



AGENDA

**Gainesville Planning and Appeals Board
Tuesday, August 13, 2019, 5:30 PM
Gainesville Justice Center**

1. CALL TO ORDER

2. MINUTES

A. July 9, 2019 PAB Meeting Minutes

3. OLD BUSINESS

4. NEW BUSINESS

A. Rezoning Requests

- (1) Request from the **City of Gainesville** to rezone a 395.69± acres tract located south of the terminus of Fulenwider Road (a/k/a **1701 Fulenwider Road, SW**) from Residential-I-A (R-I-A) to Heavy Industrial (H-I).

Ward Number: Three

Tax Parcel Number(s): 15-023-000-167 (Part)

Request: Future industrial use

B. Road Action Requests

- (1) Request from **QuikTrip Corporation** to abandon a 0.293± acre (309.51± linear foot) portion of Gordon Avenue, extending southeast from its intersection with Jesse Jewell Parkway (State Route 13).

Ward Number: Three

Request: Abandon to petitioner for a QuikTrip gas station / convenience store

5. MISCELLANEOUS

6. ADJOURNMENT

CITY OF GAINESVILLE

AGENDA REQUEST

Date Submitted: 7/15/2019
Presenter: N/A
Item of Business: July 9, 2019 PAB Meeting Minutes
Meeting Date: 8/13/2019

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

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
	Minutes	Minutes

GAINESVILLE PLANNING AND APPEALS BOARD
DRAFT MINUTES OF MEETING
JULY 9, 2019

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

Members Present: Chairman Doug Carter, Vice-Chair Jane Fleming and Board Members Eddie Martin, Sr., Rich White, Carmen Delgado, Kelvin Simmons and Ryan Thompson

Members Absent: None

Staff Present: Community & Economic Development Deputy Director Matt Tate and Recording Secretary Brandy Palmero

Others Present: Council Members Barbara Brooks and George Wangemann

MINUTES OF JUNE 11, 2019

Motion made by Board Member White
Motion seconded by Board Member Simmons
Vote – 7 favor

NEW BUSINESS

A. Annexation Requests

- 1) Request from **Karl Chambers and David Reddicks** to annex a 0.49± acre tract located on the southwest side of the intersection of Athens Street and Cooley Drive, having road frontage on the east side of Black Drive (a/k/a **1026 Athens Street**) and to establish zoning as Residential-II (R-II).
Ward Number: Three
Tax Parcel Number(s): 00-056-003-026, 057 and 058
Request: Residential duplex

Staff Presentation: Deputy Director Matt Tate gave the following staff presentation:

The applicant desires to annex the 0.49± acre property into the City of Gainesville with a zoning of Residential (R-II) for a residential duplex. The property is currently zoned R-II within unincorporated Hall County and is adjacent to the city limits to the north and east. Presently, the property consists of three tracts that have been abandoned and are overgrown with vegetation which previously contained three residential structures that were demolished over the past 20 years. The surrounding properties consists of a four-unit apartment building and single-family structures located off of Black Drive and Cooley Drive and industrial uses across Athens Street. Each duplex unit is to be 1,500 square feet in size with 3 bedrooms, 2 bathrooms, living and dining area, kitchen, laundry, and front porch. Water and sewer will be provided by the existing public infrastructure. The entrance for each unit will be from a shared driveway on Athens Street. Two parking spaces will be provided for each unit.

The Future Development Map for the City of Gainesville places the 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 ranging from two to four units per acre.

As well, the subject property is located within the *Economic Development Gateways* character area which includes a wide range of office, business, light industrial, manufacturing, research, and development uses.

The Planning Division staff is recommending conditional approval of this annexation request with R-II zoning with five conditions, based on the Comprehensive Plan and the adjacent residential and non-residential land uses.

Applicant Presentation: Karl Chambers, 530 Mattie Farms Place, stated he was the property owner and wanted to add residential duplexes to help improve the current neighborhood.

FAVOR: None

OPPOSE: None

Planning and Appeals Board Comments: None

There was a motion to recommend conditional approval of the annexation request with a zoning of Residential-II (R-II) for the purpose of a residential duplex with the following conditions:

Conditions

1. The proposed use shall be generally consistent with the standards depicted on the architectural pictures provided with this annexation application including exterior materials and roof pitch to present a residential appearance. The property shall be limited to a one or two-family structure.
2. An evergreen buffer shall be provided within the 10-foot side yard setback behind proposed structure. The location, spacing, size and type of trees planted shall be subject to the approval of the Director of the Community and Economic Development Department.
3. All proposed lawn areas fronting Athens Street and Cooley Drive shall be sodded with grass extending to the edge of the road bed.
4. All access point design for the subject property shall require review and approval by the Gainesville Public Works Department Director. All required access/traffic/sidewalk improvements associated with the proposed development shall be at the full expense of the developer/property owner.
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.

Motion made by Board Member Thompson

Motion seconded by Board Member Martin

Vote – 7 favor

- 2) Request from **Integrity Development Group, LLC** to annex a 219.65± acres tract located northeast of the intersection of Athens Highway and Gillsville Highway, and southeast of the intersection of Athens Highway and Gaines Mill Road (a/k/a **2242 Gaines Mill Road; 2579 and 2581 Gillsville Highway**) and to establish zoning as Planned Unit Development (P-U-D).

Ward Number: Three

Tax Parcel Number(s): 15-022C-000-010 and 15-023-000-014

Request: 375 single-family homes

NOTE: Chairman Carter recused himself from the meeting due to a conflict of interest with this request.

Staff Presentation: Deputy Director Matt Tate gave the following staff presentation:

The applicant is proposing to annex the 219.65± acres tract with a zoning of P-U-D for the purpose of constructing 375 single-family homes which has a residential density of 1.71 dwelling units per acre. The property is currently zoned R-II, AR-III and AR-IV within unincorporated Hall County and is contiguous to the city limits to the north which is the Heritage Pointe subdivision. The property is mostly wooded, contains several streams and consists of two parcels containing two abandoned single-family homes and a trailer that are to be demolished. Most of the surrounding uses consists of single-family homes, agricultural land and some non-residential uses along Athens Highway and Gaines Mill Road. Primary access to the development is proposed from Gillsville Highway across from the GDOT maintenance complex; however, future emergency access is proposed to connect with the adjacent Heritage Pointe subdivision. Some of the proposed development standards include minimum ranch and two-story home sizes of 1,600 square feet of heated space with a minimum lot size of 7,200 square feet. Minimum perimeter buffers of 30' to the front and side and 50' to the rear will be provided along with 150' buffers on either side of the streams. Amenities are to include clubhouse, pool, tennis courts, walking trails and green space. The development proposes to utilize City water, sewer and trash services and will share in the cost of providing sewer. In addition, the applicant is planning to reserve an area of the property for the location of a regional pump station to help the area to be better served by sewer.

The property is located within the *Low-Medium Density Residential* land use category and the *Suburban Residential Character Area* which includes areas containing or planned for single-family housing at densities ranging from two to four dwelling units per acre. In areas where natural features or sensitive environments are important, cluster housing or conservation subdivision design may be appropriate.

The Planning Division staff is recommending conditional approval of this annexation request with a zoning of Planned Unit Development (P-U-D) with five conditions, based on the Comprehensive Land Use Plan and the adjacent single-family residential uses.

Applicant Presentation: **Johnny Hastings**, 3553 Blair Circle, stated that he agreed to all the conditions. The proposed type of homes are starter homes with a price point range of \$230,000-\$250,000 and will utilize City services.

FAVOR: None

OPPOSE: **Angela Middleton**, 2836 Gaines Mill Road, stated her concerns are with the heavy traffic and felt like there should not be an entrance at Gaines Mill Road due to the

intersection at Hwy. 129 only having about 100-feet before entry access with no red light causing the traffic to back up.

Brenda Smith, 2398 Pine Grove Road, is concerned about the added children trespassing onto her property. She stated they have a four-acre pond and tennis court with cleared land with only a few trees to separate them from the new proposed development. She would like a permanent buffer such as a wall not a fence or trees.

Freddie Hopkins, 3073 Baker Road, stated he was concerned about the added children overloading the City's school system and the traffic on Gaines Mill Road which the added 375 homes would bring. He stated that Gaines Mill Road is already in horrible shape due to a lack of maintenance. His mother resides on Gaines Mill Road and he is concerned for her safety with the added traffic.

Janet Buffington, 4334 Evergreen Circle, stated her first concern was a lack of notification on Gillsville Hwy. She stated she did not see any zoning sign that referenced tonight's meeting which resulted in a smaller turnout. Ms. Buffington was not in opposition but agreed with the previously stated concerns.

Kevin Wood, 384 Valley Brock Circle, stated he was concerned with traffic congestion and the amount of accidents on Gillsville Hwy.

REBUTTAL: Johnny Hastings stated he would like to meet with someone he pointed to in the audience and he would be more than happy to discuss all concerns with the community. He plans to speak with GDOT again to determine the best solutions for the traffic concerns.

Planning and Appeals Board Comments: Board Member Simmons suggested that Mr. Hastings meet with the entire community instead of just one person. He stated that they needed to regroup and talk with the community about the traffic concerns.

There was a motion to table the request to give the applicant time to meet with the community about the request.

Motion made by Board Member Simmons
Motion died for lack of second

Board Member Thompson stated he felt like Mr. Hastings and the community would have time to work out solutions before the City Council public hearing on August 6th. Mr. Hastings agreed to meet with the community and GDOT to answer questions.

There was a motion to recommend conditional approval of the annexation request with a zoning of Planned Unit Development (P-U-D) for the purpose of 375 single-family homes with the following conditions:

Conditions

1. The development standards within the narrative, site plan and architectural renderings submitted with the applicant's annexation application shall be made part of the zoning ordinance, and shall be subject to the approval of the Director of the Community and Economic Development Department.

2. The owner/developer shall plant minimum 6-foot high evergreen buffer trees around all detention ponds, mail kiosk, amenity areas and park areas adjacent to the single-family lots. The location, spacing, size and type of trees planted shall be subject to the approval of the Director of the Community and Economic Development Department.
3. All access point design for the subject property shall require review and approval by the Gainesville Public Works Department Director and the Georgia Department of Transportation. All required access/traffic/sidewalk improvements associated with the proposed development or any additional improvements identified within the Traffic Impact Study shall be at the full expense of the developer/property owner.
4. All interior roads shall meet City of Gainesville standards. Sidewalks within the remaining future phases shall be required on both sides of the road and shall be a minimum width of 5-feet.
5. The developer shall reserve property within the proposed subdivision to provide for future access to the adjacent Heritage Pointe subdivision located to the north. The reserved property shall be a minimum of 55-feet in width extending to the property boundary and shall align with the reserved access lot within the Heritage Pointe subdivision. The property shall be designated as reserved on the final plat.

Motion made by Board Member White

Motion seconded by Board Member Thompson

Vote – 5 favor, 1 opposed (Simmons), 1 recusal (Carter)

B. Rezoning Request

- 1) Request from **S&E Holdings** to rezone a 2.48± acres tract located east of the intersection of Green Street and Ridgewood Drive and west of Glenwood Drive (a/k/a **0, 718, 736 Green Street, NE; and 430 Glenwood Drive, NE**) from Residential-I (R-I) and Residential and Office (R-O) to Residential and Office (R-O).

Ward Number: Two

Tax Parcel Number(s): 01-039-001-003 (Part), 004 (Part), 025 (Part) and 026

Request: 25 townhome units and office space

Staff Presentation: Deputy Director Matt Tate gave the following staff presentation:

The applicant is proposing to rezone the 2.48± acres tract from Residential-I (R-I) and Residential and Office (R-O) to Residential and Office (R-O) for 25 residential townhomes and approximately 2,154 square feet of office space. The property consists of part or all of four properties adjacent to City Park / Candler Park and is located behind the H. Lloyd Hill & Associates office building, Willis Investment Counsel office building and the Mellow Mushroom restaurant. The development is to be called “Parkview on Green Street” and proposes four, two-story buildings ranging from 4 to 8 units per building at an overall residential density of 10.1 dwelling units per acre. All but the four-unit, building “D” will provide a basement level. The units will range from 1,935 to 2,488 square feet in size with 3 bedrooms and 2½ to 3½ baths. In addition, each unit will contain a front entry one-car garage and private patio area. An additional 35 surface level parking spaces will be provided for residents and guests. The proposed office component is to be located within a portion of the basement level of the largest building “A” and will function similarly to a mixed-use building. Access to the development is proposed from the adjacent office and restaurant parking lots and from the existing rear driveway that connects to City Park / Candler Park.

The R-O zoned portion of the property is located within the Green Street Local Historic District. Therefore, the applicant has filed an application for a Major Work Project which is scheduled for the August 5th Gainesville Historic Preservation Commission (GHPC) meeting. Being part of a local historic district requires design review by the GHPC of any new construction and/or exterior material changes to the property or building.

The Future Development Map for the City of Gainesville places the subject property within the *Mixed-Use General* land use category and within the *Parks/ Recreation/ Conservation* land use category_and within the *Central Core and City Park Neighborhood Center* Character Areas which support a mixture residential and office uses.

Based on the Comprehensive Plan and the adjacent mixture of uses, the Planning Division staff is recommending approval of this rezoning request with Residential and Office (R-O) zoning with five conditions.

Applicant Presentation: **Steven Hill**, 1885 Lake Warner Road, stated he would like to add 25 townhome units, which would be energy efficient and low maintenance. Mr. Hill stated that due to the layout of the townhomes they were able to save the trees below the units toward the park. He stated that he will probably have one of the three-story units himself with an office in the basement. He felt the townhomes would provide easy access to downtown shopping, restaurants, parks and offices.

FAVOR: None

OPPOSE: None

Planning and Appeals Board Comments: None

There was a motion to recommend conditional approval of the request to rezone the subject property from Residential-I (R-I) and Residential and Office (R-O) to Residential and Office (R-O) zoning for 25 townhome units and office space with the following conditions:

- 1. The development standards within the narrative, site plan and architectural renderings submitted with the applicant's rezoning application shall be made part of the zoning ordinance, and shall be subject to the approval of the Gainesville Historic Preservation Commission and the Director of the Community and Economic Development Department.**
- 2. The subject property shall be limited to the proposed residential townhomes and office use. Multi-family apartments are not an approved use for the property.**
- 3. The existing trees located within the subject property shall remain except for what is only necessary to be removed for the development. The replacement trees as part of the required tree/landscape plan shall be at minimum 3-inch caliper size and consist of evergreen and deciduous trees. In addition, the applicant shall replant the evergreen buffer around the off-site detention pond if the existing trees are removed. The number, location, spacing, size and type of trees planted shall be subject to the approval of the Director of Community and Economic Development Department.**
- 4. All access point design for the subject property shall require review and approval by the Gainesville Public Works Department Director. All required access / traffic /**

sidewalk improvements associated with the proposed development shall be constructed at the full expense of the property owner/developer.

- 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.**

Motion made by Board Member Martin

Motion seconded by Board Member Delgado

Vote – 7 favor

C. Road Action Request

- 1) Request from **Georgia Mountains YMCA, Inc.** to rename Howard Road to YMCA Drive, located between State Route 365 and White Sulphur Road.
Ward Number: Two
Request: Road name change

Staff Presentation: Deputy Director Matt Tate gave the following staff presentation:

The applicant is proposing to rename all of Howard Road which consists of 1,290± linear feet (0.244± mile) of right-of-way. The new road name is to be called YMCA Drive. If approved, the YMCA property has a Howard Road address which will need to be changed. A similar request was approved in 2017 to rename a portion of Howard Road on the east side of State Route 365 which is currently named Lanier Tech Drive.

Applicant Presentation: Amy Kienle, 4452 Indian Oak Pointe, President and CEO of Georgia Mountain YMCA, stated in the last five years the membership has grown over 21% and childcare has grown around 19%. The monument sign has helped raise awareness and growth. She stated they are the only property that will be affected with this request.

FAVOR: None

OPPOSE: None

Planning and Appeals Board Comments: None

There was a motion to recommend approval of the request to rename Howard Road to YMCA Drive as presented.

Motion made by Board Member Martin

Motion seconded by Board Member Delgado

Vote – 7 favor

ADJOURNMENT

There was a motion to adjourn the meeting at 6:22 p.m.

Motion made by Board Member Simmons

Motion seconded by Board Member White

Vote – 7 favor

Respectfully submitted,

Doug Carter, Chairman

Brandy Palmero, Recording Secretary

CITY OF GAINESVILLE

AGENDA REQUEST

Date Submitted: 7/25/2019

Presenter: Matt Tate

Item of Business: Request from the **City of Gainesville** to rezone a 395.69± acres tract located south of the terminus of Fulenwider Road (a/k/a **1701 Fulenwider Road, SW**) from Residential-I-A (R-I-A) to Heavy Industrial (H-I).
Ward Number: Three
Tax Parcel Number(s): 15-023-000-167 (Part)
Request: Future industrial use

Meeting Date: 8/13/2019

Purpose of Request:

The City of Gainesville is proposing to rezone the subject property for future industrial uses as part of the planned 85 Business Park property. No specific use for the property has been determined at this time. The property was originally annexed and zoned in 1991 for a land application farm for wastewater which was never constructed and is the site of the Gainesville Public Lands and Buildings maintenance facility and the Kubota ATV test track. The property is heavily wooded with rolling topography and streams. Adjacent uses include industrial uses within Gainesville and Hall County.

History/Background:

Facts & Issues for Consideration:

Department Recommendation:

Planning Staff is recommending approval with two conditions. See the Staff Recommendation Report for details.

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
☐ Staff Recommendation Report	Report
☐ Location Maps	Backup Material
☐ Boundary Survey	Backup Material

**GAINESVILLE PLANNING and APPEALS BOARD
STAFF RECOMMENDATION**

Applicant and Property Owner..... City of Gainesville
Location..... 1701 Fulenwider Road, SW
Request..... Rezone from R-I-A to H-I
Total Acres 395.69± acres
Ward..... Three
Proposed Use..... Future industrial use
Planning Division Staff Recommendation **Approval, with conditions**
Date..... August 13, 2019

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

The City of Gainesville is proposing to rezone the subject property to help better market the property for future industrial uses as part of the planned 85 Business Park property. No specific use for the property has been determined at this time. The property was originally annexed and zoned in 1991 for a land application farm for wastewater which was never constructed. The current uses within the property include the Gainesville Public Lands and Buildings maintenance facility and the Kubota ATV / RTV test track. The property is heavily wooded with rolling topography and streams. Access to the property is currently from Fulenwider Road.

▪ **Adjacent Land Use and Zoning**

Location	Use	Zoning
North	Allen Creek Soccer Complex; Gainesville Police Gun Range	Residential-I (R-I-A) City
South	Industrial; Ampro Products, Inc., Residential Home	Heavy Industrial (I-II); Agricultural Residential-IV (AR-IV) County
East	Hall County Fire Training Facility, Hall County Sherriff Gun Range; Undeveloped Land	Agricultural Residential-IV (AR-IV) County Residential-I (R-I-A) City
West	Various Industrial uses; Cottrell, Volvo Truck Repair Facility, Hall County Landfill, Residential Home	Light Industrial (I-I), Heavy Industrial (I-II); Agricultural Residential-III (AR-III); Agricultural Residential-IV (AR-IV) County

▪ **Other Departmental Comments**

There were no departmental comments for this request.

▪ **Zoning History**

No zoning actions have taken place in the immediate area during the last ten years.

Analysis

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

The subject property is adjacent to industrial and public uses located along Fulenwider Road and nearby Candler Highway and Allen Creek Road. Most of the developed property is zoned for industrial purposes both within the City and County which support the proposed rezoning request.

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

As currently proposed, this rezoning request should have minimal impacts to the nearby property as there is no specific use proposed and the surrounding area currently functions as a heavy industrial corridor. Future impacts will be more closely studied and mitigated prior to the rezoning and development of the proposed 1,300± acres, Gainesville 85 Business Park of which this property is part of.

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

It is staff's opinion that the proposal is consistent with the Comprehensive Plan. The Future Development Map for the City of Gainesville places the subject property within the *Industrial* land use category. This category includes areas containing or planned for a wide range of office, business, light industrial, manufacturing, research and development uses; and commercial uses that directly support or are otherwise linked to the dominant business use.

According to the Character Area map for the City of Gainesville, the subject properties are located within the *Economic Development Gateways* character area which appears to support the applicant's proposal. This character area represents the industrial, warehousing and other commercial enterprises that parallel the I-985 and Norfolk-Southern railroad corridor. The primary vision for the area is to continue to support economic development while preserving and strengthening important natural and cultural resources. These areas include a wide range of office, business, light industrial, manufacturing, research, and development uses.

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

The property is zoned for residential purposes which is not consistent with the Comprehensive Plan and is contrary to adjacent and nearby development. The proposed zoning of Heavy Industrial (H-I) is necessary for future industrial development as part of the future Gainesville 85 Business Park.

(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?

Public facilities and services are currently provided to the property and are adequate. The future Gainesville 85 Business Park will require improvements to access, roads, stormwater and water / sewer utilities that will be addressed prior to the overall larger tract being rezoned. The Gainesville Fire and Police Departments currently respond to the property and the nearest City of Gainesville Fire Station #1 is approximately 3.5± miles from the subject property. There will be no impacts to the City 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 surrounding area has experienced mostly industrial growth partly due to Exit 20 /I-985, Lee Gilmer Memorial Airport and CSX Railroad being located nearby. It is staff's opinion that the proposed use appears to be consistent with existing and expected uses of the Comprehensive Plan.

(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?

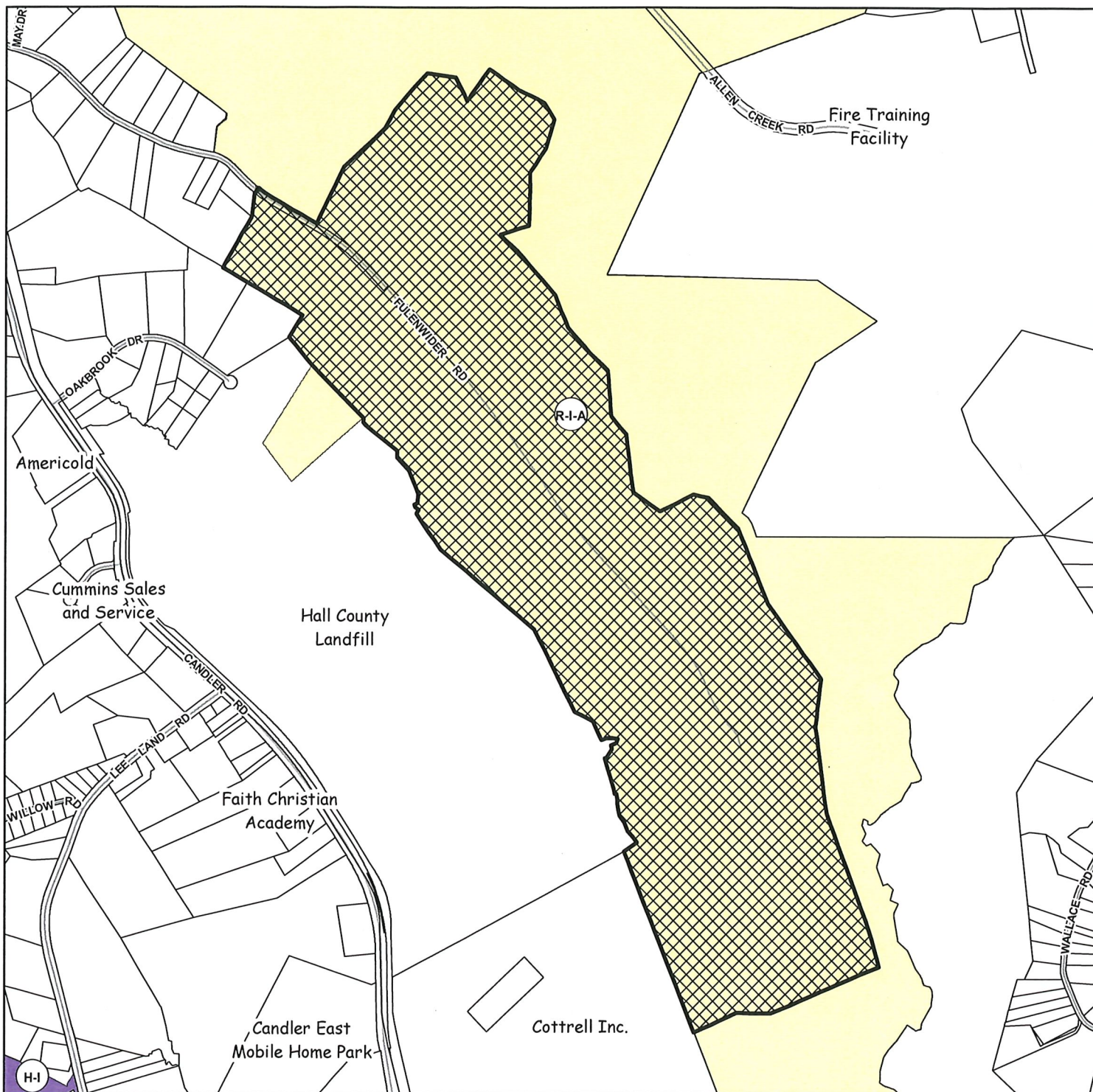
Based on the subject property's close proximity to other industrial properties, the proposal with the zoning conditions recommended by staff appears to promote a reasonable balance between the promotion of the public health, safety, morality, or general welfare, and the right to unrestricted use of property.

▪ **Staff Recommendation**

The Planning Division staff is recommending **conditional approval** of this rezoning request with **Heavy Industrial (H-I) zoning**, based on the Comprehensive Plan and the surrounding industrial uses.

Conditions

1. All exterior walls of the proposed building(s) shall meet the standards of the future industrial park covenants.
2. A Development of Regional Impact Study (DRI) and a Traffic Impact Study (TIS) shall be required to be submitted to the Georgia Mountains Regional Development Center (GMRDC) upon meeting the development thresholds for a DRI, prior to a land disturbance permit being issued.



Applicant:

CITY OF GAINESVILLE

Community & Economic Development Department

REZONING REQUEST

 Subject Property

N



Request:

Rezone 395.69+/- acres from Residential-I-A (R-I-A) to Heavy Industrial (H-I) for future industrial uses

Subject Area Address:

1701 Fulenwider Road

Meeting: 08/13/2019

Prepared: 07/25/2019

0 720 1,440 2,160 2,880 Feet

1" = 1,200'

Tax Parcel:

15-023-000-167 (Part)



Applicant:

CITY OF GAINESVILLE

Community & Economic Development Department

REZONING REQUEST



Subject Property



0 720 1,440 2,160 2,880 Feet

1" = 1,200'



Request:

Rezone 395.69+/- acres from Residential-I-A (R-I-A) to Heavy Industrial (H-I) for future industrial uses

Subject Area Address:

1701 Fulenwider Road

Meeting: 08/13/2019

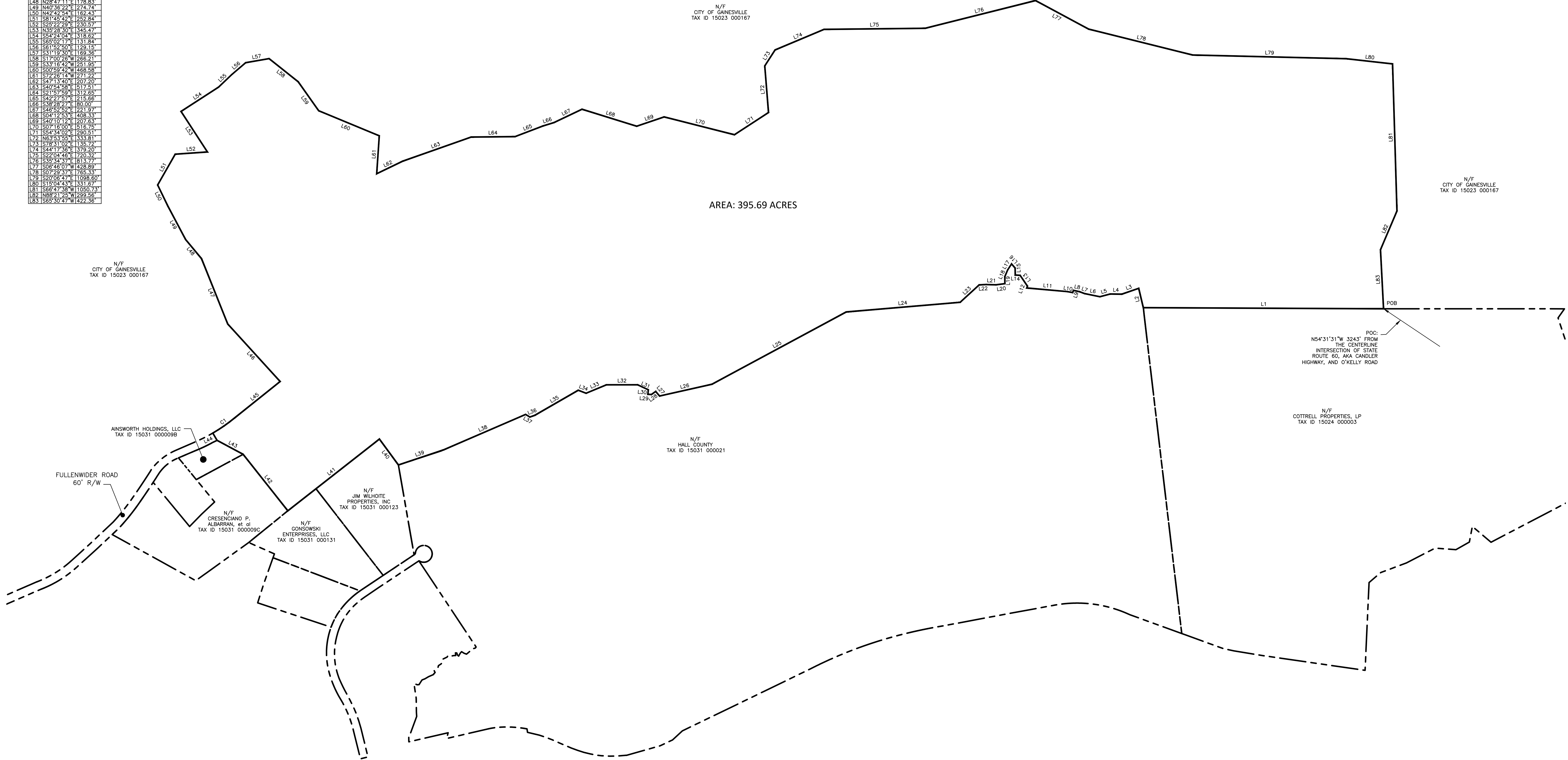
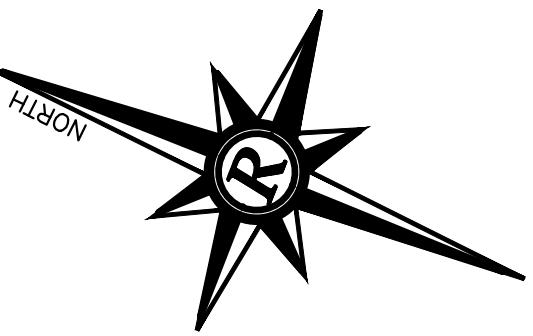
Prepared: 07/25/2019

Tax Parcel:

15-023-000-167 (Part)

LINE	BEARING	DISTANCE
L1	N211°34'48"W	1715.00'
L2	N55°10'28"E	141.70'
L3	N42°32'53"W	127.48'
L4	N27°28'47"W	82.53'
L5	N42°32'53"W	76.74'
L6	N09°45'36"W	111.33'
L7	N05°55'33"W	37.77'
L8	N05°55'33"W	44.49'
L9	S86°22'59"W	16.81'
L10	N111°14'07"W	40.13'
L11	N16°23'18"W	289.69'
L12	N50°00'00"E	13.98'
L13	N34°21'20"E	33.60'
L14	N18°01'17"W	34.70'
L15	N07°10'51"E	48.95'
L16	N27°43'58"E	38.86'
L17	N78°42'40"W	51.14'
L18	N88°39'16"W	52.18'
L19	S68°05'04"W	49.94'
L20	N08°44'11"W	64.15'
L21	N19°58'50"W	71.34'
L22	N24°35'10"W	46.68'
L23	N63°54'36"W	183.99'
L24	N26°20'15"W	815.63'
L25	N09°45'28"W	1086.69'
L26	N34°09'24"W	382.45'
L27	N28°23'17"E	42.60'
L28	N56°47'34"W	37.75'
L29	N18°12'58"W	25.18'
L30	N03°17'13"E	32.51'
L31	N03°33'29"E	83.08'
L32	N21°29'19"W	223.37'
L33	N43°59'10"W	157.24'
L34	N02°24'39"W	59.80'
L35	N01°12'51"W	356.24'
L36	N40°55'25"W	36.75'
L37	N09°50'51"E	35.77'
L38	N44°51'12"W	638.20'
L39	N39°29'31"W	339.57'
L40	N52°17'19"E	224.15'
L41	N59°33'07"W	830.55'
L42	N50°09'54"E	513.92'
L43	N08°43'26"E	217.22'
L44	N37°20'41"E	60.01'
L45	S60°08'10"E	41.98'
L46	N26°10'38"E	556.27'
L47	N46°35'48"E	509.84'
L48	N28°47'11"E	178.83'
L49	N40°36'24"E	274.72'
L50	N42°15'44"E	162.43'
L51	S81°45'42"E	252.84'
L52	S09°29'29"E	243.57'
L53	N39°28'30"E	345.47'
L54	S44°14'04"E	316.82'
L55	S65°04'11"E	113.84'
L56	S61°52'50"E	129.15'
L57	S31°18'30"E	168.36'
L58	S17°00'28"W	266.21'
L59	S33°18'42"W	251.85'
L60	S00°59'42"W	488.58'
L61	S72°26'14"W	271.22'
L62	S47°13'40"E	202.20'
L63	S40°54'58"E	517.51'
L64	S21°59'59"E	312.85'
L65	S42°27'51"E	215.66'
L66	S38°28'21"E	80.00'
L67	S46°24'54"E	221.87'
L68	S04°12'43"E	408.33'
L69	S40°10'12"E	207.63'
L70	S07°18'00"E	516.75'
L71	S54°34'05"E	280.51'
L72	N03°15'55"E	333.81'
L73	S78°31'02"E	135.72'
L74	S44°12'26"E	375.20'
L75	S22°04'46"E	720.32'
L76	S55°34'31"E	813.77'
L77	S06°46'07"W	428.80'
L78	S07°28'37"E	765.33'
L79	S20°04'43"E	1098.60'
L80	S15°04'43"E	331.67'
L81	S68°47'38"W	1050.73'
L82	N68°21'25"W	288.56'
L83	S65°30'47"W	422.36'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	1167.20'	1164.38'	12.41°	S56°16'05"E	186.89'



AREA: 395.69 ACRES

N/F
CITY OF GAINESVILLE
TAX ID 15023 000167

AINSWORTH HOLDINGS, LLC
TAX ID 15031 000009B

FULLENWIDER ROAD
60' R/W

N/F
CRESENCIANO P.
ALBARRAN, et al
TAX ID 15031 000009C

N/F
GONSOWSKI
ENTERPRISES, LLC
TAX ID 15031 000131

N/F
JIM WILHOITE
PROPERTIES, INC
TAX ID 15031 000123

N/F
HALL COUNTY
TAX ID 15031 000021

N/F
CITY OF GAINESVILLE
TAX ID 15023 000167

N/F
CITY OF GAINESVILLE
TAX ID 15023 000167

POC:
N54°31'31"W 3243' FROM
THE CENTERLINE
INTERSECTION OF STATE
ROUTE 60, AKA CANDLER
HIGHWAY, AND O'KELLY ROAD

N/F
COTTRELL PROPERTIES, LP
TAX ID 15024 000003



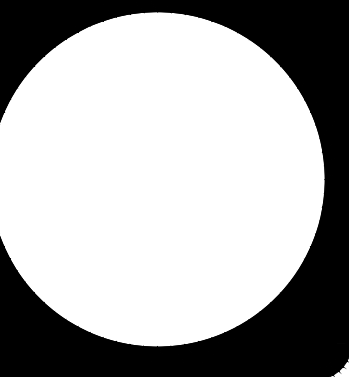
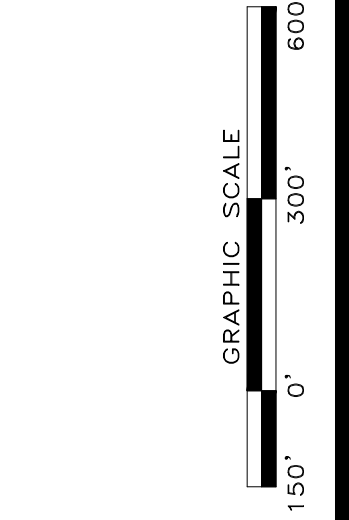
**Rochester
& Associates, Inc.**
425 Oak Street N.W. • Gainesville, Georgia 30501
(770) 718-0600 (770) 718-9090 Fax • www.rochester-assoc.com

REZONING EXHIBIT
FOR:

85 BUSINESS PARK SITE

LOCATED IN:
GEORGIA, MILITIA DISTRICT 1385 (CANDLER)
CITY OF GAINESVILLE, HALL COUNTY, GEORGIA

REVISIONS		REVISIONS	
NO.	DATE	DESCRIPTION	DATE



SHEET
1
OF
1

DATE: 7/25/2019
SCALE: 1"=300' = 100'
JOB NO. 15024-000003
DRAWN BY: MSA

CITY OF GAINESVILLE

AGENDA REQUEST

Date Submitted: 7/24/2019

Presenter: Matt Tate

Item of Business: Request from **QuikTrip Corporation** to abandon a 0.293± acre (309.51± linear foot) portion of Gordon Avenue, extending southeast from its intersection with Jesse Jewell Parkway (State Route 13).
Ward Number: Three
Request: Abandon to petitioner for a QuikTrip gas station / convenience store

Meeting Date: 8/13/2019

Purpose of Request:

The applicant is proposing to abandon a portion of Gordon Avenue in order to combine the right-of-way with the adjacent properties to develop a QuikTrip gas station / convenience store and canopy. The right-of-way and adjacent property are zoned General Business (G-B) and are located within the Midtown Overlay Zone which allows for a gas station / convenience store on properties 2.0 acres or larger in size of which the development will exceed. As part of the redevelopment, the property will demolish an abandoned two-story motel and office building located on either side of Gordon Avenue. In addition, the property will be lowered to the elevation of Jesse Jewell Parkway. Inter parcel access will be provided to Jesse Jewell Parkway, Queen City Parkway, East Avenue and the remaining segment of Gordon Avenue.

History/Background:

Facts & Issues for Consideration:

Department Recommendation:

Planning staff recommended approval with seven conditions. See the Staff Memo for details.

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
☐ Staff Memo	Report
☐ Location Maps	Backup Material
☐ Survey	Backup Material
☐ Concept Plan	Backup Material
☐ Architectural Renderings	Backup Material
☐ Traffic Impact Study	Backup Material



**COMMUNITY & ECONOMIC
DEVELOPMENT
DEPARTMENT**

P. O. Box 2496

Gainesville, GA 30503-2496

Telephone: 770-531-6570

Website: www.gainesville.org

MEMORANDUM

TO: Gainesville Planning and Appeals Board

FROM: Community and Economic Development Department

DATE: August 13, 2019

SUBJECT: Request from QuikTrip Corporation to abandon a portion of Gordon Avenue.

Applicant's Proposal and Background Information

The applicant is proposing to abandon a 0.293± acre (309.51± linear feet in length and 40 feet in width) portion of Gordon Avenue. The purpose of the request is to combine the right-of-way with the adjacent properties to develop a 4,993 square foot QuikTrip gas station / convenience store and canopy with 14 fueling positions.

The right-of-way and adjacent property are zoned General Business (G-B) and are located within the Midtown Overlay Zone which allows for a gas station / convenience store on properties 2.0 acres or larger in size of which the development will exceed. As part of the redevelopment, the developer will demolish an abandoned the existing two-story motel and office building located on either side of Gordon Avenue. In addition, the property will be lowered to the elevation of Jesse Jewell Parkway. Inter parcel access will be provided to Jesse Jewell Parkway, Queen City Parkway, East Avenue and the remaining segment of Gordon Avenue. Supporting documentation provided with this application includes a survey, concept plan, architectural renderings and traffic impact study.

Traffic Impact Study Summary

A traffic impact study was conducted for this development in June of 2019. The following six intersections were studied:

1. Jesse Jewell Parkway at West Academy Street
2. Jesse Jewell Parkway at East Avenue
3. Jesse Jewell Parkway at West Avenue
4. Jesse Jewell Parkway at Gordon Avenue / Project Driveway
5. Jesse Jewell Parkway at Queen City Parkway/ John W. Morrow Jr. Parkway
6. Queen City Parkway at Project Driveway

Traffic counts were performed on Wednesday, May 15, 2019 and Thursday, May 23, 2019. All of the studied intersections are expected to operate adequately in the future with the addition of auxiliary right turn lanes at the project driveways on Jesse Jewell Parkway and Queen City Parkway. In addition, the applicant/developer will coordinate with GDOT and the City of Gainesville regarding the planned intersection improvements at Queen City Parkway and Jesse Jewell Parkway.



**COMMUNITY & ECONOMIC
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The below table is a breakdown of the new traffic generated by the project as based on a 1.0% annual growth rate based on historic Average Annual Daily Traffic counts recorded for nearby GDOT Count Stations.

	Weekday	AM Peak Hour	PM Peak Hour
New Trips	1,756	162	156
Pass-By-Trips	2,424	253	190
Total Trips	4,180	415	346

Other Departmental Comments

The Georgia Department of Transportation is requiring the developer to coordinate with GDOT regarding the planned intersection and proposed driveway improvements on Jesse Jewell Parkway and Queen City Parkway.

According to the Department of Water Resources, the City owns and operates an existing 4" cast iron water main as well as an existing 6" gravity sanitary sewer located within the portion of Gordon Avenue requested to be abandoned. Easements are to be retained on these facilities that will no longer be located within the public right-of-way. There were no comments from other departments regarding this request.

Staff Recommendation

The Planning Division staff is recommending **conditional approval** of this road abandonment request based on the development access plan and the results of the traffic impact study.

Conditions

1. The development standards within the concept plan (Exhibit A) and architectural renderings (Exhibit B) submitted with the applicant's road abandonment application shall be made part of the ordinance, and shall be subject to the approval of the Director of the Community and Economic Development Department.
2. The gas canopy shall be located to the side of the building as depicted on the concept plan and the support poles shall be fully faced with brick to match the architecture of the proposed building.
3. The proposed development shall be required to plant minimum 3" caliper trees as part of the required tree/landscape plan. The number, location, spacing, size and type of trees planted shall be subject to the approval of the Director of Community and Economic Development Department.
4. The owner/developer shall construct a "Welcome to the City of Gainesville" sign at the northeast corner of the intersection of Jesse Jewell Parkway and Queen City Parkway and shall be at the full expense of the property owner/developer. The sign shall provide additional panel space on either side of the "Welcome to the City of Gainesville" graphic to provide for the addition of City



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DEPARTMENT**

P. O. Box 2496

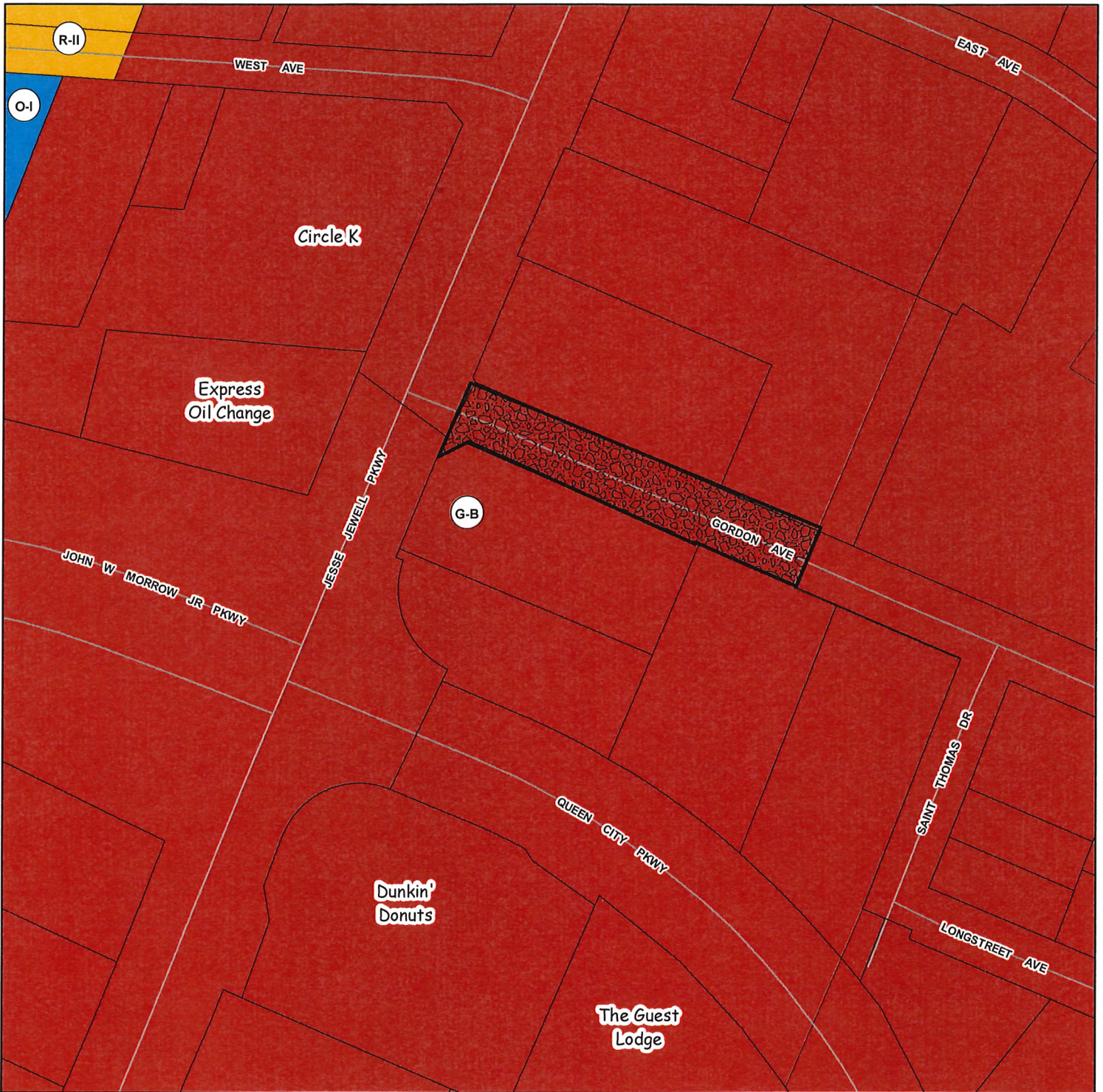
Gainesville, GA 30503-2496

Telephone: 770-531-6570

Website: www.gainesville.org

logo/branding. The location, type and size of the sign shall be subject to the Director of the Community and Economic Development Department.

5. All access point design for the subject property shall require review and approval by the Gainesville Public Works Department Director and the Georgia Department of Transportation. All required access / traffic / sidewalk improvements associated with the proposed development shall be constructed at the full expense of the property owner/developer.
6. Easements for the existing water main and gravity sanitary sewer within the subject property shall be required.
7. An updated as-built survey/plat of the subject property, indicating all improvements shall be recorded prior to obtaining a Certificate of Occupancy for the future use.



Applicant:

QUIK TRIP CORPORATION

ROAD ACTION REQUEST



Request:

Abandon a 0.293+/- acre (309.51+/- linear feet) portion of Gordon Avenue right-of-way for a convenience store with fuel pumps

Subject Area Address:

Right-of-Way

Meeting: 08/13/2019

Prepared: 07/10/2019

Community & Economic Development Department



Right-of-Way to be Abandoned



0 60 120 180 240 Feet

1" = 100'

Tax Parcel:

Right-of-Way



Applicant:

QUIK TRIP CORPORATION

ROAD ACTION REQUEST



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Abandon a 0.293+/- acre (309.51+/- linear feet) portion of Gordon Avenue right-of-way for a convenience store with fuel pumps

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Meeting: 08/13/2019

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Community & Economic Development Department



Right-of-Way to be Abandoned



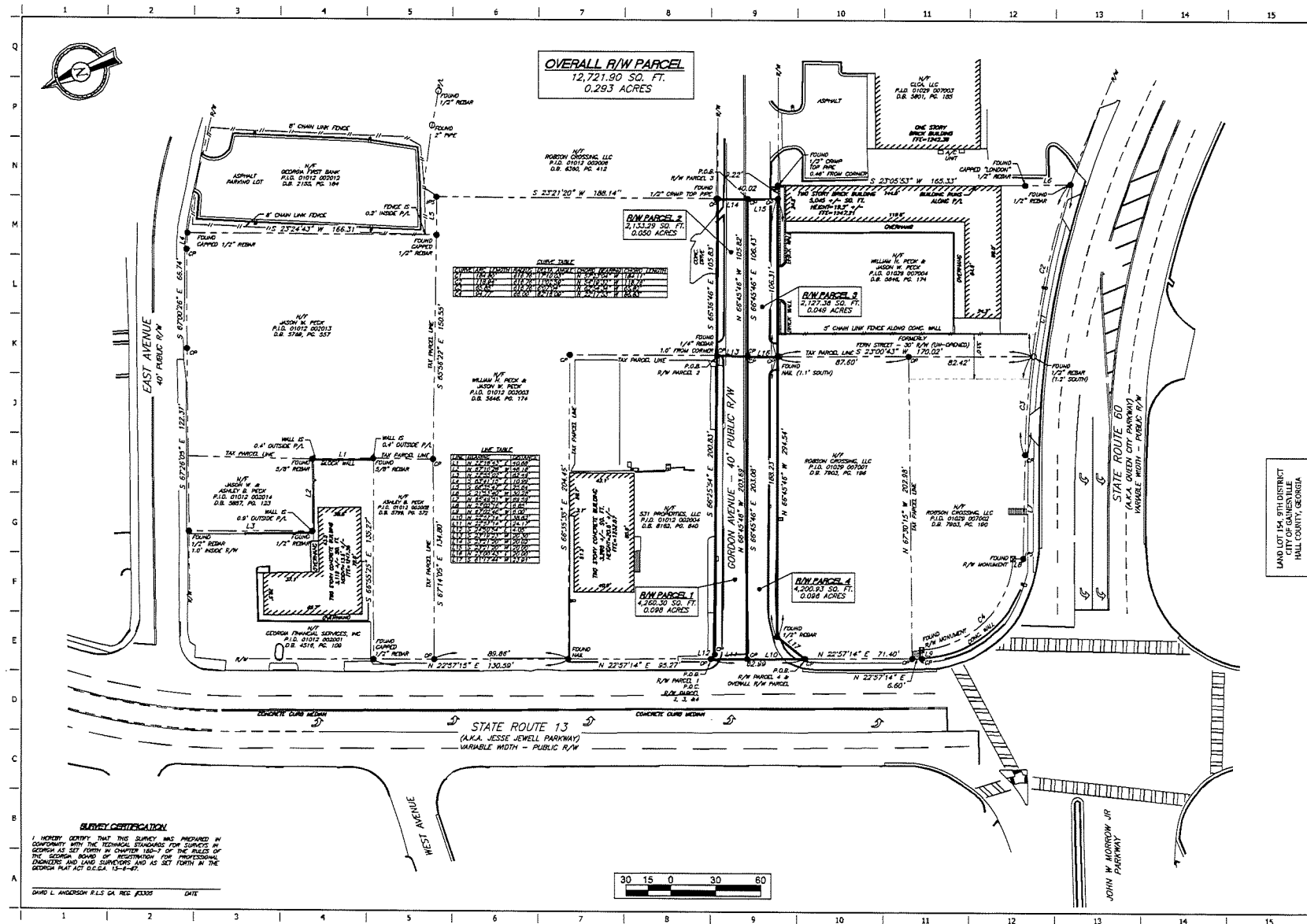
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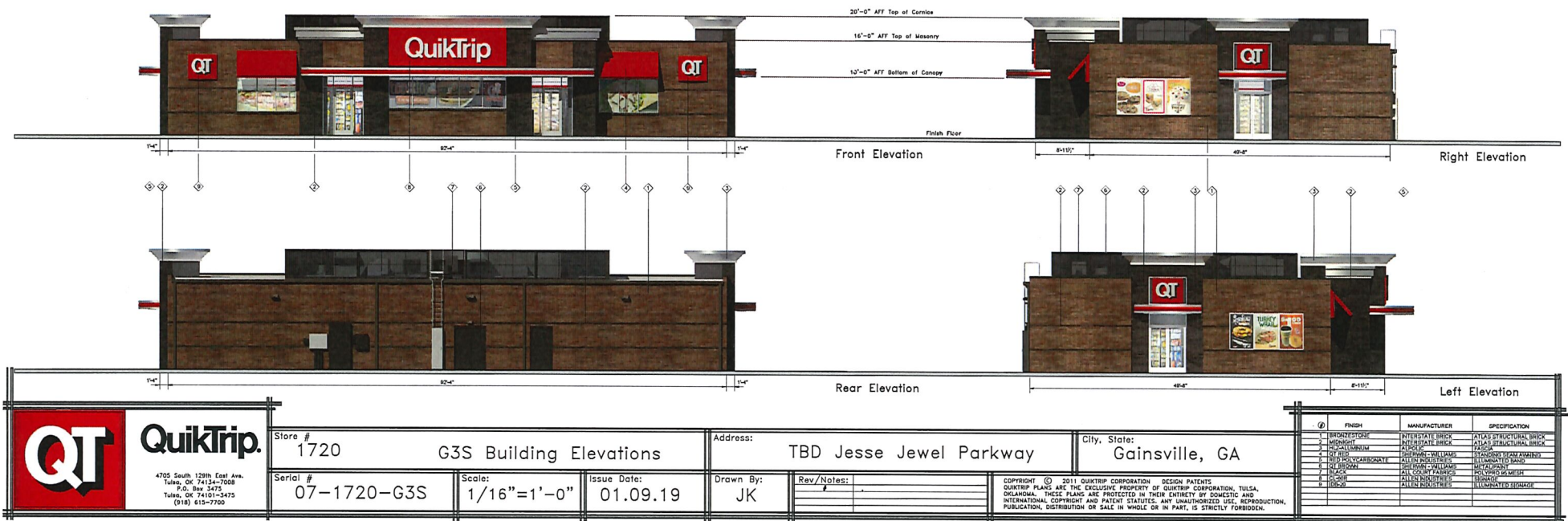
1" = 100'

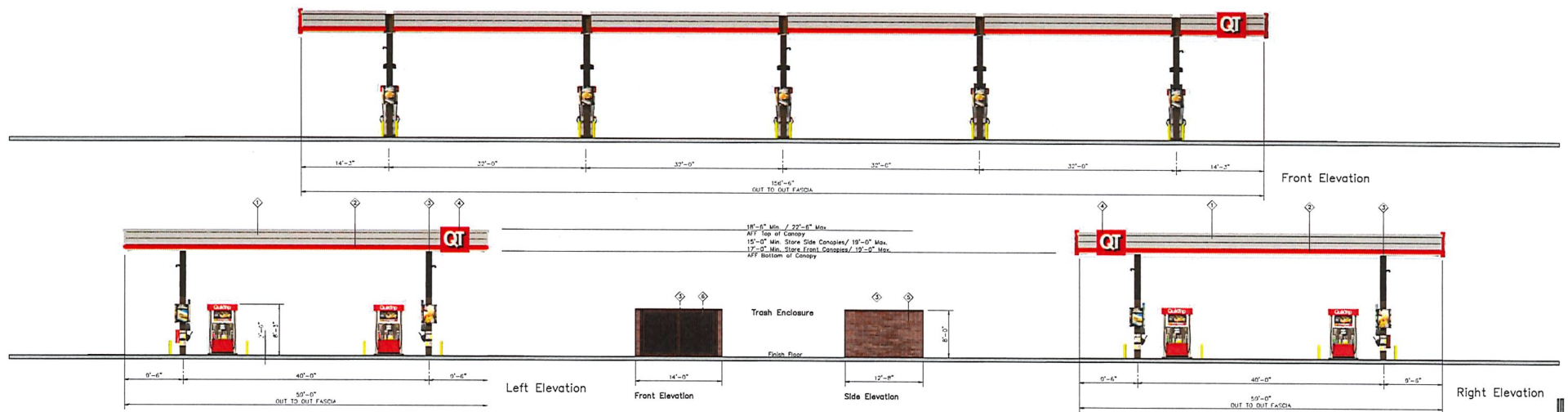
Tax Parcel:

Right-of-Way

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 QuikTrip. 4705 South 129th East Ave. Tulsa, OK 74134-7008 P.O. Box 3475 Tulsa, OK 74101-3475 (918) 415-7700	Store # 1720 Double Stack 10 Canopy Elevations		Address: TBD Jesse Jewel Parkway		City, State: Gainsville, GA		<table border="1"> <thead> <tr> <th>Q</th> <th>FINISH</th> <th>MANUFACTURER</th> <th>SPECIFICATION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ALUMINUM</td> <td>ALCO</td> <td>CANOPY</td> </tr> <tr> <td>2</td> <td>POLYCARBONATE</td> <td>ALCO</td> <td>ILLUMINATED BAND</td> </tr> <tr> <td>3</td> <td>ROOFING</td> <td>ALCO</td> <td>18" PANEL</td> </tr> <tr> <td>4</td> <td>ROOFING</td> <td>ALCO</td> <td>ILLUMINATED STORAGE</td> </tr> <tr> <td>5</td> <td>ROOFING</td> <td>ALCO</td> <td>ILLUMINATED STORAGE</td> </tr> <tr> <td>6</td> <td>ROOFING</td> <td>ALCO</td> <td>ILLUMINATED STORAGE</td> </tr> </tbody> </table>	Q	FINISH	MANUFACTURER	SPECIFICATION	1	ALUMINUM	ALCO	CANOPY	2	POLYCARBONATE	ALCO	ILLUMINATED BAND	3	ROOFING	ALCO	18" PANEL	4	ROOFING	ALCO	ILLUMINATED STORAGE	5	ROOFING	ALCO	ILLUMINATED STORAGE	6	ROOFING	ALCO	ILLUMINATED STORAGE
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Serial # 07-1720-GD10	Scale: 1/16"=1'-0"	Issue Date: 01.09.19	Drawn By:	Rev/Notes:	COPYRIGHT © 2011 QUIKTRIP CORPORATION DESIGN PATENTS QUIKTRIP PLANS ARE THE EXCLUSIVE PROPERTY OF QUIKTRIP CORPORATION, TULSA, OKLAHOMA. THESE PLANS ARE PROTECTED IN THEIR ENTIRETY BY DOMESTIC AND INTERNATIONAL COPYRIGHT AND PATENT STATUTES. ANY UNAUTHORIZED USE, REPRODUCTION, PUBLICATION, DISTRIBUTION OR SALE IN WHOLE OR IN PART, IS STRICTLY FORBIDDEN.																														

Fueling Center Traffic Impact Study

SR 369/Jesse Jewell Parkway at
SR 60/ Queen City Parkway
Gainesville, Georgia

PREPARED FOR: Fueling Center Developer
WOLVERTON PROJECT NO. 19-LD-042

JUNE 2019



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1. INTRODUCTION

A convenience store and fueling station is planned for a site on the southeast corner of SR 329/Jesse Jewell Parkway and SR 60/Queen City Parkway in Glynn County, Georgia. A Traffic Impact Analysis was performed to determine how much new traffic would be generated by the proposed development and how the new traffic would impact the existing roadway network.

1.1 STUDY AREA

The study area is located on a segment of SR 369/Jesse Jewell Parkway, beginning at the intersection with West Academy Street in the City of Gainesville, Georgia. The study area extends west along SR 369/Jesse Jewell Parkway to the intersection at SR 60/Queen City Parkway/John W. Morrow Jr. Parkway. Figure 1.1 presents the location of the project site and identifies the study intersections, which include:

1. SR 369/SR 60/Jesse Jewell Parkway at West Academy Street
2. SR 369/SR 60/Jesse Jewell Parkway at East Avenue
3. SR 369/SR 60/Jesse Jewell Parkway at West Avenue
4. SR 369/SR 60/Jesse Jewell Parkway at Gordon Avenue (Project Driveway in Proposed)
5. SR 369/SR 60/Jesse Jewell Parkway at SR 60/Queen City Parkway/
John W. Morrow Jr. Parkway
6. SR 60/Queen City Parkway at Project Driveway

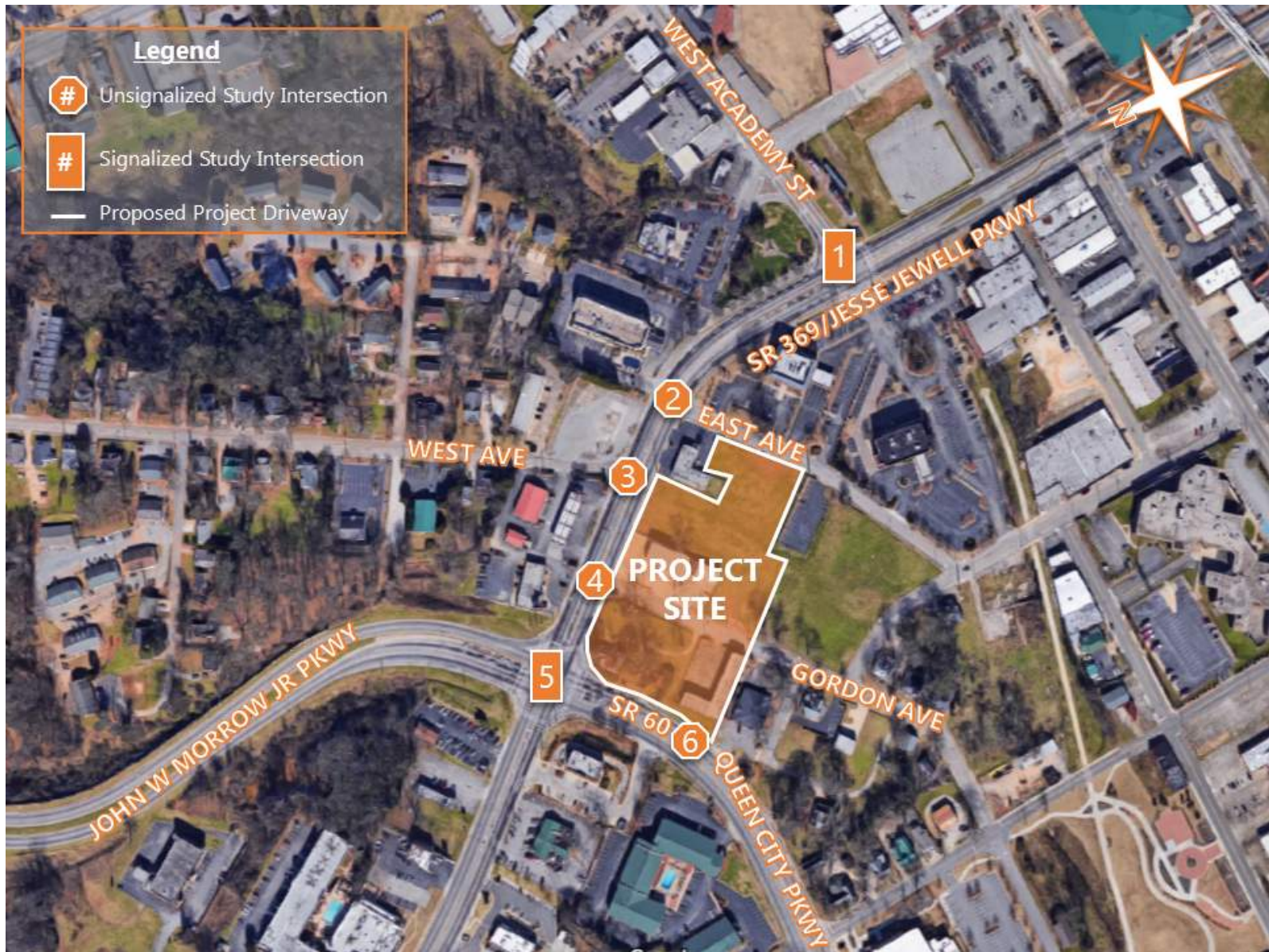


FIGURE 1.1 - AERIAL VIEW OF STUDY AREA

2. EXISTING CONDITIONS

2.1 ROADWAYS

SR 369/Jesse Jewell Parkway is an east-west route in the state highway system. SR 369 begins at an intersection with SR 20 to the east of the City of Canton and extends east to a terminus at an interchange with I-985/US 23/SR 365 in the City of Gainesville, Georgia. As noted in Table 2.1, the typical section of SR 369/Jesse Jewell Parkway includes a two-way left-turn lane. Within the study area, between SR 60/Queen City Parkway/John W. Morrow Jr. Parkway and East Avenue, the TWLT lane is striped as an exclusive left turn lane for the westbound approach to SR 60/Queen City Parkway/John W. Morrow Jr. Parkway. A raised, concrete curb located between the westbound left turn lane and the adjacent eastbound travel lane prevents any left turn maneuvers from the driveways and side streets between SR 60/Queen City Parkway/John W. Morrow Jr. Parkway and East Avenue.

SR 60 begins at an intersection with SR 124 near Braselton, Georgia and continues north to the Georgia/Tennessee state line in McCaysville, Georgia. SR 60 provides access to I-985 to the south of the study area.

The remaining roadways in the study area are local streets that serve traffic within the City of Gainesville. Table 2.1 summarizes the existing conditions on each study area roadway.

TABLE 2.1 – SUMMARY OF STUDY AREA ROADWAYS

ROADWAY	FUNCTIONAL CLASSIFICATION	ORIENTATION (STUDY AREA)	NO. TRAVEL LANES	MEDIAN TYPE	SPEED LIMIT (MPH)	Non-Motorized Accommodations			ADJACENT LAND USES		
						Pedestrian	Bicycle	Transit	Residential	Commercial	Agricultural
SR 369/Jesse Jewell Parkway	Principal Arterial	East/West	4	TWLT Lane	35	●		●		●	
West Academy Street	Minor Arterial	North/South	2	TWLT Lane	None Posted	●		●		●	
East Avenue	Local Street	North/South	2	None	None Posted	●				●	
West Avenue	Local Street	North/South	2	None	25	●				●	
Gordon Avenue	Local Street	North/South	2	None	None Posted	●				●	
John W. Morrow Jr. Parkway	Principal Arterial	North/South	4	Raised, Grassed	35	●				●	
SR 60/Queen City Parkway	Principal Arterial	North/South	4	TWLT Lane	35	●				●	

Note – Functional Classifications were taken from GDOT Functional Classification Map Web Application

2.2 INTERSECTIONS

The existing lane geometries at each study intersection are shown in Figure 2.1. Pedestrian signals and marked crosswalks are provided at each signalized intersection. Curb ramps are provided at the unsignalized side streets; however, there are no marked crosswalks at the side streets. There are no bicycle facilities within the study area.

2.3 EXISTING TRAFFIC FLOW PATTERNS

Traffic counts were performed on Wednesday, May 15, 2019 and on Thursday, May 23, 2019. The counts included 4-hour turning movement counts (TMCs) at the intersections of SR 369/Jesse Jewell Parkway at West Academy Street and at SR 60/Queen City Parkway/John W. Morrow Jr. Parkway. A 12-hour TMC was collected at SR 369/Jesse Jewell Parkway at East Avenue. 24-hour bi-directional tube counts were performed on West Avenue, Gordon Avenue, SR 60/Queen City Parkway, and a 24-hour bi-directional classification count was collected on SR 369/Jesse Jewell Parkway. All traffic counts are included in **Appendix A**. Existing morning and evening peak hour traffic is shown in Figure 2.2.

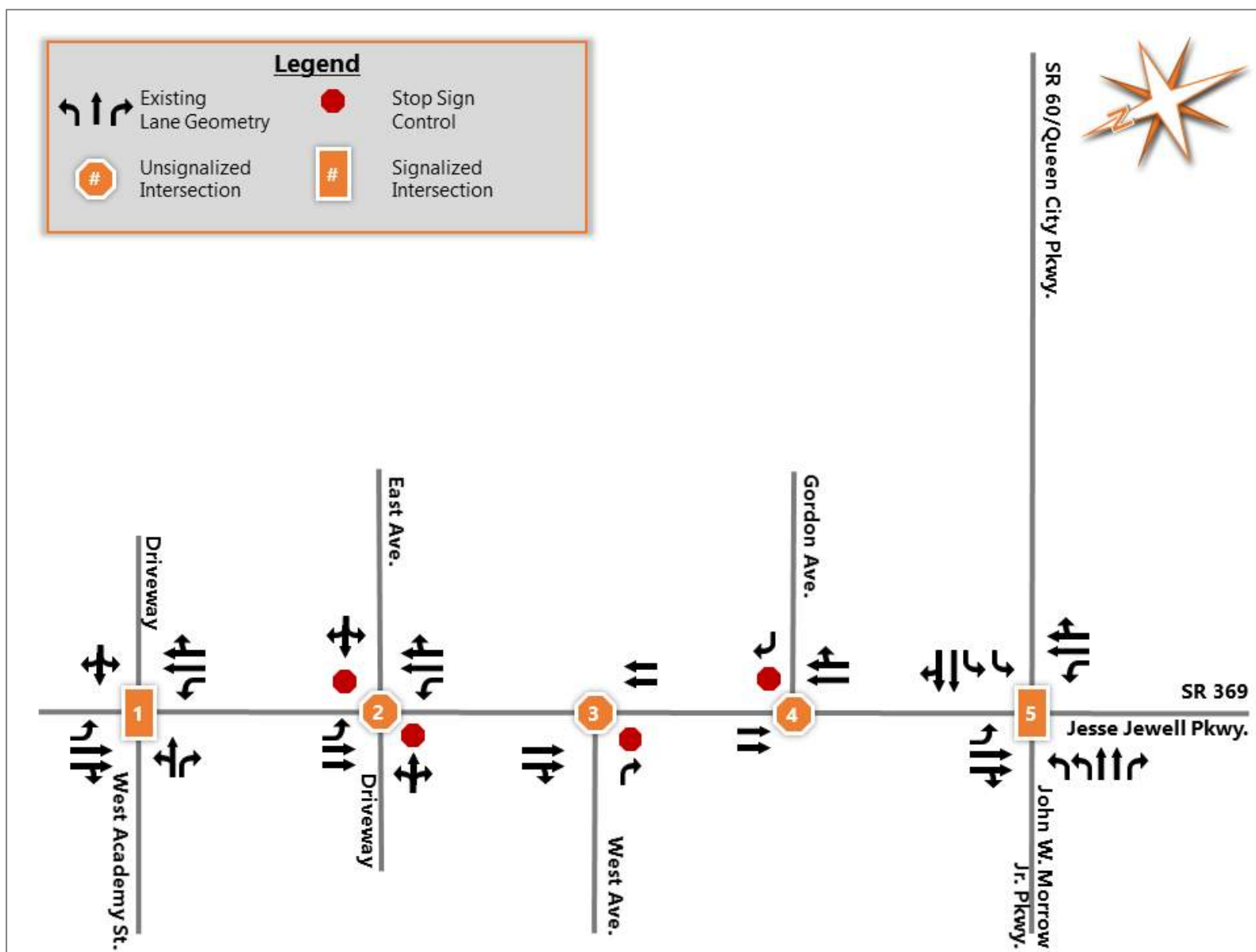


FIGURE 2.1 - EXISTING INTERSECTION GEOMETRIES

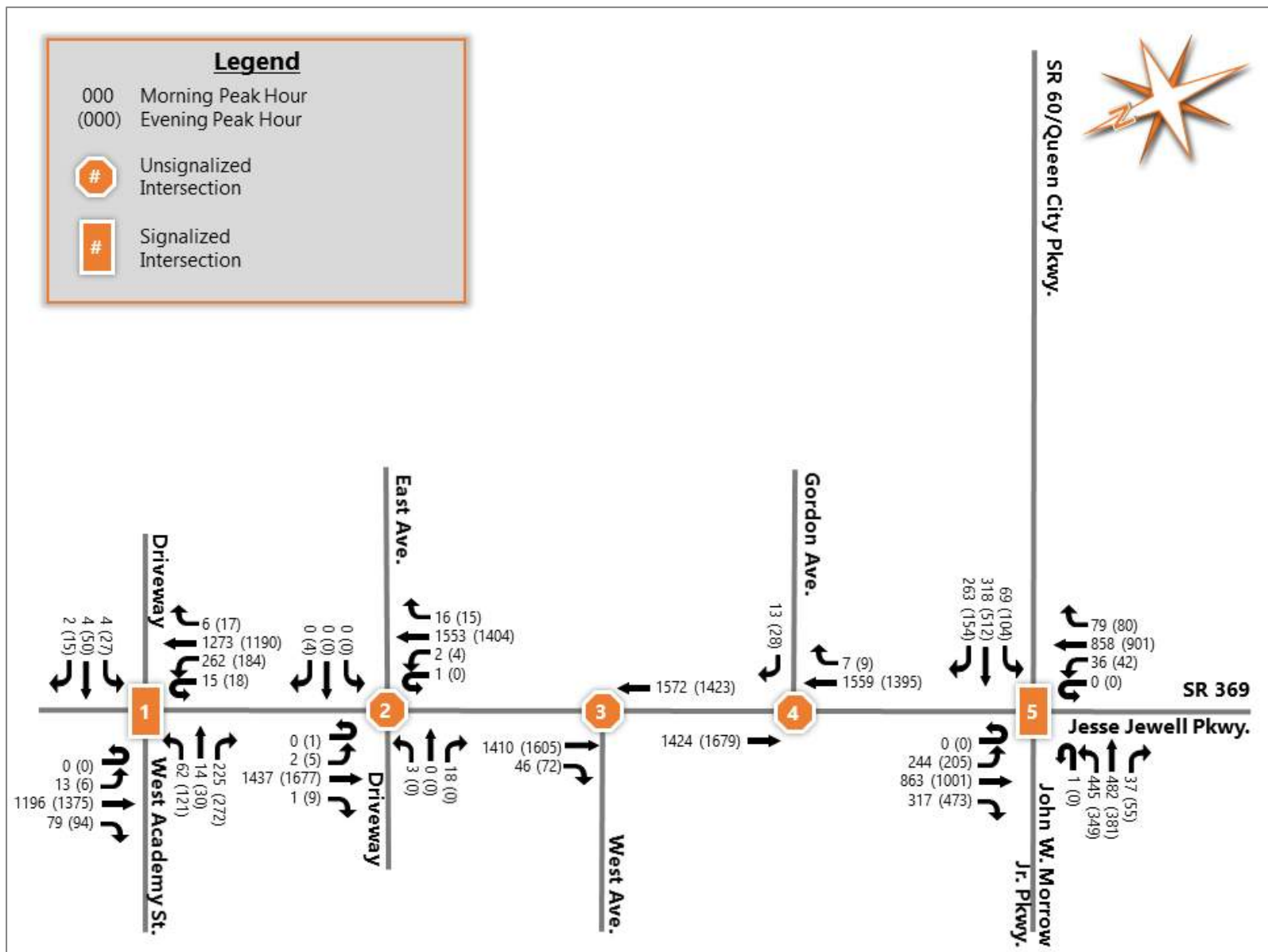


FIGURE 2.2 - EXISTING 2019 PEAK HOUR TRAFFIC

3. PROPOSED CONDITIONS

3.1 PROPOSED DEVELOPMENT

The proposed development will consist of a 4,993 square-foot convenience store with 14 vehicle fueling positions. As part of the project, the existing Gordon Avenue Right of Way (ROW) would be abandoned by the City of Gainesville. Gordon Avenue would be redirected in a 90-degree angle at the edge of the project site. A new, full access intersection would be created with the realigned Gordon Avenue and East Avenue. A full access driveway into the proposed project site would be provided on the realigned Gordon Avenue. The existing intersection of Gordon Avenue at SR 369/SR 60/Jesse Jewell Parkway would be converted to a Right-In Right-Out (RIRO) driveway for the proposed project. In addition, a RIRO driveway would be provided on SR 60/Queen City Parkway. A site plan is shown in Figure 3.1.

3.2 PLANNED TRANSPORTATION IMPROVEMENTS

Georgia Department of Transportation (GDOT) is currently designing improvements to the intersection of SR 369/Jesse Jewell Parkway at SR 60/Queen City Parkway/John W Morrow Jr. Parkway. A limited scope concept report for the project, identified by P.I. No. 0013322, was approved in September 2016. The project justification statement states,

The proposed project would address a congested intersection in the City of Gainesville, Hall County, Georgia. It is an intersection of two major state routes and three of the approaches lack dedicated right turn lanes. The project will enhance the efficiency of vehicular movements by adding right turn lanes on the three approaches that do not currently have right turn lanes and extending the existing left turn lanes on John W. Morrow Jr. Pkwy.

The Concept Report for P.I. No. 0013322 also notes the following project in the vicinity of the study area: GH112 – Jesse Jewell Parkway Widen to 6 lanes from John Morrow to Academy St (PI Not Assigned, Long-Range).

For the purposes of this study, it was assumed that the improvements identified in P.I. No. 0013322 will be completed by the opening year of the proposed project. The proposed widening improvements on Jesse Jewell Parkway were not included in this study because the project has not progressed to the design phase yet.

Proposed study intersection geometries, which reflect both the project-related improvements and the planned GDOT intersection improvements, are shown in Figure 3.2. The proposed intersection geometries for the intersection of SR 369/Jesse Jewell Parkway at SR 60/Queen City Parkway/John W. Morrow Jr. Parkway were used in both the Future Background and Future With Project capacity analyses performed for this study.

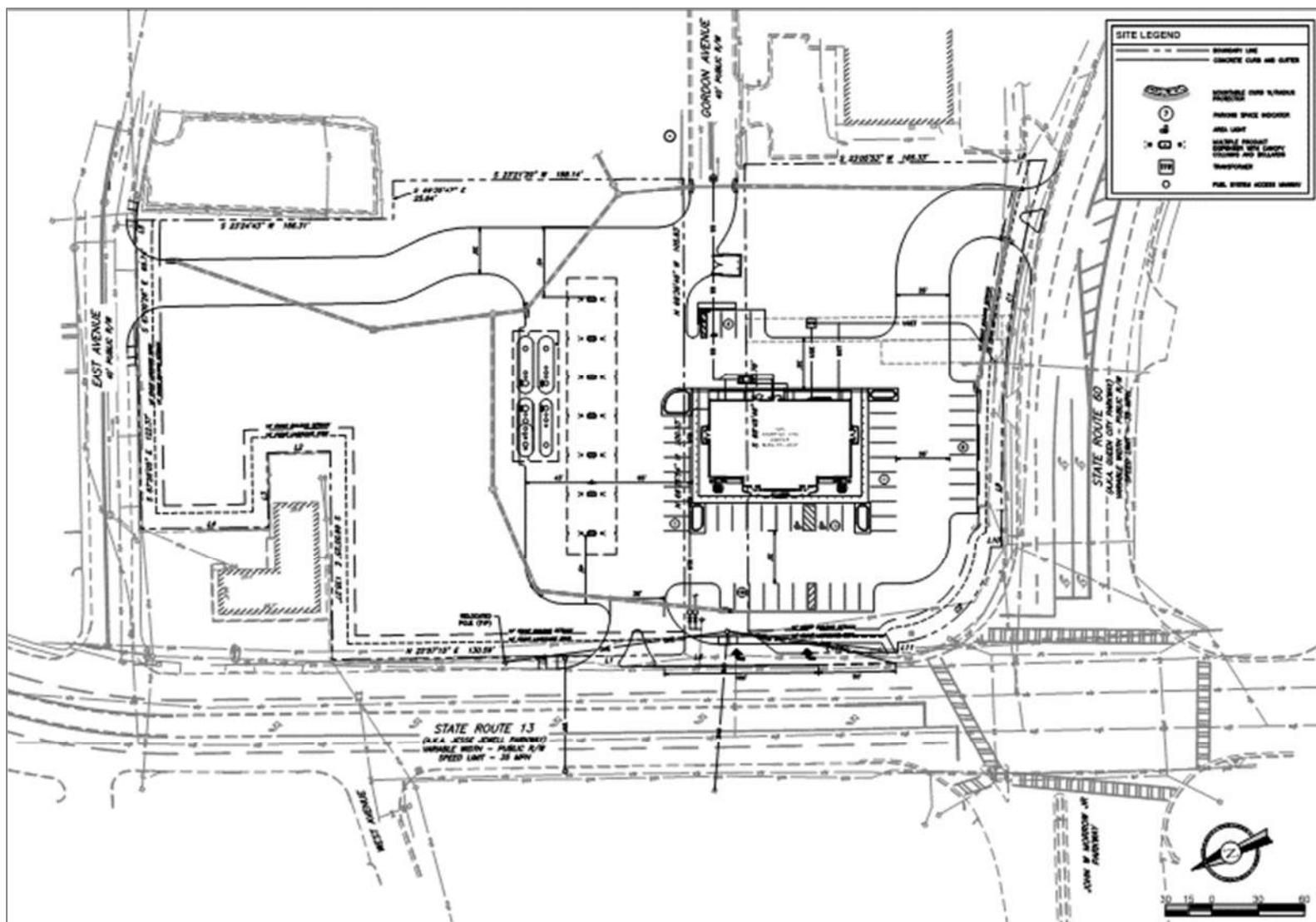


FIGURE 3.1 - PROPOSED SITE PLAN

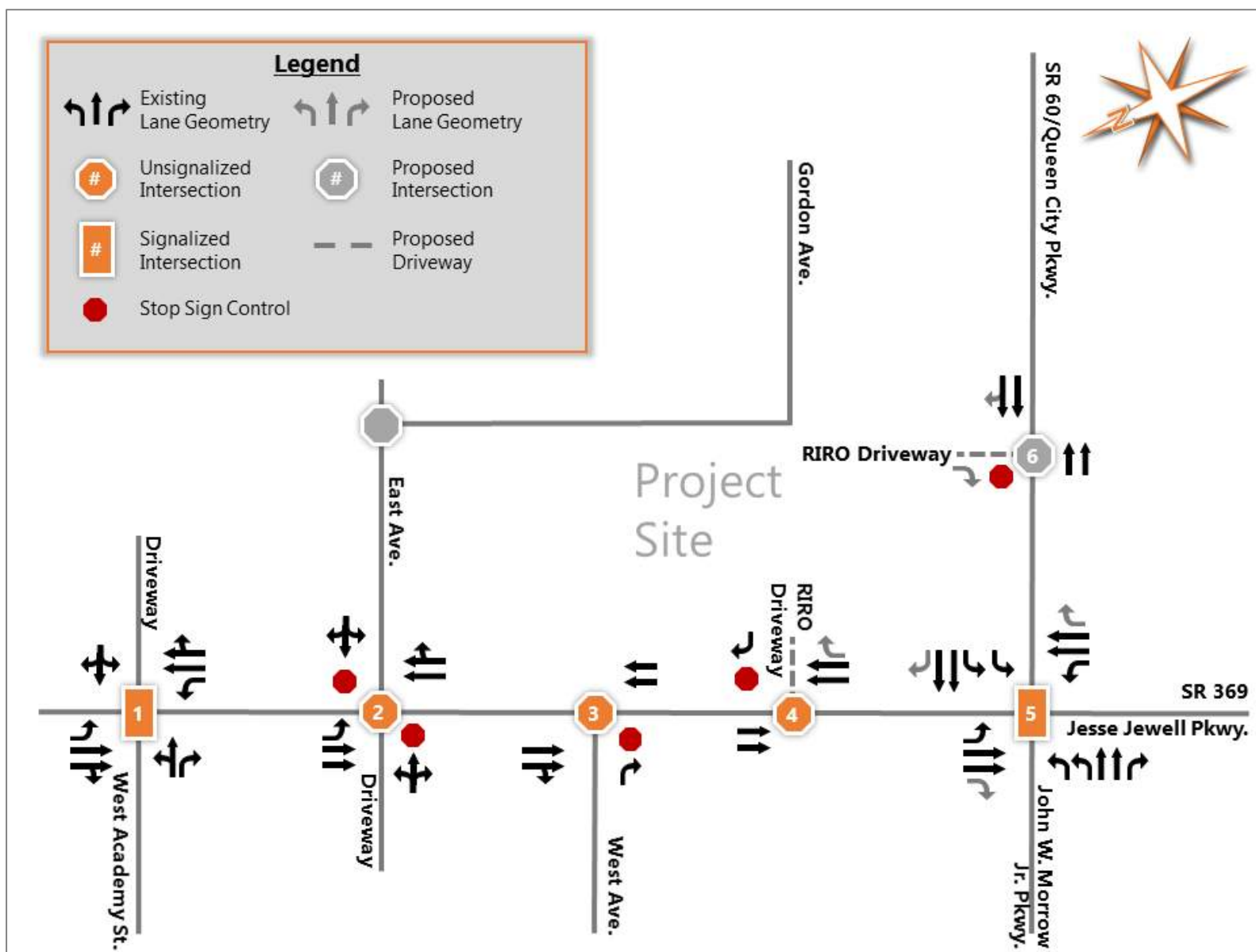


FIGURE 3.2 - PROPOSED STUDY INTERSECTION GEOMETRIES

4. TRAFFIC PROJECTIONS

4.1 FUTURE BACKGROUND TRAFFIC

A build-out year of 2020 was established for the project. An average annual growth rate was determined based on historic Average Annual Daily Traffic (AADT) counts recorded for nearby GDOT Count Stations. AADTs for Stations 139-0194, 139-0196, 139-0198, 139-0312 and 139-0313 were obtained from the Traffic Analysis and Data Application (TADA) website (gdottrafficdata.drakewell.com). An average annual growth rate of 1.0 percent per year was established for the study area.

The 1.0 percent average annual growth rate was applied to the 2019 traffic in the study area for a period of one year to establish the 2020 Background Traffic. The Future 2020 Background peak hour traffic is shown in Figure 4.1.

4.2 TRIP GENERATION

The traffic that would be generated by the proposed development was estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual (TGM) 10th Edition*. The trips that would be generated by the proposed project were estimated using ITE Land Use Code 960 – Super Convenience Market/Gas Station. The total number of project-generated trips was estimated for the typical weekday and the morning (AM) and evening (PM) peak hours.

A portion of the project-generated trips would be attracted into the site from traffic streams that are already passing by on the adjacent streets. These trips are commonly referred to as pass-by trips and can represent a significant portion of the total trips entering and exiting a commercial site. Pass-by rate data is included in the *3rd Edition Trip Generation Handbook*. At present, pass-by rate data is not available for Land Use Code 960 – Super Convenience Market/Gas Station; therefore, data for similar land uses was used to estimate pass-by rates for the proposed project. Table 4.1 lists the average pass-by rates for Land Use Codes 853 – Convenience Market with Gasoline Pumps, 944 – Gasoline/Service Station, and 945 – Gasoline/Service Station with Convenience Market. The estimated pass-by rates for the proposed project are 61 percent of morning peak hour trips and 55 percent of evening peak hour trips.

TABLE 4.1 - PASS-BY RATES

Land Use Description	Code	Pass-By Rate	
		AM	PM
Convenience Market with Gasoline Pumps	853	63%	66%
Gasoline/Service Station	944	58%	42%
Gasoline/Service Station with Convenience Market	945	62%	56%
Average Pass-By Rate		61%	55%

In general, the number of pass-by trips generated by a particular site is not expected to be greater than 15 percent of traffic on the adjacent street. The number of pass-by trips resulting from the *Trip Generation Handbook*-based rates was less than 15 percent of the background traffic on SR 369/Jesse Jewell Parkway and SR 60/Queen City Parkway; therefore, the pass-by rates were not adjusted. Table 4.2 lists the trip generation results.

TABLE 4.2 - TRIP GENERATION RESULTS

Land Use Code 960 - Super Convenience Market/Gas Station		Weekday			AM Peak Hour			PM Peak Hour		
		Total	Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting
Total Trips		4,180	2,090	2,090	415	208	207	346	173	173
Pass-By Trips	<i>58% of Daily Trips 61% AM/55% PM</i>	2,424	1,212	1,212	253	127	126	190	95	95
New Trips	(Total Trips - Pass-By Trips)	1,756	878	878	162	81	81	156	78	78

4.3 DISTRIBUTION OF PROJECT-GENERATED TRIPS

The trip distribution for the project generated trips was determined based on existing peak hour travel patterns within the study area as well as the locations of access points to the project site. Because the proposed development is a fueling station and convenience store, it was assumed that most drivers will expect a higher level of ease when accessing the site; therefore, a higher portion of trips was distributed to and from directions that would have the easiest access to and from the site. Pass-by trips were distributed to and from the directions accessible from the major routes within the study area. It was assumed that a portion of the new trips would be distributed to downtown and would, therefore, not access the major routes included in the study area. Figure 4.2 presents the peak hour trip distribution for pass-by trips, while Figure 4.3 presents the peak hour trip distribution for new trips.

4.4 ASSIGNMENT OF PROJECT-GENERATED TRIPS

The number of new and pass-by trips were distributed to the roadway network based on the trip distribution determined for the study area. The project-generated traffic was superimposed with the Future Background traffic to provide an estimate of traffic that would be present when the proposed development opens.

Because the project assumes that Gordon Avenue will be realigned to form a new, unsignalized intersection with East Avenue, the background side street traffic at the intersection of SR 369/Jesse Jewell Parkway at Gordon Avenue was redistributed to the intersection of SR 369/Jesse Jewell Parkway at East Avenue.

Future With Project peak hour traffic, including both the project-generated traffic and the redistributed Gordon Avenue traffic, is shown in Figure 4.4.

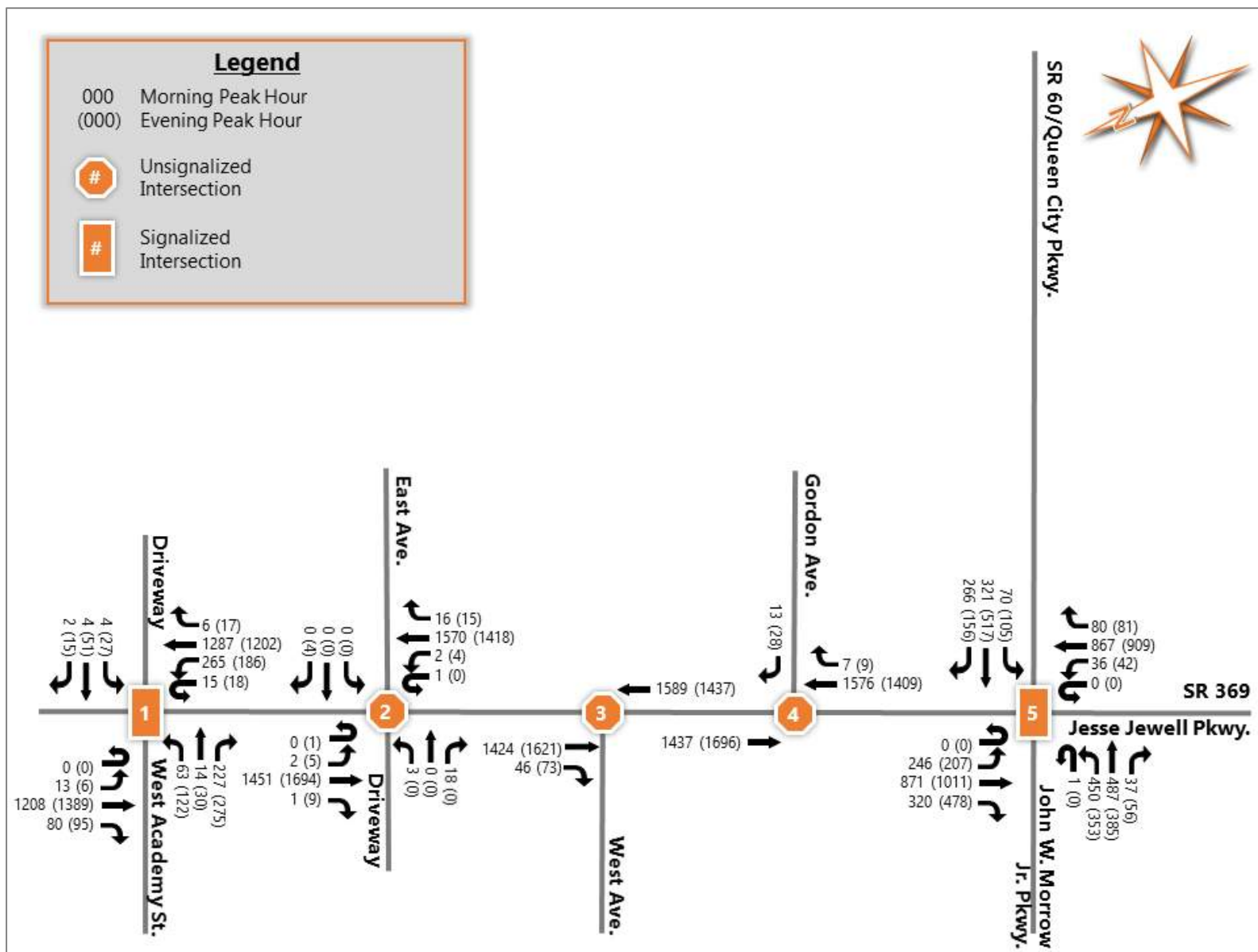


FIGURE 4.1 - FUTURE 2019 BACKGROUND PEAK HOUR TRAFFIC

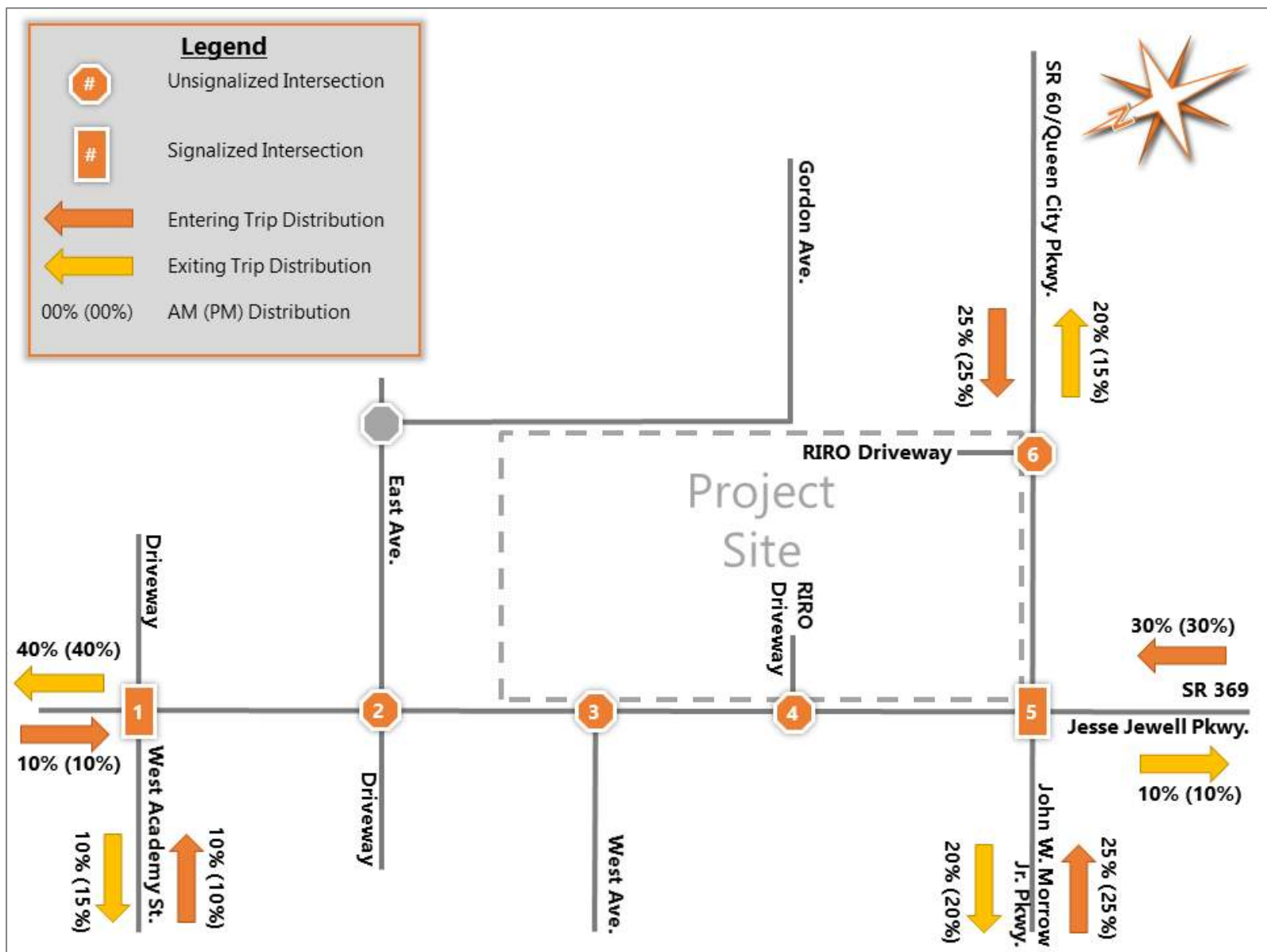


FIGURE 4.2 - PROJECT PEAK HOUR TRIP DISTRIBUTION OF PASS-BY TRIPS

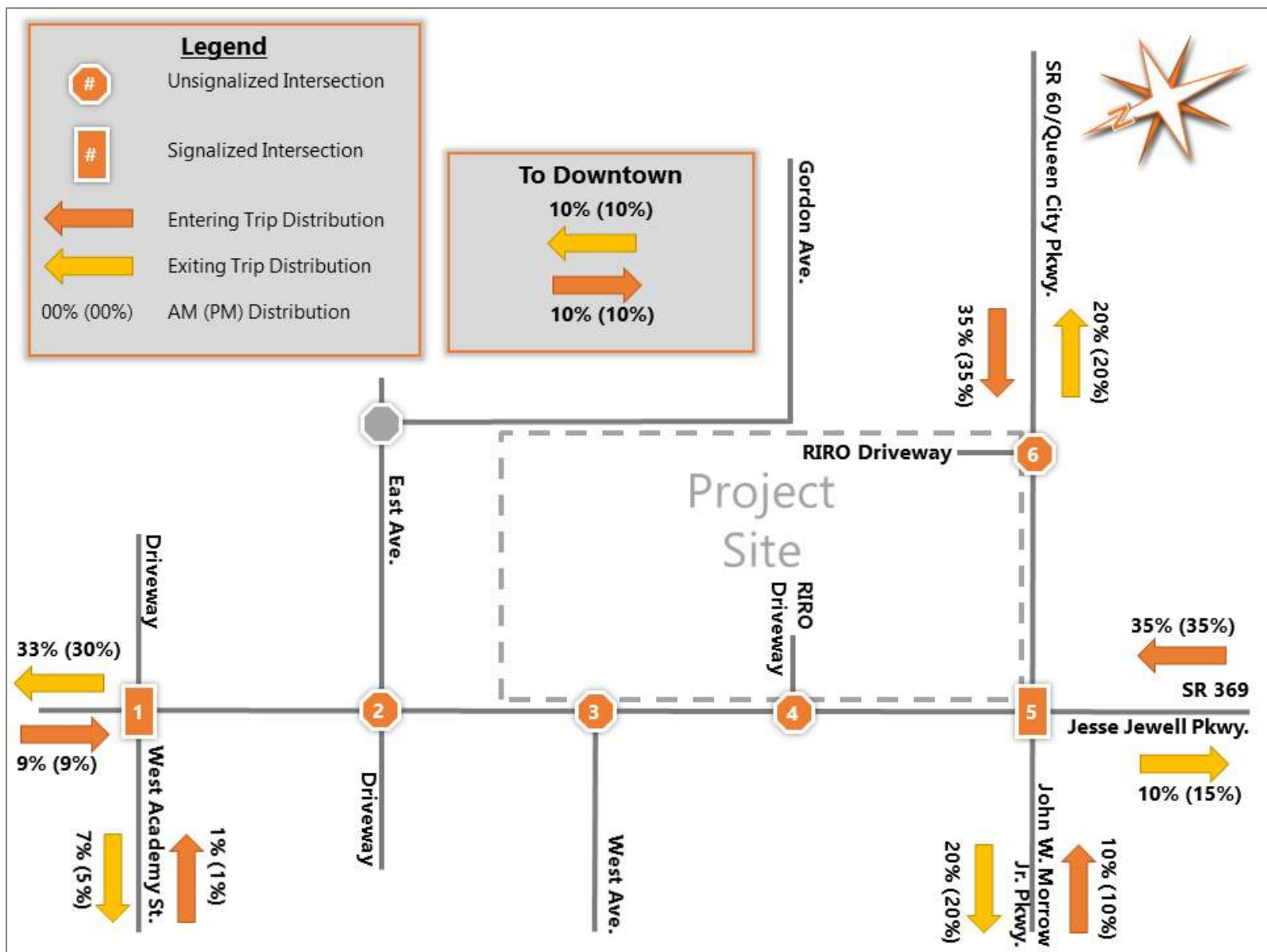


FIGURE 4.3 - PROJECT PEAK HOUR TRIP DISTRIBUTION OF NEW TRIPS

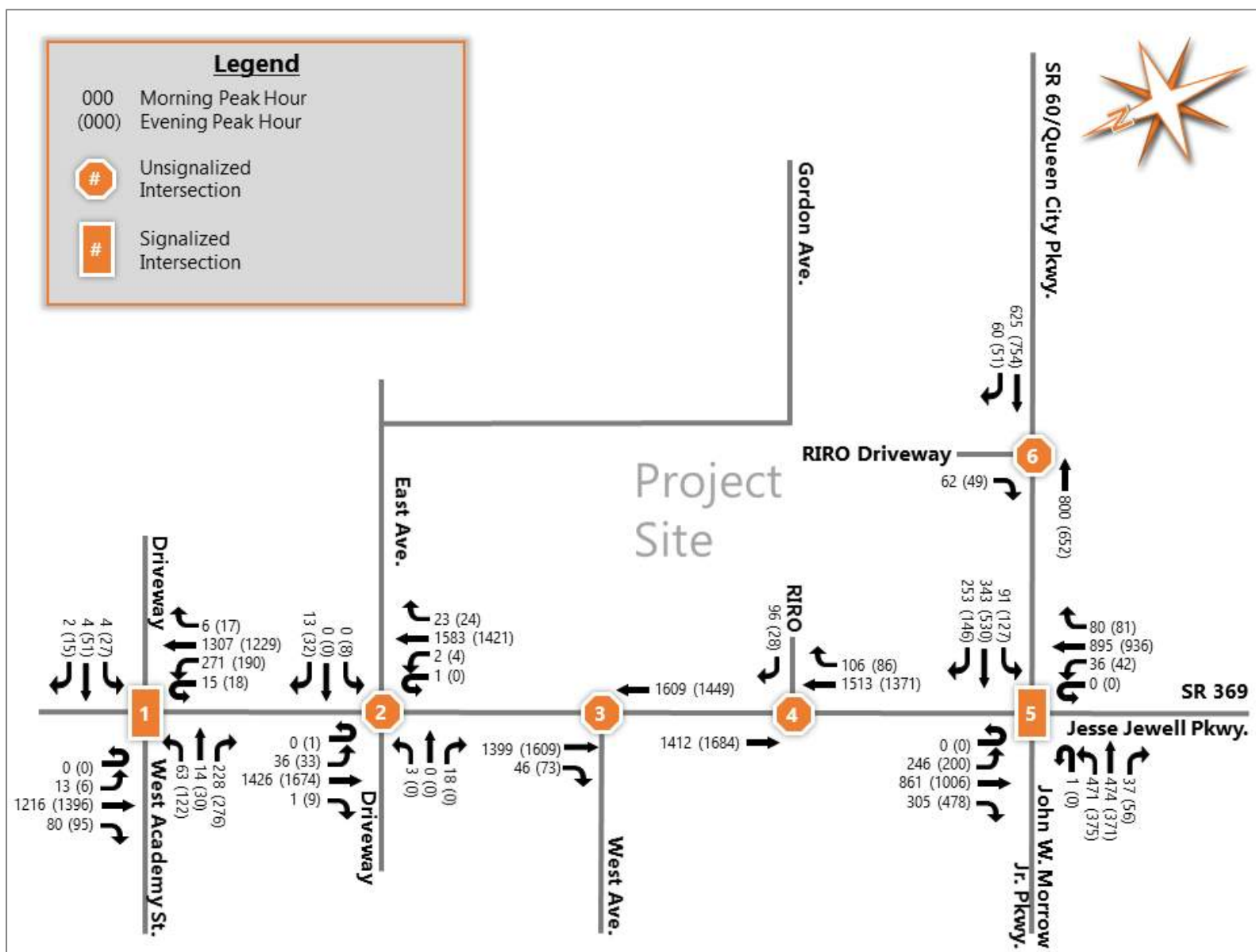


FIGURE 4.4 - FUTURE 2020 WITH PROJECT PEAK HOUR TRAFFIC

5. AUXILIARY LANES

Turn lanes are an effective measure for improving both traffic operations and safety at intersections. On uncontrolled approaches, turn lanes can separate slowing or stopped vehicles turning off the major roadway from through traffic, thereby minimizing turn-related crashes while eliminating added delays for through traffic. The addition of a right turn lane on stop-controlled approaches can significantly reduce delay for both right turning vehicles and left turning and through traffic.

The GDOT manual *Regulations for Driveway and Encroachment Control* stipulates guidelines for determining when a right turn deceleration lane should be provided for proposed driveways. For a roadway with more than two lanes, a posted speed limit of between 40 and 50 mph, and Average Annual Daily Traffic (AADT) of greater than 10,000 vehicles per day, a right turn deceleration lane is required for any driveway that generates more than 100 right-turning vehicles per day.

5.1 NEED FOR AUXILIARY TURN LANES ON SR 369/JESSE JEWELL PARKWAY

One RIRO driveway is proposed on SR 369/Jesse Jewell Parkway, which is a five-lane roadway with a posted speed limit of 35 mph. The proposed RIRO driveway on SR 369/Jesse Jewell Parkway is expected to attract more than 100 right turning vehicles in just the morning peak hour. Based on the GDOT guidelines, the RIRO driveway on SR 369/Jesse Jewell Parkway meets the minimum thresholds for requiring right turn deceleration lanes.

5.2 NEED FOR AUXILIARY TURN LANES ON SR 60/QUEEN CITY PARKWAY

One RIRO driveway is proposed on SR 60/Queen City Parkway, which is a five-lane roadway with a posted speed limit of 35 mph. The proposed RIRO driveway on SR 60/Queen City Parkway is expected to serve 60 entering vehicles during the morning peak hour and 51 entering vehicles during the evening peak hour. The total number of trips that would be served during the two peak hours would exceed the 100 vehicles per day threshold. Based on the GDOT guidelines, the RIRO driveway on SR 60/Queen City Parkway meets the minimum thresholds for requiring a right turn deceleration lane; however, the proposed RIRO driveway on SR 60/Queen City Parkway is located near the edge of the project property. Therefore, the project owner does not have control over the Right-of-Way that would be required to provide a right turn deceleration lane on SR 60/Queen City Parkway at the proposed driveway location.

6. CAPACITY ANALYSIS

In order to quantify the impacts of additional traffic and to determine any needed roadway and/or operational improvements, a capacity analysis was performed for the Future Background and the Future With Project peak hour conditions based on the methodology outlined in the *Highway Capacity Manual (HCM)*. Various computer programs are available which implement the HCM methodology. HCS7 software was used to analyze the study intersections.

HCM defines level of service (LOS) in terms of the amount of control delay, including initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The LOS categories range from A to F, with different thresholds specified according to the type of stop control at the intersection. The LOS criteria for both unsignalized and signalized intersections are listed in Table 6.1.

TABLE 6.1 - LEVEL OF SERVICE CRITERIA

Level of Service (LOS)	Unsignalized Control Delay per Vehicle (sec)	Signalized Control Delay per Vehicle (sec)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Rural, sparsely developed areas have a minimum LOS requirement of C based on rural residents' expectation for relatively uncongested conditions in combination with design flexibility associated with lower right of way costs. The minimum LOS for urban areas is D, reflecting the greater acceptance of delay and congestion by urban residents. Additionally, the increased density of developments makes right of way costs much higher in urban areas. The study area is in an urban location. A minimum LOS D is assumed for the study intersections.

6.1 EXISTING INTERSECTION CAPACITY ANALYSIS

Capacity analysis was performed for the Existing conditions in both the morning (AM) and evening (PM) peak hour conditions. The existing geometry was used for the existing analysis. Capacity analysis reports are included in **Appendix B**. The results of the analysis are listed in Table 6.2.

The results indicate that the intersection of SR 369/Jesse Jewell Parkway at SR 60/Queen City Parkway/John W. Morrow Jr. Parkway currently operates at LOS F with an overall intersection delay of 81.6 seconds per vehicle. The inadequate operations are expected to be mitigated by the proposed intersection improvements currently planned by GDOT.

TABLE 6.2 – EXISTING LOS AND DELAY AT STUDY INTERSECTIONS

No.	Intersection	Intersection Control	Approach	Existing 2019			
				AM Peak		PM Peak	
				LOS	sec/veh	LOS	sec/veh
1	SR 369/Jesse Jewell Pkwy @ West Academy St	Traffic Signal	Overall Intersection	B	15.8	C	22.6
2	SR 369/Jesse Jewell Pkwy @ East Ave	Side Street Stop	Eastbound Left	C	18.0	B	14.9
			Westbound Left	B	13.9	C	15.2
			Northbound	--	--	B	14.9
			Southbound	C	20.2	--	--
3	SR 369/Jesse Jewell Pkwy @ West Ave	Side Street Stop	Southbound	C	17.9	C	21.8
4	SR 369/Jesse Jewell Pkwy @ Gordon Ave	Side Street Stop	Northbound	C	16.6	C	15.3
5	SR 369/Jesse Jewell Pkwy @ SR 60/Queen City Pkwy/John W Morrow Jr Pkwy	Traffic Signal	Overall Intersection	F	81.6	D	52.8

6.2 FUTURE INTERSECTION CAPACITY ANALYSIS

Intersection capacity analysis was performed for the morning (AM) and evening (PM) peak hours in both the Future Background and the Future With Project conditions. The LOS and delay results are listed in Table 6.3. Capacity analysis reports for the analysis are included in **Appendix B**.

The results indicate that the study intersections would be expected to operate adequately in both the Future Background and Future With Project conditions. The Future Background and Future With Project results for the intersection of SR 369/Jesse Jewell Parkway at SR 60/Queen City Parkway/John W. Morrow Jr. Parkway reflect an improvement in operations associated with GDOT project PI No. 0013322.

TABLE 6.3 – FUTURE YEAR 2019 DELAY AND LOS RESULTS

No.	Intersection	Intersection Control	Approach	Background 2020				With Project 2020			
				AM Peak		PM Peak		AM Peak		PM Peak	
				LOS	sec/veh	LOS	sec/veh	LOS	sec/veh	LOS	sec/veh
1	SR 369/Jesse Jewell Pkwy @ West Academy St	Traffic Signal	Overall Intersection	B	12.6	B	18.1	B	13.3	B	19.9
2	SR 369/Jesse Jewell Pkwy @ East Ave	Side Street Stop	Eastbound Left	C	18.2	C	15.1	C	17.8	B	14.9
			Westbound Left	B	14.0	C	15.3	C	15.1	B	14.1
			Northbound	--	--	B	15.0	C	16.8	D	25.0
			Southbound	C	20.4	--	--	C	21.4	--	--
3	SR 369/Jesse Jewell Pkwy @ West Ave	Side Street Stop	Southbound	C	18.1	C	22.2	C	17.8	C	22.0
4	SR 369/Jesse Jewell Pkwy @ Gordon Ave/ Project Driveway*	Side Street Stop	Northbound	C	16.7	C	15.5	C	22.0	C	17.7
5	SR 369/Jesse Jewell Pkwy @ SR 60/Queen City Pkwy/John W Morrow Jr Pkwy	Traffic Signal	Overall Intersection	C	34.1	C	31.1	D	36.0	C	32.7
6	SR 60/Queen City Pkwy @ RIRO Driveway	Side Street Stop	Northbound					B	11.2	B	11.6

**At Intersection 4, the side street approach is Gordon Avenue in the Background conditions. The With Project conditions assume that Gordon Avenue will be abandoned by the City and replaced by a project driveway.*

6.3 BACK OF QUEUE ANALYSIS

Back of Queue (BOQ) analysis was used to analyze the storage needs for the existing and proposed turn lanes in the Future With Project conditions. The 95th percentile BOQ length was calculated for the turn lanes at each intersection. The queue is expected to be the reported length or shorter 95 percent of the time. The BOQ results were taken from the capacity analysis reports for each study intersection. Table 6.4 lists the BOQ lengths for each peak hour for the Existing, Future Background, and Future With Project conditions.

The BOQ results indicate that the proposed and existing storage lengths at each study intersection are adequate to serve the expected queues, with one exception – the southbound left turn movement at the intersection of SR 369/Jesse Jewell Parkway at SR 60/Queen City Parkway/John W. Morrow Jr. Parkway. The southbound left turn lanes on John W. Morrow Jr. Parkway are not adequate to serve the expected queue lengths in the Existing conditions; however, the BOQ lengths expected in the Future Background and Future With Project conditions would fit within the proposed turn lane storage.

TABLE 6.4 – BACK OF QUEUE RESULTS

No.	Intersection	Control	Movement	Existing Storage (feet)	95th Percentile Back of Queue (feet)					
					Existing 2019		Background 2020		With Project 2020	
					AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1	SR 369/Jesse Jewell Pkwy @ West Academy St	Traffic Signal	Eastbound Left	210	150	175	150	150	175	150
			Westbound Left	135	25	25	25	25	25	25
			Southbound Right	225	100	225	100	125	100	125
2	SR 369/Jesse Jewell Pkwy @ East Ave	Side Street Stop	Eastbound Left	40	0	0	0	0	0	0
			Westbound Left	150	0	25	0	25	25	25
5	SR 369/Jesse Jewell Pkwy @ SR 60/Queen City Pkwy/John W Morrow Jr Pkwy	Traffic Signal	Eastbound Left	110	50	50	50	50	50	50
			Eastbound Right	300	N/A	N/A	0	0	0	0
			Westbound Left	435	350	250	200	150	250	175
			Westbound Right	195	N/A	N/A	25	25	25	25
			Northbound Left	120	75	100	75	75	75	100
			Northbound Right	305	N/A	N/A	125	25	100	25
			Southbound Left	330	475	250	325	250	325	275
			Southbound Right	175	0	0	0	0	0	0

Note – Storage lengths listed for Intersection 5 are the proposed storage lengths recommended in the Traffic Study included in the GDOT Concept Report for the proposed intersection improvements.

7. CONCLUSIONS

A convenience store and fueling station is planned for a site on the southeast corner of SR 329/Jesse Jewell Parkway and SR 60/Queen City Parkway in Glynn County, Georgia. A Traffic Impact Analysis was performed to determine how much new traffic would be generated by the proposed development and how the new traffic would impact the existing roadway network.

The proposed development will consist of a 4,993 square-foot convenience store with 14 vehicle fueling positions. As part of the project, the existing Gordon Avenue Right of Way (ROW) would be abandoned by the City of Gainesville. Gordon Avenue would be redirected in a 90-degree angle at the edge of the project site. A new, full access intersection would be created with the realigned Gordon Avenue and East Avenue. A full access driveway into the proposed project site would be provided on the realigned Gordon Avenue. The existing intersection of Gordon Avenue at SR 369/SR 60/Jesse Jewell Parkway would be converted to a Right-In Right-Out (RIRO) driveway for the proposed project. In addition, a RIRO driveway would be provided on SR 60/Queen City Parkway.

A Trip Generation analysis was performed to determine the volume of traffic that would be generated by the proposed development. A pass-by rate of 61 percent was applied to the morning peak hour trips, and a 55 percent pass-by rate was applied to the evening peak hour trips. The project is expected to generate 1,756 new trips per day, with 162 new trips occurring during the morning peak hour, and 156 new trips occurring during the evening peak hour. The project is expected to generate a total of 4,180 daily trips, with 415 trips occurring in the morning peak hour, and 346 trips occurring in the evening peak hour.

The need for auxiliary turn lanes at the project driveways on SR 369/Jesse Jewell Parkway and on SR 60/Queen City Parkway were determined based on guidelines specified in the *GDOT Regulations for Driveway and Encroachment Control Manual*. The daily right turning volumes at both the proposed RIRO driveways meet minimum thresholds for requiring right turn lanes; however, the driveway on SR 60 is located near the edge of the project site and the developer does not own the necessary ROW along SR 60 to install a right-turn lane into the driveway.

Capacity analysis was performed for the Future Background and Future With Project peak hour conditions. LOS D or better was considered adequate. All of the study intersections are expected to operate adequately in both the Future Background and Future With Project conditions.

A Back of Queue analysis indicated that the existing storage provided in the left turn lanes on the John W. Morrow Jr. Parkway approach to SR 369/Jesse Jewell Parkway would not be adequate to accommodate Existing, Future Background, or Future With Project queues.

References

1. Trip Generation, 10th Edition, Institute of Transportation Engineers, Washington, DC, 2017.
2. Trip Generation Handbook, 3rd Edition, Institute of Transportation Engineers, Washington, DC, 2014.
3. Highway Capacity Manual, 6th Edition, Transportation Research Board, Washington, DC, 2016.
4. Highway Capacity Software, Version 7.7, McTrans, Gainesville, FL, 2018.
5. Synchro, Version 9, Trafficware Ltd., Sugar Land, TX 2014.
6. Regulations for Driveway & Encroachment Control Manual, Revision 4.1, Georgia Department of Transportation, Atlanta, Georgia, 2018.

APPENDIX A :

TRAFFIC COUNTS

Page 1

Site Code: 4

Station ID: 4

WEST AVENUE WEST OF SR 60

ADT ADT 1,866 AADT 1,866

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Site Code: 5
Station ID: 5
GORDON AVENUE EAST OF SR-60 SR-369

Start Time	15-May-19 Wed	EB		Hour Totals		WB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	2			0	5				
12:15		0	2			0	3				
12:30		0	1			0	3				
12:45		0	1	0	6	1	1	1	12	1	18
01:00		0	1			0	2				
01:15		0	1			0	3				
01:30		0	1			0	2				
01:45		0	2	0	5	0	6	0	13	0	18
02:00		0	0			0	2				
02:15		0	1			0	1				
02:30		0	1			0	0				
02:45		0	0	0	2	0	1	0	4	0	6
03:00		0	0			0	2				
03:15		0	2			0	1				
03:30		0	0			0	7				
03:45		0	2	0	4	0	3	0	13	0	17
04:00		1	0			0	7				
04:15		0	0			0	9				
04:30		1	4			0	14				
04:45		0	3	2	7	0	9	0	39	2	46
05:00		0	3			0	7				
05:15		0	3			0	6				
05:30		0	0			0	6				
05:45		0	2	0	8	1	4	1	23	1	31
06:00		0	0			1	1				
06:15		0	1			1	3				
06:30		0	0			0	0				
06:45		0	0	0	1	0	2	2	6	2	7
07:00		0	2			0	6				
07:15		0	0			2	0				
07:30		1	0			3	1				
07:45		2	0	3	2	2	0	7	7	10	9
08:00		0	0			6	0				
08:15		4	1			7	1				
08:30		0	1			2	1				
08:45		1	0	5	2	7	1	22	3	27	5
09:00		1	1			0	0				
09:15		0	0			2	0				
09:30		1	0			4	2				
09:45		0	0	2	1	2	0	8	2	10	3
10:00		2	0			1	0				
10:15		0	0			1	0				
10:30		0	1			3	0				
10:45		1	1	3	2	0	1	5	1	8	3
11:00		0	0			2	0				
11:15		0	0			0	1				
11:30		0	0			2	0				
11:45		1	0	1	0	1	1	5	2	6	2
Total		16	40			51	125			67	165
Percent		28.6%	71.4%			29.0%	71.0%			28.9%	71.1%
Grand Total		16	40			51	125			67	165
Percent		28.6%	71.4%			29.0%	71.0%			28.9%	71.1%
ADT		ADT 232		AADT 232							

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Site Code: 6
Station ID: 6
SR-60 QUEEN CITY PKWY EAST OF SR-369

Start Time	15-May-19 Wed	EB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		29	134		
12:15		18	156		
12:30		18	174		
12:45		13	160	78	624
01:00		10	155		
01:15		16	157		
01:30		4	182		
01:45		14	170	44	664
02:00		14	154		
02:15		12	178		
02:30		13	139		
02:45		8	136	47	607
03:00		17	160		
03:15		13	162		
03:30		22	175		
03:45		26	168	78	665
04:00		19	162		
04:15		36	175		
04:30		48	198		
04:45		47	166	150	701
05:00		48	204		
05:15		78	156		
05:30		96	150		
05:45		94	162	316	672
06:00		96	127		
06:15		132	120		
06:30		166	103		
06:45		188	92	582	442
07:00		174	122		
07:15		180	102		
07:30		207	90		
07:45		242	72	803	386
08:00		182	92		
08:15		149	92		
08:30		130	78		
08:45		116	93	577	355
09:00		128	92		
09:15		120	74		
09:30		122	70		
09:45		122	54	492	290
10:00		106	36		
10:15		96	52		
10:30		135	46		
10:45		119	34	456	168
11:00		142	42		
11:15		136	34		
11:30		142	33		
11:45		158	19	578	128
Total		4201	5702		
Percent		42.4%	57.6%		
Grand Total		4201	5702		
Percent		42.4%	57.6%		
ADT		ADT 9,903		AADT 9,903	

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Site Code: 6.5
Station ID: 6.5
SR 60 EAST OF JESSE JEWELL PKWY

Start Time	21-May-19 Tue	WB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		*	*		
12:15		*	166		
12:30		*	164		
12:45		*	151	0	481
01:00		*	154		
01:15		*	169		
01:30		*	182		
01:45		*	148	0	653
02:00		*	146		
02:15		*	151		
02:30		*	163		
02:45		*	156	0	616
03:00		*	138		
03:15		*	161		
03:30		*	182		
03:45		*	186	0	667
04:00		*	198		
04:15		*	203		
04:30		*	198		
04:45		*	198	0	797
05:00		*	206		
05:15		*	196		
05:30		*	170		
05:45		*	192	0	764
06:00		*	188		
06:15		*	158		
06:30		*	153		
06:45		*	106	0	605
07:00		*	116		
07:15		*	98		
07:30		*	80		
07:45		*	76	0	370
08:00		*	87		
08:15		*	52		
08:30		*	72		
08:45		*	58	0	269
09:00		*	55		
09:15		*	55		
09:30		*	48		
09:45		*	46	0	204
10:00		*	47		
10:15		*	34		
10:30		*	28		
10:45		*	26	0	135
11:00		*	48		
11:15		*	33		
11:30		*	16		
11:45		*	20	0	117
Total		0	5678		
Percent		0.0%	100.0%		

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Site Code: 6.5
Station ID: 6.5
SR 60 EAST OF JESSE JEWELL PKWY

Start Time	22-May-19 Wed	WB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		19	217		
12:15		30	180		
12:30		28	150		
12:45		20	150	97	697
01:00		18	138		
01:15		10	144		
01:30		16	162		
01:45		9	156	53	600
02:00		25	158		
02:15		15	158		
02:30		16	190		
02:45		14	148	70	654
03:00		9	194		
03:15		12	156		
03:30		14	176		
03:45		12	196	47	722
04:00		18	208		
04:15		16	195		
04:30		25	199		
04:45		15	171	74	773
05:00		46	219		
05:15		36	186		
05:30		38	188		
05:45		44	164	164	757
06:00		51	180		
06:15		58	160		
06:30		74	157		
06:45		103	124	286	621
07:00		104	109		
07:15		158	107		
07:30		174	98		
07:45		206	90	642	404
08:00		204	76		
08:15		195	68		
08:30		183	76		
08:45		186	62	768	282
09:00		163	60		
09:15		138	52		
09:30		156	43		
09:45		164	50	621	205
10:00		147	46		
10:15		148	42		
10:30		134	40		
10:45		148	28	577	156
11:00		140	36		
11:15		138	39		
11:30		194	42		
11:45		183	24	655	141
Total		4054	6012		
Percent		40.3%	59.7%		

All Traffic Data Services, Inc.
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Site Code: 6.5
Station ID: 6.5
SR 60 EAST OF JESSE JEWELL PKWY

Start Time	23-May-19 Thu	WB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		32	178		
12:15		18	184		
12:30		20	166		
12:45		20	186	90	714
01:00		18	120		
01:15		11	154		
01:30		13	160		
01:45		30	164	72	598
02:00		20	142		
02:15		12	143		
02:30		23	152		
02:45		20	160	75	597
03:00		16	190		
03:15		16	168		
03:30		5	166		
03:45		14	198	51	722
04:00		20	187		
04:15		19	222		
04:30		16	190		
04:45		22	179	77	778
05:00		27	209		
05:15		35	172		
05:30		44	198		
05:45		53	158	159	737
06:00		48	186		
06:15		64	148		
06:30		83	130		
06:45		106	128	301	592
07:00		116	124		
07:15		151	94		
07:30		171	92		
07:45		196	82	634	392
08:00		202	92		
08:15		196	70		
08:30		145	78		
08:45		180	62	723	302
09:00		160	84		
09:15		166	68		
09:30		144	54		
09:45		159	46	629	252
10:00		160	50		
10:15		138	43		
10:30		144	38		
10:45		161	36	603	167
11:00		172	36		
11:15		172	38		
11:30		184	46		
11:45		168	40	696	160
Total		4110	6011		
Percent		40.6%	59.4%		

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Site Code: 6.5
Station ID: 6.5
SR 60 EAST OF JESSE JEWELL PKWY

Start Time	24-May-19 Fri	WB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		35	*		
12:15		29	*		
12:30		22	*		
12:45		24	*	110	0
01:00		10	*		
01:15		12	*		
01:30		12	*		
01:45		20	*	54	0
02:00		22	*		
02:15		22	*		
02:30		30	*		
02:45		24	*	98	0
03:00		16	*		
03:15		14	*		
03:30		14	*		
03:45		18	*	62	0
04:00		15	*		
04:15		23	*		
04:30		18	*		
04:45		12	*	68	0
05:00		29	*		
05:15		32	*		
05:30		38	*		
05:45		52	*	151	0
06:00		52	*		
06:15		71	*		
06:30		82	*		
06:45		94	*	299	0
07:00		124	*		
07:15		157	*		
07:30		180	*		
07:45		188	*	649	0
08:00		186	*		
08:15		175	*		
08:30		158	*		
08:45		156	*	675	0
09:00		164	*		
09:15		19	*		
09:30		*	*	*	*
09:45		*	*	*	*
10:00		*	*	*	*
10:15		*	*	*	*
10:30		*	*	*	*
10:45		*	*	*	*
11:00		*	*	*	*
11:15		*	*	*	*
11:30		*	*	*	*
11:45		*	*	*	*
Total		2349	0		
Percent		100.0%	0.0%		
Grand Total		10513	17701		
Percent		37.3%	62.7%		
ADT		ADT 9,997		AADT 9,997	

All Traffic Data Services, Inc

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Site Code: 7

Station ID: 7

SR-369 SOUTH OF SR-60 - QUEEN CITY PKWY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/15/19	0	27	6	0	1	0	0	0	2	0	0	0	0	36
00:15	0	20	1	0	0	0	0	1	1	0	0	0	0	23
00:30	0	28	4	0	0	0	0	1	0	0	0	0	0	33
00:45	1	9	3	0	0	0	0	2	1	0	0	0	0	16
	1	84	14	0	1	0	0	4	4	0	0	0	0	108
01:00	0	17	5	0	0	0	0	0	0	0	0	0	0	22
01:15	0	7	6	0	0	1	0	1	0	0	0	0	0	15
01:30	1	12	1	0	0	0	0	1	0	0	0	0	0	15
01:45	0	7	1	0	1	0	0	0	0	0	0	0	0	9
	1	43	13	0	1	1	0	2	0	0	0	0	0	61
02:00	0	11	4	0	1	0	0	2	0	0	0	0	0	18
02:15	0	16	4	1	0	0	0	0	0	0	0	0	0	21
02:30	0	8	3	0	0	0	0	0	1	0	0	0	0	12
02:45	0	15	2	0	0	1	0	0	2	0	0	0	0	20
	0	50	13	1	1	1	0	2	3	0	0	0	0	71
03:00	0	8	2	0	0	0	0	0	1	0	0	0	0	11
03:15	0	12	0	0	0	0	0	0	1	0	0	0	0	13
03:30	1	8	2	0	0	1	0	0	1	0	0	0	0	13
03:45	0	7	0	0	1	0	0	1	0	0	0	0	0	9
	1	35	4	0	1	1	0	1	3	0	0	0	0	46
04:00	0	12	3	1	0	0	0	1	1	0	0	0	0	18
04:15	0	14	7	0	0	0	0	0	1	0	0	0	0	22
04:30	0	15	2	0	0	0	0	1	0	0	0	0	0	18
04:45	0	19	4	1	2	0	0	4	1	0	0	0	0	31
	0	60	16	2	2	0	0	6	3	0	0	0	0	89
05:00	1	32	3	0	1	0	0	3	0	0	0	0	0	40
05:15	2	43	7	0	3	6	0	0	0	0	0	0	0	61
05:30	0	52	11	0	2	0	0	1	0	0	1	0	0	67
05:45	0	62	12	0	1	0	0	3	0	0	0	0	1	79
	3	189	33	0	7	6	0	7	0	0	1	0	1	247
06:00	1	74	15	0	8	1	0	1	1	0	0	0	0	101
06:15	2	120	24	1	0	0	0	0	1	0	0	0	0	148
06:30	4	127	19	0	3	0	0	0	1	0	0	0	0	154
06:45	0	108	25	1	1	1	0	1	0	0	0	0	0	137
	7	429	83	2	12	2	0	2	3	0	0	0	0	540
07:00	4	163	34	1	3	1	0	1	0	0	0	0	0	207
07:15	5	164	30	0	8	0	0	4	2	0	0	1	0	214
07:30	4	215	37	0	5	3	0	2	0	0	0	0	0	266
07:45	1	185	31	2	2	3	0	2	1	0	0	0	0	227
	14	727	132	3	18	7	0	9	3	0	0	1	0	914
08:00	7	165	39	0	5	0	0	3	6	0	0	0	0	225
08:15	1	156	30	0	8	1	0	2	1	0	0	0	0	199
08:30	1	192	36	1	2	1	0	1	1	0	0	0	0	235
08:45	1	156	38	0	10	1	0	2	1	0	0	0	0	209
	10	669	143	1	25	3	0	8	9	0	0	0	0	868
09:00	3	138	25	1	12	2	0	3	3	0	0	0	0	187
09:15	3	138	33	1	4	1	1	7	2	0	0	0	0	190
09:30	2	164	44	1	3	2	0	1	3	0	0	0	0	220
09:45	2	155	31	4	5	1	0	3	3	0	0	0	0	204
	10	595	133	7	24	6	1	14	11	0	0	0	0	801
10:00	6	163	31	0	3	1	0	3	2	0	0	0	0	209
10:15	0	173	33	2	11	1	0	3	1	0	0	0	0	224
10:30	0	167	45	0	1	1	0	4	1	0	0	0	0	219
10:45	2	152	24	1	7	4	0	2	0	0	1	0	0	193
	8	655	133	3	22	7	0	12	4	0	1	0	0	845
11:00	3	143	29	0	9	1	0	2	0	0	0	0	0	187
11:15	5	191	40	3	3	1	0	1	1	1	0	0	0	246
11:30	1	177	38	2	3	1	0	0	3	0	0	0	0	225
11:45	0	177	33	1	10	2	0	2	2	1	1	0	0	229
	9	688	140	6	25	5	0	5	6	2	1	0	0	887
Total	64	4224	857	25	139	39	1	72	49	2	3	1	1	5477
Percent	1.2%	77.1%	15.6%	0.5%	2.5%	0.7%	0.0%	1.3%	0.9%	0.0%	0.1%	0.0%	0.0%	

All Traffic Data Services, Inc

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Site Code: 7

Station ID: 7

SR-369 SOUTH OF SR-60 - QUEEN CITY PKWY

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	3	223	39	0	6	2	0	2	0	2	1	0	0	278
12:15	5	206	49	0	6	2	0	4	1	0	0	0	0	273
12:30	2	237	34	0	9	1	0	0	2	0	0	0	0	285
12:45	1	236	32	2	4	1	0	1	0	0	1	0	1	279
	11	902	154	2	25	6	0	7	3	2	2	0	1	1115
13:00	5	196	34	0	2	2	0	3	0	2	1	0	0	245
13:15	6	232	33	2	1	1	0	2	0	0	0	0	0	277
13:30	5	245	36	0	3	2	0	0	2	0	1	0	1	295
13:45	3	209	42	0	4	0	0	3	0	0	0	0	0	261
	19	882	145	2	10	5	0	8	2	2	2	0	1	1078
14:00	2	216	33	0	4	0	0	0	0	1	0	0	0	256
14:15	9	200	42	1	6	3	0	7	0	0	1	0	0	269
14:30	1	229	27	0	5	3	0	2	2	0	0	0	0	269
14:45	2	205	34	0	8	2	0	2	0	0	0	0	1	254
	14	850	136	1	23	8	0	11	2	1	1	0	1	1048
15:00	6	210	29	1	5	3	0	1	2	0	0	0	0	257
15:15	2	195	34	0	5	0	0	4	4	0	1	0	0	245
15:30	5	233	26	0	1	2	0	0	1	0	0	0	0	268
15:45	3	188	44	0	4	3	0	1	3	0	1	0	0	247
	16	826	133	1	15	8	0	6	10	0	2	0	0	1017
16:00	6	191	31	1	3	0	1	2	0	0	0	1	0	236
16:15	4	206	47	1	2	0	1	1	0	0	0	0	0	262
16:30	5	182	28	0	3	3	1	0	0	0	0	0	0	222
16:45	13	175	13	0	1	0	0	0	1	0	0	0	0	203
	28	754	119	2	9	3	3	3	1	0	0	1	0	923
17:00	5	178	17	0	1	2	0	0	0	0	1	0	0	204
17:15	19	196	10	0	2	4	2	0	0	0	0	0	0	233
17:30	1	206	28	1	4	0	0	0	1	0	0	0	0	241
17:45	2	176	34	0	2	1	0	0	0	0	0	0	0	215
	27	756	89	1	9	7	2	0	1	0	1	0	0	893
18:00	1	209	54	0	3	0	0	0	1	1	1	0	0	270
18:15	0	209	30	0	5	1	0	1	0	0	0	0	0	246
18:30	3	173	37	1	2	3	0	2	2	0	0	0	0	223
18:45	3	160	26	0	4	0	0	2	0	0	0	0	0	195
	7	751	147	1	14	4	0	5	3	1	1	0	0	934
19:00	5	174	32	0	3	1	0	0	2	1	0	0	0	218
19:15	2	143	21	0	3	0	0	1	1	0	0	0	0	171
19:30	0	169	31	0	3	0	0	0	0	0	0	0	0	203
19:45	2	124	25	0	1	1	0	1	1	0	0	0	1	156
	9	610	109	0	10	2	0	2	4	1	0	0	1	748
20:00	1	199	37	0	5	2	0	1	0	0	0	0	0	245
20:15	2	168	28	0	1	2	1	1	0	0	2	0	0	205
20:30	1	173	19	0	3	4	0	2	0	0	0	0	0	202
20:45	2	109	17	0	1	0	0	1	0	0	0	0	0	130
	6	649	101	0	10	8	1	5	0	0	2	0	0	782
21:00	1	121	8	0	3	0	0	0	0	0	0	1	0	134
21:15	1	105	18	0	1	0	1	0	0	0	0	0	1	127
21:30	0	100	6	0	2	0	0	0	1	0	0	0	0	109
21:45	0	88	7	0	1	0	0	0	0	0	0	0	0	96
	2	414	39	0	7	0	1	0	1	0	0	1	1	466
22:00	0	70	12	1	2	0	0	0	2	0	0	0	0	87
22:15	0	60	11	0	2	0	0	0	0	0	0	0	0	73
22:30	0	49	7	0	1	0	0	0	2	0	0	0	0	59
22:45	1	48	3	0	1	1	0	0	1	0	0	0	0	55
	1	227	33	1	6	1	0	0	5	0	0	0	0	274
23:00	1	38	3	1	0	0	0	0	1	0	0	0	0	44
23:15	0	48	4	0	1	0	0	0	0	0	0	0	0	53
23:30	0	33	5	0	1	0	0	1	0	0	0	0	0	40
23:45	0	31	3	0	0	0	0	0	0	0	0	0	0	34
	1	150	15	1	2	0	0	1	1	0	0	0	0	171
Total	141	7771	1220	12	140	52	7	48	33	7	11	2	5	9449
Percent	1.5%	82.2%	12.9%	0.1%	1.5%	0.6%	0.1%	0.5%	0.3%	0.1%	0.1%	0.0%	0.1%	
Grand Total	205	11995	2077	37	279	91	8	120	82	9	14	3	6	14926
Percent	1.4%	80.4%	13.9%	0.2%	1.9%	0.6%	0.1%	0.8%	0.5%	0.1%	0.1%	0.0%	0.0%	

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Site Code: 7

Station ID: 7

SR-369 SOUTH OF SR-60 - QUEEN CITY PKWY

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/15/19	0	25	8	0	0	1	0	1	1	0	0	0	0	36
00:15	0	29	4	0	0	0	0	0	1	0	0	0	0	34
00:30	1	22	2	1	0	0	0	0	0	0	0	0	0	26
00:45	0	23	1	0	0	0	0	0	0	0	0	0	0	24
	1	99	15	1	0	1	0	1	2	0	0	0	0	120
01:00	0	26	4	0	1	0	0	1	0	0	0	0	0	32
01:15	0	19	2	0	0	1	0	0	0	0	0	0	0	22
01:30	0	23	3	0	0	0	0	0	0	0	0	0	0	26
01:45	0	16	2	0	0	0	0	0	0	0	0	0	0	18
	0	84	11	0	1	1	0	1	0	0	0	0	0	98
02:00	0	18	0	0	0	0	0	0	1	0	0	0	0	19
02:15	1	22	2	0	0	1	0	0	1	0	0	0	0	27
02:30	1	15	1	0	0	1	0	0	2	0	0	0	0	20
02:45	0	17	1	0	0	0	0	0	0	0	0	0	0	18
	2	72	4	0	0	2	0	0	4	0	0	0	0	84
03:00	0	19	1	0	0	0	0	0	1	0	0	0	0	21
03:15	0	3	3	1	1	0	0	0	0	0	0	0	0	8
03:30	0	15	3	0	0	0	0	0	1	0	0	0	0	19
03:45	0	15	1	0	0	1	0	0	1	0	0	0	0	18
	0	52	8	1	1	1	0	0	3	0	0	0	0	66
04:00	0	20	5	0	0	0	0	0	1	0	0	0	0	26
04:15	0	21	6	0	0	0	0	0	0	0	0	0	0	27
04:30	0	21	4	0	0	0	0	0	0	0	0	0	0	25
04:45	1	31	9	0	0	2	0	1	1	0	0	0	0	45
	1	93	24	0	0	2	0	1	2	0	0	0	0	123
05:00	0	31	3	0	2	0	0	0	3	0	0	0	0	39
05:15	0	51	11	0	3	0	0	1	1	0	0	0	0	67
05:30	1	66	14	0	5	0	0	1	1	0	0	0	0	88
05:45	2	75	17	3	5	2	0	1	0	1	0	0	0	106
	3	223	45	3	15	2	0	3	5	1	0	0	0	300
06:00	4	85	25	1	8	1	0	1	1	0	0	0	0	126
06:15	0	96	27	1	2	0	0	1	1	0	0	0	0	128
06:30	4	139	31	0	7	3	0	3	0	0	1	0	0	188
06:45	8	144	37	1	4	0	0	1	2	2	0	0	0	199
	16	464	120	3	21	4	0	6	4	2	1	0	0	641
07:00	2	167	25	1	2	0	0	1	0	0	0	1	1	200
07:15	4	189	46	0	11	5	0	1	2	0	0	1	0	259
07:30	1	186	36	1	5	2	0	3	1	1	0	0	0	236
07:45	8	189	36	0	4	3	0	2	0	0	0	0	0	242
	15	731	143	2	22	10	0	7	3	1	0	2	1	937
08:00	7	170	36	0	7	2	1	1	2	0	0	1	0	227
08:15	5	178	28	0	9	4	1	4	1	2	0	1	0	233
08:30	8	154	41	0	6	2	1	0	2	0	0	0	0	214
08:45	4	145	35	2	6	1	1	4	1	0	0	0	0	199
	24	647	140	2	28	9	4	9	6	2	0	2	0	873
09:00	2	151	34	0	1	3	0	2	3	0	0	0	0	196
09:15	7	159	27	1	6	2	0	1	1	1	0	0	0	205
09:30	8	138	32	0	1	3	0	2	4	0	0	0	0	188
09:45	2	198	31	0	6	5	0	1	4	1	0	1	0	249
	19	646	124	1	14	13	0	6	12	2	0	1	0	838
10:00	1	174	25	0	4	3	0	0	2	0	0	0	0	209
10:15	2	179	29	0	4	1	1	2	2	0	0	1	0	221
10:30	3	196	22	2	5	3	0	1	2	0	0	0	0	234
10:45	4	193	27	0	10	2	1	1	0	0	0	0	0	238
	10	742	103	2	23	9	2	4	6	0	0	1	0	902
11:00	7	212	36	0	8	2	0	1	0	1	0	0	0	267
11:15	10	225	39	1	3	3	1	3	0	0	0	0	0	285
11:30	5	206	46	0	8	1	0	2	5	0	0	1	0	274
11:45	3	211	31	1	8	1	0	2	4	0	0	0	0	261
	25	854	152	2	27	7	1	8	9	1	0	1	0	1087
Total	116	4707	889	17	152	61	7	46	56	9	1	7	1	6069
Percent	1.9%	77.6%	14.6%	0.3%	2.5%	1.0%	0.1%	0.8%	0.9%	0.1%	0.0%	0.1%	0.0%	

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Site Code: 7

Station ID: 7

SR-369 SOUTH OF SR-60 - QUEEN CITY PKWY

SB

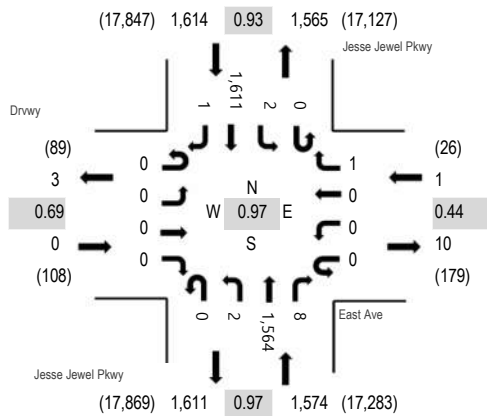
Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	7	252	54	0	4	3	0	1	2	1	0	0	0	324
12:15	1	219	44	1	5	4	0	1	2	0	0	0	0	277
12:30	6	227	34	1	3	0	0	1	6	0	0	0	0	278
12:45	4	205	39	0	2	5	0	4	1	0	0	0	0	260
	18	903	171	2	14	12	0	7	11	1	0	0	0	1139
13:00	0	230	33	1	4	1	1	0	1	0	0	0	0	271
13:15	10	214	37	0	7	2	1	3	1	1	0	0	0	276
13:30	6	207	42	0	7	3	1	3	1	0	0	0	0	270
13:45	6	209	22	0	3	2	0	2	1	1	0	0	0	246
	22	860	134	1	21	8	3	8	4	2	0	0	0	1063
14:00	4	234	45	0	4	1	0	1	1	0	1	0	0	291
14:15	2	183	35	0	4	2	0	4	1	0	0	1	0	232
14:30	9	196	35	3	3	3	0	2	1	1	0	0	0	253
14:45	6	224	36	0	3	2	0	3	1	1	0	0	0	276
	21	837	151	3	14	8	0	10	4	2	1	1	0	1052
15:00	5	204	26	1	5	2	0	2	0	1	0	1	0	247
15:15	3	199	28	0	3	2	0	4	1	0	0	0	0	240
15:30	6	182	37	0	3	1	0	2	1	1	0	0	0	233
15:45	12	194	30	0	10	2	1	3	1	1	1	0	0	255
	26	779	121	1	21	7	1	11	3	3	1	1	0	975
16:00	4	232	30	1	4	3	1	2	0	0	0	0	0	277
16:15	5	207	32	0	2	0	0	2	1	0	0	0	0	249
16:30	2	218	33	0	6	2	1	2	1	0	0	0	0	265
16:45	10	226	37	0	0	0	0	2	0	0	0	0	0	275
	21	883	132	1	12	5	2	8	2	0	0	0	0	1066
17:00	4	222	32	1	7	2	0	1	0	0	0	0	0	269
17:15	14	229	44	0	3	3	0	0	0	0	0	0	0	293
17:30	5	221	39	0	8	0	0	1	0	0	0	1	0	275
17:45	8	210	26	0	2	1	1	2	0	0	0	1	0	251
	31	882	141	1	20	6	1	4	0	0	0	2	0	1088
18:00	6	224	20	0	6	1	1	1	0	0	0	1	0	260
18:15	5	161	28	0	4	1	0	2	0	0	0	0	1	202
18:30	4	188	25	0	5	1	0	0	2	0	0	0	0	225
18:45	3	165	37	1	8	0	0	0	1	1	1	0	0	217
	18	738	110	1	23	3	1	3	3	1	1	1	1	904
19:00	2	178	23	0	4	1	0	0	2	0	0	0	0	210
19:15	6	163	24	0	3	0	2	1	1	1	1	0	0	202
19:30	3	139	19	0	5	1	0	0	0	0	0	1	0	168
19:45	0	130	20	0	3	1	0	0	2	0	0	0	0	156
	11	610	86	0	15	3	2	1	5	1	1	1	0	736
20:00	1	127	13	0	2	1	0	0	0	0	0	0	0	144
20:15	6	122	12	0	1	1	0	0	0	0	0	0	0	142
20:30	4	110	11	0	0	0	0	0	0	0	0	0	0	125
20:45	3	117	13	0	1	2	1	1	0	0	0	0	0	138
	14	476	49	0	4	4	1	1	0	0	0	0	0	549
21:00	2	119	18	0	1	0	0	0	0	1	0	0	0	141
21:15	2	96	12	0	1	1	0	0	0	0	0	0	0	112
21:30	4	90	9	0	1	0	0	1	2	0	0	0	0	107
21:45	3	79	8	0	1	0	0	0	0	2	0	0	0	93
	11	384	47	0	4	1	0	1	2	3	0	0	0	453
22:00	0	56	9	0	1	1	0	0	1	0	1	1	0	70
22:15	0	64	7	0	1	0	0	0	0	0	0	0	0	72
22:30	0	49	5	0	1	0	0	1	1	0	0	0	0	57
22:45	0	38	5	0	0	0	0	0	1	0	0	0	0	44
	0	207	26	0	3	1	0	1	3	0	1	1	0	243
23:00	0	29	6	0	0	0	0	0	0	0	0	0	0	35
23:15	0	41	5	0	0	1	0	0	0	0	0	0	0	47
23:30	0	39	6	0	1	0	0	0	1	0	0	0	0	47
23:45	0	28	4	0	0	0	0	0	0	0	0	0	0	32
	0	137	21	0	1	1	0	0	1	0	0	0	0	161
Total	193	7696	1189	10	152	59	11	55	38	13	5	7	1	9429
Percent	2.0%	81.6%	12.6%	0.1%	1.6%	0.6%	0.1%	0.6%	0.4%	0.1%	0.1%	0.1%	0.0%	
Grand Total	309	12403	2078	27	304	120	18	101	94	22	6	14	2	15498
Percent	2.0%	80.0%	13.4%	0.2%	2.0%	0.8%	0.1%	0.7%	0.6%	0.1%	0.0%	0.1%	0.0%	



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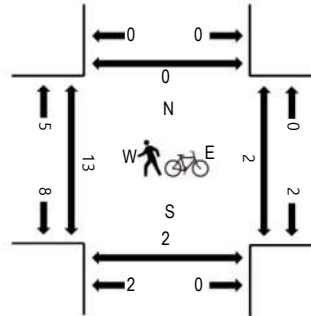
Location: #3 Jesse Jewel Pkwy & East Ave AM
Date and Start Time: Wednesday, May 15, 2019
Peak Hour: 03:15 PM - 04:15 PM
Peak 15-Minutes: 04:00 PM - 04:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Drwy Eastbound				East Ave Westbound				Jesse Jewel Pkwy Northbound				Jesse Jewel Pkwy Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	0	1	0	0	0	0	1	0	297	0	0	0	307	1	607	2,921	0	1	0	0
7:15 AM	0	0	0	3	0	0	0	0	0	0	378	0	0	1	402	0	784	3,033	0	1	0	0
7:30 AM	0	1	0	7	0	0	0	0	1	0	403	4	0	0	356	0	772	2,953	0	0	0	0
7:45 AM	0	0	0	4	0	0	0	0	0	2	390	7	0	1	353	1	758	2,831	0	1	0	0
8:00 AM	0	2	0	4	0	0	0	0	0	0	382	5	0	0	326	0	719	2,767	1	0	0	0
8:15 AM	0	2	0	2	0	0	0	0	0	0	365	4	0	2	329	0	704	2,635	1	0	0	0
8:30 AM	0	2	0	2	0	0	0	0	0	0	363	1	0	1	279	2	650	2,540	6	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	374	2	0	1	313	3	694	2,513	0	2	0	0
9:00 AM	0	1	0	3	0	1	0	0	1	1	294	2	0	1	282	1	587	2,548	7	2	0	0
9:15 AM	0	0	0	6	0	1	0	0	1	4	288	2	0	0	307	0	609	2,617	1	0	0	0
9:30 AM	0	0	0	4	0	0	0	0	0	0	315	3	0	1	299	1	623	2,669	0	0	0	0
9:45 AM	0	0	0	5	0	0	0	0	0	0	339	2	0	1	378	4	729	2,745	2	1	0	0
10:00 AM	0	0	0	2	0	1	0	0	2	0	321	2	0	0	326	2	656	2,667	1	1	0	0
10:15 AM	0	0	0	2	0	0	0	0	1	0	326	0	0	0	332	0	661	2,706	0	1	0	0
10:30 AM	0	0	0	10	0	0	0	0	0	0	332	0	0	1	355	1	699	2,778	3	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	301	3	0	1	345	1	651	2,803	3	2	0	0
11:00 AM	0	0	0	2	0	0	0	0	0	0	284	3	0	1	405	0	695	2,920	1	1	0	0
11:15 AM	0	1	0	1	0	0	0	0	0	1	315	5	0	0	409	1	733	3,022	1	0	0	0
11:30 AM	0	0	0	4	0	0	0	1	1	1	330	3	0	1	381	2	724	3,068	3	1	0	0
11:45 AM	0	1	0	2	0	1	0	1	0	0	340	3	0	4	415	1	768	3,123	3	1	1	1
12:00 PM	0	0	0	3	0	1	0	3	2	0	362	4	0	1	419	2	797	3,106	3	0	0	0
12:15 PM	0	0	0	5	0	0	0	0	0	1	400	4	0	1	367	1	779	3,047	3	0	0	0
12:30 PM	0	0	0	6	0	0	0	0	0	2	349	5	0	1	416	0	779	3,071	3	0	0	0
12:45 PM	0	0	0	1	0	0	0	1	0	0	376	3	0	1	368	1	751	3,059	0	0	0	0
1:00 PM	0	0	0	4	0	1	0	1	0	0	363	0	0	2	366	1	738	3,086	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	392	6	0	2	402	1	803	3,158	0	1	0	0
1:30 PM	0	0	0	3	0	0	1	0	0	1	377	4	0	2	379	0	767	3,137	2	0	0	0
1:45 PM	0	0	0	1	0	1	0	1	1	4	401	6	0	2	360	1	778	3,172	0	0	0	0
2:00 PM	0	1	0	1	0	0	0	1	1	0	397	3	0	1	405	0	810	3,165	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	1	388	3	0	0	389	1	782	3,122	2	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	392	1	0	3	406	0	802	3,123	1	1	0	0
2:45 PM	0	0	0	0	0	1	0	0	0	1	366	4	0	1	396	2	771	3,113	4	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	1	392	1	0	0	372	1	767	3,132	1	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	2	385	3	0	1	392	0	783	3,189	4	0	0	0
3:30 PM	0	0	0	0	0	0	0	1	0	0	400	1	0	0	390	0	792	3,189	3	2	2	0

3:45 PM	0	0	0	0	0	0	0	0	0	0	380	3	0	0	407	0	790	3,133	4	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	399	1	0	1	422	1	824	3,063	2	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	375	3	0	0	404	0	783	3,026	2	2	0	0
4:30 PM	0	0	0	0	0	0	0	1	1	2	308	6	0	0	416	2	736	3,019	4	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	2	325	6	1	1	384	1	720	3,077	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	2	0	0	330	4	0	2	447	2	787	3,105	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	353	2	0	2	414	4	776	3,042	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	2	380	3	0	0	406	2	794	2,985	0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0	0	2	356	2	0	0	382	4	748	2,872	1	0	0	0
6:00 PM	0	0	0	1	0	0	0	0	1	1	360	0	0	1	360	0	724	2,784	0	0	0	0
6:15 PM	0	1	0	1	0	2	0	0	0	2	376	0	0	3	332	2	719		1	0	0	0
6:30 PM	0	0	0	1	0	0	0	0	3	0	353	3	0	1	318	2	681		5	2	0	0
6:45 PM	0	0	0	2	0	0	0	0	0	1	326	1	0	0	329	1	660		7	0	4	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	18	0	0	0	14	0	32
Lights	0	0	0	0	0	0	0	1	0	2	1,516	8	0	2	1,537	1	3,067
Mediums	0	0	0	0	0	0	0	0	0	0	30	0	0	0	60	0	90
Total	0	0	0	0	0	0	0	1	0	2	1,564	8	0	2	1,611	1	3,189



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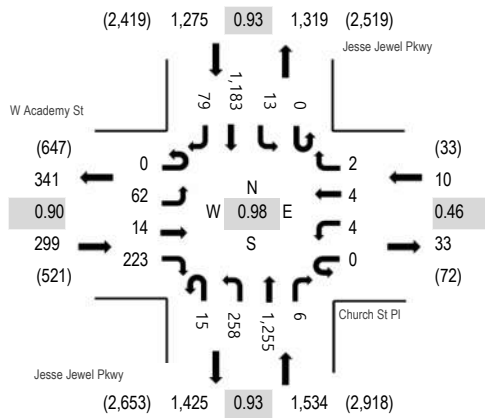
Location: #1 Jesse Jewel Pkwy & Church St PI AM @ West Academy St.

Date and Start Time: Wednesday, May 15, 2019

Peak Hour: 07:15 AM - 08:15 AM

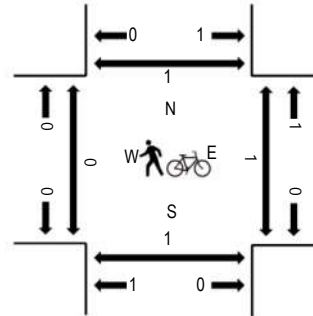
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	W Academy St Eastbound				Church St PI Westbound				Jesse Jewel Pkwy Northbound				Jesse Jewel Pkwy Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	9	3	43	0	0	0	0	3	27	260	0	0	0	261	9	615	2,941	1	2	0	0
7:15 AM	0	15	0	64	0	0	0	0	5	32	330	2	0	0	329	13	790	3,118	0	0	0	0
7:30 AM	0	20	3	60	0	0	0	1	2	66	302	1	0	1	285	18	759	3,066	0	1	0	0
7:45 AM	0	14	6	53	0	3	2	1	1	81	296	2	0	6	293	19	777	2,986	0	0	1	0
8:00 AM	0	13	5	46	0	1	2	0	7	79	327	1	0	6	276	29	792	2,950	0	0	0	1
8:15 AM	0	12	7	43	0	4	2	1	1	72	291	1	0	7	275	22	738		0	0	0	0
8:30 AM	0	8	5	30	0	0	1	1	1	59	300	2	0	3	249	20	679		0	0	0	0
8:45 AM	0	18	4	40	0	7	4	3	0	68	297	2	0	5	271	22	741		2	2	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	0	0	0	0	0	0	0	0	16	0	0	0	14	0	31
Lights	0	59	14	218	0	4	4	2	15	258	1,184	6	0	13	1,105	76	2,958
Mediums	0	2	0	5	0	0	0	0	0	0	55	0	0	0	64	3	129
Total	0	62	14	223	0	4	4	2	15	258	1,255	6	0	13	1,183	79	3,118



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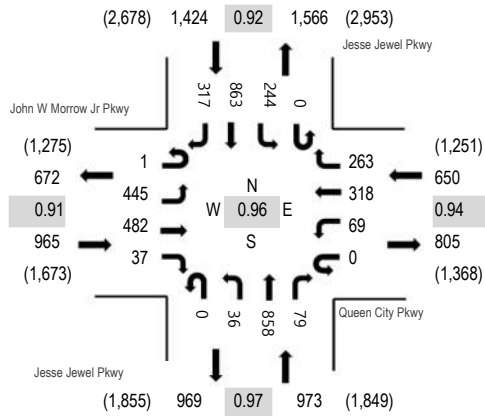
Location: #2 Jesse Jewel Pkwy & Queen City Pkwy AM

Date and Start Time: Wednesday, May 15, 2019

Peak Hour: 07:15 AM - 08:15 AM

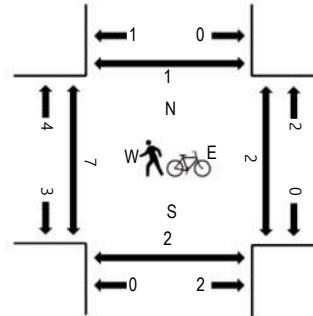
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	John W Morrow Jr Pkwy Eastbound				Queen City Pkwy Westbound				Jesse Jewel Pkwy Northbound				Jesse Jewel Pkwy Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	96	96	5	0	5	52	38	0	6	162	11	0	54	202	51	778	3,789	2	2	0	1
7:15 AM	0	123	92	11	0	16	69	40	0	7	219	18	0	70	237	82	984	4,012	2	0	0	0
7:30 AM	0	112	138	10	0	25	64	72	0	8	231	11	0	59	178	78	986	3,951	0	0	0	0
7:45 AM	0	110	145	10	0	14	89	73	0	7	206	27	0	61	231	68	1,041	3,830	1	1	1	0
8:00 AM	1	100	107	6	0	14	96	78	0	14	202	23	0	54	217	89	1,001	3,662	4	1	1	1
8:15 AM	0	93	86	10	0	20	84	71	0	11	198	18	0	49	213	70	923		2	0	0	0
8:30 AM	0	86	79	8	0	23	72	70	0	9	207	15	0	38	189	69	865		0	0	0	0
8:45 AM	1	73	71	4	0	17	76	73	0	5	220	14	0	32	190	97	873		0	4	0	1

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	8	11	0	0	2	10	0	0	1	5	2	0	0	5	6	50
Lights	1	426	464	34	0	63	290	257	0	34	823	77	0	238	825	274	3,806
Mediums	0	11	7	3	0	4	18	6	0	1	30	0	0	6	33	37	156
Total	1	445	482	37	0	69	318	263	0	36	858	79	0	244	863	317	4,012



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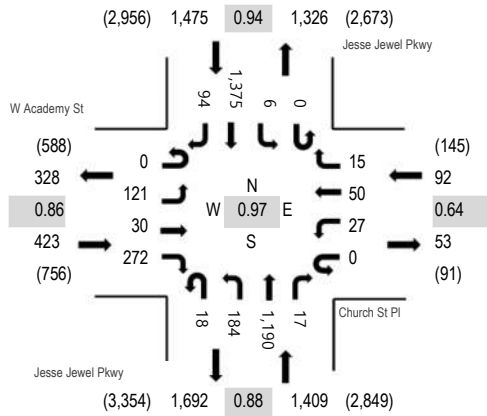
Location: #1 Jesse Jewel Pkwy & Church St PI PM

Date and Start Time: Wednesday, May 15, 2019

Peak Hour: 04:45 PM - 05:45 PM

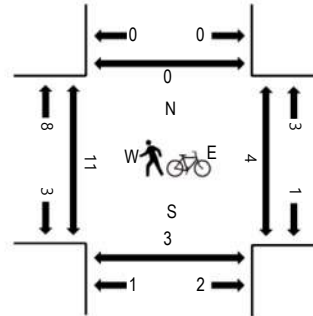
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	W Academy St Eastbound				Church St PI Westbound				Jesse Jewel Pkwy Northbound				Jesse Jewel Pkwy Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	23	2	59	0	2	6	6	1	49	354	5	0	5	372	17	901	3,349	0	0	0	0
4:15 PM	0	23	3	61	0	4	7	7	7	43	323	3	0	4	357	16	858	3,300	1	6	3	0
4:30 PM	0	19	3	65	0	2	6	2	3	33	270	2	0	0	339	22	766	3,285	1	0	1	0
4:45 PM	0	30	4	69	0	7	11	4	3	44	289	6	0	1	331	25	824	3,399	7	1	2	0
5:00 PM	0	34	6	83	0	11	18	7	7	36	271	5	0	2	346	26	852	3,357	0	1	0	0
5:15 PM	0	31	7	73	0	6	14	2	2	49	292	5	0	0	341	21	843		3	0	0	0
5:30 PM	0	26	13	47	0	3	7	2	6	55	338	1	0	3	357	22	880		1	2	1	0
5:45 PM	0	16	2	57	0	1	7	3	4	38	301	4	0	5	328	16	782		0	4	4	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	11	0	0	0	12	1	25
Lights	0	120	27	269	0	26	50	15	18	181	1,156	17	0	6	1,334	92	3,311
Mediums	0	1	2	3	0	1	0	0	0	3	23	0	0	0	29	1	63
Total	0	121	30	272	0	27	50	15	18	184	1,190	17	0	6	1,375	94	3,399



(303) 216-2439
www.alltrafficdata.net

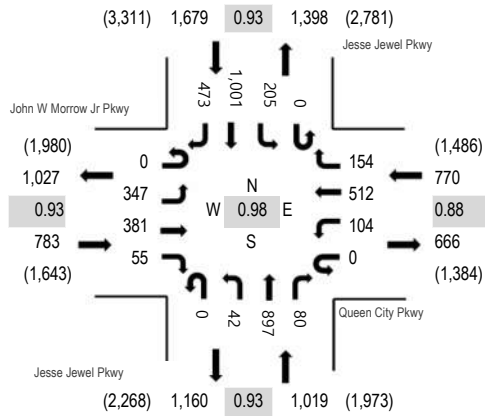
Location: #2 Jesse Jewel Pkwy & Queen City Pkwy PM

Date and Start Time: Wednesday, May 15, 2019

Peak Hour: 05:00 PM - 06:00 PM

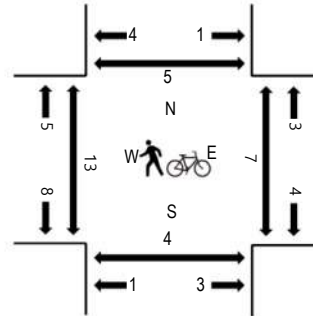
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	John W Morrow Jr Pkwy Eastbound				Queen City Pkwy Westbound				Jesse Jewel Pkwy Northbound				Jesse Jewel Pkwy Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	95	96	17	0	21	104	46	0	13	248	12	0	61	245	119	1,077	4,162	1	0	0	0
4:15 PM	0	92	108	5	0	29	127	40	0	11	202	18	0	57	219	107	1,015	4,164	3	4	1	0
4:30 PM	0	108	111	12	0	30	116	38	0	12	204	26	0	53	243	109	1,062	4,218	4	0	0	0
4:45 PM	0	104	101	11	0	24	110	31	0	13	175	20	0	55	252	112	1,008	4,236	2	0	1	0
5:00 PM	0	89	104	15	0	32	145	41	0	7	211	21	0	57	249	108	1,079	4,251	4	0	3	0
5:15 PM	0	82	75	10	0	23	122	29	0	16	226	25	0	58	279	124	1,069		2	4	1	1
5:30 PM	0	89	101	13	0	24	126	36	0	10	250	13	0	49	245	124	1,080		3	0	0	0
5:45 PM	0	87	101	17	0	25	119	48	0	9	210	21	0	41	228	117	1,023		4	3	0	4

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	3	9	1	0	0	5	5	0	0	4	1	0	1	5	2	36
Lights	0	338	366	54	0	102	501	147	0	42	877	78	0	202	974	467	4,148
Mediums	0	6	6	0	0	2	6	2	0	0	16	1	0	2	22	4	67
Total	0	347	381	55	0	104	512	154	0	42	897	80	0	205	1,001	473	4,251

APPENDIX B :

CAPACITY ANALYSIS REPORTS

Timings
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS
Existing AM Peak

										
Lane Group	EBU	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	15	262	1273	13	1196	4	4	62	14	225
Future Volume (vph)	15	262	1273	13	1196	4	4	62	14	225
Turn Type	custom	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases		1	6	5	2		8		4	
Permitted Phases	1	6		2		8		4		4
Detector Phase	1	1	6	5	2	8	8	4	4	4
Switch Phase										
Minimum Initial (s)	4.0	4.0	12.0	4.0	12.0	22.0	22.0	5.0	5.0	5.0
Minimum Split (s)	10.2	10.2	23.5	10.0	23.5	32.4	32.4	35.4	35.4	35.4
Total Split (s)	33.0	33.0	102.0	12.0	81.0	36.0	36.0	36.0	36.0	36.0
Total Split (%)	22.0%	22.0%	68.0%	8.0%	54.0%	24.0%	24.0%	24.0%	24.0%	24.0%
Yellow Time (s)	3.2	3.2	3.8	3.0	3.8	3.4	3.4	3.4	3.4	3.4
All-Red Time (s)	3.0	3.0	1.7	3.0	1.7	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)		6.2	5.5	6.0	5.5		6.4		6.4	6.4
Lead/Lag	Lead	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)		115.4	111.7	93.3	89.0		22.0		22.0	22.0
Actuated g/C Ratio		0.77	0.74	0.62	0.59		0.15		0.15	0.15
v/c Ratio		0.71	0.50	0.05	0.62		0.04		0.37	0.54
Control Delay		25.7	5.4	6.8	21.9		48.2		63.7	11.5
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay		25.7	5.4	6.8	21.9		48.2		63.7	11.5
LOS		C	A	A	C		D		E	B
Approach Delay			9.0		21.8		48.2		24.6	
Approach LOS			A		C		D		C	

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 118 (79%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 15.8

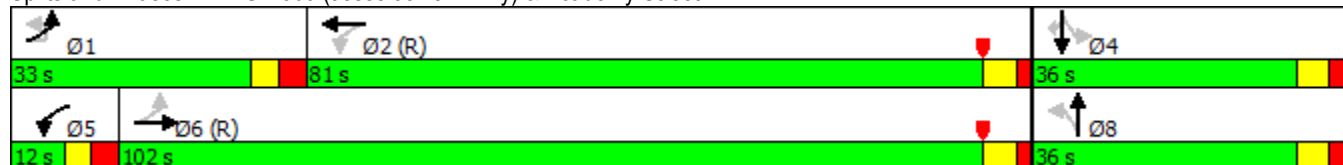
Intersection LOS: B

Intersection Capacity Utilization 103.6%

ICU Level of Service G

Analysis Period (min) 15

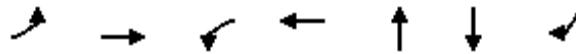
Splits and Phases: 1: SR 369 (Jesse Jewell Pkwy) & Academy Street



Queues
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS

Existing AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	282	1305	13	1301	10	77	230
v/c Ratio	0.71	0.50	0.05	0.62	0.04	0.37	0.54
Control Delay	25.7	5.4	6.8	21.9	48.2	63.7	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	5.4	6.8	21.9	48.2	63.7	11.5
Queue Length 50th (ft)	131	115	3	414	7	69	0
Queue Length 95th (ft)	m134	m289	8	548	26	124	80
Internal Link Dist (ft)		375		496	446	522	
Turn Bay Length (ft)	200		140				175
Base Capacity (vph)	459	2633	299	2084	327	278	496
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.50	0.04	0.62	0.03	0.28	0.46

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCS7 Two-Way Stop-Control Report

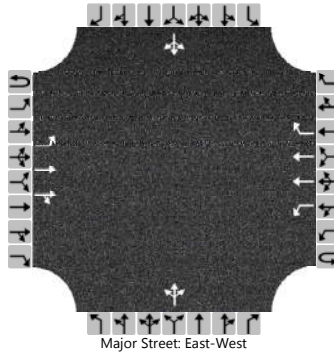
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/15/2019
Analysis Year	2019
Time Analyzed	Existing AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ East Avenue
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	East Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	0		0	1	0
Configuration		L	T	TR		L	T	R			LTR				LTR	
Volume (veh/h)	1	2	1553	16	0	2	1437	1		0	0	0		3	0	18
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4	4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)	6.40	4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)	2.5	2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)	2.50	2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3				2					0				22	
Capacity, c (veh/h)		280				408									259	
v/c Ratio		0.01				0.01									0.08	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.3	
Control Delay (s/veh)		18.0				13.9									20.2	
Level of Service (LOS)		C				B									C	
Approach Delay (s/veh)	0.0				0.0								20.2			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

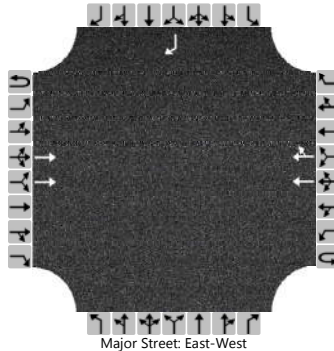
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2019
Time Analyzed	Existing AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ West Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	West Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1572				1410	46								77
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.90
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																79
Capacity, c (veh/h)																358
v/c Ratio																0.22
95% Queue Length, Q ₉₅ (veh)																0.8
Control Delay (s/veh)																17.9
Level of Service (LOS)																C
Approach Delay (s/veh)													17.9			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

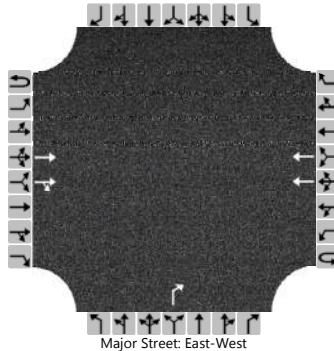
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2019
Time Analyzed	Existing AM
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ Gordon Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	Gordon Ave
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	1		0	0	0
Configuration			T	TR			T					R				
Volume (veh/h)			1559	7			1424					13				
Percent Heavy Vehicles (%)												0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				
Critical Headway (sec)												6.90				
Base Follow-Up Headway (sec)												3.3				
Follow-Up Headway (sec)												3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												14				
Capacity, c (veh/h)												324				
v/c Ratio												0.04				
95% Queue Length, Q ₉₅ (veh)												0.1				
Control Delay (s/veh)												16.6				
Level of Service (LOS)												C				
Approach Delay (s/veh)									16.6							
Approach LOS									C							

Timings

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy

Existing AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBU	SBL	SBT	SBR
Lane Configurations	←	↑↑	←	↑↑	←	↑↑		←	↑↑	←
Traffic Volume (vph)	36	858	244	863	69	318	1	445	482	37
Future Volume (vph)	36	858	244	863	69	318	1	445	482	37
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	custom	Prot	NA	Perm
Protected Phases	1	6	5	2	3	8		7	4	
Permitted Phases	6		2				7			4
Detector Phase	1	6	5	2	3	8	7	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	5.0	15.0	5.0	7.0	5.0	5.0	7.0	7.0
Minimum Split (s)	12.7	47.7	12.2	42.7	11.2	33.8	11.0	11.0	31.8	31.8
Total Split (s)	17.0	60.0	25.0	68.0	20.0	35.0	30.0	30.0	45.0	45.0
Total Split (%)	11.3%	40.0%	16.7%	45.3%	13.3%	23.3%	20.0%	20.0%	30.0%	30.0%
Yellow Time (s)	4.7	3.7	4.2	3.7	3.2	3.4	3.0	3.0	3.4	3.4
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	2.4	3.0	3.0	2.4	2.4
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)	7.7	6.7	7.2	6.7	6.2	5.8		6.0	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	59.4	54.2	77.8	67.0	7.6	26.4		26.8	45.4	45.4
Actuated g/C Ratio	0.40	0.36	0.52	0.45	0.05	0.18		0.18	0.30	0.30
v/c Ratio	0.27	0.77	0.90	0.80	0.42	0.89		1.70	0.47	0.06
Control Delay	24.4	47.3	80.6	29.4	75.9	63.3		368.5	44.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	24.4	47.3	80.6	29.4	75.9	63.3		368.5	44.5	0.2
LOS	C	D	F	C	E	E		F	D	A
Approach Delay		46.4		38.2		64.6			192.5	
Approach LOS		D		D		E			F	

Intersection Summary

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 92 (61%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.70

Intersection Signal Delay: 81.6

Intersection LOS: F

Intersection Capacity Utilization 91.1%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: SR 60/Queen City Pkwy/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy



Queues

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy

Existing AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	38	976	254	1229	72	605	465	502	39
v/c Ratio	0.27	0.77	0.90	0.80	0.42	0.89	1.70	0.47	0.06
Control Delay	24.4	47.3	80.6	29.4	75.9	63.3	368.5	44.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.4	47.3	80.6	29.4	75.9	63.3	368.5	44.5	0.2
Queue Length 50th (ft)	18	445	181	333	36	245	~354	210	0
Queue Length 95th (ft)	38	532	#329	419	62	318	#473	274	0
Internal Link Dist (ft)		906		405		987		1370	
Turn Bay Length (ft)					130		200		
Base Capacity (vph)	178	1265	290	1540	315	742	273	1072	605
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.77	0.88	0.80	0.23	0.82	1.70	0.47	0.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Timings
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS
Existing PM Peak

									
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	184	1190	6	1375	27	50	121	30	272
Future Volume (vph)	184	1190	6	1375	27	50	121	30	272
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8		4	
Permitted Phases	6		2		8		4		4
Detector Phase	1	6	5	2	8	8	4	4	4
Switch Phase									
Minimum Initial (s)	4.0	12.0	4.0	12.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.2	23.5	10.0	23.5	32.4	32.4	35.4	35.4	35.4
Total Split (s)	29.0	112.0	12.0	95.0	36.0	36.0	36.0	36.0	36.0
Total Split (%)	18.1%	70.0%	7.5%	59.4%	22.5%	22.5%	22.5%	22.5%	22.5%
Yellow Time (s)	3.2	3.8	3.0	3.8	3.4	3.4	3.4	3.4	3.4
All-Red Time (s)	3.0	1.7	3.0	1.7	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	6.2	5.5	6.0	5.5		6.4		6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	C-Min	None	C-Min	None	None	None	None	None
Act Effct Green (s)	124.0	122.5	106.2	102.1		23.4		23.4	23.4
Actuated g/C Ratio	0.78	0.77	0.66	0.64		0.15		0.15	0.15
v/c Ratio	0.69	0.46	0.02	0.68		0.49		0.88	0.72
Control Delay	35.8	4.9	7.0	21.9		67.1		108.2	32.7
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay	35.8	4.9	7.0	21.9		67.1		108.2	32.7
LOS	D	A	A	C		E		F	C
Approach Delay		9.3		21.9		67.1		59.8	
Approach LOS		A		C		E		E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 43 (27%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 22.6

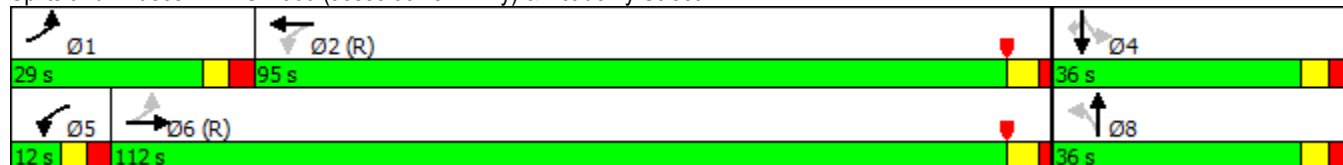
Intersection LOS: C

Intersection Capacity Utilization 94.5%

ICU Level of Service F

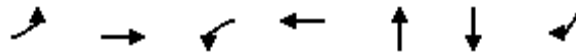
Analysis Period (min) 15

Splits and Phases: 1: SR 369 (Jesse Jewell Pkwy) & Academy Street



Queues
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS
Existing PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	209	1245	6	1515	95	156	280
v/c Ratio	0.69	0.46	0.02	0.68	0.49	0.88	0.72
Control Delay	35.8	4.9	7.0	21.9	67.1	108.2	32.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	4.9	7.0	21.9	67.1	108.2	32.7
Queue Length 50th (ft)	97	90	1	507	87	161	97
Queue Length 95th (ft)	m170	m346	6	721	146	#247	201
Internal Link Dist (ft)		375		496	446	522	
Turn Bay Length (ft)	200		140				175
Base Capacity (vph)	366	2705	322	2238	242	224	442
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.46	0.02	0.68	0.39	0.70	0.63

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS7 Two-Way Stop-Control Report

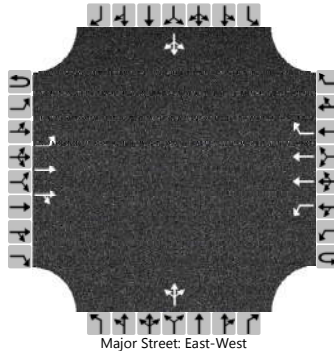
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/15/2019
Analysis Year	2019
Time Analyzed	Existing PM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ East Avenue
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	East Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	0		0	1	0
Configuration		L	T	TR		L	T	R			LTR				LTR	
Volume (veh/h)	0	4	1404	15	1	5	1677	9		0	0	4		0	0	0
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1			6.4	4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10			6.40	4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2			2.5	2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20			2.50	2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4			6					4					0	
Capacity, c (veh/h)		367			361					368						
v/c Ratio		0.01			0.02					0.01						
95% Queue Length, Q ₉₅ (veh)		0.0			0.1					0.0						
Control Delay (s/veh)		14.9			15.2					14.9						
Level of Service (LOS)		B			C					B						
Approach Delay (s/veh)	0.0				0.1				14.9							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

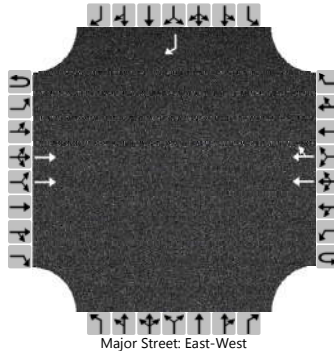
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2019
Time Analyzed	Existing PM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ West Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	West Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1423				1605	72								90
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.90
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																92
Capacity, c (veh/h)																305
v/c Ratio																0.30
95% Queue Length, Q ₉₅ (veh)																1.2
Control Delay (s/veh)																21.8
Level of Service (LOS)																C
Approach Delay (s/veh)													21.8			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

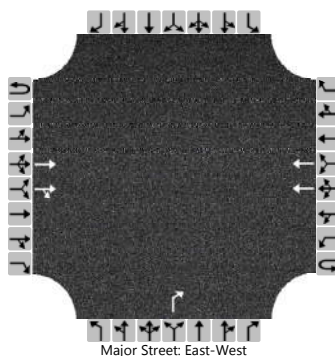
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2019
Time Analyzed	Existing PM
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ Gordon Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	Gordon Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	1		0	0	0
Configuration			T	TR			T					R				
Volume (veh/h)			1395	9			1679					28				
Percent Heavy Vehicles (%)												0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				
Critical Headway (sec)												6.90				
Base Follow-Up Headway (sec)												3.3				
Follow-Up Headway (sec)												3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												29				
Capacity, c (veh/h)												377				
v/c Ratio												0.08				
95% Queue Length, Q ₉₅ (veh)												0.2				
Control Delay (s/veh)												15.3				
Level of Service (LOS)												C				
Approach Delay (s/veh)									15.3							
Approach LOS									C							

Timings

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy

Existing PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↰	↰↱	↰	↰↱	↰↱	↰↱	↰↱	↰↱	↰
Traffic Volume (vph)	42	901	205	1001	104	512	349	381	55
Future Volume (vph)	42	901	205	1001	104	512	349	381	55
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA	Perm
Protected Phases	1	6	5	2	3	8	7	4	
Permitted Phases	6		2						4
Detector Phase	1	6	5	2	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	15.0	5.0	15.0	5.0	7.0	5.0	7.0	7.0
Minimum Split (s)	12.7	47.7	12.2	42.7	11.2	33.8	11.0	31.8	31.8
Total Split (s)	15.0	60.0	36.0	81.0	22.0	36.0	28.0	42.0	42.0
Total Split (%)	9.4%	37.5%	22.5%	50.6%	13.8%	22.5%	17.5%	26.3%	26.3%
Yellow Time (s)	4.7	3.7	4.2	3.7	3.2	3.4	3.0	3.4	3.4
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	2.4	3.0	2.4	2.4
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)	7.7	6.7	7.2	6.7	6.2	5.8	6.0	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effect Green (s)	71.5	66.3	90.4	79.6	9.3	30.2	20.4	41.1	41.1
Actuated g/C Ratio	0.45	0.41	0.56	0.50	0.06	0.19	0.13	0.26	0.26
v/c Ratio	0.38	0.69	0.69	0.88	0.53	1.03	0.81	0.43	0.11
Control Delay	31.1	42.5	44.5	32.2	82.7	101.8	83.3	51.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	42.5	44.5	32.2	82.7	101.8	83.3	51.5	0.4
LOS	C	D	D	C	F	F	F	D	A
Approach Delay		42.1		33.7		99.2		62.1	
Approach LOS		D		C		F		E	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 27 (17%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 52.8

Intersection LOS: D

Intersection Capacity Utilization 97.8%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 5: SR 60/Queen City Pkwy/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy



Queues

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy

Existing PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	43	1001	209	1504	106	679	356	389	56
v/c Ratio	0.38	0.69	0.69	0.88	0.53	1.03	0.81	0.43	0.11
Control Delay	31.1	42.5	44.5	32.2	82.7	101.8	83.3	51.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	42.5	44.5	32.2	82.7	101.8	83.3	51.5	0.4
Queue Length 50th (ft)	20	452	114	755	56	~386	188	178	0
Queue Length 95th (ft)	45	587	229	#787	89	#519	246	236	0
Internal Link Dist (ft)		906		405		987		1370	
Turn Bay Length (ft)					130		200		
Base Capacity (vph)	126	1453	414	1709	339	662	472	907	531
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.69	0.50	0.88	0.31	1.03	0.75	0.43	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Timings
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS
Future Background AM Peak

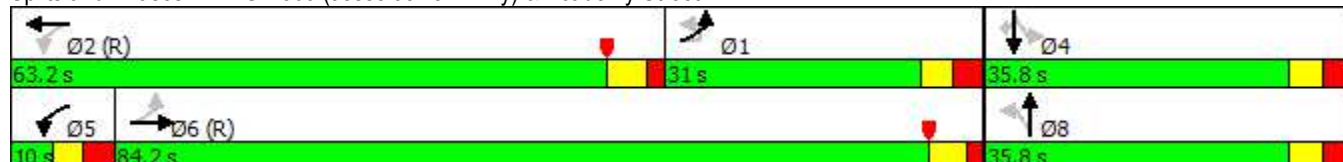
										
Lane Group	EBU	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	15	265	1287	13	1208	4	4	63	14	227
Future Volume (vph)	15	265	1287	13	1208	4	4	63	14	227
Turn Type	custom	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases		1	6	5	2		8		4	
Permitted Phases	1	6		2		8		4		4
Detector Phase	1	1	6	5	2	8	8	4	4	4
Switch Phase										
Minimum Initial (s)	4.0	4.0	12.0	4.0	12.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.2	10.2	23.5	10.0	23.5	32.4	32.4	35.4	35.4	35.4
Total Split (s)	31.0	31.0	84.2	10.0	63.2	35.8	35.8	35.8	35.8	35.8
Total Split (%)	23.8%	23.8%	64.8%	7.7%	48.6%	27.5%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.2	3.2	3.8	3.0	3.8	3.4	3.4	3.4	3.4	3.4
All-Red Time (s)	3.0	3.0	1.7	3.0	1.7	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)		6.2	5.5	6.0	5.5		6.4		6.4	6.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)		101.2	101.9	84.0	84.5		11.6		11.6	11.6
Actuated g/C Ratio		0.78	0.78	0.65	0.65		0.09		0.09	0.09
v/c Ratio		0.69	0.48	0.05	0.58		0.07		0.62	0.66
Control Delay		20.6	3.0	12.4	15.8		46.4		77.1	16.0
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay		20.6	3.0	12.4	15.8		46.4		77.1	16.0
LOS		C	A	B	B		D		E	B
Approach Delay			6.2		15.7		46.4		31.4	
Approach LOS			A		B		D		C	

Intersection Summary

Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 122 (94%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 12.6
 Intersection Capacity Utilization 90.1%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service E

Splits and Phases: 1: SR 369 (Jesse Jewell Pkwy) & Academy Street

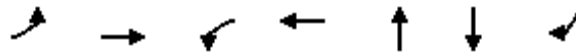


Queues

19-LD-042 Gainesville Fueling Station TIS

1: SR 369 (Jesse Jewell Pkwy) & Academy Street

Future Background AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	285	1319	13	1315	10	78	232
v/c Ratio	0.69	0.48	0.05	0.58	0.07	0.62	0.66
Control Delay	20.6	3.0	12.4	15.8	46.4	77.1	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.6	3.0	12.4	15.8	46.4	77.1	16.0
Queue Length 50th (ft)	59	41	4	301	6	65	0
Queue Length 95th (ft)	m131	232	16	494	23	114	78
Internal Link Dist (ft)		375		496	446	522	
Turn Bay Length (ft)	200		140				175
Base Capacity (vph)	538	2772	241	2280	358	319	537
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.48	0.05	0.58	0.03	0.24	0.43

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCS7 Two-Way Stop-Control Report

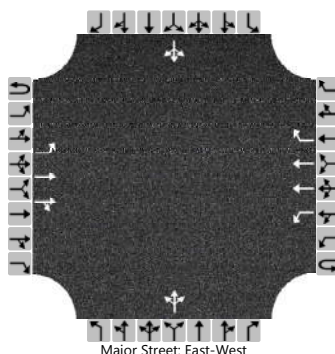
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/15/2019
Analysis Year	2020
Time Analyzed	Background AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ East Avenue
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	East Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	0		0	1	0
Configuration		L	T	TR		L	T	R			LTR				LTR	
Volume (veh/h)	1	2	1570	16	0	2	1451	1		0	0	0		3	0	18
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4	4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)	6.40	4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)	2.5	2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)	2.50	2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3				2					0				22	
Capacity, c (veh/h)		275				402									255	
v/c Ratio		0.01				0.01									0.08	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0									0.3	
Control Delay (s/veh)		18.2				14.0									20.4	
Level of Service (LOS)		C				B									C	
Approach Delay (s/veh)	0.0				0.0								20.4			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

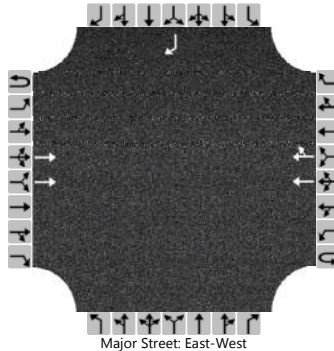
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	Background AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ West Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	West Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1589				1424	46								78
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.90
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																80
Capacity, c (veh/h)																354
v/c Ratio																0.23
95% Queue Length, Q ₉₅ (veh)																0.9
Control Delay (s/veh)																18.1
Level of Service (LOS)																C
Approach Delay (s/veh)													18.1			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

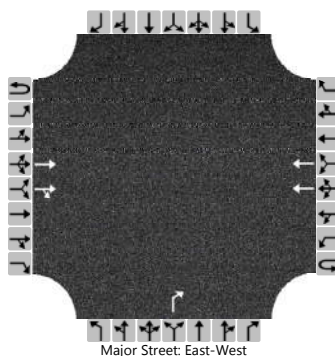
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	Background AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ Gordon Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	Gordon Ave
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	1		0	0	0
Configuration			T	TR			T					R				
Volume (veh/h)			1576	7			1437					13				
Percent Heavy Vehicles (%)												0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				
Critical Headway (sec)												6.90				
Base Follow-Up Headway (sec)												3.3				
Follow-Up Headway (sec)												3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												14				
Capacity, c (veh/h)												320				
v/c Ratio												0.04				
95% Queue Length, Q ₉₅ (veh)												0.1				
Control Delay (s/veh)												16.7				
Level of Service (LOS)												C				
Approach Delay (s/veh)									16.7							
Approach LOS									C							

Timings

19-LD-042 Gainesville Fueling Station TIS

5: SR 60 (Queen City Pkwy)/John W Morrow Jr Pkwy & SR 369 (Jesse Jewell Pkwy) Full Background AM Peak

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↗↗	↰	↰	↗↗	↰	↰↰	↗↗	↰	↰↰	↗↗	↰
Traffic Volume (vph)	36	867	80	246	871	320	70	321	266	450	487	37
Future Volume (vph)	36	867	80	246	871	320	70	321	266	450	487	37
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2		2			8			4
Detector Phase	1	6	6	5	2	2	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	12.7	47.7	47.7	12.2	42.7	42.7	11.2	33.8	33.8	11.0	31.8	31.8
Total Split (s)	12.8	49.2	49.2	22.0	58.4	58.4	12.8	33.8	33.8	25.0	46.0	46.0
Total Split (%)	9.8%	37.8%	37.8%	16.9%	44.9%	44.9%	9.8%	26.0%	26.0%	19.2%	35.4%	35.4%
Yellow Time (s)	4.7	3.7	3.7	4.2	3.7	3.7	3.2	3.4	3.4	3.0	3.4	3.4
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.4	2.4	3.0	2.4	2.4
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)	7.7	6.7	6.7	7.2	6.7	6.7	6.2	5.8	5.8	6.0	5.8	5.8
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effect Green (s)	57.8	52.6	52.6	72.8	62.5	62.5	6.2	17.8	17.8	19.9	33.5	33.5
Actuated g/C Ratio	0.44	0.40	0.40	0.56	0.48	0.48	0.05	0.14	0.14	0.15	0.26	0.26
v/c Ratio	0.17	0.63	0.11	0.73	0.53	0.36	0.45	0.69	0.64	0.90	0.56	0.07
Control Delay	18.9	34.1	0.3	37.8	16.2	2.2	68.8	60.7	14.9	74.8	44.7	0.2
Queue Delay	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 Delay	18.9	34.1	0.3	37.8	16.2	2.2	68.8	60.7	14.9	74.8	44.7	0.2
LOS	B	C	A	D	B	A	E	E	B	E	D	A
Approach Delay		30.8			16.8			43.1			56.9	
Approach LOS		C			B			D			E	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 128 (98%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 34.1

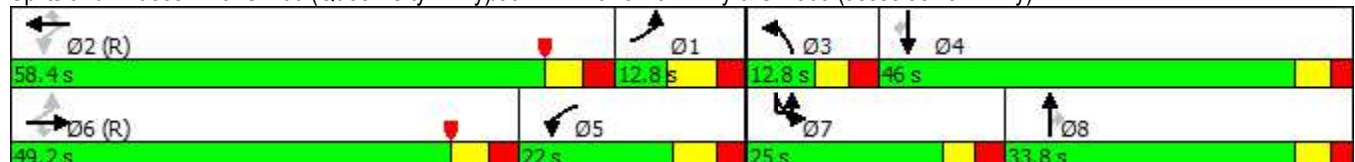
Intersection LOS: C

Intersection Capacity Utilization 80.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: SR 60 (Queen City Pkwy)/John W Morrow Jr Pkwy & SR 369 (Jesse Jewell Pkwy)



Queues

19-LD-042 Gainesville Fueling Station TIS

5: SR 60 (Queen City Pkwy)/John W Morrow Jr Pkwy & SR 369 (Jesse Jewell Pkwy) Full Background AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	903	83	256	907	333	73	334	277	470	507	39
v/c Ratio	0.17	0.63	0.11	0.73	0.53	0.36	0.45	0.69	0.64	0.90	0.56	0.07
Control Delay	18.9	34.1	0.3	37.8	16.2	2.2	68.8	60.7	14.9	74.8	44.7	0.2
Queue Delay	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 Delay	18.9	34.1	0.3	37.8	16.2	2.2	68.8	60.7	14.9	74.8	44.7	0.2
Queue Length 50th (ft)	14	316	0	97	288	29	31	143	17	204	202	0
Queue Length 95th (ft)	33	417	0	#186	215	2	57	186	101	#307	248	0
Internal Link Dist (ft)		906			405			987			1370	
Turn Bay Length (ft)	165		300				130		225	200		175
Base Capacity (vph)	229	1431	787	363	1700	933	174	762	540	524	1094	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.63	0.11	0.71	0.53	0.36	0.42	0.44	0.51	0.90	0.46	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Timings
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS
Future Background PM Peak

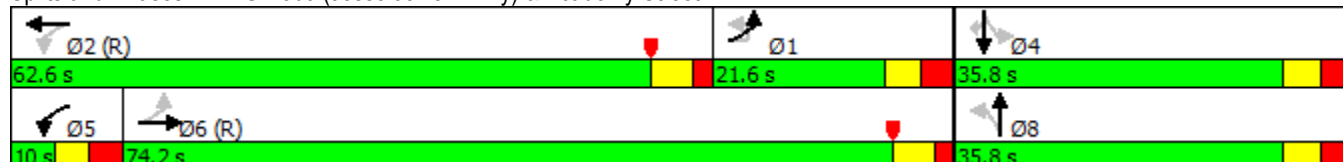
										
Lane Group	EBU	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	18	186	1202	6	1389	27	51	122	30	275
Future Volume (vph)	18	186	1202	6	1389	27	51	122	30	275
Turn Type	custom	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases		1	6	5	2		8		4	
Permitted Phases	1	6		2		8		4		4
Detector Phase	1	1	6	5	2	8	8	4	4	4
Switch Phase										
Minimum Initial (s)	4.0	4.0	12.0	4.0	12.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.2	10.2	23.5	10.0	23.5	32.4	32.4	35.4	35.4	35.4
Total Split (s)	21.6	21.6	74.2	10.0	62.6	35.8	35.8	35.8	35.8	35.8
Total Split (%)	18.0%	18.0%	61.8%	8.3%	52.2%	29.8%	29.8%	29.8%	29.8%	29.8%
Yellow Time (s)	3.2	3.2	3.8	3.0	3.8	3.4	3.4	3.4	3.4	3.4
All-Red Time (s)	3.0	3.0	1.7	3.0	1.7	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)		6.2	5.5	6.0	5.5		6.4		6.4	6.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	C-Min	None	C-Min	None	None	None	None	None
Act Effct Green (s)		86.5	87.2	71.3	71.8		18.6		18.6	18.6
Actuated g/C Ratio		0.72	0.73	0.59	0.60		0.16		0.16	0.16
v/c Ratio		0.77	0.49	0.03	0.73		0.42		0.78	0.64
Control Delay		29.2	3.0	14.3	21.8		46.2		72.7	16.6
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay		29.2	3.0	14.3	21.8		46.2		72.7	16.6
LOS		C	A	B	C		D		E	B
Approach Delay			6.8		21.7		46.2		36.6	
Approach LOS			A		C		D		D	

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 108 (90%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 18.1
 Intersection Capacity Utilization 95.3%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service F

Splits and Phases: 1: SR 369 (Jesse Jewell Pkwy) & Academy Street

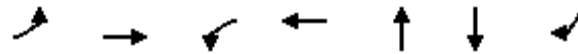


Queues

1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS

Future Background PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	211	1257	6	1530	96	157	284
v/c Ratio	0.77	0.49	0.03	0.73	0.42	0.78	0.64
Control Delay	29.2	3.0	14.3	21.8	46.2	72.7	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.2	3.0	14.3	21.8	46.2	72.7	16.6
Queue Length 50th (ft)	66	50	2	425	63	119	35
Queue Length 95th (ft)	m144	70	10	650	108	181	115
Internal Link Dist (ft)		375		496	446	522	
Turn Bay Length (ft)	200		140				175
Base Capacity (vph)	333	2567	220	2099	358	318	563
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.49	0.03	0.73	0.27	0.49	0.50

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCS7 Two-Way Stop-Control Report

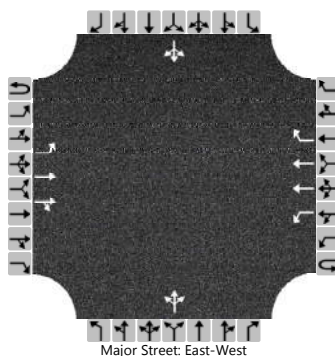
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	Background PM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ East Avenue
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	East Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	0		0	1	0
Configuration		L	T	TR		L	T	R			LTR				LTR	
Volume (veh/h)	0	4	1418	15	1	5	1694	9		0	0	4		0	0	0
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1			6.4	4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10			6.40	4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2			2.5	2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20			2.50	2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4			6					4					0	
Capacity, c (veh/h)		361			355					364						
v/c Ratio		0.01			0.02					0.01						
95% Queue Length, Q ₉₅ (veh)		0.0			0.1					0.0						
Control Delay (s/veh)		15.1			15.3					15.0						
Level of Service (LOS)		C			C					B						
Approach Delay (s/veh)	0.0				0.1				15.0							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

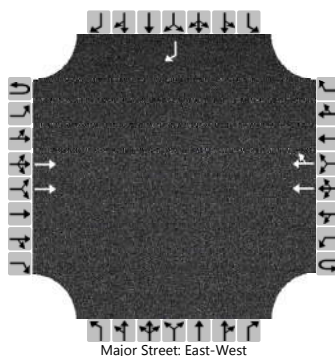
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	Background PM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ West Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	West Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1437				1621	73								91
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.90
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																93
Capacity, c (veh/h)																301
v/c Ratio																0.31
95% Queue Length, Q ₉₅ (veh)																1.3
Control Delay (s/veh)																22.2
Level of Service (LOS)																C
Approach Delay (s/veh)													22.2			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

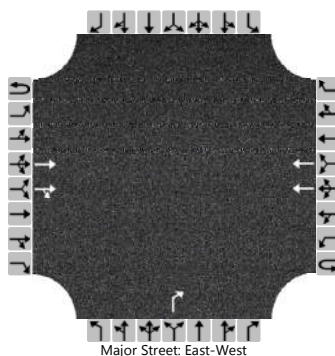
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	Background PM
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ Gordon Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	Gordon Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	1		0	0	0
Configuration			T	TR			T					R				
Volume (veh/h)			1409	9			1696					28				
Percent Heavy Vehicles (%)												0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				
Critical Headway (sec)												6.90				
Base Follow-Up Headway (sec)												3.3				
Follow-Up Headway (sec)												3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												29				
Capacity, c (veh/h)												373				
v/c Ratio												0.08				
95% Queue Length, Q ₉₅ (veh)												0.2				
Control Delay (s/veh)												15.5				
Level of Service (LOS)												C				
Approach Delay (s/veh)									15.5							
Approach LOS									C							

Timings

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/JW Morrow Jr Pkwy & SR 369/J Jewell Pkwy Future Background PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	909	81	207	1031	486	105	517	156	353	385	56
Future Volume (vph)	42	909	81	207	1031	486	105	517	156	353	385	56
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2		2			8			4
Detector Phase	1	6	6	5	2	2	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	12.7	47.7	47.7	12.2	42.7	42.7	11.2	33.8	33.8	11.0	31.8	31.8
Total Split (s)	12.7	50.2	50.2	17.0	54.5	54.5	14.3	33.8	33.8	19.0	38.5	38.5
Total Split (%)	10.6%	41.8%	41.8%	14.2%	45.4%	45.4%	11.9%	28.2%	28.2%	15.8%	32.1%	32.1%
Yellow Time (s)	4.7	3.7	3.7	4.2	3.7	3.7	3.2	3.4	3.4	3.0	3.4	3.4
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.4	2.4	3.0	2.4	2.4
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)	7.7	6.7	6.7	7.2	6.7	6.7	6.2	5.8	5.8	6.0	5.8	5.8
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effect Green (s)	44.2	45.2	45.2	51.5	52.0	52.0	7.4	23.3	23.3	16.0	31.7	31.7
Actuated g/C Ratio	0.37	0.38	0.38	0.43	0.43	0.43	0.06	0.19	0.19	0.13	0.26	0.26
v/c Ratio	0.32	0.70	0.11	0.72	0.69	0.53	0.51	0.77	0.33	0.79	0.42	0.10
Control Delay	31.9	35.4	0.3	38.0	18.9	3.8	62.9	53.5	2.9	64.0	37.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.9	35.4	0.3	38.0	18.9	3.8	62.9	53.5	2.9	64.0	37.9	0.3
LOS	C	D	A	D	B	A	E	D	A	E	D	A
Approach Delay		32.5			17.0			44.6			46.9	
Approach LOS		C			B			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 112 (93%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 31.1

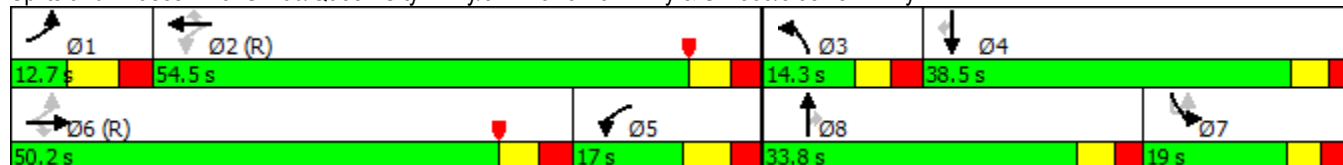
Intersection LOS: C

Intersection Capacity Utilization 82.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: SR 60/Queen City Pkwy/JW Morrow Jr Pkwy & SR 369/J Jewell Pkwy



Queues

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/JW Morrow Jr Pkwy & SR 369/J Jewell Pkwy Future Background PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	928	83	211	1052	496	107	528	159	360	393	57
v/c Ratio	0.32	0.70	0.11	0.72	0.69	0.53	0.51	0.77	0.33	0.79	0.42	0.10
Control Delay	31.9	35.4	0.3	38.0	18.9	3.8	62.9	53.5	2.9	64.0	37.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.9	35.4	0.3	38.0	18.9	3.8	62.9	53.5	2.9	64.0	37.9	0.3
Queue Length 50th (ft)	22	324	0	87	367	70	41	205	0	139	131	0
Queue Length 95th (ft)	48	401	0	m#135	313	14	72	255	13	#242	178	0
Internal Link Dist (ft)		906			405			987			1370	
Turn Bay Length (ft)	165		300				130		225	200		175
Base Capacity (vph)	136	1333	722	292	1532	940	231	825	541	457	964	595
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.70	0.11	0.72	0.69	0.53	0.46	0.64	0.29	0.79	0.41	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

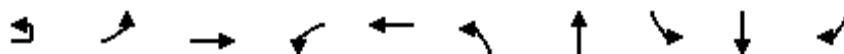
m Volume for 95th percentile queue is metered by upstream signal.

Timings

1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS

Future With Project AM Peak



Lane Group	EBU	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	15	271	1307	13	1216	4	4	63	14	228
Future Volume (vph)	15	271	1307	13	1216	4	4	63	14	228
Turn Type	custom	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases		1	6	5	2		8		4	
Permitted Phases	1	6		2		8		4		4
Detector Phase	1	1	6	5	2	8	8	4	4	4
Switch Phase										
Minimum Initial (s)	4.0	4.0	12.0	4.0	12.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.2	10.2	23.5	10.0	23.5	32.4	32.4	35.4	35.4	35.4
Total Split (s)	31.0	31.0	84.2	10.0	63.2	35.8	35.8	35.8	35.8	35.8
Total Split (%)	23.8%	23.8%	64.8%	7.7%	48.6%	27.5%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.2	3.2	3.8	3.0	3.8	3.4	3.4	3.4	3.4	3.4
All-Red Time (s)	3.0	3.0	1.7	3.0	1.7	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)		6.2	5.5	6.0	5.5		6.4		6.4	6.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	C-Min	None	C-Min	None	None	None	None	None
Act Effect Green (s)		101.2	101.9	83.4	83.9		11.6		11.6	11.6
Actuated g/C Ratio		0.78	0.78	0.64	0.65		0.09		0.09	0.09
v/c Ratio		0.70	0.48	0.06	0.58		0.07		0.62	0.66
Control Delay		23.4	3.9	12.5	16.2		46.4		77.1	16.0
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay		23.4	3.9	12.5	16.2		46.4		77.1	16.0
LOS		C	A	B	B		D		E	B
Approach Delay			7.4		16.1		46.4		31.3	
Approach LOS			A		B		D		C	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 84 (65%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 13.3

Intersection LOS: B

Intersection Capacity Utilization 90.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: SR 369 (Jesse Jewell Pkwy) & Academy Street

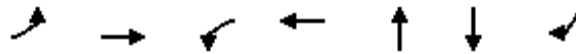
Ø2 (R)	Ø1	Ø4
63.2 s	31 s	35.8 s
Ø5	Ø6 (R)	Ø8
10 s	84.2 s	35.8 s

Queues

19-LD-042 Gainesville Fueling Station TIS

1: SR 369 (Jesse Jewell Pkwy) & Academy Street

Future With Project AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	292	1340	13	1323	10	78	233
v/c Ratio	0.70	0.48	0.06	0.58	0.07	0.62	0.66
Control Delay	23.4	3.9	12.5	16.2	46.4	77.1	16.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.4	3.9	12.5	16.2	46.4	77.1	16.0
Queue Length 50th (ft)	59	34	4	309	6	65	0
Queue Length 95th (ft)	m167	m262	16	499	23	114	78
Internal Link Dist (ft)		375		496	446	522	
Turn Bay Length (ft)	200		140				175
Base Capacity (vph)	533	2772	235	2264	358	319	538
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.48	0.06	0.58	0.03	0.24	0.43

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCS7 Two-Way Stop-Control Report

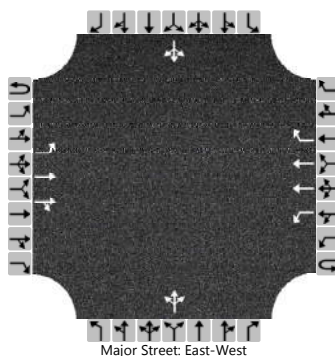
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/15/2019
Analysis Year	2020
Time Analyzed	With Project AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	3-SR 369 @ East Avenue
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	East Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	0		0	1	0
Configuration		L	T	TR		L	T	R			LTR				LTR	
Volume (veh/h)	1	2	1583	23	0	36	1426	1		0	0	13		3	0	18
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4	4.1				4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)	6.40	4.10				4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)	2.5	2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)	2.50	2.20				2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		3				37					13				22	
Capacity, c (veh/h)		284				395					319				241	
v/c Ratio		0.01				0.09					0.04				0.09	
95% Queue Length, Q ₉₅ (veh)		0.0				0.3					0.1				0.3	
Control Delay (s/veh)		17.8				15.1					16.8				21.4	
Level of Service (LOS)		C				C					C				C	
Approach Delay (s/veh)	0.0				0.4				16.8				21.4			
Approach LOS									C				C			

HCS7 Two-Way Stop-Control Report

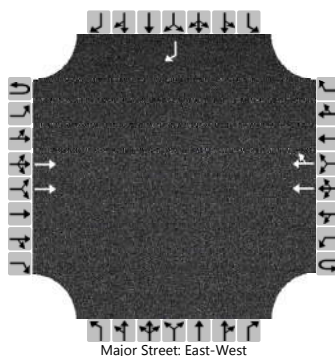
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	With Project AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ West Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	West Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1609				1399	46								78
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.90
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																80
Capacity, c (veh/h)																361
v/c Ratio																0.22
95% Queue Length, Q ₉₅ (veh)																0.8
Control Delay (s/veh)																17.8
Level of Service (LOS)																C
Approach Delay (s/veh)													17.8			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

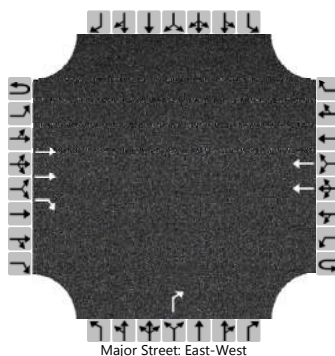
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	With Project AM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ Project Driveway
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	RIRO Driveway
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	0		0	0	1		0	0	0
Configuration			T	R			T					R				
Volume (veh/h)			1513	106			1412					96				
Percent Heavy Vehicles (%)												0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				
Critical Headway (sec)												6.90				
Base Follow-Up Headway (sec)												3.3				
Follow-Up Headway (sec)												3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												100				
Capacity, c (veh/h)												338				
v/c Ratio												0.30				
95% Queue Length, Q ₉₅ (veh)												1.2				
Control Delay (s/veh)												20.0				
Level of Service (LOS)												C				
Approach Delay (s/veh)									20.0							
Approach LOS									C							

Timings

19-LD-042 Gainesville Fueling Station TIS

5: SR 60 (Queen City Pkwy)/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy/SR 369/J Jewell Pkwy

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	895	80	246	861	305	91	343	253	471	474	37
Future Volume (vph)	36	895	80	246	861	305	91	343	253	471	474	37
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2		2			8			4
Detector Phase	1	6	6	5	2	2	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	12.7	47.7	47.7	12.2	42.7	42.7	11.2	33.8	33.8	11.0	31.8	31.8
Total Split (s)	13.2	49.2	49.2	21.0	57.0	57.0	14.5	33.8	33.8	26.0	45.3	45.3
Total Split (%)	10.2%	37.8%	37.8%	16.2%	43.8%	43.8%	11.2%	26.0%	26.0%	20.0%	34.8%	34.8%
Yellow Time (s)	4.7	3.7	3.7	4.2	3.7	3.7	3.2	3.4	3.4	3.0	3.4	3.4
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.4	2.4	3.0	2.4	2.4
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)	7.7	6.7	6.7	7.2	6.7	6.7	6.2	5.8	5.8	6.0	5.8	5.8
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	56.3	51.2	51.2	71.3	63.8	63.8	7.4	18.6	18.6	20.3	31.3	31.3
Actuated g/C Ratio	0.43	0.39	0.39	0.55	0.49	0.49	0.06	0.14	0.14	0.16	0.24	0.24
v/c Ratio	0.17	0.67	0.11	0.77	0.52	0.34	0.48	0.71	0.59	0.92	0.58	0.07
Control Delay	19.9	36.0	0.3	45.2	16.7	2.5	67.7	60.5	12.4	76.9	46.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	36.0	0.3	45.2	16.7	2.5	67.7	60.5	12.4	76.9	46.2	0.3
LOS	B	D	A	D	B	A	E	E	B	E	D	A
Approach Delay		32.6			18.6			43.8			59.2	
Approach LOS		C			B			D			E	

Intersection Summary

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 88 (68%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 36.0

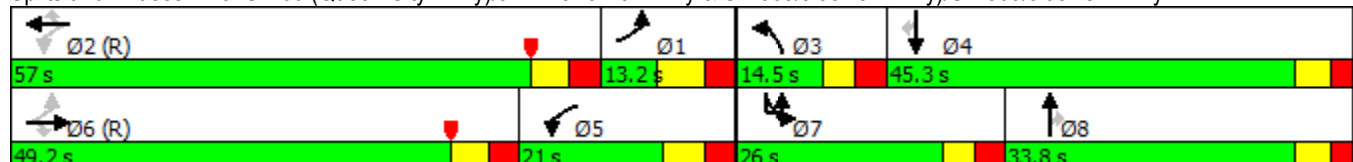
Intersection LOS: D

Intersection Capacity Utilization 82.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: SR 60 (Queen City Pkwy)/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy/SR 369/J Jewell Pkwy



Queues

19-LD-042 Gainesville Fueling Station TIS

5: SR 60 (Queen City Pkwy)/J W Morrow Jr Pkwy & SR 369/J Jewell Pkwy / SR 369/J Jewell Pkwy



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	38	932	83	256	897	318	95	357	264	492	494	39
v/c Ratio	0.17	0.67	0.11	0.77	0.52	0.34	0.48	0.71	0.59	0.92	0.58	0.07
Control Delay	19.9	36.0	0.3	45.2	16.7	2.5	67.7	60.5	12.4	76.9	46.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	36.0	0.3	45.2	16.7	2.5	67.7	60.5	12.4	76.9	46.2	0.3
Queue Length 50th (ft)	14	334	0	110	301	38	40	152	7	213	195	0
Queue Length 95th (ft)	34	438	0	#236	245	2	70	197	86	#317	241	0
Internal Link Dist (ft)		906			154			987			1370	
Turn Bay Length (ft)	165		300				130		225	200		175
Base Capacity (vph)	229	1393	772	335	1737	938	219	762	540	537	1075	623
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.67	0.11	0.76	0.52	0.34	0.43	0.47	0.49	0.92	0.46	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCS7 Two-Way Stop-Control Report

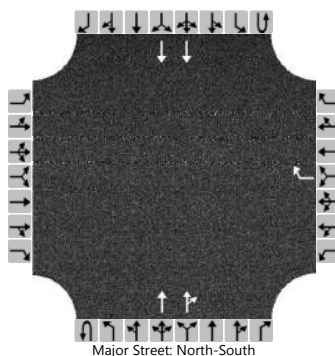
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	With Project AM Peak
Intersection Orientation	North-South
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 60 @ Project Driveway
Jurisdiction	GDOT District 1
East/West Street	RIRO Driveway
North/South Street	SR 60/Queen City Parkway
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0
Configuration								R			T	TR			T	
Volume (veh/h)								62			625	60			800	
Percent Heavy Vehicles (%)								0								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.90								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.30								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								65								
Capacity, c (veh/h)								645								
v/c Ratio								0.10								
95% Queue Length, Q ₉₅ (veh)								0.3								
Control Delay (s/veh)								11.2								
Level of Service (LOS)								B								
Approach Delay (s/veh)					11.2											
Approach LOS					B											

Timings
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS
Future With Project PM Peak

										
Lane Group	EBU	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	18	189	1217	6	1396	27	51	122	30	276
Future Volume (vph)	18	189	1217	6	1396	27	51	122	30	276
Turn Type	custom	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	Perm
Protected Phases		1	6	5	2		8		4	
Permitted Phases	1	6		2		8		4		4
Detector Phase	1	1	6	5	2	8	8	4	4	4
Switch Phase										
Minimum Initial (s)	4.0	4.0	12.0	4.0	12.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.2	10.2	23.5	10.0	23.5	32.4	32.4	35.4	35.4	35.4
Total Split (s)	21.0	21.0	74.2	10.0	63.2	35.8	35.8	35.8	35.8	35.8
Total Split (%)	17.5%	17.5%	61.8%	8.3%	52.7%	29.8%	29.8%	29.8%	29.8%	29.8%
Yellow Time (s)	3.2	3.2	3.8	3.0	3.8	3.4	3.4	3.4	3.4	3.4
All-Red Time (s)	3.0	3.0	1.7	3.0	1.7	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)		6.2	5.5	6.0	5.5		6.4		6.4	6.4
Lead/Lag	Lag	Lag	Lag	Lead	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					
Recall Mode	None	None	C-Min	None	C-Min	None	None	None	None	None
Act Effct Green (s)		86.5	87.2	71.2	71.7		18.6		18.6	18.6
Actuated g/C Ratio		0.72	0.73	0.59	0.60		0.16		0.16	0.16
v/c Ratio		0.78	0.50	0.03	0.73		0.42		0.78	0.66
Control Delay		30.4	2.4	14.2	21.8		46.2		72.7	18.5
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Delay		30.4	2.4	14.2	21.8		46.2		72.7	18.5
LOS		C	A	B	C		D		E	B
Approach Delay			6.4		21.8		46.2		37.7	
Approach LOS			A		C		D		D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 18.0

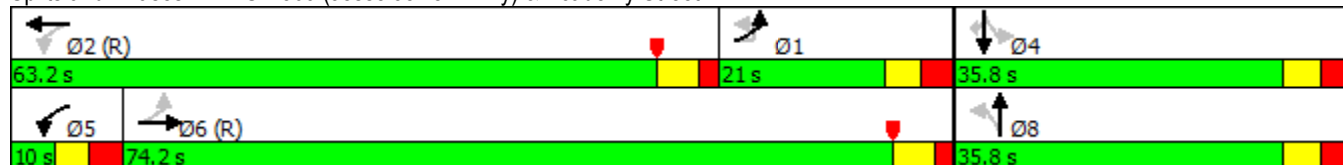
Intersection LOS: B

Intersection Capacity Utilization 95.7%

ICU Level of Service F

Analysis Period (min) 15

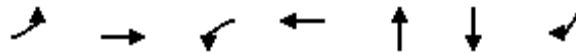
Splits and Phases: 1: SR 369 (Jesse Jewell Pkwy) & Academy Street



Queues
1: SR 369 (Jesse Jewell Pkwy) & Academy Street

19-LD-042 Gainesville Fueling Station TIS

Future With Project PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT	SBR
Lane Group Flow (vph)	214	1273	6	1537	96	157	285
v/c Ratio	0.78	0.50	0.03	0.73	0.42	0.78	0.66
Control Delay	30.4	2.4	14.2	21.8	46.2	72.7	18.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	2.4	14.2	21.8	46.2	72.7	18.5
Queue Length 50th (ft)	78	35	2	435	63	119	42
Queue Length 95th (ft)	m141	53	10	648	108	181	124
Internal Link Dist (ft)		375		496	446	522	
Turn Bay Length (ft)	200		140				175
Base Capacity (vph)	322	2568	217	2097	358	318	556
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.50	0.03	0.73	0.27	0.49	0.51

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCS7 Two-Way Stop-Control Report

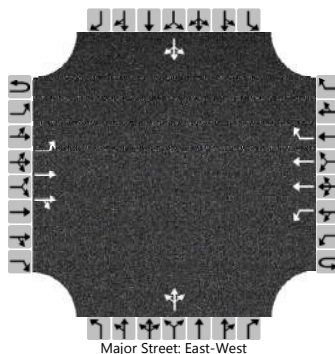
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/15/2019
Analysis Year	2020
Time Analyzed	With Project PM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ East Avenue
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	East Ave
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	1	0		0	1	0
Configuration		L	T	TR		L	T	R			LTR				LTR	
Volume (veh/h)	0	4	1421	24	1	33	1674	9		8	0	32		0	0	0
Percent Heavy Vehicles (%)	0	0			0	0				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No											
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1			6.4	4.1				7.5	6.5	6.9		7.5	6.5	6.9
Critical Headway (sec)		4.10			6.40	4.10				7.50	6.50	6.90		7.50	6.50	6.90
Base Follow-Up Headway (sec)		2.2			2.5	2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20			2.50	2.20				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4			35					41					0	
Capacity, c (veh/h)		368			431					221						
v/c Ratio		0.01			0.08					0.19						
95% Queue Length, Q ₉₅ (veh)		0.0			0.3					0.7						
Control Delay (s/veh)		14.9			14.1					25.0						
Level of Service (LOS)		B			B					D						
Approach Delay (s/veh)	0.0				0.3				25.0							
Approach LOS									D							

HCS7 Two-Way Stop-Control Report

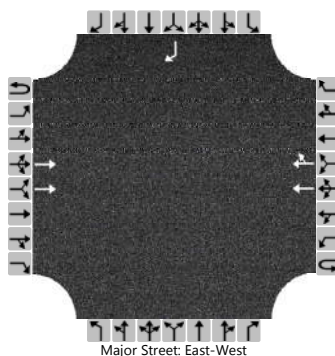
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	With Project PM Peak
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ West Ave
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	West Ave
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	0	2	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1449				1609	73								91
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																6.9
Critical Headway (sec)																6.90
Base Follow-Up Headway (sec)																3.3
Follow-Up Headway (sec)																3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																93
Capacity, c (veh/h)																304
v/c Ratio																0.31
95% Queue Length, Q ₉₅ (veh)																1.3
Control Delay (s/veh)																22.0
Level of Service (LOS)																C
Approach Delay (s/veh)													22.0			
Approach LOS													C			

HCS7 Two-Way Stop-Control Report

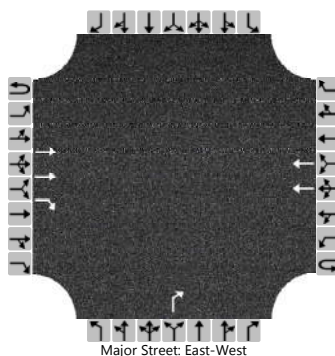
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	With Project PM
Intersection Orientation	East-West
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 369 @ Project Driveway
Jurisdiction	GDOT District 1
East/West Street	SR 369/Jesse Jewell Pkwy
North/South Street	RIRO Driveway
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	1	0	0	2	0		0	0	1		0	0	0
Configuration			T	R			T					R				
Volume (veh/h)			1371	86			1684					78				
Percent Heavy Vehicles (%)												0				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized	No								No							
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)												6.9				
Critical Headway (sec)												6.90				
Base Follow-Up Headway (sec)												3.3				
Follow-Up Headway (sec)												3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)												80				
Capacity, c (veh/h)												387				
v/c Ratio												0.21				
95% Queue Length, Q ₉₅ (veh)												0.8				
Control Delay (s/veh)												16.7				
Level of Service (LOS)												C				
Approach Delay (s/veh)									16.7							
Approach LOS									C							

Timings

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/JW Morrow Jr Pkwy & SR 369/J Jewell Pkwy Future With Project PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	936	81	207	1011	478	125	538	146	375	371	56
Future Volume (vph)	42	936	81	207	1011	478	125	538	146	375	371	56
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2		2			8			4
Detector Phase	1	6	6	5	2	2	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	12.7	47.7	47.7	12.2	42.7	42.7	11.2	33.8	33.8	11.0	31.8	31.8
Total Split (s)	12.7	49.0	49.0	17.2	53.5	53.5	14.3	33.8	33.8	20.0	39.5	39.5
Total Split (%)	10.6%	40.8%	40.8%	14.3%	44.6%	44.6%	11.9%	28.2%	28.2%	16.7%	32.9%	32.9%
Yellow Time (s)	4.7	3.7	3.7	4.2	3.7	3.7	3.2	3.4	3.4	3.0	3.4	3.4
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.4	2.4	3.0	2.4	2.4
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)	7.7	6.7	6.7	7.2	6.7	6.7	6.2	5.8	5.8	6.0	5.8	5.8
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	43.1	44.1	44.1	50.5	51.0	51.0	7.6	23.8	23.8	16.4	32.4	32.4
Actuated g/C Ratio	0.36	0.37	0.37	0.42	0.42	0.42	0.06	0.20	0.20	0.14	0.27	0.27
v/c Ratio	0.32	0.74	0.12	0.76	0.69	0.52	0.59	0.78	0.30	0.82	0.40	0.10
Control Delay	32.7	37.5	0.3	43.1	20.0	3.2	65.9	53.7	2.1	65.5	36.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	37.5	0.3	43.1	20.0	3.2	65.9	53.7	2.1	65.5	36.9	0.3
LOS	C	D	A	D	C	A	E	D	A	E	D	A
Approach Delay		34.5			18.1			46.3			47.7	
Approach LOS		C			B			D			D	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 32.7

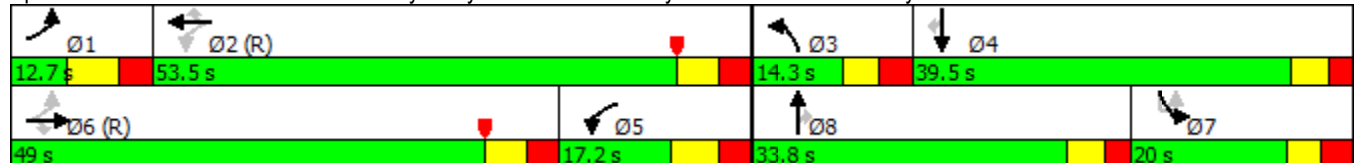
Intersection LOS: C

Intersection Capacity Utilization 84.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: SR 60/Queen City Pkwy/JW Morrow Jr Pkwy & SR 369/J Jewell Pkwy



Queues

19-LD-042 Gainesville Fueling Station TIS

5: SR 60/Queen City Pkwy/JW Morrow Jr Pkwy & SR 369/J Jewell Pkwy Future With Project PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	955	83	211	1032	488	128	549	149	383	379	57
v/c Ratio	0.32	0.74	0.12	0.76	0.69	0.52	0.59	0.78	0.30	0.82	0.40	0.10
Control Delay	32.7	37.5	0.3	43.1	20.0	3.2	65.9	53.7	2.1	65.5	36.9	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	37.5	0.3	43.1	20.0	3.2	65.9	53.7	2.1	65.5	36.9	0.3
Queue Length 50th (ft)	22	343	0	83	361	45	50	213	0	148	124	0
Queue Length 95th (ft)	49	424	0	m#158	324	8	83	266	5	#251	170	0
Internal Link Dist (ft)		906			405			987			1370	
Turn Bay Length (ft)	165		300				130		225	200		175
Base Capacity (vph)	136	1299	708	278	1504	938	231	825	541	469	993	606
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.74	0.12	0.76	0.69	0.52	0.55	0.67	0.28	0.82	0.38	0.09

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS7 Two-Way Stop-Control Report

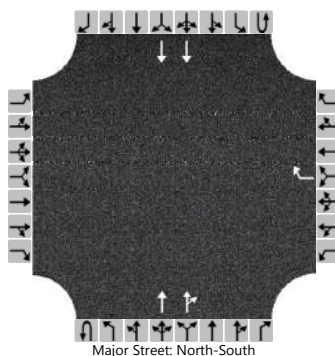
General Information

Analyst	K Farabee
Agency/Co.	Wolverton
Date Performed	6/17/2019
Analysis Year	2020
Time Analyzed	With Project PM Peak
Intersection Orientation	North-South
Project Description	19-LD-042 Fueling Station TIS

Site Information

Intersection	SR 60 @ Project Driveway
Jurisdiction	GDOT District 1
East/West Street	RIRO Driveway
North/South Street	SR 60/Queen City Parkway
Peak Hour Factor	0.98
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	1	0	0	2	0	0	0	2	0
Configuration								R			T	TR			T	
Volume (veh/h)								49			754	51			652	
Percent Heavy Vehicles (%)								0								
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)								6.9								
Critical Headway (sec)								6.90								
Base Follow-Up Headway (sec)								3.3								
Follow-Up Headway (sec)								3.30								

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)								50								
Capacity, c (veh/h)								596								
v/c Ratio								0.08								
95% Queue Length, Q ₉₅ (veh)								0.3								
Control Delay (s/veh)								11.6								
Level of Service (LOS)								B								
Approach Delay (s/veh)					11.6											
Approach LOS					B											