TRAFFIC IMPACT STUDY FOR

LITHONIA DISTRIBUTION CENTER
DRI #2961

DATE:
June 19, 2019

LOCATION:
Lithonia Industrial Blvd
City of Stonecrest, DeKalb County, Georgia

PREPARED FOR:
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Executive Summary

A new 614,676 square feet (sf) warehousing development in the City of Stonecrest, DeKalb County, GA is planned for a 102 acres' site located north of Lithonia Industrial Blvd, west of Rogers Lake Road and east of South Stone Mountain Lithonia Road. There will be a single site access intersection with Lithonia Industrial Blvd. The development is expected to be completed by 2021. The site is currently zoned for this use (M and M2).

When completed, the development is expected to generate 76 AM and 28 PM weekday peak hour (of the adjacent street) new entering vehicular trips with 23 AM and 74 PM new exiting vehicular trips. Daily, the development is expected to generate a total of 1,016 new vehicular trips. Of these vehicles, approximately 197 are expected to be trucks over three axles entering and exiting daily.

The intersection capacity analyses assumed 50% of the new personal vehicles and 75% of the trucks will originate and terminate west of the site and the remainder to/from the east using Lithonia Industrial Boulevard.

The existing lane configurations and existing and planned traffic control at the study intersections are adequate for existing, No-Build (background) and Build (with project traffic) traffic volumes.

The new traffic from the development is expected to have little impact on the external roadway network.

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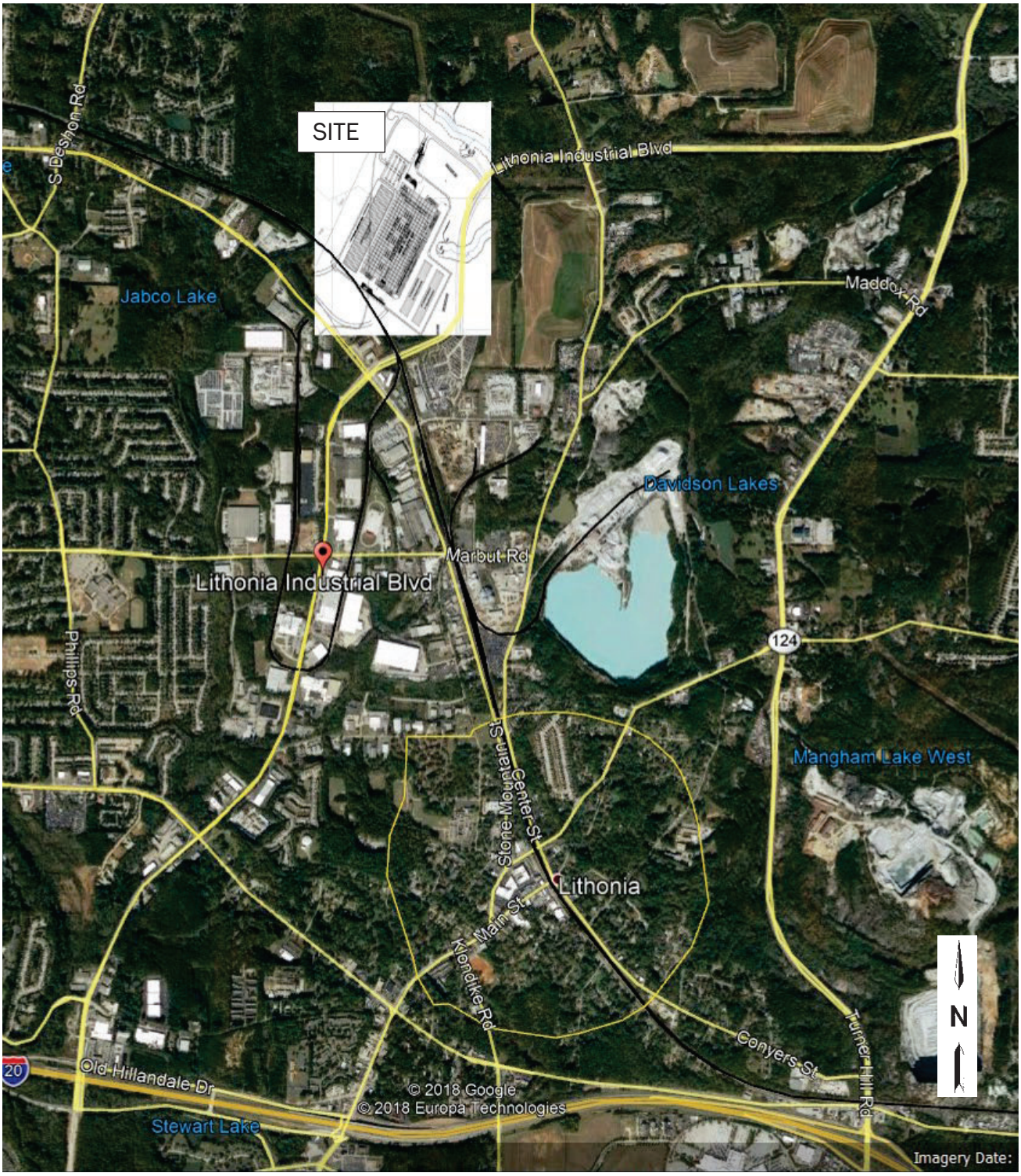
A new 614,676 square feet (sf) warehousing development in the City of Stonecrest, DeKalb County, GA is planned for the 102 acres' site located north of Lithonia Industrial Blvd, west of Rogers Lake Road and east of South Stone Mountain Lithonia Road. There will be a single site access intersection with Lithonia Industrial Blvd. The development is expected to be completed by 2021. The site is currently zoned for this use (M and M2).

The purpose of this study is to identify the traffic impacts associated with the development – both existing traffic, future background growth traffic, and full future traffic and to assess if any mitigation is needed. The traffic impact study analyzes the levels of service at the development access points. Figure 1 shows the site location. A copy of the site plan is included in the Appendix.

This report summarizes the data collected, projected traffic at the study locations, analysis of traffic impacts including level of service (LOS), turn lane analysis, and conclusions from the analysis.

Figure 1. Vicinity Map



B. Proposed Development Description

B.1. Phasing

The development is planned to be completed in a single phase by 2021

B.2. Transportation Facilities and LOS Standards

Lithonia Industrial Blvd is a four-lane east-west roadway with a 45 MPH posted speed limit with dedicated turn lanes and traffic signal control at major intersections. The adjacent land uses are primarily industrial and vacant/agricultural the study area.

South Stone Mountain Lithonia Rd is a four-lane north-south roadway with a 45 MPH posted speed limit with dedicated turn lanes and traffic signal control at major intersections. The adjacent land uses are primarily commercial, industrial and vacant/agricultural the study area.

Rogers Lake Rd is a two-lane north-south roadway with dedicated turn lanes and traffic signal control at Lithonia Industrial Blvd. The adjacent land uses are primarily industrial and vacant.

LOS D will be considered the minimum standard unless existing conditions are lower.

B.3. Transit

There are MARTA bus routes along S Stone Mountain Lithonia Road by not along Lithonia Industrial Blvd at the site.

B.4. Pedestrian and Bicycle Facilities

There are sidewalks along Lithonia Industrial Blvd on one or both sides of the roadway. There are no bicycle facilities adjacent to the site.

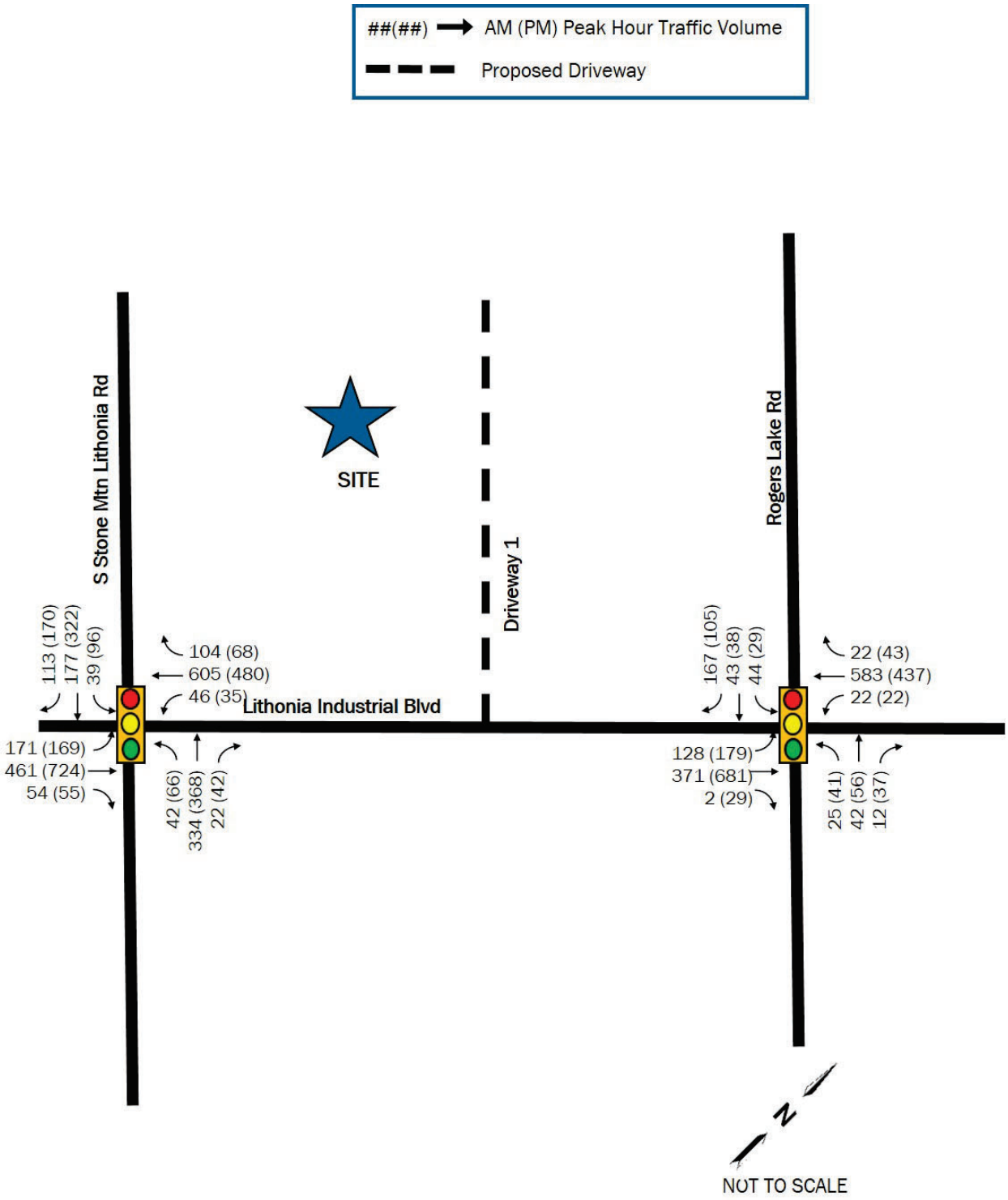
B.5. Traffic Volumes

Traffic counts were collected on Thursday, May 16, 2019 while public schools were in session. From the counts, the peak hour for the AM turning movements is 7:30 to 8:30 AM and the peak hour for the PM turning movements is 4:45 to 5:45 PM at the following existing adjacent intersections:

South Stone Mountain Lithonia Road & Lithonia Industrial Boulevard (signalized)
Rogers Lake Road & Lithonia Industrial Boulevard (signalized)

Figure 2 shows the study intersection existing peak hour turning movement counts. A 24-hour bidirectional vehicular count was collected on Lithonia Industrial Boulevard adjacent to the site on the same day. There were 18,253 vehicles counted in both directions, including 1,070 trucks with over three (3) axles. The count worksheets are included in the Appendix.

Figure 2: Existing Turning Movement Counts



C. Future Conditions

C.1. No Build (Background) Growth

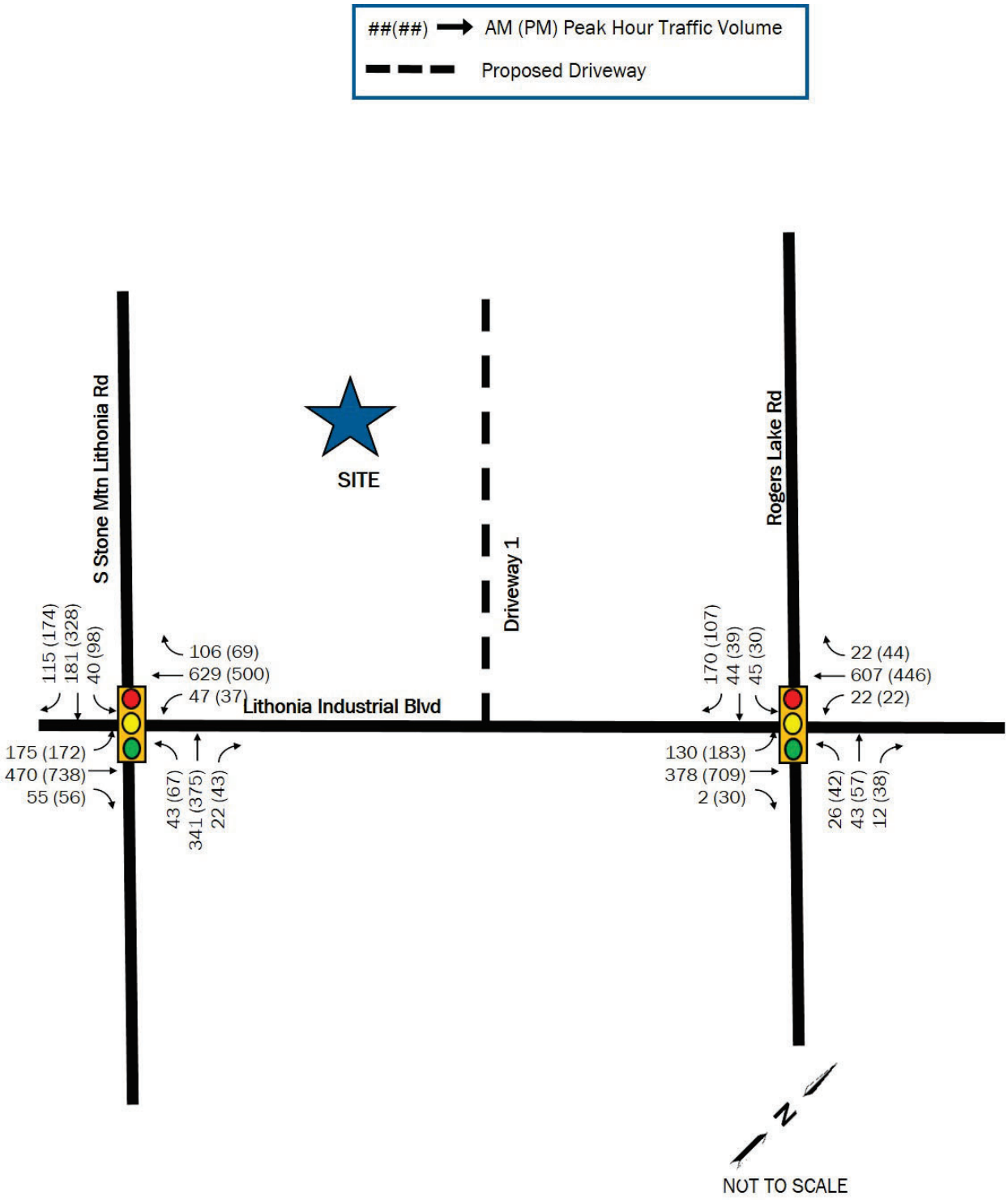
The existing volumes were increased by 1% annually (for a conservative growth estimate) for two (2) years for the No Build (background) traffic volumes as shown in Figure 3.

C.2. Planned/programed Improvements

According to ARC's Transportation Improvement Program, the Regional Transportation Plan (Atlanta Region's Plan), GDOT's construction work programs, City of Stonecrest and DeKalb County's programmed projects, and the GA STIP, no projects are programmed or planned to be completed within the study area.

The existing lane configurations and existing and planned traffic control at the study intersections were used for the analyses.

Figure 3: No-Build Traffic Volumes



C.3. Project Trip Generation

Table 1 summarizes the project trip generation calculated using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 10th Edition, 2017.

Table 1: Project Trip Generation

Land Use (ITE LUC) Density		Total	In	Out
Warehousing (150) 614,676 sf Total Trips	Daily	1,016	508	508
	AM Peak Hour	99	76	23
	PM Peak Hour	102	74	28
Truck Trips	Daily	398	197	196
	AM Peak Hour	18	14	4
	PM Peak Hour	25	7	18
Personal Vehicles Trips	Daily	623	311	312
	AM Peak Hour	81	62	19
	PM Peak Hour	77	21	56

No modal split reduction was applied to calculate the number of new vehicular trips expected.

C.4. Trip Distribution and Assignment

The intersection capacity analyses directional distribution was based on the existing traffic counts and the area roadway network characteristics.

The new truck trips distribution is expected to be 75% via Lithonia Industrial Blvd west of site with approximately 10% on S Stone Mtn Lithonia Rd to/from the north, 3% on S Stone Mtn Lithonia Rd to/from the south, and 62% on Lithonia Industrial Blvd to/from the west. About 25% of the new truck trips will use Lithonia Industrial Blvd east of the site with 4% on Rogers Lake Rd to/from the north, 3% on Rogers Lake Rd to/from the south, and 18% Lithonia Industrial Blvd to/from the east.

The new personal vehicles' trips distribution is expected to be 50% via Lithonia Industrial Blvd west of the site with approximately 5% on S Stone Mtn Lithonia Rd to/from the north, 2% on S Stone Mtn Lithonia Rd to/from the south, and 43% on Lithonia Industrial Blvd to/from the west. About 50% of the new personal vehicle trips will use Lithonia Industrial Blvd east of the site with 11% on Rogers Lake Rd to/from the north, 2% on Rogers Lake Rd to/from the south, and 37% on Lithonia Industrial Blvd to/from the east.

The future site traffic is shown in Figure 4 and the Build traffic volumes are shown in Figure 5.

Figure 4: Project Trips

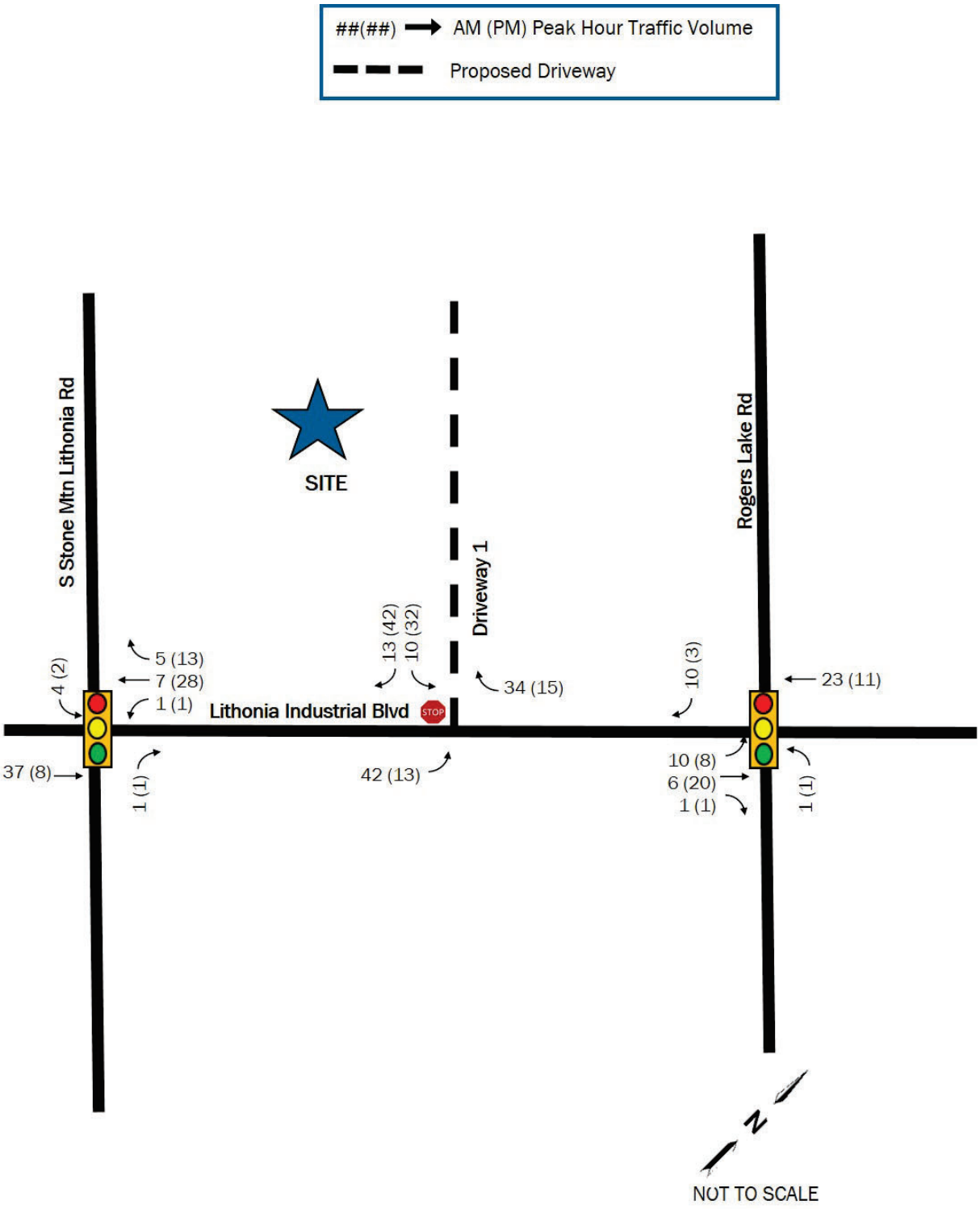
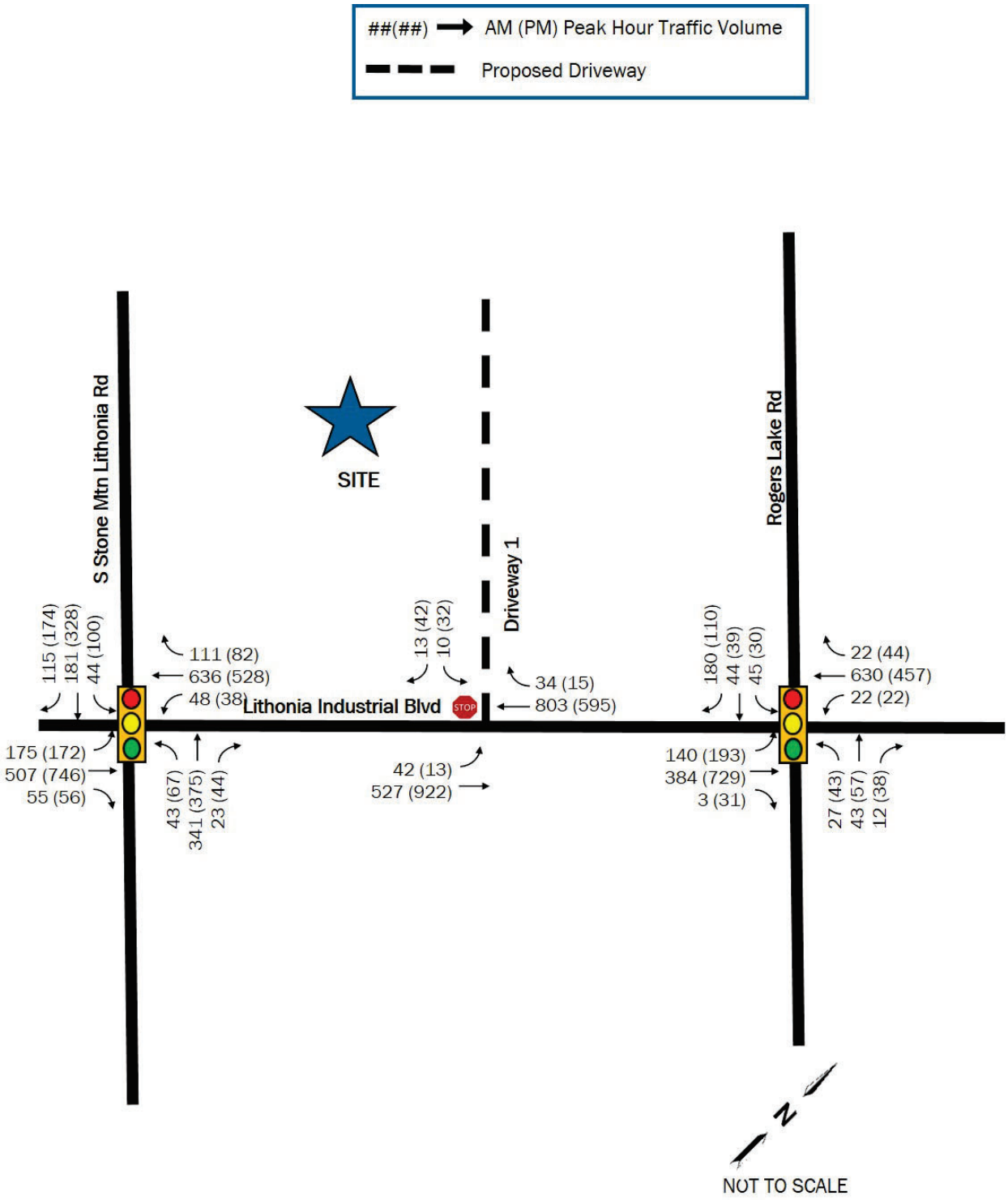


Figure 5: Build Traffic Volumes



D. Traffic Impact Analyses

The analysis in each of the scenarios for the study was performed using the traffic analysis software Synchro® 10. Average vehicular delays are calculated and reported as Levels of Service (LOS) as defined by the Highway Capacity Manual (HCM). Worksheets are included in the Appendix.

D.1. Existing Capacity Analysis

The results of the Existing Traffic Volumes' capacity analysis are shown in Table 2.

Table 2: Existing Capacity Analysis

Intersection	Control	Movement	AM		PM	
			Delay (s)	LOS	Delay (s)	LOS
South Stone Mtn Lithonia Rd at Lithonia Industrial Blvd	Signal	Overall	16.2	B	16.6	B
Rogers Lake Rd at Lithonia Industrial Blvd	Signal	Overall	10.4	B	10.0	A

All of the study intersections operate adequately overall during weekday peak hours.

D.2. No-Build Capacity Analysis

The results of the No-Build capacity analysis are shown in Table 3.

Table 3: No-Build Capacity Analysis

Intersection	Control	Movement	AM		PM	
			Delay (s)	LOS	Delay (s)	LOS
South Stone Mtn Lithonia Rd at Lithonia Industrial Blvd	Signal	Overall	16.5	B	16.6	B
Rogers Lake Rd at Lithonia Industrial Blvd	Signal	Overall	10.3	B	10.0	A

All of the study intersections are expected to operate adequately with the existing lane configurations and the existing control with 2021 volumes.

D.3. Build Conditions Capacity Analysis

The results of the Build conditions intersection capacity analysis are shown in Table 5.

Table 4: Build Capacity Analysis

Intersection	Control	Movement	AM		PM	
			Delay (s)	LOS	Delay (s)	LOS
South Stone Mtn Lithonia Rd at Lithonia Industrial Blvd	Signal	Overall	17.1	B	16.8	B
Rogers Lake Rd at Lithonia Industrial Blvd	Signal	Overall	10.2	B	9.9	A
Driveway 1 (Site) at Lithonia Industrial Blvd	Side Street Stop Sign	SB	17.9	C	19.8	C
		EB Left	10.2	B	8.9	A
		WB	0	A	0	A

All of the study intersections are expected to operate adequately with the existing and planned driveway shared lane configurations and existing and planned driveway side street stop sign controls for 2021 volumes with the project traffic.

E. Recommendations

A new 614,676 square feet (sf) warehousing development in the City of Stonecrest, DeKalb County, GA is planned for a 102 acres' site located north of Lithonia Industrial Blvd, west of Rogers Lake Road and east of South Stone Mountain Lithonia Road. There will be a single site access intersection with Lithonia Industrial Blvd. The development is expected to be completed by 2021. The site is currently zoned for this use (M and M2).

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APPENDIX

Prepared by National Data & Surveying Services

S Stone Mountain Lithonia Rd & Lithonia Industrial Blvd

Peak Hour Turning Movement Count

ID: 19-09407-001
City: Lithonia

Day: Thursday
Date: 05/16/2019

	PEAK HOURS	COUNT PERIODS
AM	07:30 AM - 08:30 AM	06:00 AM - 10:00 AM
NOON	NONE	NONE
PM	04:45 PM - 05:45 PM	04:00 PM - 06:00 PM

S Stone Mountain Lithonia Rd — SOUTHBOUND

	Right	Thru	Left	U-Turn	Departing
AM	113	177	39	0	609
NOON	0	0	0	0	0
PM	170	322	96	0	604
Lanes	1	1	1	0	

Lithonia Industrial Blvd — EASTBOUND

	AM	NOON	PM	Lanes
Departing	760	0	717	
U-Turn	0	0	1	0
Left	171	0	168	1
Thru	461	0	724	2
Right	54	0	55	1

Lithonia Industrial Blvd — WESTBOUND

	Lanes	PM	NOON	AM
Right	1	68	0	104
Thru	2	480	0	605
Left	1	24	0	40
U-Turn	0	11	0	6
Departing		873	0	528

S Stone Mountain Lithonia Rd — NORTHBOUND

	Departing	U-Turn	Left	Thru	Right
Lanes		0	1	1	1
PM	401	0	66	368	42
NOON	0	0	0	0	0
AM	271	0	42	334	22

CONTROL

Signalized

	AM	NOON	PM
TEV	2168	0	2595
PHF	0.93		0.95

Total Vehicles (AM)

Approach	Left	Thru	Right
Southbound	39	177	113
Eastbound	171	461	54
Westbound	40	605	104
Northbound	42	334	22

HT (AM)

Approach	Left	Thru	Right
Southbound	3	8	5
Eastbound	5	38	10
Westbound	5	47	16
Northbound	19	17	3

Total Vehicles (Noon)

Approach	Left	Thru	Right
Southbound	N/A	N/A	N/A
Eastbound	N/A	N/A	N/A
Westbound	N/A	N/A	N/A
Northbound	N/A	N/A	N/A

HT (NOON)

Approach	Left	Thru	Right
Southbound	N/A	N/A	N/A
Eastbound	N/A	N/A	N/A
Westbound	N/A	N/A	N/A
Northbound	N/A	N/A	N/A

Total Vehicles (PM)

Approach	Left	Thru	Right
Southbound	96	322	170
Eastbound	168	724	55
Westbound	24	480	68
Northbound	66	368	42

HT (PM)

Approach	Left	Thru	Right
Southbound	5	10	6
Eastbound	1	48	11
Westbound	0	21	7
Northbound	7	10	0

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North	Eastbound	0	0	1
North	Westbound	0	0	0
West	Southbound	0	0	1
West	Northbound	0	0	0
East	Southbound	0	0	0
East	Northbound	1	0	0
South	Eastbound	0	0	0
South	Westbound	0	0	0
NW diagonal		0	0	0
NE diagonal		0	0	0
SW diagonal		0	0	0
SE diagonal		0	0	0

roject ID: 19-09407-001
.ocation: S Stone Mountain Lithonia Rd & Lithonia Industrial Blvd
City: Lithonia

Day: Thursday
Date: 05/16/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	S Stone Mountain Lithonia Rd Northbound						S Stone Mountain Lithonia Rd Southbound						Lithonia Industrial Blvd Eastbound						Lithonia Industrial Blvd Westbound						
Start Tim	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	nt. Total
6:00 AM	16	40	2	0	0	58	9	18	21	0	0	48	18	43	6	0	0	67	3	100	12	0	0	115	288
6:15 AM	9	71	5	0	0	85	9	24	17	0	0	50	28	66	10	1	0	105	7	123	17	2	0	149	389
6:30 AM	8	82	4	0	0	94	9	32	21	0	0	62	35	78	8	0	1	121	3	142	23	0	0	168	445
6:45 AM	12	87	4	0	0	103	9	38	27	0	0	74	41	83	15	0	0	139	6	166	29	0	0	201	517
Total	45	280	15	0	0	340	36	112	86	0	0	234	122	270	39	1	1	432	19	531	81	2	0	633	1639
7:00 AM	7	77	1	0	0	85	8	35	13	0	0	56	30	97	7	0	1	134	3	159	21	0	0	183	458
7:15 AM	6	68	2	0	0	76	8	35	24	0	0	67	43	90	7	0	0	140	8	138	25	1	0	172	455
7:30 AM	9	83	10	0	0	102	12	39	37	0	0	88	44	110	7	0	0	161	9	190	31	1	0	231	582
7:45 AM	9	71	3	0	0	83	7	45	24	0	0	76	36	122	13	0	0	171	12	164	27	1	1	204	534
Total	31	299	16	0	0	346	35	154	98	0	0	287	153	419	34	0	1	606	32	651	104	3	1	790	2029
8:00 AM	11	92	2	0	0	105	9	48	26	0	0	83	56	126	17	0	0	199	9	127	29	1	0	166	553
8:15 AM	13	88	7	0	0	108	11	45	26	0	0	82	35	103	17	0	0	155	10	124	17	3	0	154	499
8:30 AM	9	57	12	0	0	78	7	55	32	0	0	94	37	102	7	0	0	146	12	119	15	0	0	146	464
8:45 AM	15	68	8	0	0	91	16	66	26	0	0	108	30	67	8	0	0	105	7	115	11	0	0	133	437
Total	48	305	29	0	0	382	43	214	110	0	0	367	158	398	49	0	0	605	38	485	72	4	0	599	1953
BREAK																									
4:00 PM	10	60	16	0	0	86	18	91	36	0	0	145	41	157	13	1	0	212	6	96	11	2	0	115	558
4:15 PM	15	84	8	0	0	107	15	83	45	0	0	143	30	180	15	0	0	225	6	103	10	3	0	122	597
4:30 PM	12	84	7	0	0	103	27	97	31	0	0	155	46	154	10	0	0	210	9	128	12	2	0	151	619
4:45 PM	18	89	13	0	0	120	16	70	52	0	0	138	40	163	14	1	0	218	7	115	14	2	0	138	614
Total	55	317	44	0	0	416	76	341	164	0	0	581	157	654	52	2	0	865	28	442	47	9	0	526	2388
5:00 PM	17	88	11	0	0	116	36	95	47	0	0	178	42	193	14	0	0	249	3	115	19	6	0	143	686
5:15 PM	16	101	11	0	0	128	20	71	28	0	1	119	44	181	8	0	1	233	7	119	16	1	0	143	623
5:30 PM	15	90	7	0	0	112	24	86	43	0	0	153	42	187	19	0	0	248	7	131	19	2	0	159	672
5:45 PM	6	70	13	0	0	89	15	103	34	0	0	152	35	167	11	0	0	213	5	98	17	0	0	120	574
Total	54	349	42	0	0	445	95	355	152	0	1	602	163	728	52	0	1	943	22	463	71	9	0	565	2555
and Total	233	1550	146	0	0	1929	285	1176	610	0	1	2071	753	2469	226	3	3	3451	139	2572	375	27	1	3113	10564
Apprch %	12.1	80.4	7.6	0.0	0.0		13.8	56.8	29.5	0.0	0.0		21.8	71.5	6.5	0.1	0.1		4.5	82.6	12.0	0.9	0.0		
Total %	2.2	14.7	1.4	0.0	0.0	18.3	2.7	11.1	5.8	0.0	0.0	19.6	7.1	23.4	2.1	0.0	0.0	32.7	1.3	24.3	3.5	0.3	0.0	29.5	
PU, Vans	144	1492	135	0	0	1771	263	1127	586		1	1976	729	2316	178	3		3226	132	2395	338		1	2891	9864
s, PU, Vans	61.8	96.3	92.5	0.0	0.0	91.8	92.3	95.8	96.1	0.0	####	95.4	96.8	93.8	78.8	####	0.0	93.5	95.0	93.1	90.1	0.0	100.0	92.9	93.4
vy Trucks	89	58	11	0		158	22	49	24	0		95	24	153	48	0		225	7	177	37	1		222	700
eavy Trucks	38.2	3.7	7.5	0.0	0.0	8.2	7.7	4.2	3.9	0.0	0.0	4.6	3.2	6.2	21.2	0.0	0.0	6.5	5.0	6.9	9.9	3.7	0.0	7.1	6.6
s, PU, Vans																			4.8	84.4	10.8				
eavy Trucks																			4.4	81.1	14.5				

roject ID: 19-09407-001
.ocation: S Stone Mountain Lithonia Rd & Lithonia
City: Lithonia

PEAK HOURS

Day: Thursday
Date: 05/16/2019

AM

	S Stone Mountain Lithonia Rd Northbound					S Stone Mountain Lithonia Rd Southbound					Lithonia Industrial Blvd Eastbound					Lithonia Industrial Blvd Westbound					
Start Tim	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 06:00 AM to 10:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	9	83	10	0	102	12	39	37	0	88	44	110	7	0	161	9	190	31	1	231	582
7:45 AM	9	71	3	0	83	7	45	24	0	76	36	122	13	0	171	12	164	27	1	204	534
8:00 AM	11	92	2	0	105	9	48	26	0	83	56	126	17	0	199	9	127	29	1	166	553
8:15 AM	13	88	7	0	108	11	45	26	0	82	35	103	17	0	155	10	124	17	3	154	499
al Volume	42	334	22	0	398	39	177	113	0	329	171	461	54	0	686	40	605	104	6	755	2168
App. Total	10.6	83.9	5.5	0.0	100	11.9	53.8	34.3	0.0	100	24.9	67.2	7.9	0.0	100	5.3	80.1	13.8	0.8	100	
PHF					0.921					0.935					0.862					0.817	0.931
PU, Vans	23	317	19	0	359	36	169	108	0	313	166	423	44	0	633	35	558	88	6	687	1992
s, PU, Vans	54.8	94.9	86.4	0.0	90.2	92.3	95.5	95.6	0.0	95.1	97.1	91.8	81.5	0.0	92.3	87.5	92.2	84.6	100.0	91.0	91.9
vy Trucks	19	17	3	0	39	3	8	5	0	16	5	38	10	0	53	5	47	16	0	68	176
eavy Trucks	45.2	5.1	13.6	0.0	9.8	7.7	4.5	4.4	0.0	4.9	2.9	8.2	18.5	0.0	7.7	12.5	7.8	15.4	0.0	9.0	8.1

PM

	S Stone Mountain Lithonia Rd Northbound					S Stone Mountain Lithonia Rd Southbound					Lithonia Industrial Blvd Eastbound					Lithonia Industrial Blvd Westbound					
Start Tim	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	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	18	89	13	0	120	16	70	52	0	138	40	163	14	1	218	7	115	14	2	138	614
5:00 PM	17	88	11	0	116	36	95	47	0	178	42	193	14	0	249	3	115	19	6	143	686
5:15 PM	16	101	11	0	128	20	71	28	0	119	44	181	8	0	233	7	119	16	1	143	623
5:30 PM	15	90	7	0	112	24	86	43	0	153	42	187	19	0	248	7	131	19	2	159	672
al Volume	66	368	42	0	476	96	322	170	0	588	168	724	55	1	948	24	480	68	11	583	2595
App. Total	13.9	77.3	8.8	0.0	100	16.3	54.8	28.9	0.0	100	17.7	76.4	5.8	0.1	100	4.1	82.3	11.7	1.9	100	
PHF					0.930					0.826					0.952					0.917	0.946
PU, Vans	59	358	42	0	459	91	312	164	0	567	167	676	44	1	888	24	459	61	10	554	2468
s, PU, Vans	89.4	97.3	####	0.0	96.4	94.8	96.9	96.5	0.0	96.4	99.4	93.4	80.0	####	93.7	####	95.6	89.7	90.9	95.0	95.1
vy Trucks	7	10	0	0	17	5	10	6	0	21	1	48	11	0	60	0	21	7	1	29	127
eavy Trucks	10.6	2.7	0.0	0.0	3.6	5.2	3.1	3.5	0.0	3.6	0.6	6.6	20.0	0.0	6.3	0.0	4.4	10.3	9.1	5.0	4.9

Prepared by National Data & Surveying Services

Rogers Lake Rd & Lithonia Industrial Blvd

Peak Hour Turning Movement Count

ID: 19-09407-002
City: Lithonia

Day: Thursday
Date: 05/16/2019

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 06:00 AM - 10:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

Rogers Lake Rd — SOUTHBOUND

AM	167	43	44	0	191	AM
NOON	0	0	0	0	0	NOON
PM	105	38	29	0	278	PM

Lithonia Industrial Blvd — EASTBOUND

AM	NOON	PM		
776	0	583	⇦	
1	0	0	↶	0
127	0	179	↱	1
371	0	681	→	2
2	0	29	↴	1
AM	NOON	PM		

Lithonia Industrial Blvd — WESTBOUND

PM	NOON	AM		
43	0	22	↰	1
437	0	583	←	2
22	0	22	↲	1
0	0	0	↷	0
747	0	427	⇨	
PM	NOON	AM		

Rogers Lake Rd — NORTHBOUND

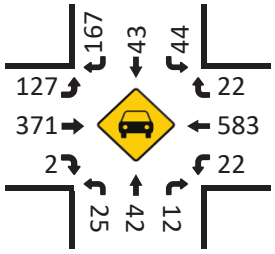
PM	89	0	41	56	37	PM
NOON	0	0	0	0	0	NOON
AM	67	0	25	42	12	AM

	1	1	1	0
	0	1	1	1

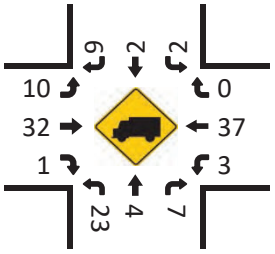
CONTROL: Signalized

TEV	1461 AM	0 NOON	1697 PM
PHF	0.92		0.95

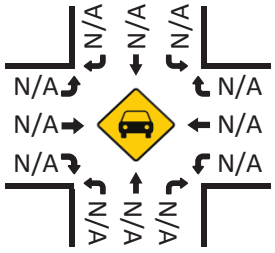
Total Vehicles (AM)



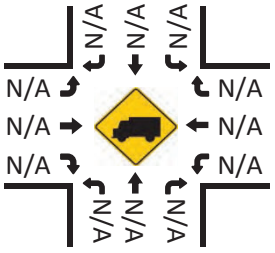
HT (AM)



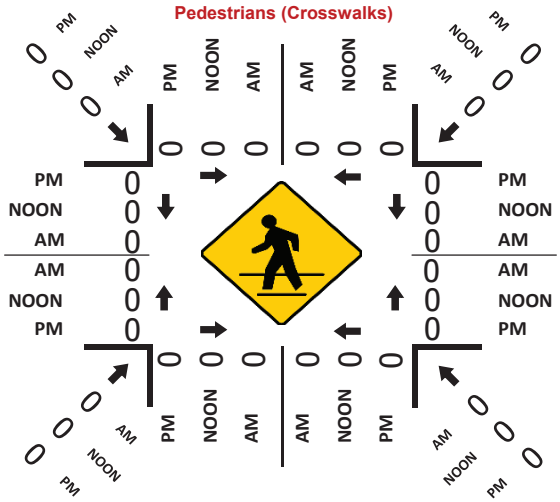
Total Vehicles (NOON)



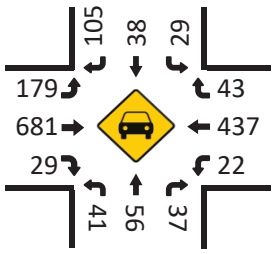
HT (NOON)



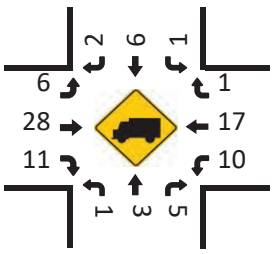
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



Project ID: 19-09407-002
Location: Rogers Lake Rd & Lithonia Industrial Blvd
City: Lithonia

Day: Thursday
Date: 05/16/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Rogers Lake Rd Northbound				Rogers Lake Rd Southbound				Lithonia Industrial Blvd Eastbound				Lithonia Industrial Blvd Westbound				
Start Time	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Total
6:00 AM	6	2	2	10	3	4	22	29	10	35	3	48	3	74	0	77	164
6:15 AM	4	1	4	9	6	4	27	37	12	47	6	65	3	104	4	111	222
6:30 AM	7	6	0	13	10	7	29	46	21	51	11	83	3	138	6	147	289
6:45 AM	7	5	5	17	5	6	43	54	20	68	10	98	9	145	5	159	328
Total	24	14	11	49	24	21	121	166	63	201	30	294	18	461	15	494	1003
7:00 AM	6	3	5	14	8	6	50	64	24	77	11	112	6	131	4	141	331
7:15 AM	2	7	6	15	5	10	35	50	16	87	2	105	2	148	6	156	326
7:30 AM	1	12	1	14	13	9	44	66	31	91	1	123	4	184	6	194	397
7:45 AM	16	15	4	35	15	13	51	79	23	97	1	121	9	146	4	159	394
Total	25	37	16	78	41	38	180	259	94	352	15	461	21	609	20	650	1448
8:00 AM	5	7	3	15	6	8	33	47	35	89	0	124	1	127	6	134	320
8:15 AM	3	8	4	15	10	13	39	62	38	94	0	132	8	126	6	140	349
8:30 AM	2	7	2	11	12	12	26	50	28	83	2	113	1	115	4	120	294
8:45 AM	1	9	1	11	5	11	28	44	23	78	3	104	5	113	4	122	281
Total	11	31	10	52	33	44	126	203	124	344	5	473	15	481	20	516	1244
BREAK																	
4:00 PM	5	11	2	18	14	14	25	53	51	139	7	197	3	77	6	86	354
4:15 PM	2	11	3	16	9	10	33	52	54	136	7	197	2	97	11	110	375
4:30 PM	5	16	6	27	13	18	37	68	34	138	5	177	7	101	7	115	387
4:45 PM	2	12	7	21	7	12	16	35	35	151	8	194	2	103	10	115	365
Total	14	50	18	82	43	54	111	208	174	564	27	765	14	378	34	426	1481
5:00 PM	3	15	14	32	5	13	23	41	51	186	7	244	5	115	9	129	446
5:15 PM	2	13	7	22	11	7	24	42	37	184	5	226	5	118	14	137	427
5:30 PM	24	15	5	44	8	10	29	47	40	160	10	210	8	107	9	124	425
5:45 PM	12	13	11	36	5	8	29	42	51	151	7	209	4	97	11	112	399
Total	41	56	37	134	29	38	105	172	179	681	29	889	22	437	43	502	1697
Grand Total	115	188	92	395	170	195	643	1008	634	2142	106	2882	90	2366	132	2588	6873
Apprch %	29.1	47.6	23.3		16.9	19.3	63.8		22.0	74.3	3.7		3.5	91.4	5.1		
Total %	1.7	2.7	1.3	5.7	2.5	2.8	9.4	14.7	9.2	31.2	1.5	41.9	1.3	34.4	1.9	37.7	
Cars, PU, Vans	67	178	58	303	163	181	614	958	601	2021	75	2697	68	2222	126	2416	6376
% Cars, PU, Vans	58.3	94.7	63.0	76.7	95.9	92.8	95.5	95.0	94.8	94.4	70.8	93.6	75.6	93.9	95.5	93.4	92.7
Heavy Trucks	48	10	34	92	7	14	29	50	33	121	31	185	22	144	6	172	499
%Heavy Trucks	41.7	5.3	37.0	23.3	4.1	7.2	4.5	5.0	5.2	5.6	29.2	6.4	24.4	6.1	4.5	6.6	7.3
% Cars, PU, Vans									21.7	75.8	2.5						
%Heavy Trucks									15.3	65.3	19.5						

Project ID: 19-09407-002
Location: Rogers Lake Rd & Lithonia Industrial Blvd
City: Lithonia

PEAK HOURS

Day: Thursday
Date: 05/16/2019

AM

	Rogers Lake Rd Northbound					0 Southbound					Lithonia Industrial Blvd Eastbound					0 Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 06:00 AM to 10:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	1	12	1	0	14	13	9	44	0	66	31	91	1	0	123	4	184	6	0	194	397
7:45 AM	16	15	4	0	35	15	13	51	0	79	23	97	1	0	121	9	146	4	0	159	394
8:00 AM	5	7	3	0	15	6	8	33	0	47	35	89	0	0	124	1	127	6	0	134	320
8:15 AM	3	8	4	0	15	10	13	39	0	62	38	94	0	1	133	8	126	6	0	140	350
Total Volume	25	42	12	0	79	44	43	167	0	254	127	371	2	1	501	22	583	22	0	627	1461
% App. Total	31.6	53.2	15.2	0.0	100	17.3	16.9	65.7	0.0	100	25.3	74.1	0.4	0.2	100	3.5	93.0	3.5	0.0	100	
PHF					0.564					0.804					0.942					0.808	0.920
Cars, PU, Vans	2	38	5	0	45	42	41	158	0	241	117	339	1	1	458	19	546	22	0	587	1331
% Cars, PU, Vans	8.0	90.5	41.7	0.0	57.0	95.5	95.3	94.6	0.0	94.9	92.1	91.4	50.0	100.0	91.4	86.4	93.7	100.0	0.0	93.6	91.1
Heavy Trucks	23	4	7	0	34	2	2	9	0	13	10	32	1	0	43	3	37	0	0	40	130
%Heavy Trucks	92.0	9.5	58.3	0.0	43.0	4.5	4.7	5.4	0.0	5.1	7.9	8.6	50.0	0.0	8.6	13.6	6.3	0.0	0.0	6.4	8.9

PM

	Rogers Lake Rd Northbound					0 Southbound					Lithonia Industrial Blvd Eastbound					0 Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	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	3	15	14	0	32	5	13	23	0	41	51	186	7	0	244	5	115	9	0	129	446
5:15 PM	2	13	7	0	22	11	7	24	0	42	37	184	5	0	226	5	118	14	0	137	427
5:30 PM	24	15	5	0	44	8	10	29	0	47	40	160	10	0	210	8	107	9	0	124	425
5:45 PM	12	13	11	0	36	5	8	29	0	42	51	151	7	0	209	4	97	11	0	112	399
Total Volume	41	56	37	0	134	29	38	105	0	172	179	681	29	0	889	22	437	43	0	502	1697
% App. Total	30.6	41.8	27.6	0.0	100	16.9	22.1	61.0	0.0	100	20.1	76.6	3.3	0.0	100	4.4	87.1	8.6	0.0	100	
PHF					0.761					0.915					0.911					0.916	0.951
Cars, PU, Vans	40	53	32	0	125	28	32	103	0	163	173	653	18	0	844	12	420	42	0	474	1606
% Cars, PU, Vans	97.6	94.6	86.5	0.0	93.3	96.6	84.2	98.1	0.0	94.8	96.6	95.9	62.1	0.0	94.9	54.5	96.1	97.7	0.0	94.4	94.6
Heavy Trucks	1	3	5	0	9	1	6	2	0	9	6	28	11	0	45	10	17	1	0	28	91
%Heavy Trucks	2.4	5.4	13.5	0.0	6.7	3.4	15.8	1.9	0.0	5.2	3.4	4.1	37.9	0.0	5.1	45.5	3.9	2.3	0.0	5.6	5.4

Prepared by NDS/ATD
Prepared by National Data & Surveying Services

VOLUME

Lithonia Industrial Blvd W/O Rogers Lake Rd

Day: Thursday
Date: 5/16/2019

City: Lithonia
Project #: GA19_9408_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,215	9,038	18,253

AM Period	EB		WB		TOTAL		PM Period	EB		WB		TOTAL	
00:00	38		19		57		12:00	113		107		220	
00:15	30		20		50		12:15	108		101		209	
00:30	36		15		51		12:30	102		116		218	
00:45	21	125	14	68	35	193	12:45	107	430	95	419	202	849
01:00	29		19		48		13:00	117		98		215	
01:15	18		7		25		13:15	110		104		214	
01:30	15		6		21		13:30	123		112		235	
01:45	20	82	4	36	24	118	13:45	118	468	99	413	217	881
02:00	18		15		33		14:00	122		95		217	
02:15	16		8		24		14:15	114		111		225	
02:30	18		7		25		14:30	150		131		281	
02:45	11	63	9	39	20	102	14:45	152	538	106	443	258	981
03:00	10		15		25		15:00	161		128		289	
03:15	10		12		22		15:15	161		109		270	
03:30	14		14		28		15:30	182		132		314	
03:45	19	53	41	82	60	135	15:45	170	674	99	468	269	1142
04:00	14		28		42		16:00	199		125		324	
04:15	14		43		57		16:15	209		131		340	
04:30	20		43		63		16:30	195		148		343	
04:45	13	61	51	165	64	226	16:45	181	784	126	530	307	1314
05:00	31		50		81		17:00	247		143		390	
05:15	30		66		96		17:15	227		145		372	
05:30	31		86		117		17:30	210		165		375	
05:45	39	131	113	315	152	446	17:45	212	896	127	580	339	1476
06:00	51		121		172		18:00	207		154		361	
06:15	79		142		221		18:15	179		145		324	
06:30	95		174		269		18:30	159		147		306	
06:45	96	321	208	645	304	966	18:45	164	709	119	565	283	1274
07:00	102		182		284		19:00	161		129		290	
07:15	107		184		291		19:15	130		99		229	
07:30	130		244		374		19:30	117		103		220	
07:45	119	458	217	827	336	1285	19:45	125	533	93	424	218	957
08:00	133		175		308		20:00	120		83		203	
08:15	134		180		314	1322	20:15	108		107		215	
08:30	117		164		281		20:30	113		76		189	
08:45	106	490	136	655	242	1145	20:45	108	449	79	345	187	794
09:00	94		140		234		21:00	95		82		177	
09:15	111		118		229		21:15	91		60		151	
09:30	94		120		214		21:30	95		77		172	
09:45	92	391	140	518	232	909	21:45	80	361	66	285	146	646
10:00	86		92		178		22:00	74		59		133	
10:15	85		122		207		22:15	74		44		118	
10:30	95		133		228		22:30	79		55		134	
10:45	85	351	118	465	203	816	22:45	57	284	34	192	91	476
11:00	90		114		204		23:00	47		34		81	
11:15	117		103		220		23:15	51		32		83	
11:30	81		128		209		23:30	62		23		85	
11:45	77	365	97	442	174	807	23:45	38	198	28	117	66	315

Prepared by National Data & Surveying Services

CLASSIFICATION

Lithonia Industrial Blvd W/O Rogers Lake Rd

Day: Thursday
Date: 5/16/2019

City: Lithonia
Project #: GA19_9408_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	102	19	1	3	0	0	0	0	0	0	0	0	125
01:00	0	67	12	0	3	0	0	0	0	0	0	0	0	82
02:00	0	55	7	1	0	0	0	0	0	0	0	0	0	63
03:00	0	44	7	0	1	0	0	1	0	0	0	0	0	53
04:00	0	49	11	0	1	0	0	0	0	0	0	0	0	61
05:00	0	96	26	1	5	0	0	3	0	0	0	0	0	131
06:00	0	264	42	1	9	0	0	5	0	0	0	0	0	321
07:00	0	371	66	4	11	3	0	3	0	0	0	0	0	458
08:00	0	388	72	3	14	6	0	3	4	0	0	0	0	490
09:00	2	291	67	1	13	15	0	1	1	0	0	0	0	391
10:00	0	278	52	1	10	6	0	3	1	0	0	0	0	351
11:00	0	279	56	1	14	11	0	0	4	0	0	0	0	365
12:00 PM	0	331	68	0	10	14	0	6	1	0	0	0	0	430
13:00	1	358	83	1	12	6	0	4	3	0	0	0	0	468
14:00	0	413	87	3	17	10	0	5	3	0	0	0	0	538
15:00	0	515	111	5	23	18	0	1	1	0	0	0	0	674
16:00	1	620	121	2	23	16	0	1	0	0	0	0	0	784
17:00	0	734	129	1	23	7	0	0	2	0	0	0	0	896
18:00	0	570	105	0	22	10	0	1	1	0	0	0	0	709
19:00	1	437	76	0	16	1	0	1	1	0	0	0	0	533
20:00	0	361	77	0	10	1	0	0	0	0	0	0	0	449
21:00	1	292	55	0	11	1	0	1	0	0	0	0	0	361
22:00	2	236	42	0	4	0	0	0	0	0	0	0	0	284
23:00	1	163	29	0	5	0	0	0	0	0	0	0	0	198
Totals	9	7314	1420	26	260	125		39	22					9215
% of Totals	0%	79%	15%	0%	3%	1%		0%	0%					100%

AM Volumes	2	2284	437	14	84	41	0	19	10	0	0	0	0	2891
% AM	0%	25%	5%	0%	1%	0%		0%	0%					31%
AM Peak Hour	09:00	08:00	08:00	07:00	08:00	09:00		06:00	08:00					08:00
Volume	2	388	72	4	14	15		5	4					490
PM Volumes	7	5030	983	12	176	84	0	20	12	0	0	0	0	6324
% PM	0%	55%	11%	0%	2%	1%		0%	0%					69%
PM Peak Hour	22:00	17:00	17:00	15:00	15:00	15:00		12:00	13:00					17:00
Volume	2	734	129	5	23	18		6	3					896

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	948		10%	898		10%	1680		18%	5689		62%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lithonia Industrial Blvd W/O Rogers Lake Rd

Day: Thursday
Date: 5/16/2019

City: Lithonia
Project #: GA19_9408_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	61	7	0	0	0	0	0	0	0	0	0	0	68
01:00	0	33	1	0	1	0	0	1	0	0	0	0	0	36
02:00	0	33	5	0	0	0	0	0	1	0	0	0	0	39
03:00	0	71	9	0	0	0	0	2	0	0	0	0	0	82
04:00	0	131	24	1	4	0	0	5	0	0	0	0	0	165
05:00	0	246	41	0	8	5	0	10	5	0	0	0	0	315
06:00	1	538	68	2	18	13	0	2	3	0	0	0	0	645
07:00	0	680	92	8	25	15	0	6	1	0	0	0	0	827
08:00	0	536	73	2	16	21	0	3	4	0	0	0	0	655
09:00	1	412	69	0	17	11	0	6	2	0	0	0	0	518
10:00	0	362	62	2	13	15	0	4	7	0	0	0	0	465
11:00	0	347	54	0	14	16	0	6	5	0	0	0	0	442
12:00 PM	0	329	61	2	11	10	0	3	3	0	0	0	0	419
13:00	0	319	60	2	13	11	0	5	3	0	0	0	0	413
14:00	1	360	52	3	11	13	0	2	1	0	0	0	0	443
15:00	0	374	71	4	15	4	0	0	0	0	0	0	0	468
16:00	3	429	66	7	14	6	0	5	0	0	0	0	0	530
17:00	0	494	63	5	14	2	0	2	0	0	0	0	0	580
18:00	0	481	66	0	12	4	0	1	1	0	0	0	0	565
19:00	1	362	48	1	7	2	0	2	1	0	0	0	0	424
20:00	1	305	30	0	6	0	0	2	1	0	0	0	0	345
21:00	1	247	26	2	7	1	0	1	0	0	0	0	0	285
22:00	0	172	17	0	2	0	0	1	0	0	0	0	0	192
23:00	0	104	9	0	2	0	0	1	1	0	0	0	0	117
Totals	9	7426	1074	41	230	149		70	39					9038
% of Totals	0%	82%	12%	0%	3%	2%		1%	0%					100%

AM Volumes	2	3450	505	15	116	96	0	45	28	0	0	0	0	4257
% AM	0%	38%	6%	0%	1%	1%		0%	0%					47%
AM Peak Hour	06:00	07:00	07:00	07:00	07:00	08:00		05:00	10:00					07:00
Volume	1	680	92	8	25	21		10	7					827
PM Volumes	7	3976	569	26	114	53	0	25	11	0	0	0	0	4781
% PM	0%	44%	6%	0%	1%	1%		0%	0%					53%
PM Peak Hour	16:00	17:00	15:00	16:00	15:00	14:00		13:00	12:00					17:00
Volume	3	494	71	7	15	13		5	3					580

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	1482		16%	832		9%	1110		12%	5614		62%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Lithonia Industrial Blvd W/O Rogers Lake Rd

Day: Thursday
Date: 5/16/2019

City: Lithonia
Project #: GA19_9408_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	163	26	1	3	0	0	0	0	0	0	0	0	193
01:00	0	100	13	0	4	0	0	1	0	0	0	0	0	118
02:00	0	88	12	1	0	0	0	0	1	0	0	0	0	102
03:00	0	115	16	0	1	0	0	3	0	0	0	0	0	135
04:00	0	180	35	1	5	0	0	5	0	0	0	0	0	226
05:00	0	342	67	1	13	5	0	13	5	0	0	0	0	446
06:00	1	802	110	3	27	13	0	7	3	0	0	0	0	966
07:00	0	1051	158	12	36	18	0	9	1	0	0	0	0	1285
08:00	0	924	145	5	30	27	0	6	8	0	0	0	0	1145
09:00	3	703	136	1	30	26	0	7	3	0	0	0	0	909
10:00	0	640	114	3	23	21	0	7	8	0	0	0	0	816
11:00	0	626	110	1	28	27	0	6	9	0	0	0	0	807
12:00 PM	0	660	129	2	21	24	0	9	4	0	0	0	0	849
13:00	1	677	143	3	25	17	0	9	6	0	0	0	0	881
14:00	1	773	139	6	28	23	0	7	4	0	0	0	0	981
15:00	0	889	182	9	38	22	0	1	1	0	0	0	0	1142
16:00	4	1049	187	9	37	22	0	6	0	0	0	0	0	1314
17:00	0	1228	192	6	37	9	0	2	2	0	0	0	0	1476
18:00	0	1051	171	0	34	14	0	2	2	0	0	0	0	1274
19:00	2	799	124	1	23	3	0	3	2	0	0	0	0	957
20:00	1	666	107	0	16	1	0	2	1	0	0	0	0	794
21:00	2	539	81	2	18	2	0	2	0	0	0	0	0	646
22:00	2	408	59	0	6	0	0	1	0	0	0	0	0	476
23:00	1	267	38	0	7	0	0	1	1	0	0	0	0	315
Totals	18	14740	2494	67	490	274		109	61					18253
% of Totals	0%	81%	14%	0%	3%	2%		1%	0%					100%

AM Volumes	4	5734	942	29	200	137	0	64	38	0	0	0	0	7148
% AM	0%	31%	5%	0%	1%	1%		0%	0%					39%
AM Peak Hour	09:00	07:00	07:00	07:00	07:00	08:00		05:00	11:00					07:00
Volume	3	1051	158	12	36	27		13	9					1285
PM Volumes	14	9006	1552	38	290	137	0	45	23	0	0	0	0	11105
% PM	0%	49%	9%	0%	2%	1%		0%	0%					61%
PM Peak Hour	16:00	17:00	17:00	15:00	15:00	12:00		12:00	13:00					17:00
Volume	4	1228	192	9	38	24		9	6					1476

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	2430		13%	1730		9%	2790		15%	11303		62%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Warehousing (150)

Based upon methodology from ITE's Trip Generation, 10th Edition (2017)

Project Land Use		Project Density	Project Trips			ITE Code	Variable	Equation Used[1]	In/Out Distribution	
			Total	IN	OUT					
Warehousing	TOTAL PROJECT TRIPS	614,676 sf				150	1000 S.F			
	Daily		**1,016**	508	508			T = 1.58 (X) + 45.54	50%	50%
	AM Peak Hour		**99**	76	23			T = 0.12 (X) + 25.32	77%	23%
	PM Peak Hour		**102**	28	74			T = 0.12 (X) + 27.82	27%	73%
	Truck Trips									
	Daily		**393**	197	196			T = 0.64 (X)	50%	50%
	AM Peak Hour		**18**	14	4			T = 0.03(X)	77%	23%
	PM Peak Hour		**25**	7	18			T = 0.04(X)	27%	73%
	Personal Vehicle Trips									
	Daily		**623**	311	312				50%	50%
	AM Peak Hour		**81**	62	19				77%	23%
	PM Peak Hour		**77**	21	56				27%	73%

Warehousing
(150)

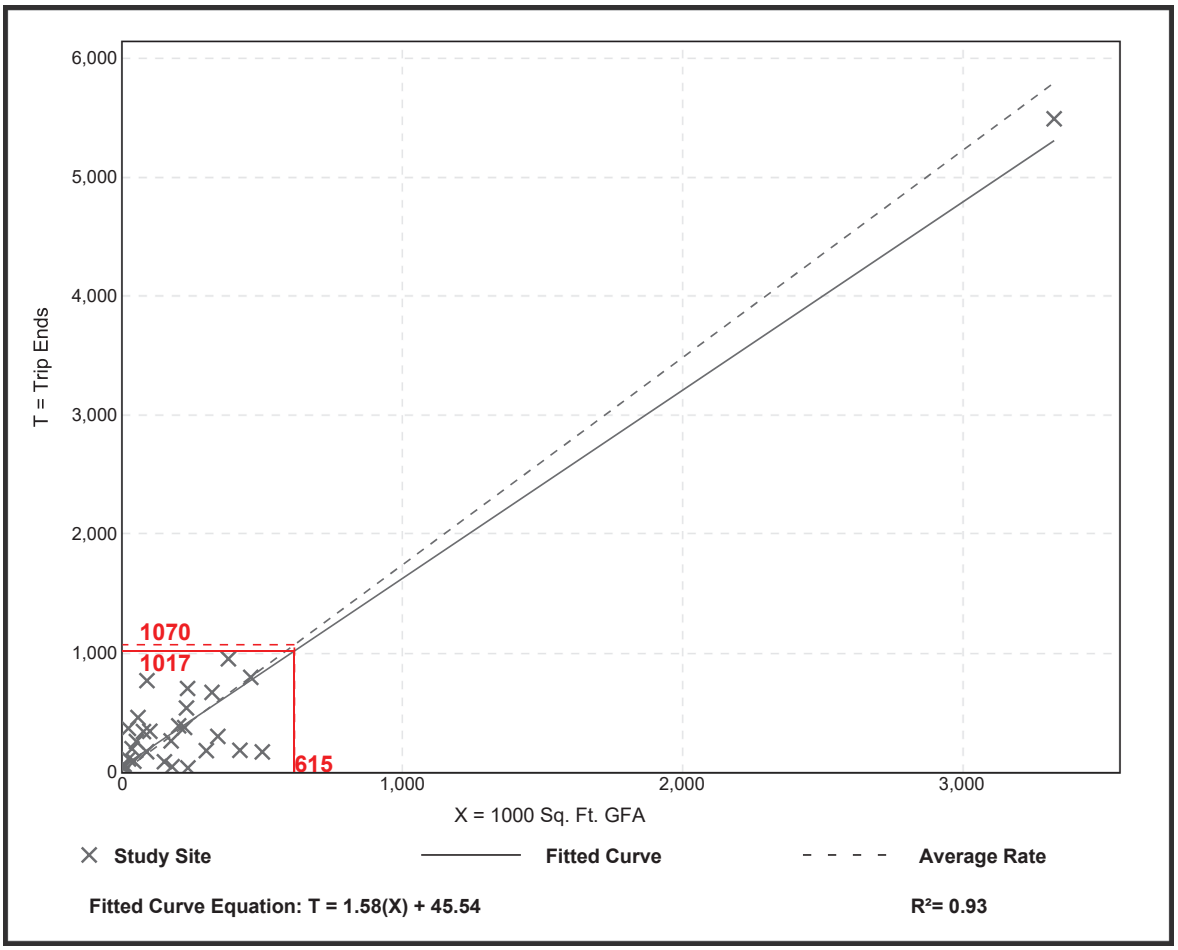
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 29
Avg. 1000 Sq. Ft. GFA: 285
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.74	0.15 - 16.93	1.55

Data Plot and Equation



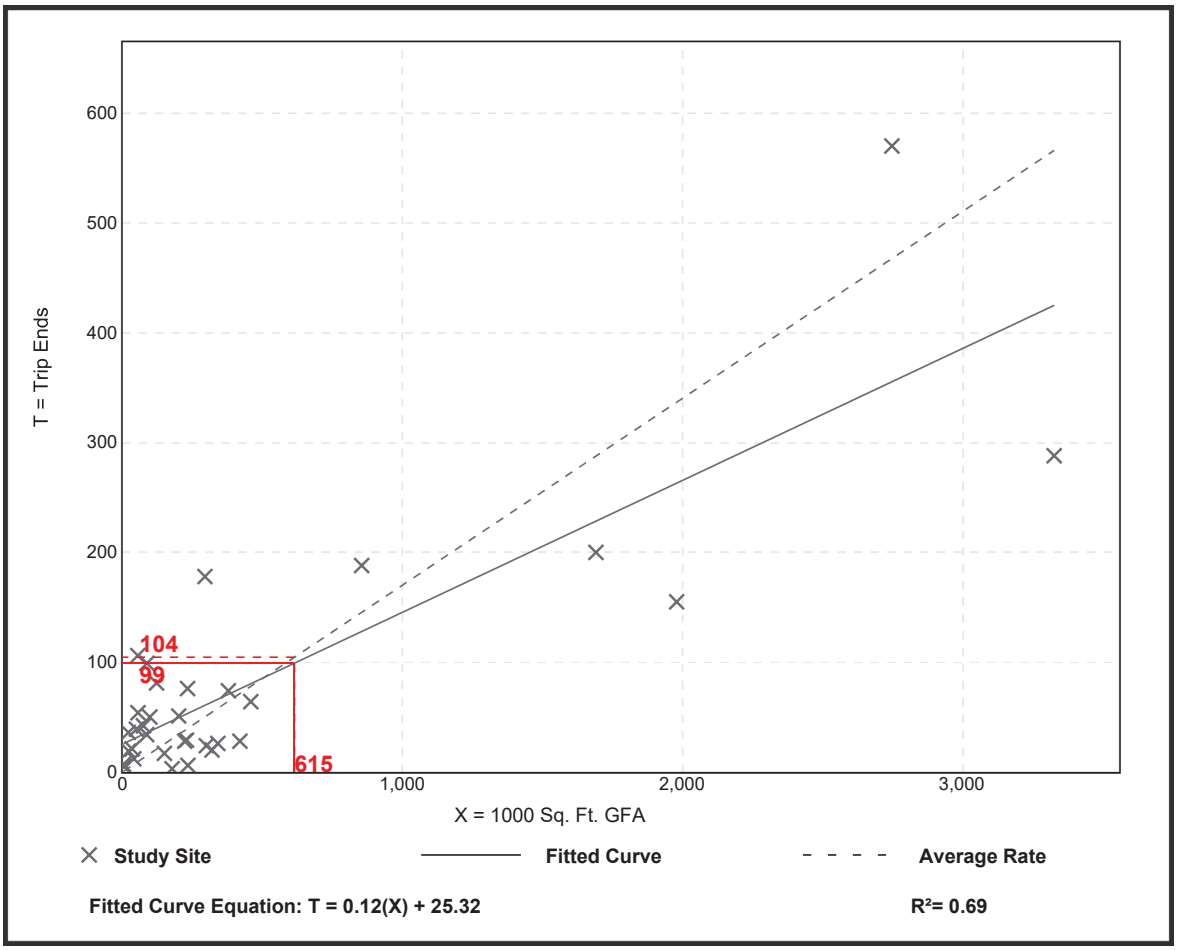
Warehousing
(150)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	34
Avg. 1000 Sq. Ft. GFA:	451
Directional Distribution:	77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.17	0.02 - 1.93	0.20

Data Plot and Equation



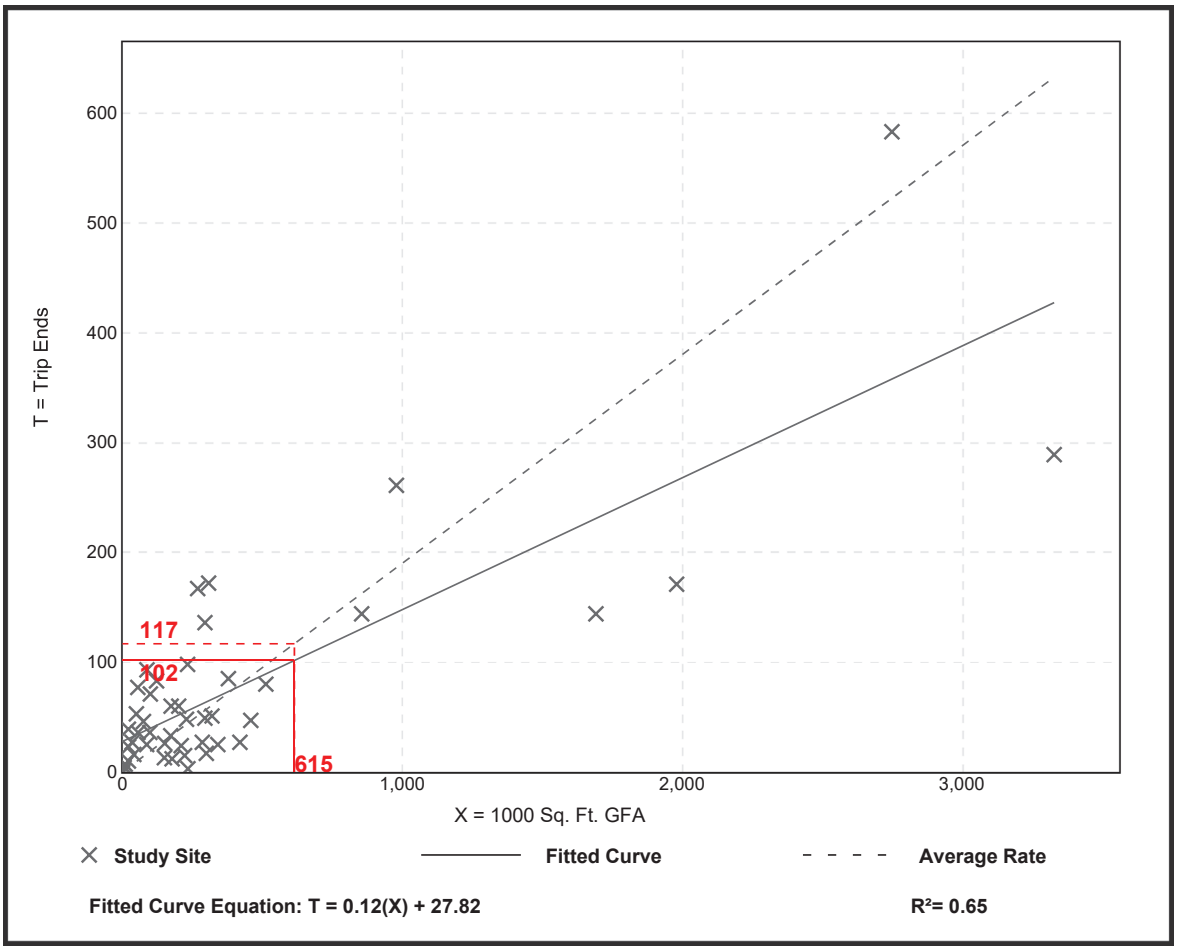
Warehousing
(150)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	47
Avg. 1000 Sq. Ft. GFA:	400
Directional Distribution:	27% entering, 73% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.19	0.01 - 1.80	0.18

Data Plot and Equation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	171	461	54	46	605	104	42	334	22	39	177	113
Future Volume (veh/h)	171	461	54	46	605	104	42	334	22	39	177	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	184	496	0	49	651	0	45	359	0	42	190	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	1096		385	863		525	1100		438	1094	
Arrive On Green	0.10	0.31	0.00	0.04	0.24	0.00	0.04	0.31	0.00	0.03	0.31	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	184	496	0	49	651	0	45	359	0	42	190	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.7	5.8	0.0	1.1	8.8	0.0	0.9	4.0	0.0	0.8	2.0	0.0
Cycle Q Clear(g_c), s	3.7	5.8	0.0	1.1	8.8	0.0	0.9	4.0	0.0	0.8	2.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	1096		385	863		525	1100		438	1094	
V/C Ratio(X)	0.48	0.45		0.13	0.75		0.09	0.33		0.10	0.17	
Avail Cap(c_a), veh/h	470	1367		453	1094		596	1100		513	1094	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.7	14.4	0.0	13.8	18.2	0.0	11.5	13.8	0.0	11.7	13.2	0.0
Incr Delay (d2), s/veh	0.9	0.3	0.0	0.1	2.3	0.0	0.1	0.8	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	0.0	0.4	3.2	0.0	0.3	1.4	0.0	0.3	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	14.7	0.0	14.0	20.5	0.0	11.6	14.6	0.0	11.7	13.5	0.0
LnGrp LOS	B	B		B	C		B	B		B	B	
Approach Vol, veh/h		680	A		700	A		404	A		232	A
Approach Delay, s/veh		14.4			20.1			14.2			13.2	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	20.1	6.0	20.0	5.9	20.0	9.4	16.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	16.0	4.0	20.0	4.0	16.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	2.8	6.0	3.1	7.8	2.9	4.0	5.7	10.8
Green Ext Time (p_c), s	0.0	1.4	0.0	2.3	0.0	0.7	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	724	55	35	480	68	66	368	42	96	322	170
Future Volume (veh/h)	169	724	55	35	480	68	66	368	42	96	322	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	178	762	0	37	505	0	69	387	0	101	339	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	396	1010		258	757		492	1126		476	1163	
Arrive On Green	0.10	0.28	0.00	0.03	0.21	0.00	0.05	0.32	0.00	0.06	0.33	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	178	762	0	37	505	0	69	387	0	101	339	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.8	10.1	0.0	0.8	6.8	0.0	1.3	4.3	0.0	1.9	3.7	0.0
Cycle Q Clear(g_c), s	3.8	10.1	0.0	0.8	6.8	0.0	1.3	4.3	0.0	1.9	3.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	396	1010		258	757		492	1126		476	1163	
V/C Ratio(X)	0.45	0.75		0.14	0.67		0.14	0.34		0.21	0.29	
Avail Cap(c_a), veh/h	452	1300		338	1095		543	1126		542	1163	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.1	16.9	0.0	15.5	18.8	0.0	11.0	13.6	0.0	10.9	13.0	0.0
Incr Delay (d2), s/veh	0.8	1.9	0.0	0.3	1.0	0.0	0.1	0.8	0.0	0.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.5	0.0	0.3	2.4	0.0	0.4	1.5	0.0	0.6	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	18.8	0.0	15.8	19.8	0.0	11.1	14.4	0.0	11.1	13.6	0.0
LnGrp LOS	B	B		B	B		B	B		B	B	
Approach Vol, veh/h		940	A		542	A		456	A		440	A
Approach Delay, s/veh		17.9			19.5			13.9			13.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	20.5	5.7	18.8	6.5	21.0	9.4	15.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	16.0	4.0	19.0	4.0	17.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	3.9	6.3	2.8	12.1	3.3	5.7	5.8	8.8
Green Ext Time (p_c), s	0.0	1.5	0.0	2.6	0.0	1.4	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	371	2	22	583	22	25	42	12	44	43	167
Future Volume (veh/h)	128	371	2	22	583	22	25	42	12	44	43	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	139	403	2	24	634	24	27	46	0	48	47	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1417	632	470	1417	632	718	803		719	803	
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.00	0.43	0.43	0.00
Sat Flow, veh/h	776	3554	1585	980	3554	1585	1359	1870	1585	1360	1870	1585
Grp Volume(v), veh/h	139	403	2	24	634	24	27	46	0	48	47	0
Grp Sat Flow(s),veh/h/ln	776	1777	1585	980	1777	1585	1359	1870	1585	1360	1870	1585
Q Serve(g_s), s	7.4	3.6	0.0	0.8	6.1	0.4	0.6	0.7	0.0	1.0	0.7	0.0
Cycle Q Clear(g_c), s	13.5	3.6	0.0	4.4	6.1	0.4	1.2	0.7	0.0	1.7	0.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	1417	632	470	1417	632	718	803		719	803	
V/C Ratio(X)	0.38	0.28	0.00	0.05	0.45	0.04	0.04	0.06		0.07	0.06	
Avail Cap(c_a), veh/h	587	2442	1089	753	2442	1089	718	803		719	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
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.2	9.5	8.4	11.0	10.2	8.5	8.1	7.8	0.0	8.3	7.8	0.0
Incr Delay (d2), s/veh	0.7	0.1	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.0	0.0	0.1	1.7	0.1	0.1	0.2	0.0	0.3	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	9.6	8.4	11.0	10.5	8.6	8.2	7.9	0.0	8.4	7.9	0.0
LnGrp LOS	B	A	A	B	B	A	A	A		A	A	
Approach Vol, veh/h		544			682			73	A		95	A
Approach Delay, s/veh		11.2			10.4			8.0			8.2	
Approach LOS		B			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.0		22.6		24.0		22.6				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		20.0		32.0		20.0		32.0				
Max Q Clear Time (g_c+I1), s		3.2		15.5		3.7		8.1				
Green Ext Time (p_c), s		0.2		3.0		0.3		4.2				

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	681	29	22	437	43	41	56	37	29	38	105
Future Volume (veh/h)	179	681	29	22	437	43	41	56	37	29	38	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	717	31	23	460	45	43	59	0	31	40	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	455	1502	670	351	1502	670	692	760		674	760	
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.41	0.41	0.00	0.41	0.41	0.00
Sat Flow, veh/h	894	3554	1585	713	3554	1585	1367	1870	1585	1344	1870	1585
Grp Volume(v), veh/h	188	717	31	23	460	45	43	59	0	31	40	0
Grp Sat Flow(s),veh/h/ln	894	1777	1585	713	1777	1585	1367	1870	1585	1344	1870	1585
Q Serve(g_s), s	8.3	6.8	0.5	1.1	4.0	0.8	0.9	0.9	0.0	0.7	0.6	0.0
Cycle Q Clear(g_c), s	12.3	6.8	0.5	8.0	4.0	0.8	1.5	0.9	0.0	1.6	0.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	455	1502	670	351	1502	670	692	760		674	760	
V/C Ratio(X)	0.41	0.48	0.05	0.07	0.31	0.07	0.06	0.08		0.05	0.05	
Avail Cap(c_a), veh/h	708	2507	1118	553	2507	1118	692	760		674	760	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	9.8	7.9	12.6	9.0	8.0	8.9	8.5	0.0	9.0	8.4	0.0
Incr Delay (d2), s/veh	0.6	0.2	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.8	0.1	0.1	1.1	0.2	0.2	0.3	0.0	0.2	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	10.0	8.0	12.7	9.1	8.1	9.1	8.7	0.0	9.1	8.6	0.0
LnGrp LOS	B	A	A	B	A	A	A	A		A	A	
Approach Vol, veh/h		936			528			102	A		71	A
Approach Delay, s/veh		10.7			9.1			8.9			8.8	
Approach LOS		B			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		23.8		23.0		23.8				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		19.0		33.0		19.0		33.0				
Max Q Clear Time (g_c+I1), s		3.5		14.3		3.6		10.0				
Green Ext Time (p_c), s		0.3		5.5		0.2		3.1				
Intersection Summary												
HCM 6th Ctrl Delay			10.0									
HCM 6th LOS			A									

Notes
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	470	55	47	629	106	43	341	22	40	181	115
Future Volume (veh/h)	175	470	55	47	629	106	43	341	22	40	181	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	505	0	51	676	0	46	367	0	43	195	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	1115		387	881		517	1088		430	1082	
Arrive On Green	0.11	0.31	0.00	0.04	0.25	0.00	0.04	0.31	0.00	0.04	0.30	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	188	505	0	51	676	0	46	367	0	43	195	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.8	6.0	0.0	1.1	9.3	0.0	0.9	4.2	0.0	0.9	2.1	0.0
Cycle Q Clear(g_c), s	3.8	6.0	0.0	1.1	9.3	0.0	0.9	4.2	0.0	0.9	2.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	380	1115		387	881		517	1088		430	1082	
V/C Ratio(X)	0.50	0.45		0.13	0.77		0.09	0.34		0.10	0.18	
Avail Cap(c_a), veh/h	463	1353		452	1082		586	1088		502	1082	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.7	14.4	0.0	13.8	18.3	0.0	11.7	14.1	0.0	11.9	13.4	0.0
Incr Delay (d2), s/veh	1.0	0.3	0.0	0.2	2.7	0.0	0.1	0.8	0.0	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	0.0	0.4	3.4	0.0	0.3	1.5	0.0	0.3	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	14.7	0.0	13.9	21.0	0.0	11.8	14.9	0.0	12.0	13.8	0.0
LnGrp LOS	B	B		B	C		B	B		B	B	
Approach Vol, veh/h		693	A		727	A		413	A		238	A
Approach Delay, s/veh		14.4			20.5			14.6			13.5	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	20.1	6.1	20.5	6.0	20.0	9.6	17.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	16.0	4.0	20.0	4.0	16.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	6.2	3.1	8.0	2.9	4.1	5.8	11.3
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	0.7	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	738	56	37	500	69	67	375	43	98	328	174
Future Volume (veh/h)	172	738	56	37	500	69	67	375	43	98	328	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	181	777	0	39	526	0	71	395	0	103	345	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	400	1039		263	785		479	1092		463	1130	
Arrive On Green	0.10	0.29	0.00	0.03	0.22	0.00	0.05	0.31	0.00	0.06	0.32	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	181	777	0	39	526	0	71	395	0	103	345	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.8	10.3	0.0	0.9	7.0	0.0	1.4	4.5	0.0	2.0	3.8	0.0
Cycle Q Clear(g_c), s	3.8	10.3	0.0	0.9	7.0	0.0	1.4	4.5	0.0	2.0	3.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	400	1039		263	785		479	1092		463	1130	
V/C Ratio(X)	0.45	0.75		0.15	0.67		0.15	0.36		0.22	0.31	
Avail Cap(c_a), veh/h	487	1365		341	1092		529	1092		494	1130	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.9	16.7	0.0	15.3	18.5	0.0	11.3	14.0	0.0	11.3	13.4	0.0
Incr Delay (d2), s/veh	0.8	1.6	0.0	0.3	1.0	0.0	0.1	0.9	0.0	0.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.6	0.0	0.3	2.5	0.0	0.4	1.6	0.0	0.6	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	18.3	0.0	15.5	19.6	0.0	11.5	15.0	0.0	11.5	14.1	0.0
LnGrp LOS	B	B		B	B		B	B		B	B	
Approach Vol, veh/h		958	A		565	A		466	A		448	A
Approach Delay, s/veh		17.4			19.3			14.4			13.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	20.0	5.7	19.2	6.6	20.5	9.4	15.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	16.0	4.0	20.0	4.0	16.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	4.0	6.5	2.9	12.3	3.4	5.8	5.8	9.0
Green Ext Time (p_c), s	0.0	1.6	0.0	2.9	0.0	1.4	0.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	378	2	22	607	22	26	43	12	45	44	170
Future Volume (veh/h)	130	378	2	22	607	22	26	43	12	45	44	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	203	2	24	660	24	28	47	0	49	48	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	1406	627	584	1406	627	718	795		719	795	
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.43	0.43	0.00	0.43	0.43	0.00
Sat Flow, veh/h	757	3554	1585	1177	3554	1585	1357	1870	1585	1359	1870	1585
Grp Volume(v), veh/h	141	203	2	24	660	24	28	47	0	49	48	0
Grp Sat Flow(s),veh/h/ln	757	1777	1585	1177	1777	1585	1357	1870	1585	1359	1870	1585
Q Serve(g_s), s	7.6	1.6	0.0	0.6	6.2	0.4	0.6	0.7	0.0	1.0	0.7	0.0
Cycle Q Clear(g_c), s	13.7	1.6	0.0	2.2	6.2	0.4	1.2	0.7	0.0	1.6	0.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	1406	627	584	1406	627	718	795		719	795	
V/C Ratio(X)	0.40	0.14	0.00	0.04	0.47	0.04	0.04	0.06		0.07	0.06	
Avail Cap(c_a), veh/h	616	2625	1171	987	2625	1171	718	795		719	795	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.1	8.7	8.2	9.4	10.0	8.3	7.9	7.6	0.0	8.1	7.6	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.0	0.2	0.0	0.1	0.1	0.0	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.4	0.0	0.1	1.6	0.1	0.1	0.2	0.0	0.3	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	8.7	8.2	9.4	10.3	8.3	8.0	7.7	0.0	8.2	7.7	0.0
LnGrp LOS	B	A	A	A	B	A	A	A		A	A	
Approach Vol, veh/h		346			708			75	A		97	A
Approach Delay, s/veh		11.6			10.2			7.8			8.0	
Approach LOS		B			B			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		21.7		23.0		21.7				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		19.0		33.0		19.0		33.0				
Max Q Clear Time (g_c+I1), s		3.2		15.7		3.6		8.2				
Green Ext Time (p_c), s		0.2		1.9		0.3		4.4				
Intersection Summary												
HCM 6th Ctrl Delay			10.3									
HCM 6th LOS			B									

Notes
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	709	30	22	446	44	42	57	38	30	39	107
Future Volume (veh/h)	183	709	30	22	446	44	42	57	38	30	39	107
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	193	746	32	23	469	46	44	60	0	32	41	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	457	1532	683	346	1532	683	680	749		662	749	
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.40	0.40	0.00	0.40	0.40	0.00
Sat Flow, veh/h	886	3554	1585	694	3554	1585	1366	1870	1585	1343	1870	1585
Grp Volume(v), veh/h	193	746	32	23	469	46	44	60	0	32	41	0
Grp Sat Flow(s),veh/h/ln	886	1777	1585	694	1777	1585	1366	1870	1585	1343	1870	1585
Q Serve(g_s), s	8.7	7.2	0.6	1.2	4.1	0.8	1.0	0.9	0.0	0.7	0.6	0.0
Cycle Q Clear(g_c), s	12.8	7.2	0.6	8.3	4.1	0.8	1.6	0.9	0.0	1.7	0.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	457	1532	683	346	1532	683	680	749		662	749	
V/C Ratio(X)	0.42	0.49	0.05	0.07	0.31	0.07	0.06	0.08		0.05	0.05	
Avail Cap(c_a), veh/h	691	2471	1102	529	2471	1102	680	749		662	749	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	9.7	7.8	12.7	8.8	7.9	9.2	8.8	0.0	9.3	8.7	0.0
Incr Delay (d2), s/veh	0.6	0.2	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.9	0.1	0.1	1.1	0.2	0.3	0.3	0.0	0.2	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	10.0	7.9	12.8	9.0	7.9	9.4	9.0	0.0	9.5	8.9	0.0
LnGrp LOS	B	A	A	B	A	A	A	A		A	A	
Approach Vol, veh/h		971			538			104	A		73	A
Approach Delay, s/veh		10.6			9.0			9.2			9.1	
Approach LOS		B			A			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		24.5		23.0		24.5				
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0				
Max Green Setting (Gmax), s		19.0		33.0		19.0		33.0				
Max Q Clear Time (g_c+I1), s		3.6		14.8		3.7		10.3				
Green Ext Time (p_c), s		0.3		5.7		0.2		3.1				
Intersection Summary												
HCM 6th Ctrl Delay			10.0									
HCM 6th LOS			A									

Notes
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	507	55	48	636	111	43	341	23	44	181	115
Future Volume (veh/h)	175	507	55	48	636	111	43	341	23	44	181	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	545	0	52	684	0	46	367	0	47	195	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	371	1107		366	878		526	1118		439	1120	
Arrive On Green	0.10	0.31	0.00	0.04	0.25	0.00	0.04	0.31	0.00	0.04	0.32	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	188	545	0	52	684	0	46	367	0	47	195	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	4.0	6.7	0.0	1.2	9.7	0.0	0.9	4.3	0.0	0.9	2.1	0.0
Cycle Q Clear(g_c), s	4.0	6.7	0.0	1.2	9.7	0.0	0.9	4.3	0.0	0.9	2.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	1107		366	878		526	1118		439	1120	
V/C Ratio(X)	0.51	0.49		0.14	0.78		0.09	0.33		0.11	0.17	
Avail Cap(c_a), veh/h	415	1250		426	1053		592	1118		505	1120	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.2	15.1	0.0	14.2	19.0	0.0	11.7	14.1	0.0	11.8	13.4	0.0
Incr Delay (d2), s/veh	1.1	0.3	0.0	0.2	3.2	0.0	0.1	0.8	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.2	0.0	0.4	3.7	0.0	0.3	1.5	0.0	0.3	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	15.5	0.0	14.4	22.1	0.0	11.8	14.9	0.0	11.9	13.7	0.0
LnGrp LOS	B	B		B	C		B	B		B	B	
Approach Vol, veh/h		733	A		736	A		413	A		242	A
Approach Delay, s/veh		15.2			21.6			14.6			13.4	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	21.0	6.2	20.8	6.0	21.0	9.7	17.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	17.0	4.0	19.0	4.0	17.0	7.0	16.0
Max Q Clear Time (g_c+I1), s	2.9	6.3	3.2	8.7	2.9	4.1	6.0	11.7
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	0.8	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	746	56	38	528	82	67	375	44	100	328	174
Future Volume (veh/h)	172	746	56	38	528	82	67	375	44	100	328	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	181	785	0	40	556	0	71	395	0	105	345	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	1044		262	793		478	1087		463	1129	
Arrive On Green	0.10	0.29	0.00	0.03	0.22	0.00	0.05	0.31	0.00	0.06	0.32	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	181	785	0	40	556	0	71	395	0	105	345	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.8	10.5	0.0	0.9	7.5	0.0	1.4	4.5	0.0	2.1	3.8	0.0
Cycle Q Clear(g_c), s	3.8	10.5	0.0	0.9	7.5	0.0	1.4	4.5	0.0	2.1	3.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	391	1044		262	793		478	1087		463	1129	
V/C Ratio(X)	0.46	0.75		0.15	0.70		0.15	0.36		0.23	0.31	
Avail Cap(c_a), veh/h	477	1358		338	1087		527	1087		490	1129	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	16.7	0.0	15.2	18.7	0.0	11.4	14.2	0.0	11.4	13.5	0.0
Incr Delay (d2), s/veh	0.9	1.7	0.0	0.3	1.2	0.0	0.1	0.9	0.0	0.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.6	0.0	0.3	2.7	0.0	0.4	1.6	0.0	0.7	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	18.5	0.0	15.5	20.0	0.0	11.6	15.1	0.0	11.6	14.2	0.0
LnGrp LOS	B	B		B	B		B	B		B	B	
Approach Vol, veh/h		966	A		596	A		466	A		450	A
Approach Delay, s/veh		17.6			19.7			14.6			13.6	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.2	20.0	5.8	19.4	6.6	20.6	9.5	15.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	4.0	16.0	4.0	20.0	4.0	16.0	8.0	16.0				
Max Q Clear Time (g_c+I1), s	4.1	6.5	2.9	12.5	3.4	5.8	5.8	9.5				
Green Ext Time (p_c), s	0.0	1.6	0.0	2.9	0.0	1.4	0.1	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	384	3	22	630	22	27	43	12	45	44	180
Future Volume (veh/h)	140	384	3	22	630	22	27	43	12	45	44	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	152	210	3	24	685	24	29	47	0	49	48	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	1473	657	598	1473	657	694	771		695	771	
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.00	0.41	0.41	0.00
Sat Flow, veh/h	740	3554	1585	1168	3554	1585	1357	1870	1585	1359	1870	1585
Grp Volume(v), veh/h	152	210	3	24	685	24	29	47	0	49	48	0
Grp Sat Flow(s),veh/h/ln	740	1777	1585	1168	1777	1585	1357	1870	1585	1359	1870	1585
Q Serve(g_s), s	8.6	1.7	0.1	0.6	6.4	0.4	0.6	0.7	0.0	1.0	0.7	0.0
Cycle Q Clear(g_c), s	15.1	1.7	0.1	2.3	6.4	0.4	1.3	0.7	0.0	1.7	0.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	1473	657	598	1473	657	694	771		695	771	
V/C Ratio(X)	0.42	0.14	0.00	0.04	0.46	0.04	0.04	0.06		0.07	0.06	
Avail Cap(c_a), veh/h	582	2543	1134	949	2543	1134	694	771		695	771	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.3	8.4	7.9	9.1	9.8	8.0	8.6	8.2	0.0	8.7	8.2	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.2	0.0	0.1	0.2	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.4	0.0	0.1	1.7	0.1	0.2	0.2	0.0	0.3	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	8.4	7.9	9.1	10.0	8.0	8.7	8.3	0.0	8.9	8.3	0.0
LnGrp LOS	B	A	A	A	B	A	A	A		A	A	
Approach Vol, veh/h		365			733			76	A		97	A
Approach Delay, s/veh		11.6			9.9			8.5			8.6	
Approach LOS		B			A			A			A	

Timer - Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		23.0		23.1		23.0		23.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		19.0		33.0		19.0		33.0
Max Q Clear Time (g_c+I1), s		3.3		17.1		3.7		8.4
Green Ext Time (p_c), s		0.2		2.0		0.2		4.6

Intersection Summary	
HCM 6th Ctrl Delay	10.2
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	729	31	22	457	44	43	57	38	30	39	110
Future Volume (veh/h)	193	729	31	22	457	44	43	57	38	30	39	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	767	33	23	481	46	45	60	0	32	41	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	1573	702	345	1573	702	666	734		648	734	
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.39	0.39	0.00	0.39	0.39	0.00
Sat Flow, veh/h	876	3554	1585	680	3554	1585	1366	1870	1585	1343	1870	1585
Grp Volume(v), veh/h	203	767	33	23	481	46	45	60	0	32	41	0
Grp Sat Flow(s),veh/h/ln	876	1777	1585	680	1777	1585	1366	1870	1585	1343	1870	1585
Q Serve(g_s), s	9.4	7.4	0.6	1.2	4.2	0.8	1.0	1.0	0.0	0.7	0.7	0.0
Cycle Q Clear(g_c), s	13.6	7.4	0.6	8.6	4.2	0.8	1.7	1.0	0.0	1.7	0.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	460	1573	702	345	1573	702	666	734		648	734	
V/C Ratio(X)	0.44	0.49	0.05	0.07	0.31	0.07	0.07	0.08		0.05	0.06	
Avail Cap(c_a), veh/h	669	2421	1080	507	2421	1080	666	734		648	734	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.1	9.6	7.7	12.7	8.7	7.7	9.7	9.2	0.0	9.8	9.1	0.0
Incr Delay (d2), s/veh	0.7	0.2	0.0	0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.0	0.1	0.2	1.1	0.2	0.3	0.4	0.0	0.2	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	9.8	7.7	12.7	8.8	7.8	9.9	9.5	0.0	9.9	9.3	0.0
LnGrp LOS	B	A	A	B	A	A	A	A		A	A	
Approach Vol, veh/h		1003			550			105	A		73	A
Approach Delay, s/veh		10.6			8.9			9.6			9.6	
Approach LOS		B			A			A			A	

Timer - Assigned Phs	2		4		6		8	
Phs Duration (G+Y+Rc), s	23.0		25.4		23.0		25.4	
Change Period (Y+Rc), s	4.0		4.0		4.0		4.0	
Max Green Setting (Gmax), s	19.0		33.0		19.0		33.0	
Max Q Clear Time (g_c+I1), s	3.7		15.6		3.7		10.6	
Green Ext Time (p_c), s	0.3		5.8		0.2		3.2	

Intersection Summary		
HCM 6th Ctrl Delay		9.9
HCM 6th LOS		A

Notes
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	42	527	803	34	10	13
Future Vol, veh/h	42	527	803	34	10	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	450	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	238	873	37	11	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	910	0	-	0	1103	455
Stage 1	-	-	-	-	892	-
Stage 2	-	-	-	-	211	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	744	-	-	-	206	552
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	804	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	744	-	-	-	193	552
Mov Cap-2 Maneuver	-	-	-	-	193	-
Stage 1	-	-	-	-	339	-
Stage 2	-	-	-	-	804	-

Approach	EB	WB	SB
HCM Control Delay, s	1.6	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	744	-	-	-	305
HCM Lane V/C Ratio	0.061	-	-	-	0.082
HCM Control Delay (s)	10.2	-	-	-	17.9
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	13	922	595	15	32	42
Future Vol, veh/h	13	922	595	15	32	42
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	971	626	16	34	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	642	0	-	0	1148	321
Stage 1	-	-	-	-	634	-
Stage 2	-	-	-	-	514	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	939	-	-	-	192	675
Stage 1	-	-	-	-	491	-
Stage 2	-	-	-	-	565	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	939	-	-	-	189	675
Mov Cap-2 Maneuver	-	-	-	-	189	-
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	565	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	19.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	939	-	-	-	320
HCM Lane V/C Ratio	0.015	-	-	-	0.243
HCM Control Delay (s)	8.9	-	-	-	19.8
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.9