TRAFFIC IMPACT STUDY FOR

DRI 2665
SABEN FAIRBURN SOUTH DISTRIBUTION CENTER

Oakley Industrial Blvd & Creekwood Rd in Fairburn, Fulton County, GA

March 17, 2017

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Executive Summary

The Sabin Fairburn South Distribution Center will be approximately 1,382,000 square feet (sf) of warehouse/distribution buildings located along the south side of I-85 east of Creekwood Road and Oakley Industrial Boulevard in the City of Fairburn, south Fulton County, Georgia. The site will be accessed by two driveways on Creekwood Road, the main one opposite the southern driveway to the existing Clorox facility and the other will provide access to the personal vehicle parking area for a 40,000 sf building approximately 300 feet north of the main entrance. The development is to be completed in 2019. Most of the site is currently zoned AG-1 (Agricultural), and is proposed to be M-1 (Light Industrial District). This development is subject to DRI review as it falls within the "wholesale & distribution" category and exceeding 500,000 SF of building area. The ARC Unified Growth Policy Map identifies the area as a Developing Suburbs.

No programed improvements were identified within the project study area.

No mitigating improvements were identified at the study intersections resulting from the additional project trips.

The purpose of this report is to identify the expected traffic impacts expected to be generated by the new vehicular trips generated by the development when completed as a single phase. The traffic study includes background traffic growth, trip generation, directional distribution, and traffic impacts at intersections within the area.

The development is projected to generate approximately 2,322 daily trips, 168 AM, and 231 PM peak hour weekday trips. Approximately 25% of the peak hours and 38% daily new trips are expected to be trucks, with the remainder personal vehicles.

The expected additional background trip volumes were calculated using a one percent (1%) annual growth rate applied for three (3) years to the existing intersection peak hour turning movement counts.

In addition to the site driveway and adjacent major existing intersections studied as required by the *GRTA Procedures and Principles for GRTA DRI REVIEW, 2013,* Expedited Review Criteria in Section 3-103, Part B, intersection capacity analyses are also provided for the signalized intersection of Oakley Industrial Boulevard at Senoia Road (SR 74) for existing conditions, future 2019 background (No-Build) traffic volumes (including the new trips to be generated by the 308 apartments being constructed southeast of the intersection), and future 2019 with the Sabin Fairburn South Distribution Center trips conditions, with and without the planned second eastbound Oakley Industrial Boulevard left turn lane (to create dual left turn lanes).

Although the intersection of Oakley Industrial Boulevard at Senoia Road currently operates an acceptable overall intersection Level of Service (LOS) "D", and is expected to continue to operate at LOS "D" in 2019 with and without the new trips from the apartments and from Sabin Fairburn South Distribution Center, vehicles on several approach movements may experience longer average per vehicle peak hour delays than are desirable. Identification of specific movements experiencing the longer peak weekday hour delays is dependent upon the traffic signal phasing priorities. The SR 74 through movement volumes are much higher than turning or crossing movements, and would therefore be prioritized when designing the signal timing plans. Adding an Oakley Industrial Boulevard westbound right turn overlap signal phase and a second left turn lane to create dual left turn lanes, in addition to the planned additional (second) eastbound left turn lane, with appropriate optimization of the signal timing and phasing may help reduce the individual approach movement delays.

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1. Introduction

The Sabin Fairburn South Distribution Center will be approximately 1,382,000 square feet (sf) of warehouse/distribution buildings located along the south side of I-85 east of Creekwood Road and Oakley Industrial Boulevard in the City of Fairburn, south Fulton County, Georgia.

The site will be accessed by two driveways on Creekwood Road. The main one opposite the southern driveway to the existing Clorox facility will provide access to almost all of the parking areas on the site. The second access point will provide access to personal vehicle parking for a 40,000 sf building approximately 300 feet north of the main entrance.

The development is to be completed in 2019.

The purpose of this report is to identify the expected traffic impacts expected to be generated by the new vehicular trips generated by the development when completed as a single phase. The traffic study includes background traffic growth, trip generation, directional distribution, and traffic impacts at the site driveways and study intersections within the immediate area.

In addition to the two site driveways intersections and the adjacent major existing intersections at Johnson Road/Bohannon Road and Creekwood Road and at Bohannon Road and Oakley Industrial Boulevard to be studied as required by the *GRTA Procedures and Principles for GRTA DRI REVIEW, 2013,* Expedited Review Criteria in Section 3-103, Part B, intersection capacity analyses are also provided for the signalized intersection of Oakley Industrial Boulevard at Senoia Road (SR 74) for existing conditions, future 2019 background (No-Build) traffic volumes (including the new trips to be generated by the 308 apartments being constructed southeast of the intersection), and future 2019 with the Sabin Fairburn South Distribution Center trips (Build) conditions, with and without the planned second eastbound Oakley Industrial Boulevard left turn lane (to create dual left turn lanes).

Figure 1 shows the site location and Figure 2 shows the study intersections. The site plan is included with this report.

Figure 1: Vicinity Map

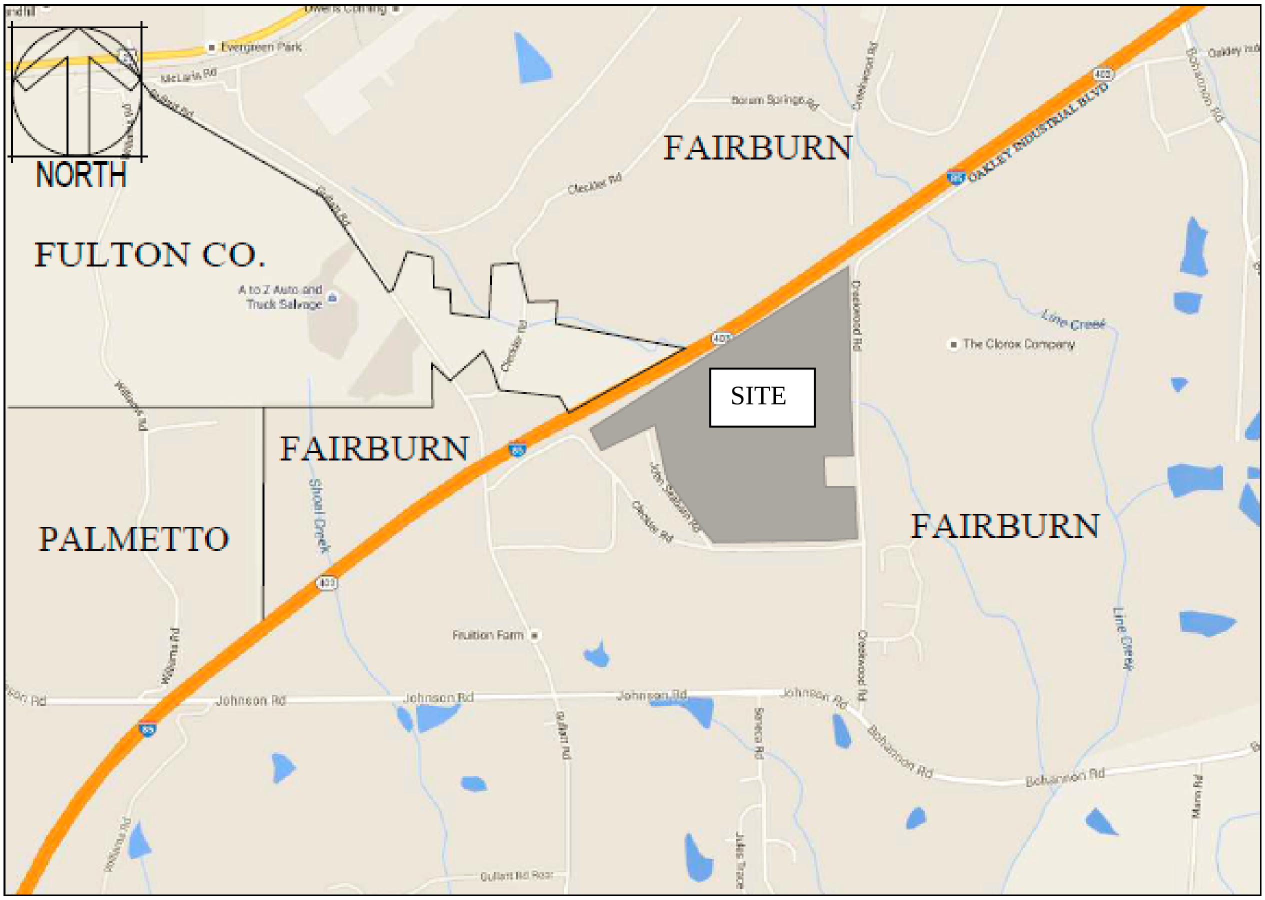


Figure 2: Study Intersections

2. Proposed Development Description

The Sabin Fairburn South Distribution Center will be approximately 1,382,000 square feet (sf) of warehouse/distribution buildings located along the south side of I-85 east of Creekwood Road and Oakley Industrial Boulevard in the City of Fairburn, south Fulton County, Georgia.

The site will be accessed by two driveways on Creekwood Road. The main one opposite the southern driveway to the existing Clorox facility will provide access to almost all of the parking areas on the site. The second access point will provide access to personal vehicle parking for a 40,000 sf building approximately 300 feet north of the main entrance.

2.1. Phasing

This traffic study considers the full build-out and occupancy of the site in 2019 as a single phase.

2.2. Programmed Improvement Projects

There are no planned STIP, RTIP, or local planned roadway improvement projects within the study area. The following nearby projects are programmed or planned to be completed by the respective years:

2019	FA-106	Oakley Industrial Full-Depth Reclamation Stalwart Dr to Bohannon Rd $897,309 TSPLOST funded
2020	FS-AR-182	SR 74 (Senoia Road) at I-85 – Add turn lanes at the ends widening of bridge to include turn lanes $47,648,961Federal, State & Local funding
2017	FS-284	South Fulton Multi-modal Study $325,000 Federal & Local funding

3. Existing Conditions

3.1. Transportation Facilities

Creekwood Road is an urban local two-lane roadway with no traffic signals. It runs north to south from Oakley Industrial Boulevard to Johnson and Bohannon Roads in this area of southern Fairburn and is posted south of the site entrance for no truck traffic. It is signed for 40 MPH. The land uses along Creekwood Road are agricultural and residential to the south of the site and warehouse/distribution center east of the site to the north.

Johnson Road is an urban local two-lane roadway with no traffic signals. It runs between Palmetto to the west and Bohannon Road in southern Fairburn to the east and is posted for no truck traffic. It is signed for 40 MPH. The land uses along Johnson Road are agricultural and residential.

Bohannon Road is an urban local two-lane roadway with no traffic signals. It runs between Johnson Road to the west and Oakley Industrial Boulevard to the north (posted for no truck traffic) and continues to the north to McLarin Road (this segment allows truck traffic). It is signed for 40 MPH. The land uses along Bohannon Road are agricultural and residential from Johnson Road to Oakley Industrial Boulevard and primarily industrial north of Oakley Industrial Boulevard.

Oakley Industrial Boulevard is a two-lane roadway functionally classified as an Urban Collector Street with an all-way stop sign controlled intersection at Bohannon Road and a traffic signal controlled intersection at Senoia Road (SR 74). It runs between Creekwood Road to the west and SR 138 to the east. It is signed for 40 MPH. The land uses along Oakley Industrial Boulevard are primarily industrial with commercial and residential uses near SR 74.

Senoia Road (SR 74) Oakley Industrial Boulevard is a four-lane median divided roadway with turn lanes at major intersections functionally classified as an Urban Principal Arterial with traffic signals at Oakley Industrial Boulevard, the I-85 ramps, and other major intersections in the area. SR 74 south from Roosevelt Highway (SR 14/US 29) as Fairburn Industrial Parkway to I-85, then as Senoia Road to Fayette County and beyond. It is signed for 45 MPH in the area. The land uses along SR 74 are primarily commercial, residential, industrial, and vacant/agricultural.

The existing lane configurations and traffic controls are shown in Figure 3.

3.2. Traffic Volumes

New traffic counts were collected on Thursday, November 3, 2016, from 7-9 AM and 4-6 PM while schools were in session at the following intersections:

1. Johnson Rd, Bohannon Rd and Creekwood Rd
2. Bohannon Rd at Oakley Industrial Blvd
3. Oakley Industrial Blvd at SR 74 Senoia Rd

There were 1,821 vehicles counted, 651 northbound and 585 southbound, on Creekwood Road on the same day, Thursday, November 3, 2016, near the site.

The existing morning and evening peak hour turning movement counts at the study intersections are shown in Figure 4. The count worksheets are included in the Appendix.

Figure 3: Existing and Planned Lane Configurations and Traffic Control

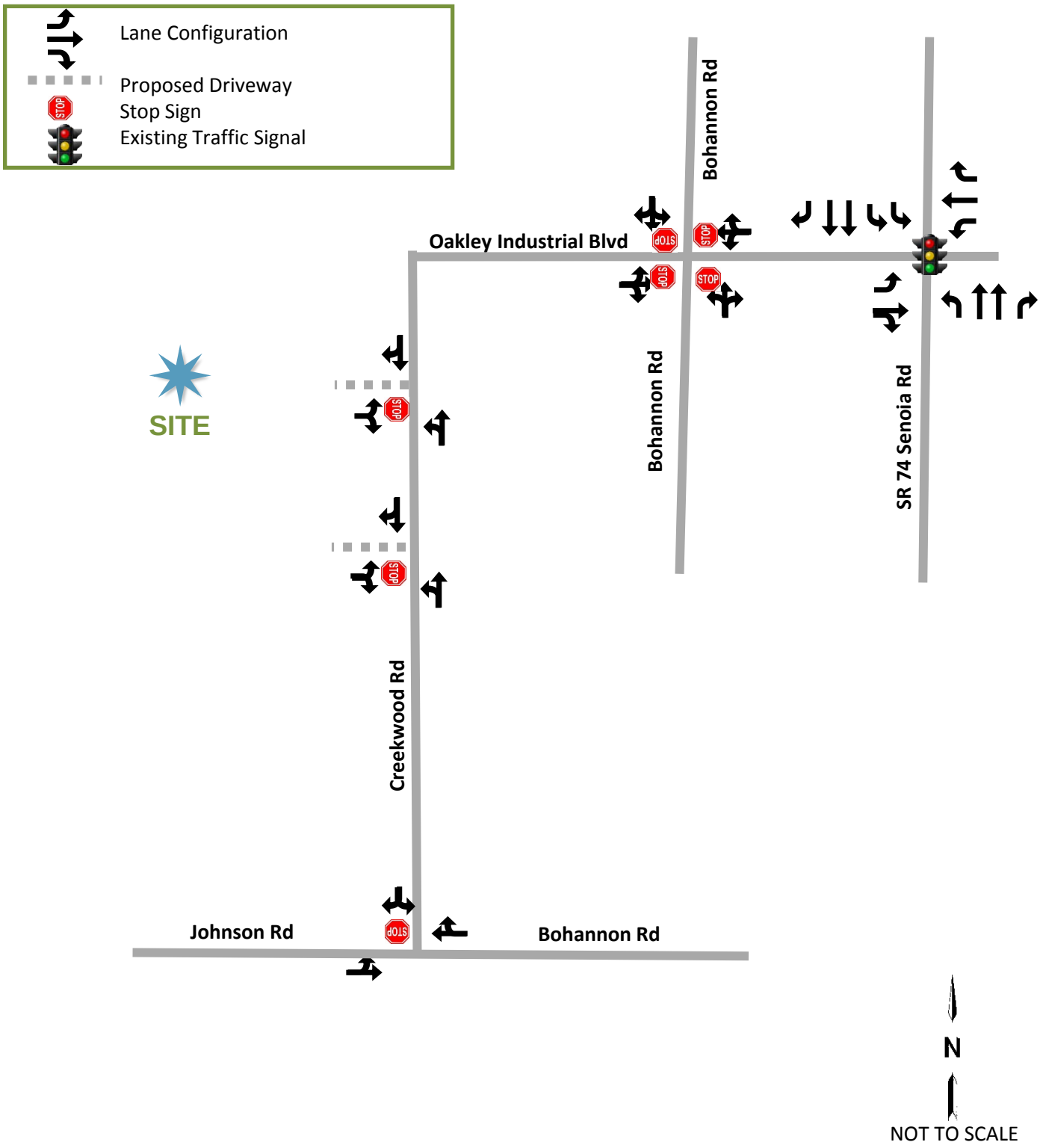
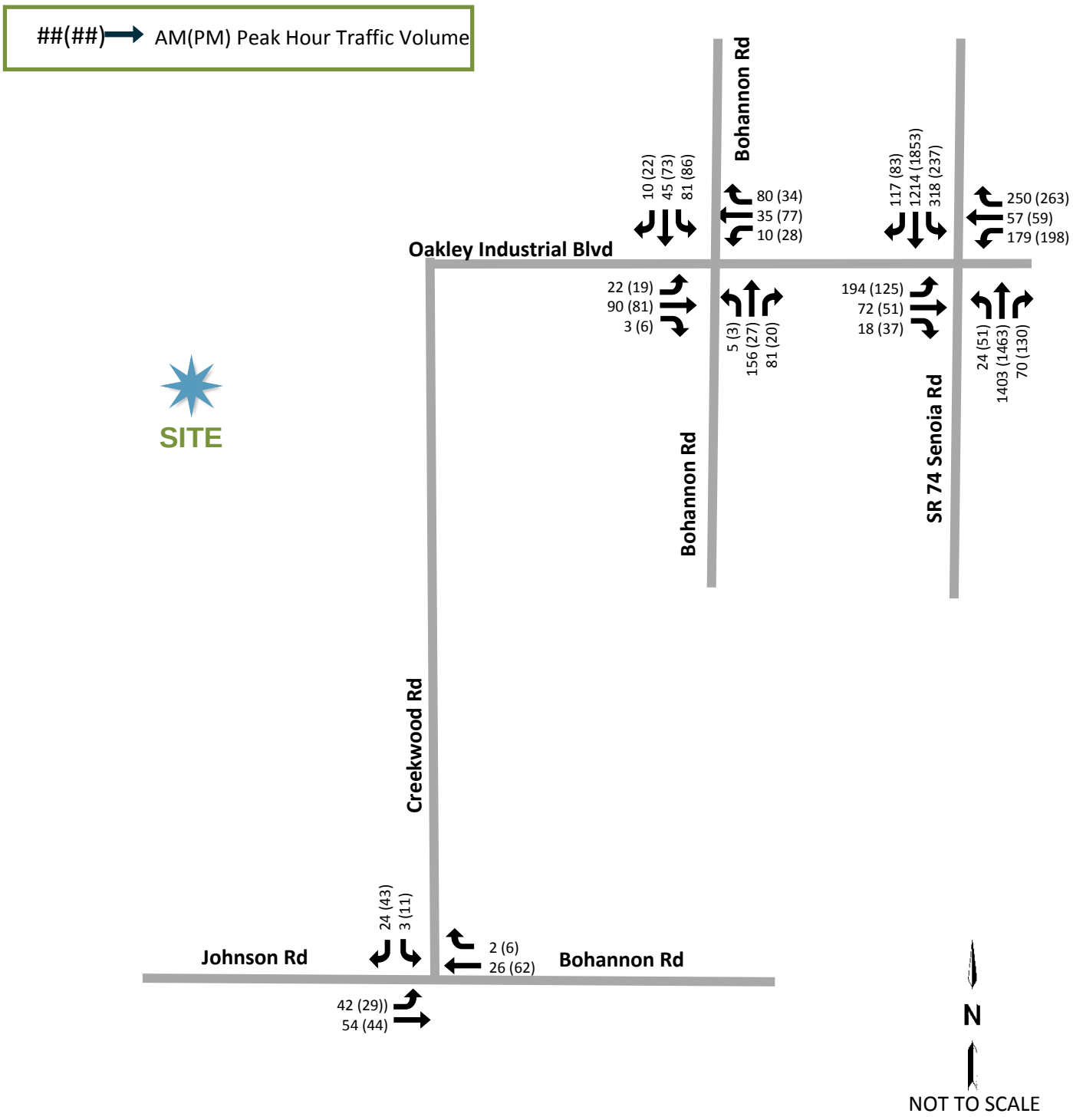


Figure 4: Existing Traffic Volumes



3.3. Existing Capacity Analysis

The results of the intersection capacity analysis are shown in Table 1 for existing volumes. Average vehicular delays are calculated and reported as Levels of Service (LOS) as defined by the Highway Capacity Manual (HCM 2010). Synchro output reports are included in Appendix C.

Table 1: Existing Intersection Capacity Analyses

Intersection	Control	Approach	Peak Hour LOS (sec delay)	
			AM	PM
Creekwood Rd at Johnson/Bohannon Rds	Side Street Stop Sign	SB	A	A
		EB	A	A
		WB	A	A
Oakley Industrial Blvd at Bohannon Rd	All Way Stop	Overall	B	A
Oakley Industrial Blvd at SR 74 Senoia Rd	Signal	Overall	D	D

As can be seen in Table 1, the existing study intersections operate adequately overall during both morning and evening peak volume hours with the existing lane configurations and traffic controls.

Intersection capacity analyses worksheets are included in the Appendix.

4. Trip Generation

Table 2 summarizes the project trip generation calculated using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 9th Edition, 2012 and *Trip Generation Handbook*, 3th Edition, 2014. The worksheet is included in the Appendix.

Table 2: Project Trip Generation

Project Land Use (LUC)	Project Density	Vehicular Project Trips		
		Total	Inbound	Outbound
High Cube Warehouse/Distribution (152)	1,382 ksf			
Daily		**2323**		
AM Peak Hour		**168**	116	52
PM Peak Hour		**231**	72	159

4.1. Trip Distribution and Assignment

The assignment and distribution was based on the projected land uses, a review of road facilities in the area, discussion with local planners, engineering judgment as follows:

- To/from the northeast: 90% personal vehicles and 100% trucks via Creekwood Road and Oakley Industrial Blvd, Bohannon Road, and Senoia Road (SR 74) to/from I-85;
- To/from the south & southwest: 10% personal vehicles only via Creekwood Road;
- To/from the southeast: 20% personal vehicles only via south Bohannon Road;
- To/from the north & west: 20% personal vehicles and trucks via north Bohannon Road;
- To/from southeast 20% personal vehicles and trucks via south Senoia Road (SR 74);
- To/from north & east 10% personal vehicles and 25% trucks via Northbound I-85;
- To/from south & west 10% personal vehicles and 25% trucks via Southbound I-85;
- To/from north, northeast, & northwest 10% personal vehicles & trucks via SR 74.

Figures 4 and 5 show the directional distribution and volumes of the new vehicular project trips.

Figure 5: Directional Trip Distribution

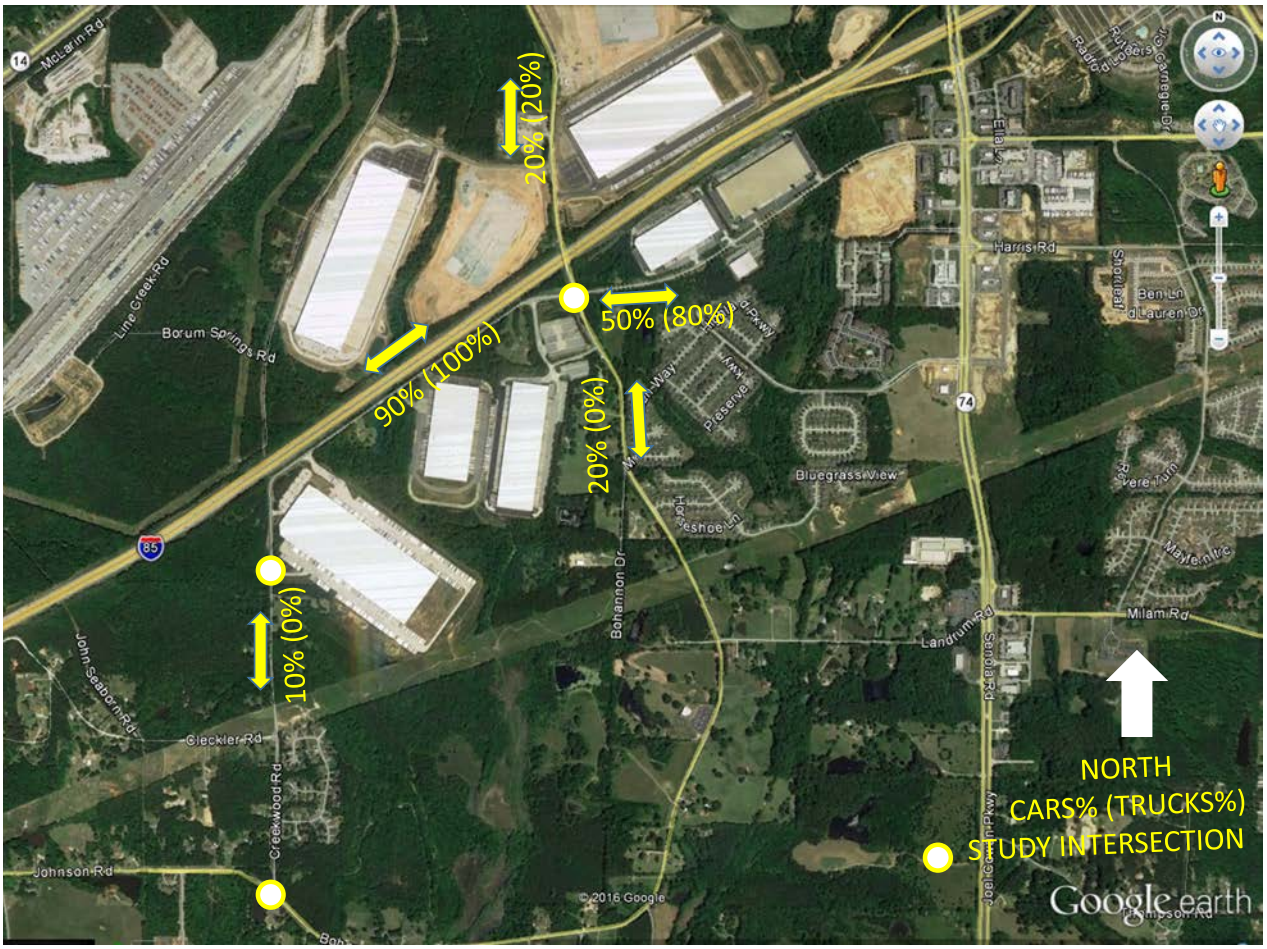
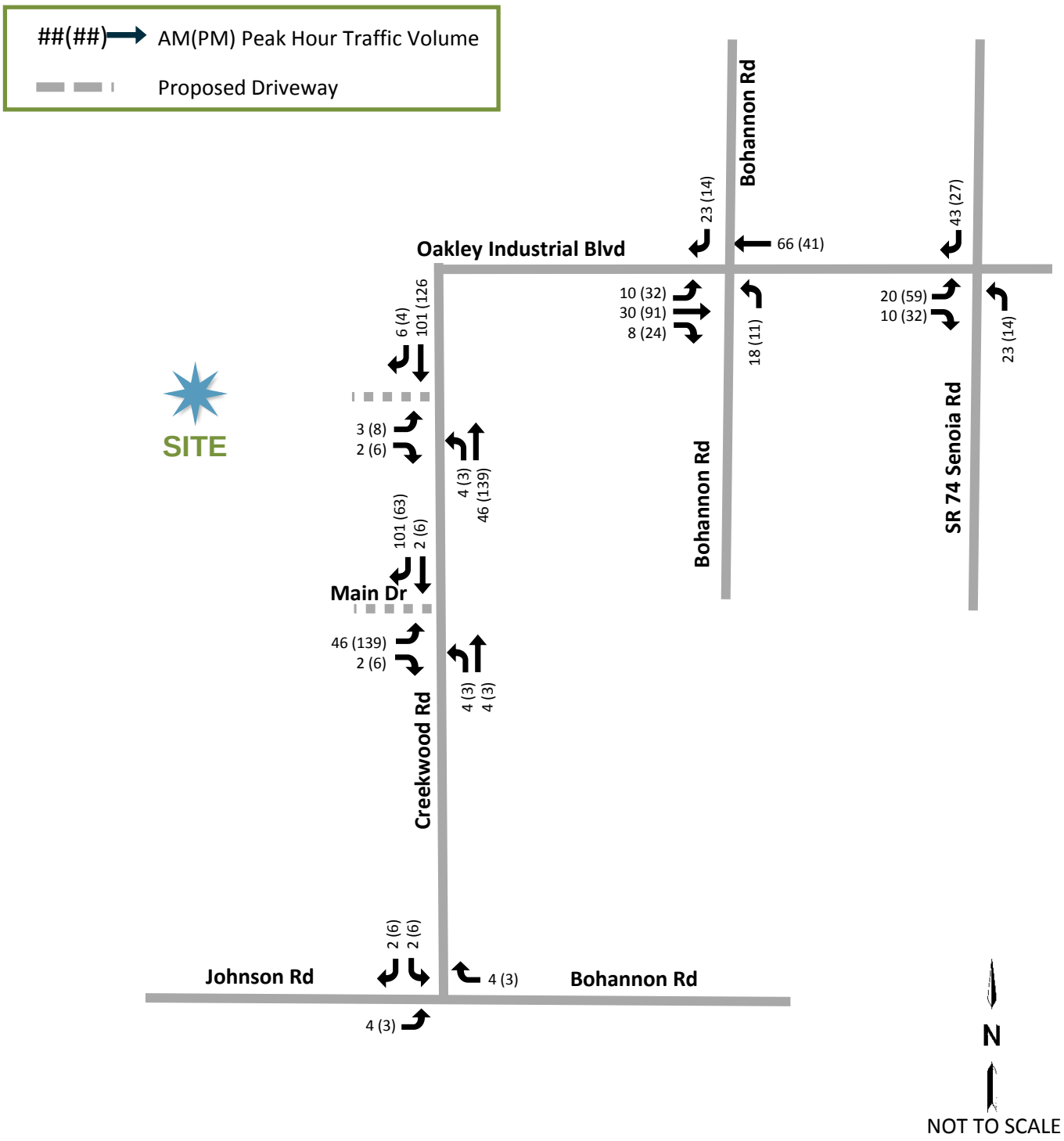


Figure 6: Project Traffic Volumes



5. Background Conditions Capacity Analysis

A 1% annual growth rate for three years was applied to the existing traffic volumes and the new trips expected to be generated by the 308 apartments being constructed southeast of the intersection from the August 2, 2016, A&R Engineering, Inc. Traffic Impact Study for Oakley Industrial Boulevard Residential Development provided to calculate the future intersection turning movement volumes at the end of 2019 without new project trips. The background volumes are shown in Figure 7 and the expected Levels of Service (LOS) are shown in Table 3.

Table 3: Background LOS

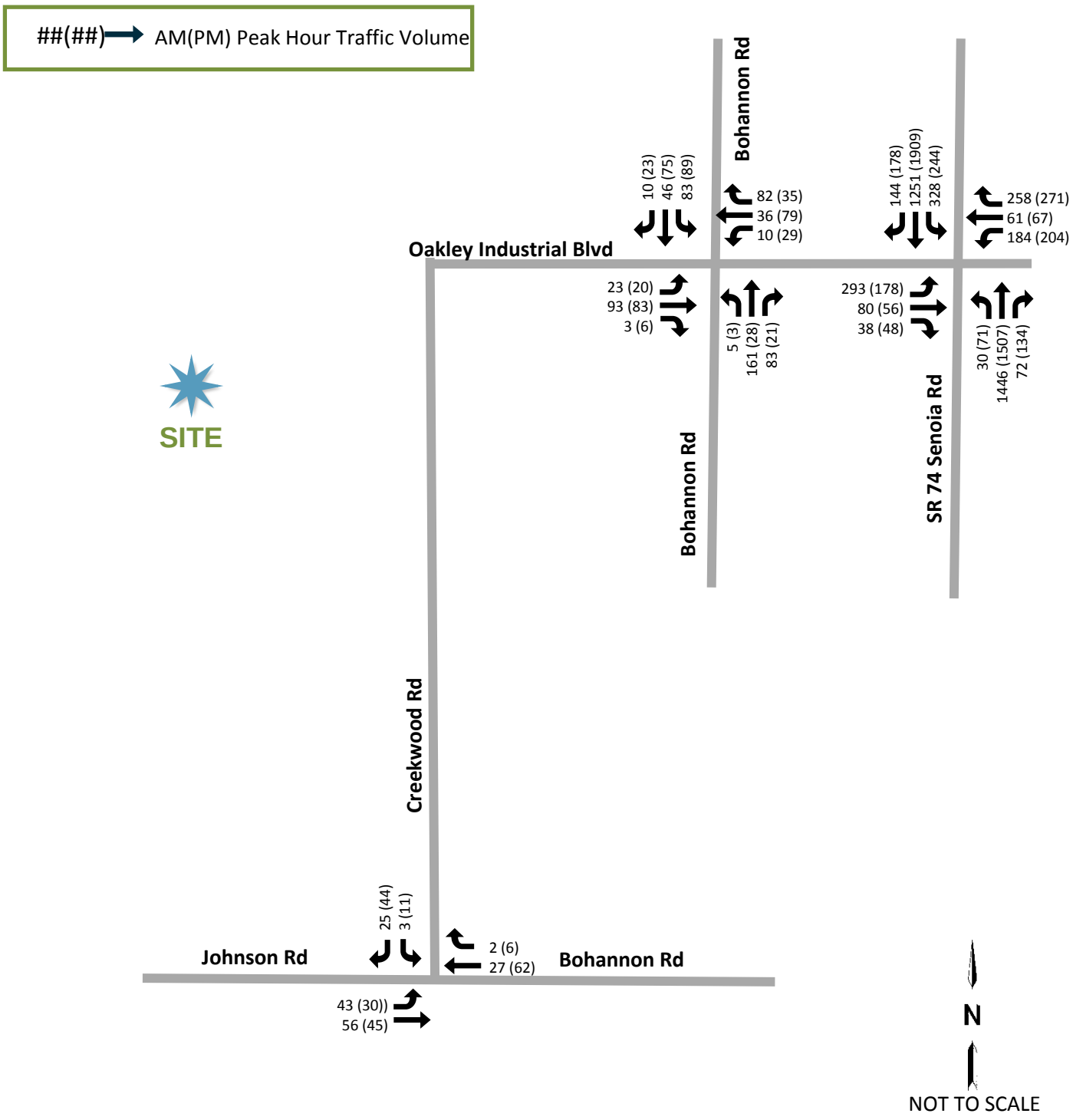
Intersection	Control	Approach	Peak Hour LOS (sec delay)	
			AM	PM
Creekwood Rd at Johnson/Bohannon Rds	Side Street Stop Sign	SB	A	A
		EB*	A	A
		WB	A	A
Oakley Industrial Blvd at Bohannon Rd	All Way Stop	Overall	B	A
Oakley Industrial Blvd at SR 74 Senoia Rd	Signal	Overall	D	D

As can be seen in Table 3, the study intersections are expected to operate adequately overall in 2019 for expected background (no build) traffic volumes during both morning and evening peak volume hours.

The Oakley Industrial Boulevard at Senoia Road intersection is expected to continue to operate at LOS "D" in 2019 with the new trips from the apartments, vehicles on several approach movements may experience longer average per vehicle peak hour delays than are desirable. Identification of specific movements experiencing the longer peak weekday hour delays is dependent upon the traffic signal phasing priorities. The SR 74 through movement volumes are much higher than turning or crossing movements, and would therefore be prioritized when designing the signal timing plans. Adding a second eastbound left turn lane, with appropriate optimization of the signal timing and phasing would be likely to help reduce the individual approach movement delays.

Capacity analyses worksheets showing the background 2019 traffic conditions for existing lane configurations and traffic control are included in the Appendix.

Figure 7: Background Traffic Volumes



6. Future Conditions Capacity Analysis

The results of the intersection capacity analysis are shown in Table 4 for existing with project volumes.

Table 4: Future with Project Trips LOS

Intersection	Control	Approach	Peak Hour LOS (sec delay)	
			AM	PM
Creekwood Rd at Johnson/Bohannon Rds	Side Street Stop Sign	SB	A	A
		EB*	A	A
		WB	A	A
Oakley Industrial Blvd at Bohannon Rd	All Way Stop	Overall	B	B
Main Site Access at Creekwood Rd (or Oakley Industrial Blvd)	Side Street Stop Sign	NB	A	A
		SB	A	A
		EB	B	B
North Site Access at Creekwood Rd	Side Street Stop Sign	NB	A	A
		SB	A	A
		EB	A	B
Oakley Industrial Blvd at SR 74 Senoia Rd	Signal	Overall	D	D
		Overall*	D	D

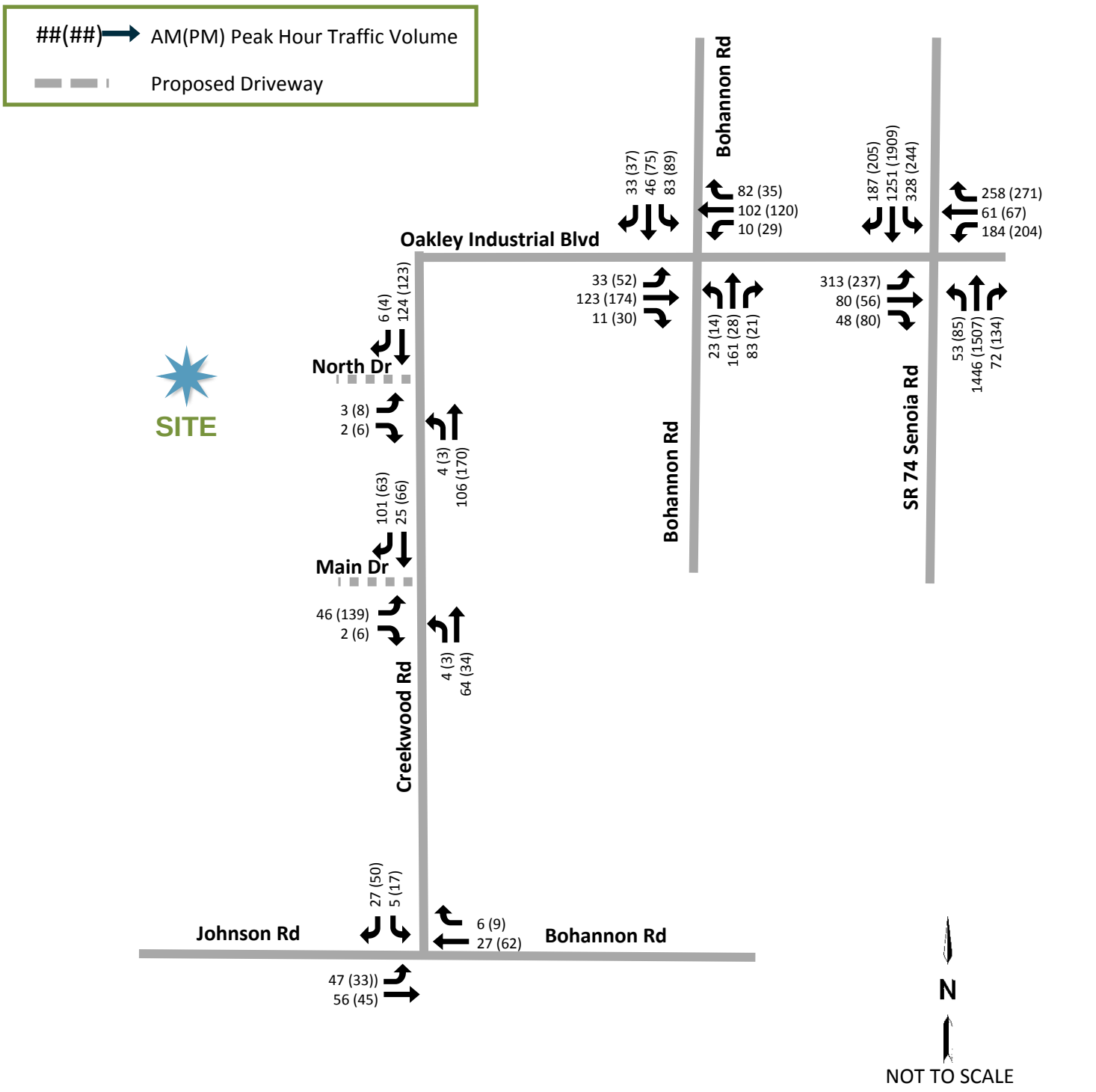
*with the planned dual eastbound Oakley Industrial Blvd left-turn lanes

As can be seen in Table 4, the site driveways' intersections and the existing intersections studied are expected to operate adequately in the weekday peak hours with the project trips in 2019 with existing and planned traffic control and lane configurations. The site access intersections are also expected to operate adequately with combined turning and through lanes on the adjacent streets and exiting the site controlled by stop signs.

Although the intersection of Oakley Industrial Boulevard at Senoia Road currently operates an acceptable overall intersection Level of Service (LOS) "D", and is expected to continue to operate at LOS "D" in 2019 with and without the new trips from the apartments and from Sabin Fairburn South Distribution Center, vehicles on several approach movements may experience longer average per vehicle peak hour delays than are desirable. Identification of specific movements experiencing the longer peak weekday hour delays is dependent upon the traffic signal phasing priorities. The SR 74 through movement volumes are much higher than turning or crossing movements, and would therefore be prioritized when designing the signal timing plans. Adding an Oakley Industrial Boulevard westbound right turn overlap signal phase and a second left turn lane to create dual left turn lanes, in addition to the planned additional (second) eastbound left turn lane, with appropriate optimization of the signal timing and phasing would be likely to help reduce the individual approach movement delays.

Capacity analyses worksheets showing the expected 2019 traffic conditions with the project trips for the existing and planned lane configurations and traffic control are included in the Appendix.

Figure 8: Build Traffic Volumes



7. Conclusions and Recommendations

No mitigating improvements were identified at the study intersections resulting from the additional trips expected to be generated by the planned 1,382,000 square feet (sf) of warehouse/distribution buildings to be located along the south side of I-85 east of Creekwood Road and Oakley Industrial Boulevard in the City of Fairburn, south Fulton County, Georgia when completed in 2019. The site will be accessed by two driveways on Creekwood Road, the main one opposite the southern driveway to the existing Clorox facility and the other will provide access to the personal vehicle parking area for a 40,000 sf building approximately 300 feet north of the main entrance.

The development is projected to generate approximately 2,322 daily trips, 168 AM, and 231 PM peak hour weekday trips. Approximately 25% of the peak hours and 38% daily new trips are expected to be trucks, with the remainder personal vehicles.

No programmed improvements were identified to be completed by 2019 in the study area.

The traffic study includes background traffic growth, trip generation, directional distribution, and traffic impacts at intersections within the area. The expected additional background trip volumes were calculated using a one percent (1%) annual growth rate applied for three (3) years to the existing intersection peak hour turning movement counts.

In addition to the site driveway and adjacent major existing intersections, intersection capacity analyses were also provided for the signalized intersection of Oakley Industrial Boulevard at Senoia Road (SR 74) for existing conditions, future 2019 background (No-Build) traffic volumes (including the new trips to be generated by the 308 apartments being constructed southeast of the intersection), and future 2019 with the Sabin Fairburn South Distribution Center trips conditions, with and without the planned second eastbound Oakley Industrial Boulevard left turn lane (to create dual left turn lanes).

Although the intersection of Oakley Industrial Boulevard at Senoia Road currently operates an acceptable overall intersection Level of Service (LOS) "D", and is expected to continue to operate at LOS "D" in 2019 with and without the new trips from the apartments and from Sabin Fairburn South Distribution Center, vehicles on several approach movements may experience longer average per vehicle peak hour delays than are desirable. Identification of specific movements experiencing the longer peak weekday hour delays is dependent upon the traffic signal phasing priorities. The SR 74 through movement volumes are much higher than turning or crossing movements, and would therefore be prioritized when designing the signal timing plans. Adding an Oakley Industrial Boulevard westbound right turn overlap signal phase and a second left turn lane to create dual left turn lanes, in addition to the planned additional (second) eastbound left turn lane, with appropriate optimization of the signal timing and phasing would be likely to help reduce the individual approach movement delays.

Appendix A: Counts

Project ID: 16-9479-008
Location: Bohannon Rd & Oakley Industrial Blvd
City: Palmetto

Day: Thursday
Date: 11/3/2016

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Bohannon Rd Southbound					Oakley Industrial Blvd Westbound					Bohannon Rd Northbound					Oakley Industrial Blvd Eastbound					
Start Time	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Int. Total
7:00 AM	4	7	35	0	46	17	11	1	0	29	18	24	0	0	42	2	44	4	0	50	167
7:15 AM	2	9	12	0	23	35	10	1	0	46	18	41	2	0	61	0	15	11	0	26	156
7:30 AM	3	20	20	0	43	10	8	4	0	22	22	45	1	0	68	1	18	3	0	22	155
7:45 AM	1	9	14	0	24	18	6	4	0	28	23	46	2	0	71	0	13	4	0	17	140
Total	10	45	81	0	136	80	35	10	0	125	81	156	5	0	242	3	90	22	0	115	618
8:00 AM	2	6	6	0	14	25	7	4	0	36	13	27	2	0	42	1	13	1	0	15	107
8:15 AM	2	6	11	0	19	12	12	2	0	26	13	22	0	0	35	0	10	2	0	12	92
8:30 AM	2	3	4	0	9	17	9	6	0	32	13	5	1	0	19	0	12	2	0	14	74
8:45 AM	0	7	8	0	15	15	13	3	0	31	12	8	2	0	22	0	6	1	0	7	75
Total	6	22	29	0	57	69	41	15	0	125	51	62	5	0	118	1	41	6	0	48	348
BREAK																					
4:00 PM	8	13	28	0	49	7	15	3	0	25	2	4	0	0	6	4	42	10	0	56	136
4:15 PM	3	14	23	0	40	9	15	11	0	35	6	10	1	0	17	0	12	3	0	15	107
4:30 PM	5	22	20	0	47	7	27	7	0	41	4	6	1	0	11	1	12	1	0	14	113
4:45 PM	6	24	15	0	45	11	20	7	0	38	8	7	1	0	16	1	15	5	0	21	120
Total	22	73	86	0	181	34	77	28	0	139	20	27	3	0	50	6	81	19	0	106	476
5:00 PM	5	31	15	0	51	2	13	7	0	22	6	9	1	0	16	2	8	0	0	10	99
5:15 PM	2	20	11	0	33	3	13	5	0	21	13	10	0	0	23	0	10	1	0	11	88
5:30 PM	7	23	20	0	50	6	15	8	0	29	4	3	2	0	9	3	9	1	0	13	101
5:45 PM	6	29	45	0	80	7	12	9	0	28	7	16	0	0	23	1	10	1	0	12	143
Total	20	103	91	0	214	18	53	29	0	100	30	38	3	0	71	6	37	3	0	46	431
Grand Total	58	243	287	0	588	201	206	82	0	489	182	283	16	0	481	16	249	50	0	315	1873
Apprch %	9.9	41.3	48.8	0.0		41.1	42.1	16.8	0.0		37.8	58.8	3.3	0.0		5.1	79.0	15.9	0.0		
Total %	3.1	13.0	15.3	0.0	31.4	10.7	11.0	4.4	0.0	26.1	9.7	15.1	0.9	0.0	25.7	0.9	13.3	2.7	0.0	16.8	
Cars, PU, Vans	58	243	287	0	588	201	206	82	0	489	182	283	16	0	481	16	249	50	0	315	1873
% Cars, PU, Vans	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Heavy Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0
%Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Project ID: 16-9479-008
Location: Bohannon Rd & Oakley Indu
City: Palmetto

PEAK HOURS

Day: Thursday
Date: 11/3/2016

AM

	Bohannon Rd Southbound				Oakley Industrial Blvd Westbound				Bohannon Rd Northbound				Oakley Industrial Blvd Eastbound				
Start Time	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM to 09:00 AM																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
7:00 AM	4	7	35	46	17	11	1	29	18	24	0	42	2	44	4	50	167
7:15 AM	2	9	12	23	35	10	1	46	18	41	2	61	0	15	11	26	156
7:30 AM	3	20	20	43	10	8	4	22	22	45	1	68	1	18	3	22	155
7:45 AM	1	9	14	24	18	6	4	28	23	46	2	71	0	13	4	17	140
Total Volume	10	45	81	136	80	35	10	125	81	156	5	242	3	90	22	115	618
% App. Total	7.4	33.1	59.6	100	64.0	28.0	8.0	100	33.5	64.5	2.1	100	2.6	78.3	19.1	100	
PHF				0.739				0.679				0.852				0.575	
Cars, PU, Vans	10	45	81	136	80	35	10	125	81	156	5	242	3	90	22	115	618
% Cars, PU, Vans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PM

	Bohannon Rd Southbound				Oakley Industrial Blvd Westbound				Bohannon Rd Northbound				Oakley Industrial Blvd Eastbound				
Start Time	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM to 06:00 PM																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
4:00 PM	8	13	28	49	7	15	3	25	2	4	0	6	4	42	10	56	136
4:15 PM	3	14	23	40	9	15	11	35	6	10	1	17	0	12	3	15	107
4:30 PM	5	22	20	47	7	27	7	41	4	6	1	11	1	12	1	14	113
4:45 PM	6	24	15	45	11	20	7	38	8	7	1	16	1	15	5	21	120
Total Volume	22	73	86	181	34	77	28	139	20	27	3	50	6	81	19	106	476
% App. Total	12.2	40.3	47.5	100	24.5	55.4	20.1	100	40.0	54.0	6.0	100	5.7	76.4	17.9	100	
PHF				0.923				0.848				0.735				0.473	

ITM Peak Hour Summary

Prepared by:

Bohannon Rd and Oakley Industrial Blvd , Palmetto

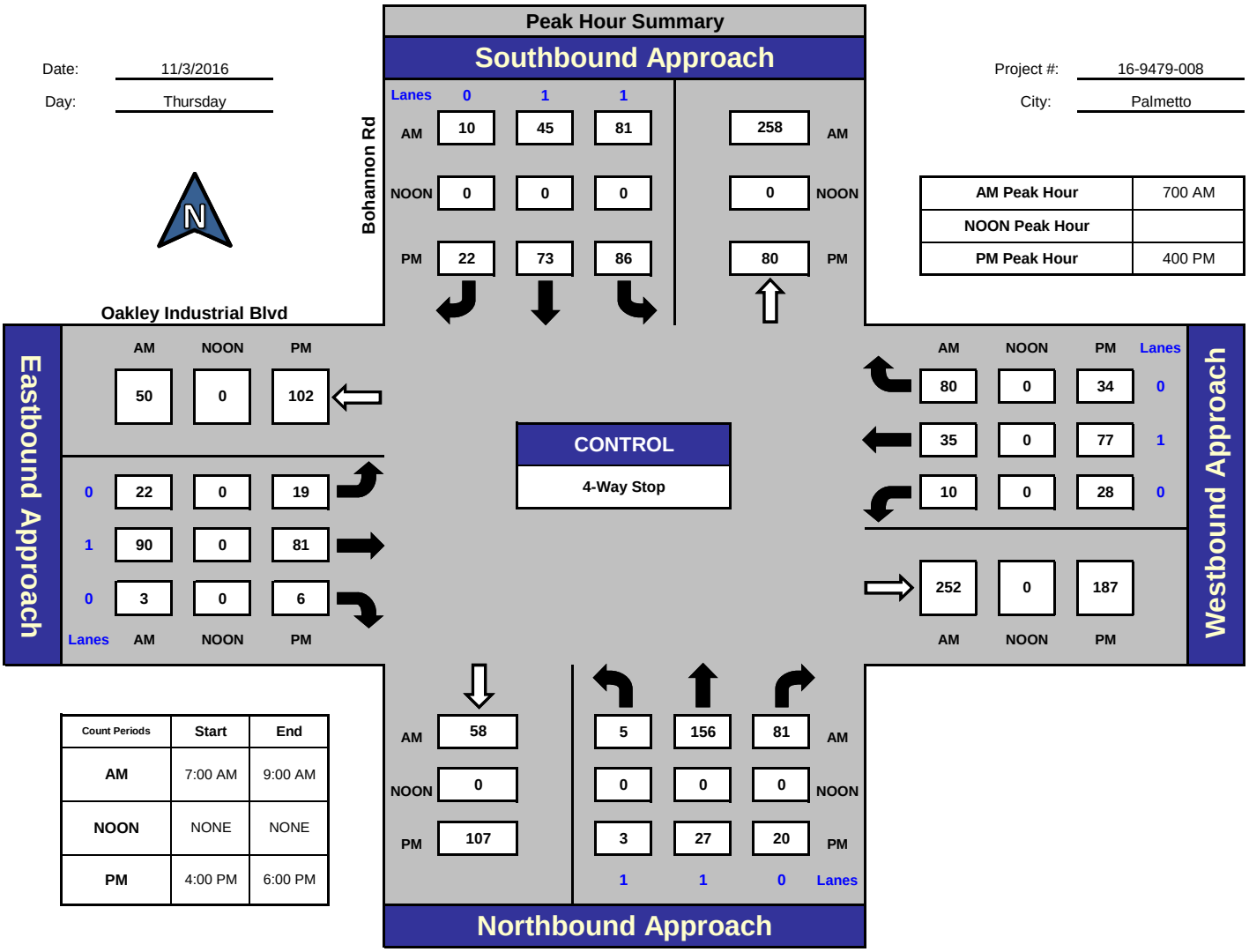
Date: 11/3/2016

Day: Thursday

Project #: 16-9479-008

City: Palmetto

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	400 PM



Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
	136	258	AM
	0	0	NOON
	181	80	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
50	0	102		125	0	139
115	0	106		252	0	187

	South Leg	
AM	58	242
NOON	0	0
PM	107	50

Total Volume Per Leg

North Leg	
394	AM
0	NOON
261	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
165	0	208	377	0	326

South Leg	
AM	300
NOON	0
PM	157

Project ID: 16-9479-007
Location: Creekwood Rd & Johnson Rd_Bohannon Rd
City: Palmetto

Day: Thursday
Date: 11/3/2016

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Creekwood Rd Southbound					Johnson Rd_Bohannon Rd Westbound					Creekwood Rd Northbound					Johnson Rd_Bohannon Rd Eastbound					
Start Time	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Int. Total
7:00 AM	10	0	1	0	11	0	2	0	0	2	0	0	0	0	0	0	8	16	0	24	37
7:15 AM	2	0	0	0	2	1	6	0	0	7	0	0	0	0	0	0	16	12	0	28	37
7:30 AM	4	0	0	0	4	1	8	0	0	9	0	0	0	0	0	0	14	6	0	20	33
7:45 AM	8	0	2	0	10	0	10	0	0	10	0	0	0	0	0	0	16	8	0	24	44
Total	24	0	3	0	27	2	26	0	0	28	0	0	0	0	0	0	54	42	0	96	151
8:00 AM	5	0	1	0	6	0	3	0	0	3	0	0	0	0	0	0	11	9	0	20	29
8:15 AM	3	0	0	0	3	2	4	0	0	6	0	0	0	0	0	0	10	6	0	16	25
8:30 AM	15	0	1	0	16	1	3	0	0	4	0	0	0	0	0	0	15	6	0	21	41
8:45 AM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	12	2	0	14	17
Total	24	0	2	0	26	3	12	0	0	15	0	0	0	0	0	0	48	23	0	71	112
BREAK																					
4:00 PM	12	0	3	0	15	5	12	0	0	17	0	0	0	0	0	0	7	4	0	11	43
4:15 PM	8	0	0	0	8	2	11	0	0	13	0	0	0	0	0	0	10	4	0	14	35
4:30 PM	20	0	2	0	22	4	11	0	0	15	0	0	0	0	0	0	6	10	0	16	53
4:45 PM	9	0	0	0	9	1	21	0	0	22	0	0	0	0	0	0	10	7	0	17	48
Total	49	0	5	0	54	12	55	0	0	67	0	0	0	0	0	0	33	25	0	58	179
5:00 PM	7	0	3	0	10	0	14	0	0	14	0	0	0	0	0	0	13	2	0	15	39
5:15 PM	9	0	2	0	11	2	15	0	0	17	0	0	0	0	0	0	10	6	0	16	44
5:30 PM	13	0	2	0	15	2	14	0	0	16	0	0	0	0	0	0	16	10	0	26	57
5:45 PM	14	0	4	0	18	2	19	0	0	21	0	0	0	0	0	0	5	11	0	16	55
Total	43	0	11	0	54	6	62	0	0	68	0	0	0	0	0	0	44	29	0	73	195
Grand Total	140	0	21	0	161	23	155	0	0	178	0	0	0	0	0	0	179	119	0	298	637
Apprch %	87.0	0.0	13.0	0.0		12.9	87.1	0.0	0.0		0.0	0.0	0.0	0.0		0.0	60.1	39.9	0.0		
Total %	22.0	0.0	3.3	0.0	25.3	3.6	24.3	0.0	0.0	27.9	0.0	0.0	0.0	0.0	0.0	0.0	28.1	18.7	0.0	46.8	
Cars, PU, Vans	140	0	21	0	161	23	155	0	0	178	0	0	0	0	0	0	179	119	0	298	637
% Cars, PU, Vans	100.0	0.0	100.0	0.0	100.0	100.0	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	100.0	100.0
Heavy Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0
%Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Project ID: 16-9479-007
Location: Creekwood Rd & Johnson R
City: Palmetto

PEAK HOURS

Day: Thursday
Date: 11/3/2016

AM

	Creekwood Rd Southbound				Johnson Rd_Bohannon Rd Westbound				Creekwood Rd Northbound				Johnson Rd_Bohannon Rd Eastbound				
Start Time	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM to 09:00 AM																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
7:00 AM	10	0	1	11	0	2	0	2	0	0	0	0	0	8	16	24	37
7:15 AM	2	0	0	2	1	6	0	7	0	0	0	0	0	16	12	28	37
7:30 AM	4	0	0	4	1	8	0	9	0	0	0	0	0	14	6	20	33
7:45 AM	8	0	2	10	0	10	0	10	0	0	0	0	0	16	8	24	44
Total Volume	24	0	3	27	2	26	0	28	0	0	0	0	0	54	42	96	151
% App. Total	88.9	0.0	11.1	100	7.1	92.9	0.0	100	0.0	0.0	0.0	0	0.0	56.3	43.8	100	
PHF				0.614				0.700				0.000				0.857	
Cars, PU, Vans	24	0	3	27	2	26	0	28	0	0	0	0	0	54	42	96	151
% Cars, PU, Vans	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	100.0
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PM

	Creekwood Rd Southbound				Johnson Rd_Bohannon Rd Westbound				Creekwood Rd Northbound				Johnson Rd_Bohannon Rd Eastbound				
Start Time	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM to 06:00 PM																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
5:00 PM	7	0	3	10	0	14	0	14	0	0	0	0	0	13	2	15	39
5:15 PM	9	0	2	11	2	15	0	17	0	0	0	0	0	10	6	16	44
5:30 PM	13	0	2	15	2	14	0	16	0	0	0	0	0	16	10	26	57
5:45 PM	14	0	4	18	2	19	0	21	0	0	0	0	0	5	11	16	55
Total Volume	43	0	11	54	6	62	0	68	0	0	0	0	0	44	29	73	195
% App. Total	79.6	0.0	20.4	100	8.8	91.2	0.0	100	0.0	0.0	0.0	0	0.0	60.3	39.7	100	
PHF				0.750				0.810				0.000				0.702	

ITM Peak Hour Summary

Prepared by:

Creekwood Rd and Johnson Rd_Bohannon Rd , Palmetto

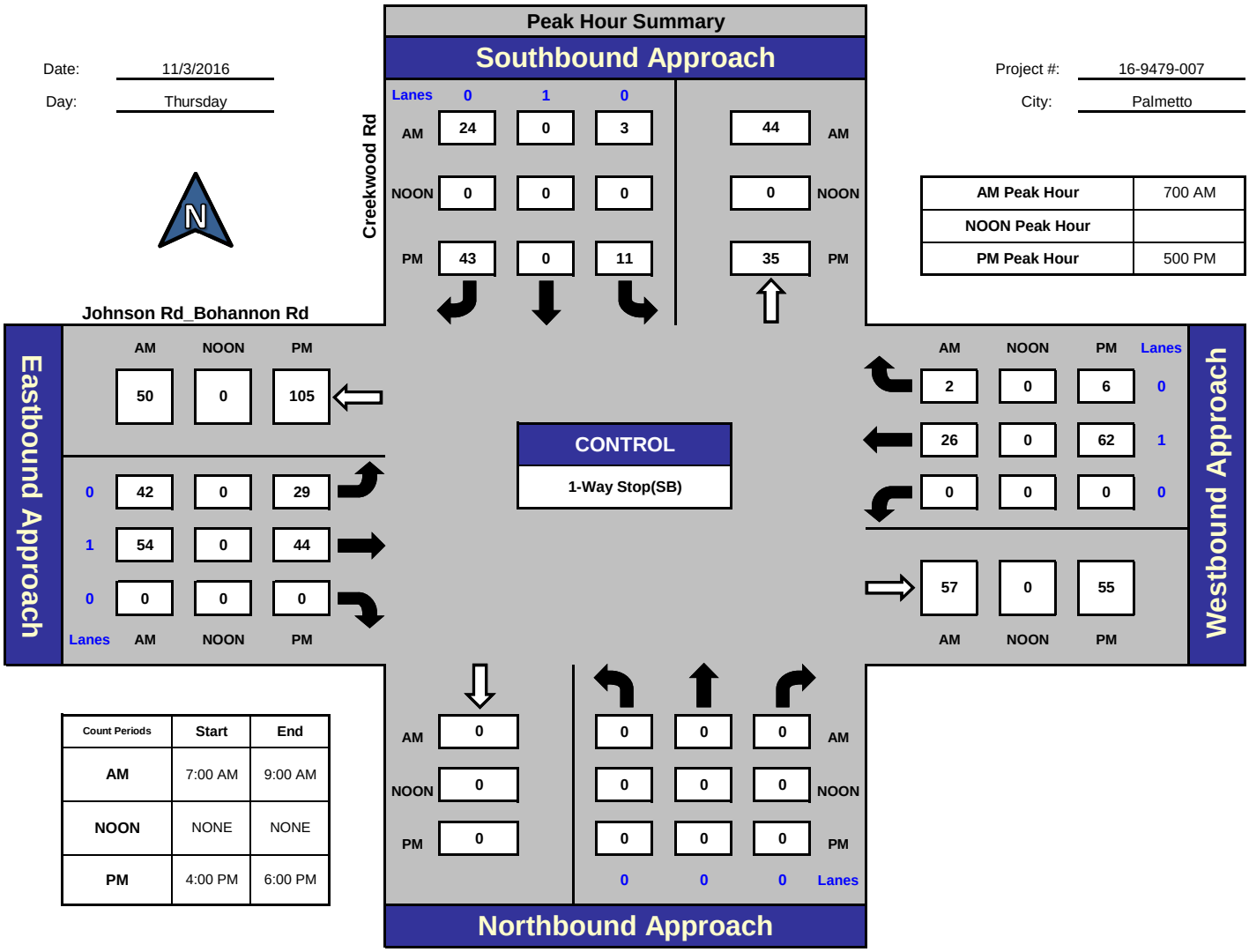
Date: 11/3/2016

Day: Thursday

Project #: 16-9479-007

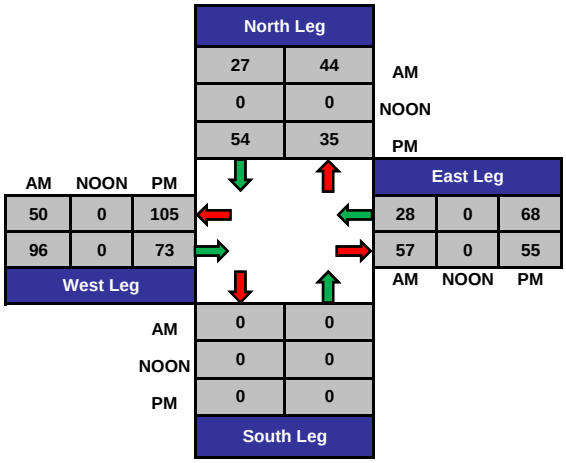
City: Palmetto

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	500 PM

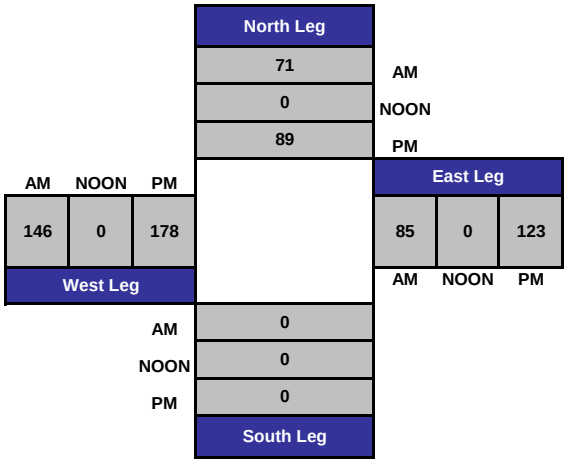


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Project ID: 16-9479-009
Location: SR 74 & Oakley Industrial Blvd
City: Palmetto

Day: Thursday
Date: 11/3/2016

Groups Printed - Cars, PU, Vans - Heavy Trucks

	SR 74 Southbound					Oakley Industrial Blvd Westbound					SR 74 Northbound					Oakley Industrial Blvd Eastbound					
Start Time	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Rgt	Thru	Left	Peds	App. Total	Int. Total
7:00 AM	28	224	51	0	303	53	24	34	0	111	10	313	1	0	324	4	26	72	0	102	840
7:15 AM	34	259	59	0	352	48	12	36	0	96	14	351	8	0	373	3	22	58	0	83	904
7:30 AM	23	337	90	0	450	65	13	38	0	116	17	379	4	0	400	8	15	40	0	63	1029
7:45 AM	30	297	96	0	423	69	15	44	0	128	16	344	6	0	366	5	22	60	0	87	1004
Total	115	1117	296	0	1528	235	64	152	0	451	57	1387	19	0	1463	20	85	230	0	335	3777
8:00 AM	30	321	73	0	424	68	17	61	0	146	23	329	6	0	358	2	13	36	0	51	979
8:15 AM	33	268	49	0	350	45	7	36	0	88	18	365	12	0	395	4	12	36	0	52	885
8:30 AM	24	327	81	0	432	51	12	35	0	98	21	355	13	0	389	6	9	34	0	49	968
8:45 AM	31	298	58	0	387	33	13	46	0	92	24	347	14	0	385	8	10	43	0	61	925
Total	118	1214	261	0	1593	197	49	178	0	424	86	1396	45	0	1527	20	44	149	0	213	3757
BREAK																					
4:00 PM	21	380	54	0	455	50	12	47	0	109	27	267	12	0	306	11	29	48	0	88	958
4:15 PM	20	356	65	0	441	53	15	44	0	112	33	319	8	0	360	10	29	47	0	86	999
4:30 PM	24	446	68	0	538	53	15	39	0	107	27	342	8	0	377	7	14	30	0	51	1073
4:45 PM	23	458	67	0	548	51	21	54	0	126	30	352	15	0	397	12	13	29	0	54	1125
Total	88	1640	254	0	1982	207	63	184	0	454	117	1280	43	0	1440	40	85	154	0	279	4155
5:00 PM	17	466	58	0	541	72	11	55	0	138	44	312	15	0	371	9	12	42	0	63	1113
5:15 PM	20	432	47	0	499	81	13	38	0	132	29	375	9	0	413	9	14	31	0	54	1098
5:30 PM	23	497	65	0	585	59	14	51	0	124	27	424	12	0	463	7	12	23	0	42	1214
5:45 PM	18	451	82	0	551	60	17	61	0	138	31	288	15	0	334	17	22	42	0	81	1104
Total	78	1846	252	0	2176	272	55	205	0	532	131	1399	51	0	1581	42	60	138	0	240	4529
Grand Total	399	5817	1063	0	7279	911	231	719	0	1861	391	5462	158	0	6011	122	274	671	0	1067	16218
Apprch %	5.5	79.9	14.6	0.0		49.0	12.4	38.6	0.0		6.5	90.9	2.6	0.0		11.4	25.7	62.9	0.0		
Total %	2.5	35.9	6.6	0.0	44.9	5.6	1.4	4.4	0.0	11.5	2.4	33.7	1.0	0.0	37.1	0.8	1.7	4.1	0.0	6.6	
Cars, PU, Vans	399	5817	1063	0	7279	911	231	719	0	1861	391	5462	158	0	6011	122	274	671	0	1067	16218
% Cars, PU, Vans	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0
Heavy Trucks	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0
%Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Project ID: 16-9479-009
Location: SR 74 & Oakley Industrial Bl
City: Palmetto

PEAK HOURS

Day: Thursday
Date: 11/3/2016

AM

	SR 74 Southbound				Oakley Industrial Blvd Westbound				SR 74 Northbound				Oakley Industrial Blvd Eastbound				
Start Time	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM to 09:00 AM																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
7:15 AM	34	259	59	352	48	12	36	96	14	351	8	373	3	22	58	83	904
7:30 AM	23	337	90	450	65	13	38	116	17	379	4	400	8	15	40	63	1029
7:45 AM	30	297	96	423	69	15	44	128	16	344	6	366	5	22	60	87	1004
8:00 AM	30	321	73	424	68	17	61	146	23	329	6	358	2	13	36	51	979
Total Volume	117	1214	318	1649	250	57	179	486	70	1403	24	1497	18	72	194	284	3916
% App. Total	7.1	73.6	19.3	100	51.4	11.7	36.8	100	4.7	93.7	1.6	100	6.3	25.4	68.3	100	
PHF				0.916				0.832				0.936				0.816	
Cars, PU, Vans	117	1214	318	1649	250	57	179	486	70	1403	24	1497	18	72	194	284	3916
% Cars, PU, Vans	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
%Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PM

	SR 74 Southbound				Oakley Industrial Blvd Westbound				SR 74 Northbound				Oakley Industrial Blvd Eastbound				
Start Time	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Rgt	Thru	Left	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM to 06:00 PM																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
4:45 PM	23	458	67	548	51	21	54	126	30	352	15	397	12	13	29	54	1125
5:00 PM	17	466	58	541	72	11	55	138	44	312	15	371	9	12	42	63	1113
5:15 PM	20	432	47	499	81	13	38	132	29	375	9	413	9	14	31	54	1098
5:30 PM	23	497	65	585	59	14	51	124	27	424	12	463	7	12	23	42	1214
Total Volume	83	1853	237	2173	263	59	198	520	130	1463	51	1644	37	51	125	213	4550
% App. Total	3.8	85.3	10.9	100	50.6	11.3	38.1	100	7.9	89.0	3.1	100	17.4	23.9	58.7	100	
PHF				0.929				0.942				0.888				0.845	

ITM Peak Hour Summary

Prepared by:

SR 74 and Oakley Industrial Blvd , Palmetto

Date: 11/3/2016

Day: Thursday

Project #: 16-9479-009

City: Palmetto

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Peak Hour Summary

Southbound Approach

Lanes	1	2	2		
AM	117	1214	318	1847	AM
NOON	0	0	0	0	NOON
PM	83	1853	237	1851	PM

SR 74

Oakley Industrial Blvd

Eastbound Approach

Lanes	AM	NOON	PM
	198	0	193
1	194	0	125
1	72	0	51
1	18	0	37

Westbound Approach

Lanes	AM	NOON	PM
1	250	0	263
1	57	0	59
1	179	0	198
	460	0	418

CONTROL

Signalized

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Northbound Approach

AM	1411	24	1403	70	AM
NOON	0	0	0	0	NOON
PM	2088	51	1463	130	PM
		1	2	1	Lanes

Total Ins & Outs

North Leg	
1649	1847
0	0
2173	1851

AM / NOON / PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
198	0	193	486	0	520
284	0	213	460	0	418

South Leg	
1411	1497
0	0
2088	1644

AM / NOON / PM

Total Volume Per Leg

North Leg
3496
0
4024

AM / NOON / PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
482	0	406	946	0	938

South Leg
2908
0
3732

AM / NOON / PM

Prepared by NDS/ATD

VOLUME

Creekwood Rd N/O Cleckler Rd

Day: Thursday
Date: 11/3/2016

City: Palmetto
Project #: GA16_9480_004

DAILY TOTALS	SB	NB	Total
	651	585	1,821

AM Period	NB		SB		TOTAL		PM Period	NB		SB		TOTAL	
00:00	3		2		5		12:00	3		3		6	
00:15	0		1		1		12:15	5		4		9	
00:30	1		2		3		12:30	3		4		7	
00:45	1	5	4	9	5	14	12:45	5	16	7	18	12	34
01:00	1		3		4		13:00	6		5		11	
01:15	0		0		0		13:15	10		10		20	
01:30	1		3		4		13:30	8		6		14	
01:45	0	2	2	8	2	10	13:45	1	25	9	30	10	55
02:00	1		0		1		14:00	4		4		8	
02:15	0		1		1		14:15	7		9		16	
02:30	2		3		5		14:30	6		10		16	
02:45	3	6	2	6	5	12	14:45	18	35	12	35	30	70
03:00	3		4		7		15:00	10		16		26	
03:15	1		6		7		15:15	8		11		19	
03:30	1		3		4		15:30	8		12		20	
03:45	3	8	1	14	4	22	15:45	7	33	11	50	18	83
04:00	0		1		1		16:00	11		12		23	
04:15	3		3		6		16:15	8		10		18	
04:30	3		0		3		16:30	7		16		23	
04:45	1	7	1	5	2	12	16:45	5	31	13	51	18	82
05:00	3		1		4		17:00	5		14		19	
05:15	5		2		7		17:15	9		14		23	
05:30	11		3		14		17:30	12		12		24	
05:45	14	33	5	11	19	44	17:45	5	31	20	60	25	91
06:00	13		6		19		18:00	12		9		21	
06:15	10		4		14		18:15	7		11		18	
06:30	18		15		33		18:30	9		16		25	
06:45	19	60	9	34	28	94	18:45	5	33	21	57	26	90
07:00	18		8		26		19:00	6		19		25	
07:15	9		5		14		19:15	21		16		37	
07:30	13		4		17		19:30	3		9		12	
07:45	20	60	6	23	26	83	19:45	8	38	6	50	14	88
08:00	8		5		13		20:00	0		8		8	
08:15	11		7		18		20:15	2		5		7	
08:30	11		7		18		20:30	3		8		11	
08:45	11	41	4	23	15	64	20:45	3	8	10	31	13	39
09:00	4		2		6		21:00	8		7		15	
09:15	5		7		12		21:15	4		12		16	
09:30	9		2		11		21:30	3		7		10	
09:45	4	22	1	12	5	34	21:45	1	16	7	33	8	49
10:00	6		5		11		22:00	4		2		6	
10:15	4		4		8		22:15	2		8		10	
10:30	4		6		10		22:30	4		2		6	
10:45	6	20	11	26	17	46	22:45	4	14	10	22	14	36
11:00	17		9		26		23:00	4		3		7	
11:15	5		9		14		23:15	2		3		5	
11:30	4		4		8		23:30	2		3		5	
11:45	6	32	7	29	13	61	23:45	1	9	5	14	6	23

Appendix B: Trip Generation Worksheet

Trip Generation

ITE Trip Generation, 9th Edition (2012)

Project	Fairburn South Distribution Center	***Project Number***	
Client			
Site	Creekwood Rd, Fairburn, GA	***1000 Square Feet***	***1382***
Land Use	***High-Cube Warehouse***	***ITE Code***	***152***

Weekdays

	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=1.68(#units)-trucks	**1,437**	**50%**	**50%**	**719**	**719**
Trucks = 0.64 (#units)	**885**			**443**	**443**
Totals=	2,322			1,162	1,162

AM Peak Hour: Weekdays

(peak hour of adjacent street)

	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=0.14(#units)-25.62-trucks	**127**	**69%**	**31%**	**88**	**39**
Trucks = 0.03 (#units)	**41**			**28**	**13**
Totals=	168			116	52

PM Peak Hour: Weekdays

(peak hour of adjacent street)

	Trips				
	Total Number	Percent In	Percent Out	Number In	Number Out
Personal Vehicles=0.13(#units)-3.73-trucks	**176**	**31%**	**69%**	**55**	**121**
Trucks = 0.04 (#units)	**55**			**17**	**38**
Totals=	231			72	159

Appendix C: Capacity Analysis Worksheets

Intersection
Int Delay, s/veh 3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	54	26	2	3	24
Future Vol, veh/h	42	54	26	2	3	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	63	35	3	4	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	38	0	-	0	198	37
Stage 1	-	-	-	-	37	-
Stage 2	-	-	-	-	161	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1572	-	-	-	791	1035
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	868	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1572	-	-	-	766	1035
Mov Cap-2 Maneuver	-	-	-	-	766	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	868	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1572	-	-	-	996
HCM Lane V/C Ratio	0.031	-	-	-	0.036
HCM Control Delay (s)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection
Int Delay, s/veh 3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	44	62	6	11	43
Future Vol, veh/h	29	44	62	6	11	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	81	81	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	59	77	7	15	57

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	84	0	-	0	218	81
Stage 1	-	-	-	-	81	-
Stage 2	-	-	-	-	137	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1513	-	-	-	770	979
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1513	-	-	-	749	979
Mov Cap-2 Maneuver	-	-	-	-	749	-
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1513	-	-	-	921
HCM Lane V/C Ratio	0.026	-	-	-	0.078
HCM Control Delay (s)	7.4	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	22	90	3	0	10	35	80	0	5	156	81
Future Vol, veh/h	0	22	90	3	0	10	35	80	0	5	156	81
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	29	120	4	0	13	47	107	0	6	184	95
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	1
HCM Control Delay	10.1	9.6	11.3
HCM LOS	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	2%	19%	8%	100%	0%
Vol Thru, %	64%	78%	28%	0%	82%
Vol Right, %	33%	3%	64%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	242	115	125	81	55
LT Vol	5	22	10	81	0
Through Vol	156	90	35	0	45
RT Vol	81	3	80	0	10
Lane Flow Rate	285	153	167	108	73
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.395	0.232	0.234	0.187	0.114
Departure Headway (Hd)	4.998	5.453	5.057	6.247	5.612
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	720	659	710	576	639
Service Time	3.021	3.483	3.085	3.973	3.338
HCM Lane V/C Ratio	0.396	0.232	0.235	0.188	0.114
HCM Control Delay	11.3	10.1	9.6	10.4	9.1
HCM Lane LOS	B	B	A	B	A
HCM 95th-tile Q	1.9	0.9	0.9	0.7	0.4

Intersection
Intersection Delay, s/veh
Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	81	45	10
Future Vol, veh/h	0	81	45	10
Peak Hour Factor	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	108	60	13
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	9.9
HCM LOS	A

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	19	81	6	0	28	77	34	0	3	27	20
Future Vol, veh/h	0	19	81	6	0	28	77	34	0	3	27	20
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	25	108	8	0	33	91	40	0	4	36	27
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	1
HCM Control Delay	9	9	8.3
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	6%	18%	20%	100%	0%
Vol Thru, %	54%	76%	55%	0%	77%
Vol Right, %	40%	6%	24%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	106	139	86	95
LT Vol	3	19	28	86	0
Through Vol	27	81	77	0	73
RT Vol	20	6	34	0	22
Lane Flow Rate	67	141	164	93	103
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.089	0.188	0.212	0.151	0.148
Departure Headway (Hd)	4.795	4.8	4.668	5.822	5.155
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	743	745	767	614	693
Service Time	2.854	2.845	2.711	3.573	2.906
HCM Lane V/C Ratio	0.09	0.189	0.214	0.151	0.149
HCM Control Delay	8.3	9	9	9.6	8.8
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0.7	0.8	0.5	0.5

Intersection
Intersection Delay, s/veh
Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	86	73	22
Future Vol, veh/h	0	86	73	22
Peak Hour Factor	0.75	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	93	79	24
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	9.2
HCM LOS	A

Intersection						
Int Delay, s/veh	3.6					

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	43	56	27	2	3	25
Future Vol, veh/h	43	56	27	2	3	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	50	65	36	3	4	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	39	0	-	0	203	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	165	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1571	-	-	-	786	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	864	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1571	-	-	-	760	1034
Mov Cap-2 Maneuver	-	-	-	-	760	-
Stage 1	-	-	-	-	952	-
Stage 2	-	-	-	-	864	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1571	-	-	-	996
HCM Lane V/C Ratio	0.032	-	-	-	0.037
HCM Control Delay (s)	7.4	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection
Int Delay, s/veh 3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	45	64	6	11	44
Future Vol, veh/h	30	45	64	6	11	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	81	81	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	60	79	7	15	59

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	86	0	-	0	223	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	140	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1510	-	-	-	765	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	887	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1510	-	-	-	744	976
Mov Cap-2 Maneuver	-	-	-	-	744	-
Stage 1	-	-	-	-	915	-
Stage 2	-	-	-	-	887	-

Approach	EB	WB	SB
HCM Control Delay, s	3	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1510	-	-	-	919
HCM Lane V/C Ratio	0.026	-	-	-	0.08
HCM Control Delay (s)	7.4	0	-	-	9.3
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	23	93	3	0	10	36	82	0	5	161	83
Future Vol, veh/h	0	23	93	3	0	10	36	82	0	5	161	83
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	31	124	4	0	13	48	109	0	6	189	98
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	1
HCM Control Delay	10.3	9.8	11.5
HCM LOS	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	2%	19%	8%	100%	0%
Vol Thru, %	65%	78%	28%	0%	82%
Vol Right, %	33%	3%	64%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	249	119	128	83	56
LT Vol	5	23	10	83	0
Through Vol	161	93	36	0	46
RT Vol	83	3	82	0	10
Lane Flow Rate	293	159	171	111	75
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.41	0.243	0.242	0.194	0.117
Departure Headway (Hd)	5.041	5.506	5.108	6.296	5.663
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	715	652	703	571	633
Service Time	3.069	3.539	3.143	4.027	3.394
HCM Lane V/C Ratio	0.41	0.244	0.243	0.194	0.118
HCM Control Delay	11.5	10.3	9.8	10.5	9.1
HCM Lane LOS	B	B	A	B	A
HCM 95th-tile Q	2	0.9	0.9	0.7	0.4

Intersection
Intersection Delay, s/veh
Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	83	46	10
Future Vol, veh/h	0	83	46	10
Peak Hour Factor	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	111	61	13
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	9.9
HCM LOS	A

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	20	83	6	0	29	79	35	0	3	28	21
Future Vol, veh/h	0	20	83	6	0	29	79	35	0	3	28	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	27	111	8	0	34	93	41	0	4	37	28
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	1
HCM Control Delay	9.1	9.1	8.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	6%	18%	20%	100%	0%
Vol Thru, %	54%	76%	55%	0%	77%
Vol Right, %	40%	6%	24%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	52	109	143	89	98
LT Vol	3	20	29	89	0
Through Vol	28	83	79	0	75
RT Vol	21	6	35	0	23
Lane Flow Rate	69	145	168	97	107
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.093	0.195	0.22	0.157	0.153
Departure Headway (Hd)	4.826	4.834	4.701	5.849	5.179
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	737	740	762	611	689
Service Time	2.891	2.881	2.744	3.605	2.936
HCM Lane V/C Ratio	0.094	0.196	0.22	0.159	0.155
HCM Control Delay	8.4	9.1	9.1	9.7	8.9
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.3	0.7	0.8	0.6	0.5

Intersection
Intersection Delay, s/veh
Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	89	75	23
Future Vol, veh/h	0	89	75	23
Peak Hour Factor	0.75	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	97	82	25
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	9.3
HCM LOS	A

Intersection							
Int Delay, s/veh	3.8						
Movement	EBL	EBT		WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	47	56		27	6	5	27
Future Vol, veh/h	47	56		27	6	5	27
Conflicting Peds, #/hr	0	0		0	0	0	0
Sign Control	Free	Free		Free	Free	Stop	Stop
RT Channelized	-	None		-	None	-	None
Storage Length	-	-		-	-	0	-
Veh in Median Storage, #	-	0		0	-	0	-
Grade, %	-	0		0	-	0	-
Peak Hour Factor	86	86		75	75	75	75
Heavy Vehicles, %	2	2		2	2	2	2
Mvmt Flow	55	65		36	8	7	36

Major/Minor	Major1			Major2		Minor2	
Conflicting Flow All	44	0		-	0	215	40
Stage 1	-	-		-	-	40	-
Stage 2	-	-		-	-	175	-
Critical Hdwy	4.12	-		-	-	6.42	6.22
Critical Hdwy Stg 1	-	-		-	-	5.42	-
Critical Hdwy Stg 2	-	-		-	-	5.42	-
Follow-up Hdwy	2.218	-		-	-	3.518	3.318
Pot Cap-1 Maneuver	1564	-		-	-	773	1031
Stage 1	-	-		-	-	982	-
Stage 2	-	-		-	-	855	-
Platoon blocked, %		-		-	-		
Mov Cap-1 Maneuver	1564	-		-	-	745	1031
Mov Cap-2 Maneuver	-	-		-	-	745	-
Stage 1	-	-		-	-	947	-
Stage 2	-	-		-	-	855	-

Approach	EB	WB	SB
HCM Control Delay, s	3.4	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1564	-	-	-	973
HCM Lane V/C Ratio	0.035	-	-	-	0.044
HCM Control Delay (s)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1

Intersection
Int Delay, s/veh 4.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	45	64	9	17	50
Future Vol, veh/h	33	45	64	9	17	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	81	81	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	60	79	11	23	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	90	0	-	0	233	85
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	148	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1505	-	-	-	755	974
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1505	-	-	-	732	974
Mov Cap-2 Maneuver	-	-	-	-	732	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	880	-

Approach	EB	WB	SB
HCM Control Delay, s	3.2	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1505	-	-	-	899
HCM Lane V/C Ratio	0.029	-	-	-	0.099
HCM Control Delay (s)	7.5	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	33	123	11	0	10	102	82	0	23	161	83
Future Vol, veh/h	0	33	123	11	0	10	102	82	0	23	161	83
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	44	164	15	0	13	136	109	0	27	189	98
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	1
HCM Control Delay	12.5	12.6	14.3
HCM LOS	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	9%	20%	5%	100%	0%
Vol Thru, %	60%	74%	53%	0%	58%
Vol Right, %	31%	7%	42%	0%	42%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	267	167	194	83	79
LT Vol	23	33	10	83	0
Through Vol	161	123	102	0	46
RT Vol	83	11	82	0	33
Lane Flow Rate	314	223	259	111	105
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.495	0.368	0.406	0.213	0.18
Departure Headway (Hd)	5.677	5.944	5.647	6.943	6.135
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	631	601	631	513	580
Service Time	3.752	4.028	3.728	4.727	3.919
HCM Lane V/C Ratio	0.498	0.371	0.41	0.216	0.181
HCM Control Delay	14.3	12.5	12.6	11.6	10.3
HCM Lane LOS	B	B	B	B	B
HCM 95th-tile Q	2.7	1.7	2	0.8	0.7

Intersection
Intersection Delay, s/veh
Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	83	46	33
Future Vol, veh/h	0	83	46	33
Peak Hour Factor	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	111	61	44
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	11
HCM LOS	B

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	52	174	30	0	29	120	35	0	14	28	21
Future Vol, veh/h	0	52	174	30	0	29	120	35	0	14	28	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.85	0.85	0.85	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	69	232	40	0	34	141	41	0	19	37	28
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	1	1	2
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	2	1	1
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	1	2	1
HCM Control Delay	12.9	10.7	9.7
HCM LOS	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	22%	20%	16%	100%	0%
Vol Thru, %	44%	68%	65%	0%	67%
Vol Right, %	33%	12%	19%	0%	33%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	256	184	89	112
LT Vol	14	52	29	89	0
Through Vol	28	174	120	0	75
RT Vol	21	30	35	0	37
Lane Flow Rate	84	341	216	97	122
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.134	0.485	0.315	0.178	0.199
Departure Headway (Hd)	5.76	5.111	5.239	6.633	5.89
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	622	707	686	542	610
Service Time	3.803	3.14	3.272	4.367	3.625
HCM Lane V/C Ratio	0.135	0.482	0.315	0.179	0.2
HCM Control Delay	9.7	12.9	10.7	10.8	10.1
HCM Lane LOS	A	B	B	B	B
HCM 95th-tile Q	0.5	2.7	1.3	0.6	0.7

Intersection
Intersection Delay, s/veh
Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations				
Traffic Vol, veh/h	0	89	75	37
Future Vol, veh/h	0	89	75	37
Peak Hour Factor	0.75	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	97	82	40
Number of Lanes	0	1	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	1
Conflicting Approach Left	WB
Conflicting Lanes Left	1
Conflicting Approach Right	EB
Conflicting Lanes Right	1
HCM Control Delay	10.4
HCM LOS	B

Intersection
Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	46	0	2	0	0	0	4	64	0	0	25	101
Future Vol, veh/h	46	0	2	0	0	0	4	64	0	0	25	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	61	0	3	0	0	0	5	85	0	0	33	135

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	196	196	101	197	263	85	168	0	0	85	0	0
Stage 1	101	101	-	95	95	-	-	-	-	-	-	-
Stage 2	95	95	-	102	168	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	763	699	954	762	642	974	1410	-	-	1512	-	-
Stage 1	905	811	-	912	816	-	-	-	-	-	-	-
Stage 2	912	816	-	904	759	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	761	696	954	757	639	974	1410	-	-	1512	-	-
Mov Cap-2 Maneuver	761	696	-	757	639	-	-	-	-	-	-	-
Stage 1	901	811	-	908	813	-	-	-	-	-	-	-
Stage 2	908	813	-	901	759	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	0	0.4	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1410	-	-	767	-	1512	-	-
HCM Lane V/C Ratio	0.004	-	-	0.083	-	-	-	-
HCM Control Delay (s)	7.6	0	-	10.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	-	0	-	-

Intersection
Int Delay, s/veh 5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	139	0	6	0	0	0	3	34	0	0	66	63
Future Vol, veh/h	139	0	6	0	0	0	3	34	0	0	66	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	185	0	8	0	0	0	4	45	0	0	88	84

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	183	183	130	187	225	45	172	0	0	45	0	0
Stage 1	130	130	-	53	53	-	-	-	-	-	-	-
Stage 2	53	53	-	134	172	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	778	711	920	774	674	1025	1405	-	-	1563	-	-
Stage 1	874	789	-	960	851	-	-	-	-	-	-	-
Stage 2	960	851	-	869	756	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	776	709	920	765	672	1025	1405	-	-	1563	-	-
Mov Cap-2 Maneuver	776	709	-	765	672	-	-	-	-	-	-	-
Stage 1	871	789	-	957	848	-	-	-	-	-	-	-
Stage 2	957	848	-	861	756	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	0	0.6	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1405	-	-	781	-	1563	-	-
HCM Lane V/C Ratio	0.003	-	-	0.248	-	-	-	-
HCM Control Delay (s)	7.6	0	-	11.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1	-	0	-	-

Intersection
Int Delay, s/veh 0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	2	4	106	124	6
Future Vol, veh/h	3	2	4	106	124	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	3	5	141	165	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	320	169	173	0	-	0
Stage 1	169	-	-	-	-	-
Stage 2	151	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	673	875	1404	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	877	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	670	875	1404	-	-	-
Mov Cap-2 Maneuver	670	-	-	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	877	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1404	-	739	-	-
HCM Lane V/C Ratio	0.004	-	0.009	-	-
HCM Control Delay (s)	7.6	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

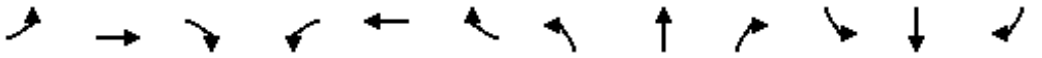
Intersection
Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	6	3	170	123	4
Future Vol, veh/h	8	6	3	170	123	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	8	4	227	164	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	402	167	169	0	-	0
Stage 1	167	-	-	-	-	-
Stage 2	235	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	604	877	1409	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	602	877	1409	-	-	-
Mov Cap-2 Maneuver	602	-	-	-	-	-
Stage 1	860	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1409	-	695	-	-
HCM Lane V/C Ratio	0.003	-	0.027	-	-
HCM Control Delay (s)	7.6	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	72	18	179	57	250	24	1403	70	318	1214	117
Future Volume (veh/h)	194	72	18	179	57	250	24	1403	70	318	1214	117
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1661	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	237	88	0	216	69	0	26	1493	0	346	1320	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.82	0.82	0.82	0.83	0.83	0.83	0.94	0.94	0.94	0.92	0.92	0.92
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	307	119	0	277	121	103	216	1580	675	404	1930	824
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
Prop Arrive On Green	0.13	0.07	0.00	0.13	0.07	0.00	0.02	0.46	0.00	0.13	0.56	0.00
Ln Grp Delay, s/veh	53.8	59.3	0.0	55.7	54.0	0.0	17.0	41.5	0.0	60.8	19.3	0.0
Ln Grp LOS	D	E		E	D		B	D		E	B	
Approach Vol, veh/h		325			285			1519			1666	
Approach Delay, s/veh		55.3			55.3			41.1			27.9	
Approach LOS		E			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	20.1	57.0	20.0	13.9	8.8	68.3	20.0	13.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	16.0	51.0	14.0	15.0	11.0	56.0	14.0	15.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	13.8	48.0	16.0	7.8	2.9	32.3	16.0	6.4
Green Ext Time (g_e), s	0.3	2.3	0.0	0.2	0.0	9.8	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.55	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.15	0.00	0.00	1.00	0.04

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		1616	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1661		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0

Grp Vol (v), veh/h	346	0	216	0	26	0	237	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1616	0
Q Serve Time (g_s), s	11.8	0.0	14.0	0.0	0.9	0.0	14.0	0.0
Cycle Q Clear Time (g_c), s	11.8	0.0	14.0	0.0	0.9	0.0	14.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1108	0	384	0	1208	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	7.9	0.0	51.0	0.0	7.9	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.2	0.0	32.0	0.0	3.6	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.2	0.0	1.4	0.0	2.9	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	404	0	277	0	216	0	307	0
V/C Ratio (X)	0.86	0.00	0.78	0.00	0.12	0.00	0.77	0.00
Avail Cap (c_a), veh/h	460	0	277	0	339	0	307	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	47.5	0.0	42.2	0.0	16.7	0.0	42.4	0.0
Incr Delay (d2), s/veh	13.4	0.0	13.4	0.0	0.2	0.0	11.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	60.8	0.0	55.7	0.0	17.0	0.0	53.8	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	0.8	0.0	0.4	0.0	1.0	0.0
2nd-Term Q (Q2), veh/ln	0.8	0.0	1.0	0.0	0.0	0.0	1.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.9	0.0	1.8	0.0	0.4	0.0	1.9	0.0
%ile Storage Ratio (RQ%)	0.38	0.00	0.32	0.00	0.04	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1493	0	88	0	1320	0	69
Grp Sat Flow (s), veh/h/ln	0	1719	0	1661	0	1719	0	1696
Q Serve Time (g_s), s	0.0	46.0	0.0	5.8	0.0	30.3	0.0	4.4
Cycle Q Clear Time (g_c), s	0.0	46.0	0.0	5.8	0.0	30.3	0.0	4.4
Lane Grp Cap (c), veh/h	0	1580	0	119	0	1930	0	121
V/C Ratio (X)	0.00	0.95	0.00	0.74	0.00	0.68	0.00	0.57
Avail Cap (c_a), veh/h	0	1580	0	224	0	1930	0	229
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.7	0.0	50.5	0.0	17.3	0.0	49.9
Incr Delay (d2), s/veh	0.0	12.9	0.0	8.8	0.0	2.0	0.0	4.2
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	41.5	0.0	59.3	0.0	19.3	0.0	54.0
1st-Term Q (Q1), veh/ln	0.0	21.8	0.0	2.6	0.0	14.3	0.0	2.1
2nd-Term Q (Q2), veh/ln	0.0	2.8	0.0	0.3	0.0	0.5	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	24.6	0.0	2.9	0.0	14.8	0.0	2.2
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.10	0.00	0.22	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	675	0	0	0	824	0	103
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	675	0	0	0	824	0	195
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		37.6						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	51	37	198	59	263	51	1463	130	237	1853	83
Future Volume (veh/h)	125	51	37	198	59	263	51	1463	130	237	1853	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1623	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	147	60	0	211	63	0	57	1644	0	255	1992	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.85	0.85	0.85	0.94	0.94	0.94	0.89	0.89	0.89	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	185	90	0	183	125	106	149	1967	840	290	2151	918
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
Prop Arrive On Green	0.05	0.06	0.00	0.06	0.07	0.00	0.04	0.57	0.00	0.09	0.63	0.00
Ln Grp Delay, s/veh	71.1	59.2	0.0	163.5	52.2	0.0	26.0	23.7	0.0	74.6	26.7	0.0
Ln Grp LOS	E	E		F	D		C	C		E	C	
Approach Vol, veh/h		207			274			1701			2247	
Approach Delay, s/veh		67.6			137.9			23.8			32.2	
Approach LOS		E			F			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.0	69.0	13.0	12.1	10.1	74.9	11.0	14.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	10.0	63.0	7.0	16.0	5.0	68.0	5.0	18.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	10.7	45.2	9.0	6.0	3.5	58.8	7.0	5.9
Green Ext Time (g_e), s	0.0	10.8	0.0	0.1	0.0	7.6	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.83	1.00	0.99	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.01	1.00	0.00	1.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		1616	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1623		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0

Grp Vol (v), veh/h	255	0	211	0	57	0	147	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1616	0
Q Serve Time (g_s), s	8.7	0.0	7.0	0.0	1.5	0.0	5.0	0.0
Cycle Q Clear Time (g_c), s	8.7	0.0	7.0	0.0	1.5	0.0	5.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1137	0	200	0	1215	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	6.1	0.0	63.0	0.0	6.1	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.1	0.0	12.1	0.0	4.2	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.1	0.0	12.1	0.0	4.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	290	0	183	0	149	0	185	0
V/C Ratio (X)	0.88	0.00	1.15	0.00	0.38	0.00	0.80	0.00
Avail Cap (c_a), veh/h	290	0	183	0	162	0	185	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	49.5	0.0	49.9	0.0	24.4	0.0	50.1	0.0
Incr Delay (d2), s/veh	25.2	0.0	113.6	0.0	1.6	0.0	21.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.6	0.0	163.5	0.0	26.0	0.0	71.1	0.0
1st-Term Q (Q1), veh/ln	3.8	0.0	2.7	0.0	1.0	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	5.8	0.0	0.1	0.0	1.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	4.8	0.0	8.4	0.0	1.1	0.0	3.3	0.0
%ile Storage Ratio (RQ%)	0.31	0.00	1.49	0.00	0.10	0.00	0.44	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1644	0	60	0	1992	0	63
Grp Sat Flow (s), veh/h/ln	0	1719	0	1623	0	1719	0	1696
Q Serve Time (g_s), s	0.0	43.2	0.0	4.0	0.0	56.8	0.0	3.9
Cycle Q Clear Time (g_c), s	0.0	43.2	0.0	4.0	0.0	56.8	0.0	3.9
Lane Grp Cap (c), veh/h	0	1967	0	90	0	2151	0	125
V/C Ratio (X)	0.00	0.84	0.00	0.67	0.00	0.93	0.00	0.50
Avail Cap (c_a), veh/h	0	1967	0	236	0	2151	0	277
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.3	0.0	51.0	0.0	18.4	0.0	49.1
Incr Delay (d2), s/veh	0.0	4.4	0.0	8.2	0.0	8.4	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.7	0.0	59.2	0.0	26.7	0.0	52.2
1st-Term Q (Q1), veh/ln	0.0	20.3	0.0	1.8	0.0	26.6	0.0	1.8
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	0.2	0.0	2.5	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	21.5	0.0	2.0	0.0	29.1	0.0	1.9
%ile Storage Ratio (RQ%)	0.00	0.20	0.00	0.08	0.00	0.44	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	840	0	0	0	918	0	106
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	840	0	0	0	918	0	236
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay		37.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	293	80	38	184	61	258	30	1446	72	328	1251	144
Future Volume (veh/h)	293	80	38	184	61	258	30	1446	72	328	1251	144
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1640	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	357	98	0	222	73	0	32	1538	0	357	1360	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.82	0.82	0.82	0.83	0.83	0.83	0.94	0.94	0.94	0.92	0.92	0.92
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	323	142	0	278	102	87	206	1615	690	361	1908	815
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
Prop Arrive On Green	0.15	0.09	0.00	0.12	0.06	0.00	0.03	0.47	0.00	0.11	0.56	0.00
Ln Grp Delay, s/veh	126.9	56.9	0.0	60.9	61.8	0.0	17.8	42.8	0.0	95.2	21.1	0.0
Ln Grp LOS	F	E		E	E		B	D		F	C	
Approach Vol, veh/h		455			295			1570			1717	
Approach Delay, s/veh		111.8			61.1			42.3			36.5	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	19.0	60.0	20.0	15.9	9.2	69.8	23.0	12.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	13.0	54.0	14.0	15.0	5.0	62.0	17.0	12.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	14.8	51.3	16.0	8.7	3.1	35.5	19.0	6.9
Green Ext Time (g_e), s	0.0	2.1	0.0	0.2	0.0	10.7	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.64	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.34	1.00	0.00	1.00	0.82

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		1616	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1640		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0

Grp Vol (v), veh/h	357	0	222	0	32	0	357	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1616	0
Q Serve Time (g_s), s	12.8	0.0	14.0	0.0	1.1	0.0	17.0	0.0
Cycle Q Clear Time (g_c), s	12.8	0.0	14.0	0.0	1.1	0.0	17.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1098	0	370	0	1204	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	6.9	0.0	54.0	0.0	6.9	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.3	0.0	30.3	0.0	2.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	3.3	0.0	2.2	0.0	2.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	361	0	278	0	206	0	323	0
V/C Ratio (X)	0.99	0.00	0.80	0.00	0.16	0.00	1.10	0.00
Avail Cap (c_a), veh/h	361	0	278	0	232	0	323	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.9	0.0	45.7	0.0	17.5	0.0	46.0	0.0
Incr Delay (d2), s/veh	44.3	0.0	15.2	0.0	0.3	0.0	80.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	95.2	0.0	60.9	0.0	17.8	0.0	126.9	0.0
1st-Term Q (Q1), veh/ln	5.7	0.0	1.2	0.0	0.5	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.2	0.0	1.2	0.0	0.0	0.0	7.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.9	0.0	2.4	0.0	0.5	0.0	7.3	0.0
%ile Storage Ratio (RQ%)	0.50	0.00	0.43	0.00	0.05	0.00	0.97	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1538	0	98	0	1360	0	73
Grp Sat Flow (s), veh/h/ln	0	1719	0	1640	0	1719	0	1696
Q Serve Time (g_s), s	0.0	49.3	0.0	6.7	0.0	33.5	0.0	4.9
Cycle Q Clear Time (g_c), s	0.0	49.3	0.0	6.7	0.0	33.5	0.0	4.9
Lane Grp Cap (c), veh/h	0	1615	0	142	0	1908	0	102
V/C Ratio (X)	0.00	0.95	0.00	0.69	0.00	0.71	0.00	0.71
Avail Cap (c_a), veh/h	0	1615	0	214	0	1908	0	177
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.2	0.0	51.0	0.0	18.8	0.0	53.0
Incr Delay (d2), s/veh	0.0	13.6	0.0	5.9	0.0	2.3	0.0	8.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.8	0.0	56.9	0.0	21.1	0.0	61.8
1st-Term Q (Q1), veh/ln	0.0	23.3	0.0	3.0	0.0	15.9	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	3.1	0.0	0.2	0.0	0.6	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	26.3	0.0	3.3	0.0	16.5	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.11	0.00	0.25	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	690	0	0	0	815	0	87
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	690	0	0	0	815	0	151
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		49.1						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	56	48	204	67	271	71	1507	134	244	1909	178
Future Volume (veh/h)	178	56	48	204	67	271	71	1507	134	244	1909	178
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1617	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	209	66	0	217	71	0	80	1693	0	262	2053	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.85	0.85	0.85	0.94	0.94	0.94	0.89	0.89	0.89	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	197	95	0	192	115	97	140	1954	834	283	2119	905
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
Prop Arrive On Green	0.06	0.06	0.00	0.07	0.07	0.00	0.04	0.57	0.00	0.09	0.62	0.00
Ln Grp Delay, s/veh	132.4	60.8	0.0	154.2	56.4	0.0	31.8	26.2	0.0	85.1	34.0	0.0
Ln Grp LOS	F	E		F	E		C	C		F	C	
Approach Vol, veh/h		275			288			1773			2315	
Approach Delay, s/veh		115.2			130.1			26.4			39.8	
Approach LOS		F			F			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.0	70.0	14.0	12.6	10.6	75.4	13.0	13.6
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	10.0	64.0	8.0	14.0	5.0	69.0	7.0	15.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	11.2	49.2	10.0	6.5	4.3	66.0	9.0	6.6
Green Ext Time (g_e), s	0.0	9.8	0.0	0.1	0.0	2.7	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.92	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.10	1.00	0.00	1.00	0.05

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		1616	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1617		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0

Grp Vol (v), veh/h	262	0	217	0	80	0	209	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1616	0
Q Serve Time (g_s), s	9.2	0.0	8.0	0.0	2.3	0.0	7.0	0.0
Cycle Q Clear Time (g_c), s	9.2	0.0	8.0	0.0	2.3	0.0	7.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1130	0	189	0	1206	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	6.6	0.0	64.0	0.0	6.6	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.1	0.0	5.4	0.0	3.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.1	0.0	5.4	0.0	3.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	283	0	192	0	140	0	197	0
V/C Ratio (X)	0.92	0.00	1.13	0.00	0.57	0.00	1.06	0.00
Avail Cap (c_a), veh/h	283	0	192	0	146	0	197	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.9	0.0	50.3	0.0	26.9	0.0	50.9	0.0
Incr Delay (d2), s/veh	34.2	0.0	103.9	0.0	4.9	0.0	81.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	85.1	0.0	154.2	0.0	31.8	0.0	132.4	0.0
1st-Term Q (Q1), veh/ln	4.0	0.0	2.6	0.0	1.4	0.0	3.0	0.0
2nd-Term Q (Q2), veh/ln	1.3	0.0	5.5	0.0	0.2	0.0	4.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.4	0.0	8.2	0.0	1.6	0.0	7.4	0.0
%ile Storage Ratio (RQ%)	0.34	0.00	1.45	0.00	0.15	0.00	0.99	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	6.2	0.0	0.0	0.0	3.1	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1693	0	66	0	2053	0	71
Grp Sat Flow (s), veh/h/ln	0	1719	0	1617	0	1719	0	1696
Q Serve Time (g_s), s	0.0	47.2	0.0	4.5	0.0	64.0	0.0	4.6
Cycle Q Clear Time (g_c), s	0.0	47.2	0.0	4.5	0.0	64.0	0.0	4.6
Lane Grp Cap (c), veh/h	0	1954	0	95	0	2119	0	115
V/C Ratio (X)	0.00	0.87	0.00	0.69	0.00	0.97	0.00	0.62
Avail Cap (c_a), veh/h	0	1954	0	201	0	2119	0	226
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.7	0.0	52.0	0.0	20.6	0.0	51.1
Incr Delay (d2), s/veh	0.0	5.5	0.0	8.8	0.0	13.5	0.0	5.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.2	0.0	60.8	0.0	34.0	0.0	56.4
1st-Term Q (Q1), veh/ln	0.0	22.1	0.0	2.0	0.0	29.9	0.0	2.1
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.2	0.0	4.0	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	23.6	0.0	2.2	0.0	33.9	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.22	0.00	0.09	0.00	0.51	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	834	0	0	0	905	0	97
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	834	0	0	0	905	0	192
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		44.8						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	80	48	184	61	258	53	1446	72	328	1251	187
Future Volume (veh/h)	313	80	48	184	61	258	53	1446	72	328	1251	187
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1631	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	382	98	0	222	73	0	56	1538	0	357	1360	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.82	0.82	0.82	0.83	0.83	0.83	0.94	0.94	0.94	0.92	0.92	0.92
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	323	141	0	277	102	87	215	1615	690	361	1880	803
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
Prop Arrive On Green	0.15	0.09	0.00	0.12	0.06	0.00	0.04	0.47	0.00	0.11	0.55	0.00
Ln Grp Delay, s/veh	154.7	57.0	0.0	61.1	61.8	0.0	18.4	42.8	0.0	95.2	22.0	0.0
Ln Grp LOS	F	E		E	E		B	D		F	C	
Approach Vol, veh/h		480			295			1594			1717	
Approach Delay, s/veh		134.7			61.2			42.0			37.2	
Approach LOS		F			E			D			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	19.0	60.0	20.0	15.9	10.2	68.8	23.0	12.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	13.0	54.0	14.0	15.0	6.0	61.0	17.0	12.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	14.8	51.3	16.0	8.7	4.0	36.1	19.0	6.9
Green Ext Time (g_e), s	0.0	2.1	0.0	0.2	0.0	10.4	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.83	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.35	1.00	0.00	1.00	0.82

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		1616	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1631		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0

Grp Vol (v), veh/h	357	0	222	0	56	0	382	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1616	0
Q Serve Time (g_s), s	12.8	0.0	14.0	0.0	2.0	0.0	17.0	0.0
Cycle Q Clear Time (g_c), s	12.8	0.0	14.0	0.0	2.0	0.0	17.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1098	0	370	0	1204	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	6.9	0.0	54.0	0.0	6.9	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.2	0.0	28.7	0.0	2.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	3.2	0.0	4.5	0.0	2.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	361	0	277	0	215	0	323	0
V/C Ratio (X)	0.99	0.00	0.80	0.00	0.26	0.00	1.18	0.00
Avail Cap (c_a), veh/h	361	0	277	0	241	0	323	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	50.9	0.0	45.7	0.0	17.8	0.0	46.0	0.0
Incr Delay (d2), s/veh	44.3	0.0	15.3	0.0	0.6	0.0	108.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	95.2	0.0	61.1	0.0	18.4	0.0	154.7	0.0
1st-Term Q (Q1), veh/ln	5.7	0.0	1.2	0.0	0.9	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	2.2	0.0	1.2	0.0	0.0	0.0	9.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	7.9	0.0	2.4	0.0	0.9	0.0	9.8	0.0
%ile Storage Ratio (RQ%)	0.50	0.00	0.43	0.00	0.09	0.00	1.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1538	0	98	0	1360	0	73
Grp Sat Flow (s), veh/h/ln	0	1719	0	1631	0	1719	0	1696
Q Serve Time (g_s), s	0.0	49.3	0.0	6.7	0.0	34.1	0.0	4.9
Cycle Q Clear Time (g_c), s	0.0	49.3	0.0	6.7	0.0	34.1	0.0	4.9
Lane Grp Cap (c), veh/h	0	1615	0	141	0	1880	0	102
V/C Ratio (X)	0.00	0.95	0.00	0.69	0.00	0.72	0.00	0.71
Avail Cap (c_a), veh/h	0	1615	0	213	0	1880	0	177
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	29.2	0.0	51.0	0.0	19.5	0.0	53.0
Incr Delay (d2), s/veh	0.0	13.6	0.0	6.0	0.0	2.5	0.0	8.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	42.8	0.0	57.0	0.0	22.0	0.0	61.8
1st-Term Q (Q1), veh/ln	0.0	23.3	0.0	3.0	0.0	16.1	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	3.1	0.0	0.2	0.0	0.6	0.0	0.3

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	26.3	0.0	3.3	0.0	16.7	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.12	0.00	0.25	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	690	0	0	0	803	0	87
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	690	0	0	0	803	0	151
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		52.3						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	56	80	204	67	271	85	1507	134	244	1909	205
Future Volume (veh/h)	237	56	80	204	67	271	85	1507	134	244	1909	205
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1596	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	279	66	0	217	71	0	96	1693	0	262	2053	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.85	0.85	0.85	0.94	0.94	0.94	0.89	0.89	0.89	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	242	93	0	236	128	109	129	1884	805	273	2038	870
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
Prop Arrive On Green	0.09	0.06	0.00	0.10	0.08	0.00	0.04	0.55	0.00	0.09	0.59	0.00
Ln Grp Delay, s/veh	156.6	63.6	0.0	86.2	55.9	0.0	47.9	30.8	0.0	96.3	45.6	0.0
Ln Grp LOS	F	E		F	E		D	C		F	F	
Approach Vol, veh/h		345			288			1789			2315	
Approach Delay, s/veh		138.8			78.7			31.7			51.3	
Approach LOS		F			E			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.0	70.0	18.0	12.8	10.8	75.2	16.0	14.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	10.0	64.0	12.0	10.0	5.0	69.0	10.0	12.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	11.6	53.2	14.0	6.7	5.0	71.2	12.0	6.7
Green Ext Time (g_e), s	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.73

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		1616	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1596		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)	
Lanes in Grp	2	0	1	0	1	0	1	0

Grp Vol (v), veh/h	262	0	217	0	96	0	279	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1616	0
Q Serve Time (g_s), s	9.6	0.0	12.0	0.0	3.0	0.0	10.0	0.0
Cycle Q Clear Time (g_c), s	9.6	0.0	12.0	0.0	3.0	0.0	10.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1130	0	189	0	1206	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	6.8	0.0	64.0	0.0	6.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.0	0.0	0.0	0.0	4.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.0	0.0	0.0	0.0	4.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	273	0	236	0	129	0	242	0
V/C Ratio (X)	0.96	0.00	0.92	0.00	0.74	0.00	1.15	0.00
Avail Cap (c_a), veh/h	273	0	236	0	132	0	242	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	53.2	0.0	49.2	0.0	28.0	0.0	51.3	0.0
Incr Delay (d2), s/veh	43.1	0.0	37.0	0.0	19.8	0.0	105.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	96.3	0.0	86.2	0.0	47.9	0.0	156.6	0.0
1st-Term Q (Q1), veh/ln	4.2	0.0	2.0	0.0	1.7	0.0	3.3	0.0
2nd-Term Q (Q2), veh/ln	1.6	0.0	2.4	0.0	0.7	0.0	7.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.8	0.0	4.4	0.0	2.4	0.0	10.4	0.0
%ile Storage Ratio (RQ%)	0.37	0.00	0.78	0.00	0.22	0.00	1.38	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	9.2	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1693	0	66	0	2053	0	71
Grp Sat Flow (s), veh/h/ln	0	1719	0	1596	0	1719	0	1696
Q Serve Time (g_s), s	0.0	51.2	0.0	4.7	0.0	69.2	0.0	4.7
Cycle Q Clear Time (g_c), s	0.0	51.2	0.0	4.7	0.0	69.2	0.0	4.7
Lane Grp Cap (c), veh/h	0	1884	0	93	0	2038	0	128
V/C Ratio (X)	0.00	0.90	0.00	0.71	0.00	1.01	0.00	0.56
Avail Cap (c_a), veh/h	0	1884	0	137	0	2038	0	174
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.5	0.0	54.0	0.0	23.8	0.0	52.1
Incr Delay (d2), s/veh	0.0	7.3	0.0	9.6	0.0	21.8	0.0	3.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	30.8	0.0	63.6	0.0	45.6	0.0	55.9
1st-Term Q (Q1), veh/ln	0.0	24.2	0.0	2.1	0.0	32.5	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	1.9	0.0	0.2	0.0	6.2	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	26.1	0.0	2.3	0.0	38.7	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.09	0.00	0.58	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	805	0	0	0	870	0	109
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	805	0	0	0	870	0	148
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		51.9						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	313	80	48	184	61	258	53	1446	72	328	1251	187
Future Volume (veh/h)	313	80	48	184	61	258	53	1446	72	328	1251	187
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1631	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	382	98	0	222	73	0	56	1538	0	357	1360	0
Adj No. of Lanes	2	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.82	0.82	0.82	0.83	0.83	0.83	0.94	0.94	0.94	0.92	0.92	0.92
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	413	142	0	254	103	88	224	1630	696	392	1927	823
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
Prop Arrive On Green	0.13	0.09	0.00	0.11	0.06	0.00	0.04	0.47	0.00	0.12	0.56	0.00
Ln Grp Delay, s/veh	75.6	56.4	0.0	74.6	61.1	0.0	17.4	40.9	0.0	74.1	20.4	0.0
Ln Grp LOS	E	E		E	E		B	D		E	C	
Approach Vol, veh/h		480			295			1594			1717	
Approach Delay, s/veh		71.7			71.3			40.1			31.6	
Approach LOS		E			E			D			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	20.0	60.0	18.0	15.9	10.2	69.8	21.0	12.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	14.0	54.0	12.0	16.0	6.0	62.0	15.0	13.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	14.6	50.5	14.0	8.6	4.0	34.8	15.7	6.8
Green Ext Time (g_e), s	0.0	2.7	0.0	0.2	0.0	10.8	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.83	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.15	1.00	0.00	1.00	0.33

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		3134	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1631		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Prot)	
Lanes in Grp	2	0	1	0	1	0	2	0

Grp Vol (v), veh/h	357	0	222	0	56	0	382	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1567	0
Q Serve Time (g_s), s	12.6	0.0	12.0	0.0	2.0	0.0	13.7	0.0
Cycle Q Clear Time (g_c), s	12.6	0.0	12.0	0.0	2.0	0.0	13.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1098	0	370	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	6.9	0.0	54.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.3	0.0	31.1	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	3.3	0.0	4.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	392	0	254	0	224	0	413	0
V/C Ratio (X)	0.91	0.00	0.88	0.00	0.25	0.00	0.93	0.00
Avail Cap (c_a), veh/h	392	0	254	0	251	0	413	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	49.3	0.0	47.5	0.0	16.8	0.0	48.9	0.0
Incr Delay (d2), s/veh	24.8	0.0	27.1	0.0	0.6	0.0	26.7	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	74.1	0.0	74.6	0.0	17.4	0.0	75.6	0.0
1st-Term Q (Q1), veh/ln	5.6	0.0	2.0	0.0	0.9	0.0	5.9	0.0
2nd-Term Q (Q2), veh/ln	1.3	0.0	1.9	0.0	0.0	0.0	1.5	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.9	0.0	3.9	0.0	0.9	0.0	7.5	0.0
%ile Storage Ratio (RQ%)	0.44	0.00	0.69	0.00	0.08	0.00	0.99	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1538	0	98	0	1360	0	73
Grp Sat Flow (s), veh/h/ln	0	1719	0	1631	0	1719	0	1696
Q Serve Time (g_s), s	0.0	48.5	0.0	6.6	0.0	32.8	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	48.5	0.0	6.6	0.0	32.8	0.0	4.8
Lane Grp Cap (c), veh/h	0	1630	0	142	0	1927	0	103
V/C Ratio (X)	0.00	0.94	0.00	0.69	0.00	0.71	0.00	0.71
Avail Cap (c_a), veh/h	0	1630	0	229	0	1927	0	194
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	28.5	0.0	50.5	0.0	18.2	0.0	52.5
Incr Delay (d2), s/veh	0.0	12.4	0.0	5.9	0.0	2.2	0.0	8.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	40.9	0.0	56.4	0.0	20.4	0.0	61.1
1st-Term Q (Q1), veh/ln	0.0	22.9	0.0	3.0	0.0	15.5	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	2.8	0.0	0.2	0.0	0.6	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.7	0.0	3.2	0.0	16.1	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.12	0.00	0.24	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	696	0	0	0	823	0	88
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	696	0	0	0	823	0	165
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		42.5						
HCM 2010 LOS		D						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	56	80	204	67	271	85	1507	134	244	1909	205
Future Volume (veh/h)	237	56	80	204	67	271	85	1507	134	244	1909	205
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1696	1596	1900	1583	1696	1696	1727	1810	1727	1727	1810	1727
Adj Flow Rate, veh/h	279	66	0	217	71	0	96	1693	0	262	2053	0
Adj No. of Lanes	2	1	0	1	1	1	1	2	1	2	2	1
Peak Hour Factor	0.85	0.85	0.85	0.94	0.94	0.94	0.89	0.89	0.89	0.93	0.93	0.93
Percent Heavy Veh, %	12	12	12	20	12	12	10	5	10	10	5	10
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	268	93	0	224	113	96	131	1913	817	273	2067	883
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
Prop Arrive On Green	0.09	0.06	0.00	0.09	0.07	0.00	0.04	0.56	0.00	0.09	0.60	0.00
Ln Grp Delay, s/veh	119.0	63.6	0.0	102.0	58.7	0.0	46.4	29.1	0.0	96.3	41.3	0.0
Ln Grp LOS	F	E		F	E		D	C		F	D	
Approach Vol, veh/h		345			288			1789			2315	
Approach Delay, s/veh		108.4			91.3			30.0			47.5	
Approach LOS		F			F			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	3.0	1.1	4.0	1.1	3.0	2.0	3.0
Phs Duration (G+Y+Rc), s	16.0	71.0	17.0	12.8	10.8	76.2	16.0	13.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green (Gmax), s	10.0	65.0	11.0	10.0	5.0	70.0	10.0	11.0
Max Allow Headway (MAH), s	3.7	4.9	3.8	4.9	3.7	4.9	3.7	4.9
Max Q Clear (g_c+I1), s	11.6	52.2	13.0	6.7	4.9	71.0	12.0	6.8
Green Ext Time (g_e), s	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.1
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	0.96	1.00	1.00	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	3191		1508		1645		3134	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3438		1596		3438		1696

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1468		0		1468		1442

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Pr/Pm)		(Prot)	
Lanes in Grp	2	0	1	0	1	0	2	0

Grp Vol (v), veh/h	262	0	217	0	96	0	279	0
Grp Sat Flow (s), veh/h/ln	1596	0	1508	0	1645	0	1567	0
Q Serve Time (g_s), s	9.6	0.0	11.0	0.0	2.9	0.0	10.0	0.0
Cycle Q Clear Time (g_c), s	9.6	0.0	11.0	0.0	2.9	0.0	10.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1130	0	189	0	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	6.8	0.0	65.0	0.0	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	2.0	0.0	1.2	0.0	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.0	0.0	1.2	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	273	0	224	0	131	0	268	0
V/C Ratio (X)	0.96	0.00	0.97	0.00	0.73	0.00	1.04	0.00
Avail Cap (c_a), veh/h	273	0	224	0	134	0	268	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	53.2	0.0	50.3	0.0	28.1	0.0	53.4	0.0
Incr Delay (d2), s/veh	43.1	0.0	51.8	0.0	18.3	0.0	65.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	96.3	0.0	102.0	0.0	46.4	0.0	119.0	0.0
1st-Term Q (Q1), veh/ln	4.2	0.0	2.4	0.0	1.7	0.0	4.3	0.0
2nd-Term Q (Q2), veh/ln	1.6	0.0	3.2	0.0	0.7	0.0	2.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.8	0.0	5.6	0.0	2.4	0.0	6.7	0.0
%ile Storage Ratio (RQ%)	0.37	0.00	0.99	0.00	0.22	0.00	0.90	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1693	0	66	0	2053	0	71
Grp Sat Flow (s), veh/h/ln	0	1719	0	1596	0	1719	0	1696
Q Serve Time (g_s), s	0.0	50.2	0.0	4.7	0.0	69.0	0.0	4.8
Cycle Q Clear Time (g_c), s	0.0	50.2	0.0	4.7	0.0	69.0	0.0	4.8
Lane Grp Cap (c), veh/h	0	1913	0	93	0	2067	0	113
V/C Ratio (X)	0.00	0.88	0.00	0.71	0.00	0.99	0.00	0.63
Avail Cap (c_a), veh/h	0	1913	0	137	0	2067	0	160
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.6	0.0	54.0	0.0	23.0	0.0	53.1
Incr Delay (d2), s/veh	0.0	6.4	0.0	9.6	0.0	18.2	0.0	5.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.1	0.0	63.6	0.0	41.3	0.0	58.7
1st-Term Q (Q1), veh/ln	0.0	23.7	0.0	2.1	0.0	32.5	0.0	2.2
2nd-Term Q (Q2), veh/ln	0.0	1.7	0.0	0.2	0.0	5.2	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.5	0.0	2.3	0.0	37.7	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.24	0.00	0.09	0.00	0.57	0.00	0.02
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1468	0	0	0	1468	0	1442
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	817	0	0	0	883	0	96
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	817	0	0	0	883	0	136
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		48.0						
HCM 2010 LOS		D						

Appendix D: ARC RTP Project Sheets

FS-AR-182

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	I-85 SOUTH INTERCHANGE IMPROVEMENTS AT SR 74 (SENOIA ROAD)
GDOT Project No.	0007841
Federal ID No.	CSNHS-0007-00(841)
Status	Programmed
Service Type	Roadway / Interchange Capacity
Sponsor	City of Fairburn
Jurisdiction	Regional - Southwest
Analysis Level	In the Region's Air Quality Conformity Analysis

Existing Thru Lane	Var	**LCI**		**Network Year**	2024
Planned Thru Lane	Var	**Flex**		**Corridor Length**	N/A miles

Detailed Description and Justification

This is an interchange reconstruction to reduce congestion and provide capacity to the I-85 @ SR 74. The project involves adding turn lanes at the ends of the exit ramps and widening the SR 74 bridge to include turn lanes. The interchange will be a partial cloverleaf design as recommended in the Interchange Modification Report (IMR).

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
SCP	National Highway System	AUTH	2011	**$50,000**	~~$40,000~~	~~$10,000~~	~~$0,000~~	~~$0,000~~
PE	National Highway System	AUTH	2012	**$1,263,377**	~~$1,010,702~~	~~$252,675~~	~~$0,000~~	~~$0,000~~
PE	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	AUTH	2016	**$852,000**	~~$681,600~~	~~$0,000~~	~~$0,000~~	~~$170,400~~
ROW	National Highway Performance Program (NHPP)		2017	**$13,163,141**	$10,530,513	$2,632,628	$0,000	$0,000
UTL	National Highway Performance Program (NHPP)		2020	**$672,367**	$537,894	$134,473	$0,000	$0,000
CST	National Highway Performance Program (NHPP)		2020	**$22,898,076**	$18,318,461	$4,579,615	$0,000	$0,000
CST	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)		2020	**$8,750,000**	$7,000,000	$1,750,000	$0,000	$0,000
				$47,648,961	**$38,119,170**	**$9,359,391**	**$0,000**	**$170,400**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

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FS-284

Atlanta Region's Plan RTP (2016) PROJECT FACT SHEET

Short Title	SOUTH FULTON MULTI-MODAL STUDY
GDOT Project No.	0015081
Federal ID No.	N/A
Status	Programmed
Service Type	Other / Planning
Sponsor	City of Fairburn,South Fulton CID
Jurisdiction	Fulton County (South)
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)

Existing Thru Lane	N/A	**LCI**		**Network Year**	TBD
Planned Thru Lane	N/A	**Flex**		**Corridor Length**	N/A miles

Detailed Description and Justification

This study will address intermodal and multimodal issues to improve mobility, safety, and system access needs for both commuters and freight for the South Fulton area. Additionally, cost-effective, innovative, short-term solutions will be developed to be implemented in near future, as well as medium- and long-term programs, policies and projects necessary for achieving significant, positive community and economic development impacts over time.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
SCP	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)		2017	**$325,000**	$260,000	$0,000	$0,000	$65,000
				$325,000	**$260,000**	**$0,000**	**$0,000**	**$65,000**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
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