



# Circle K – Lake City, FL

Traffic Impact Analysis

March 2022

Kimley»Horn



# TRAFFIC IMPACT ANALYSIS

Circle K – US 90 & Centurion Court  
Lake City, FL

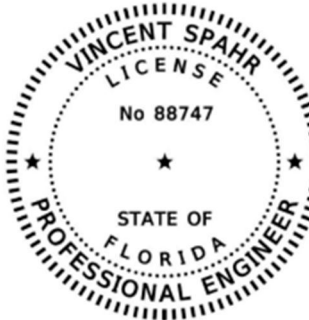
Prepared for:

Circle K

Prepared by:

Kimley-Horn and Associates, Inc.

March 2022



This document has been digitally signed and sealed by Vincent Spahr, P.E. on the date adjacent to the seal.

Vincent E Spahr  
2022.03.18 09:03:21 - 04'00'

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Vincent Spahr, P.E.  
Florida Registration Number 88747  
Kimley-Horn and Associates, Inc.  
800 SW 2<sup>nd</sup> Avenue, Suite 100  
Gainesville, Florida 32601  
Registry 35106

## Table of Contents

1.0	INTRODUCTION.....	1
2.0	EXISTING CONDITIONS ANALYSIS.....	3
2.1	<i>Existing Traffic Data</i> .....	3
2.2	<i>Existing Intersection Conditions</i> .....	3
3.0	PROJECT DEVELOPMENT .....	5
3.1	<i>Site Access</i> .....	5
3.2	<i>Trip Generation</i> .....	5
3.3	<i>Trip Distribution</i> .....	6
3.4	<i>Trip Assignment</i> .....	6
4.0	BACKGROUND CONDITIONS ANALYSIS – YEAR 2023 .....	9
4.1	<i>Historical Traffic Growth</i> .....	9
4.2	<i>Background Traffic</i> .....	9
4.3	<i>Background Intersection Analysis</i> .....	9
5.0	BUILDOUT CONDITIONS ANALYSIS – YEAR 2023 .....	11
5.1	<i>Buildout Traffic</i> .....	11
5.2	<i>Buildout Intersection Analysis</i> .....	11
6.0	CONCLUSION.....	13

## Figures

Figure 1: Project Location and Study Area .....	2
Figure 2: Existing (2021) Intersection Volumes.....	4
Figure 3: Project Trip Distribution .....	7
Figure 4: Project Trip Assignment.....	8
Figure 5: Background Intersection Volumes.....	10
Figure 6: Buildout Intersection Volumes .....	12

## Tables

Table 1: Existing Intersection Conditions.....	3
Table 2: Existing Site Trip Generation Comparison .....	5
Table 3: Trip Generation Summary .....	6
Table 4: Background Intersection Conditions.....	9
Table 5: Buildout Intersection Conditions .....	11

## Appendices

Appendix A: Conceptual Site Plan

Appendix B: Traffic Data

Appendix C: Intersection Volume Development Worksheets

Appendix D: Synchro Output Reports

Appendix E: Trip Generation Calculations

Appendix F: FDOT *Trend* Worksheet

## 1.0 INTRODUCTION

Kimley-Horn has been retained by Circle K to analyze and document the traffic impacts associated with the expansion of a gas station and Circle K convenience market on the northeast quadrant of the intersection of US Highway 90 (US 90) and Centurion Court/SW Florida Gateway Drive in Lake City, Florida.

There is an existing 4,968 square-foot convenience market with 24 vehicle fueling positions (VFP) on the site. The project location is shown in Figure 1.

The applicant is proposing to add a 900-square foot expansion to the convenience market and 3 vehicle fueling positions designed for diesel trucks. The conceptual site plan is provided in Appendix A.

The study area for this traffic impact analysis includes the project driveways and the signalized intersection of US 90 and Centurion Court/SW Florida Gateway Drive, as shown in Figure 1.



Figure 1: Project Location Map

March 2022  
 Project No.: 149880040

**Kimley»Horn**  
 © 2022 Kimley-Horn and Associates, Inc.  
 189 S Orange Ave, Suite 1000, Orlando, FL, 32801  
 Phone: (407)-898-1511

## 2.0 EXISTING CONDITIONS ANALYSIS

### 2.1 EXISTING TRAFFIC DATA

Turning movement counts (TMCs) were collected at the study intersection on Thursday, September 2, 2021 during the AM (7:00AM – 9:00 AM) and PM (4:00PM – 6:00PM) peak periods. Raw turning movement counts are provided in Appendix B.

Turning movement volumes were adjusted using the peak season conversion factor (PSCF) from the Florida Department of Transportation (FDOT) Florida Traffic Online (FTO). Seasonal factor data is included in Appendix B. Existing signal timings were provided by Lake City staff for use in the analysis, signal timing worksheets are included in Appendix B.

Figure 2 illustrates turning movement volumes for existing peak season conditions at the study intersection. The intersection volume development worksheet can be found in Appendix C.

### 2.2 EXISTING INTERSECTION CONDITIONS

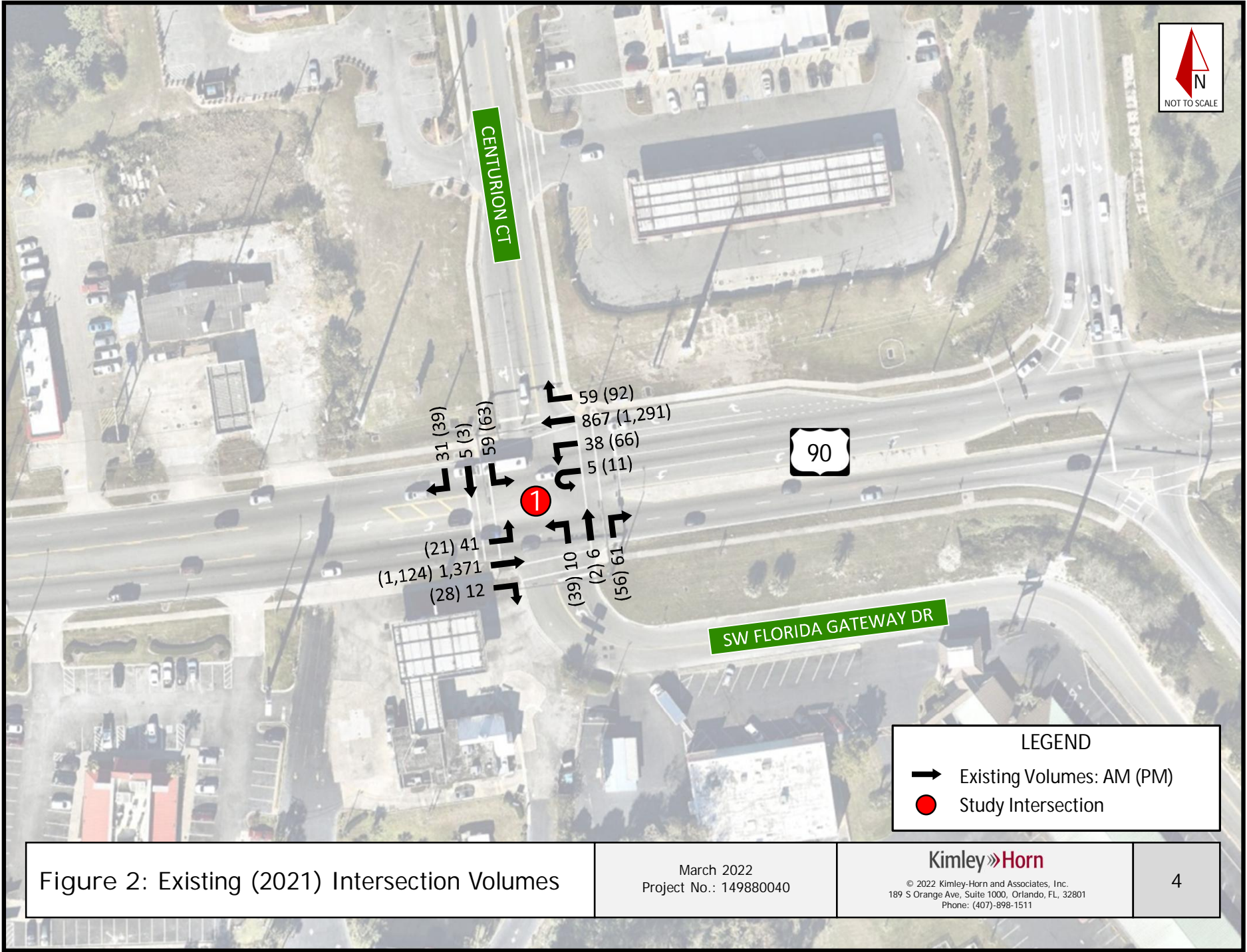
Intersection capacity analyses were performed for existing (2021) conditions using the operational analysis procedures outlined in the latest *Highway Capacity Manual, 6<sup>th</sup> Edition* (HCM 6). Specifically, *Synchro* (v11) software was used to evaluate existing operational conditions at study area intersections by reporting delay, level of service (LOS), volume-to-capacity (v/c) ratios, and the 95<sup>th</sup> percentile queue for each movement. Table 1 summarizes the operational analyses for the existing AM and PM peak hour conditions at the study intersection. Synchro outputs are provided in Appendix D.

Table 1: Existing Intersection Conditions

		AM Peak Hour				PM Peak Hour			
		Delay (sec/veh)	LOS	v/c Ratio	95th percentile queue (veh)	Delay (sec/veh)	LOS	v/c Ratio	95th percentile queue (veh)
<b>US 90 &amp; Centurion Court</b>	<b>Overall Intersection</b>	<b>13.2</b>	<b>B</b>	-	-	<b>13.2</b>	<b>B</b>	-	-
	<b>Eastbound</b>	<b>11.5</b>	<b>B</b>	-	-	<b>9.6</b>	<b>A</b>	-	-
	EBL	5.5	A	0.10	0.5	6.9	A	0.08	0.3
	EBT	11.7	B	0.58	14.6	9.7	A	0.48	12.5
	EBT/R	11.7	B	0.58	15.2	9.6	A	0.48	12.9
	<b>Westbound</b>	<b>7.7</b>	<b>A</b>	-	-	<b>8.7</b>	<b>A</b>	-	-
	WBL	7.9	A	0.16	0.5	6.7	A	0.24	1.1
	WBT	7.9	A	0.38	8.0	9.0	A	0.54	13.7
	WBR	5.8	A	0.06	0.9	5.4	A	0.09	1.5
	<b>Northbound</b>	<b>55.6</b>	<b>E</b>	-	-	<b>65.1</b>	<b>E</b>	-	-
	NBL	54.9	D	0.06	0.6	66.7	E	0.28	2.9
	NBT/R	55.7	E	0.42	4.1	64.0	E	0.38	4.2
	<b>Southbound</b>	<b>58.8</b>	<b>E</b>	-	-	<b>68.1</b>	<b>E</b>	-	-
	SBL	61.9	E	0.45	3.8	71.6	E	0.51	5.0
	SBT/R	53.6	D	0.23	2.1	62.7	E	0.27	3.0

The intersection of US 90 and Centurion Court operates with LOS B during existing (2021) AM peak hour and PM peak hour conditions. All movements operate with v/c ratios less than 1.00 under existing (2021) AM and PM peak hour conditions. The northbound and southbound approaches operate with LOS E during the AM and PM peak hour due to the prioritization of green time for the mainline US 90 movements.





**LEGEND**

- ➔ Existing Volumes: AM (PM)
- Study Intersection

Figure 2: Existing (2021) Intersection Volumes

March 2022  
Project No.: 149880040

**Kimley»Horn**  
© 2022 Kimley-Horn and Associates, Inc.  
189 S Orange Ave, Suite 1000, Orlando, FL, 32801  
Phone: (407)-898-1511

## 3.0 PROJECT DEVELOPMENT

The existing site currently has 24 VFPs and a 4,968-square foot Circle K convenience store. The proposed expansion will add approximately 900-square feet to the existing convenience market and 3 VFPs north of the existing site. The latest industry standards were referenced to evaluate the amount of new external trips to be generated by the site at buildout.

### 3.1 SITE ACCESS

Access to the site is proposed via two existing driveways and one new driveway along Centurion Court, as shown in the site plan provided in Appendix A.

### 3.2 TRIP GENERATION

Trip generation and pass-by rates for the proposed development were calculated using the 11<sup>th</sup> Edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. Land Use Code (LUC) 945 (Gasoline Station with Convenience Market) was used to calculate the trip generation potential for the existing and proposed development.

The trip generation potential of the existing Circle K convenience store and gas station was compared to observed traffic volumes on Centurion Court north of US 90. Table 2 summarizes the comparison of the calculated trip generation potential of the existing development and the observed peak hour volumes on Centurion Court.

Table 2: Existing Site Trip Generation Comparison

	AM Peak Hour			PM Peak Hour		
	Total	In (NB)	Out (SB)	Total	In (NB)	Out (SB)
ITE <i>Trip Generation Manual</i>	649	325	324	546	273	273
Observed Peak Season Traffic	201	106	95	220	115	105

Since the existing AM and PM peak hour traffic volumes were significantly less than the trip generation potential of the existing development, the trip generation calculations for the proposed expansion to the convenience store and gas station were adjusted proportionately to reflect actual conditions anticipated at the site under buildout conditions.

Table 3 provides the AM peak hour, and PM peak hour trip generation calculations for the proposed expansion and the adjustment applied based on the existing trip generation comparison. A factor of 0.31 (201/649) was applied to the AM peak hour trip generation calculations and a factor of 0.40 (220/546) was applied to the PM peak hour trip generation calculations in accordance with the comparison illustrated in Table 2.

As summarized in Table 3, the proposed expansion is anticipated to generate 16 net new AM peak hour trips (8 inbound and 8 outbound), and 18 net new PM peak hour trips (9 inbound and 9 outbound) to the external roadway network at buildout. In addition, the proposed expansion is anticipated to generate 48 AM peak hour pass-by trips (24 inbound and 24 outbound), and 54 PM peak hour pass-by trips (27 inbound

and 27 outbound). A detailed table including all trip generation calculations and adjustments is provided in Appendix E.

Table 3: Trip Generation Summary

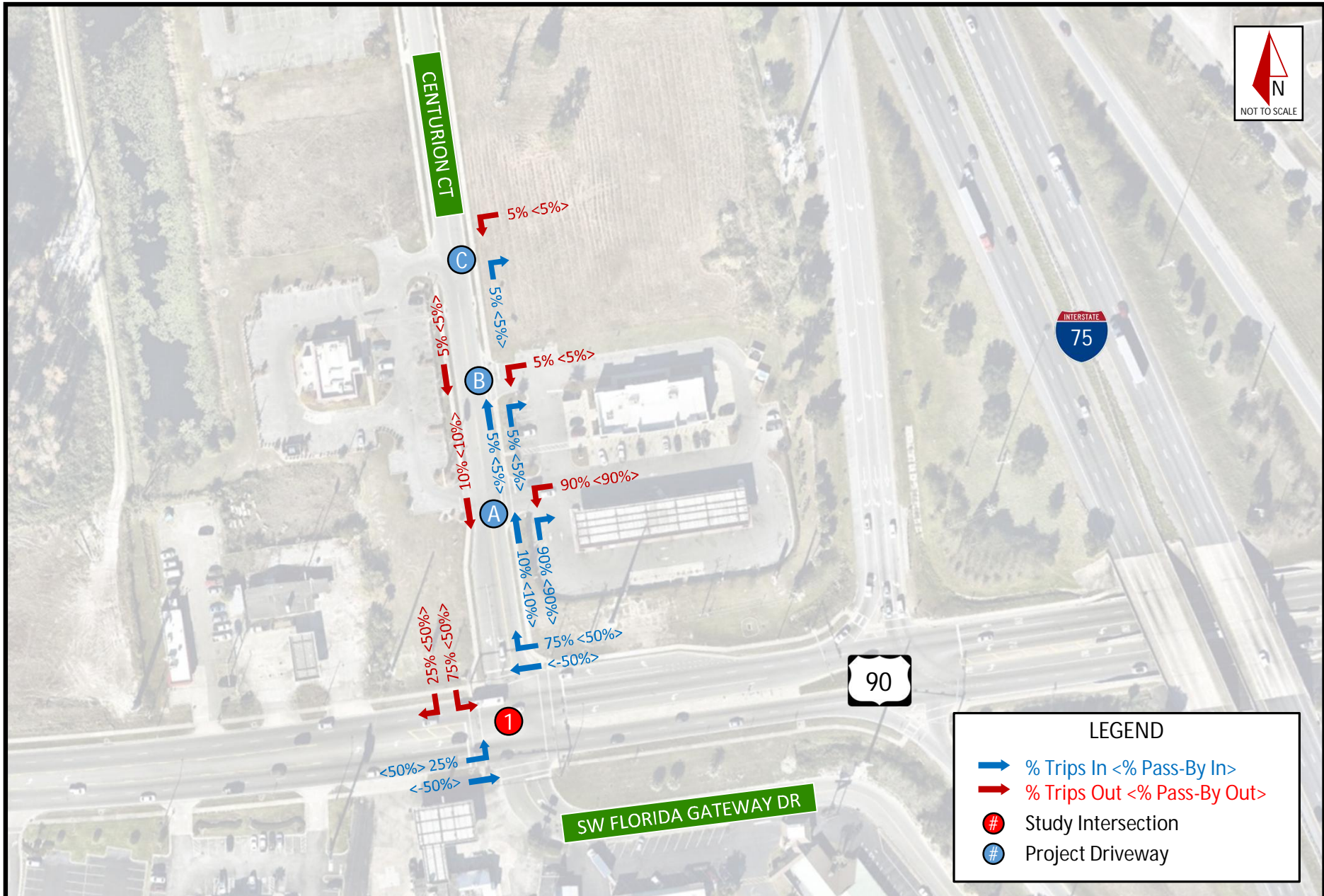
	AM Peak Hour			PM Peak Hour		
	Total	In (NB)	Out (SB)	Total	In (NB)	Out (SB)
ITE <i>Trip Generation Manual</i> (Net New)	50	25	25	46	23	23
ITE <i>Trip Generation Manual</i> (Pass-by)	204	102	102	180	90	90
Adjustment Factor	0.31			0.40		
Adjusted Net New Trips	16	8	8	18	9	9
Adjusted Pass-by Trips	48	24	24	54	27	27

### 3.3 TRIP DISTRIBUTION

The project's trip distribution was developed based on observed traffic patterns within the study area roadway network and engineering judgement. Figure 3 displays the anticipated trip distribution for the proposed Circle K gas station expansion at buildout.

### 3.4 TRIP ASSIGNMENT

Site distribution percentages were used to assign anticipated project trips to the study area intersection and driveways. Figure 4 shows the anticipated AM and PM peak hour project movements at the study area intersection and project driveways.



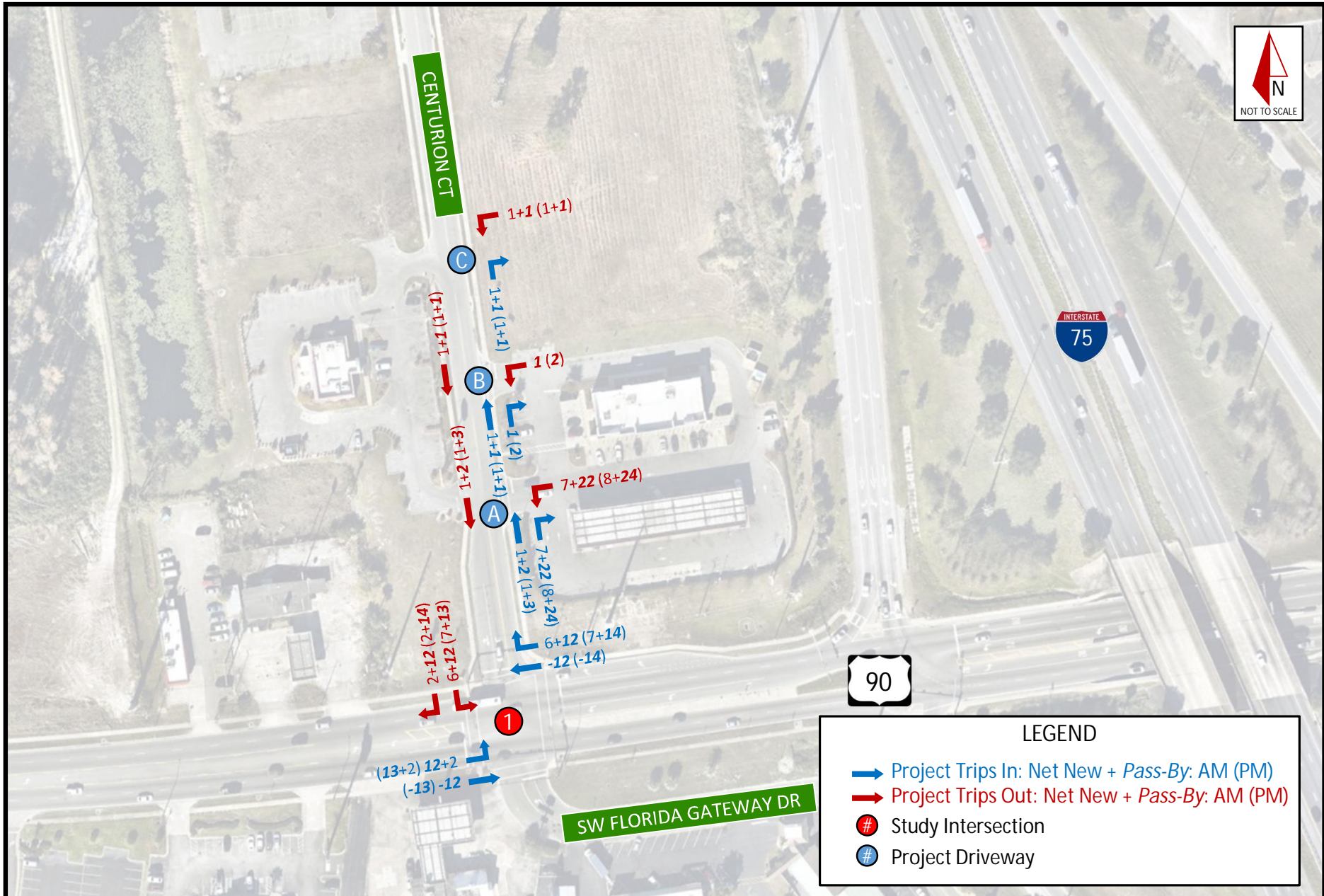
**LEGEND**

- % Trips In <% Pass-By In>
- % Trips Out <% Pass-By Out>
- Study Intersection
- Project Driveway

Figure 3: Project Trip Distribution

March 2022  
Project No.: 149880040

**Kimley»Horn**  
© 2022 Kimley-Horn and Associates, Inc.  
189 S Orange Ave, Suite 1000, Orlando, FL, 32801  
Phone: (407)-898-1511



**LEGEND**

- Project Trips In: Net New + Pass-By: AM (PM)
- Project Trips Out: Net New + Pass-By: AM (PM)
- # Study Intersection
- # Project Driveway

Figure 4: Project Trip Assignment

March 2022  
Project No.: 149880040

**Kimley»Horn**  
© 2022 Kimley-Horn and Associates, Inc.  
189 S Orange Ave, Suite 1000, Orlando, FL, 32801  
Phone: (407)-898-1511

## 4.0 BACKGROUND CONDITIONS ANALYSIS – YEAR 2023

### 4.1 HISTORICAL TRAFFIC GROWTH

A historical traffic growth rate was calculated based upon the nearest historical Annual Average Daily Traffic (AADT) data available from FTO. A 2.11% annual historical growth rate was calculated based on the average traffic growth exhibited over the past five (5) years from an FDOT count station located east of the project site on US 90. The growth trend worksheet can be found in Appendix F.

### 4.2 BACKGROUND TRAFFIC

Traffic conditions were evaluated for year 2023 background conditions prior to the addition of project traffic. Background volumes at study area intersections were derived by applying 2.11% annual growth to existing (2021) traffic counts. Figure 5 illustrates AM peak hour and PM peak hour turning movement volumes for background conditions at the study intersection. The intersection volume development worksheet can be found in Appendix C.

### 4.3 BACKGROUND INTERSECTION ANALYSIS

Intersection operational analyses were performed for 2023 background conditions in the AM and PM peak hours using procedures outlined in the *Highway Capacity Manual 6* with *Synchro* (v11) software. Table 4 summarizes the operational analyses for the 2023 background AM and PM peak hour conditions at the study intersection. Synchro outputs are provided in Appendix D.

Table 4: Background Intersection Conditions

		AM Peak Hour				PM Peak Hour			
		Delay (sec/veh)	LOS	v/c Ratio	95th percentile queue (veh)	Delay (sec/veh)	LOS	v/c Ratio	95th percentile queue (veh)
<b>US 90 &amp; Centurion Court</b>	<b>Overall Intersection</b>	<b>13.8</b>	<b>B</b>	-	-	<b>13.7</b>	<b>B</b>	-	-
	<b>Eastbound</b>	<b>12.4</b>	<b>B</b>	-	-	<b>10.2</b>	<b>B</b>	-	-
	EBL	5.8	A	0.11	0.5	7.5	A	0.09	0.3
	EBT	12.6	B	0.61	15.8	10.2	B	0.50	13.4
	EBT/R	12.5	B	0.61	16.4	10.2	B	0.51	13.8
	<b>Westbound</b>	<b>8.2</b>	<b>A</b>	-	-	<b>9.3</b>	<b>A</b>	-	-
	WBL	8.8	A	0.17	0.6	7.3	A	0.26	1.1
	WBT	8.3	A	0.39	8.6	9.7	A	0.57	14.9
	WBR	6.0	A	0.06	0.9	5.6	A	0.09	1.6
	<b>Northbound</b>	<b>55.1</b>	<b>E</b>	-	-	<b>64.8</b>	<b>E</b>	-	-
	NBL	54.4	D	0.06	0.6	66.6	E	0.29	3.1
	NBT/R	55.2	E	0.42	4.3	63.5	E	0.38	4.4
	<b>Southbound</b>	<b>58.6</b>	<b>E</b>	-	-	<b>67.8</b>	<b>E</b>	-	-
	SBL	61.8	E	0.47	4.1	71.5	E	0.52	5.2
SBT/R	53.1	D	0.22	2.2	62.3	E	0.28	3.2	

The intersection of US 90 and Centurion Court is expected to operate with LOS B during background (2023) AM peak hour and PM peak hour conditions. All movements are expected to operate with v/c ratios less than 1.00 under background (2023) AM and PM peak hour conditions. The northbound and southbound approaches are expected to continue to operate with LOS E during the AM and PM peak hour due to the prioritization of green time for the mainline US 90 movements.

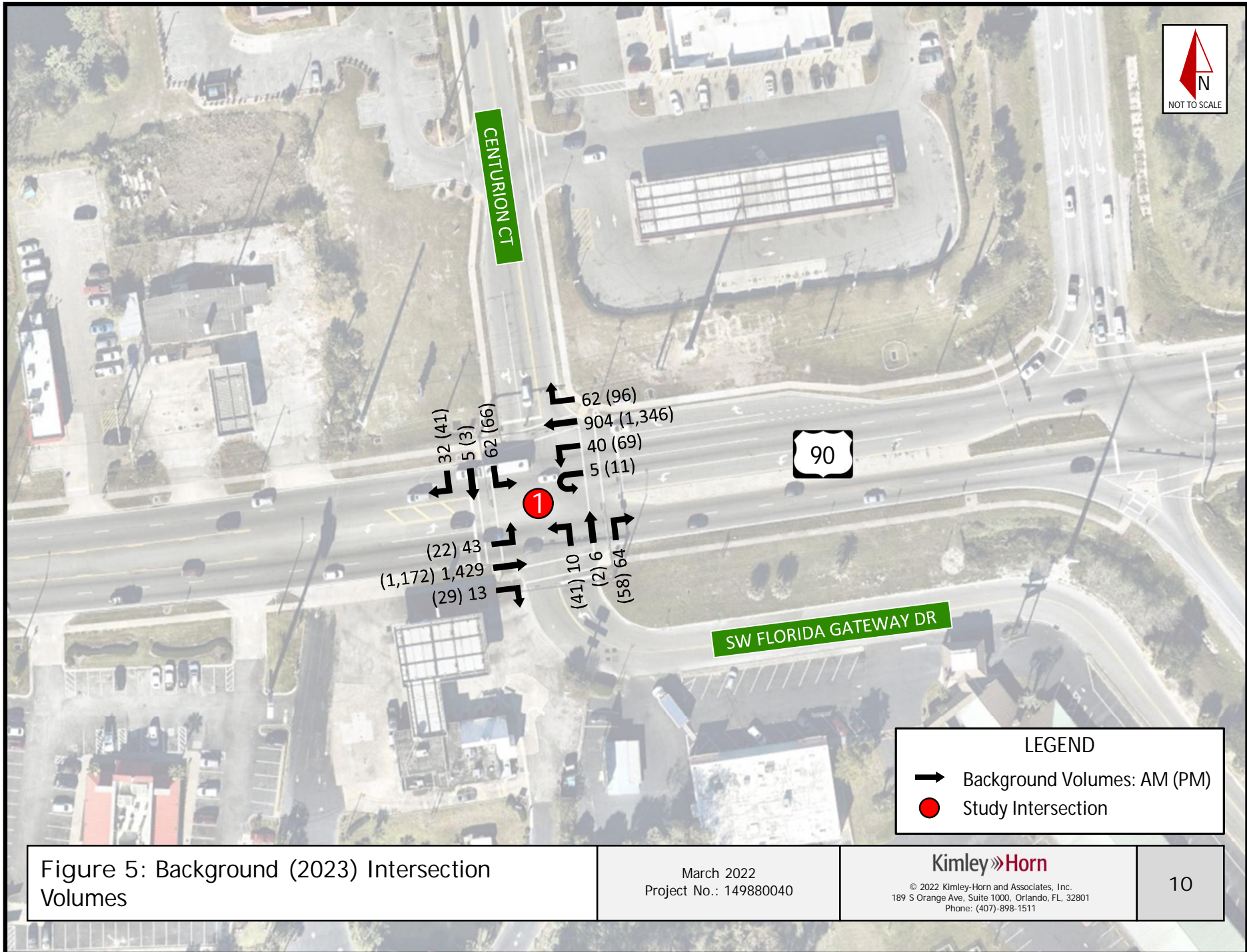


Figure 5: Background (2023) Intersection Volumes

March 2022  
Project No.: 149880040

**Kimley»Horn**  
© 2022 Kimley-Horn and Associates, Inc.  
189 S Orange Ave, Suite 1000, Orlando, FL, 32801  
Phone: (407)-898-1511

## 5.0 BUILDOUT CONDITIONS ANALYSIS – YEAR 2023

### 5.1 BUILDOUT TRAFFIC

Future traffic conditions for the proposed development were evaluated for year 2023 conditions with the inclusion of project traffic. Buildout volumes were developed by adding anticipated project trips to background (2023) volumes. Figure 6 illustrates the projected turning movement volumes under buildout AM and PM peak hour conditions at the study intersection and the proposed driveways. The intersection volume development worksheet can be found in Appendix C.

### 5.2 BUILDOUT INTERSECTION ANALYSIS

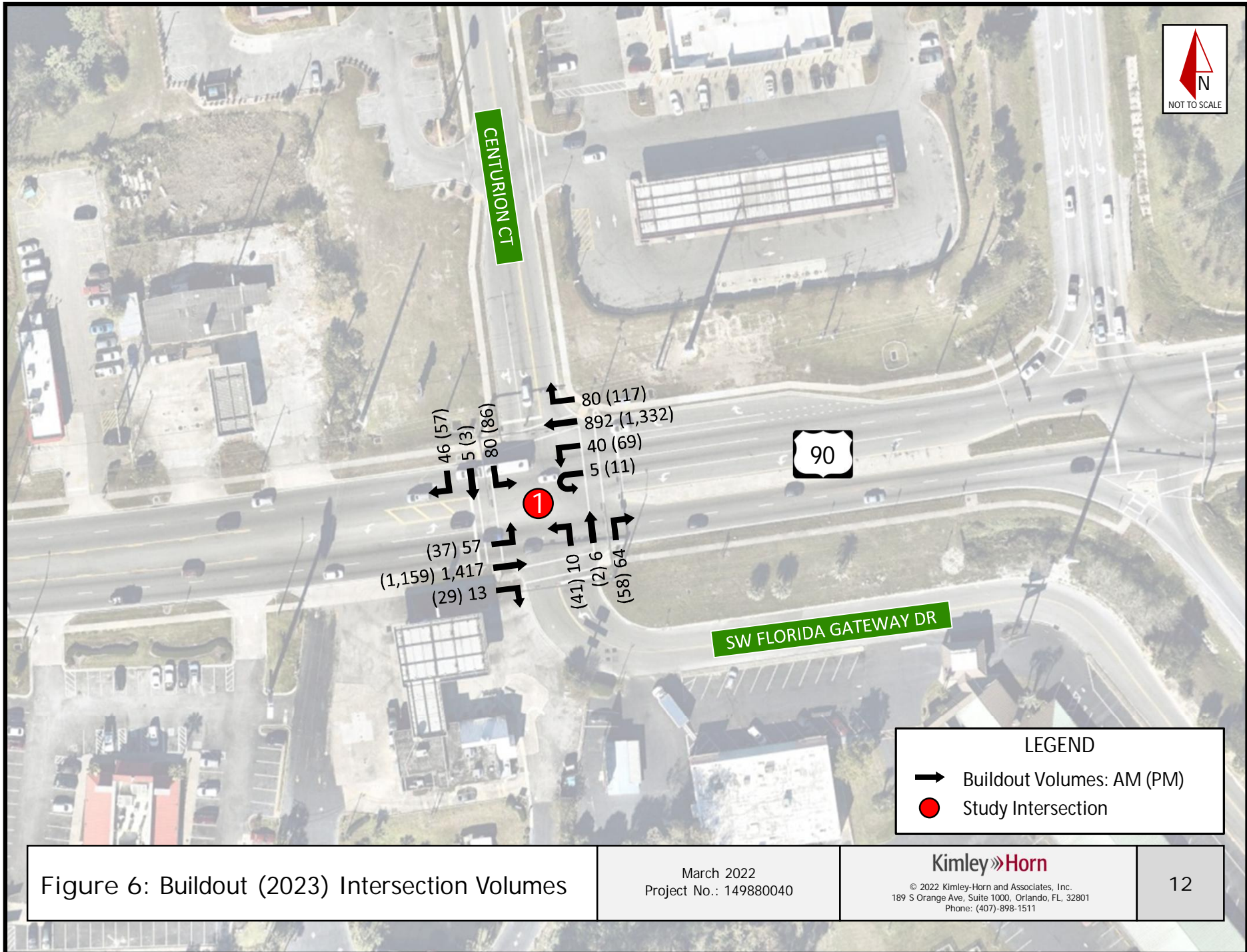
Intersection operational analyses were performed for 2023 buildout conditions in the AM and PM peak hour conditions using procedures outlined in the *Highway Capacity Manual 6* with *Synchro* (v11) software. Table 5 summarizes the operational analyses for the 2023 buildout AM and PM peak hour conditions at the study intersection. Synchro outputs are provided in Appendix D.

Table 5: Buildout Intersection Conditions

		AM Peak Hour				PM Peak Hour			
		Delay (sec/veh)	LOS	v/c Ratio	95th percentile queue (veh)	Delay (sec/veh)	LOS	v/c Ratio	95th percentile queue (veh)
<b>US 90 &amp; Centurion Court</b>	<b>Overall Intersection</b>	<b>15.0</b>	<b>B</b>	-	-	<b>15.5</b>	<b>B</b>	-	-
	<b>Eastbound</b>	<b>13.3</b>	<b>B</b>	-	-	<b>11.3</b>	<b>B</b>	-	-
	EBL	6.4	A	0.14	0.8	8.9	A	0.16	0.6
	EBT	13.6	B	0.62	16.5	11.4	B	0.51	14.2
	EBT/R	13.5	B	0.62	17.1	11.4	B	0.51	14.7
	<b>Westbound</b>	<b>9.0</b>	<b>A</b>	-	-	<b>10.8</b>	<b>B</b>	-	-
	WBL	9.5	A	0.18	0.6	8.3	A	0.27	1.3
	WBT	9.2	A	0.4	9.0	11.3	B	0.58	16.2
	WBR	6.8	A	0.08	1.3	6.8	A	0.12	2.2
	<b>Northbound</b>	<b>53.2</b>	<b>D</b>	-	-	<b>62.7</b>	<b>E</b>	-	-
	NBL	53.8	D	0.06	0.6	65.5	E	0.28	3.1
	NBT/R	53.1	D	0.37	4.2	60.7	E	0.33	4.3
	<b>Southbound</b>	<b>57.8</b>	<b>E</b>	-	-	<b>66.4</b>	<b>E</b>	-	-
	SBL	61.3	E	0.54	5.2	70.4	E	0.58	6.8
SBT/R	52.1	D	0.28	3.0	60.7	E	0.33	4.2	

The intersection of US 90 and Centurion Court is expected to operate with LOS B during buildout (2023) AM peak hour and PM peak hour conditions. All movements are expected to operate with v/c ratios less than 1.00 under buildout (2023) AM and PM peak hour conditions. The northbound and southbound approaches are expected to continue to operate with LOS E during the AM and PM peak hour due to the prioritization of green time for the mainline US 90 movements.





**LEGEND**

- ➔ Buildout Volumes: AM (PM)
- Study Intersection

Figure 6: Buildout (2023) Intersection Volumes

March 2022  
Project No.: 149880040

**Kimley»Horn**  
© 2022 Kimley-Horn and Associates, Inc.  
189 S Orange Ave, Suite 1000, Orlando, FL, 32801  
Phone: (407)-898-1511

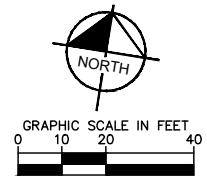
## 6.0 CONCLUSION

This traffic impact analysis was performed to assess the transportation impacts of the proposed expansion of a gas station and Circle K convenience market located in the northwest quadrant of the intersection of US Highway 90 (SR 10) and Centurion Court/SW Florida Gateway Drive. The expansion, proposed for buildout in year 2023, will include the addition of 3 vehicle fueling positions designed for diesel trucks and a 900-square foot expansion to the existing Circle K convenience market. Access to the site will be provided via two existing driveways and one new driveway to the north on Centurion Court.

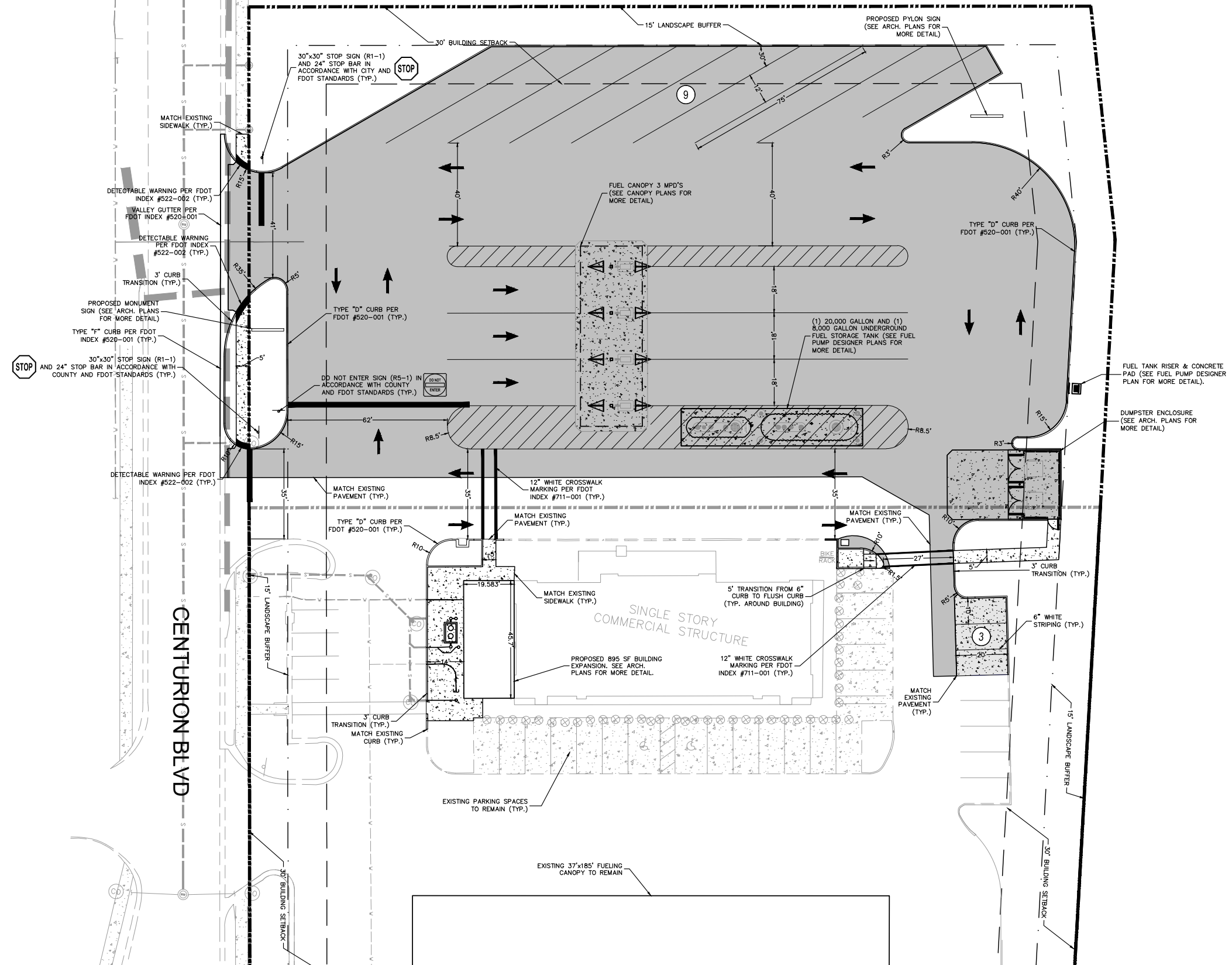
Accounting for the observed trip generation of the existing site, the proposed expansion is anticipated to generate 16 net new AM peak hour trips and 18 net new PM peak hour trips at buildout. An additional 48 new AM peak hour pass-by trips and 54 new PM peak hour pass-by trips are expected at the site as well.

Operational analyses were performed utilizing *Synchro* software for the existing (2021), background (2023), and buildout (2023) conditions at the study intersection of US 90 and Centurion Court/SW Florida Gateway Drive during the AM peak hour and the PM peak hour. Results indicated that the study intersection is expected to operate at LOS B through the buildout year. No operational deficiencies are expected at the study intersection with the inclusion of project traffic under buildout (2023) conditions.

**APPENDIX A**  
Conceptual Site Plan

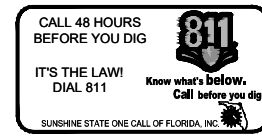


- NOTES:**
1. ALL CURB DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
  2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
  3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
  4. REFER TO SIGNAGE PLANS FOR MONUMENT SIGN DETAILS.
  5. SEE MEP PLANS FOR ELECTRICAL DRAWINGS.
  6. ALL PROPOSED ON-SITE STRIPING AND PAVEMENT MARKING WILL BE PAINTED UNLESS OTHERWISE NOTED AND IN ACCORDANCE WITH FDOT INDEX 711-001.
  7. REFER TO ARCHITECTURAL PLANS FOR PROPOSED TRASH CAN LOCATIONS AND DESIGN.
  8. BOLLARDS IN SIDEWALK ADJACENT TO BUILDING SHALL BE COVERED WITH RED PLASTIC COVERS TO BE SUPPLIED BY CONTRACTOR.
  9. BOLLARDS UNDER CANOPY SHALL BE COVERED WITH GRAY PLASTIC COVERS TO BE SUPPLIED BY CONTRACTOR (SEE FUEL PUMP DESIGNER PLANS FOR MORE DETAIL).
  10. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING AND ELECTRICAL PLANS.
  11. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL MEET MUTCD AND FDOT STANDARDS.
  12. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF POLK COUNTY LAND DEVELOPMENT CODE, CHAPTER 7, SEC. 760



- LEGEND**
- PROPERTY LINE (TYP.)
  - ▨ PROPOSED ASPHALT PAVEMENT (SEE DETAIL SHEET C7.0)
  - ▤ PROPOSED CONCRETE SIDEWALK (SEE DETAIL SHEET C7.0)
  - ▥ PROPOSED MEDIUM DUTY CONCRETE (SEE DETAIL SHEET C7.0)
  - ▧ PROPOSED HEAVY DUTY CONCRETE (SEE DETAIL SHEET C7.0)

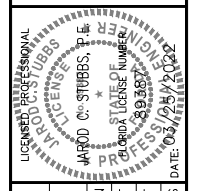
**VERTICAL DATUM:**  
 ELEVATIONS ARE BASED ON BENCHMARK DESIGNATION BM 32 BEING: 117.497 FEET, (NGVD 29), PUBLISHED BY FLORIDA DEPARTMENT OF TRANSPORTATION. ORTHOMETRIC HEIGHT CONVERSION PROVIDED BY VERTCON; DATUM SHIFT (NAVD-NGVD) = -0.883 FEET



Appendix A: Conceptual Site Plan  
 Page 1 of 1

No.	REVISIONS	DATE	BY

**Kimley-Horn**  
 © 2022 KIMLEY-HORN AND ASSOCIATES, INC.  
 189 S. ORANGE AVENUE, SUITE 1000, ORLANDO, FL 32801  
 WWW.KIMLEY-HORN.COM REGISTRY NO. 35106



KHA PROJECT	149880040
DATE	03/25/2022
SCALE AS SHOWN	AS SHOWN
DESIGNED BY	ELJ
DRAWN BY	EJF
CHECKED BY	JCS

**SITE PLAN**

CIRCLE K - US HWY 90 & I-75 FUEL EXPANSION  
 FLORIDA  
 CITY OF LAKE CITY  
 SHEET NUMBER  
**C4.1**

## APPENDIX B

### Traffic Data

# APPENDIX 8 : TRAFFIC COUNT

Florida

LEASE - NTI

US 90 and Florida Gateway Drive  
Lake City FL



## TRAFFIC COUNT AT THE SITE PROPOSED

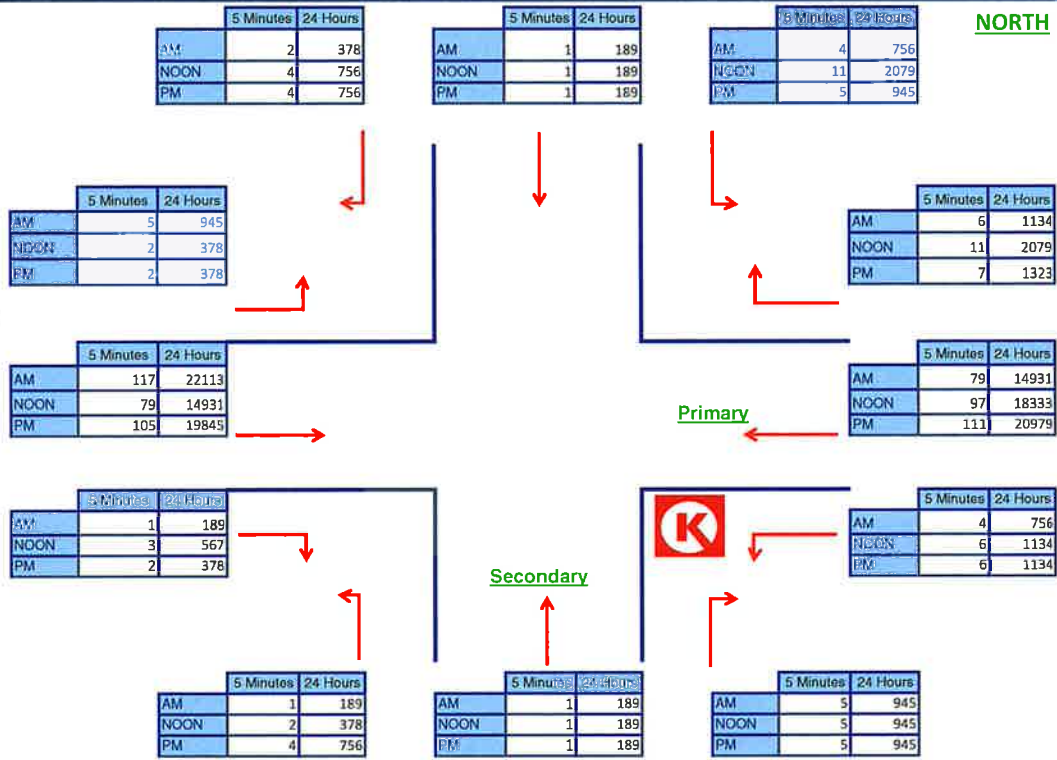
### MANUAL

Traffic counts taken during COVID-19

Total AM:	42,714
Total NOON:	41,958
Total PM:	47,817

#### NOON COUNT

Primary	37,422
Secondary	4,536
<b>TOTAL:</b>	<b>41,958</b> cars/day



### D.O.T.

	PRIMARY	SECONDARY	TOTAL	YEAR
DAILY TRAFFIC TOTALS	27,000		27,000	2020

### DIRECT TRAFFIC

IS ACCESS TO THIS SITE AFFECTED BY MEDIAN	NO
---	----

	PRIMARY	SECONDARY	TOTAL
DIRECT TRAFFIC TOTALS			0

### TRUCK TRAFFIC COUNT

	PRIMARY	SECONDARY	TOTAL	SOURCE
TRUCK TRAFFIC TOTALS			0	



**National Data & Surveying Services**

Site Code: 21-120370-001

Date: 09/02/2021

Weather: Sunny

City: Lake City

County: Columbia

Count Times: 07:00 - 09:00

12:00 - 14:00

16:00 - 18:00

Control: Signalized

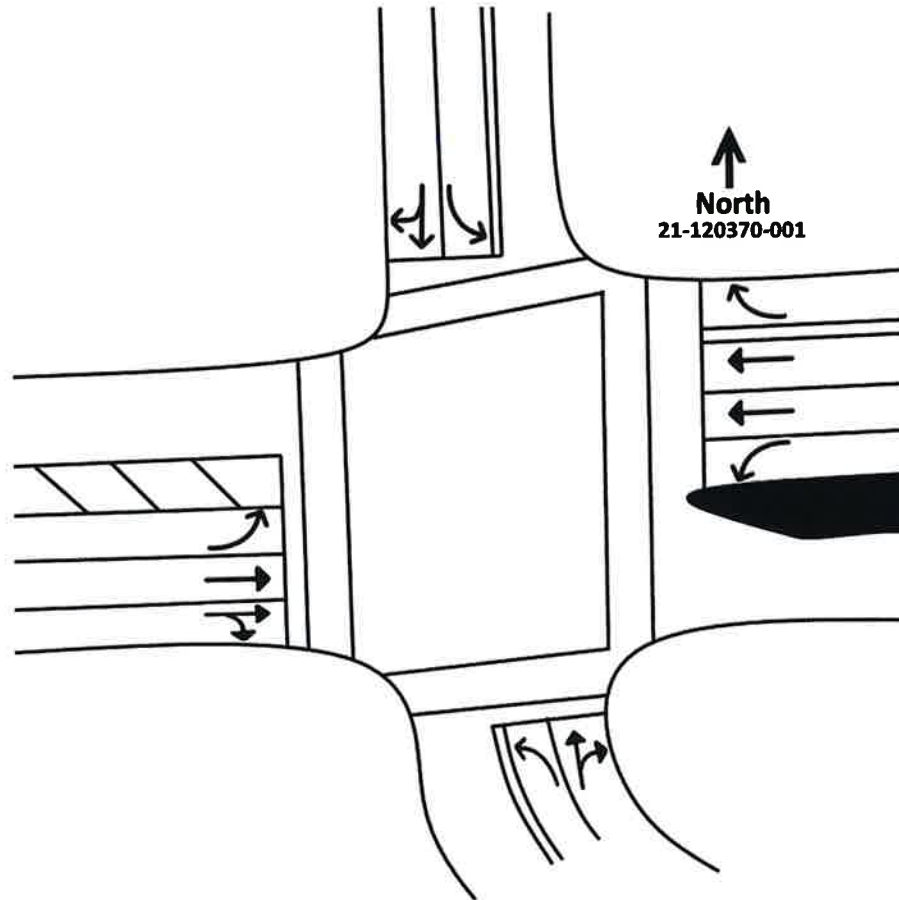
**SIGNAL TIMING**

PHASES	1	2	3
NT/ST	00:25	00:33	00:20
EL/WL	00:15	-	-
WL/WT	-	00:13	-
ET/WT	01:42	01:34	01:59



N/S Street: Florida Gateway Dr

Speed: N/A



E/W Street: US Hwy 90

Speed: 45 MPH

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Florida Gateway Dr & US Hwy 90  
**City:** Lake City  
**Control:** Signalized

**Project ID:** 21-120370-001  
**Date:** 9/2/2021

## Data - Total

NS/EW Streets:	Florida Gateway Dr				Florida Gateway Dr				US Hwy 90				US Hwy 90				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	4	1	7	0	16	0	7	0	6	215	1	0	2	149	8	1	417
7:15 AM	1	0	16	0	7	2	8	0	6	348	2	0	4	182	11	1	588
7:30 AM	2	2	14	0	14	2	4	0	8	378	1	0	10	215	11	0	661
7:45 AM	1	1	15	0	13	1	6	0	15	350	4	0	11	236	18	2	673
8:00 AM	6	3	14	0	23	0	12	0	11	255	5	0	12	209	17	2	569
8:15 AM	2	1	16	0	22	0	10	0	10	214	5	0	16	196	16	0	508
8:30 AM	4	0	12	0	19	3	11	0	7	239	6	0	16	211	21	1	550
8:45 AM	6	2	12	0	17	4	9	0	7	211	6	0	7	203	11	1	496
<b>TOTAL VOLUMES :</b>	26	10	106	0	131	12	67	0	70	2210	30	0	78	1601	113	8	4462
<b>APPROACH %'s :</b>	18.31%	7.04%	74.65%	0.00%	62.38%	5.71%	31.90%	0.00%	3.03%	95.67%	1.30%	0.00%	4.33%	88.94%	6.28%	0.44%	
<b>PEAK HR :</b>	<b>07:15 AM - 08:15 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	10	6	59	0	57	5	30	0	40	1331	12	0	37	842	57	5	2491
<b>PEAK HR FACTOR :</b>	0.417	0.500	0.922	0.000	0.620	0.625	0.625	0.000	0.667	0.880	0.600	0.000	0.771	0.892	0.792	0.625	0.925
	0.815				0.657				0.893				0.881				
NOON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
12:00 PM	5	0	10	0	23	0	8	0	6	318	4	0	16	230	26	3	649
12:15 PM	7	0	18	0	27	0	8	0	7	237	4	0	19	261	25	4	617
12:30 PM	4	2	13	0	21	0	13	0	6	290	3	1	15	252	21	0	641
12:45 PM	7	1	12	0	18	1	13	0	8	234	4	0	15	300	34	2	649
1:00 PM	7	1	16	0	34	1	13	0	5	236	9	0	16	291	34	2	665
1:15 PM	8	1	14	0	28	1	5	0	4	252	7	0	17	291	22	2	652
1:30 PM	3	0	12	0	30	0	5	0	5	243	9	0	21	273	26	4	631
1:45 PM	2	1	18	0	25	1	4	0	5	254	1	0	11	290	20	0	632
<b>TOTAL VOLUMES :</b>	43	6	113	0	206	4	69	0	46	2064	41	1	130	2188	208	17	5136
<b>APPROACH %'s :</b>	26.54%	3.70%	69.75%	0.00%	73.84%	1.43%	24.73%	0.00%	2.14%	95.91%	1.91%	0.05%	5.11%	86.04%	8.18%	0.67%	
<b>PEAK HR :</b>	<b>12:30 PM - 01:30 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	26	5	55	0	101	3	44	0	23	1012	23	1	63	1134	111	6	2607
<b>PEAK HR FACTOR :</b>	0.813	0.625	0.859	0.000	0.743	0.750	0.846	0.000	0.719	0.872	0.639	0.250	0.926	0.945	0.816	0.750	0.980
	0.896				0.771				0.883				0.936				
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	4	0	14	0	16	0	7	0	3	273	3	0	11	349	30	3	713
4:15 PM	4	0	16	0	18	0	12	0	5	237	3	0	15	314	12	1	637
4:30 PM	4	0	13	0	21	2	7	0	7	239	7	0	11	295	21	0	627
4:45 PM	5	1	14	0	15	0	6	0	5	287	6	0	17	310	19	3	688
5:00 PM	13	1	15	0	16	2	13	0	6	316	6	0	14	334	21	4	761
5:15 PM	7	0	12	0	13	1	9	0	3	290	7	0	15	265	24	4	650
5:30 PM	13	0	13	0	17	0	10	0	6	198	8	0	18	344	25	0	652
5:45 PM	5	0	27	0	18	1	7	0	4	223	8	0	22	265	28	4	612
<b>TOTAL VOLUMES :</b>	55	2	124	0	134	6	71	0	39	2063	48	0	123	2476	180	19	5340
<b>APPROACH %'s :</b>	30.39%	1.10%	68.51%	0.00%	63.51%	2.84%	33.65%	0.00%	1.81%	95.95%	2.23%	0.00%	4.40%	88.49%	6.43%	0.68%	
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	38	2	54	0	61	3	38	0	20	1091	27	0	64	1253	89	11	2751
<b>PEAK HR FACTOR :</b>	0.731	0.500	0.900	0.000	0.897	0.375	0.731	0.000	0.833	0.863	0.844	0.000	0.889	0.911	0.890	0.688	0.904
	0.810				0.823				0.867				0.915				



# National Data & Surveying Services Intersection Turning Movement Count

Location: Florida Gateway Dr & US Hwy 90  
 City: Lake City  
 Control: Signalized

Project ID: 21-120370-001  
 Date: 9/2/2021

## Data - Cars

NS/EW Streets:	Florida Gateway Dr				Florida Gateway Dr				US Hwy 90				US Hwy 90				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	4	1	6	0	16	0	7	0	6	207	1	0	2	146	8	1	405
7:15 AM	1	0	16	0	6	2	8	0	6	343	2	0	4	175	9	1	573
7:30 AM	2	2	14	0	14	2	4	0	7	371	1	0	10	206	10	0	643
7:45 AM	1	1	15	0	11	1	5	0	12	342	4	0	10	229	17	2	650
8:00 AM	6	3	14	0	20	0	12	0	11	249	5	0	12	202	17	2	553
8:15 AM	2	1	16	0	22	0	9	0	9	205	5	0	16	186	16	0	487
8:30 AM	4	0	12	0	19	3	10	0	7	234	6	0	14	200	20	1	530
8:45 AM	6	2	12	0	17	3	7	0	6	203	6	0	7	191	10	1	471
<b>TOTAL VOLUMES :</b>	26	10	105	0	125	11	62	0	64	2154	30	0	75	1535	107	8	4312
<b>APPROACH %'s :</b>	18.44%	7.09%	74.47%	0.00%	63.13%	5.56%	31.31%	0.00%	2.85%	95.82%	1.33%	0.00%	4.35%	88.99%	6.20%	0.46%	
<b>PEAK HR :</b>	<b>07:15 AM - 08:15 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	10	6	59	0	51	5	29	0	36	1305	12	0	36	812	53	5	2419
<b>PEAK HR FACTOR :</b>	0.417	0.500	0.922	0.000	0.638	0.625	0.604	0.000	0.750	0.879	0.600	0.000	0.750	0.886	0.779	0.625	0.930
	0.815				0.664				0.892				0.878				
NOON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
12:00 PM	5	0	9	0	19	0	8	0	6	307	4	0	15	225	25	3	626
12:15 PM	7	0	17	0	27	0	7	0	7	231	4	0	17	258	22	4	601
12:30 PM	4	1	13	0	19	0	13	0	6	281	2	1	15	242	21	0	618
12:45 PM	7	0	9	0	18	1	12	0	7	226	4	0	15	293	32	2	626
1:00 PM	5	1	14	0	33	1	12	0	5	232	8	0	16	279	34	2	642
1:15 PM	8	1	13	0	27	1	5	0	4	246	5	0	17	281	21	2	631
1:30 PM	3	0	12	0	30	0	5	0	5	233	8	0	20	267	25	4	612
1:45 PM	2	1	17	0	23	1	4	0	3	247	1	0	10	279	20	0	608
<b>TOTAL VOLUMES :</b>	41	4	104	0	196	4	66	0	43	2003	36	1	125	2124	200	17	4964
<b>APPROACH %'s :</b>	27.52%	2.68%	69.80%	0.00%	73.68%	1.50%	24.81%	0.00%	2.06%	96.16%	1.73%	0.05%	5.07%	86.13%	8.11%	0.69%	
<b>PEAK HR :</b>	<b>12:30 PM - 01:30 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	24	3	49	0	97	3	42	0	22	985	19	1	63	1095	108	6	2517
<b>PEAK HR FACTOR :</b>	0.750	0.750	0.875	0.000	0.735	0.750	0.808	0.000	0.786	0.876	0.594	0.250	0.926	0.934	0.794	0.750	0.980
	0.864				0.772				0.885				0.930				
PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	4	0	14	0	16	0	7	0	3	262	3	0	11	336	29	3	688
4:15 PM	4	0	16	0	17	0	12	0	5	231	3	0	14	303	11	1	617
4:30 PM	4	0	12	0	21	2	6	0	7	233	7	0	10	284	21	0	607
4:45 PM	5	1	13	0	15	0	6	0	5	282	6	0	16	302	19	3	673
5:00 PM	11	1	15	0	15	2	13	0	6	312	6	0	13	330	19	4	747
5:15 PM	7	0	12	0	13	1	9	0	3	282	7	0	14	257	24	4	633
5:30 PM	13	0	13	0	17	0	10	0	6	196	8	0	18	340	25	0	646
5:45 PM	5	0	27	0	18	1	7	0	4	218	8	0	22	258	24	4	596
<b>TOTAL VOLUMES :</b>	53	2	122	0	132	6	70	0	39	2016	48	0	118	2410	172	19	5207
<b>APPROACH %'s :</b>	29.94%	1.13%	68.93%	0.00%	63.46%	2.88%	33.65%	0.00%	1.85%	95.86%	2.28%	0.00%	4.34%	88.64%	6.33%	0.70%	
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	36	2	53	0	60	3	38	0	20	1072	27	0	61	1229	87	11	2699
<b>PEAK HR FACTOR :</b>	0.692	0.500	0.883	0.000	0.882	0.375	0.731	0.000	0.833	0.859	0.844	0.000	0.847	0.904	0.870	0.688	0.903
	0.843				0.842				0.863				0.906				

# National Data & Surveying Services Intersection Turning Movement Count

**Location:** Florida Gateway Dr & US Hwy 90  
**City:** Lake City  
**Control:** Signalized

**Project ID:** 21-120370-001  
**Date:** 9/2/2021

## Data - HT

NS/EW Streets:	Florida Gateway Dr				Florida Gateway Dr				US Hwy 90				US Hwy 90				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	1	0	0	0	0	0	0	8	0	0	0	3	0	0	12
7:15 AM	0	0	0	0	1	0	0	0	0	5	0	0	0	7	2	0	15
7:30 AM	0	0	0	0	0	0	0	0	1	7	0	0	0	9	1	0	18
7:45 AM	0	0	0	0	2	0	1	0	3	8	0	0	1	7	1	0	23
8:00 AM	0	0	0	0	3	0	0	0	0	6	0	0	0	7	0	0	16
8:15 AM	0	0	0	0	0	0	1	0	1	9	0	0	0	10	0	0	21
8:30 AM	0	0	0	0	0	0	1	0	0	5	0	0	2	11	1	0	20
8:45 AM	0	0	0	0	0	1	2	0	1	8	0	0	0	12	1	0	25
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
	0	0	1	0	6	1	5	0	6	56	0	0	3	66	8	0	150
<b>APPROACH %'s :</b>	0.00%	0.00%	100.00%	0.00%	50.00%	8.33%	41.67%	0.00%	9.68%	90.32%	0.00%	0.00%	4.00%	88.00%	8.00%	0.00%	
<b>PEAK HR :</b>	<b>07:15 AM - 08:15 AM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	0	0	0	0	6	0	1	0	4	26	0	0	1	30	4	0	72
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.333	0.813	0.000	0.000	0.250	0.833	0.500	0.000	0.783
					0.583				0.682				0.875				
<b>NOON</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
12:00 PM	0	0	1	0	4	0	0	0	0	11	0	0	1	5	1	0	23
12:15 PM	0	0	1	0	0	0	1	0	0	6	0	0	2	3	3	0	16
12:30 PM	0	1	0	0	2	0	0	0	0	9	1	0	0	10	0	0	23
12:45 PM	0	1	3	0	0	0	1	0	1	8	0	0	0	7	2	0	23
1:00 PM	2	0	2	0	1	0	1	0	0	4	1	0	0	12	0	0	23
1:15 PM	0	0	1	0	1	0	0	0	0	6	2	0	0	10	1	0	21
1:30 PM	0	0	0	0	0	0	0	0	0	10	1	0	1	6	1	0	19
1:45 PM	0	0	1	0	2	0	0	0	2	7	0	0	1	11	0	0	24
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
	2	2	9	0	10	0	3	0	3	61	5	0	5	64	8	0	172
<b>APPROACH %'s :</b>	15.38%	15.38%	69.23%	0.00%	76.92%	0.00%	23.08%	0.00%	4.35%	88.41%	7.25%	0.00%	6.49%	83.12%	10.39%	0.00%	
<b>PEAK HR :</b>	<b>12:30 PM - 01:30 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	2	2	6	0	4	0	2	0	1	27	4	0	0	39	3	0	90
<b>PEAK HR FACTOR :</b>	0.250	0.500	0.500	0.000	0.500	0.000	0.500	0.000	0.250	0.750	0.500	0.000	0.000	0.813	0.375	0.000	0.978
	0.625				0.750				0.800				0.875				
<b>PM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	11	0	0	0	13	1	0	25
4:15 PM	0	0	0	0	1	0	0	0	0	6	0	0	1	11	1	0	20
4:30 PM	0	0	1	0	0	0	1	0	0	6	0	0	1	11	0	0	20
4:45 PM	0	0	1	0	0	0	0	0	0	5	0	0	1	8	0	0	15
5:00 PM	2	0	0	0	1	0	0	0	0	4	0	0	1	4	2	0	14
5:15 PM	0	0	0	0	0	0	0	0	0	8	0	0	1	8	0	0	17
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	7	4	0	16
<b>TOTAL VOLUMES :</b>	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	<b>TOTAL</b>
	2	0	2	0	2	0	1	0	0	47	0	0	5	66	8	0	133
<b>APPROACH %'s :</b>	50.00%	0.00%	50.00%	0.00%	66.67%	0.00%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	6.33%	83.54%	10.13%	0.00%	
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>																<b>TOTAL</b>
<b>PEAK HR VOL :</b>	2	0	1	0	1	0	0	0	0	19	0	0	3	24	2	0	52
<b>PEAK HR FACTOR :</b>	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.594	0.000	0.000	0.750	0.750	0.250	0.000	0.765
	0.375				0.250				0.594				0.806				

# National Data & Surveying Services Intersection Turning Movement Count

Location: Florida Gateway Dr & US Hwy 90  
 City: Lake City  
 Control: Signalized

Project ID: 21-120370-001  
 Date: 9/2/2021

## Data - Bikes

NS/EW Streets:	Florida Gateway Dr				Florida Gateway Dr				US Hwy 90				US Hwy 90					
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	0	1	0	0	1	0	1	0	0	0	3	0	0	1	1	0	0	8
<b>APPROACH %'s :</b>	0.00%	100.00%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	
<b>PEAK HR :</b>	07:15 AM - 08:15 AM																<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	0	1	0	0	1	0	1	0	0	0	2	0	0	1	1	0	0	7
<b>PEAK HR FACTOR :</b>	0.000	0.250	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.583
				0.250			0.500				0.500					0.500		
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
12:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
<b>APPROACH %'s :</b>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
<b>PEAK HR :</b>	12:30 PM - 01:30 PM																<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250
															0.250			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	0	0	0	0	0	0	2	0	0	1	0	0	0	3	0	0	0	6
<b>APPROACH %'s :</b>	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
<b>PEAK HR :</b>	04:45 PM - 05:45 PM																<b>TOTAL</b>	
<b>PEAK HR VOL :</b>	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	4
<b>PEAK HR FACTOR :</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.500
							0.500								0.500			

# National Data & Surveying Services Intersection Turning Movement Count

Location: Florida Gateway Dr & US Hwy 90  
City: Lake City

Project ID: 21-120370-001  
Date: 9/2/2021

## Data - Pedestrians (Crosswalks)

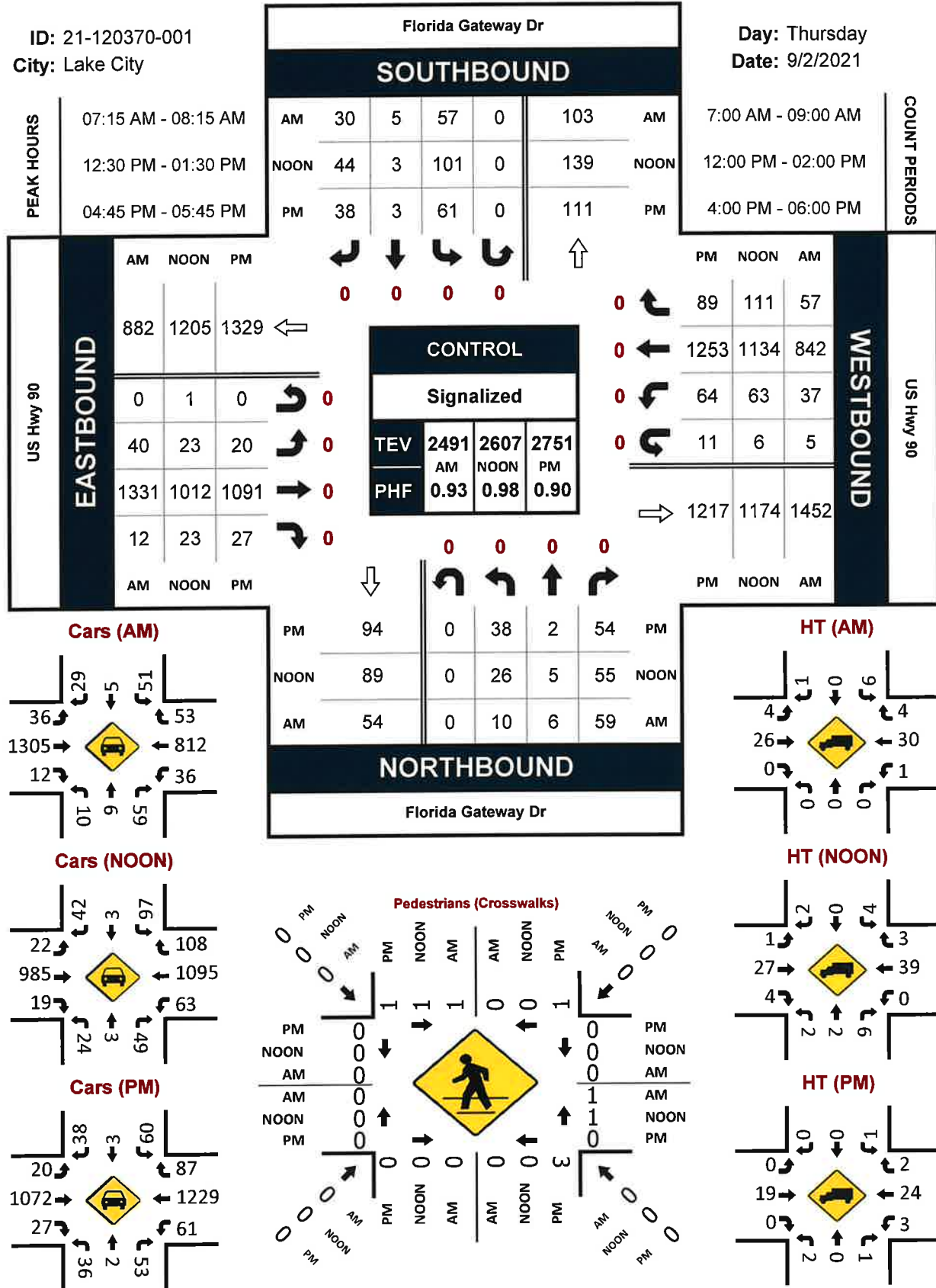
NS/EW Streets:	Florida Gateway Dr	Florida Gateway Dr	US Hwy 90	US Hwy 90					
<b>AM</b>	NORTH LEG		SOUTH LEG		EAST LEG	WEST LEG	TOTAL		
	EB	WB	EB	WB	NB	SB		NB	SB
7:00 AM	0	0	1	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0	0	4
<b>PEAK HR :</b>	<b>07:15 AM - 08:15 AM</b>								TOTAL
<b>PEAK HR VOL :</b>	1	0	0	0	1	0	0	0	2
<b>PEAK HR FACTOR :</b>	0.250				0.250				0.500
	0.250				0.250				
<b>NOON</b>	NORTH LEG		SOUTH LEG		EAST LEG	WEST LEG	TOTAL		
	EB	WB	EB	WB	NB	SB		NB	SB
12:00 PM	0	1	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	1	0	0	1	2
12:30 PM	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0
1:15 PM	1	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	50.00%	50.00%	0	0	100.00%	0.00%	0.00%	100.00%	5
<b>PEAK HR :</b>	<b>12:30 PM - 01:30 PM</b>								TOTAL
<b>PEAK HR VOL :</b>	1	0	0	0	1	0	0	0	2
<b>PEAK HR FACTOR :</b>	0.250				0.250				0.500
	0.250				0.250				
<b>PM</b>	NORTH LEG		SOUTH LEG		EAST LEG	WEST LEG	TOTAL		
	EB	WB	EB	WB	NB	SB		NB	SB
4:00 PM	0	0	0	1	0	0	0	0	1
4:15 PM	1	1	0	0	0	0	0	0	2
4:30 PM	1	0	2	1	0	0	0	0	4
4:45 PM	0	1	0	1	0	0	0	0	2
5:00 PM	0	0	0	2	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0
<b>TOTAL VOLUMES :</b>	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
<b>APPROACH %'s :</b>	60.00%	40.00%	28.57%	71.43%	0	0	0	0	12
<b>PEAK HR :</b>	<b>04:45 PM - 05:45 PM</b>								TOTAL
<b>PEAK HR VOL :</b>	1	1	0	3	0	0	0	0	5
<b>PEAK HR FACTOR :</b>	0.250	0.250		0.375					0.625
	0.500		0.375						

# Florida Gateway Dr & US Hwy 90

## Peak Hour Turning Movement Count

ID: 21-120370-001  
City: Lake City

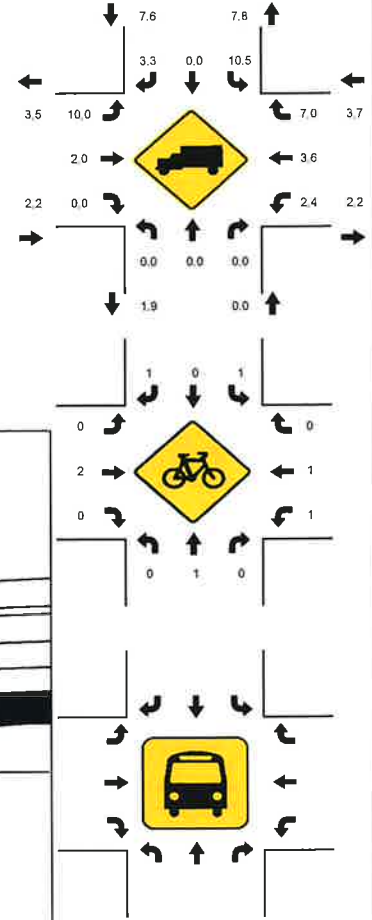
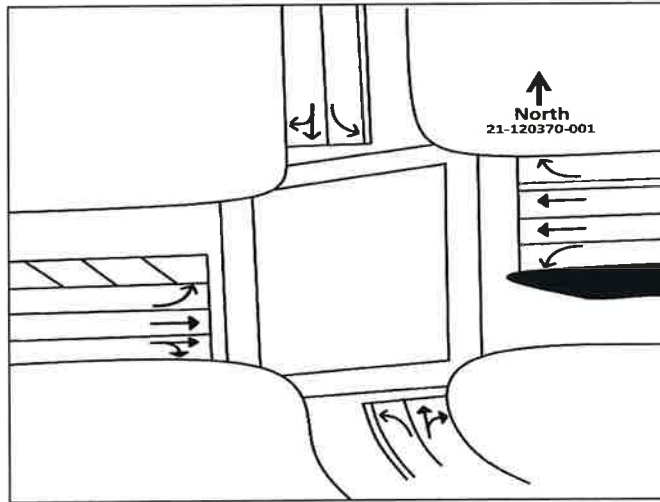
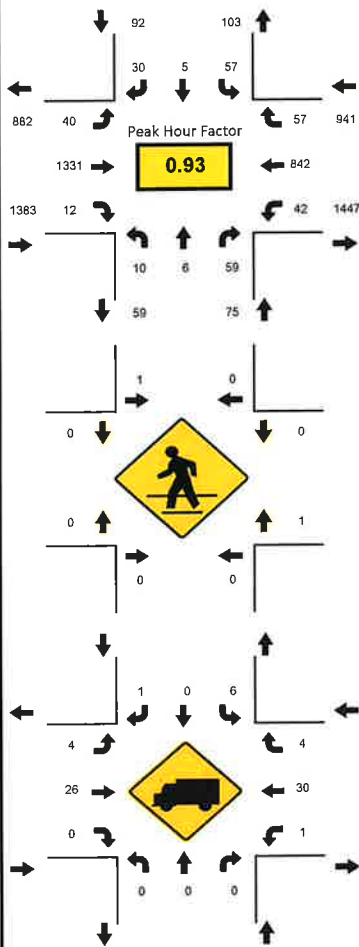
Day: Thursday  
Date: 9/2/2021



Peak-Hour: 07:15 AM - 08:15 AM  
 Peak 15-Minute: 07:45 AM - 08:00 AM

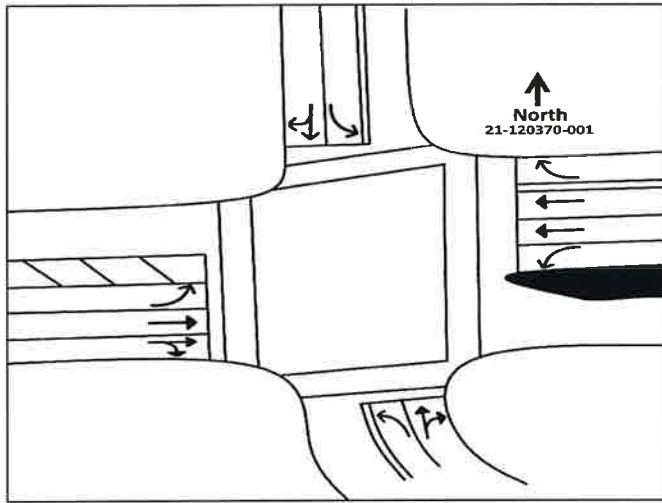
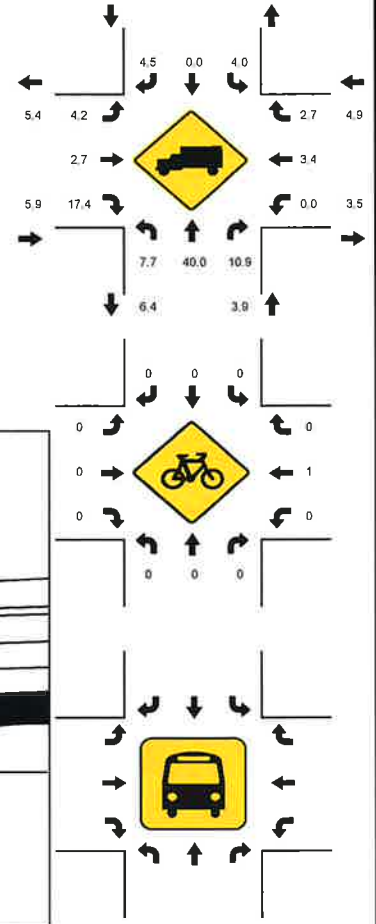
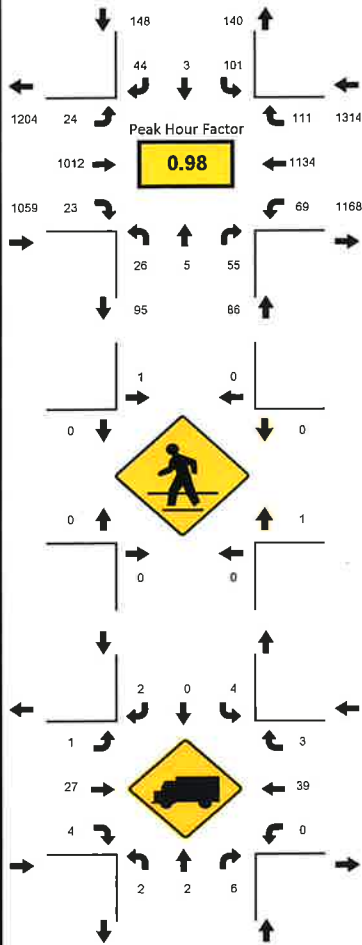


National Data & Surveying Services



15-Min Count Period Beginning At	Florida Gateway Dr Northbound					Florida Gateway Dr Southbound					US Hwy 90 Eastbound					US Hwy 90 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	4	1	7	0		16	0	7	0		6	215	1	0		2	149	8	1		417	2339
07:15 AM	1	0	16	0		7	2	8	0		6	348	2	0		4	182	11	1		588	2491
07:30 AM	2	2	14	0		14	2	4	0		8	378	1	0		10	215	11	0		661	2411
07:45 AM	1	1	15	0		13	1	6	0		15	350	4	0		11	236	18	2		673	2300
08:00 AM	6	3	14	0		23	0	12	0		11	255	5	0		12	209	17	2		569	2123
08:15 AM	2	1	16	0		22	0	10	0		10	214	5	0		16	196	16	0		508	1554
08:30 AM	4	0	12	0		19	3	11	0		7	239	6	0		16	211	21	1		550	1046
08:45 AM	6	2	12	0		17	4	9	0		7	211	6	0		7	203	11	1		496	496
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
All Vehicles	24	12	64	0		92	8	48	0		60	1512	20	0		48	944	72	8		2912	
Heavy Trucks	0	0	0	0		12	0	4	0		12	32	0	0		4	36	8	0		108	
Pedestrians			0				4					0					4				8	
Bicycles	0	4	0	0		4	0	4	0		0	4	0	0		4	4	0	0		24	
Buses																						
Stopped Buses																						

Peak-Hour: 12:30 PM - 01:30 PM  
 Peak 15-Minute: 01:00 PM - 01:15 PM

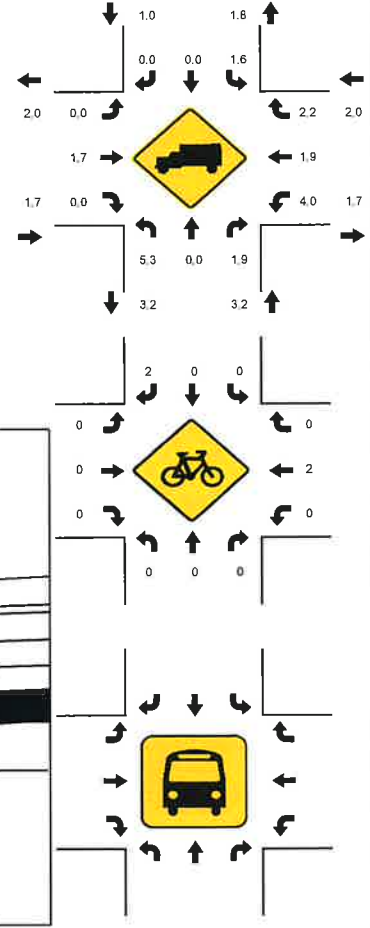
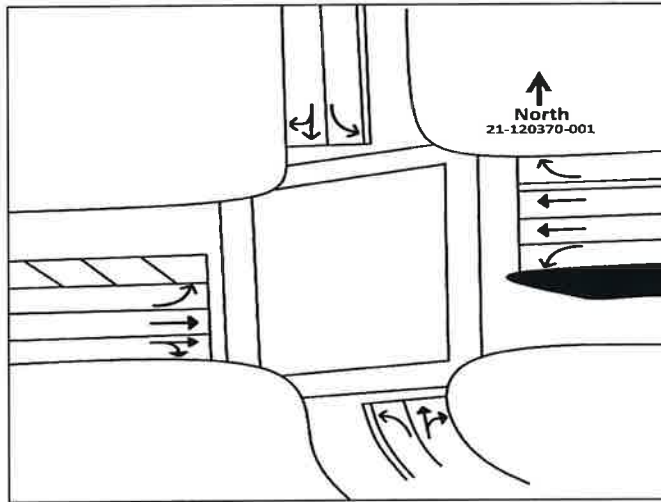
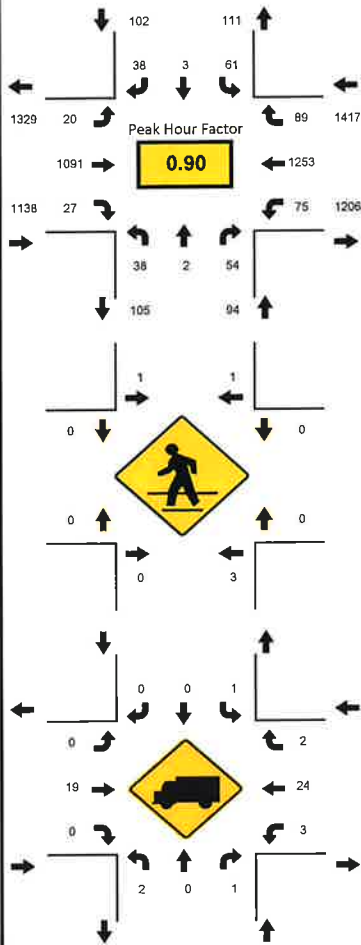


15-Min Count Period Beginning At	Florida Gateway Dr Northbound					Florida Gateway Dr Southbound					US Hwy 90 Eastbound					US Hwy 90 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
12:00 PM	5	0	10	0		23	0	8	0		6	318	4	0		16	230	26	3		649	2556
12:15 PM	7	0	18	0		27	0	8	0		7	237	4	0		19	261	25	4		617	2572
12:30 PM	4	2	13	0		21	0	13	0		6	290	3	1		15	252	21	0		641	2607
12:45 PM	7	1	12	0		18	1	13	0		8	234	4	0		15	300	34	2		649	2597
01:00 PM	7	1	16	0		34	1	13	0		5	236	9	0		16	291	34	2		665	2580
01:15 PM	8	1	14	0		28	1	5	0		4	252	7	0		17	291	22	2		652	1915
01:30 PM	3	0	12	0		30	0	5	0		5	243	9	0		21	273	26	4		631	1263
01:45 PM	2	1	18	0		25	1	4	0		5	254	1	0		11	290	20	0		632	632
<b>Peak 15-Min Flowrates</b>	<b>Northbound</b>					<b>Southbound</b>					<b>Eastbound</b>					<b>Westbound</b>					<b>Total</b>	
All Vehicles	32	8	64	0		136	4	52	0		32	1160	36	4		68	1200	136	8		2940	
Heavy Trucks	8	4	12	0		8	0	4	0		4	36	8	0		0	48	8	0		140	
Pedestrians		0					4					0					4				8	
Bicycles	0	0	0	0		0	0	0	0		0	0	0	0		0	4	0	0		4	
Buses																						
Stopped Buses																						

Peak-Hour: 04:45 PM - 05:45 PM  
 Peak 15-Minute: 05:00 PM - 05:15 PM



National Data & Surveying Services



15-Min Count Period Beginning At	Florida Gateway Dr Northbound					Florida Gateway Dr Southbound					US Hwy 90 Eastbound					US Hwy 90 Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	4	0	14	0		16	0	7	0		3	273	3	0		11	349	30	3		713	2665
04:15 PM	4	0	16	0		18	0	12	0		5	237	3	0		15	314	12	1		637	2713
04:30 PM	4	0	13	0		21	2	7	0		7	239	7	0		11	295	21	0		627	2726
04:45 PM	5	1	14	0		15	0	6	0		5	287	6	0		17	310	19	3		688	2751
05:00 PM	13	1	15	0		16	2	13	0		6	316	6	0		14	334	21	4		761	2675
05:15 PM	7	0	12	0		13	1	9	0		3	290	7	0		15	265	24	4		650	1914
05:30 PM	13	0	13	0		17	0	10	0		6	198	8	0		18	344	25	0		652	1264
05:45 PM	5	0	27	0		18	1	7	0		4	223	8	0		22	265	28	4		612	612
<b>Peak 15-Min Flowrates</b>	<b>Northbound</b>					<b>Southbound</b>					<b>Eastbound</b>					<b>Westbound</b>					<b>Total</b>	
All Vehicles	52	4	60	0		68	8	52	0		24	1264	32	0		72	1376	100	16		3128	
Heavy Trucks	8	0	4	0		4	0	0	0		0	32	0	0		4	32	8	0		92	
Pedestrians	8					4					0					0					12	
Bicycles	0	0	0	0		0	0	4	0		0	0	0	0		0	4	0	0		8	
Buses																						
Stopped Buses																						



2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 2900 COLUMBIA COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2019 - 01/05/2019	1.02	1.05
2	01/06/2019 - 01/12/2019	1.05	1.08
3	01/13/2019 - 01/19/2019	1.08	1.11
4	01/20/2019 - 01/26/2019	1.06	1.09
5	01/27/2019 - 02/02/2019	1.04	1.07
6	02/03/2019 - 02/09/2019	1.03	1.06
7	02/10/2019 - 02/16/2019	1.01	1.04
8	02/17/2019 - 02/23/2019	1.00	1.03
9	02/24/2019 - 03/02/2019	0.99	1.02
10	03/03/2019 - 03/09/2019	0.98	1.01
*11	03/10/2019 - 03/16/2019	0.97	1.00
*12	03/17/2019 - 03/23/2019	0.97	1.00
*13	03/24/2019 - 03/30/2019	0.97	1.00
*14	03/31/2019 - 04/06/2019	0.97	1.00
*15	04/07/2019 - 04/13/2019	0.97	1.00
*16	04/14/2019 - 04/20/2019	0.97	1.00
*17	04/21/2019 - 04/27/2019	0.97	1.00
*18	04/28/2019 - 05/04/2019	0.97	1.00
*19	05/05/2019 - 05/11/2019	0.97	1.00
*20	05/12/2019 - 05/18/2019	0.97	1.00
*21	05/19/2019 - 05/25/2019	0.97	1.00
*22	05/26/2019 - 06/01/2019	0.97	1.00
*23	06/02/2019 - 06/08/2019	0.98	1.01
24	06/09/2019 - 06/15/2019	0.98	1.01
25	06/16/2019 - 06/22/2019	0.99	1.02
26	06/23/2019 - 06/29/2019	1.00	1.03
27	06/30/2019 - 07/06/2019	1.00	1.03
28	07/07/2019 - 07/13/2019	1.01	1.04
29	07/14/2019 - 07/20/2019	1.02	1.05
30	07/21/2019 - 07/27/2019	1.02	1.05
31	07/28/2019 - 08/03/2019	1.01	1.04
32	08/04/2019 - 08/10/2019	1.01	1.04
33	08/11/2019 - 08/17/2019	1.01	1.04
34	08/18/2019 - 08/24/2019	1.01	1.04
35	08/25/2019 - 08/31/2019	1.01	1.04
<b>36</b>	<b>09/01/2019 - 09/07/2019</b>	<b>1.00</b>	<b>1.03</b>
37	09/08/2019 - 09/14/2019	1.00	1.03
38	09/15/2019 - 09/21/2019	1.00	1.03
39	09/22/2019 - 09/28/2019	1.00	1.03
40	09/29/2019 - 10/05/2019	1.00	1.03
41	10/06/2019 - 10/12/2019	1.00	1.03
42	10/13/2019 - 10/19/2019	1.00	1.03
43	10/20/2019 - 10/26/2019	1.01	1.04
44	10/27/2019 - 11/02/2019	1.01	1.04
45	11/03/2019 - 11/09/2019	1.02	1.05
46	11/10/2019 - 11/16/2019	1.02	1.05
47	11/17/2019 - 11/23/2019	1.02	1.05
48	11/24/2019 - 11/30/2019	1.02	1.05
49	12/01/2019 - 12/07/2019	1.02	1.05
50	12/08/2019 - 12/14/2019	1.02	1.05
51	12/15/2019 - 12/21/2019	1.02	1.05
52	12/22/2019 - 12/28/2019	1.05	1.08
53	12/29/2019 - 12/31/2019	1.08	1.11

\* PEAK SEASON

14-FEB-2020 15:39:21

830UPD

2\_2900\_PKSEASON.TXT

Location Details			
Signal ID:	1002	Date:	November 20, 2021
Major Street:	US 90	Orientation:	E-W
Minor Street:	FL Gateway Dr	Orientation:	N-S

**Controller Timings (seconds)**

Movement # (Controller Phase Ø)	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Notes
Direction	EBLT	WB		NB	WBLT	EB		SB									
Turn Type	Prot Perm				Prot Perm												
Min Green	5	15		7	5	15		7									
Ext	3.0	4.0		3.0	3.0	4.0		3.0									
Yellow	4.8	4.9		3.8	4.9	4.9		3.8									
All Red	2.0	2.0		2.0	2.0	2.0		2.0									
Max I	15	75		20	15	75		20									
Max II																	
Walk		7		7		7		7									
Flashing Don't Walk		18		29		18		22									
Detector Memory																	
Det. Switching to:	Ø6				Ø2												
Recall		MIN				MIN											
CNA																	

**Coordination Timings (seconds)**

Pattern	C-S-O	Cycle Length	Splits																Offset	Seq	Coord Ø
			Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16			
1		130	15	91 MAX		24	16	90 MAX		24								24	1	2	
2		130	15	70 MAX		45	20	65 MAX		45								15	1	2	
3		150	15	88 MAX		47	25	78 MAX		47								20	1	2	
4		110	16	64 MAX		30	23	57 MAX		30								18	1	2	
5		100	15	59 MAX		26	17	57 MAX		26								22	1	2	
6		140	15	75 MAX		50	23	67 MAX		50								7	1	2	
7		110	17	58 MAX		35	18	57 MAX		35								63	1	2	
8		100	15	59 MAX		26	17	57 MAX		26								22	1	2	
9		140	15	75 MAX		50	23	67 MAX		50								7	1	2	
10		110	17	58 MAX		35	18	57 MAX		35								63	1	2	

Offset Reference Point	Phase Mode
End of Green of first through movement	STD8

- Notes:
- 1) Use 'Max I' during FREE Operation.
  - 2) Program phase restriction to omit Ø1 during Ø2 green and omit Ø5 during Ø6 green.

SEQ 1			
Ring - 1	1	2	4
Ring - 2	5	6	8

Signal ID:	1002
Major Street:	US 90
Minor Street:	FL Gateway Dr

**Day Plans**

Monday-Thursday				Saturday				Sunday				Friday			
Day Plan 1				Day Plan 2				Day Plan 3				Day Plan 4			
Hr	Min	Patt	Cycl	Hr	Min	Patt	Cycl	Hr	Min	Patt	Cycl	Hr	Min	Patt	Cycl
00	00	254	Free	00	00	254	Free	00	00	254	Free	00	00	254	Free
6	30	1	130	8	00	5	100	9	30	8	100	6	30	1	130
10	00	2	130	10	00	6	140	11	00	9	140	10	00	2	130
15	00	3	150	17	00	7	110	16	30	10	110	11	30	3	150
18	30	4	110	22	00	254	Free	21	00	254	Free	19	00	4	110
21	00	254	Free									22	00	254	Free

Day Plan 5				Day Plan 6				Day Plan 7				Day Plan 8			
Hr	Min	Patt	Cycl	Hr	Min	Patt	Cycl	Hr	Min	Patt	Cycl	Hr	Min	Patt	Cycl

Patt	Force Mode	Alt Opt Table	Alt Time Table	Coord Max Plan	Alt Time Table Max Values (Seconds)															
					Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16
1	FIXED	None	None	Max Inh																
2	FIXED	None	None	Max Inh																
3	FIXED	None	None	Max Inh																
4	FIXED	None	None	Max Inh																
5	FIXED	None	None	Max Inh																
6	FIXED	None	None	Max Inh																
7	FIXED	None	None	Max Inh																
8	FIXED	None	None	Max Inh																
9	FIXED	None	None	Max Inh																
10	FIXED	None	None	Max Inh																

## APPENDIX C

### Intersection Volume Development Worksheets

# TRAFFIC VOLUMES AT STUDY INTERSECTIONS

**INTERSECTION:** US 90 & Centurion Ct/Florida Gateway Dr  
**COUNT DATE:** September 2, 2021  
**AM PEAK HOUR FACTOR:** 0.93  
**PM PEAK HOUR FACTOR:** 0.9

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
AM Raw Turning Movements		40	1,331	12	5	37	842	57		10	6	59		57	5	30
Peak Season Conversion Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03

AM EXISTING CONDITIONS		41	1,371	12	5	38	867	59		10	6	61		59	5	31
------------------------	--	----	-------	----	---	----	-----	----	--	----	---	----	--	----	---	----

"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
PM Raw Turning Movements		20	1,091	27	11	64	1,253	89		38	2	54		61	3	38
Peak Season Conversion Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03

PM EXISTING CONDITIONS		21	1,124	28	11	66	1,291	92		39	2	56		63	3	39
------------------------	--	----	-------	----	----	----	-------	----	--	----	---	----	--	----	---	----

"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
AM BACKGROUND TRAFFIC GROWTH		2	58	1	0	2	37	3		0	0	3		3	0	1

AM NON-PROJECT TRAFFIC		43	1,429	13	5	40	904	62		10	6	64		62	5	32
------------------------	--	----	-------	----	---	----	-----	----	--	----	---	----	--	----	---	----

"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Yearly Growth Rate	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%	2.1%
PM BACKGROUND TRAFFIC GROWTH		1	48	1	0	3	55	4		2	0	2		3	0	2

PM NON-PROJECT TRAFFIC		22	1,172	29	11	69	1,346	96		41	2	58		66	3	41
------------------------	--	----	-------	----	----	----	-------	----	--	----	---	----	--	----	---	----

"AM PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering		50.0%	-50.0%				-50.0%	50.0%								
	Exiting														50.0%		50.0%
Net New Distribution	Entering		25.0%					75.0%									
	Exiting													75.0%			25.0%

"PM PROJECT DISTRIBUTION"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Pass-By Distribution	Entering		50.0%	-50.0%				-50.0%	50.0%								
	Exiting														50.0%		50.0%
Net New Distribution	Entering		25.0%					75.0%									
	Exiting													75.0%			25.0%

"AM PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project Trips	Pass - By		12	-12				-12	12						12		12
	Net New		2						6						6		2
AM TOTAL PROJECT TRAFFIC			14	-12	0	0	0	-12	18		0	0	0		18	0	14

AM TOTAL TRAFFIC		57	1,417	13	5	40	892	80		10	6	64		80	5	46
------------------	--	----	-------	----	---	----	-----	----	--	----	---	----	--	----	---	----

"PM PROJECT TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
LAND USE	TYPE																
Project Trips	Pass - By		13	-13				-14	14						13		14
	Net New		2						7						7		2
PM TOTAL PROJECT TRAFFIC			15	-13	0	0	0	-14	21		0	0	0		20	0	16

PM TOTAL TRAFFIC		37	1,159	29	11	69	1,332	117		41	2	58		86	3	57
------------------	--	----	-------	----	----	----	-------	-----	--	----	---	----	--	----	---	----

APPENDIX D  
Synchro Output Reports

Lanes, Volumes, Timings  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

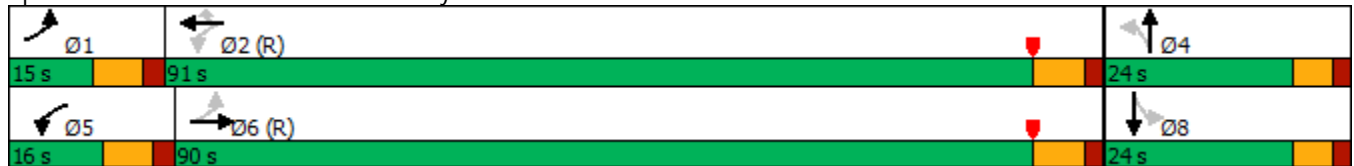
Circle K - I-75 & US 90  
 Existing (2021) Conditions, AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	41	1371	12	43	867	59	10	6	61	59	5	31
Future Volume (vph)	41	1371	12	43	867	59	10	6	61	59	5	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	250		125	50		0	0		110
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			50			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30				30
Link Distance (ft)		398			433			442				282
Travel Time (s)		6.0			6.6			10.0				6.4
Confl. Peds. (#/hr)	1						1			1	1	
Confl. Bikes (#/hr)			2				1			1		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	8%	8%	8%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				8
Permitted Phases	6			2		2	4			8		
Detector Phase	1	6		5	2	2	4	4		8		8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	7.0	7.0		7.0		7.0
Minimum Split (s)	11.8	31.9		11.9	31.9	31.9	41.8	41.8		34.8		34.8
Total Split (s)	15.0	90.0		16.0	91.0	91.0	24.0	24.0		24.0		24.0
Total Split (%)	11.5%	69.2%		12.3%	70.0%	70.0%	18.5%	18.5%		18.5%		18.5%
Yellow Time (s)	4.8	4.9		4.9	4.9	4.9	3.8	3.8		3.8		3.8
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0		2.0
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)	6.8	6.9		6.9	6.9	6.9	5.8	5.8		5.8		5.8
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None		None

Intersection Summary

Area Type: Other  
 Cycle Length: 130  
 Actuated Cycle Length: 130  
 Offset: 24 (18%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated

Splits and Phases: 1: SW Florida Gateway Dr/Centurion Ct & US 90



HCM 6th Signalized Intersection Summary  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Existing (2021) Conditions, AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	41	1371	12	43	867	59	10	6	61	59	5	31
Future Volume (veh/h)	41	1371	12	43	867	59	10	6	61	59	5	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1870	1870	1870	1781	1781	1781
Adj Flow Rate, veh/h	44	1474	13	46	932	63	11	6	66	63	5	33
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	8	8	8
Cap, veh/h	453	2533	22	296	2485	1085	173	14	158	139	22	145
Arrive On Green	0.03	0.70	0.70	0.04	0.71	0.71	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1781	3609	32	1753	3497	1527	1366	132	1449	1263	202	1335
Grp Volume(v), veh/h	44	725	762	46	932	63	11	0	72	63	0	38
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1753	1749	1527	1366	0	1580	1263	0	1537
Q Serve(g_s), s	0.9	26.7	26.8	0.9	13.7	1.6	1.0	0.0	5.5	6.4	0.0	2.9
Cycle Q Clear(g_c), s	0.9	26.7	26.8	0.9	13.7	1.6	3.9	0.0	5.5	11.9	0.0	2.9
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.92	1.00		0.87
Lane Grp Cap(c), veh/h	453	1247	1308	296	2485	1085	173	0	172	139	0	167
V/C Ratio(X)	0.10	0.58	0.58	0.16	0.38	0.06	0.06	0.00	0.42	0.45	0.00	0.23
Avail Cap(c_a), veh/h	510	1247	1308	351	2485	1085	216	0	221	178	0	215
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.4	9.8	9.8	7.7	7.4	5.7	54.7	0.0	54.1	59.6	0.0	52.9
Incr Delay (d2), s/veh	0.1	2.0	1.9	0.2	0.4	0.1	0.2	0.0	1.6	2.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	14.6	15.2	0.5	8.0	0.9	0.6	0.0	4.1	3.8	0.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.5	11.7	11.7	7.9	7.9	5.8	54.9	0.0	55.7	61.9	0.0	53.6
LnGrp LOS	A	B	B	A	A	A	D	A	E	E	A	D
Approach Vol, veh/h		1531			1041			83			101	
Approach Delay, s/veh		11.5			7.7			55.6			58.8	
Approach LOS		B			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	99.3		19.9	11.9	98.2		19.9				
Change Period (Y+Rc), s	6.8	6.9		* 5.8	6.9	6.9		* 5.8				
Max Green Setting (Gmax), s	8.2	84.1		* 18	9.1	83.1		* 18				
Max Q Clear Time (g_c+I1), s	2.9	15.7		7.5	2.9	28.8		13.9				
Green Ext Time (p_c), s	0.0	7.7		0.2	0.0	13.9		0.1				

Intersection Summary

HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lanes, Volumes, Timings  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Existing (2021) Conditions, PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	1124	28	77	1291	92	39	2	56	63	3	39
Future Volume (vph)	21	1124	28	77	1291	92	39	2	56	63	3	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	250		125	50		0	0		110
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			50			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30				30
Link Distance (ft)		398			433			442				282
Travel Time (s)		6.0			6.6			10.0				6.4
Confl. Peds. (#/hr)	2		3	3		2						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				8
Permitted Phases	6			2		2	4			8		
Detector Phase	1	6		5	2	2	4	4		8		8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	7.0	7.0		7.0		7.0
Minimum Split (s)	11.8	31.9		11.9	31.9	31.9	41.8	41.8		34.8		34.8
Total Split (s)	15.0	78.0		25.0	88.0	88.0	47.0	47.0		47.0		47.0
Total Split (%)	10.0%	52.0%		16.7%	58.7%	58.7%	31.3%	31.3%		31.3%		31.3%
Yellow Time (s)	4.8	4.9		4.9	4.9	4.9	3.8	3.8		3.8		3.8
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0		2.0
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)	6.8	6.9		6.9	6.9	6.9	5.8	5.8		5.8		5.8
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	Max		None	C-Max	C-Max	None	None		None		None

Intersection Summary

Area Type: Other  
 Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 20 (13%), Referenced to phase 2:WBTL, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated

Splits and Phases: 1: SW Florida Gateway Dr/Centurion Ct & US 90



HCM 6th Signalized Intersection Summary  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Existing (2021) Conditions, PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	21	1124	28	77	1291	92	39	2	56	63	3	39
Future Volume (veh/h)	21	1124	28	77	1291	92	39	2	56	63	3	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	23	1249	31	86	1434	102	43	2	62	70	3	43
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	278	2589	64	360	2644	1152	154	5	161	138	11	158
Arrive On Green	0.02	0.73	0.73	0.03	0.74	0.74	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1781	3543	88	1781	3554	1549	1349	49	1531	1338	104	1497
Grp Volume(v), veh/h	23	626	654	86	1434	102	43	0	64	70	0	46
Grp Sat Flow(s),veh/h/ln	1781	1777	1854	1781	1777	1549	1349	0	1580	1338	0	1601
Q Serve(g_s), s	0.5	22.0	22.0	1.8	26.0	2.7	4.5	0.0	5.7	7.7	0.0	4.0
Cycle Q Clear(g_c), s	0.5	22.0	22.0	1.8	26.0	2.7	8.5	0.0	5.7	13.4	0.0	4.0
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.97	1.00		0.93
Lane Grp Cap(c), veh/h	278	1298	1355	360	2644	1152	154	0	167	138	0	169
V/C Ratio(X)	0.08	0.48	0.48	0.24	0.54	0.09	0.28	0.00	0.38	0.51	0.00	0.27
Avail Cap(c_a), veh/h	338	1298	1355	515	2644	1152	383	0	434	365	0	440
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.8	8.4	8.4	6.4	8.2	5.3	65.7	0.0	62.6	68.8	0.0	61.8
Incr Delay (d2), s/veh	0.1	1.3	1.2	0.3	0.8	0.2	1.0	0.0	1.4	2.8	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	12.5	12.9	1.1	13.7	1.5	2.9	0.0	4.2	5.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.9	9.7	9.6	6.7	9.0	5.4	66.7	0.0	64.0	71.6	0.0	62.7
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	A	E
Approach Vol, veh/h		1303			1622			107				116
Approach Delay, s/veh		9.6			8.7			65.1				68.1
Approach LOS		A			A			E				E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.9	118.5		21.6	11.9	116.5		21.6				
Change Period (Y+Rc), s	6.8	6.9		* 5.8	6.9	6.9		* 5.8				
Max Green Setting (Gmax), s	8.2	81.1		* 41	18.1	71.1		* 41				
Max Q Clear Time (g_c+I1), s	2.5	28.0		10.5	3.8	24.0		15.4				
Green Ext Time (p_c), s	0.0	15.2		0.5	0.1	10.3		0.4				

Intersection Summary

HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

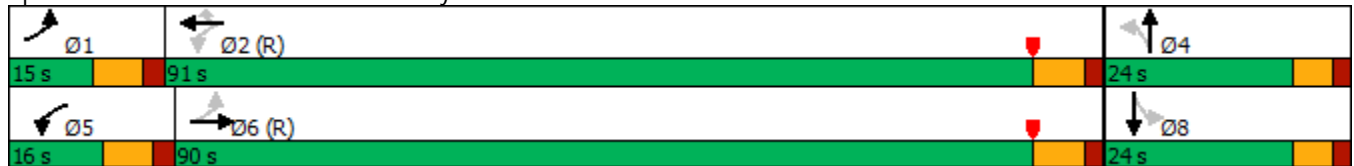
Circle K - I-75 & US 90  
 Background (2023) Conditions, AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	1429	13	45	904	62	10	6	64	62	5	32
Future Volume (vph)	43	1429	13	45	904	62	10	6	64	62	5	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	250		125	50		0	0		110
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			50			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		398			433			442			282	
Travel Time (s)		6.0			6.6			10.0			6.4	
Confl. Peds. (#/hr)	1						1			1	1	
Confl. Bikes (#/hr)			2						1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	8%	8%	8%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				8
Permitted Phases	6			2		2	4			8		
Detector Phase	1	6		5	2	2	4	4		8		8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.8	31.9		11.9	31.9	31.9	41.8	41.8		34.8	34.8	
Total Split (s)	15.0	90.0		16.0	91.0	91.0	24.0	24.0		24.0	24.0	
Total Split (%)	11.5%	69.2%		12.3%	70.0%	70.0%	18.5%	18.5%		18.5%	18.5%	
Yellow Time (s)	4.8	4.9		4.9	4.9	4.9	3.8	3.8		3.8	3.8	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
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)	6.8	6.9		6.9	6.9	6.9	5.8	5.8		5.8	5.8	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	

Intersection Summary

Area Type: Other  
 Cycle Length: 130  
 Actuated Cycle Length: 130  
 Offset: 24 (18%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated

Splits and Phases: 1: SW Florida Gateway Dr/Centurion Ct & US 90



HCM 6th Signalized Intersection Summary  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Background (2023) Conditions, AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1429	13	45	904	62	10	6	64	62	5	32
Future Volume (veh/h)	43	1429	13	45	904	62	10	6	64	62	5	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1870	1870	1870	1781	1781	1781
Adj Flow Rate, veh/h	46	1537	14	48	972	67	11	6	69	67	5	34
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	8	8	8
Cap, veh/h	432	2515	23	278	2467	1099	179	14	165	143	22	152
Arrive On Green	0.03	0.70	0.70	0.04	0.71	0.71	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1781	3608	33	1753	3497	1559	1365	126	1453	1259	197	1339
Grp Volume(v), veh/h	46	757	794	48	972	67	11	0	75	67	0	39
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1753	1749	1559	1365	0	1580	1259	0	1536
Q Serve(g_s), s	0.9	29.2	29.2	1.0	14.7	1.7	1.0	0.0	5.7	6.8	0.0	3.0
Cycle Q Clear(g_c), s	0.9	29.2	29.2	1.0	14.7	1.7	4.0	0.0	5.7	12.5	0.0	3.0
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.92	1.00		0.87
Lane Grp Cap(c), veh/h	432	1239	1299	278	2467	1099	179	0	179	143	0	174
V/C Ratio(X)	0.11	0.61	0.61	0.17	0.39	0.06	0.06	0.00	0.42	0.47	0.00	0.22
Avail Cap(c_a), veh/h	489	1239	1299	333	2467	1099	215	0	221	176	0	215
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	10.4	10.4	8.5	7.8	5.9	54.2	0.0	53.6	59.5	0.0	52.4
Incr Delay (d2), s/veh	0.1	2.2	2.2	0.3	0.5	0.1	0.1	0.0	1.5	2.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	15.8	16.4	0.6	8.6	0.9	0.6	0.0	4.3	4.1	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	12.6	12.5	8.8	8.3	6.0	54.4	0.0	55.2	61.8	0.0	53.1
LnGrp LOS	A	B	B	A	A	A	D	A	E	E	A	D
Approach Vol, veh/h		1597			1087			86				106
Approach Delay, s/veh		12.4			8.2			55.1				58.6
Approach LOS		B			A			E				E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	98.6		20.6	11.9	97.5		20.6				
Change Period (Y+Rc), s	6.8	6.9		* 5.8	6.9	6.9		* 5.8				
Max Green Setting (Gmax), s	8.2	84.1		* 18	9.1	83.1		* 18				
Max Q Clear Time (g_c+I1), s	2.9	16.7		7.7	3.0	31.2		14.5				
Green Ext Time (p_c), s	0.0	8.2		0.2	0.0	15.0		0.1				

Intersection Summary

HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

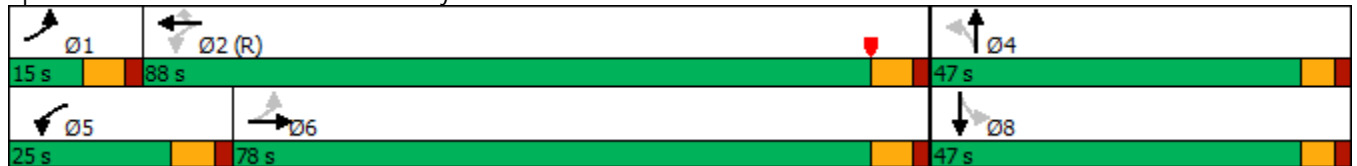
Circle K - I-75 & US 90  
 Background (2023) Conditions, PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1172	29	80	1346	96	41	2	58	66	3	41
Future Volume (vph)	22	1172	29	80	1346	96	41	2	58	66	3	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	250		125	50		0	0		110
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			50			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30				30
Link Distance (ft)		398			433			442				282
Travel Time (s)		6.0			6.6			10.0				6.4
Confl. Peds. (#/hr)	2		3	3		2						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				8
Permitted Phases	6			2		2	4			8		
Detector Phase	1	6		5	2	2	4	4		8		8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	7.0	7.0		7.0		7.0
Minimum Split (s)	11.8	31.9		11.9	31.9	31.9	41.8	41.8		34.8		34.8
Total Split (s)	15.0	78.0		25.0	88.0	88.0	47.0	47.0		47.0		47.0
Total Split (%)	10.0%	52.0%		16.7%	58.7%	58.7%	31.3%	31.3%		31.3%		31.3%
Yellow Time (s)	4.8	4.9		4.9	4.9	4.9	3.8	3.8		3.8		3.8
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0		2.0
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)	6.8	6.9		6.9	6.9	6.9	5.8	5.8		5.8		5.8
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	Max		None	C-Max	C-Max	None	None		None		None

Intersection Summary

Area Type: Other  
 Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 20 (13%), Referenced to phase 2:WBTL, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated

Splits and Phases: 1: SW Florida Gateway Dr/Centurion Ct & US 90



HCM 6th Signalized Intersection Summary  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Background (2023) Conditions, PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	22	1172	29	80	1346	96	41	2	58	66	3	41
Future Volume (veh/h)	22	1172	29	80	1346	96	41	2	58	66	3	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	24	1302	32	89	1496	107	46	2	64	73	3	46
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	260	2577	63	341	2630	1146	157	5	167	142	11	164
Arrive On Green	0.02	0.73	0.73	0.03	0.74	0.74	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	1781	3544	87	1781	3554	1549	1345	48	1532	1335	98	1502
Grp Volume(v), veh/h	24	652	682	89	1496	107	46	0	66	73	0	49
Grp Sat Flow(s),veh/h/ln	1781	1777	1854	1781	1777	1549	1345	0	1580	1335	0	1600
Q Serve(g_s), s	0.5	23.8	23.8	1.9	28.4	2.9	4.9	0.0	5.8	8.1	0.0	4.2
Cycle Q Clear(g_c), s	0.5	23.8	23.8	1.9	28.4	2.9	9.1	0.0	5.8	13.9	0.0	4.2
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.97	1.00		0.94
Lane Grp Cap(c), veh/h	260	1292	1348	341	2630	1146	157	0	172	142	0	174
V/C Ratio(X)	0.09	0.50	0.51	0.26	0.57	0.09	0.29	0.00	0.38	0.52	0.00	0.28
Avail Cap(c_a), veh/h	320	1292	1348	496	2630	1146	380	0	434	363	0	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.3	8.8	8.8	6.9	8.8	5.4	65.6	0.0	62.1	68.6	0.0	61.4
Incr Delay (d2), s/veh	0.2	1.4	1.4	0.4	0.9	0.2	1.0	0.0	1.4	2.9	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	13.4	13.8	1.1	14.9	1.6	3.1	0.0	4.4	5.2	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	10.2	10.2	7.3	9.7	5.6	66.6	0.0	63.5	71.5	0.0	62.3
LnGrp LOS	A	B	B	A	A	A	E	A	E	E	A	E
Approach Vol, veh/h		1358			1692			112			122	
Approach Delay, s/veh		10.2			9.3			64.8			67.8	
Approach LOS		B			A			E			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	117.9		22.1	11.9	116.0		22.1				
Change Period (Y+Rc), s	6.8	6.9		* 5.8	6.9	6.9		* 5.8				
Max Green Setting (Gmax), s	8.2	81.1		* 41	18.1	71.1		* 41				
Max Q Clear Time (g_c+I1), s	2.5	30.4		11.1	3.9	25.8		15.9				
Green Ext Time (p_c), s	0.0	16.3		0.5	0.1	11.0		0.5				

Intersection Summary

HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lanes, Volumes, Timings  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

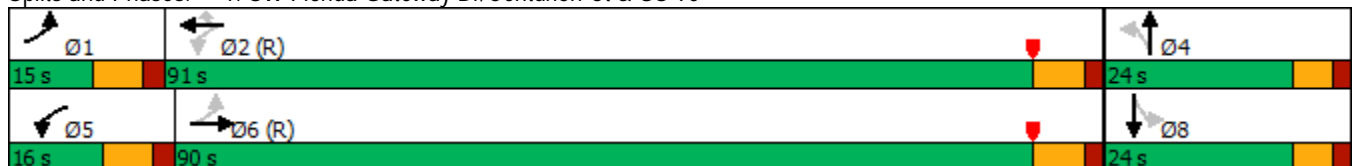
Circle K - I-75 & US 90  
 Buildout (2023) Conditions, AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	1417	13	45	892	80	10	6	64	80	5	46
Future Volume (vph)	57	1417	13	45	892	80	10	6	64	80	5	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	250		125	50		0	0		110
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			50			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		398			433			442			282	
Travel Time (s)		6.0			6.6			10.0			6.4	
Confl. Peds. (#/hr)	1					1			1	1		
Confl. Bikes (#/hr)			2						1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	8%	8%	8%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2		2	4			8		
Detector Phase	1	6		5	2	2	4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	7.0	7.0		7.0	7.0	
Minimum Split (s)	11.8	31.9		11.9	31.9	31.9	41.8	41.8		34.8	34.8	
Total Split (s)	15.0	90.0		16.0	91.0	91.0	24.0	24.0		24.0	24.0	
Total Split (%)	11.5%	69.2%		12.3%	70.0%	70.0%	18.5%	18.5%		18.5%	18.5%	
Yellow Time (s)	4.8	4.9		4.9	4.9	4.9	3.8	3.8		3.8	3.8	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
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)	6.8	6.9		6.9	6.9	6.9	5.8	5.8		5.8	5.8	
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Min		None	C-Min	C-Min	None	None		None	None	

Intersection Summary

Area Type: Other  
 Cycle Length: 130  
 Actuated Cycle Length: 130  
 Offset: 24 (18%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated

Splits and Phases: 1: SW Florida Gateway Dr/Centurion Ct & US 90



HCM 6th Signalized Intersection Summary  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Buildout (2023) Conditions, AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	57	1417	13	45	892	80	10	6	64	80	5	46
Future Volume (veh/h)	57	1417	13	45	892	80	10	6	64	80	5	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1870	1870	1870	1781	1781	1781
Adj Flow Rate, veh/h	61	1524	14	48	959	86	11	6	69	86	5	49
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	8	8	8
Cap, veh/h	425	2466	23	273	2409	1074	184	16	185	161	18	176
Arrive On Green	0.03	0.68	0.68	0.04	0.69	0.69	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1781	3607	33	1753	3497	1559	1347	126	1454	1259	141	1387
Grp Volume(v), veh/h	61	750	788	48	959	86	11	0	75	86	0	54
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1753	1749	1559	1347	0	1581	1259	0	1528
Q Serve(g_s), s	1.3	30.1	30.1	1.0	15.3	2.4	1.0	0.0	5.7	8.7	0.0	4.2
Cycle Q Clear(g_c), s	1.3	30.1	30.1	1.0	15.3	2.4	5.1	0.0	5.7	14.4	0.0	4.2
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.92	1.00		0.91
Lane Grp Cap(c), veh/h	425	1215	1274	273	2409	1074	184	0	201	161	0	194
V/C Ratio(X)	0.14	0.62	0.62	0.18	0.40	0.08	0.06	0.00	0.37	0.54	0.00	0.28
Avail Cap(c_a), veh/h	476	1215	1274	328	2409	1074	201	0	221	177	0	214
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.3	11.3	11.3	9.2	8.7	6.7	53.7	0.0	52.0	58.6	0.0	51.3
Incr Delay (d2), s/veh	0.2	2.4	2.3	0.3	0.5	0.1	0.1	0.0	1.1	2.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	16.5	17.1	0.6	9.0	1.3	0.6	0.0	4.2	5.2	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.4	13.6	13.5	9.5	9.2	6.8	53.8	0.0	53.1	61.3	0.0	52.1
LnGrp LOS	A	B	B	A	A	A	D	A	D	E	A	D
Approach Vol, veh/h		1599			1093			86			140	
Approach Delay, s/veh		13.3			9.0			53.2			57.8	
Approach LOS		B			A			D			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.2	96.4		22.3	11.9	95.8		22.3				
Change Period (Y+Rc), s	6.8	6.9		* 5.8	6.9	6.9		* 5.8				
Max Green Setting (Gmax), s	8.2	84.1		* 18	9.1	83.1		* 18				
Max Q Clear Time (g_c+I1), s	3.3	17.3		7.7	3.0	32.1		16.4				
Green Ext Time (p_c), s	0.0	8.1		0.2	0.0	14.7		0.1				

Intersection Summary

HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lanes, Volumes, Timings  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Buildout (2023) Conditions, PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	1159	29	80	1332	117	41	2	58	86	3	57
Future Volume (vph)	37	1159	29	80	1332	117	41	2	58	86	3	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	250		125	50		0	0		110
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25			50			25			25		
Right Turn on Red			Yes			Yes			Yes			Yes
Link Speed (mph)		45			45			30				30
Link Distance (ft)		398			433			442				282
Travel Time (s)		6.0			6.6			10.0				6.4
Confl. Peds. (#/hr)	2		3	3		2						
Confl. Bikes (#/hr)						2						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Shared Lane Traffic (%)												
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				8
Permitted Phases	6			2		2	4			8		
Detector Phase	1	6		5	2	2	4	4		8		8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	15.0	7.0	7.0		7.0		7.0
Minimum Split (s)	11.8	31.9		11.9	31.9	31.9	41.8	41.8		34.8		34.8
Total Split (s)	15.0	78.0		25.0	88.0	88.0	47.0	47.0		47.0		47.0
Total Split (%)	10.0%	52.0%		16.7%	58.7%	58.7%	31.3%	31.3%		31.3%		31.3%
Yellow Time (s)	4.8	4.9		4.9	4.9	4.9	3.8	3.8		3.8		3.8
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0		2.0
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)	6.8	6.9		6.9	6.9	6.9	5.8	5.8		5.8		5.8
Lead/Lag	Lead	Lag		Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Recall Mode	None	Max		None	C-Max	C-Max	None	None		None		None

Intersection Summary

Area Type: Other  
 Cycle Length: 150  
 Actuated Cycle Length: 150  
 Offset: 20 (13%), Referenced to phase 2:WBTL, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated

Splits and Phases: 1: SW Florida Gateway Dr/Centurion Ct & US 90



HCM 6th Signalized Intersection Summary  
 1: SW Florida Gateway Dr/Centurion Ct & US 90

Circle K - I-75 & US 90  
 Buildout (2023) Conditions, PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	37	1159	29	80	1332	117	41	2	58	86	3	57
Future Volume (veh/h)	37	1159	29	80	1332	117	41	2	58	86	3	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1856	1856	1870	1870	1870
Adj Flow Rate, veh/h	41	1288	32	89	1480	130	46	2	64	96	3	63
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	258	2515	62	334	2546	1110	165	6	193	166	9	192
Arrive On Green	0.03	0.71	0.71	0.03	0.72	0.72	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1781	3543	88	1781	3554	1548	1325	48	1532	1335	73	1524
Grp Volume(v), veh/h	41	646	674	89	1480	130	46	0	66	96	0	66
Grp Sat Flow(s),veh/h/ln	1781	1777	1854	1781	1777	1548	1325	0	1580	1335	0	1596
Q Serve(g_s), s	0.9	24.8	24.9	2.0	30.3	3.9	4.9	0.0	5.7	10.6	0.0	5.7
Cycle Q Clear(g_c), s	0.9	24.8	24.9	2.0	30.3	3.9	10.6	0.0	5.7	16.3	0.0	5.7
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.97	1.00		0.95
Lane Grp Cap(c), veh/h	258	1261	1316	334	2546	1110	165	0	199	166	0	201
V/C Ratio(X)	0.16	0.51	0.51	0.27	0.58	0.12	0.28	0.00	0.33	0.58	0.00	0.33
Avail Cap(c_a), veh/h	307	1261	1316	489	2546	1110	362	0	434	364	0	438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.6	9.9	9.9	7.8	10.3	6.6	64.6	0.0	59.8	67.2	0.0	59.7
Incr Delay (d2), s/veh	0.3	1.5	1.4	0.4	1.0	0.2	0.9	0.0	1.0	3.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	14.2	14.6	1.3	16.2	2.2	3.1	0.0	4.3	6.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.9	11.4	11.4	8.3	11.3	6.8	65.5	0.0	60.7	70.4	0.0	60.7
LnGrp LOS	A	B	B	A	B	A	E	A	E	E	A	E
Approach Vol, veh/h		1361			1699			112				162
Approach Delay, s/veh		11.3			10.8			62.7				66.4
Approach LOS		B			B			E				E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	114.4		24.7	11.9	113.4		24.7				
Change Period (Y+Rc), s	6.8	6.9		* 5.8	6.9	6.9		* 5.8				
Max Green Setting (Gmax), s	8.2	81.1		* 41	18.1	71.1		* 41				
Max Q Clear Time (g_c+I1), s	2.9	32.3		12.6	4.0	26.9		18.3				
Green Ext Time (p_c), s	0.0	16.0		0.5	0.1	10.8		0.6				

Intersection Summary

HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

- User approved pedestrian interval to be less than phase max green.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

**APPENDIX E**  
Trip Generation Calculations

**Table 1: Trip Generation**

Land Use	Intensity	AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
		Total	In	Out	Total	In	Out
<b>Existing Development</b> Convenience Store/Gas Station (4-5.5k)	24 VFP	649	325	324	546	273	273
<b>Existing Development Pass-By</b> Convenience Store/Gas Station (4-5.5k)	<u>Daily</u> <u>AM</u> <u>PM</u> 75%    76%    75%	494	247	247	410	205	205
EXISTING SITE - POTENTIAL TOTAL DRIVEWAY VOLUMES		649	325	324	546	273	273
EXISTING SITE - POTENTIAL PASS-BY TRIPS		494	247	247	410	205	205
EXISTING SITE - POTENTIAL NEW EXTERNAL TRIPS		155	78	77	136	68	68
OBSERVED DRIVEWAY VOLUMES		201	106	95	220	115	105
ACTUAL/POTENTIAL DRIVEWAY VOLUMES ADJUSTMENT FACTOR		0.31			0.40		
<b>Proposed Development</b> Convenience Store/Gas Station (5.5-10k)	27 VFP	853	427	426	726	363	363
<b>Proposed Development Pass-By</b> Convenience Store/Gas Station (5.5-10k)	<u>Daily</u> <u>AM</u> <u>PM</u> 75%    76%    75%	648	324	324	544	272	272
PROPOSED SITE - POTENTIAL TOTAL DRIVEWAY VOLUMES		853	427	426	726	363	363
PROPOSED SITE - POTENTIAL TOTAL PASS-BY TRIPS		648	324	324	544	272	272
PROPOSED SITE - POTENTIAL TOTAL NEW EXTERNAL TRIPS		205	103	102	182	91	91
<b>POTENTIAL NET NEW TOTAL DRIVEWAY VOLUMES (PROPOSED - EXISTING)</b>		204	102	102	180	90	90
<b>POTENTIAL NET NEW PASS-BY TRIPS (PROPOSED - EXISTING)</b>		154	77	77	134	67	67
<b>POTENTIAL NET NEW EXTERNAL TRIPS (PROPOSED - EXISTING)</b>		50	25	25	46	23	23
<b>ADJUSTED NET NEW TOTAL DRIVEWAY VOLUMES</b>		64	32	32	72	36	36
<b>ADJUSTED NET NEW PASS-BY TRIPS</b>		48	24	24	54	27	27
<b>ADJUSTED NET NEW EXTERNAL TRIPS</b>		16	8	8	18	9	9

Trip generation and pass-by reductions were calculated using the following data from ITE's Trip Generation Manual, 11th Edition.

**Convenience Store/ Gas Station (4-5.5k) [ITE 945]**

Daily:  $T = 257.13*(X)$ ; X is vehicle fueling positions  
 AM Peak Hour of Adjacent Street:  $T = 27.04*(X)$ ; X is vehicle fueling positions; (50% in, 50% out)  
 PM Peak Hour of Adjacent Street:  $T = 22.76*(X)$ ; X is vehicle fueling positions; (50% in, 50% out)

**Convenience Store/ Gas Station (5.5-10k) [ITE 945]**

Daily:  $T = 345.75*(X)$ ; X is vehicle fueling positions  
 AM Peak Hour of Adjacent Street:  $T = 31.60*(X)$ ; X is vehicle fueling positions; (50% in, 50% out)  
 PM Peak Hour of Adjacent Street:  $T = 26.90*(X)$ ; X is vehicle fueling positions; (50% in, 50% out)

APPENDIX F  
FDOT *Trend* Worksheet

FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2020 HISTORICAL AADT REPORT

COUNTY: 29 - COLUMBIA

SITE: 0278 - SR 10 400' W. OF I-75

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	27000	C	E 13500		W 13500	9.00	54.80	6.80
2019	30000	C	E 15000		W 15000	9.00	54.80	6.20
2018	28000	C	E 14000		W 14000	9.00	54.70	6.20
2017	27500	C	E 14000		W 13500	9.00	55.50	5.80
2016	27000	C	E 13500		W 13500	9.00	53.90	5.40
2015	27500	C	E 14000		W 13500	9.00	54.50	5.70
2014	27000	C	E 13500		W 13500	9.00	54.40	5.90
2013	25000	C	E 12500		W 12500	9.00	55.30	6.40
2012	26000	C	E 13000		W 13000	9.00	54.70	5.50
2011	26000	C	E 13000		W 13000	9.00	53.70	5.30
2010	25500	C	E 12500		W 13000	9.94	54.40	4.90
2009	25000	C	E 12500		W 12500	9.78	54.18	5.30
2008	27000	C	E 13500		W 13500	9.82	54.63	6.20
2007	27500	C	E 13500		W 14000	9.99	54.46	6.40
2006	27000	C	E 13500		W 13500	10.01	55.64	7.00
2005	31500	C	E 15500		W 16000	9.90	56.60	9.80

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE  
 S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE  
 V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

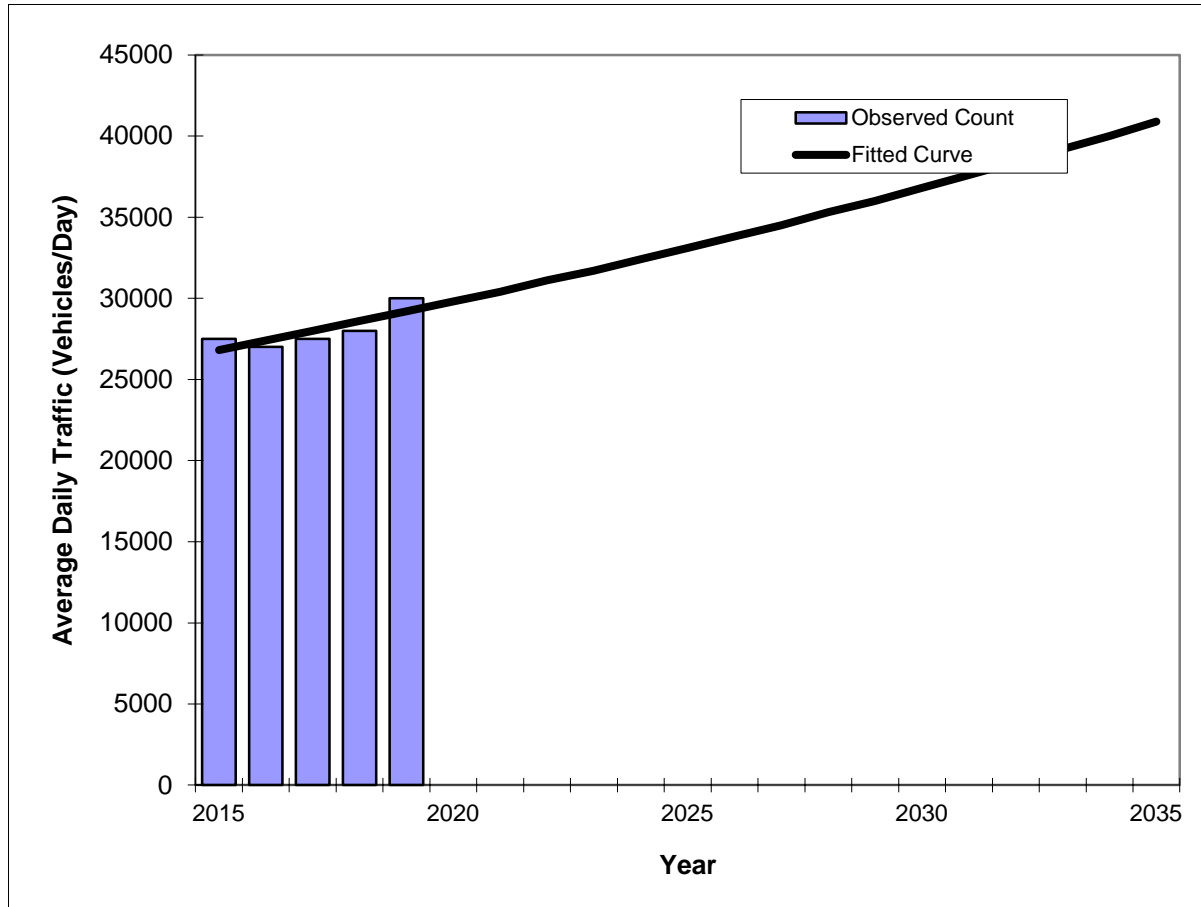
\*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

## Traffic Trends - V03.a

### SR 10 -- 400' W OF I-75

FIN#	429193-1
Location	1

County:	Columbia (29)
Station #:	0278
Highway:	SR 10



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2015	27500	26800
2016	27000	27400
2017	27500	28000
2018	28000	28600
2019	30000	29200
<b>2023 Opening Year Trend</b>		
2023	N/A	31700
<b>2024 Mid-Year Trend</b>		
2024	N/A	32400
<b>2025 Design Year Trend</b>		
2025	N/A	33100
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	65.77%
Compounded Annual Historic Growth Rate:	2.17%
Compounded Growth Rate (2019 to Design Year):	2.11%
Printed:	3-Mar-22
<b>Exponential Growth Option</b>	

\*Axle-Adjusted