TRAFFIC IMPACT STUDY FOR

MARIETTA BLVD MIXED USE DRI #2929

DATE:
May 17, 2019

LOCATION:
Marietta Blvd & Chatachoochee Ave
City of Atlanta, Fulton County, Georgia

PREPARED FOR:
AB Capital LLC

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Executive Summary

A new mixed-use development in the City of Atlanta containing 350 multifamily units and 299,292 square feet (sf) commercial space (including 249,000 sf office, 25,000 sf retail and 25,000 sf restaurant use spaces) is planned for the 5.51 acres' site located west of Marietta Boulevard NW and east of Chattahoochee Avenue NW, north of the Bolton Pl intersection to be completed in 2021. The development site is located in the northwest quadrant of the City, west of I-75 and east of I-285. There will be three (3) vehicular access points, two (2) intersections on Marietta Boulevard and one (1) on Chattahoochee Avenue. The zoning is changing from Industrial (I-I) to Mixed Use (MRC-2).

When completed, the development is expected to generate 305 AM and 179 PM weekday peak hour (of the adjacent street) new entering vehicular trips with 148 AM and 267 PM new exiting vehicular trips. Daily, the development is expected to generate a total of 8,914 new trips. Of these, approximately 2,641 new entering and 2,641 new exiting vehicular trips are expected daily. This assumes the calculated combined peak hours 31% internal capture reduction applies over the entire day, the PM peak hours' pass-by reduction is applied (9.6% for 2 hours—52 trips), and the 7.5% modal split reduction is applied. The intersection capacity analyses assumed 40% of the residential use generated vehicles and 60% of the commercial use generated vehicles will originate and terminate north (and northeast and west) of the site and the remainder to/from the south using Marietta Boulevard.

The existing lane configurations and existing and planned traffic control (Bolton Place at Marietta Blvd to be signalized by 2021) 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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CALYX #2019057

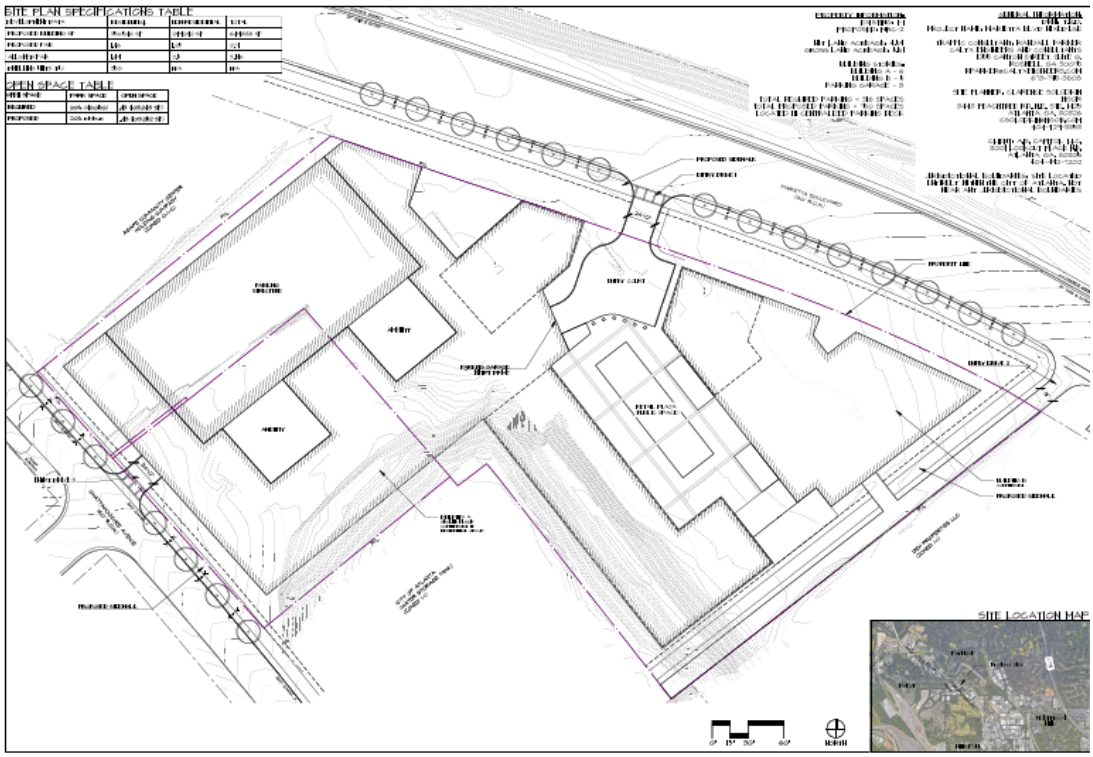
A. Introduction

A new mixed-use development in the City of Atlanta containing 350 multifamily units and 299,292 square feet (sf) commercial space (including 249,000 sf office, 25,000 sf retail and 25,000 sf restaurant use spaces) is planned for the 5.51 acres' site located west of Marietta Boulevard NW and east of Chattahoochee Avenue NW, north of the Bolton Pl intersection to be completed in 2021. The development site is located in the northwest quadrant of the City, west of I-75 and east of I-285. There will be three (3) vehicular access points, two (2) intersections on Marietta Boulevard and one (1) on Chattahoochee Avenue. The zoning is changing from Industrial (I-I) to Mixed Use (MRC-2).

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 Descrioption

B.1. Phasing

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

B.2. Transportation Facilities and LOS Standards

Marietta Boulevard is a four-lane 45 mph minor arterial that connects I-285 with west Midtown.

Chattahoochee Avenue is a two-lane major collector east of Marietta Boulevard and a local road west of Marietta Boulevard. It serves as a connection to Howell Mill Road and ultimately to I-75.

Bolton Place is a two-lane local road that will link Marietta Boulevard with Bolton Drive.

Coronet Way is a two-lane local road that serves as a connection and possible cut-thru to Bolton Rd northwest of the study area.

Moores Mill Road is a local two-lane road between Marietta Blvd and I-75.

Bolton Road is a local two-lane road between SR 280 and Coronet Way.

MacArthur Boulevard is a local two-lane road running west from Chattahoochee Ave to a dead end.

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

B.3. Transit

There are MARTA bus routes along Marietta Blvd at the site.

B.4. Pedestrian and Bicycle Facilitiest

There are sidewalks along Marietta Blvd adjacent to the site. There are no bicycle facilities adjacent to the site.

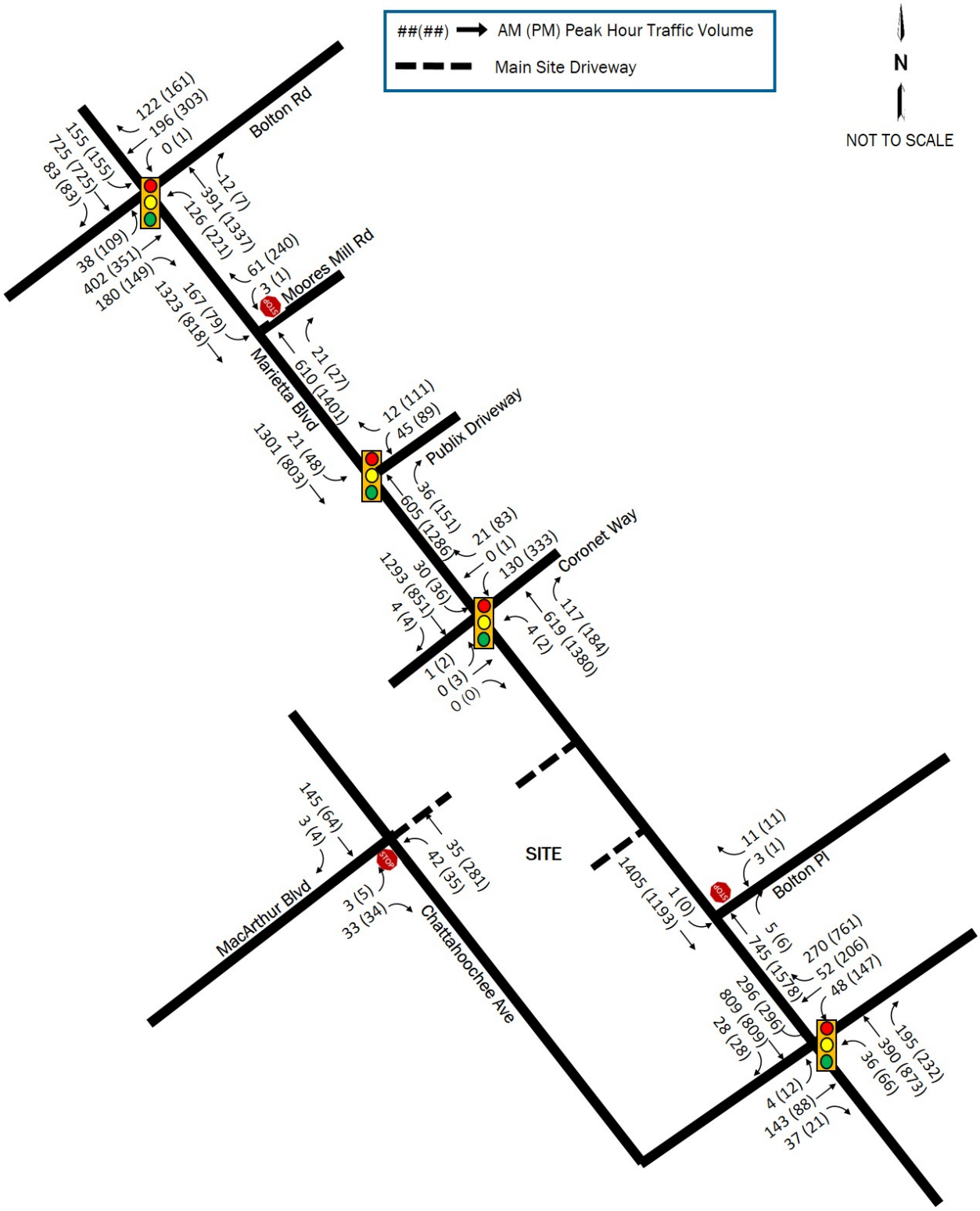
B.5. Traffic Volumes

Traffic counts were collected on Thursday, April 18, 2018 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 4:30 to 5:30 PM at the following study intersections:

Marietta Blvd & Chattahoochee Ave (signalized)
Marietta Blvd & Bolton Place
Marietta Blvd & Coronet Way
Marietta Blvd & Moores Mill Rd
Marietta Blvd & Publix Driveway (signalized)
Marietta Blvd & Bolton Rd (signalized)
Site Access on Chattahoochee Ave
Site Access #1 (north) on Marietta Blvd
Site Access #2 (south) on Marietta Blvd
Site Access #3 on Chattahoochee Ave

Figure 2 shows the study intersection existing peak hour turning movement counts. A 24-hour bidirectional vehicular count was collected on Marietta Blvd on the same day. There were 31,024 vehicles counted, including 1,035 trucks with over three (3) axles in both directions. The count worksheets are included in the Appendix.

Figure 2: Existing Turning Movement Counts



C. Future Conditions

C.1. No Build (Background) Growth

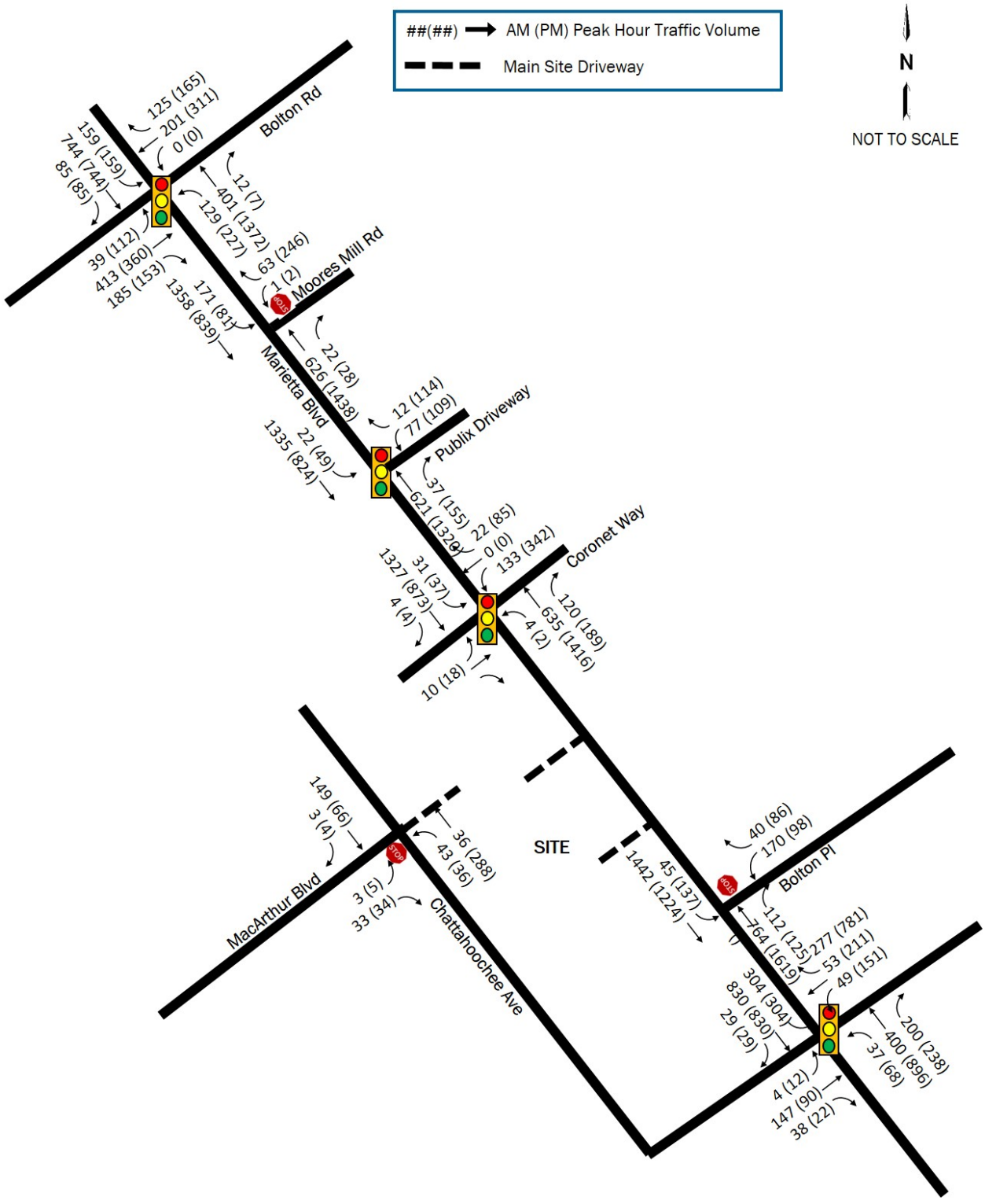
The existing volumes were increased by 1.3% annually (for a conservative growth estimate) for three (3) years for the No Build (background) traffic volumes as shown in Figure 3.

C.2. Planned/programed Imparovementst

According to ARC's Transportation Improvement Program, the Regional Transportation Plan (Atlanta Region's Plan), GDOT's construction work programs, City of Atlanta and Fulton 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 (Bolton Place at Marietta Blvd to be signalized by 2021) 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
Apartments (221) 350 Dwelling Units	Daily	1,906	953	953
	AM Peak Hour	117	30	87
	PM Peak Hour	147	90	57
Office (710) 249,000 sf	Daily	2,570	1,285	1,285
	AM Peak Hour	261	224	37
	PM Peak Hour	271	43	228
Retail (820) 25,000 sf	Daily	2,342	1,171	1,171
	AM Peak Hour	164	102	62
	PM Peak Hour	195	94	101
Restaurants (931) 25,000 sf	Daily	2,096	1,048	1,048
	AM Peak Hour	18	9	9
	PM Peak Hour	195	131	64
Total New Trips	Daily	8,914	4,457	4,457
	AM Peak Hour	560	365	195
	PM Peak Hour	808	358	450
New External Trips	AM Peak Hour	490	330	160
(after Internal Capture Reduction)	PM Peak Hour	539	222	317
New External Vehicular Trips		**8,246**	**4,123**	**4,123**
(after 7.5% Modal Split Reduction)	AM Peak Hour	**453**	**305**	**148**
	PM Peak Hour	498	205	293
(after Bypass trips reductions)	PM Peak Hour	**487**	**179**	**267**

Internal capture of trips between different land uses within the site were calculated using the ITE Trip Generation Manual criteria (worksheets included in Appendix) to reduce the number of new external trips. Pass-by reduction of trips on the external roadways (but not at the site driveways' entering and exiting trips) for the retail and restaurants was applied (9.6%) and the agreed upon 7.5% modal split reduction was applied to calculate the number of new vehicular trips expected.

C.4. Trip Distribution and Assignment

The intersection capacity analyses assumed 40% of the residential use generated vehicles and 60% of the commercial use generated vehicles will originate and terminate north (and northeast and west) of the site and the remainder to/from the south using Marietta Boulevard.

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

Figure 4: Project Trips

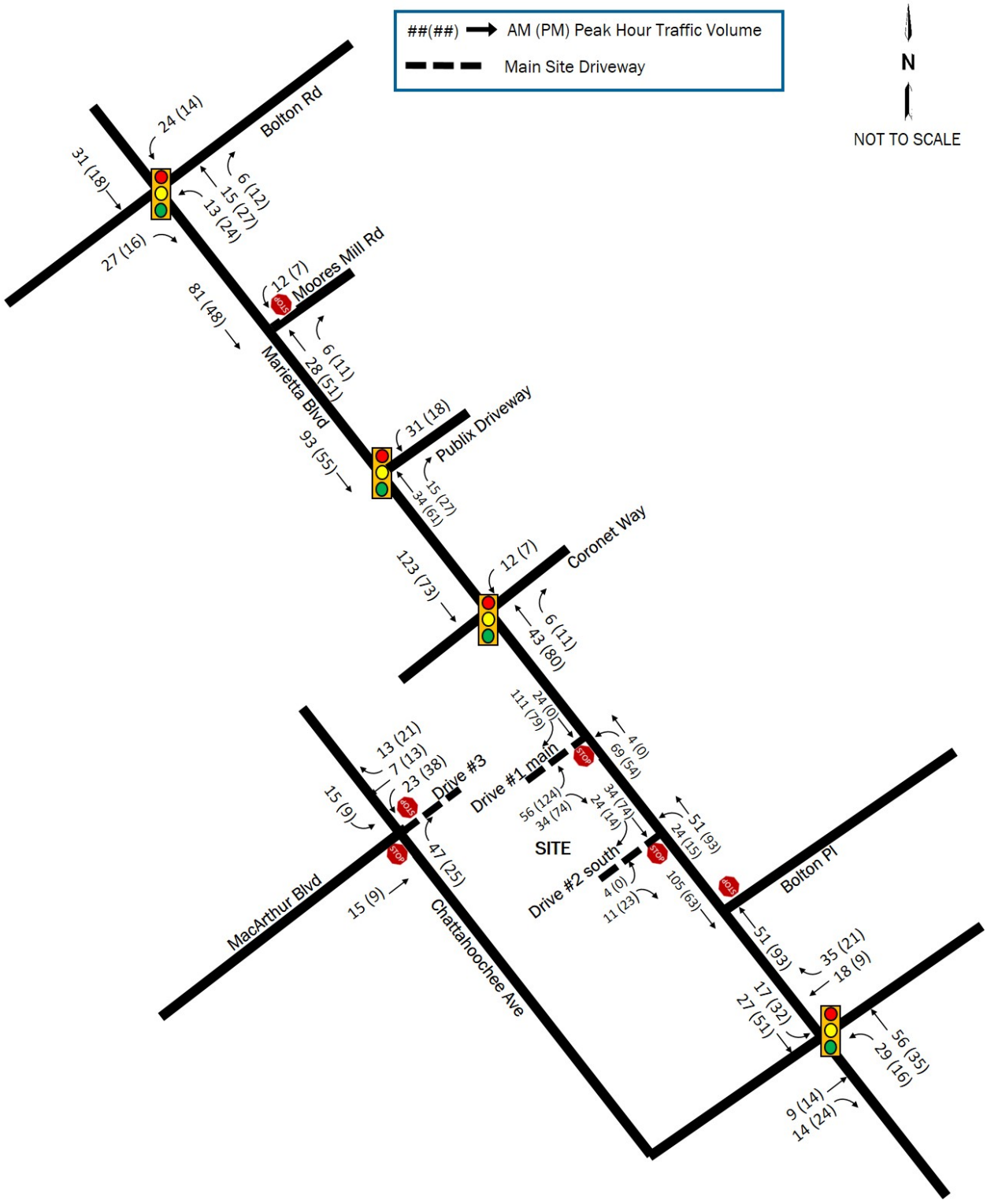
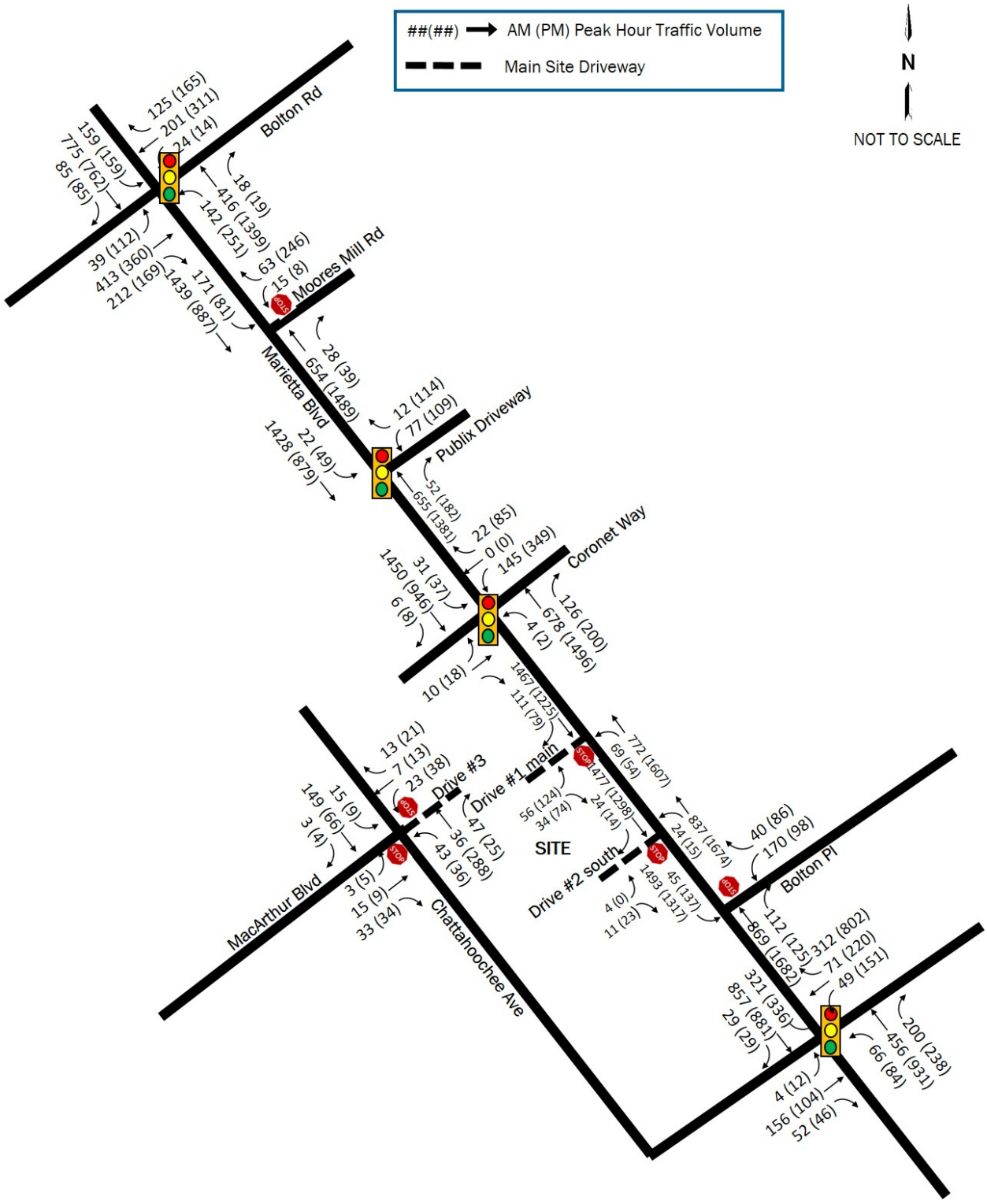


Figure 5: Build Traffic Volumes



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
Chattahoochee Ave at Marietta Blvd	Signal	Overall	9.0	A	24.9	C
Bolton Place at Marietta Blvd	Side Street Stop	NB	0	A	0	A
		SBl	0	A	0	A
		WB	33.5	D	157.0	F
Coronet Way at Marietta Blvd	Signal	Overall	5.1	A	18.7	B
Publix Dr at Marietta Blvd	Signal	Overall	3.1	A	3.6	A
Moores Mill Rd at Marietta Blvd	Side Street Stop	NB	0	A	0	A
		SBL	9.3	A	13.0	B
		WB	11.1	B	11.8	B
Bolton Rd at Marietta Blvd	Signal	Overall	15.6	B	19.8	B
Chattahoochee Ave at MacArthur Blvd	Side Street Stop	NB	4.3	A	1.1	A
		SB	0	A	0	A
		EB	9.4	A	9.5	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
Chattahoochee Ave at Marietta Blvd	Signal	Overall	10.8	B	27.2	C
Bolton Place at Marietta Blvd	Signal	Overall	6.9	A	21.9	C
Coronet Way at Marietta Blvd	Signal	Overall	4.7	A	16.5	B
Publix Dr at Marietta Blvd	Signal	Overall	3.2	A	4.7	A
Moores Mill Rd at Marietta Blvd	Side Street Stop	NB	0	A	0	A
		SBL	13.4	B	9.4	A
		WB	12.1	B	11.2	B
Bolton Rd at Marietta Blvd	Signal	Overall	16.0	B	27.5	C
Chattahoochee Ave at MacArthur Blvd	Side Street Stop	NB	4.3	A	1.1	A
		SB	0	A	0	A
		EB	9.4	A	9.5	A

All of the study intersections are expected to operate adequately with the existing lane configurations and the existing or planned control (Bolton Place at Marietta Blvd to be signalized by 2021).

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
Chattahoochee Ave at Marietta Blvd	Signal	Overall	12.0	B	32.9	C
Bolton Place at Marietta Blvd	Signal	Overall	6.7	A	27.8	C
Coronet Way at Marietta Blvd	Signal	Overall	5.7	A	24.0	C
Publix Dr at Marietta Blvd	Signal	Overall	4.2	A	3.9	A
Moores Mill Rd at Marietta Blvd	Side Street Stop	NB	0	A	0	A
		SBL	9.5	A	13.9	B
		WB	16.4	C	14.5	B
Bolton Rd at Marietta Blvd	Signal	Overall	17.2	B	26.4	C
Drive #3/MacArthur Blvd at Chattahoochee Ave	Side Street Stop	NB	2.8	A	1.0	A
		SB	0.8	A	1.0	A
		EB	10.5	B	10.7	B
		WB	11.6	B	15.4	C
Drive #2 (south) at Marietta Blvd	Side Street Stop	NB	1.9	A	0.8	A
		SB	0	A	0	A
		EB	32.1	D	14.5	B
Drive #1 (main) at Marietta Blvd	Side Street Stop	NB	5.1	A	2.7	A
		SB	0	A	0	A
		EB	32.0	D	337	D

All of the study intersections are expected to operate adequately with the existing lane configurations and existing or planned control (Bolton Place at Marietta Blvd to be signalized by 2021). The site driveways are expected to operated adequately during the weekday peak hours with side-street stop controls and shared turning lanes on all approaches. However, it may become difficult for additional exiting left-turning vehicles, particulary from driveway #2, to find sufficient gaps in the Marietta Blvd through traffic during peak volume hours. Although not identified in the analyses, there should be consideration of aligning Bolton Place with one of the site driveways to allow the planned traffic signal to provide controlled access for this development. This should not be a condition for approval of this DRI as the developer does not control the property to effect this realignment of Bolton Place. In addition, although not identified in the capacity analyses as necessary, separate dedicated turning lanes at the site access points on Marietta Blvd are recommended to minimize delays caused by left-turning vehicles waiting for gaps in the through traffic to avoid blocking other vehicles.

E. Recommendations

A new mixed-use development in the City of Atlanta containing 350 multifamily units and 299,292 square feet (sf) commercial space (including 249,000 sf office, 25,000 sf retail and 25,000 sf restaurant use spaces) is planned for the 5.51 acres' site located west of Marietta Boulevard NW and east of Chattahoochee Avenue NW, north of the Bolton Pl intersection to be completed in 2021. The development site is located in the northwest quadrant of the City, west of I-75 and east of I-285. There will be three (3) vehicular access points, two (2) intersections on Marietta Boulevard and one (1) on Chattahoochee Avenue. The zoning is changing from Industrial (I-I) to Mixed Use (MRC-2).

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APPENDIX

Prepared by National Data & Surveying Services

Marietta Blvd & Chattahoochee Ave NW

Peak Hour Turning Movement Count

ID: 19-09270-001
City: Atlanta

Day: Thursday
Date: 04/18/2019

PEAK HOURS

AM	07:45 AM - 08:45 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 07:00 PM

Marietta Blvd — SOUTHBOUND

AM	17	736	661	0	664	AM
NOON	0	0	0	0	0	NOON
PM	28	809	296	0	1646	PM

Chattahoochee Ave NW — EASTBOUND

AM	NOON	PM		
105	0	300		
0	0	0	0	
4	0	12	0	
143	0	88	1	
37	0	21	0	
AM	NOON	PM		

CONTROL

Signalized

TEV	2589 AM	0 NOON	3539 PM
PHF	0.97		0.98

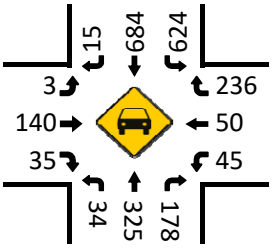
Chattahoochee Ave NW — WESTBOUND

PM	NOON	AM	
761	0	270	0
206	0	52	2
147	0	48	0
0	0	0	0
616	0	999	
PM	NOON	AM	

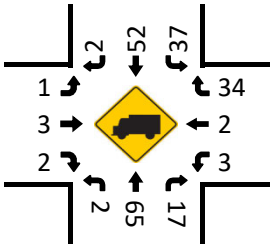
Marietta Blvd — NORTHBOUND

PM	977	0	66	873	232	PM
NOON	0	0	0	0	0	NOON
AM	821	0	36	390	195	AM

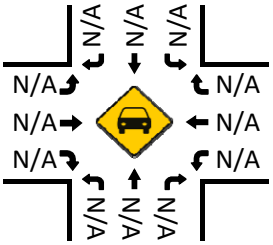
Cars (AM)



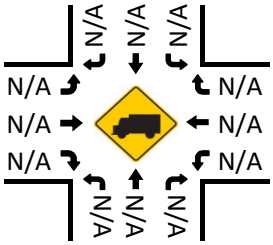
HT (AM)



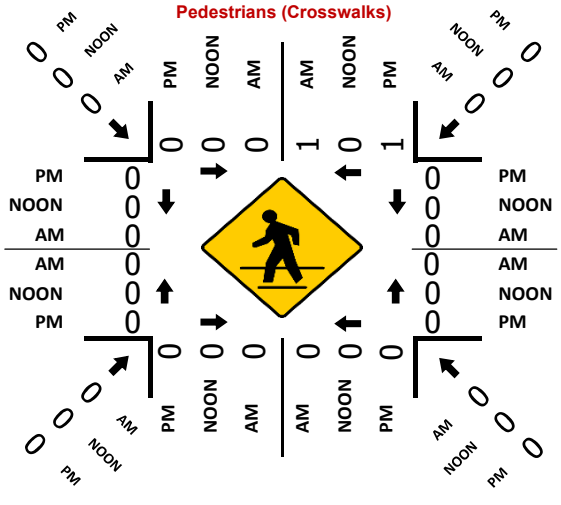
Cars (NOON)



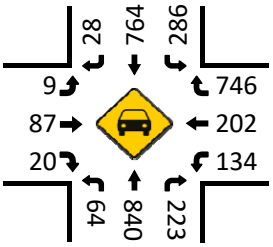
HT (NOON)



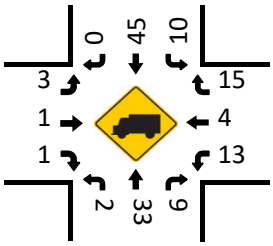
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 19-09270-001
Location: Marietta Blvd & Chattahoochee Ave NW
City: Atlanta

Day: Thursday
Date: 04/18/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Marietta Blvd Northbound						Marietta Blvd Southbound						Chattahoochee Ave NW Eastbound						Chattahoochee Ave NW Westbound						
Start Time	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	Int. Total
7:00 AM	3	65	22	0	0	90	154	127	3	0	0	284	0	18	5	0	0	23	6	14	44	0	1	64	461
7:15 AM	8	66	32	0	0	106	178	176	1	0	0	355	1	28	3	0	0	32	8	8	59	0	0	75	568
7:30 AM	1	90	37	0	0	128	174	168	4	0	0	346	1	21	6	0	0	28	8	10	81	0	3	99	601
7:45 AM	10	94	36	0	0	140	175	192	5	0	0	372	0	36	14	0	0	50	8	17	79	0	0	104	666
Total	22	315	127	0	0	464	681	663	13	0	0	1357	2	103	28	0	0	133	30	49	263	0	4	342	2296
8:00 AM	7	102	40	0	0	149	165	185	4	0	0	354	2	35	5	0	0	42	10	15	56	0	0	81	626
8:15 AM	6	106	63	0	0	175	162	183	4	0	0	349	2	31	9	0	0	42	13	13	75	0	0	101	667
8:30 AM	13	88	56	0	0	157	159	176	4	0	1	339	0	41	9	0	0	50	17	7	60	0	0	84	630
8:45 AM	11	81	45	0	0	137	181	164	6	0	0	351	1	22	7	0	0	30	17	13	54	0	0	84	602
Total	37	377	204	0	0	618	667	708	18	0	1	1393	5	129	30	0	0	164	57	48	245	0	0	350	2525
BREAK																									
4:00 PM	6	146	36	0	0	188	87	171	0	0	1	258	4	11	6	0	0	21	26	35	195	0	0	256	723
4:15 PM	3	206	37	0	0	246	74	160	3	1	2	238	1	12	8	0	1	21	33	36	148	0	1	217	722
4:30 PM	9	242	41	0	0	292	67	192	6	0	1	265	2	20	7	0	2	29	35	42	160	0	0	237	823
4:45 PM	10	167	42	0	0	219	88	200	1	0	0	289	4	21	2	0	0	27	32	48	167	0	0	247	782
Total	28	761	156	0	0	945	316	723	10	1	4	1050	11	64	23	0	3	98	126	161	670	0	1	957	3050
5:00 PM	12	246	49	0	0	307	72	212	12	0	1	296	4	28	10	0	0	42	27	46	191	0	0	264	909
5:15 PM	6	228	62	0	0	296	77	196	5	0	0	278	6	17	1	0	0	24	39	43	220	0	0	302	900
5:30 PM	17	215	62	0	0	294	68	196	4	0	0	268	1	22	7	0	0	30	40	46	179	0	0	265	857
5:45 PM	31	184	59	0	0	274	79	205	7	0	0	291	1	21	3	0	0	25	41	71	171	0	0	283	873
Total	66	873	232	0	0	1171	296	809	28	0	1	1133	12	88	21	0	0	121	147	206	761	0	0	1114	3539
6:00 PM	18	192	45	0	0	255	75	159	5	0	0	239	2	20	10	0	0	32	44	50	170	0	0	264	790
6:15 PM	10	171	36	0	0	217	80	176	6	0	0	262	0	13	4	0	0	17	28	49	173	0	0	250	746
6:30 PM	2	145	30	0	0	177	87	143	4	0	0	234	1	20	7	0	0	28	23	28	118	0	0	169	608
6:45 PM	3	123	29	0	1	155	81	124	7	0	0	212	1	10	3	0	0	14	35	19	116	0	1	170	551
Total	33	631	140	0	1	804	323	602	22	0	0	947	4	63	24	0	0	91	130	146	577	0	1	853	2695
Grand Total	186	2957	859	0	1	4002	2283	3505	91	1	6	5880	34	447	126	0	3	607	490	610	2516	0	6	3616	14105
Apprch %	4.6	73.9	21.5	0.0	0.0		38.8	59.6	1.5	0.0	0.1		5.6	73.6	20.8	0.0	0.5		13.6	16.9	69.6	0.0	0.2		
Total %	1.3	21.0	6.1	0.0	0.0	28.4	16.2	24.8	0.6	0.0	0.0	41.7	0.2	3.2	0.9	0.0	0.0	4.3	3.5	4.3	17.8	0.0	0.0	25.6	
Cars, PU, Vans	175	2719	797	0	1	3691	2176	3252	86		6	5515	26	439	119	0		584	449	593	2399		6	3441	13231
% Cars, PU, Vans	94.1	92.0	92.8	0.0	100.0	92.2	95.3	92.8	94.5	0.0	100.0	93.8	76.5	98.2	94.4	0.0	0.0	96.2	91.6	97.2	95.3	0.0	100.0	95.2	93.8
Heavy Trucks	11	238	62	0		311	107	253	5	0		365	8	8	7	0		23	41	17	117	0		175	874
%Heavy Trucks	5.9	8.0	7.2	0.0	0.0	7.8	4.7	7.2	5.5	0.0	0.0	6.2	23.5	1.8	5.6	0.0	0.0	3.8	8.4	2.8	4.7	0.0	0.0	4.8	6.2

Project ID: 19-09270-001
Location: Marietta Blvd & Chattahoochee Ave NW
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 04/18/2019

AM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Chattahoochee Ave NW Eastbound					Chattahoochee Ave NW 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 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
7:45 AM	10	94	36	0	140	175	192	5	0	372	0	36	14	0	50	8	17	79	0	104	666
8:00 AM	7	102	40	0	149	165	185	4	0	354	2	35	5	0	42	10	15	56	0	81	626
8:15 AM	6	106	63	0	175	162	183	4	0	349	2	31	9	0	42	13	13	75	0	101	667
8:30 AM	13	88	56	0	157	159	176	4	0	339	0	41	9	0	50	17	7	60	0	84	630
Total Volume	36	390	195	0	621	661	736	17	0	1414	4	143	37	0	184	48	52	270	0	370	2589
% App. Total	5.8	62.8	31.4	0.0	100	46.7	52.1	1.2	0.0	100	2.2	77.7	20.1	0.0	100	13.0	14.1	73.0	0.0	100	
PHF					0.891					0.950					0.920					0.892	0.972
Cars, PU, Vans	34	325	178	0	537	624	684	15	0	1323	3	140	35	0	178	45	50	236	0	331	2369
% Cars, PU, Vans	94.4	83.3	91.3	0.0	86.5	94.4	92.9	88.2	0.0	93.6	75.0	97.9	94.6	0.0	96.7	93.8	96.2	87.4	0.0	89.5	91.5
Heavy Trucks	2	65	17	0	84	37	52	2	0	91	1	3	2	0	6	3	2	34	0	39	220
%Heavy Trucks	5.6	16.7	8.7	0.0	13.5	5.6	7.1	11.8	0.0	6.4	25.0	2.1	5.4	0.0	3.3	6.3	3.8	12.6	0.0	10.5	8.5

PM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Chattahoochee Ave NW Eastbound					Chattahoochee Ave NW 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 07:00 PM																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
5:00 PM	12	246	49	0	307	72	212	12	0	296	4	28	10	0	42	27	46	191	0	264	909
5:15 PM	6	228	62	0	296	77	196	5	0	278	6	17	1	0	24	39	43	220	0	302	900
5:30 PM	17	215	62	0	294	68	196	4	0	268	1	22	7	0	30	40	46	179	0	265	857
5:45 PM	31	184	59	0	274	79	205	7	0	291	1	21	3	0	25	41	71	171	0	283	873
Total Volume	66	873	232	0	1171	296	809	28	0	1133	12	88	21	0	121	147	206	761	0	1114	3539
% App. Total	5.6	74.6	19.8	0.0	100	26.1	71.4	2.5	0.0	100	9.9	72.7	17.4	0.0	100	13.2	18.5	68.3	0.0	100	
PHF					0.956					0.959					0.720					0.923	0.976
Cars, PU, Vans	64	840	223	0	1127	286	764	28	0	1078	9	87	20	0	116	134	202	746	0	1082	3403
% Cars, PU, Vans	97.0	96.2	96.1	0.0	96.2	96.6	94.4	100.0	0.0	95.1	75.0	98.9	95.2	0.0	95.9	91.2	98.1	98.0	0.0	97.1	96.2
Heavy Trucks	2	33	9	0	44	10	45	0	0	55	3	1	1	0	5	13	4	15	0	32	136
%Heavy Trucks	3.0	3.8	3.9	0.0	3.8	3.4	5.6	0.0	0.0	4.9	25.0	1.1	4.8	0.0	4.1	8.8	1.9	2.0	0.0	2.9	3.8

Prepared by National Data & Surveying Services

Marietta Blvd & Coronet Way

Peak Hour Turning Movement Count

ID: 19-09270-002
City: Atlanta

Day: Thursday
Date: 04/18/2019

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 07:00 PM

SOUTHBOUND (Marietta Blvd)

AM	4	1293	30	0	641	AM
NOON	0	0	0	0	0	NOON
PM	4	851	36	0	1465	PM

EASTBOUND (Coronet Way)

AM	NOON	PM	
8	0	6	
0	0	0	0
1	0	2	0
0	0	3	1
0	0	0	0
AM	NOON	PM	

WESTBOUND (Coronet Way)

	PM	NOON	AM
0	83	0	21
1	1	0	0
0	333	0	130
0	0	0	0
	223	0	147
	PM	NOON	AM

NORTHBOUND (Marietta Blvd)

PM	1185	1	1	1380	184	PM
NOON	0	0	0	0	0	NOON
AM	1423	0	4	619	117	AM

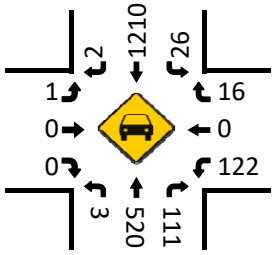
0	2	1	0	
0	1	2	0	

CONTROL

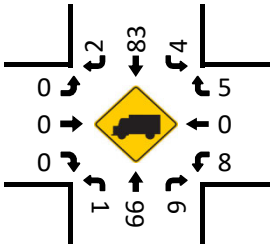
Signalized

TEV	2219	0	2879
	AM	NOON	PM
PHF	0.97		0.97

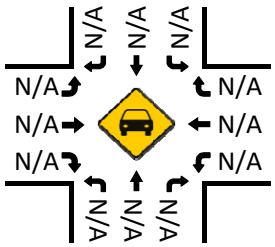
Cars (AM)



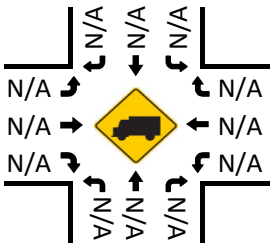
HT (AM)



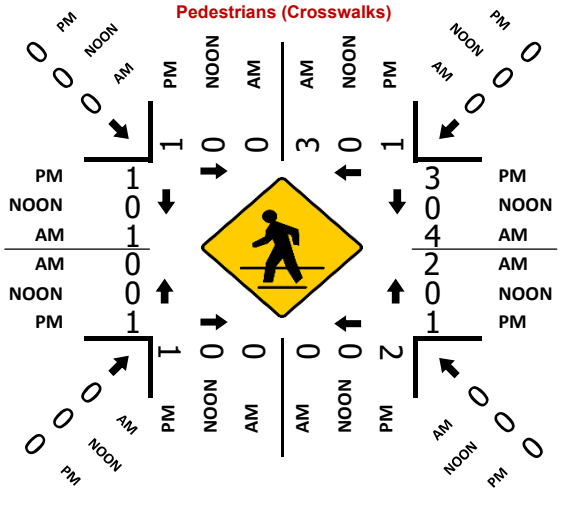
Cars (NOON)



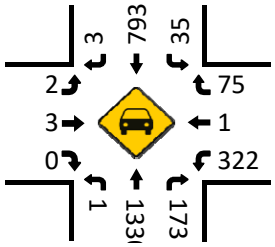
HT (NOON)



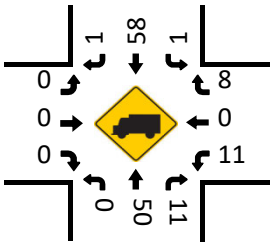
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 19-09270-002
Location: Marietta Blvd & Coronet Way
City: Atlanta

Day: Thursday
Date: 04/18/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Marietta Blvd Northbound						Marietta Blvd Southbound						Coronet Way Eastbound						Coronet Way Westbound						
Start Time	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	Int. Total
7:00 AM	2	95	27	0	0	124	7	265	1	0	0	273	0	0	0	0	1	0	8	1	4	0	0	13	410
7:15 AM	2	108	28	0	0	138	8	328	1	0	1	337	0	0	0	0	0	0	17	0	4	0	0	21	496
7:30 AM	1	158	37	0	0	196	4	314	0	0	2	318	1	0	0	0	0	1	29	0	5	0	3	34	549
7:45 AM	2	158	25	0	0	185	8	331	1	0	0	340	0	0	0	0	0	0	38	0	7	0	2	45	570
Total	7	519	117	0	0	643	27	1238	3	0	3	1268	1	0	0	0	1	1	92	1	20	0	5	113	2025
8:00 AM	0	146	29	0	0	175	6	331	1	0	1	338	0	0	0	0	1	0	29	0	4	0	1	33	546
8:15 AM	1	157	26	0	0	184	12	317	2	0	0	331	0	0	0	0	0	0	34	0	5	0	0	39	554
8:30 AM	0	150	32	0	0	182	10	321	1	0	0	332	0	0	0	0	0	0	22	1	2	0	0	25	539
8:45 AM	0	122	20	0	0	142	13	313	1	0	0	327	0	0	0	0	0	0	29	0	4	0	0	33	502
Total	1	575	107	0	0	683	41	1282	5	0	1	1328	0	0	0	0	1	0	114	1	15	0	1	130	2141
BREAK																									
4:00 PM	0	327	28	0	0	355	3	213	0	1	0	217	0	1	0	0	0	1	75	1	19	0	0	95	668
4:15 PM	1	346	21	0	2	368	9	168	3	0	0	180	0	0	0	0	0	0	65	0	21	0	0	86	634
4:30 PM	0	351	48	0	1	399	9	211	2	0	0	222	0	2	0	0	0	2	89	0	14	0	1	103	726
4:45 PM	0	298	35	1	0	334	11	238	1	0	0	250	2	0	0	0	0	2	87	0	20	0	0	107	693
Total	1	1322	132	1	3	1456	32	830	6	1	0	869	2	3	0	0	0	5	316	1	74	0	1	391	2721
5:00 PM	1	388	50	0	1	439	8	196	1	0	2	205	0	0	0	0	2	0	74	1	23	0	0	98	742
5:15 PM	0	343	51	0	1	394	8	206	0	0	0	214	0	1	0	0	0	1	83	0	26	0	3	109	718
5:30 PM	1	326	47	0	0	374	8	195	1	0	0	204	0	1	1	0	0	2	63	0	22	0	0	85	665
5:45 PM	1	332	46	0	0	379	5	232	0	0	2	237	1	1	1	0	0	3	72	1	30	0	2	103	722
Total	3	1389	194	0	2	1586	29	829	2	0	4	860	1	3	2	0	2	6	292	2	101	0	5	395	2847
6:00 PM	0	302	37	0	1	339	7	204	1	0	2	212	0	1	0	0	0	1	69	1	28	0	1	98	650
6:15 PM	2	343	41	1	0	387	4	194	0	0	3	198	1	0	0	0	2	1	60	1	19	0	0	80	666
6:30 PM	0	234	29	0	0	263	5	175	1	0	2	181	2	0	0	0	0	2	51	1	11	0	0	63	509
6:45 PM	0	218	27	0	1	245	4	192	0	1	0	197	0	0	0	0	0	0	35	2	11	0	1	48	490
Total	2	1097	134	1	2	1234	20	765	2	1	7	788	3	1	0	0	2	4	215	5	69	0	2	289	2315
Grand Total	14	4902	684	2	7	5602	149	4944	18	2	15	5113	7	7	2	0	6	16	1029	10	279	0	14	1318	12049
Apprch %	0.2	87.5	12.2	0.0	0.1		2.9	96.7	0.4	0.0	0.3		43.8	43.8	12.5	0.0	37.5		78.1	0.8	21.2	0.0	1.1		
Total %	0.1	40.7	5.7	0.0	0.1	46.5	1.2	41.0	0.1	0.0	0.1	42.4	0.1	0.1	0.0	0.0	0.0	0.1	8.5	0.1	2.3	0.0	0.1	10.9	
Cars, PU, Vans	12	4567	647	2	7	5228	143	4622	15		15	4782	7	4	2	0		13	973	8	246		14	1227	11250
% Cars, PU, Vans	85.7	93.2	94.6	100.0	100.0	93.3	96.0	93.5	83.3	0.0	100.0	93.5	100.0	57.1	100.0	0.0	0.0	81.3	94.6	80.0	88.2	0.0	100.0	93.1	93.4
Heavy Trucks	2	335	37	0		374	6	322	3	0		331	0	3	0	0		3	56	2	33	0		91	799
%Heavy Trucks	14.3	6.8	5.4	0.0	0.0	6.7	4.0	6.5	16.7	0.0	0.0	6.5	0.0	42.9	0.0	0.0	0.0	18.8	5.4	20.0	11.8	0.0	0.0	6.9	6.6

Project ID: 19-09270-002
Location: Marietta Blvd & Coronet Way
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 04/18/2019

AM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Coronet Way Eastbound					Coronet Way 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 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	1	158	37	0	196	4	314	0	0	318	1	0	0	0	1	29	0	5	0	34	549
7:45 AM	2	158	25	0	185	8	331	1	0	340	0	0	0	0	0	38	0	7	0	45	570
8:00 AM	0	146	29	0	175	6	331	1	0	338	0	0	0	0	0	29	0	4	0	33	546
8:15 AM	1	157	26	0	184	12	317	2	0	331	0	0	0	0	0	34	0	5	0	39	554
Total Volume	4	619	117	0	740	30	1293	4	0	1327	1	0	0	0	1	130	0	21	0	151	2219
% App. Total	0.5	83.6	15.8	0.0	100	2.3	97.4	0.3	0.0	100	100.0	0.0	0.0	0.0	100	86.1	0.0	13.9	0.0	100	
PHF					0.944					0.976					0.250					0.839	0.973
Cars, PU, Vans	3	520	111	0	634	26	1210	2	0	1238	1	0	0	0	1	122	0	16	0	138	2011
% Cars, PU, Vans	75.0	84.0	94.9	0.0	85.7	86.7	93.6	50.0	0.0	93.3	100.0	0.0	0.0	0.0	100.0	93.8	0.0	76.2	0.0	91.4	90.6
Heavy Trucks	1	99	6	0	106	4	83	2	0	89	0	0	0	0	0	8	0	5	0	13	208
%Heavy Trucks	25.0	16.0	5.1	0.0	14.3	13.3	6.4	50.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	6.2	0.0	23.8	0.0	8.6	9.4

PM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Coronet Way Eastbound					Coronet Way 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 07:00 PM																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
4:30 PM	0	351	48	0	399	9	211	2	0	222	0	2	0	0	2	89	0	14	0	103	726
4:45 PM	0	298	35	1	334	11	238	1	0	250	2	0	0	0	2	87	0	20	0	107	693
5:00 PM	1	388	50	0	439	8	196	1	0	205	0	0	0	0	0	74	1	23	0	98	742
5:15 PM	0	343	51	0	394	8	206	0	0	214	0	1	0	0	1	83	0	26	0	109	718
Total Volume	1	1380	184	1	1566	36	851	4	0	891	2	3	0	0	5	333	1	83	0	417	2879
% App. Total	0.1	88.1	11.7	0.1	100	4.0	95.5	0.4	0.0	100	40.0	60.0	0.0	0.0	100	79.9	0.2	19.9	0.0	100	
PHF					0.892					0.891					0.625					0.956	0.970
Cars, PU, Vans	1	1330	173	1	1505	35	793	3	0	831	2	3	0	0	5	322	1	75	0	398	2739
% Cars, PU, Vans	100.0	96.4	94.0	100.0	96.1	97.2	93.2	75.0	0.0	93.3	100.0	100.0	0.0	0.0	100.0	96.7	100.0	90.4	0.0	95.4	95.1
Heavy Trucks	0	50	11	0	61	1	58	1	0	60	0	0	0	0	0	11	0	8	0	19	140
%Heavy Trucks	0.0	3.6	6.0	0.0	3.9	2.8	6.8	25.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	3.3	0.0	9.6	0.0	4.6	4.9

Prepared by National Data & Surveying Services

Marietta Blvd & Moores Mill Rd

Peak Hour Turning Movement Count

ID: 19-09270-003
City: Atlanta

Day: Thursday
Date: 04/18/2019

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:15 PM - 05:15 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 07:00 PM

Marietta Blvd — SOUTHBOUND

AM	0	1323	167	0	671	AM
NOON	0	0	0	0	0	NOON
PM	0	818	78	1	1641	PM

Moores Mill Rd — EASTBOUND

AM	NOON	PM		
0	0	4		
0	0	0	↰	0
0	0	3	↱	0
0	0	0	→	0
0	0	1	↱	1
AM	NOON	PM		

Moores Mill Rd — WESTBOUND

PM	NOON	AM		
240	0	61	↰	0
0	0	0	←	1
1	0	3	↰	0
0	0	0	↰	0
105	0	188		
PM	NOON	AM		

Marietta Blvd — NORTHBOUND

PM	820	0	4	1397	27	PM
NOON	0	0	0	0	0	NOON
AM	1326	0	0	610	21	AM

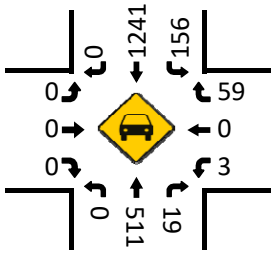
0	2	0	0	
				0 2 0 0
0	0	3	0	

CONTROL

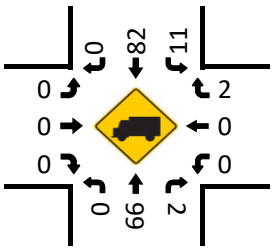
1-Way Stop (WB)

TEV	2185	0	2570
	AM	NOON	PM
PHF	0.98		0.96

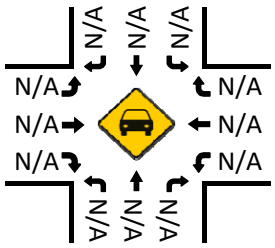
Cars (AM)



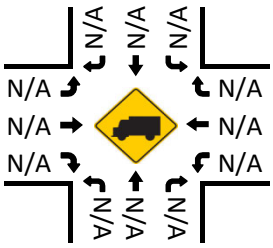
HT (AM)



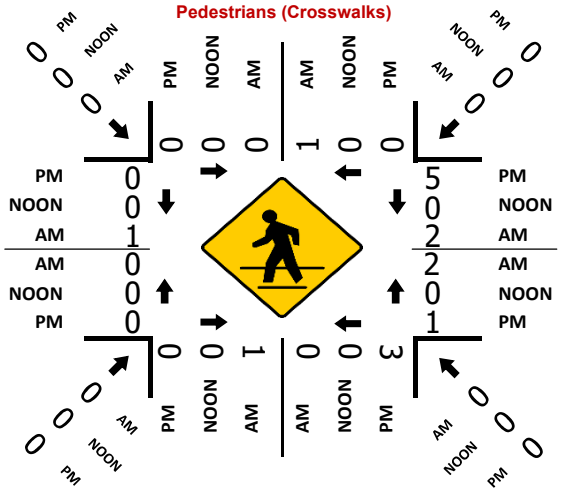
Cars (NOON)



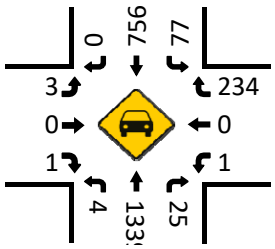
HT (NOON)



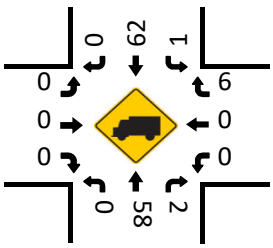
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 19-09270-003
Location: Marietta Blvd & Moores Mill Rd
City: Atlanta

Day: Thursday
Date: 04/18/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Marietta Blvd Northbound						Marietta Blvd Southbound						Moores Mill Rd Eastbound						Moores Mill Rd Westbound						
Start Time	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	Int. Total
7:00 AM	0	83	3	0	0	86	36	292	0	0	1	328	0	0	0	0	1	0	1	0	12	0	2	13	427
7:15 AM	0	102	5	0	0	107	34	351	0	0	0	385	0	0	0	0	0	0	2	0	16	0	0	18	510
7:30 AM	0	160	6	0	0	166	47	316	0	0	1	363	0	0	0	0	0	0	0	0	14	0	2	14	543
7:45 AM	0	146	4	0	0	150	42	345	0	0	0	387	0	0	0	0	0	0	1	0	18	0	1	19	556
Total	0	491	18	0	0	509	159	1304	0	0	2	1463	0	0	0	0	1	0	4	0	60	0	5	64	2036
8:00 AM	0	146	4	0	1	150	41	329	0	0	0	370	0	0	0	0	1	0	1	0	16	0	1	17	537
8:15 AM	0	158	7	0	0	165	37	333	0	0	0	370	0	0	0	0	0	0	1	0	13	0	0	14	549
8:30 AM	0	142	7	1	0	150	45	325	0	0	0	370	0	0	0	0	0	0	1	0	16	0	0	17	537
8:45 AM	0	129	5	0	0	134	40	323	0	0	0	363	0	0	0	0	0	0	1	0	14	0	0	15	512
Total	0	575	23	1	1	599	163	1310	0	0	0	1473	0	0	0	0	1	0	4	0	59	0	1	63	2135
BREAK																									
4:00 PM	1	337	3	0	0	341	20	203	0	0	0	223	0	0	1	0	0	1	3	1	75	0	1	79	644
4:15 PM	0	343	11	0	3	354	16	177	0	0	0	193	0	0	0	0	0	0	0	0	67	0	2	67	614
4:30 PM	1	342	5	0	0	348	22	200	0	1	0	223	0	0	0	0	0	0	1	0	56	0	1	57	628
4:45 PM	3	335	6	0	0	344	23	236	0	0	0	259	2	0	1	0	0	3	0	0	61	0	3	61	667
Total	5	1357	25	0	3	1387	81	816	0	1	0	898	2	0	2	0	0	4	4	1	259	0	7	264	2553
5:00 PM	0	377	5	0	0	382	17	205	0	0	0	222	1	0	0	0	0	1	0	0	56	0	0	56	661
5:15 PM	0	328	2	0	0	330	23	208	0	0	0	231	1	0	2	0	0	3	1	0	47	0	2	48	612
5:30 PM	0	330	2	0	0	332	29	208	0	0	0	237	0	0	2	0	0	2	0	0	52	0	2	52	623
5:45 PM	0	342	4	0	0	346	23	223	1	0	0	247	0	0	0	0	0	0	1	1	40	0	3	42	635
Total	0	1377	13	0	0	1390	92	844	1	0	0	937	2	0	4	0	0	6	2	1	195	0	7	198	2531
6:00 PM	2	325	3	0	0	330	16	206	0	0	0	222	2	0	1	0	0	3	1	0	52	0	0	53	608
6:15 PM	0	351	2	0	0	353	22	205	1	0	0	228	0	0	1	0	0	1	1	0	49	0	1	50	632
6:30 PM	0	289	3	0	0	292	20	163	0	0	0	183	0	0	0	0	0	0	0	0	63	0	0	63	538
6:45 PM	1	214	13	0	0	228	29	183	0	0	0	212	2	1	0	0	0	3	1	0	85	0	3	86	529
Total	3	1179	21	0	0	1203	87	757	1	0	0	845	4	1	2	0	0	7	3	0	249	0	4	252	2307
Grand Total	8	4979	100	1	4	5088	582	5031	2	1	2	5616	8	1	8	0	2	17	17	2	822	0	24	841	11562
Apprch %	0.2	97.9	2.0	0.0	0.1		10.4	89.6	0.0	0.0	0.0		47.1	5.9	47.1	0.0	11.8		2.0	0.2	97.7	0.0	2.9		
Total %	0.1	43.1	0.9	0.0	0.0	44.0	5.0	43.5	0.0	0.0	0.0	48.6	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	7.1	0.0	0.2	7.3	
Cars, PU, Vans	8	4630	95	1	4	4734	563	4708	2		2	5274	8	1	8	0		17	16	2	800		24	818	10843
% Cars, PU, Vans	100.0	93.0	95.0	100.0	100.0	93.0	96.7	93.6	100.0	0.0	100.0	93.9	100.0	100.0	100.0	0.0	0.0	100.0	94.1	100.0	97.3	0.0	100.0	97.3	93.8
Heavy Trucks	0	349	5	0		354	19	323	0	0		342	0	0	0	0		0	1	0	22	0		23	719
%Heavy Trucks	0.0	7.0	5.0	0.0	0.0	7.0	3.3	6.4	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	2.7	0.0	0.0	2.7	6.2

Project ID: 19-09270-003
Location: Marietta Blvd & Moores Mill Rd
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 04/18/2019

AM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Moores Mill Rd Eastbound					Moores Mill Rd 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 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	0	160	6	0	166	47	316	0	0	363	0	0	0	0	0	0	0	14	0	14	543
7:45 AM	0	146	4	0	150	42	345	0	0	387	0	0	0	0	0	1	0	18	0	19	556
8:00 AM	0	146	4	0	150	41	329	0	0	370	0	0	0	0	0	1	0	16	0	17	537
8:15 AM	0	158	7	0	165	37	333	0	0	370	0	0	0	0	0	1	0	13	0	14	549
Total Volume	0	610	21	0	631	167	1323	0	0	1490	0	0	0	0	0	3	0	61	0	64	2185
% App. Total	0.0	96.7	3.3	0.0	100	11.2	88.8	0.0	0.0	100	0.0	0.0	0.0	0.0	0	4.7	0.0	95.3	0.0	100	
PHF					0.950					0.963										0.842	0.982
Cars, PU, Vans	0	511	19	0	530	156	1241	0	0	1397	0	0	0	0	0	3	0	59	0	62	1989
% Cars, PU, Vans	0.0	83.8	90.5	0.0	84.0	93.4	93.8	0.0	0.0	93.8	0.0	0.0	0.0	0.0	0.0	100.0	0.0	96.7	0.0	96.9	91.0
Heavy Trucks	0	99	2	0	101	11	82	0	0	93	0	0	0	0	0	0	0	2	0	2	196
%Heavy Trucks	0.0	16.2	9.5	0.0	16.0	6.6	6.2	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	3.1	9.0

PM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Moores Mill Rd Eastbound					Moores Mill Rd 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 07:00 PM																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
4:15 PM	0	343	11	0	354	16	177	0	0	193	0	0	0	0	0	0	0	67	0	67	614
4:30 PM	1	342	5	0	348	22	200	0	1	223	0	0	0	0	0	1	0	56	0	57	628
4:45 PM	3	335	6	0	344	23	236	0	0	259	2	0	1	0	3	0	0	61	0	61	667
5:00 PM	0	377	5	0	382	17	205	0	0	222	1	0	0	0	1	0	0	56	0	56	661
Total Volume	4	1397	27	0	1428	78	818	0	1	897	3	0	1	0	4	1	0	240	0	241	2570
% App. Total	0.3	97.8	1.9	0.0	100	8.7	91.2	0.0	0.1	100	75.0	0.0	25.0	0.0	100	0.4	0.0	99.6	0.0	100	
PHF					0.935					0.866					0.333					0.899	0.963
Cars, PU, Vans	4	1339	25	0	1368	77	756	0	1	834	3	0	1	0	4	1	0	234	0	235	2441
% Cars, PU, Vans	100.0	95.8	92.6	0.0	95.8	98.7	92.4	0.0	100.0	93.0	100.0	0.0	100.0	0.0	100.0	100.0	0.0	97.5	0.0	97.5	95.0
Heavy Trucks	0	58	2	0	60	1	62	0	0	63	0	0	0	0	0	0	0	6	0	6	129
%Heavy Trucks	0.0	4.2	7.4	0.0	4.2	1.3	7.6	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	2.5	5.0

Prepared by National Data & Surveying Services

Marietta Blvd & Publix Dwy

Peak Hour Turning Movement Count

ID: 19-09270-004
City: Atlanta

Day: Thursday
Date: 04/18/2019

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	04:00 PM - 07:00 PM

Marietta Blvd — SOUTHBOUND

AM	0	1301	21	1	618	AM
NOON	0	0	0	0	0	NOON
PM	0	803	48	0	1397	PM

EASTBOUND (Publix Dwy)

AM	NOON	PM		
0	0	0		
0	0	0	↰	0
0	0	0	↑	0
0	0	0	→	0
0	0	0	↱	0
AM	NOON	PM		

WESTBOUND (Publix Dwy)

PM	NOON	AM		
111	0	12	↰	1
0	0	0	←	0
89	0	45	↰	1
0	0	0	↰	0
199	0	57		
PM	NOON	AM		

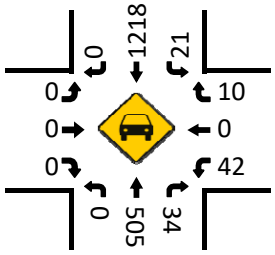
NORTHBOUND — Marietta Blvd

PM	892	0	0	1286	151	PM
NOON	0	0	0	0	0	NOON
AM	1346	0	0	605	36	AM

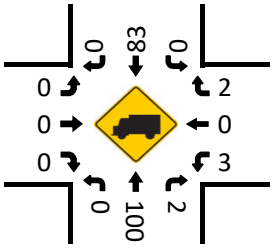
	0	0	2	1
	↰	↰	↑	↱

CONTROL			
Signalized			
TEV	2021	0	2488
	AM	NOON	PM
PHF	0.98		0.94

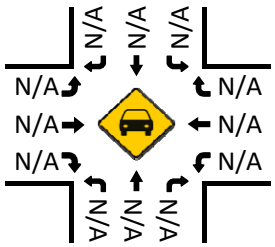
Cars (AM)



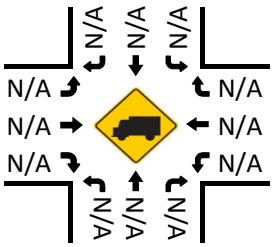
HT (AM)



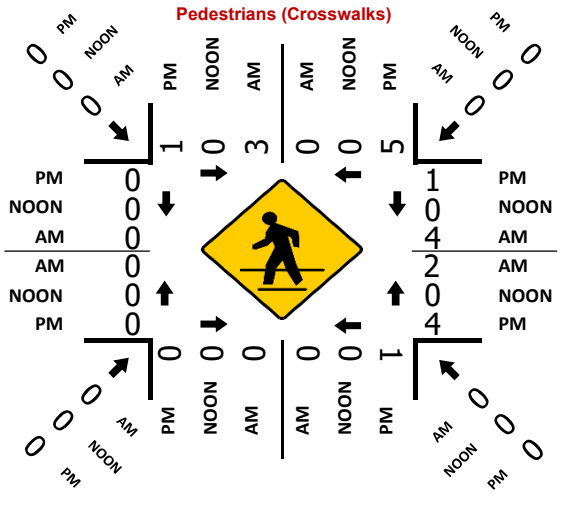
Cars (NOON)



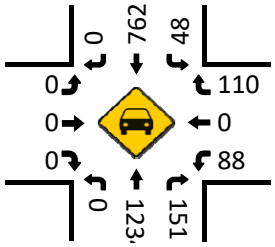
HT (NOON)



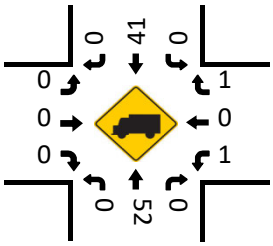
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 19-09270-004
Location: Marietta Blvd & Publix Dwy
City: Atlanta

Day: Thursday
Date: 04/18/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Marietta Blvd Northbound						Marietta Blvd Southbound						Publix Dwy Eastbound						Publix Dwy Westbound						
Start Time	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	Int. Total
7:00 AM	0	85	7	0	0	92	0	281	0	0	0	281	0	0	0	0	0	0	1	0	2	0	0	3	376
7:15 AM	0	103	7	0	0	110	4	339	0	0	0	343	0	0	0	0	0	0	10	0	3	0	0	13	466
7:30 AM	0	156	6	0	0	162	6	312	0	0	2	318	0	0	0	0	0	0	13	0	4	0	3	17	497
7:45 AM	0	154	13	0	0	167	7	332	0	0	0	339	0	0	0	0	0	0	8	0	3	0	2	11	517
Total	0	498	33	0	0	531	17	1264	0	0	2	1281	0	0	0	0	0	0	32	0	12	0	5	44	1856
8:00 AM	0	140	8	0	0	148	3	330	0	0	0	333	0	0	0	0	0	0	16	0	2	0	1	18	499
8:15 AM	0	155	9	0	0	164	5	327	0	1	1	333	0	0	0	0	0	0	8	0	3	0	0	11	508
8:30 AM	0	141	11	0	0	152	3	319	0	1	0	323	0	0	0	0	0	0	7	0	0	0	0	7	482
8:45 AM	0	124	9	0	0	133	9	312	0	0	0	321	0	0	0	0	0	0	6	0	5	0	0	11	465
Total	0	560	37	0	0	597	20	1288	0	2	1	1310	0	0	0	0	0	0	37	0	10	0	1	47	1954
BREAK																									
4:00 PM	0	326	19	0	0	345	5	196	0	1	0	202	0	0	0	0	0	0	15	0	13	0	1	28	575
4:15 PM	0	329	24	0	0	353	12	160	0	0	0	172	0	0	0	0	0	0	15	0	20	0	2	35	560
4:30 PM	0	337	35	0	0	372	14	184	0	0	0	198	0	0	0	0	0	0	27	0	16	0	0	43	613
4:45 PM	0	320	28	0	0	348	18	222	0	0	0	240	0	0	0	0	0	0	16	0	18	0	0	34	622
Total	0	1312	106	0	0	1418	49	762	0	1	0	812	0	0	0	0	0	0	73	0	67	0	3	140	2370
5:00 PM	0	366	30	0	0	396	10	198	0	0	1	208	0	0	0	0	0	0	25	0	30	0	2	55	659
5:15 PM	0	297	48	0	1	345	14	189	0	0	4	203	0	0	0	0	0	0	15	0	30	0	1	45	593
5:30 PM	0	315	32	0	0	347	12	198	0	0	1	210	0	0	0	0	0	0	25	0	23	0	1	48	605
5:45 PM	0	308	41	0	0	349	12	218	0	0	0	230	0	0	0	0	0	0	24	0	28	0	1	52	631
Total	0	1286	151	0	1	1437	48	803	0	0	6	851	0	0	0	0	0	0	89	0	111	0	5	200	2488
6:00 PM	0	297	37	0	1	334	14	184	0	0	0	198	0	0	0	0	0	0	20	0	31	0	0	51	583
6:15 PM	0	321	49	1	0	371	18	194	0	0	1	212	0	0	0	0	0	0	11	0	32	0	1	43	626
6:30 PM	0	279	22	0	0	301	6	156	0	0	6	162	0	0	0	0	0	0	20	0	18	0	3	38	501
6:45 PM	0	208	21	0	0	229	10	173	0	2	2	185	0	0	0	0	0	0	18	0	13	0	1	31	445
Total	0	1105	129	1	1	1235	48	707	0	2	9	757	0	0	0	0	0	0	69	0	94	0	5	163	2155
Grand Total	0	4761	456	1	2	5218	182	4824	0	5	18	5011	0	0	0	0	0	0	300	0	294	0	19	594	10823
Apprch %	0.0	91.2	8.7	0.0	0.0		3.6	96.3	0.0	0.1	0.4		0.0	0.0	0.0	0.0	0.0		50.5	0.0	49.5	0.0	3.2		
Total %	0.0	44.0	4.2	0.0	0.0	48.2	1.7	44.6	0.0	0.0	0.2	46.3	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	2.7	0.0	0.2	5.5	
Cars, PU, Vans	0	4407	450	1	2	4858	182	4498	0		18	4685	0	0	0	0		0	294	0	290		19	584	10127
% Cars, PU, Vans	0.0	92.6	98.7	100.0	100.0	93.1	100.0	93.2	0.0	0.0	100.0	93.5	0.0	0.0	0.0	0.0	0.0	0.0	98.0	0.0	98.6	0.0	100.0	98.3	93.6
Heavy Trucks	0	354	6	0		360	0	326	0	0		326	0	0	0	0		0	6	0	4	0		10	696
%Heavy Trucks	0.0	7.4	1.3	0.0	0.0	6.9	0.0	6.8	0.0	0.0	0.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.4	0.0	0.0	1.7	6.4

Project ID: 19-09270-004
Location: Marietta Blvd & Publix Dwy
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 04/18/2019

AM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Publix Dwy Eastbound					Publix Dwy 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 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	0	156	6	0	162	6	312	0	0	318	0	0	0	0	0	13	0	4	0	17	497
7:45 AM	0	154	13	0	167	7	332	0	0	339	0	0	0	0	0	8	0	3	0	11	517
8:00 AM	0	140	8	0	148	3	330	0	0	333	0	0	0	0	0	16	0	2	0	18	499
8:15 AM	0	155	9	0	164	5	327	0	1	333	0	0	0	0	0	8	0	3	0	11	508
Total Volume	0	605	36	0	641	21	1301	0	1	1323	0	0	0	0	0	45	0	12	0	57	2021
% App. Total	0.0	94.4	5.6	0.0	100	1.6	98.3	0.0	0.1	100	0.0	0.0	0.0	0.0	0	78.9	0.0	21.1	0.0	100	
PHF					0.960					0.976										0.792	0.977
Cars, PU, Vans	0	505	34	0	539	21	1218	0	1	1240	0	0	0	0	0	42	0	10	0	52	1831
% Cars, PU, Vans	0.0	83.5	94.4	0.0	84.1	100.0	93.6	0.0	100.0	93.7	0.0	0.0	0.0	0.0	0.0	93.3	0.0	83.3	0.0	91.2	90.6
Heavy Trucks	0	100	2	0	102	0	83	0	0	83	0	0	0	0	0	3	0	2	0	5	190
%Heavy Trucks	0.0	16.5	5.6	0.0	15.9	0.0	6.4	0.0	0.0	6.3	0.0	0.0	0.0	0.0	0.0	6.7	0.0	16.7	0.0	8.8	9.4

PM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Publix Dwy Eastbound					Publix Dwy 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 07:00 PM																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
5:00 PM	0	366	30	0	396	10	198	0	0	208	0	0	0	0	0	25	0	30	0	55	659
5:15 PM	0	297	48	0	345	14	189	0	0	203	0	0	0	0	0	15	0	30	0	45	593
5:30 PM	0	315	32	0	347	12	198	0	0	210	0	0	0	0	0	25	0	23	0	48	605
5:45 PM	0	308	41	0	349	12	218	0	0	230	0	0	0	0	0	24	0	28	0	52	631
Total Volume	0	1286	151	0	1437	48	803	0	0	851	0	0	0	0	0	89	0	111	0	200	2488
% App. Total	0.0	89.5	10.5	0.0	100	5.6	94.4	0.0	0.0	100	0.0	0.0	0.0	0.0	0	44.5	0.0	55.5	0.0	100	
PHF					0.907					0.925										0.909	0.944
Cars, PU, Vans	0	1234	151	0	1385	48	762	0	0	810	0	0	0	0	0	88	0	110	0	198	2393
% Cars, PU, Vans	0.0	96.0	100.0	0.0	96.4	100.0	94.9	0.0	0.0	95.2	0.0	0.0	0.0	0.0	0.0	98.9	0.0	99.1	0.0	99.0	96.2
Heavy Trucks	0	52	0	0	52	0	41	0	0	41	0	0	0	0	0	1	0	1	0	2	95
%Heavy Trucks	0.0	4.0	0.0	0.0	3.6	0.0	5.1	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.9	0.0	1.0	3.8

Prepared by National Data & Surveying Services

Marietta Blvd & Bolton Rd/Plant St

Peak Hour Turning Movement Count

ID: 19-09270-005
City: Atlanta

Day: Thursday
Date: 04/18/2019

	PEAK HOURS	COUNT PERIODS
AM	07:15 AM - 08:15 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	05:00 PM - 06:00 PM	04:00 PM - 07:00 PM

Marietta Blvd — SOUTHBOUND

	Right	Through	Left	U-Turn	Exiting (Northbound)
AM	33	1069	311	0	551
NOON	0	0	0	0	0
PM	83	725	153	2	1609
Lanes	0.5	1.5	1	0	

Bolton Rd/Plant St — EASTBOUND

	AM	NOON	PM	Lanes
Exiting (Westbound)	355	0	607	
U-Turn	0	0	0	0
Left	38	0	109	1
Through	402	0	351	0.5
Right	180	0	149	1.5

Bolton Rd/Plant St — WESTBOUND

	Lanes	PM	NOON	AM
Right	0.5	161	0	122
Through	0.5	303	0	196
Left	0	1	0	0
U-Turn	0	0	0	0
Exiting (Eastbound)		511	0	725

Marietta Blvd — NORTHBOUND

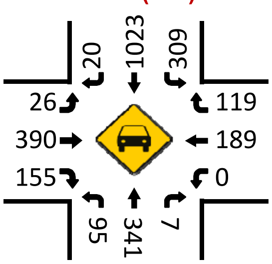
	Exiting (Southbound)	U-Turn	Left	Through	Right
Lanes		0	1	2	1
PM	875	0	221	1337	7
NOON	0	0	0	0	0
AM	1249	0	126	391	12

CONTROL

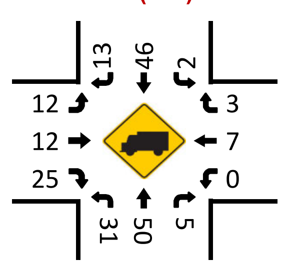
Signalized

	AM	NOON	PM
TEV	2880	0	3602
PHF	0.98		0.98

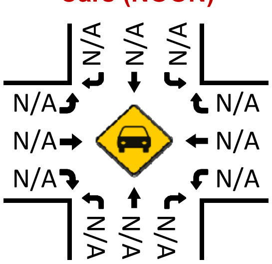
Cars (AM)



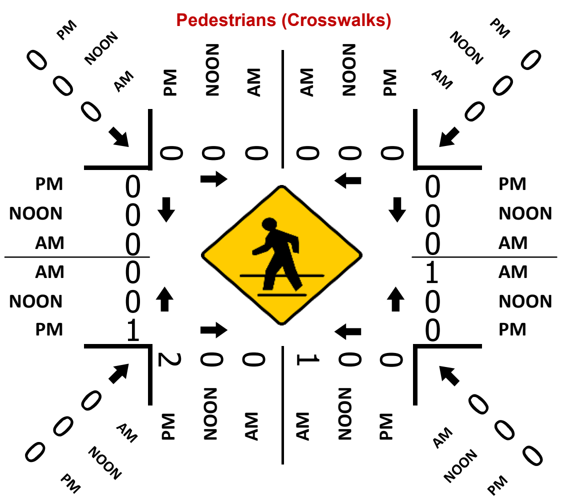
HT (AM)



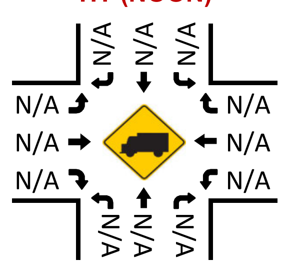
Cars (NOON)



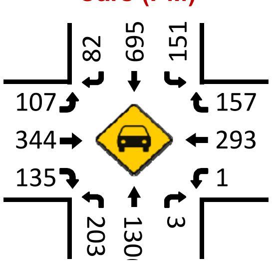
Pedestrians (Crosswalks)



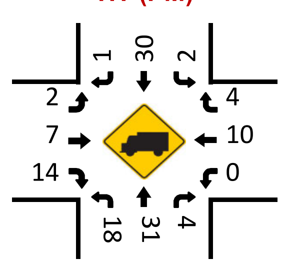
HT (NOON)



Cars (PM)



HT (PM)



Project ID: 19-09270-005
Location: Marietta Blvd & Bolton Rd/Plant St
City: Atlanta

Day: Thursday
Date: 04/18/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Marietta Blvd Northbound						Marietta Blvd Southbound						Bolton Rd/Plant St Eastbound						Bolton Rd/Plant St Westbound						
Start Time	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	Int. Total
7:00 AM	18	60	3	0	0	81	84	245	10	0	0	339	8	104	51	0	0	163	0	42	15	0	0	57	640
7:15 AM	27	59	2	0	0	88	105	289	6	0	0	400	3	113	44	0	0	160	0	44	22	0	1	66	714
7:30 AM	40	110	5	0	0	155	76	252	8	0	0	336	6	106	45	0	0	157	0	43	41	0	0	84	732
7:45 AM	25	113	3	0	0	141	68	279	10	0	0	357	8	88	40	0	0	136	0	47	35	0	0	82	716
Total	110	342	13	0	0	465	333	1065	34	0	0	1432	25	411	180	0	0	616	0	176	113	0	1	289	2802
8:00 AM	34	109	2	0	1	145	62	249	9	0	0	320	21	95	51	0	0	167	0	62	24	0	0	86	718
8:15 AM	28	120	6	0	0	154	66	264	6	0	0	336	8	86	50	0	0	144	0	45	28	0	0	73	707
8:30 AM	28	112	3	0	0	143	73	266	6	1	0	346	8	98	47	0	0	153	0	45	26	0	0	71	713
8:45 AM	25	106	4	0	0	135	64	258	9	0	0	331	10	91	56	0	0	157	0	41	29	0	1	70	693
Total	115	447	15	0	1	577	265	1037	30	1	0	1333	47	370	204	0	0	621	0	193	107	0	1	300	2831
BREAK																									
4:00 PM	59	277	4	0	0	340	34	141	21	0	0	196	26	47	45	0	0	118	0	85	35	0	0	120	774
4:15 PM	49	295	2	0	0	346	34	133	18	0	0	185	29	50	35	0	0	114	0	72	44	0	0	116	761
4:30 PM	55	320	4	0	1	379	28	169	19	1	0	217	24	75	34	0	0	133	0	75	40	0	0	115	844
4:45 PM	49	319	5	0	3	373	38	193	20	0	0	251	20	82	36	0	0	138	0	72	43	0	0	115	877
Total	212	1211	15	0	4	1438	134	636	78	1	0	849	99	254	150	0	0	503	0	304	162	0	0	466	3256
5:00 PM	59	361	2	0	0	422	36	172	22	0	0	230	29	89	33	0	1	151	0	83	34	0	0	117	920
5:15 PM	57	321	2	0	2	380	38	182	32	0	0	252	30	95	35	0	0	160	1	71	45	0	0	117	909
5:30 PM	49	318	2	0	0	369	36	191	20	2	0	249	23	77	45	0	0	145	0	76	44	0	0	120	883
5:45 PM	56	337	1	0	0	394	43	180	9	0	0	232	27	90	36	0	0	153	0	73	38	0	0	111	890
Total	221	1337	7	0	2	1565	153	725	83	2	0	963	109	351	149	0	1	609	1	303	161	0	0	465	3602
6:00 PM	55	342	3	0	3	400	35	162	26	3	0	226	26	71	39	0	0	136	0	83	32	0	0	115	877
6:15 PM	56	313	2	0	2	371	36	154	14	1	0	205	25	64	51	0	0	140	0	69	45	0	0	114	830
6:30 PM	72	310	4	0	0	386	39	111	10	2	0	162	11	62	49	0	0	122	0	70	39	0	0	109	779
6:45 PM	66	224	6	0	5	296	41	134	14	0	0	189	8	54	52	0	0	114	1	63	35	0	1	99	698
Total	249	1189	15	0	10	1453	151	561	64	6	0	782	70	251	191	0	0	512	1	285	151	0	1	437	3184
Grand Total	907	4526	65	0	17	5498	1036	4024	289	10	0	5359	350	1637	874	0	1	2861	2	1261	694	0	3	1957	15675
Apprch %	16.5	82.3	1.2	0.0	0.3		19.3	75.1	5.4	0.2	0.0		12.2	57.2	30.5	0.0	0.0		0.1	64.4	35.5	0.0	0.2		
Total %	5.8	28.9	0.4	0.0	0.1	35.1	6.6	25.7	1.8	0.1	0.0	34.2	2.2	10.4	5.6	0.0	0.0	18.3	0.0	8.0	4.4	0.0	0.0	12.5	
Cars, PU, Vans	790	4314	36	0	17	5140	1021	3821	257		0	5109	321	1587	771	0		2679	2	1212	683		3	1897	14825
% Cars, PU, Vans	87.1	95.3	55.4	0.0	100.0	93.5	98.6	95.0	88.9	0.0	0.0	95.3	91.7	96.9	88.2	0.0	0.0	93.6	100.0	96.1	98.4	0.0	100.0	96.9	94.6
Heavy Trucks	117	212	29	0		358	15	203	32	0		250	29	50	103	0		182	0	49	11	0		60	850
%Heavy Trucks	12.9	4.7	44.6	0.0	0.0	6.5	1.4	5.0	11.1	0.0	0.0	4.7	8.3	3.1	11.8	0.0	0.0	6.4	0.0	3.9	1.6	0.0	0.0	3.1	5.4

Project ID: 19-09270-005
Location: Marietta Blvd & Bolton Rd/Plant St
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 04/18/2019

AM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Bolton Rd/Plant St Eastbound					Bolton Rd/Plant St 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 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
7:15 AM	27	59	2	0	88	105	289	6	0	400	3	113	44	0	160	0	44	22	0	66	714
7:30 AM	40	110	5	0	155	76	252	8	0	336	6	106	45	0	157	0	43	41	0	84	732
7:45 AM	25	113	3	0	141	68	279	10	0	357	8	88	40	0	136	0	47	35	0	82	716
8:00 AM	34	109	2	0	145	62	249	9	0	320	21	95	51	0	167	0	62	24	0	86	718
Total Volume	126	391	12	0	529	311	1069	33	0	1413	38	402	180	0	620	0	196	122	0	318	2880
% App. Total	23.8	73.9	2.3	0.0	100	22.0	75.7	2.3	0.0	100	6.1	64.8	29.0	0.0	100	0.0	61.6	38.4	0.0	100	
PHF					0.864					0.872					0.922					0.937	0.983
Cars, PU, Vans	95	341	7	0	443	309	1023	20	0	1352	26	390	155	0	571	0	189	119	0	308	2674
% Cars, PU, Vans	75.4	87.2	58.3	0.0	83.7	99.4	95.7	60.6	0.0	95.7	68.4	97.0	86.1	0.0	92.1	0.0	96.4	97.5	0.0	96.9	92.8
Heavy Trucks	31	50	5	0	86	2	46	13	0	61	12	12	25	0	49	0	7	3	0	10	206
%Heavy Trucks	24.6	12.8	41.7	0.0	16.3	0.6	4.3	39.4	0.0	4.3	31.6	3.0	13.9	0.0	7.9	0.0	3.6	2.5	0.0	3.1	7.2

PM

	Marietta Blvd Northbound					Marietta Blvd Southbound					Bolton Rd/Plant St Eastbound					Bolton Rd/Plant St 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 07:00 PM																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
5:00 PM	59	361	2	0	422	36	172	22	0	230	29	89	33	0	151	0	83	34	0	117	920
5:15 PM	57	321	2	0	380	38	182	32	0	252	30	95	35	0	160	1	71	45	0	117	909
5:30 PM	49	318	2	0	369	36	191	20	2	249	23	77	45	0	145	0	76	44	0	120	883
5:45 PM	56	337	1	0	394	43	180	9	0	232	27	90	36	0	153	0	73	38	0	111	890
Total Volume	221	1337	7	0	1565	153	725	83	2	963	109	351	149	0	609	1	303	161	0	465	3602
% App. Total	14.1	85.4	0.4	0.0	100	15.9	75.3	8.6	0.2	100	17.9	57.6	24.5	0.0	100	0.2	65.2	34.6	0.0	100	
PHF					0.925					0.957					0.940					0.965	0.981
Cars, PU, Vans	203	1306	3	0	1512	151	695	82	2	930	107	344	135	0	586	1	293	157	0	451	3479
% Cars, PU, Vans	91.9	97.7	42.9	0.0	96.6	98.7	95.9	98.8	100.0	96.6	98.2	98.0	90.6	0.0	96.2	100.0	96.7	97.5	0.0	97.0	96.6
Heavy Trucks	18	31	4	0	53	2	30	1	0	33	2	7	14	0	23	0	10	4	0	14	123
%Heavy Trucks	8.1	2.3	57.1	0.0	3.4	1.3	4.1	1.2	0.0	3.4	1.8	2.0	9.4	0.0	3.8	0.0	3.3	2.5	0.0	3.0	3.4

Prepared by National Data & Surveying Services

Chattahoochee Ave & MacArthur Blvd

Peak Hour Turning Movement Count

ID: 19-09270-006
City: Atlanta

Day: Thursday
Date: 04/18/2019

PEAK HOURS		COUNT PERIODS
AM	07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	05:30 PM - 06:30 PM	04:00 PM - 07:00 PM

Chattahoochee Ave – SOUTHBOUND

	Right	Thru	Left	U-Turn	Exit
AM	3	145	0	0	38
NOON	0	0	0	0	0
PM	4	64	0	0	287
	0	1	0	0	

MacArthur Blvd – EASTBOUND

	AM	NOON	PM	
Exit	45	0	39	
U-Turn	0	0	0	0
Left	3	0	5	0
Thru	0	0	0	1
Right	32	0	33	0

MacArthur Blvd – WESTBOUND

		PM	NOON	AM
Right	0	1	0	0
Thru	1	0	0	0
Left	0	0	0	0
U-Turn	0	0	0	0
Exit		0	0	0

Chattahoochee Ave – NORTHBOUND

	Exit	U-Turn	Left	Thru	Right
		0	0	1	0
PM	97	0	35	281	0
NOON	0	0	0	0	0
AM	177	0	42	35	0

CONTROL

1-Way Stop (EB)

	AM	NOON	PM
TEV	260	0	423
PHF	0.89		0.81

Cars (AM)

- Southbound: 3, 142, 0
- Eastbound: 3, 0, 31
- Westbound: 0, 0, 0
- Northbound: 41, 34, 0

HT (AM)

- Southbound: 0, 3, 0
- Eastbound: 0, 0, 1
- Westbound: 0, 0, 0
- Northbound: 1, 1, 0

Cars (NOON)

- 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)

- 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

Cars (PM)

- Southbound: 4, 64, 0
- Eastbound: 5, 0, 28
- Westbound: 1, 0, 0
- Northbound: 33, 277, 0

HT (PM)

- Southbound: 0, 0, 0
- Eastbound: 0, 0, 5
- Westbound: 0, 0, 0
- Northbound: 2, 4, 0

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North	0 0	0 0	0 0
South	0 0	0 0	0 0
West	0 0	0 0	0 0
East	0 0	0 0	0 0
NW corner	0	0	0
NE corner	0	0	0
SW corner	0	0	0
SE corner	0	0	0

Project ID: 19-09270-006
Location: Chattahoochee Ave & MacArthur Blvd
City: Atlanta

Day: Thursday
Date: 04/18/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Chattahoochee Ave Northbound						Chattahoochee Ave Southbound						MacArthur Blvd Eastbound						MacArthur Blvd Westbound						
Start Time	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	Int. Total
7:00 AM	7	7	0	0	0	14	0	22	1	0	0	23	0	0	3	0	0	3	0	0	0	0	0	0	40
7:15 AM	6	5	0	0	0	11	0	28	0	0	0	28	0	0	9	0	0	9	0	0	0	0	0	0	48
7:30 AM	3	14	0	0	0	17	0	37	1	0	0	38	0	0	9	0	0	9	0	0	0	0	0	0	64
7:45 AM	11	13	0	0	0	24	0	38	3	0	0	41	0	0	8	0	0	8	0	0	0	0	0	0	73
Total	27	39	0	0	0	66	0	125	5	0	0	130	0	0	29	0	0	29	0	0	0	0	0	0	225
8:00 AM	9	11	0	0	0	20	0	31	0	0	0	31	2	0	6	0	0	8	0	0	0	0	0	0	59
8:15 AM	9	6	0	0	0	15	0	33	0	0	0	33	0	0	9	0	0	9	0	0	0	0	0	0	57
8:30 AM	13	5	0	0	0	18	0	43	0	0	0	43	1	0	9	0	0	10	0	0	0	0	0	0	71
8:45 AM	11	13	0	0	0	24	0	21	0	0	0	21	2	0	6	0	1	8	0	0	0	0	0	0	53
Total	42	35	0	0	0	77	0	128	0	0	0	128	5	0	30	0	1	35	0	0	0	0	0	0	240
BREAK																									
4:00 PM	3	33	0	0	0	36	0	10	2	0	0	12	3	0	9	0	0	12	0	0	0	0	0	0	60
4:15 PM	12	33	0	0	0	45	0	5	0	0	0	5	0	0	9	0	0	9	0	0	0	0	0	0	59
4:30 PM	9	49	0	0	0	58	0	11	1	0	0	12	1	0	10	0	0	11	0	0	0	0	0	0	81
4:45 PM	13	49	0	0	0	62	1	17	0	0	0	18	1	0	14	0	0	15	0	0	0	0	0	0	95
Total	37	164	0	0	0	201	1	43	3	0	0	47	5	0	42	0	0	47	0	0	0	0	0	0	295
5:00 PM	11	62	0	0	0	73	0	14	2	0	0	16	3	0	21	0	0	24	0	0	0	0	0	0	113
5:15 PM	2	49	0	0	0	51	0	10	2	0	0	12	2	0	11	0	0	13	0	0	0	0	0	0	76
5:30 PM	8	59	0	0	0	67	0	18	0	0	0	18	2	0	10	0	0	12	0	0	0	0	0	0	97
5:45 PM	6	93	0	0	0	99	0	18	1	0	0	19	0	0	12	0	0	12	0	0	1	0	0	1	131
Total	27	263	0	0	0	290	0	60	5	0	0	65	7	0	54	0	0	61	0	0	1	0	0	1	417
6:00 PM	6	79	0	0	0	85	0	16	1	0	0	17	2	0	7	0	0	9	0	0	0	0	0	0	111
6:15 PM	15	50	0	0	0	65	0	12	2	0	0	14	1	0	4	0	0	5	0	0	0	0	0	0	84
6:30 PM	9	27	0	0	0	36	0	19	0	0	0	19	2	0	9	0	0	11	0	0	0	0	0	0	66
6:45 PM	7	21	0	0	0	28	0	9	1	0	0	10	2	0	3	0	0	5	0	0	0	0	1	0	43
Total	37	177	0	0	0	214	0	56	4	0	0	60	7	0	23	0	0	30	0	0	0	0	1	0	304
Grand Total	170	678	0	0	0	848	1	412	17	0	0	430	24	0	178	0	1	202	0	0	1	0	1	1	1481
Apprch %	20.0	80.0	0.0	0.0	0.0		0.2	95.8	4.0	0.0	0.0		11.9	0.0	88.1	0.0	0.5		0.0	0.0	100.0	0.0	100.0		
Total %	11.5	45.8	0.0	0.0	0.0	57.3	0.1	27.8	1.1	0.0	0.0	29.0	1.6	0.0	12.0	0.0	0.1	13.6	0.0	0.0	0.1	0.0	0.1	0.1	
Cars, PU, Vans	155	665	0	0	0	820	1	407	15		0	423	23	0	161	0		184	0	0	1		1	1	1428
% Cars, PU, Vans	91.2	98.1	0.0	0.0	0.0	96.7	100.0	98.8	88.2	0.0	0.0	98.4	95.8	0.0	90.4	0.0	0.0	91.1	0.0	0.0	100.0	0.0	100.0	100.0	96.4
Heavy Trucks	15	13	0	0		28	0	5	2	0		7	1	0	17	0		18	0	0	0	0		0	53
%Heavy Trucks	8.8	1.9	0.0	0.0	0.0	3.3	0.0	1.2	11.8	0.0	0.0	1.6	4.2	0.0	9.6	0.0	0.0	8.9	0.0	0.0	0.0	0.0	0.0	0.0	3.6

Project ID: 19-09270-006
Location: Chattahoochee Ave & MacArthur Blvd
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 04/18/2019

AM

	Chattahoochee Ave Northbound					Chattahoochee Ave Southbound					MacArthur Blvd Eastbound					MacArthur Blvd 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 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
7:45 AM	11	13	0	0	24	0	38	3	0	41	0	0	8	0	8	0	0	0	0	0	73
8:00 AM	9	11	0	0	20	0	31	0	0	31	2	0	6	0	8	0	0	0	0	0	59
8:15 AM	9	6	0	0	15	0	33	0	0	33	0	0	9	0	9	0	0	0	0	0	57
8:30 AM	13	5	0	0	18	0	43	0	0	43	1	0	9	0	10	0	0	0	0	0	71
Total Volume	42	35	0	0	77	0	145	3	0	148	3	0	32	0	35	0	0	0	0	0	260
% App. Total	54.5	45.5	0.0	0.0	100	0.0	98.0	2.0	0.0	100	8.6	0.0	91.4	0.0	100	0.0	0.0	0.0	0.0	0	
PHF					0.802					0.860					0.875						0.890
Cars, PU, Vans	41	34	0	0	75	0	142	3	0	145	3	0	31	0	34	0	0	0	0	0	254
% Cars, PU, Vans	97.6	97.1	0.0	0.0	97.4	0.0	97.9	100.0	0.0	98.0	100.0	0.0	96.9	0.0	97.1	0.0	0.0	0.0	0.0	0.0	97.7
Heavy Trucks	1	1	0	0	2	0	3	0	0	3	0	0	1	0	1	0	0	0	0	0	6
%Heavy Trucks	2.4	2.9	0.0	0.0	2.6	0.0	2.1	0.0	0.0	2.0	0.0	0.0	3.1	0.0	2.9	0.0	0.0	0.0	0.0	0.0	2.3

PM

	Chattahoochee Ave Northbound					Chattahoochee Ave Southbound					MacArthur Blvd Eastbound					MacArthur Blvd 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 07:00 PM																					
Peak Hour for Entire Intersection Begins at 05:30 PM																					
5:30 PM	8	59	0	0	67	0	18	0	0	18	2	0	10	0	12	0	0	0	0	0	97
5:45 PM	6	93	0	0	99	0	18	1	0	19	0	0	12	0	12	0	0	1	0	1	131
6:00 PM	6	79	0	0	85	0	16	1	0	17	2	0	7	0	9	0	0	0	0	0	111
6:15 PM	15	50	0	0	65	0	12	2	0	14	1	0	4	0	5	0	0	0	0	0	84
Total Volume	35	281	0	0	316	0	64	4	0	68	5	0	33	0	38	0	0	1	0	1	423
% App. Total	11.1	88.9	0.0	0.0	100	0.0	94.1	5.9	0.0	100	13.2	0.0	86.8	0.0	100	0.0	0.0	100.0	0.0	100	
PHF					0.798					0.895					0.792					0.250	0.807
Cars, PU, Vans	33	277	0	0	310	0	64	4	0	68	5	0	28	0	33	0	0	1	0	1	412
% Cars, PU, Vans	94.3	98.6	0.0	0.0	98.1	0.0	100.0	100.0	0.0	100.0	100.0	0.0	84.8	0.0	86.8	0.0	0.0	100.0	0.0	100.0	97.4
Heavy Trucks	2	4	0	0	6	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	11
%Heavy Trucks	5.7	1.4	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0	13.2	0.0	0.0	0.0	0.0	0.0	2.6

Prepared by National Data & Surveying Services

Marietta Blvd & Bolton Place

Peak Hour Turning Movement Count

ID: 19-09270-007
City: Atlanta

Day: Thursday
Date: 04/18/2019

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 07:00 PM

Marietta Blvd — SOUTHBOUND

AM	0	1405	1	0	748	AM
NOON	0	0	0	0	0	NOON
PM	0	1193	0	0	1579	PM

EASTBOUND

AM	NOON	PM	
0	0	0	
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
AM	NOON	PM	

0

WESTBOUND

PM	NOON	AM	
1	0	3	0
0	0	0	1
11	0	11	0
0	0	0	0
6	0	6	
PM	NOON	AM	

Bolton Place

CONTROL: Signalized

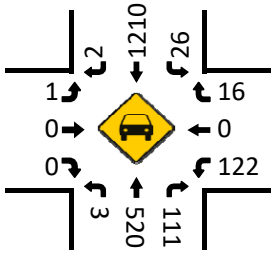
TEV	2170 AM	0 NOON	2789 PM
PHF	0.98		0.95

Marietta Blvd — NORTHBOUND

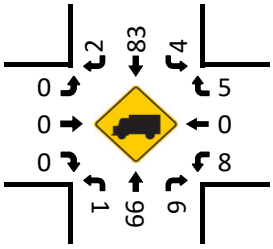
PM	1204	0	0	1578	6	PM
NOON	0	0	0	0	0	NOON
AM	1416	0	0	745	5	AM

0 1 2 0

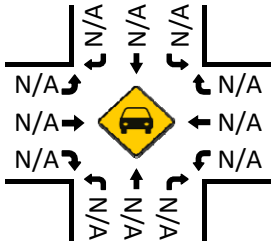
Cars (AM)



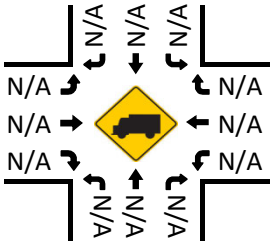
HT (AM)



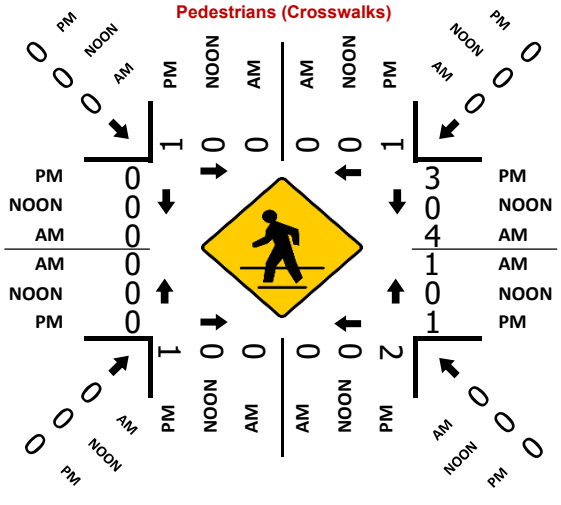
Cars (NOON)



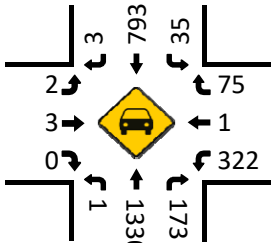
HT (NOON)



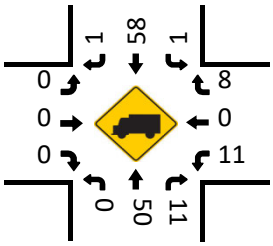
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Project ID: 19-09270-007
Location: Marietta Blvd & Bolton Place
City: Atlanta

Day: Thursday
Date: 04/18/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Marietta Blvd Northbound						Marietta Blvd Southbound						0 Eastbound						Bolton Place Westbound						
Start Time	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	Int. Total
7:00 AM	0	123	0	0	0	123	0	279	0	0	0	279	0	0	0	0	0	0	2	0	1	0	0	3	405
7:15 AM	0	144	4	0	0	148	1	339	0	0	0	340	0	0	0	0	0	0	2	0	0	0	0	2	490
7:30 AM	0	192	0	0	0	192	0	341	0	0	0	341	0	0	0	0	0	0	4	0	2	0	2	6	539
7:45 AM	0	189	1	0	0	190	0	360	0	0	0	360	0	0	0	0	0	0	2	0	0	0	2	2	552
Total	0	648	5	0	0	653	1	1319	0	0	0	1320	0	0	0	0	0	0	10	0	3	0	4	13	1986
8:00 AM	0	183	2	0	0	185	1	350	0	0	0	351	0	0	0	0	0	0	2	0	0	0	1	2	538
8:15 AM	0	181	2	0	0	183	0	354	0	0	0	354	0	0	0	0	0	0	3	0	1	0	0	4	541
8:30 AM	0	187	2	0	0	189	0	341	0	0	0	341	0	0	0	0	0	0	5	0	2	0	0	7	537
8:45 AM	0	140	2	0	0	142	1	342	0	0	0	343	0	0	0	0	0	0	1	0	0	0	0	1	486
Total	0	691	8	0	0	699	2	1387	0	0	0	1389	0	0	0	0	0	0	11	0	3	0	1	14	2102
BREAK																									
4:00 PM	0	349	4	0	0	353	0	286	0	1	0	287	0	0	0	0	0	0	2	0	0	0	0	2	642
4:15 PM	0	361	1	0	2	362	0	236	0	0	0	236	0	0	0	0	0	0	0	0	0	0	0	0	598
4:30 PM	0	406	1	0	1	407	0	306	0	0	0	306	0	0	0	0	0	0	1	0	0	0	1	1	714
4:45 PM	0	330	1	0	0	331	0	322	0	0	0	322	0	0	0	0	0	0	3	0	0	0	0	3	656
Total	0	1446	7	0	3	1453	0	1150	0	1	0	1151	0	0	0	0	0	0	6	0	0	0	1	6	2610
5:00 PM	0	452	0	0	1	452	0	279	0	0	2	279	0	0	0	0	0	0	3	0	0	0	0	3	734
5:15 PM	0	390	4	0	1	394	0	286	0	0	0	286	0	0	0	0	0	0	4	0	1	0	3	5	685
5:30 PM	0	365	8	0	0	373	2	257	0	0	0	259	0	0	0	0	0	0	3	0	1	0	0	4	636
5:45 PM	0	373	4	0	0	377	1	297	0	0	2	298	0	0	0	0	0	0	2	0	0	0	2	2	677
Total	0	1580	16	0	2	1596	3	1119	0	0	4	1122	0	0	0	0	0	0	12	0	2	0	5	14	2732
6:00 PM	0	337	2	0	1	339	0	271	0	0	2	271	0	0	0	0	0	0	0	0	0	0	1	0	610
6:15 PM	0	371	4	0	0	375	1	360	0	0	3	361	0	0	0	0	0	0	7	0	2	0	0	9	745
6:30 PM	0	279	0	0	0	279	0	234	0	0	2	234	0	0	0	0	0	0	2	0	0	0	0	2	515
6:45 PM	0	244	0	0	1	244	0	235	0	1	0	236	0	0	0	0	0	0	3	0	0	0	1	3	483
Total	0	1231	6	0	2	1237	1	1100	0	1	7	1102	0	0	0	0	0	0	12	0	2	0	2	14	2353
Grand Total	0	5596	42	0	7	5638	7	6075	0	2	11	6084	0	0	0	0	0	0	51	0	10	0	13	61	11783
Apprch %	0.0	99.3	0.7	0.0	0.1		0.1	99.9	0.0	0.0	0.2		0.0	0.0	0.0	0.0	0.0		83.6	0.0	16.4	0.0	21.3		
Total %	0.0	47.5	0.4	0.0	0.1	47.8	0.1	51.6	0.0	0.0	0.1	51.6	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	0.0	0.1	0.5	
Cars, PU, Vans	0	5224	42	0	7	5266	7	5747	0		11	5756	0	0	0	0		0	51	0	10		13	61	11083
% Cars, PU, Vans	0.0	93.4	100.0	0.0	100.0	93.4	100.0	94.6	0.0	0.0	100.0	94.6	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	100.0	94.1
Heavy Trucks	0	372	0	0		372	0	328	0	0		328	0	0	0	0		0	0	0	0	0		0	700
%Heavy Trucks	0.0	6.6	0.0	0.0	0.0	6.6	0.0	5.4	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9

Project ID: 19-09270-007
Location: Marietta Blvd & Bolton Place
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 04/18/2019

AM

	Marietta Blvd Northbound					Marietta Blvd Southbound					0 Eastbound					Bolton Place 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 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	0	192	0	0	192	0	341	0	0	341	0	0	0	0	0	4	0	2	0	6	539
7:45 AM	0	189	1	0	190	0	360	0	0	360	0	0	0	0	0	2	0	0	0	2	552
8:00 AM	0	183	2	0	185	1	350	0	0	351	0	0	0	0	0	2	0	0	0	2	538
8:15 AM	0	181	2	0	183	0	354	0	0	354	0	0	0	0	0	3	0	1	0	4	541
Total Volume	0	745	5	0	750	1	1405	0	0	1406	0	0	0	0	0	11	0	3	0	14	2170
% App. Total	0.0	99.3	0.7	0.0	100	0.1	99.9	0.0	0.0	100	0.0	0.0	0.0	0.0	0	78.6	0.0	21.4	0.0	100	
PHF					0.977					0.976										0.583	0.983
Cars, PU, Vans	0	640	5	0	645	1	1318	0	0	1319	0	0	0	0	0	11	0	3	0	14	1978
% Cars, PU, Vans	0.0	85.9	100.0	0.0	86.0	100.0	93.8	0.0	0.0	93.8	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	91.2
Heavy Trucks	0	105	0	0	105	0	87	0	0	87	0	0	0	0	0	0	0	0	0	0	192
%Heavy Trucks	0.0	14.1	0.0	0.0	14.0	0.0	6.2	0.0	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8

PM

	Marietta Blvd Northbound					Marietta Blvd Southbound					0 Eastbound					Bolton Place 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 07:00 PM																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
4:30 PM	0	406	1	0	407	0	306	0	0	306	0	0	0	0	0	1	0	0	0	1	714
4:45 PM	0	330	1	0	331	0	322	0	0	322	0	0	0	0	0	3	0	0	0	3	656
5:00 PM	0	452	0	0	452	0	279	0	0	279	0	0	0	0	0	3	0	0	0	3	734
5:15 PM	0	390	4	0	394	0	286	0	0	286	0	0	0	0	0	4	0	1	0	5	685
Total Volume	0	1578	6	0	1584	0	1193	0	0	1193	0	0	0	0	0	11	0	1	0	12	2789
% App. Total	0.0	99.6	0.4	0.0	100	0.0	100.0	0.0	0.0	100	0.0	0.0	0.0	0.0	0	91.7	0.0	8.3	0.0	100	
PHF					0.876					0.926										0.600	0.950
Cars, PU, Vans	0	1517	6	0	1523	0	1134	0	0	1134	0	0	0	0	0	11	0	1	0	12	2669
% Cars, PU, Vans	0.0	96.1	100.0	0.0	96.1	0.0	95.1	0.0	0.0	95.1	0.0	0.0	0.0	0.0	0.0	100.0	0.0	100.0	0.0	100.0	95.7
Heavy Trucks	0	61	0	0	61	0	59	0	0	59	0	0	0	0	0	0	0	0	0	0	120
%Heavy Trucks	0.0	3.9	0.0	0.0	3.9	0.0	4.9	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3

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

VOLUME

Marietta Blvd Bet. Chattahoochee Ave & Coronet Way

Day: Thursday
Date: 4/18/2019

City: Atlanta
Project #: GA19_9271_001

DAILY TOTALS	NB	SB	Total
	15,374	15,650	31,024

AM Period	NB		SB		TOTAL		PM Period	NB		SB		TOTAL	
0:00	62		33		95		12:00	221		219		440	
0:15	38		24		62		12:15	229		222		451	
0:30	36		12		48		12:30	228		262		490	
0:45	28	164	20	89	48	253	12:45	234	912	218	921	452	1833
1:00	25		16		41		13:00	219		213		432	
1:15	25		9		34		13:15	199		230		429	
1:30	24		7		31		13:30	225		219		444	
1:45	16	90	14	46	30	136	13:45	225	868	192	854	417	1722
2:00	23		4		27		14:00	261		187		448	
2:15	11		12		23		14:15	233		202		435	
2:30	25		9		34		14:30	266		209		475	
2:45	23	82	8	33	31	115	14:45	244	1004	188	786	432	1790
3:00	10		16		26		15:00	293		203		496	
3:15	13		9		22		15:15	286		202		488	
3:30	15		17		32		15:30	306		203		509	
3:45	13	51	21	63	34	114	15:45	289	1174	213	821	502	1995
4:00	29		10		39		16:00	349		286		635	
4:15	23		16		39		16:15	361		236		597	
4:30	14		29		43		16:30	406		306		712	
4:45	23	89	67	122	90	211	16:45	330	1446	322	1150	652	2596
5:00	20		43		63		17:00	452		279		731	
5:15	20		60		80		17:15	391		286		677	
5:30	45		94		139		17:30	366		259		625	
5:45	31	116	127	324	158	440	17:45	373	1582	298	1122	671	2704
6:00	65		181		246		18:00	337		271		608	
6:15	71		223		294		18:15	373		261		634	
6:30	76		230		306		18:30	279		234		513	
6:45	95	307	323	957	418	1264	18:45	244	1233	235	1001	479	2234
7:00	124		279		403		19:00	254		195		449	
7:15	144		340		484		19:15	257		161		418	
7:30	194		341		535		19:30	222		128		350	
7:45	189	651	360	1320	549	1971	19:45	205	938	143	627	348	1565
8:00	183		351		534		20:00	177		120		297	
8:15	182		354		536		20:15	160		115		275	
8:30	189		341		530		20:30	165		109		274	
8:45	140	694	343	1389	483	2083	20:45	182	684	91	435	273	1119
9:00	134		321		455		21:00	158		78		236	
9:15	171		329		500		21:15	122		69		191	
9:30	171		267		438		21:30	116		80		196	
9:45	151	627	277	1194	428	1821	21:45	101	497	61	288	162	785
10:00	166		226		392		22:00	97		74		171	
10:15	173		224		397		22:15	93		80		173	
10:30	173		175		348		22:30	81		64		145	
10:45	165	677	194	819	359	1496	22:45	67	338	46	264	113	602
11:00	211		212		423		23:00	99		57		156	
11:15	198		194		392		23:15	69		36		105	
11:30	253		224		477		23:30	63		33		96	
11:45	215	877	229	859	444	1736	23:45	42	273	40	166	82	439

Prepared by National Data & Surveying Services

CLASSIFICATION

Marietta Blvd Bet. Chattahoochee Ave & Coronet Way

Day: Thursday
Date: 4/18/2019

City: Atlanta
Project #: GA19_9271_001n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	131	21	3	4	0	0	0	5	0	0	0	0	164
1:00	0	77	11	0	1	0	0	0	1	0	0	0	0	90
2:00	0	71	9	0	0	0	0	0	2	0	0	0	0	82
3:00	0	42	6	1	2	0	0	0	0	0	0	0	0	51
4:00	0	59	14	7	5	0	0	1	3	0	0	0	0	89
5:00	0	82	19	5	3	2	0	1	4	0	0	0	0	116
6:00	0	231	51	6	7	0	0	2	9	0	1	0	0	307
7:00	0	459	100	11	40	9	0	8	21	0	3	0	0	651
8:00	1	496	99	11	45	7	0	12	21	0	2	0	0	694
9:00	2	448	109	6	22	4	0	5	28	0	3	0	0	627
10:00	2	504	111	7	20	6	0	1	25	0	1	0	0	677
11:00	2	638	162	10	20	10	0	4	30	0	1	0	0	877
12:00 PM	1	683	152	11	20	16	0	5	23	0	1	0	0	912
13:00	2	642	161	7	17	4	0	5	25	1	4	0	0	868
14:00	0	772	154	10	17	10	0	6	34	0	1	0	0	1004
15:00	1	923	177	8	17	13	0	5	27	0	3	0	0	1174
16:00	6	1171	204	6	10	15	0	8	24	0	2	0	0	1446
17:00	3	1325	202	6	7	14	1	4	10	6	4	0	0	1582
18:00	3	1016	148	7	11	21	3	7	11	4	2	0	0	1233
19:00	2	772	118	8	10	4	0	4	19	1	0	0	0	938
20:00	0	586	71	6	3	4	0	0	13	0	1	0	0	684
21:00	0	406	67	5	2	3	0	0	14	0	0	0	0	497
22:00	0	285	38	3	2	0	0	0	10	0	0	0	0	338
23:00	0	225	32	5	4	4	0	2	1	0	0	0	0	273
Totals	25	12044	2236	149	289	146	4	80	360	12	29			15374
% of Totals	0%	78%	15%	1%	2%	1%	0%	1%	2%	0%	0%			100%

AM Volumes	7	3238	712	67	169	38	0	34	149	0	11	0	0	4425
% AM	0%	21%	5%	0%	1%	0%		0%	1%		0%			29%
AM Peak Hour	9:00	11:00	11:00	7:00	8:00	11:00		8:00	11:00		7:00			11:00
Volume	2	638	162	11	45	10		12	30		3			877
PM Volumes	18	8806	1524	82	120	108	4	46	211	12	18	0	0	10949
% PM	0%	57%	10%	1%	1%	1%	0%	0%	1%	0%	0%			71%
PM Peak Hour	16:00	17:00	16:00	12:00	12:00	18:00	18:00	16:00	14:00	17:00	13:00			17:00
Volume	6	1325	204	11	20	21	3	8	34	6	4			1582

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	1345		9%	1780		12%	3028		20%	9221		60%

Classification Definitions

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

Prepared by National Data & Surveying Services

CLASSIFICATION

Marietta Blvd Bet. Chattahoochee Ave & Coronet Way

Day: Thursday
Date: 4/18/2019

City: Atlanta
Project #: GA19_9271_001s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	65	8	3	1	0	0	5	6	0	1	0	0	89
1:00	0	35	6	2	1	1	0	1	0	0	0	0	0	46
2:00	0	23	5	0	3	0	0	2	0	0	0	0	0	33
3:00	0	47	8	1	2	0	0	4	1	0	0	0	0	63
4:00	0	96	14	1	1	3	0	3	4	0	0	0	0	122
5:00	0	262	49	3	3	1	0	4	1	0	1	0	0	324
6:00	0	755	150	4	14	8	0	10	12	0	4	0	0	957
7:00	2	1067	172	5	29	13	0	9	18	0	5	0	0	1320
8:00	1	1115	170	9	41	10	1	11	24	0	7	0	0	1389
9:00	1	924	155	12	31	16	0	11	37	1	6	0	0	1194
10:00	5	613	124	9	19	17	0	12	16	0	4	0	0	819
11:00	3	656	124	10	18	15	0	7	21	0	5	0	0	859
12:00 PM	1	709	145	5	17	10	0	8	21	0	5	0	0	921
13:00	0	639	134	5	15	19	0	13	23	0	6	0	0	854
14:00	1	588	119	8	17	17	0	7	25	0	4	0	0	786
15:00	3	650	108	11	13	12	0	5	14	0	5	0	0	821
16:00	3	927	153	7	11	10	0	3	32	0	4	0	0	1150
17:00	4	950	109	6	12	8	0	5	23	0	5	0	0	1122
18:00	3	823	108	7	16	12	0	8	19	0	5	0	0	1001
19:00	1	515	74	7	7	5	0	3	14	0	1	0	0	627
20:00	0	360	55	6	3	2	0	4	5	0	0	0	0	435
21:00	0	242	35	3	1	1	0	3	1	0	2	0	0	288
22:00	0	207	32	6	4	2	0	9	4	0	0	0	0	264
23:00	0	135	17	4	0	0	0	7	3	0	0	0	0	166
Totals	28	12403	2074	134	279	182	1	154	324	1	70			15650
% of Totals	0%	79%	13%	1%	2%	1%	0%	1%	2%	0%	0%			100%

AM Volumes	12	5658	985	59	163	84	1	79	140	1	33	0	0	7215
% AM	0%	36%	6%	0%	1%	1%	0%	1%	1%	0%	0%			46%
AM Peak Hour	10:00	8:00	7:00	9:00	8:00	10:00	8:00	10:00	9:00	9:00	8:00			8:00
Volume	5	1115	172	12	41	17	1	12	37	1	7			1389
PM Volumes	16	6745	1089	75	116	98	0	75	184	0	37	0	0	8435
% PM	0%	43%	7%	0%	1%	1%		0%	1%		0%			54%
PM Peak Hour	17:00	17:00	16:00	15:00	12:00	13:00		13:00	16:00		13:00			16:00
Volume	4	950	153	11	17	19		13	32		6			1150

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	2709		17%	1775		11%	2272		15%	8894		57%

Classification Definitions

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

Prepared by National Data & Surveying Services

CLASSIFICATION

Marietta Blvd Bet. Chattahoochee Ave & Coronet Way

Day: Thursday
Date: 4/18/2019

City: Atlanta
Project #: GA19_9271_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	196	29	6	5	0	0	5	11	0	1	0	0	253
1:00	0	112	17	2	2	1	0	1	1	0	0	0	0	136
2:00	0	94	14	0	3	0	0	2	2	0	0	0	0	115
3:00	0	89	14	2	4	0	0	4	1	0	0	0	0	114
4:00	0	155	28	8	6	3	0	4	7	0	0	0	0	211
5:00	0	344	68	8	6	3	0	5	5	0	1	0	0	440
6:00	0	986	201	10	21	8	0	12	21	0	5	0	0	1264
7:00	2	1526	272	16	69	22	0	17	39	0	8	0	0	1971
8:00	2	1611	269	20	86	17	1	23	45	0	9	0	0	2083
9:00	3	1372	264	18	53	20	0	16	65	1	9	0	0	1821
10:00	7	1117	235	16	39	23	0	13	41	0	5	0	0	1496
11:00	5	1294	286	20	38	25	0	11	51	0	6	0	0	1736
12:00 PM	2	1392	297	16	37	26	0	13	44	0	6	0	0	1833
13:00	2	1281	295	12	32	23	0	18	48	1	10	0	0	1722
14:00	1	1360	273	18	34	27	0	13	59	0	5	0	0	1790
15:00	4	1573	285	19	30	25	0	10	41	0	8	0	0	1995
16:00	9	2098	357	13	21	25	0	11	56	0	6	0	0	2596
17:00	7	2275	311	12	19	22	1	9	33	6	9	0	0	2704
18:00	6	1839	256	14	27	33	3	15	30	4	7	0	0	2234
19:00	3	1287	192	15	17	9	0	7	33	1	1	0	0	1565
20:00	0	946	126	12	6	6	0	4	18	0	1	0	0	1119
21:00	0	648	102	8	3	4	0	3	15	0	2	0	0	785
22:00	0	492	70	9	6	2	0	9	14	0	0	0	0	602
23:00	0	360	49	9	4	4	0	9	4	0	0	0	0	439
Totals	53	24447	4310	283	568	328	5	234	684	13	99			31024
% of Totals	0%	79%	14%	1%	2%	1%	0%	1%	2%	0%	0%			100%

AM Volumes	19	8896	1697	126	332	122	1	113	289	1	44	0	0	11640
% AM	0%	29%	5%	0%	1%	0%	0%	0%	1%	0%	0%			38%
AM Peak Hour	10:00	8:00	11:00	8:00	8:00	11:00	8:00	8:00	9:00	9:00	8:00			8:00
Volume	7	1611	286	20	86	25	1	23	65	1	9			2083
PM Volumes	34	15551	2613	157	236	206	4	121	395	12	55	0	0	19384
% PM	0%	50%	8%	1%	1%	1%	0%	0%	1%	0%	0%			62%
PM Peak Hour	16:00	17:00	16:00	15:00	12:00	18:00	18:00	13:00	14:00	17:00	13:00			17:00
Volume	9	2275	357	19	37	33	3	18	59	6	10			2704

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	4054		13%	3555		11%	5300		17%	18115		58%

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	

SITE PLAN SPECIFICATIONS TABLE

DEVELOPMENT DATA	RESIDENTIAL	NON-RESIDENTIAL	TOTAL
PROPOSED BUILDING SF	550,346 SF	249,292 SF	644,858 SF
PROPOSED FAR	1.46	1.25	2.71
ALLOWED FAR	1.44	2.5	5.146
DWELLING UNITS (DU)	550	N/A	N/A

OPEN SPACE TABLE

OPEN SPACE	PARK SPACE	OPEN SPACE
REQUIRED	20% (40,050)	.43 (103,245 SF)
PROPOSED	20% minimum	.43 (103,252 SF)

PROPERTY INFORMATION:
EXISTING: I-1
PROPOSED: MRC-2

NET LAND ACREAGE: 4.59
GROSS LAND ACREAGE: 5.51

BUILDING STORIES:
BUILDING A - 6
BUILDING B - 5
PARKING GARAGE - 8

TOTAL REQUIRED PARKING = 316 SPACES
TOTAL PROPOSED PARKING = 750 SPACES
LOCATED IN CENTRALIZED PARKING DECK

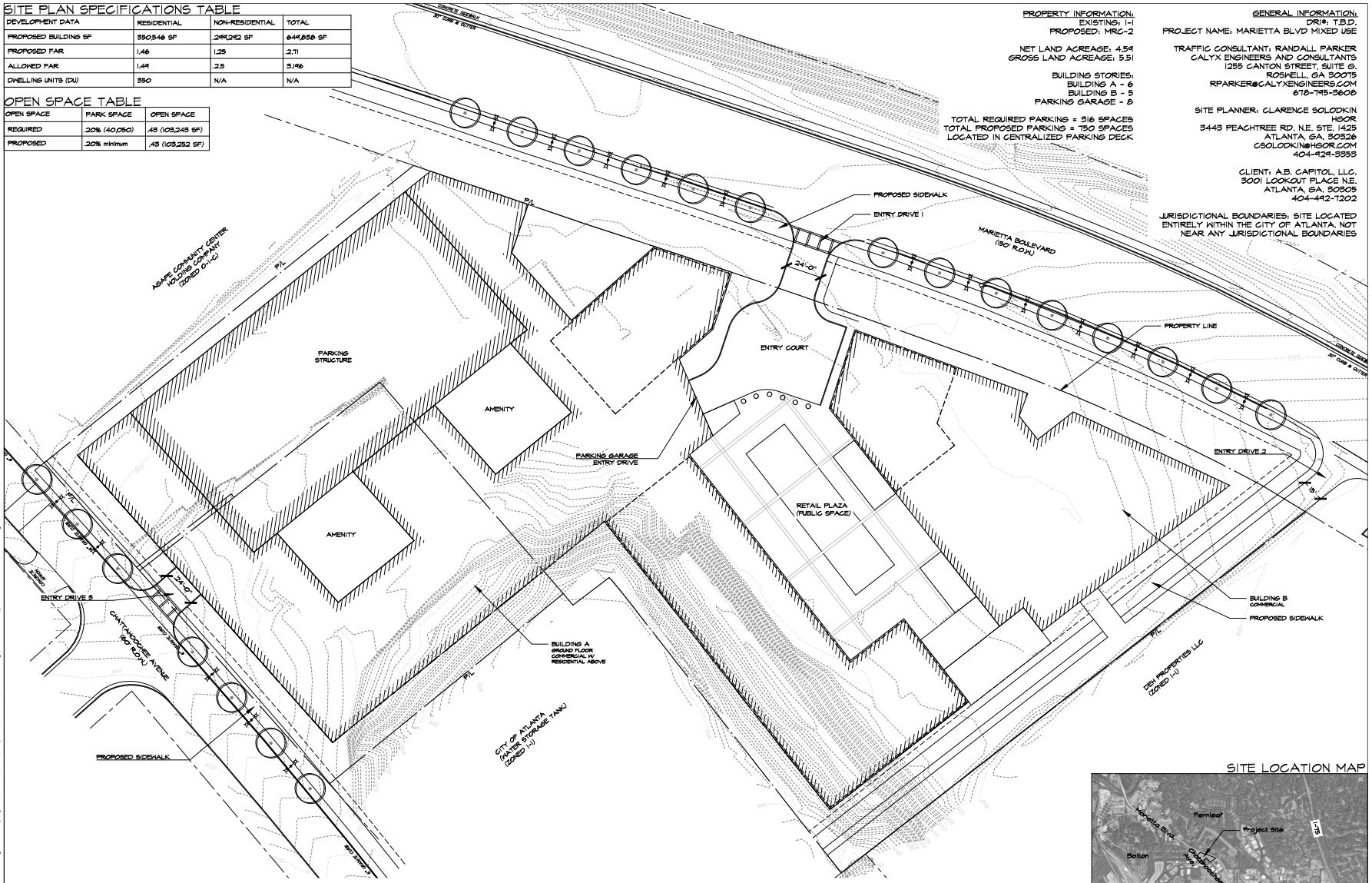
GENERAL INFORMATION:
DRI#: T.B.D.
PROJECT NAME: MARIETTA BLVD MIXED USE

TRAFFIC CONSULTANT: RANDALL PARKER
CALYX ENGINEERS AND CONSULTANTS
1255 CANTON STREET, SUITE G.
ROSWELL, GA 30075
RPARKER@CALYXENGINEERS.COM
678-745-3608

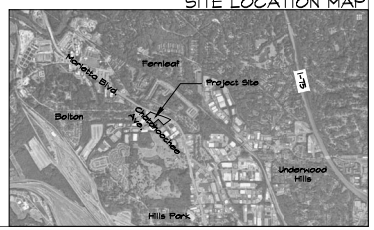
SITE PLANNER: CLARENCE SOLODKIN
HGOR
3443 PEACHTREE RD. N.E. STE. 1425
ATLANTA, GA. 30326
CSOLODKIN@HGOR.COM
404-424-5555

CLIENT: A.B. CAPITOL, LLC.
3001 LOOKOUT PLACE N.E.
ATLANTA, GA. 30305
404-492-7202

JURISDICTIONAL BOUNDARIES: SITE LOCATED ENTIRELY WITHIN THE CITY OF ATLANTA. NOT NEAR ANY JURISDICTIONAL BOUNDARIES



SITE LOCATION MAP



0' 15' 30' 60'

NORTH

Marietta Blvd Mixed Use
Atlanta, GA

AB Capital, LLC
Atlanta, GA

TITLE
ZONING PLAN

DATE	04/25/2019
JOB NO.	19010
DWG	2019-04-23_19010-HW1-DRI PLAN
DRAWN	CS
CHECKED	TF
SCALE	1"=30'
SHEET	P - 1
	1 OF 1

Last modified on 04/25/19 by CSOLODKIN
File located in \\hgornas2.hgor2.com\projects\2019\19010\Graphics\C - CAD\05 - Planning\ 2019-04-23_19010-HW1-DRI Plan.dwg

Project Land Use	Project Density	Project Trips Total	In	Out	ITE Code	Variable	Equation Used[1]	In/Out Distribution	
Mid-Rise Multifamily H	350 DU				221	Dwelling Units			
Daily		1,906	953	953	after Internal Capture		T= 5.45(X)-1.75	50%	50%
AM Peak Hour		117	30	87	29	83	Ln(T)= 0.98Ln(X)-0.98	26%	74%
PM Peak Hour		147	90	57	48	34	Ln(T)= 0.96Ln(X)-0.63	61%	39%
General Office Buildin	249,000 S.F.				710	1,000 S.F.			
Daily		2,570	1,285	1,285	after Internal Capture		ln(T) = 0.97 ln(X) + 2.5	50%	50%
AM Peak Hour		261	224	37	210	25	T = 0.94 (X) + 26.49	86%	14%
PM Peak Hour		271	43	228	36	215	ln(T) = 0.95 ln(X) + 0.36	16%	84%
Shopping Center	25,000 SF				820	1,000 SF			
Daily		2,342	1,171	1,171	after Internal Capture		Ln(T)=0.68Ln(X) + 5.57	50%	50%
AM Peak Hour		164	102	62	90	47	TAM= 0.50(X) + 151.78	62%	38%
PM Peak Hour		195	94	101	51	44	Ln(TPM)=0.74Ln(X) + 2.89	48%	52%
Passby Reductuction	34%	-30	-15	-15	-15	-15		50%	50%
Quality Restaurant	25,000 S.F.				931	1,000 S.F.			
Daily		2,096	1,048	1,048	after Internal Capture		T = 83.84(X)	50%	50%
AM Peak Hour		18	9	9	1	5	T = 0.73(X)	50%	50%
PM Peak Hour		195	131	64	87	24	T = 7.80(X)	67%	33%
Passby Reductuction	44%	-22	-11	-11	-11	-11		50%	50%
TOTAL NEW PROJECT TRIPS			In	Out	**In**	**Out**	after 7.5% modal split	**In**	**Out**
	Daily	8,914	4,457	4,457	after Internal Capture		Daily	**4,123**	**4,123**
	AM Peak Hour	560	365	195	**330**	**160**	AM Peak Hour	**305**	**148**
	PM Peak Hour	808	358	450	**222**	**317**	PM Peak Hour	**179**	**267**

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:		**Organization:**	CALYX
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				261	224	37
Retail				164	102	62
Restaurant				18	9	9
Cinema/Entertainment				0		
Residential				117	30	87
Hotel				0		
All Other Land Uses[2]				0		
				560	365	195

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses[2]	1.10	0%	0%	1.10	0%	0%

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		11	2	0	0	0
Retail	10		5	0	1	0
Restaurant	3	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	1	2	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	616	401	215
Internal Capture Percentage	12%	9%	18%
External Vehicle-Trips[5]	490	330	160
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	6%	32%
Retail	12%	24%
Restaurant	90%	40%
Cinema/Entertainment	N/A	N/A
Residential	3%	5%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	0
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.10	224	246	1.10	37	41
Retail	1.10	102	112	1.10	62	68
Restaurant	1.10	9	10	1.10	9	10
Cinema/Entertainment	1.10	0	0	1.10	0	0
Residential	1.10	30	33	1.10	87	96
Hotel	1.10	0	0	1.10	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		11	26	0	0	0
Retail	20		9	0	10	0
Restaurant	3	1		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	1	19	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		36	2	0	0	0
Retail	10		5	0	1	0
Restaurant	34	9		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	7	19	2	0		0
Hotel	7	4	1	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	15	231	246	210	0	0
Retail	13	99	112	90	0	0
Restaurant	9	1	10	1	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	32	33	29	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	13	28	41	25	0	0
Retail	16	52	68	47	0	0
Restaurant	4	6	10	5	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	5	91	96	83	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:		**Organization:**	CALYX
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:		**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office			SF	271	43	228
Retail				195	94	101
Restaurant				195	131	64
Cinema/Entertainment				0		
Residential				147	90	57
Hotel				0		
All Other Land Uses[2]				0		
				808	358	450

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office	1.10	0%	0%	1.10	0%	0%
Retail	1.10	0%	0%	1.10	0%	0%
Restaurant	1.10	0%	0%	1.10	0%	0%
Cinema/Entertainment	1.10	0%	0%	1.10	0%	0%
Residential	1.10	0%	0%	1.10	0%	0%
Hotel	1.10	0%	0%	1.10	0%	0%
All Other Land Uses[2]	1.10	0%	0%	1.10	0%	0%

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		8	3	0	4	0
Retail	2		32	0	29	0
Restaurant	2	29		0	13	0
Cinema/Entertainment	0	0	0		0	0
Residential	3	10	13	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	888	393	495
Internal Capture Percentage	33%	38%	30%
External Vehicle-Trips[5]	539	222	317
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	15%	6%
Retail	46%	57%
Restaurant	33%	63%
Cinema/Entertainment	N/A	N/A
Residential	46%	41%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Project Name:	0
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.10	43	47	1.10	228	251
Retail	1.10	94	103	1.10	101	111
Restaurant	1.10	131	144	1.10	64	70
Cinema/Entertainment	1.10	0	0	1.10	0	0
Residential	1.10	90	99	1.10	57	63
Hotel	1.10	0	0	1.10	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		50	10	0	5	0
Retail	2		32	4	29	6
Restaurant	2	29		6	13	5
Cinema/Entertainment	0	0	0		0	0
Residential	3	26	13	0		2
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		8	3	0	4	0
Retail	15		42	0	46	0
Restaurant	14	52		0	16	0
Cinema/Entertainment	3	4	4		4	0
Residential	27	10	20	0		0
Hotel	0	2	7	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	7	40	47	36	0	0
Retail	47	56	103	51	0	0
Restaurant	48	96	144	87	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	46	53	99	48	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	15	236	251	215	0	0
Retail	63	48	111	44	0	0
Restaurant	44	26	70	24	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	26	37	63	34	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Table 7.1a Adjusted Internal Trip Capture Rates for Trip Origins within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Office	0.0%	0.0%
	To Retail	28.0%	20.0%
	To Restaurant	63.0%	4.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	1.0%	2.0%
	To Hotel	0.0%	0.0%
From RETAIL	To Office	29.0%	2.0%
	To Retail	0.0%	0.0%
	To Restaurant	13.0%	29.0%
	To Cinema/Entertainment	0.0%	4.0%
	To Residential	14.0%	26.0%
	To Hotel	0.0%	5.0%
From RESTAURANT	To Office	31.0%	3.0%
	To Retail	14.0%	41.0%
	To Restaurant	0.0%	0.0%
	To Cinema/Entertainment	0.0%	8.0%
	To Residential	4.0%	18.0%
	To Hotel	3.0%	7.0%
From CINEMA/ENTERTAINMENT	To Office	0.0%	2.0%
	To Retail	0.0%	21.0%
	To Restaurant	0.0%	31.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	8.0%
	To Hotel	0.0%	2.0%
From RESIDENTIAL	To Office	2.0%	4.0%
	To Retail	1.0%	42.0%
	To Restaurant	20.0%	21.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	0.0%
	To Hotel	0.0%	3.0%
From HOTEL	To Office	75.0%	0.0%
	To Retail	14.0%	16.0%
	To Restaurant	9.0%	68.0%
	To Cinema/Entertainment	0.0%	0.0%
	To Residential	0.0%	2.0%
	To Hotel	0.0%	0.0%

Table 7.2a Adjusted Internal Trip Capture Rates for Trip Destinations within a Multi-Use Development			
Land Use Pairs		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Office	0.0%	0.0%
	From Retail	4.0%	31.0%
	From Restaurant	14.0%	30.0%
	From Cinema/Entertainment	0.0%	6.0%
	From Residential	3.0%	57.0%
	From Hotel	3.0%	0.0%
To RETAIL	From Office	32.0%	8.0%
	From Retail	0.0%	0.0%
	From Restaurant	8.0%	50.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	17.0%	10.0%
	From Hotel	4.0%	2.0%
To RESTAURANT	From Office	23.0%	2.0%
	From Retail	50.0%	29.0%
	From Restaurant	0.0%	0.0%
	From Cinema/Entertainment	0.0%	3.0%
	From Residential	20.0%	14.0%
	From Hotel	6.0%	5.0%
To CINEMA/ENTERTAINMENT	From Office	0.0%	1.0%
	From Retail	0.0%	26.0%
	From Restaurant	0.0%	32.0%
	From Cinema/Entertainment	0.0%	0.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To RESIDENTIAL	From Office	0.0%	4.0%
	From Retail	2.0%	46.0%
	From Restaurant	5.0%	16.0%
	From Cinema/Entertainment	0.0%	4.0%
	From Residential	0.0%	0.0%
	From Hotel	0.0%	0.0%
To HOTEL	From Office	0.0%	0.0%
	From Retail	0.0%	17.0%
	From Restaurant	4.0%	71.0%
	From Cinema/Entertainment	0.0%	1.0%
	From Residential	0.0%	12.0%
	From Hotel	0.0%	0.0%

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	143	37	48	52	270	36	390	195	296	809	28
Future Volume (vph)	4	143	37	48	52	270	36	390	195	296	809	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			0.95	0.95	1.00	0.95	1.00	1.00	0.95	
Frt		0.97			0.93	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1810			1626	1504	1770	3539	1583	1770	3521	
Flt Permitted		0.99			0.83	1.00	0.29	1.00	1.00	0.50	1.00	
Satd. Flow (perm)		1797			1372	1504	541	3539	1583	934	3521	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	147	38	49	54	278	37	402	201	305	834	29
RTOR Reduction (vph)	0	16	0	0	54	117	0	0	113	0	3	0
Lane Group Flow (vph)	0	173	0	0	138	72	37	402	88	305	860	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		11.6			11.6	20.6	26.4	26.4	26.4	41.4	41.4	
Effective Green, g (s)		13.6			13.6	24.6	28.4	28.4	28.4	43.4	43.4	
Actuated g/C Ratio		0.21			0.21	0.38	0.44	0.44	0.44	0.67	0.67	
Clearance Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		375			287	661	236	1546	691	765	2350	
v/s Ratio Prot						0.02		0.11		0.07	c0.24	
v/s Ratio Perm		0.10			c0.10	0.03	0.07		0.06	c0.20		
v/c Ratio		0.46			0.48	0.11	0.16	0.26	0.13	0.40	0.37	
Uniform Delay, d1		22.5			22.6	13.1	11.1	11.6	10.9	5.7	4.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	0.29	0.35	
Incremental Delay, d2		0.9			1.3	0.1	1.4	0.4	0.4	0.3	0.4	
Delay (s)		23.4			23.9	13.2	12.5	12.0	11.3	2.0	2.1	
Level of Service		C			C	B	B	B	B	A	A	
Approach Delay (s)		23.4			18.6			11.8			2.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	88	21	147	206	761	66	873	232	296	809	28
Future Volume (vph)	12	88	21	147	206	761	66	873	232	296	809	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			0.95	0.95	1.00	0.95	1.00	1.00	0.95	
Frt		0.98			0.94	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1811			1638	1504	1770	3539	1583	1770	3521	
Flt Permitted		0.76			0.89	1.00	0.21	1.00	1.00	0.17	1.00	
Satd. Flow (perm)		1386			1475	1504	392	3539	1583	324	3521	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	90	21	150	210	777	67	891	237	302	826	29
RTOR Reduction (vph)	0	11	0	0	41	24	0	0	168	0	4	0
Lane Group Flow (vph)	0	112	0	0	583	489	67	891	69	302	851	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		24.0			24.0	30.0	17.0	17.0	17.0	29.0	29.0	
Effective Green, g (s)		26.0			26.0	34.0	19.0	19.0	19.0	31.0	31.0	
Actuated g/C Ratio		0.40			0.40	0.52	0.29	0.29	0.29	0.48	0.48	
Clearance Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		554			590	879	114	1034	462	332	1679	
v/s Ratio Prot						0.07		0.25		c0.11	0.24	
v/s Ratio Perm		0.08			c0.40	0.26	0.17		0.04	c0.32		
v/c Ratio		0.20			0.99	0.56	0.59	0.86	0.15	0.91	0.51	
Uniform Delay, d1		12.7			19.4	10.4	19.7	21.8	17.0	22.0	11.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	0.49	0.33	
Incremental Delay, d2		0.2			33.7	0.8	20.3	9.4	0.7	24.6	0.9	
Delay (s)		12.9			53.1	11.2	39.9	31.2	17.7	35.3	4.8	
Level of Service		B			D	B	D	C	B	D	A	
Approach Delay (s)		12.9			34.2			29.0			12.8	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	3	745	5	1	1405
Future Volume (Veh/h)	11	3	745	5	1	1405
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	11	3	760	5	1	1434
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1482	382			765	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1482	382			765	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	100			100	
cM capacity (veh/h)	116	616			844	

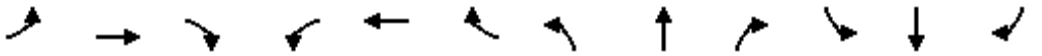
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	14	507	258	1	717	717
Volume Left	11	0	0	1	0	0
Volume Right	3	0	5	0	0	0
cSH	140	1700	1700	844	1700	1700
Volume to Capacity	0.10	0.30	0.15	0.00	0.42	0.42
Queue Length 95th (ft)	8	0	0	0	0	0
Control Delay (s)	33.5	0.0	0.0	9.3	0.0	0.0
Lane LOS	D			A		
Approach Delay (s)	33.5	0.0		0.0		
Approach LOS	D					

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	48.8%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	1	1578	6	0	1193
Future Volume (Veh/h)	11	1	1578	6	0	1193
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	12	1	1661	6	0	1256
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2292	834			1667	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2292	834			1667	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	64	100			100	
cM capacity (veh/h)	33	312			382	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	13	1107	560	0	628	628
Volume Left	12	0	0	0	0	0
Volume Right	1	0	6	0	0	0
cSH	35	1700	1700	1700	1700	1700
Volume to Capacity	0.37	0.65	0.33	0.00	0.37	0.37
Queue Length 95th (ft)	30	0	0	0	0	0
Control Delay (s)	157.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F					
Approach Delay (s)	157.0	0.0		0.0		
Approach LOS	F					

Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	53.8%	ICU Level of Service		A
Analysis Period (min)	15			

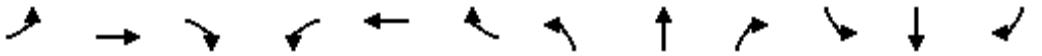


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	130	0	21	4	619	117	30	1293	4
Future Volume (vph)	1	0	0	130	0	21	4	619	117	30	1293	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00			1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected	0.95			0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770			1770	1583		1770	3455		1770	3538	
Flt Permitted	0.74			0.76	1.00		0.20	1.00		0.29	1.00	
Satd. Flow (perm)	1384			1410	1583		374	3455		543	3538	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1	0	0	134	0	22	4	638	121	31	1333	4
RTOR Reduction (vph)	0	0	0	0	18	0	0	18	0	0	0	0
Lane Group Flow (vph)	1	0	0	134	4	0	4	741	0	31	1337	0
Turn Type	Perm			Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	10.1			10.1	10.1		34.7	34.7		42.9	42.9	
Effective Green, g (s)	12.1			12.1	12.1		36.7	36.7		44.9	44.9	
Actuated g/C Ratio	0.19			0.19	0.19		0.56	0.56		0.69	0.69	
Clearance Time (s)	6.0			6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	257			262	294		211	1950		454	2443	
v/s Ratio Prot					0.00			0.21		0.00	c0.38	
v/s Ratio Perm	0.00			c0.10			0.01			0.04		
v/c Ratio	0.00			0.51	0.01		0.02	0.38		0.07	0.55	
Uniform Delay, d1	21.5			23.8	21.6		6.2	7.8		3.7	5.0	
Progression Factor	1.00			1.00	1.00		0.73	0.67		0.33	0.32	
Incremental Delay, d2	0.0			1.7	0.0		0.2	0.6		0.1	0.8	
Delay (s)	21.5			25.5	21.6		4.7	5.8		1.3	2.4	
Level of Service	C			C	C		A	A		A	A	
Approach Delay (s)		21.5			24.9			5.8			2.4	
Approach LOS		C			C			A			A	

Intersection Summary

HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	3	0	333	1	83	2	1380	184	36	851	4
Future Volume (vph)	2	3	0	333	1	83	2	1380	184	36	851	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863		1770	1587		1770	3477		1770	3537	
Flt Permitted	0.70	1.00		0.76	1.00		0.32	1.00		0.11	1.00	
Satd. Flow (perm)	1305	1863		1408	1587		601	3477		210	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	2	3	0	343	1	86	2	1423	190	37	877	4
RTOR Reduction (vph)	0	0	0	0	62	0	0	15	0	0	0	0
Lane Group Flow (vph)	2	3	0	343	25	0	2	1598	0	37	881	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	15.9	15.9		15.9	15.9		29.5	29.5		37.1	37.1	
Effective Green, g (s)	17.9	17.9		17.9	17.9		31.5	31.5		39.1	39.1	
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.48	0.48		0.60	0.60	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	359	513		387	437		291	1685		212	2127	
v/s Ratio Prot		0.00			0.02			c0.46		0.01	c0.25	
v/s Ratio Perm	0.00			c0.24			0.00			0.10		
v/c Ratio	0.01	0.01		0.89	0.06		0.01	0.95		0.17	0.41	
Uniform Delay, d1	17.1	17.1		22.6	17.3		8.7	16.0		12.3	6.9	
Progression Factor	1.00	1.00		1.00	1.00		0.65	0.57		1.17	1.59	
Incremental Delay, d2	0.0	0.0		20.8	0.1		0.0	8.5		0.4	0.6	
Delay (s)	17.1	17.1		43.4	17.4		5.7	17.6		14.8	11.5	
Level of Service	B	B		D	B		A	B		B	B	
Approach Delay (s)		17.1			38.1			17.6			11.7	
Approach LOS		B			D			B			B	

Intersection Summary

HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	45	12	605	36	21	1301
Future Volume (vph)	45	12	605	36	21	1301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.41	1.00
Satd. Flow (perm)	1770	1583	3539	1583	766	3539
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	46	12	617	37	21	1328
RTOR Reduction (vph)	0	11	0	12	0	0
Lane Group Flow (vph)	46	1	617	25	21	1328
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	4.9	4.9	41.3	41.3	48.1	48.1
Effective Green, g (s)	6.9	6.9	43.3	43.3	50.1	50.1
Actuated g/C Ratio	0.11	0.11	0.67	0.67	0.77	0.77
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	187	168	2357	1054	633	2727
v/s Ratio Prot	c0.03		0.17		0.00	c0.38
v/s Ratio Perm		0.00		0.02	0.02	
v/c Ratio	0.25	0.01	0.26	0.02	0.03	0.49
Uniform Delay, d1	26.7	26.0	4.4	3.7	1.9	2.7
Progression Factor	1.00	1.00	0.78	0.92	0.51	0.42
Incremental Delay, d2	0.7	0.0	0.3	0.0	0.0	0.6
Delay (s)	27.4	26.0	3.7	3.4	1.0	1.8
Level of Service	C	C	A	A	A	A
Approach Delay (s)	27.1		3.7			1.8
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	89	111	1286	151	48	803
Future Volume (vph)	89	111	1286	151	48	803
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.14	1.00
Satd. Flow (perm)	1770	1583	3539	1583	254	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	95	118	1368	161	51	854
RTOR Reduction (vph)	0	100	0	65	0	0
Lane Group Flow (vph)	95	18	1368	96	51	854
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	7.7	7.7	36.9	36.9	45.3	45.3
Effective Green, g (s)	9.7	9.7	38.9	38.9	47.3	47.3
Actuated g/C Ratio	0.15	0.15	0.60	0.60	0.73	0.73
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	264	236	2117	947	287	2575
v/s Ratio Prot	c0.05		c0.39		0.01	c0.24
v/s Ratio Perm		0.01		0.06	0.12	
v/c Ratio	0.36	0.07	0.65	0.10	0.18	0.33
Uniform Delay, d1	24.9	23.8	8.5	5.6	8.6	3.2
Progression Factor	1.00	1.00	0.12	0.02	0.63	0.35
Incremental Delay, d2	0.8	0.1	0.9	0.1	0.3	0.3
Delay (s)	25.7	23.9	1.9	0.2	5.7	1.4
Level of Service	C	C	A	A	A	A
Approach Delay (s)	24.7		1.8			1.7
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	61	610	21	167	1323
Future Volume (Veh/h)	3	61	610	21	167	1323
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	3	62	622	21	170	1350
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			503			1176
pX, platoon unblocked	0.92	0.94			0.94	
vC, conflicting volume	1637	311			643	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1244	151			503	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	92			83	
cM capacity (veh/h)	127	820			999	

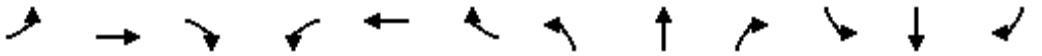
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	65	311	311	21	170	675	675
Volume Left	3	0	0	0	170	0	0
Volume Right	62	0	0	21	0	0	0
cSH	655	1700	1700	1700	999	1700	1700
Volume to Capacity	0.10	0.18	0.18	0.01	0.17	0.40	0.40
Queue Length 95th (ft)	8	0	0	0	15	0	0
Control Delay (s)	11.1	0.0	0.0	0.0	9.3	0.0	0.0
Lane LOS	B				A		
Approach Delay (s)	11.1	0.0			1.0		
Approach LOS	B						

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	240	1401	27	79	818
Future Volume (Veh/h)	1	240	1401	27	79	818
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1	250	1459	28	82	852
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			503			1176
pX, platoon unblocked	0.79	0.74			0.74	
vC, conflicting volume	2049	730			1487	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1200	0			942	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	69			85	
cM capacity (veh/h)	118	797			532	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	251	730	730	28	82	426	426
Volume Left	1	0	0	0	82	0	0
Volume Right	250	0	0	28	0	0	0
cSH	779	1700	1700	1700	532	1700	1700
Volume to Capacity	0.32	0.43	0.43	0.02	0.15	0.25	0.25
Queue Length 95th (ft)	35	0	0	0	14	0	0
Control Delay (s)	11.8	0.0	0.0	0.0	13.0	0.0	0.0
Lane LOS	B				B		
Approach Delay (s)	11.8	0.0			1.1		
Approach LOS	B						

Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	402	180	0	196	122	126	391	12	155	725	83
Future Volume (vph)	38	402	180	0	196	122	126	391	12	155	725	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583		1767		1770	3539	1583	1770	3485	
Flt Permitted	0.40	1.00	1.00		1.00		0.21	1.00	1.00	0.52	1.00	
Satd. Flow (perm)	750	1863	1583		1767		383	3539	1583	963	3485	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	19	410	184	0	200	124	129	399	12	158	740	85
RTOR Reduction (vph)	0	0	127	0	36	0	0	0	5	0	12	0
Lane Group Flow (vph)	19	410	57	0	288	0	129	399	7	158	813	0
Turn Type	Perm	NA	Perm		NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4				2		2	6		
Actuated Green, G (s)	18.3	18.3	18.3		18.3		34.7	34.7	34.7	24.7	24.7	
Effective Green, g (s)	20.3	20.3	20.3		20.3		36.7	36.7	36.7	26.7	26.7	
Actuated g/C Ratio	0.31	0.31	0.31		0.31		0.56	0.56	0.56	0.41	0.41	
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	234	581	494		551		344	1998	893	395	1431	
v/s Ratio Prot		c0.22			0.16		c0.03	0.11			c0.23	
v/s Ratio Perm	0.03		0.04				0.18		0.00	0.16		
v/c Ratio	0.08	0.71	0.12		0.52		0.38	0.20	0.01	0.40	0.57	
Uniform Delay, d1	15.8	19.7	15.9		18.4		8.1	6.9	6.2	13.5	14.7	
Progression Factor	1.00	1.00	1.00		1.00		0.76	0.73	1.00	1.00	1.00	
Incremental Delay, d2	0.1	3.9	0.1		0.9		0.7	0.2	0.0	3.0	1.6	
Delay (s)	15.9	23.6	16.1		19.3		6.8	5.3	6.2	16.5	16.4	
Level of Service	B	C	B		B		A	A	A	B	B	
Approach Delay (s)		21.1			19.3			5.7			16.4	
Approach LOS		C			B			A			B	

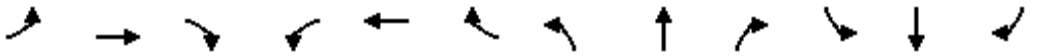
Intersection Summary			
HCM 2000 Control Delay	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	351	149	1	303	161	221	1337	7	155	725	83
Future Volume (vph)	109	351	149	1	303	161	221	1337	7	155	725	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583		1776		1770	3539	1583	1770	3485	
Flt Permitted	0.22	1.00	1.00		1.00		0.22	1.00	1.00	0.18	1.00	
Satd. Flow (perm)	414	1863	1583		1774		415	3539	1583	329	3485	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	56	358	152	1	309	164	226	1364	7	158	740	85
RTOR Reduction (vph)	0	0	110	0	30	0	0	0	3	0	13	0
Lane Group Flow (vph)	56	358	42	0	444	0	226	1364	4	158	812	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	16.0	16.0	16.0		16.0		37.0	37.0	37.0	27.0	27.0	
Effective Green, g (s)	18.0	18.0	18.0		18.0		39.0	39.0	39.0	29.0	29.0	
Actuated g/C Ratio	0.28	0.28	0.28		0.28		0.60	0.60	0.60	0.45	0.45	
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	114	515	438		491		374	2123	949	146	1554	
v/s Ratio Prot		0.19					0.06	c0.39			0.23	
v/s Ratio Perm	0.14		0.03		c0.25		0.31		0.00	c0.48		
v/c Ratio	0.49	0.70	0.10		0.90		0.60	0.64	0.00	1.08	0.52	
Uniform Delay, d1	19.7	21.0	17.5		22.7		7.5	8.5	5.2	18.0	13.0	
Progression Factor	1.00	1.00	1.00		1.00		0.87	0.38	1.00	1.00	1.00	
Incremental Delay, d2	3.3	4.1	0.1		20.0		2.5	1.4	0.0	98.2	1.3	
Delay (s)	23.0	25.1	17.6		42.7		9.0	4.6	5.2	116.2	14.3	
Level of Service	C	C	B		D		A	A	A	F	B	
Approach Delay (s)		22.9			42.7			5.2			30.6	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.4%	ICU Level of Service	F
Analysis Period (min)	15		

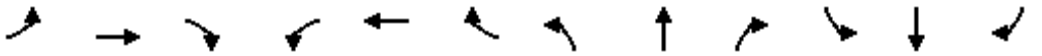
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	32	0	0	0	42	35	0	0	145	3
Future Volume (Veh/h)	3	0	32	0	0	0	42	35	0	0	145	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	3	0	36	0	0	0	47	39	0	0	163	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	298	298	164	334	299	39	166			39		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	298	298	164	334	299	39	166			39		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	100	100	100	97			100		
cM capacity (veh/h)	638	594	880	580	593	1033	1412			1571		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	39	0	86	166
Volume Left	3	0	47	0
Volume Right	36	0	0	3
cSH	855	1700	1412	1571
Volume to Capacity	0.05	0.00	0.03	0.00
Queue Length 95th (ft)	4	0	3	0
Control Delay (s)	9.4	0.0	4.3	0.0
Lane LOS	A	A	A	
Approach Delay (s)	9.4	0.0	4.3	0.0
Approach LOS	A	A		

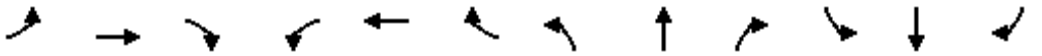
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	25.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	33	0	0	0	35	281	0	0	64	4
Future Volume (Veh/h)	5	0	33	0	0	0	35	281	0	0	64	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	6	0	41	0	0	0	43	347	0	0	79	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	514	514	82	556	517	347	84			347		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	514	514	82	556	517	347	84			347		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	96	100	100	100	97			100		
cM capacity (veh/h)	460	451	978	414	449	696	1513			1212		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	47	0	390	84
Volume Left	6	0	43	0
Volume Right	41	0	0	5
cSH	855	1700	1513	1212
Volume to Capacity	0.05	0.00	0.03	0.00
Queue Length 95th (ft)	4	0	2	0
Control Delay (s)	9.5	0.0	1.1	0.0
Lane LOS	A	A	A	
Approach Delay (s)	9.5	0.0	1.1	0.0
Approach LOS	A	A		

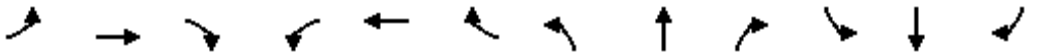
Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	33.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	147	38	49	53	277	37	400	200	304	830	29
Future Volume (vph)	4	147	38	49	53	277	37	400	200	304	830	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			0.95	0.95	1.00	0.95	1.00	1.00	0.95	
Frt		0.97			0.93	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1811			1625	1504	1770	3539	1583	1770	3521	
Flt Permitted		0.99			0.82	1.00	0.28	1.00	1.00	0.49	1.00	
Satd. Flow (perm)		1798			1348	1504	523	3539	1583	921	3521	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	152	39	51	55	286	38	412	206	313	856	30
RTOR Reduction (vph)	0	15	0	0	52	121	0	0	116	0	3	0
Lane Group Flow (vph)	0	180	0	0	146	73	38	412	90	313	883	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		11.6			11.6	20.6	26.4	26.4	26.4	41.4	41.4	
Effective Green, g (s)		13.6			13.6	24.6	28.4	28.4	28.4	43.4	43.4	
Actuated g/C Ratio		0.21			0.21	0.38	0.44	0.44	0.44	0.67	0.67	
Clearance Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		376			282	661	228	1546	691	758	2350	
v/s Ratio Prot						0.02		0.12		c0.07	0.25	
v/s Ratio Perm		0.10			c0.11	0.03	0.07		0.06	c0.21		
v/c Ratio		0.48			0.52	0.11	0.17	0.27	0.13	0.41	0.38	
Uniform Delay, d1		22.6			22.8	13.1	11.1	11.7	10.9	5.9	4.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	0.94	1.06	
Incremental Delay, d2		1.0			1.6	0.1	1.6	0.4	0.4	0.3	0.4	
Delay (s)		23.5			24.4	13.2	12.7	12.1	11.3	5.8	5.4	
Level of Service		C			C	B	B	B	B	A	A	
Approach Delay (s)		23.5			18.8			11.9			5.5	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	90	22	151	211	781	68	896	238	304	830	29
Future Volume (vph)	12	90	22	151	211	781	68	896	238	304	830	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			0.95	0.95	1.00	0.95	1.00	1.00	0.95	
Frt		0.98			0.94	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00			0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1810			1638	1504	1770	3539	1583	1770	3521	
Flt Permitted		0.73			0.89	1.00	0.32	1.00	1.00	0.17	1.00	
Satd. Flow (perm)		1330			1475	1504	603	3539	1583	324	3521	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	92	22	154	215	797	69	914	243	310	847	30
RTOR Reduction (vph)	0	12	0	0	41	24	0	0	172	0	4	0
Lane Group Flow (vph)	0	114	0	0	599	502	69	914	71	310	873	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		24.0			24.0	30.0	17.0	17.0	17.0	29.0	29.0	
Effective Green, g (s)		26.0			26.0	34.0	19.0	19.0	19.0	31.0	31.0	
Actuated g/C Ratio		0.40			0.40	0.52	0.29	0.29	0.29	0.48	0.48	
Clearance Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		532			590	879	176	1034	462	332	1679	
v/s Ratio Prot						0.07		0.26		c0.11	0.25	
v/s Ratio Perm		0.09			c0.41	0.26	0.11		0.04	c0.33		
v/c Ratio		0.21			1.02	0.57	0.39	0.88	0.15	0.93	0.52	
Uniform Delay, d1		12.8			19.5	10.5	18.4	21.9	17.0	13.7	11.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	0.88	0.43	
Incremental Delay, d2		0.2			41.0	0.9	6.4	11.0	0.7	29.5	1.0	
Delay (s)		13.0			60.5	11.4	24.8	32.9	17.7	41.6	6.1	
Level of Service		B			E	B	C	C	B	D	A	
Approach Delay (s)		13.0			38.4			29.4			15.3	
Approach LOS		B			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	170	40	764	112	45	1442
Future Volume (vph)	170	40	764	112	45	1442
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1744		3472		1770	3539
Flt Permitted	0.96		1.00		0.22	1.00
Satd. Flow (perm)	1744		3472		419	3539
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	173	41	780	114	46	1471
RTOR Reduction (vph)	14	0	15	0	0	0
Lane Group Flow (vph)	200	0	879	0	46	1471
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Actuated Green, G (s)	12.2		31.7		40.8	40.8
Effective Green, g (s)	14.2		33.7		42.8	42.8
Actuated g/C Ratio	0.22		0.52		0.66	0.66
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	380		1800		381	2330
v/s Ratio Prot	c0.11		0.25		0.01	c0.42
v/s Ratio Perm					0.07	
v/c Ratio	0.53		0.49		0.12	0.63
Uniform Delay, d1	22.4		10.1		4.9	6.5
Progression Factor	1.00		0.73		0.32	0.40
Incremental Delay, d2	1.3		0.9		0.1	1.1
Delay (s)	23.7		8.3		1.7	3.8
Level of Service	C		A		A	A
Approach Delay (s)	23.7		8.3			3.7
Approach LOS	C		A			A

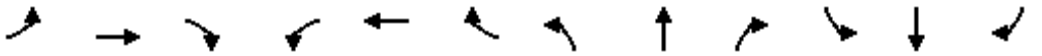
Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	98	86	1619	125	137	1224
Future Volume (vph)	98	86	1619	125	137	1224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.99		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1700		3501		1770	3539
Flt Permitted	0.97		1.00		0.11	1.00
Satd. Flow (perm)	1700		3501		199	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	91	1704	132	144	1288
RTOR Reduction (vph)	55	0	8	0	0	0
Lane Group Flow (vph)	139	0	1828	0	144	1288
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Actuated Green, G (s)	10.3		31.5		42.7	42.7
Effective Green, g (s)	12.3		33.5		44.7	44.7
Actuated g/C Ratio	0.19		0.52		0.69	0.69
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	321		1804		310	2433
v/s Ratio Prot	c0.08		c0.52		0.05	c0.36
v/s Ratio Perm					0.27	
v/c Ratio	0.43		1.01		0.46	0.53
Uniform Delay, d1	23.3		15.8		12.8	5.0
Progression Factor	1.00		0.83		1.03	1.12
Incremental Delay, d2	0.9		20.2		1.0	0.7
Delay (s)	24.2		33.3		14.2	6.3
Level of Service	C		C		B	A
Approach Delay (s)	24.2		33.3			7.1
Approach LOS	C		C			A

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

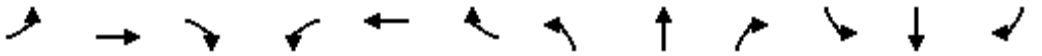
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	133	0	22	4	635	120	31	1327	4
Future Volume (vph)	1	0	0	133	0	22	4	635	120	31	1327	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00			1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected	0.95			0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770			1770	1583		1770	3455		1770	3538	
Flt Permitted	0.74			0.76	1.00		0.19	1.00		0.28	1.00	
Satd. Flow (perm)	1383			1410	1583		353	3455		530	3538	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1	0	0	137	0	23	4	655	124	32	1368	4
RTOR Reduction (vph)	0	0	0	0	19	0	0	19	0	0	0	0
Lane Group Flow (vph)	1	0	0	137	4	0	4	760	0	32	1372	0
Turn Type	Perm			Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	10.1			10.1	10.1		34.9	34.9		42.9	42.9	
Effective Green, g (s)	12.1			12.1	12.1		36.9	36.9		44.9	44.9	
Actuated g/C Ratio	0.19			0.19	0.19		0.57	0.57		0.69	0.69	
Clearance Time (s)	6.0			6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	257			262	294		200	1961		442	2443	
v/s Ratio Prot					0.00			0.22		0.00	c0.39	
v/s Ratio Perm	0.00			c0.10			0.01			0.05		
v/c Ratio	0.00			0.52	0.01		0.02	0.39		0.07	0.56	
Uniform Delay, d1	21.5			23.8	21.6		6.1	7.8		3.7	5.1	
Progression Factor	1.00			1.00	1.00		0.40	0.48		0.28	0.34	
Incremental Delay, d2	0.0			1.9	0.0		0.2	0.5		0.1	0.9	
Delay (s)	21.5			25.7	21.6		2.6	4.2		1.1	2.6	
Level of Service	C			C	C		A	A		A	A	
Approach Delay (s)		21.5			25.1			4.2			2.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	0	0	342	0	85	2	1416	189	37	873	4
Future Volume (vph)	2	0	0	342	0	85	2	1416	189	37	873	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00			1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected	0.95			0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770			1770	1583		1770	3477		1770	3537	
Flt Permitted	0.70			0.76	1.00		0.32	1.00		0.11	1.00	
Satd. Flow (perm)	1304			1410	1583		587	3477		210	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	2	0	0	353	0	88	2	1460	195	38	900	4
RTOR Reduction (vph)	0	0	0	0	64	0	0	15	0	0	0	0
Lane Group Flow (vph)	2	0	0	353	24	0	2	1640	0	38	904	0
Turn Type	Perm			Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0			16.0	16.0		29.4	29.4		37.0	37.0	
Effective Green, g (s)	18.0			18.0	18.0		31.4	31.4		39.0	39.0	
Actuated g/C Ratio	0.28			0.28	0.28		0.48	0.48		0.60	0.60	
Clearance Time (s)	6.0			6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361			390	438		283	1679		212	2122	
v/s Ratio Prot					0.02			c0.47		0.01	c0.26	
v/s Ratio Perm	0.00			c0.25			0.00			0.10		
v/c Ratio	0.01			0.91	0.06		0.01	0.98		0.18	0.43	
Uniform Delay, d1	17.0			22.7	17.3		8.7	16.4		13.1	7.0	
Progression Factor	1.00			1.00	1.00		0.20	0.47		0.80	0.75	
Incremental Delay, d2	0.0			23.8	0.1		0.0	8.2		0.4	0.6	
Delay (s)	17.0			46.4	17.3		1.7	16.0		10.8	5.9	
Level of Service	B			D	B		A	B		B	A	
Approach Delay (s)		17.0			40.6			16.0			6.1	
Approach LOS		B			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	46	12	621	37	22	1335
Future Volume (vph)	46	12	621	37	22	1335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.40	1.00
Satd. Flow (perm)	1770	1583	3539	1583	751	3539
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	47	12	634	38	22	1362
RTOR Reduction (vph)	0	11	0	13	0	0
Lane Group Flow (vph)	47	1	634	25	22	1362
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	4.9	4.9	41.3	41.3	48.1	48.1
Effective Green, g (s)	6.9	6.9	43.3	43.3	50.1	50.1
Actuated g/C Ratio	0.11	0.11	0.67	0.67	0.77	0.77
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	187	168	2357	1054	622	2727
v/s Ratio Prot	c0.03		0.18		0.00	c0.38
v/s Ratio Perm		0.00		0.02	0.03	
v/c Ratio	0.25	0.01	0.27	0.02	0.04	0.50
Uniform Delay, d1	26.7	26.0	4.4	3.7	2.0	2.8
Progression Factor	1.00	1.00	0.75	0.42	0.64	0.50
Incremental Delay, d2	0.7	0.0	0.3	0.0	0.0	0.6
Delay (s)	27.4	26.0	3.6	1.6	1.3	2.0
Level of Service	C	C	A	A	A	A
Approach Delay (s)	27.1		3.5			2.0
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	91	114	1320	155	49	824
Future Volume (vph)	91	114	1320	155	49	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.13	1.00
Satd. Flow (perm)	1770	1583	3539	1583	237	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	97	121	1404	165	52	877
RTOR Reduction (vph)	0	103	0	67	0	0
Lane Group Flow (vph)	97	18	1404	98	52	877
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	7.8	7.8	36.8	36.8	45.2	45.2
Effective Green, g (s)	9.8	9.8	38.8	38.8	47.2	47.2
Actuated g/C Ratio	0.15	0.15	0.60	0.60	0.73	0.73
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	266	238	2112	944	275	2569
v/s Ratio Prot	c0.05		c0.40		0.01	c0.25
v/s Ratio Perm		0.01		0.06	0.12	
v/c Ratio	0.36	0.08	0.66	0.10	0.19	0.34
Uniform Delay, d1	24.8	23.7	8.8	5.6	9.3	3.2
Progression Factor	1.00	1.00	0.15	0.03	1.12	1.16
Incremental Delay, d2	0.9	0.1	0.9	0.1	0.3	0.3
Delay (s)	25.7	23.9	2.2	0.3	10.7	4.1
Level of Service	C	C	A	A	B	A
Approach Delay (s)	24.7		2.0			4.4
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	63	626	22	171	1358
Future Volume (Veh/h)	3	63	626	22	171	1358
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	3	64	639	22	174	1386
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			503			1176
pX, platoon unblocked	0.92	0.94			0.94	
vC, conflicting volume	1680	320			661	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1267	151			514	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	92			82	
cM capacity (veh/h)	121	817			986	

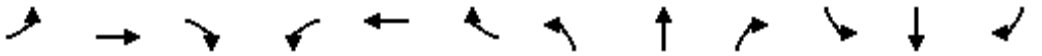
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	67	320	320	22	174	693	693
Volume Left	3	0	0	0	174	0	0
Volume Right	64	0	0	22	0	0	0
cSH	650	1700	1700	1700	986	1700	1700
Volume to Capacity	0.10	0.19	0.19	0.01	0.18	0.41	0.41
Queue Length 95th (ft)	9	0	0	0	16	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	9.4	0.0	0.0
Lane LOS	B				A		
Approach Delay (s)	11.2	0.0			1.1		
Approach LOS	B						

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	246	1438	28	81	839
Future Volume (Veh/h)	1	246	1438	28	81	839
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	1	256	1498	29	84	874
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			503			1176
pX, platoon unblocked	0.78	0.72			0.72	
vC, conflicting volume	2103	749			1527	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1205	0			959	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	67			84	
cM capacity (veh/h)	115	783			515	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	257	749	749	29	84	437	437
Volume Left	1	0	0	0	84	0	0
Volume Right	256	0	0	29	0	0	0
cSH	765	1700	1700	1700	515	1700	1700
Volume to Capacity	0.34	0.44	0.44	0.02	0.16	0.26	0.26
Queue Length 95th (ft)	37	0	0	0	14	0	0
Control Delay (s)	12.1	0.0	0.0	0.0	13.4	0.0	0.0
Lane LOS	B				B		
Approach Delay (s)	12.1	0.0			1.2		
Approach LOS	B						

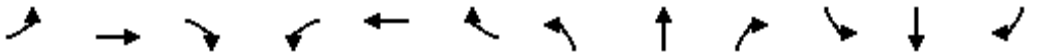
Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	413	185	0	201	125	129	401	12	159	744	85
Future Volume (vph)	39	413	185	0	201	125	129	401	12	159	744	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583		1766		1770	3539	1583	1770	3485	
Flt Permitted	0.40	1.00	1.00		1.00		0.24	1.00	1.00	0.51	1.00	
Satd. Flow (perm)	743	1863	1583		1766		450	3539	1583	954	3485	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	20	421	189	0	205	128	132	409	12	162	759	87
RTOR Reduction (vph)	0	0	128	0	37	0	0	0	5	0	12	0
Lane Group Flow (vph)	20	421	61	0	296	0	132	409	7	162	834	0
Turn Type	Perm	NA	Perm		NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4				2		2	6		
Actuated Green, G (s)	18.9	18.9	18.9		18.9		34.1	34.1	34.1	24.9	24.9	
Effective Green, g (s)	20.9	20.9	20.9		20.9		36.1	36.1	36.1	26.9	26.9	
Actuated g/C Ratio	0.32	0.32	0.32		0.32		0.56	0.56	0.56	0.41	0.41	
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	238	599	508		567		355	1965	879	394	1442	
v/s Ratio Prot		c0.23			0.17		c0.03	0.12			c0.24	
v/s Ratio Perm	0.03		0.04				0.18		0.00	0.17		
v/c Ratio	0.08	0.70	0.12		0.52		0.37	0.21	0.01	0.41	0.58	
Uniform Delay, d1	15.4	19.3	15.6		18.0		13.7	7.3	6.5	13.5	14.7	
Progression Factor	1.00	1.00	1.00		1.00		0.80	0.93	1.00	1.00	1.00	
Incremental Delay, d2	0.2	3.7	0.1		0.9		0.7	0.2	0.0	3.2	1.7	
Delay (s)	15.5	23.1	15.7		18.8		11.7	7.0	6.5	16.6	16.4	
Level of Service	B	C	B		B		B	A	A	B	B	
Approach Delay (s)		20.6			18.8			8.1			16.4	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

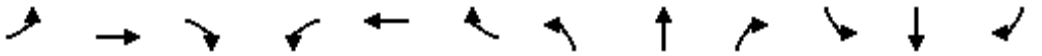
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	360	153	0	311	165	227	1372	7	159	744	85
Future Volume (vph)	112	360	153	0	311	165	227	1372	7	159	744	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583		1776		1770	3539	1583	1770	3485	
Flt Permitted	0.22	1.00	1.00		1.00		0.25	1.00	1.00	0.14	1.00	
Satd. Flow (perm)	414	1863	1583		1776		474	3539	1583	257	3485	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	57	367	156	0	317	168	232	1400	7	162	759	87
RTOR Reduction (vph)	0	0	113	0	30	0	0	0	3	0	13	0
Lane Group Flow (vph)	57	367	43	0	455	0	232	1400	4	162	833	0
Turn Type	Perm	NA	Perm		NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4				2		2	6		
Actuated Green, G (s)	16.0	16.0	16.0		16.0		37.0	37.0	37.0	27.0	27.0	
Effective Green, g (s)	18.0	18.0	18.0		18.0		39.0	39.0	39.0	29.0	29.0	
Actuated g/C Ratio	0.28	0.28	0.28		0.28		0.60	0.60	0.60	0.45	0.45	
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	114	515	438		491		404	2123	949	114	1554	
v/s Ratio Prot		0.20			c0.26		0.05	c0.40			0.24	
v/s Ratio Perm	0.14		0.03				0.29		0.00	c0.63		
v/c Ratio	0.50	0.71	0.10		0.93		0.57	0.66	0.00	1.42	0.54	
Uniform Delay, d1	19.7	21.2	17.5		22.9		14.0	8.6	5.2	18.0	13.1	
Progression Factor	1.00	1.00	1.00		1.00		0.71	0.70	1.00	1.00	1.00	
Incremental Delay, d2	3.4	4.6	0.1		23.7		1.8	1.4	0.0	232.8	1.3	
Delay (s)	23.1	25.8	17.6		46.5		11.7	7.4	5.2	250.8	14.4	
Level of Service	C	C	B		D		B	A	A	F	B	
Approach Delay (s)		23.3			46.5			8.0			52.4	
Approach LOS		C			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		

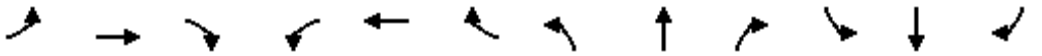
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	33	0	0	0	43	36	0	0	149	3
Future Volume (Veh/h)	3	0	33	0	0	0	43	36	0	0	149	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	3	0	37	0	0	0	48	40	0	0	167	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	304	304	168	342	306	40	170			40		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	304	304	168	342	306	40	170			40		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	100	100	100	97			100		
cM capacity (veh/h)	631	588	876	571	587	1031	1407			1570		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	40	0	88	170
Volume Left	3	0	48	0
Volume Right	37	0	0	3
cSH	851	1700	1407	1570
Volume to Capacity	0.05	0.00	0.03	0.00
Queue Length 95th (ft)	4	0	3	0
Control Delay (s)	9.4	0.0	4.3	0.0
Lane LOS	A	A	A	
Approach Delay (s)	9.4	0.0	4.3	0.0
Approach LOS	A	A		

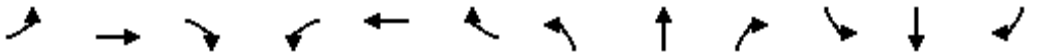
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	25.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	34	0	0	0	36	288	0	0	66	4
Future Volume (Veh/h)	5	0	34	0	0	0	36	288	0	0	66	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	6	0	42	0	0	0	44	356	0	0	81	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	528	528	84	570	530	356	86			356		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	528	528	84	570	530	356	86			356		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	96	100	100	100	97			100		
cM capacity (veh/h)	451	443	976	405	441	688	1510			1203		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	48	0	400	86
Volume Left	6	0	44	0
Volume Right	42	0	0	5
cSH	852	1700	1510	1203
Volume to Capacity	0.06	0.00	0.03	0.00
Queue Length 95th (ft)	4	0	2	0
Control Delay (s)	9.5	0.0	1.1	0.0
Lane LOS	A	A	A	
Approach Delay (s)	9.5	0.0	1.1	0.0
Approach LOS	A	A		

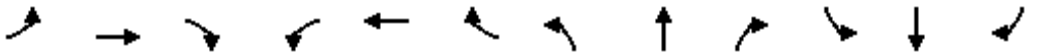
Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	33.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	156	52	49	71	312	66	456	200	321	857	29
Future Volume (vph)	4	156	52	49	71	312	66	456	200	321	857	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			0.95	0.95	1.00	0.95	1.00	1.00	0.95	
Frt		0.97			0.93	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00			0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1799			1631	1504	1770	3539	1583	1770	3522	
Flt Permitted		0.99			0.83	1.00	0.26	1.00	1.00	0.45	1.00	
Satd. Flow (perm)		1787			1368	1504	489	3539	1583	836	3522	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	4	161	54	51	73	322	68	470	206	331	884	30
RTOR Reduction (vph)	0	20	0	0	51	104	0	0	122	0	3	0
Lane Group Flow (vph)	0	199	0	0	177	115	68	470	84	331	911	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		12.5			12.5	22.5	24.5	24.5	24.5	40.5	40.5	
Effective Green, g (s)		14.5			14.5	26.5	26.5	26.5	26.5	42.5	42.5	
Actuated g/C Ratio		0.22			0.22	0.41	0.41	0.41	0.41	0.65	0.65	
Clearance Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		398			305	705	199	1442	645	719	2302	
v/s Ratio Prot						0.03		0.13		c0.09	0.26	
v/s Ratio Perm		0.11			c0.13	0.05	0.14		0.05	c0.22		
v/c Ratio		0.50			0.58	0.16	0.34	0.33	0.13	0.46	0.40	
Uniform Delay, d1		22.1			22.5	12.2	13.2	13.1	12.0	7.4	5.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	0.93	1.10	
Incremental Delay, d2		1.0			2.7	0.1	4.6	0.6	0.4	0.4	0.4	
Delay (s)		23.1			25.2	12.3	17.9	13.8	12.5	7.2	6.2	
Level of Service		C			C	B	B	B	B	A	A	
Approach Delay (s)		23.1			18.9			13.8			6.5	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	104	46	151	220	802	84	931	238	336	881	29
Future Volume (vph)	12	104	46	151	220	802	84	931	238	336	881	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			0.95	0.95	1.00	0.95	1.00	1.00	0.95	
Frt		0.96			0.94	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00			0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1785			1638	1504	1770	3539	1583	1770	3522	
Flt Permitted		0.71			0.88	1.00	0.31	1.00	1.00	0.18	1.00	
Satd. Flow (perm)		1264			1464	1504	573	3539	1583	339	3522	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	12	106	47	154	224	818	86	950	243	343	899	30
RTOR Reduction (vph)	0	22	0	0	41	23	0	0	176	0	4	0
Lane Group Flow (vph)	0	143	0	0	615	517	86	950	67	343	925	0
Turn Type	Perm	NA		Perm	NA	pm+ov	Perm	NA	Perm	pm+pt	NA	
Protected Phases		4			8	1		2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		24.0			24.0	31.0	16.0	16.0	16.0	29.0	29.0	
Effective Green, g (s)		26.0			26.0	35.0	18.0	18.0	18.0	31.0	31.0	
Actuated g/C Ratio		0.40			0.40	0.54	0.28	0.28	0.28	0.48	0.48	
Clearance Time (s)		6.0			6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		505			585	902	158	980	438	359	1679	
v/s Ratio Prot						0.08		0.27		c0.13	0.26	
v/s Ratio Perm		0.11			c0.42	0.26	0.15		0.04	c0.32		
v/c Ratio		0.28			1.05	0.57	0.54	0.97	0.15	0.96	0.55	
Uniform Delay, d1		13.2			19.5	10.0	20.0	23.2	17.7	14.3	12.1	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	0.80	0.68	
Incremental Delay, d2		0.3			51.5	0.9	12.8	22.2	0.7	32.0	1.1	
Delay (s)		13.5			71.0	10.9	32.8	45.5	18.5	43.4	9.3	
Level of Service		B			E	B	C	D	B	D	A	
Approach Delay (s)		13.5			43.9			39.5			18.5	
Approach LOS		B			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	170	40	869	112	45	1493
Future Volume (vph)	170	40	869	112	45	1493
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1744		3479		1770	3539
Flt Permitted	0.96		1.00		0.19	1.00
Satd. Flow (perm)	1744		3479		350	3539
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	173	41	887	114	46	1523
RTOR Reduction (vph)	14	0	13	0	0	0
Lane Group Flow (vph)	200	0	988	0	46	1523
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Actuated Green, G (s)	12.2		31.7		40.8	40.8
Effective Green, g (s)	14.2		33.7		42.8	42.8
Actuated g/C Ratio	0.22		0.52		0.66	0.66
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	380		1803		341	2330
v/s Ratio Prot	c0.11		0.28		0.01	c0.43
v/s Ratio Perm					0.08	
v/c Ratio	0.53		0.55		0.13	0.65
Uniform Delay, d1	22.4		10.5		5.3	6.7
Progression Factor	1.00		0.67		0.31	0.32
Incremental Delay, d2	1.3		1.2		0.2	1.2
Delay (s)	23.7		8.2		1.8	3.4
Level of Service	C		A		A	A
Approach Delay (s)	23.7		8.2			3.3
Approach LOS	C		A			A

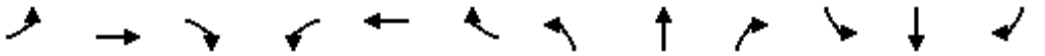
Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	98	86	1682	125	137	1317
Future Volume (vph)	98	86	1682	125	137	1317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.94		0.99		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1700		3502		1770	3539
Flt Permitted	0.97		1.00		0.11	1.00
Satd. Flow (perm)	1700		3502		199	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	103	91	1771	132	144	1386
RTOR Reduction (vph)	55	0	7	0	0	0
Lane Group Flow (vph)	139	0	1896	0	144	1386
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Actuated Green, G (s)	10.3		31.5		42.7	42.7
Effective Green, g (s)	12.3		33.5		44.7	44.7
Actuated g/C Ratio	0.19		0.52		0.69	0.69
Clearance Time (s)	6.0		6.0		6.0	6.0
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	321		1804		310	2433
v/s Ratio Prot	c0.08		c0.54		0.05	c0.39
v/s Ratio Perm					0.27	
v/c Ratio	0.43		1.05		0.46	0.57
Uniform Delay, d1	23.3		15.8		12.8	5.2
Progression Factor	1.00		0.79		0.79	1.39
Incremental Delay, d2	0.9		31.4		1.0	0.9
Delay (s)	24.2		43.8		11.1	8.1
Level of Service	C		D		B	A
Approach Delay (s)	24.2		43.8			8.4
Approach LOS	C		D			A

Intersection Summary			
HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

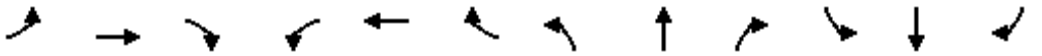
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	0	0	145	0	22	4	678	126	31	1450	6
Future Volume (vph)	10	0	0	145	0	22	4	678	126	31	1450	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00			1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected	0.95			0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770			1770	1583		1770	3456		1770	3537	
Flt Permitted	0.74			0.76	1.00		0.15	1.00		0.26	1.00	
Satd. Flow (perm)	1383			1410	1583		288	3456		491	3537	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	0	0	149	0	23	4	699	130	32	1495	6
RTOR Reduction (vph)	0	0	0	0	19	0	0	18	0	0	0	0
Lane Group Flow (vph)	10	0	0	149	4	0	4	811	0	32	1501	0
Turn Type	Perm			Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	10.4			10.4	10.4		34.6	34.6		42.6	42.6	
Effective Green, g (s)	12.4			12.4	12.4		36.6	36.6		44.6	44.6	
Actuated g/C Ratio	0.19			0.19	0.19		0.56	0.56		0.69	0.69	
Clearance Time (s)	6.0			6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	263			268	301		162	1945		415	2426	
v/s Ratio Prot					0.00			0.23		0.00	c0.42	
v/s Ratio Perm	0.01			c0.11			0.01			0.05		
v/c Ratio	0.04			0.56	0.01		0.02	0.42		0.08	0.62	
Uniform Delay, d1	21.4			23.8	21.3		6.3	8.1		3.9	5.6	
Progression Factor	1.00			1.00	1.00		0.50	0.61		0.43	0.45	
Incremental Delay, d2	0.1			2.5	0.0		0.3	0.6		0.1	1.0	
Delay (s)	21.5			26.3	21.4		3.4	5.6		1.7	3.6	
Level of Service	C			C	C		A	A		A	A	
Approach Delay (s)		21.5			25.6			5.5			3.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	0	0	349	0	85	2	1496	200	37	946	8
Future Volume (vph)	18	0	0	349	0	85	2	1496	200	37	946	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00			1.00	0.85		1.00	0.98		1.00	1.00	
Flt Protected	0.95			0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770			1770	1583		1770	3477		1770	3535	
Flt Permitted	0.70			0.76	1.00		0.29	1.00		0.11	1.00	
Satd. Flow (perm)	1304			1410	1583		543	3477		210	3535	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	19	0	0	360	0	88	2	1542	206	38	975	8
RTOR Reduction (vph)	0	0	0	0	64	0	0	15	0	0	1	0
Lane Group Flow (vph)	19	0	0	360	24	0	2	1733	0	38	982	0
Turn Type	Perm			Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			8			2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.0			16.0	16.0		29.4	29.4		37.0	37.0	
Effective Green, g (s)	18.0			18.0	18.0		31.4	31.4		39.0	39.0	
Actuated g/C Ratio	0.28			0.28	0.28		0.48	0.48		0.60	0.60	
Clearance Time (s)	6.0			6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	361			390	438		262	1679		212	2121	
v/s Ratio Prot					0.02			c0.50		0.01	c0.28	
v/s Ratio Perm	0.01			c0.26			0.00			0.10		
v/c Ratio	0.05			0.92	0.06		0.01	1.03		0.18	0.46	
Uniform Delay, d1	17.2			22.8	17.3		8.7	16.8		13.1	7.2	
Progression Factor	1.00			1.00	1.00		0.19	0.20		1.04	1.54	
Incremental Delay, d2	0.1			27.1	0.1		0.0	23.0		0.4	0.7	
Delay (s)	17.3			49.9	17.3		1.7	26.3		14.0	11.8	
Level of Service	B			D	B		A	C		B	B	
Approach Delay (s)		17.3			43.5			26.2			11.9	
Approach LOS		B			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	77	12	655	52	22	1428
Future Volume (vph)	77	12	655	52	22	1428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.38	1.00
Satd. Flow (perm)	1770	1583	3539	1583	711	3539
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	79	12	668	53	22	1457
RTOR Reduction (vph)	0	10	0	20	0	0
Lane Group Flow (vph)	79	2	668	33	22	1457
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	7.2	7.2	39.0	39.0	45.8	45.8
Effective Green, g (s)	9.2	9.2	41.0	41.0	47.8	47.8
Actuated g/C Ratio	0.14	0.14	0.63	0.63	0.74	0.74
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	250	224	2232	998	568	2602
v/s Ratio Prot	c0.04		0.19		0.00	c0.41
v/s Ratio Perm		0.00		0.02	0.03	
v/c Ratio	0.32	0.01	0.30	0.03	0.04	0.56
Uniform Delay, d1	25.1	24.0	5.5	4.5	2.9	3.9
Progression Factor	1.00	1.00	0.73	0.38	0.69	0.53
Incremental Delay, d2	0.7	0.0	0.3	0.1	0.0	0.8
Delay (s)	25.8	24.0	4.3	1.8	2.0	2.9
Level of Service	C	C	A	A	A	A
Approach Delay (s)	25.6		4.1			2.9
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	109	114	1381	182	49	879
Future Volume (vph)	109	114	1381	182	49	879
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.11	1.00
Satd. Flow (perm)	1770	1583	3539	1583	206	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	116	121	1469	194	52	935
RTOR Reduction (vph)	0	102	0	80	0	0
Lane Group Flow (vph)	116	19	1469	114	52	935
Turn Type	Prot	Perm	NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2	6	
Actuated Green, G (s)	8.4	8.4	36.2	36.2	44.6	44.6
Effective Green, g (s)	10.4	10.4	38.2	38.2	46.6	46.6
Actuated g/C Ratio	0.16	0.16	0.59	0.59	0.72	0.72
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	283	253	2079	930	253	2537
v/s Ratio Prot	c0.07		c0.42		0.01	c0.26
v/s Ratio Perm		0.01		0.07	0.13	
v/c Ratio	0.41	0.08	0.71	0.12	0.21	0.37
Uniform Delay, d1	24.5	23.2	9.4	6.0	10.9	3.5
Progression Factor	1.00	1.00	0.09	0.01	0.90	0.55
Incremental Delay, d2	1.0	0.1	1.0	0.1	0.4	0.4
Delay (s)	25.5	23.3	1.8	0.2	10.2	2.3
Level of Service	C	C	A	A	B	A
Approach Delay (s)	24.4		1.6			2.7
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay	3.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	15	63	654	28	171	1439
Future Volume (Veh/h)	15	63	654	28	171	1439
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	15	64	667	29	174	1468
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			503			1176
pX, platoon unblocked	0.91	0.93			0.93	
vC, conflicting volume	1749	334			696	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1261	121			512	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	92			82	
cM capacity (veh/h)	121	841			972	

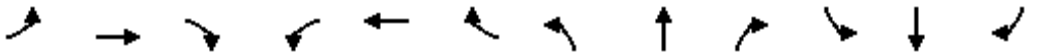
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	79	334	334	29	174	734	734
Volume Left	15	0	0	0	174	0	0
Volume Right	64	0	0	29	0	0	0
cSH	395	1700	1700	1700	972	1700	1700
Volume to Capacity	0.20	0.20	0.20	0.02	0.18	0.43	0.43
Queue Length 95th (ft)	18	0	0	0	16	0	0
Control Delay (s)	16.4	0.0	0.0	0.0	9.5	0.0	0.0
Lane LOS	C				A		
Approach Delay (s)	16.4	0.0			1.0		
Approach LOS	C						

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	8	246	1489	39	81	887
Future Volume (Veh/h)	8	246	1489	39	81	887
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	8	256	1551	41	84	924
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			503			1176
pX, platoon unblocked	0.75	0.69			0.69	
vC, conflicting volume	2181	776			1592	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1198	0			967	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	66			83	
cM capacity (veh/h)	111	751			490	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	264	776	776	41	84	462	462
Volume Left	8	0	0	0	84	0	0
Volume Right	256	0	0	41	0	0	0
cSH	639	1700	1700	1700	490	1700	1700
Volume to Capacity	0.41	0.46	0.46	0.02	0.17	0.27	0.27
Queue Length 95th (ft)	51	0	0	0	15	0	0
Control Delay (s)	14.5	0.0	0.0	0.0	13.9	0.0	0.0
Lane LOS	B				B		
Approach Delay (s)	14.5	0.0			1.2		
Approach LOS	B						

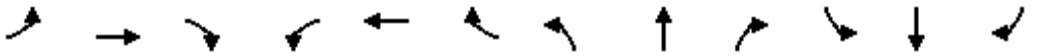
Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	413	212	24	201	125	142	416	18	159	775	85
Future Volume (vph)	39	413	212	24	201	125	142	416	18	159	775	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583		1767		1770	3539	1583	1770	3487	
Flt Permitted	0.40	1.00	1.00		0.84		0.23	1.00	1.00	0.50	1.00	
Satd. Flow (perm)	745	1863	1583		1494		429	3539	1583	939	3487	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	20	421	216	24	205	128	145	424	18	162	791	87
RTOR Reduction (vph)	0	0	148	0	33	0	0	0	8	0	12	0
Lane Group Flow (vph)	20	421	68	0	324	0	145	424	10	162	866	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	18.5	18.5	18.5		18.5		34.5	34.5	34.5	25.3	25.3	
Effective Green, g (s)	20.5	20.5	20.5		20.5		36.5	36.5	36.5	27.3	27.3	
Actuated g/C Ratio	0.32	0.32	0.32		0.32		0.56	0.56	0.56	0.42	0.42	
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	234	587	499		471		348	1987	888	394	1464	
v/s Ratio Prot		c0.23					c0.03	0.12			c0.25	
v/s Ratio Perm	0.03		0.04		0.22		0.20		0.01	0.17		
v/c Ratio	0.09	0.72	0.14		0.69		0.42	0.21	0.01	0.41	0.59	
Uniform Delay, d1	15.7	19.7	15.9		19.5		14.3	7.1	6.3	13.2	14.5	
Progression Factor	1.00	1.00	1.00		1.00		0.92	1.09	7.78	1.00	1.00	
Incremental Delay, d2	0.2	4.2	0.1		4.2		0.8	0.2	0.0	3.2	1.8	
Delay (s)	15.8	23.9	16.0		23.6		13.9	8.0	49.0	16.4	16.3	
Level of Service	B	C	B		C		B	A	D	B	B	
Approach Delay (s)		21.0			23.6			10.7			16.3	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	360	169	14	311	165	251	1399	19	159	762	85
Future Volume (vph)	112	360	169	14	311	165	251	1399	19	159	762	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00		1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.95		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1863	1583		1776		1770	3539	1583	1770	3486	
Flt Permitted	0.22	1.00	1.00		0.93		0.21	1.00	1.00	0.16	1.00	
Satd. Flow (perm)	414	1863	1583		1662		385	3539	1583	292	3486	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	57	367	172	14	317	168	256	1428	19	162	778	87
RTOR Reduction (vph)	0	0	124	0	28	0	0	0	8	0	13	0
Lane Group Flow (vph)	57	367	48	0	471	0	256	1428	11	162	852	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases		4			8		5	2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)	16.0	16.0	16.0		16.0		37.0	37.0	37.0	27.0	27.0	
Effective Green, g (s)	18.0	18.0	18.0		18.0		39.0	39.0	39.0	29.0	29.0	
Actuated g/C Ratio	0.28	0.28	0.28		0.28		0.60	0.60	0.60	0.45	0.45	
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	114	515	438		460		358	2123	949	130	1555	
v/s Ratio Prot		0.20					0.07	c0.40			0.24	
v/s Ratio Perm	0.14		0.03		c0.28		0.36		0.01	c0.56		
v/c Ratio	0.50	0.71	0.11		1.02		0.72	0.67	0.01	1.25	0.55	
Uniform Delay, d1	19.7	21.2	17.5		23.5		8.0	8.7	5.2	18.0	13.2	
Progression Factor	1.00	1.00	1.00		1.00		1.17	0.32	0.00	1.00	1.00	
Incremental Delay, d2	3.4	4.6	0.1		48.1		5.8	1.5	0.0	159.5	1.4	
Delay (s)	23.1	25.8	17.6		71.6		15.2	4.3	0.0	177.5	14.6	
Level of Service	C	C	B		E		B	A	A	F	B	
Approach Delay (s)		23.2			71.6			5.9			40.3	
Approach LOS		C			E			A			D	

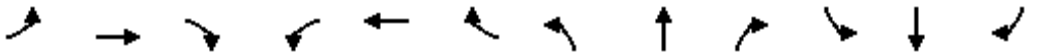
Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	15	33	23	7	13	43	36	47	15	149	3
Future Volume (Veh/h)	3	15	33	23	7	13	43	36	47	15	149	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	3	17	37	26	8	15	48	40	53	17	167	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	384	392	168	410	366	66	170			93		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	384	392	168	410	366	66	170			93		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	97	96	95	99	98	97			99		
cM capacity (veh/h)	540	520	876	497	537	997	1407			1501		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	57	49	141	187
Volume Left	3	26	48	17
Volume Right	37	15	53	3
cSH	708	596	1407	1501
Volume to Capacity	0.08	0.08	0.03	0.01
Queue Length 95th (ft)	7	7	3	1
Control Delay (s)	10.5	11.6	2.8	0.8
Lane LOS	B	B	A	A
Approach Delay (s)	10.5	11.6	2.8	0.8
Approach LOS	B	B		

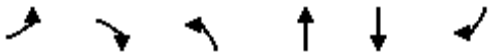
Intersection Summary				
Average Delay	3.9			
Intersection Capacity Utilization	33.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	5	9	34	38	13	21	36	288	25	9	66	4
Future Volume (Veh/h)	5	9	34	38	13	21	36	288	25	9	66	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (vph)	6	11	42	47	16	26	44	356	31	11	81	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	599	580	84	612	568	372	86			387		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	599	580	84	612	568	372	86			387		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	97	96	87	96	96	97			99		
cM capacity (veh/h)	375	409	976	369	416	674	1510			1171		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	59	89	431	97
Volume Left	6	47	44	11
Volume Right	42	26	31	5
cSH	687	435	1510	1171
Volume to Capacity	0.09	0.20	0.03	0.01
Queue Length 95th (ft)	7	19	2	1
Control Delay (s)	10.7	15.4	1.0	1.0
Lane LOS	B	C	A	A
Approach Delay (s)	10.7	15.4	1.0	1.0
Approach LOS	B	C		

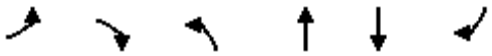
Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	41.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	11	24	837	1477	24
Future Volume (Veh/h)	4	11	24	837	1477	24
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	4	11	24	854	1507	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				356		
pX, platoon unblocked	0.82					
vC, conflicting volume	1994	766	1531			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1776	766	1531			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	93	97	94			
cM capacity (veh/h)	57	346	431			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	15	309	569	1005	526
Volume Left	4	24	0	0	0
Volume Right	11	0	0	0	24
cSH	148	431	1700	1700	1700
Volume to Capacity	0.10	0.06	0.33	0.59	0.31
Queue Length 95th (ft)	8	4	0	0	0
Control Delay (s)	32.1	1.9	0.0	0.0	0.0
Lane LOS	D	A			
Approach Delay (s)	32.1	0.7		0.0	
Approach LOS	D				

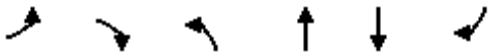
Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	51.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	23	15	1674	1298	14
Future Volume (Veh/h)	0	23	15	1674	1298	14
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	0	23	15	1708	1324	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				356		
pX, platoon unblocked	0.50					
vC, conflicting volume	2215	669	1338			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1429	669	1338			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	97			
cM capacity (veh/h)	61	400	511			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	23	584	1139	883	455
Volume Left	0	15	0	0	0
Volume Right	23	0	0	0	14
cSH	400	511	1700	1700	1700
Volume to Capacity	0.06	0.03	0.67	0.52	0.27
Queue Length 95th (ft)	5	2	0	0	0
Control Delay (s)	14.5	0.8	0.0	0.0	0.0
Lane LOS	B	A			
Approach Delay (s)	14.5	0.3		0.0	
Approach LOS	B				

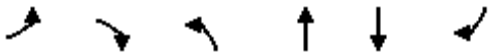
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	66.8%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	56	34	69	772	1467	111
Future Volume (Veh/h)	56	34	69	772	1467	111
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	57	35	70	788	1497	113
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				804	947	
pX, platoon unblocked	0.82	0.74	0.74			
vC, conflicting volume	2088	805	1610			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1044	46	1130			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	63	95	85			
cM capacity (veh/h)	156	753	456			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	92	333	525	998	612
Volume Left	57	70	0	0	0
Volume Right	35	0	0	0	113
cSH	223	456	1700	1700	1700
Volume to Capacity	0.41	0.15	0.31	0.59	0.36
Queue Length 95th (ft)	47	13	0	0	0
Control Delay (s)	32.0	5.1	0.0	0.0	0.0
Lane LOS	D	A			
Approach Delay (s)	32.0	2.0		0.0	
Approach LOS	D				

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	82.6%	ICU Level of Service	E	
Analysis Period (min)	15			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	124	74	54	1607	1225	79
Future Volume (Veh/h)	124	74	54	1607	1225	79
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	127	76	55	1640	1250	81
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				804	947	
pX, platoon unblocked	0.59	0.85	0.85			
vC, conflicting volume	2220	666	1331			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	550	258	1040			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	49	88	90			
cM capacity (veh/h)	248	631	566			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	203	602	1093	833	498
Volume Left	127	55	0	0	0
Volume Right	76	0	0	0	81
cSH	321	566	1700	1700	1700
Volume to Capacity	0.63	0.10	0.64	0.49	0.29
Queue Length 95th (ft)	101	8	0	0	0
Control Delay (s)	33.7	2.7	0.0	0.0	0.0
Lane LOS	D	A			
Approach Delay (s)	33.7	0.9		0.0	
Approach LOS	D				

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	101.7%	ICU Level of Service	G	
Analysis Period (min)	15			