

Appendix A

Intersection Selection Matrix

Aerotropolis Freight Cluster Study Area: Intersection Selection Matrix

Intersection	Total Entering Vol (2040)	Total Entering Truck Vol (2040)	Percent Trucks (2040)*	Commercial Veh Crashes (2014-2018) (within 300') **	Total Crashes (2018) (within 300')**	Total Crash Rate	Percent Truck Crashes	Selection Scoring	Industrial / Commercial Land Use Area	Covered in Prior Plan/Study	Proposed or Planned Project?	Within AACIDs Boundary
SR 14 @ Majestic Pl	43475	2625	6.0%	9	10	0.63	18.0%	12	Yes	Yes	Yes	No
Ben Hill @ Welcome All Rd	10325	725	7.0%	7	10	2.65	14.0%	10	Adjacent	No	Yes	Yes (West)
N. Commerce Drive @ Washington Rd	4300	600	14.0%	5	12	7.65	8.3%	10	Yes	No	No	Yes (West)
SR 6/Camp Creek Pkwy @ N Commerce Dr	45175	7525	16.5%	36	121	7.34	6.0%	9	Yes	Yes	No	Yes (West)
SR 139/Riverdale Rd @ Phoenix Blvd/Forest Pkwy	70150	13375	19.0%	7	63	2.46	2.2%	8	Yes	No	No	Yes (South)
SR 6/Camp Creek Pkwy @ Centre Pkwy	37300	6875	18.5%	9	45	3.31	4.0%	8	Yes	Yes	No	Yes (West)
N Outer Loop Rd/ Toffie Ter.	19550	1175	6.0%	3	12	1.68	5.0%	7	Yes	No	Yes	Yes (West)
Loop Rd @ Charles W Grant Pkwy	62100	3725	6.0%	12	48	2.12	5.0%	6	No	Yes	Yes	Yes (South)
US 41/Old Dixie @ SR 331/Forest Pkwy	51350	5725	11.0%	8	69	3.68	2.3%	6	Yes	Yes	Yes	No
SR 279/Old National Highway @ Sullivan Rd	21775	1450	6.5%	4	40	5.03	2.0%	5	Yes	No	No	Yes (West)
SR 279/Old National Highway @ Godby Rd	57175	5700	10.0%	1	147	7.04	0.1%	4	Yes	No	Yes	Yes (West)
SR 54/Jonesboro Rd @ Southside Industrial Pkwy	27200	2275	8.5%	2	18	1.81	2.2%	4	Yes	No	No	No
SR 6/Camp Creek Pkwy @ Washington Rd	54800	5025	9.0%	12	86	4.3	2.8%	4	Adjacent	Yes	Yes	Yes (West)
US 41/Crown Rd @ Browns Mill Rd	33750	3225	9.5%	2	13	1.06	3.1%	4	Yes	No	No	Just outside
I-75/ US 41 SB Ramps (Exit 239)	26550	2125	8.0%	1	7	0.72	2.9%	4	Yes	Yes	Yes	Yes
S Outer Loop Rd @ Lake Mirror Rd	37900	3850	10.0%	0	6	0.43	0.0%	3	Adjacent	No	No	Yes (South)
Perry J Hudson Pkwy/N Inner Loop/ Union Ave	25200	1600	6.5%	0	5	0.54	0.0%	3	Yes	Yes	Yes	Yes (North)
Perry J Hudson Pkwy/N Inner Loop/ Rainey Ave	23500	1450	6.0%	0	8	0.93	0.0%	3	Yes	Yes	Yes	Yes(North)
N Outer Loop Rd/ I-85 Ramps/Woolman Pl SW	25075	1550	6.0%	0	6	0.66	0.0%	3	Yes	No	Yes	Yes
Browns Mill Rd @ Southside Ind Pkwy	21150	1550	7.5%	0	14	1.81	0.0%	2	Yes	No	No	Just outside
Sylvan Rd @ N Central Pkwy	16000	1000	6.5%	0	8	1.37	0.0%	2	Adjacent	Yes	No	Just outside

Notes
*Data from ARC Activity Based Model, provided by Modern Mobility Partners
**From GDOT GEARS

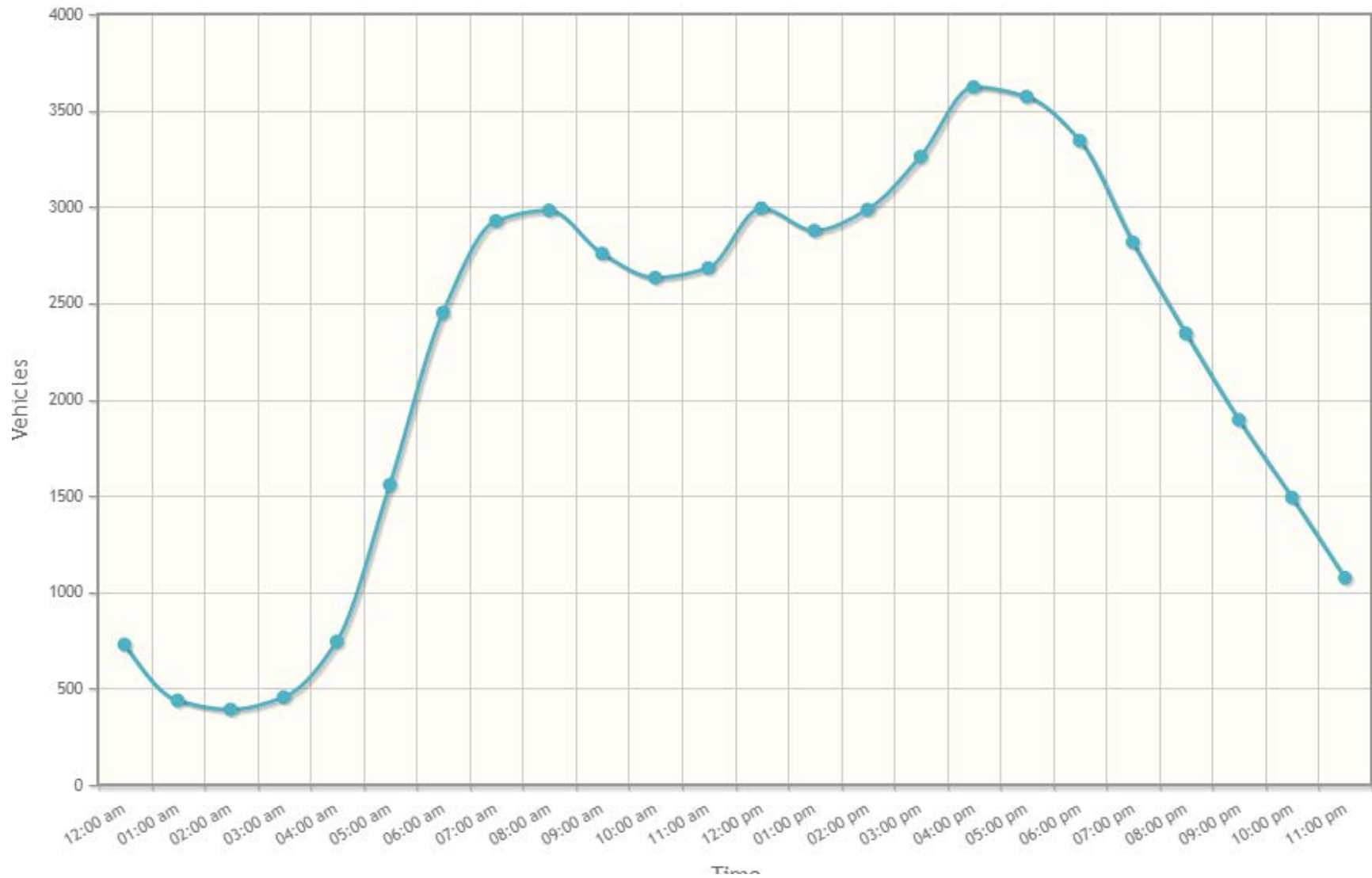
Aerotropolis Freight Cluster Study Area: Intersection Selection Matrix

Intersection	Partner Jurisdiction	Notes
SR 14 @ Majestic Pl	Union City	South Fulton CTP (2013) recommends removal of at-grade intersection at Majestic Pl in the long-term
Ben Hill @ Welcome All Rd	East Point	GDOT PI#0013709 - Welcome All Road @ CSX RR. Welcome All Rd at intersection of CSXT and Ben Hill Rd - Traffic signal upgrades in the form of traffic pre-signal installation and supplemental roadway striping and striping upgrades. PE/Construction by City forces/contractor. PE in 2017.
N. Commerce Drive @ Washington Rd	South Fulton	
SR 6/Camp Creek Pkwy @ N Commerce Dr	East Point	Camp Creek Pkwy beautification / streetscape
SR 139/Riverdale Rd @ Phoenix Blvd/Forest Pkwy	Clayton County	AACIDs Master Plan recommends improvement to enhance acecss and overall attractiveness
SR 6/Camp Creek Pkwy @ Centre Pkwy	Atlanta / East Point	Camp Creek Pkwy beautification / streetscape
N Outer Loop Rd/ Toffie Ter.	Hapeville / East Point	
Loop Rd @ Charles W Grant Pkwy	Clayton County	Long-Range Project - MHJJ Blvd/Loop Road Improvments in H-JAIA Master Plan
US 41/Old Dixie @ SR 331/Forest Pkwy	Forest Park	Intersection Improvement outlined in Clayton CTP
SR 279/Old National Highway @ Sullivan Rd	College Park	Adjacent to PI#0013724 (ends at Sullivan Rd)
SR 279/Old National Highway @ Godby Rd	College Park	GDOT PI#0013724 SR 279 from CS 567/Sullivan Rd to Jolly Rd - Safety project. In Program Delivery. PM is Andrew Bryant. ROW anticipated March 2021. Includes a PHB between I-285 and Sullivan Rd, replacing raised median and installing half RCUTs to reduce frequency and severity of crashes.
SR 54/Jonesboro Rd @ Southside Industrial Pkwy	Atlanta	
SR 6/Camp Creek Pkwy @ Washington Rd	East Point	AACIDs Master Plan: AWCID Priority 9 - realignment at Washington Rd and Ale Circle. CID took out of their capital plan. On TSPLOST - Tier 3 - proposing extension of Desert Dr - concepts. Likely not funded.
US 41/Crown Rd @ Browns Mill Rd	Atlanta	
I-75/ US 41 SB Ramps (Exit 239)	Hapeville	GDOT PI#0015084 - N Central Ave. Pedestrian & Transit Improvments Study - Phase II - Scoping programmed in 2017; Also covered in Hapeville LCI Plan Update
S Outer Loop Rd @ Lake Mirror Rd	Clayton County	
Perry J Hudson Pkwy/N Inner Loop/ Union Ave	Hapeville	GDOT PI#0007532 Airport Loop Road Access Roads in Hapeville (65.53% complete as of 9/3/2019 based on GDOT GeoPI
Perry J Hudson Pkwy/N Inner Loop/ Rainey Ave	Hapeville	GDOT PI#0007532 Airport Loop Road Access Roads in Hapeville (65.53% complete as of 9/3/2019 based on GDOT GeoPI
N Outer Loop Rd/ I-85 Ramps/Woolman Pl SW	Hapeville	
Browns Mill Rd @ Southside Ind Pkwy	Atlanta	Previous project near this location: GDOT PI#0009895 - Browns Mill Rd @ NS RR - Utility safety project programmed for 2014
Sylvan Rd @ N Central Pkwy	Hapeville	Adjacent to I-85 Interchange Improvements in AACIDs Master Plan

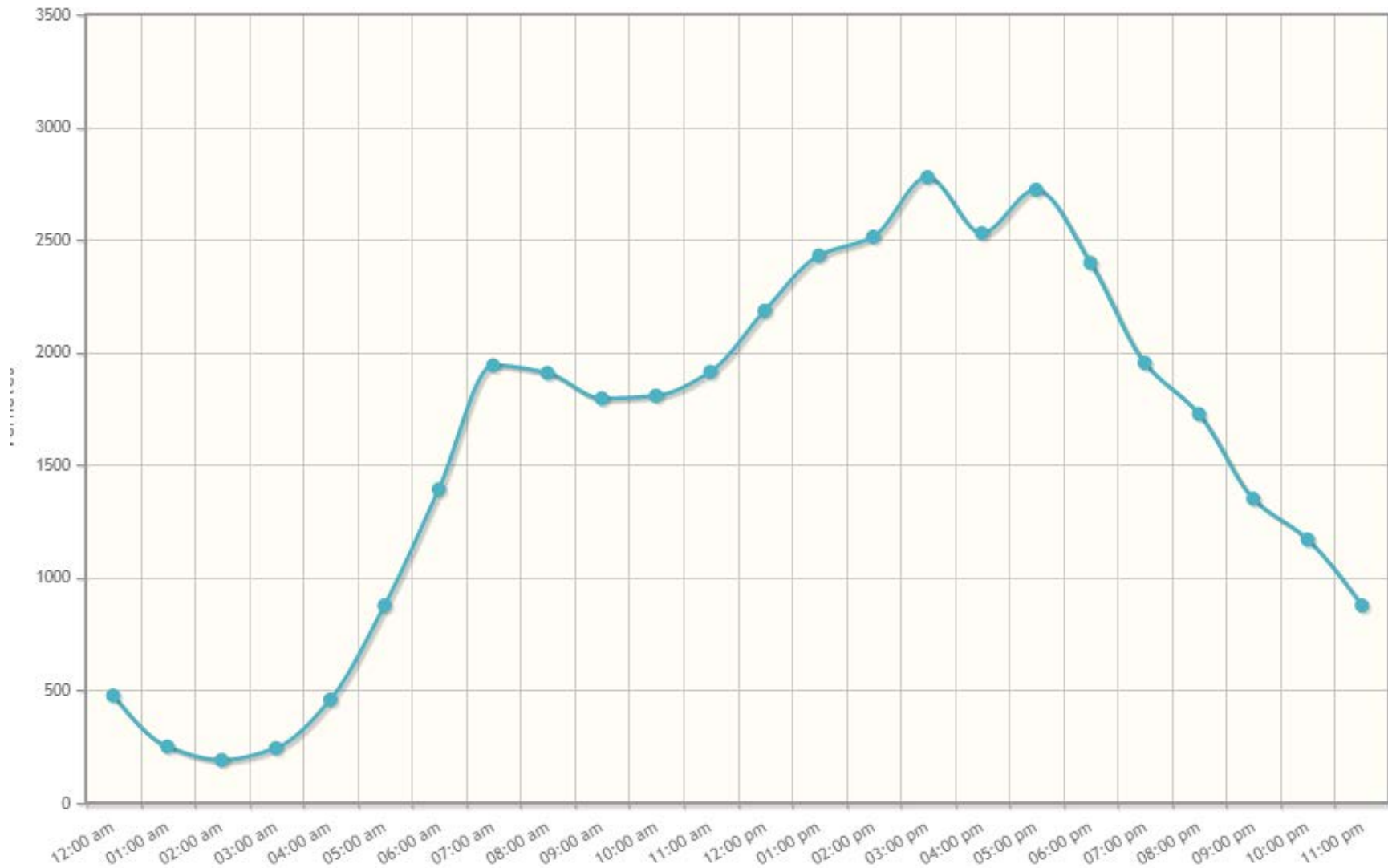
Notes
*Data from ARC Activity Based Model, provided by Modern Mobility Partners
**From GDOT GEARS

Appendix B

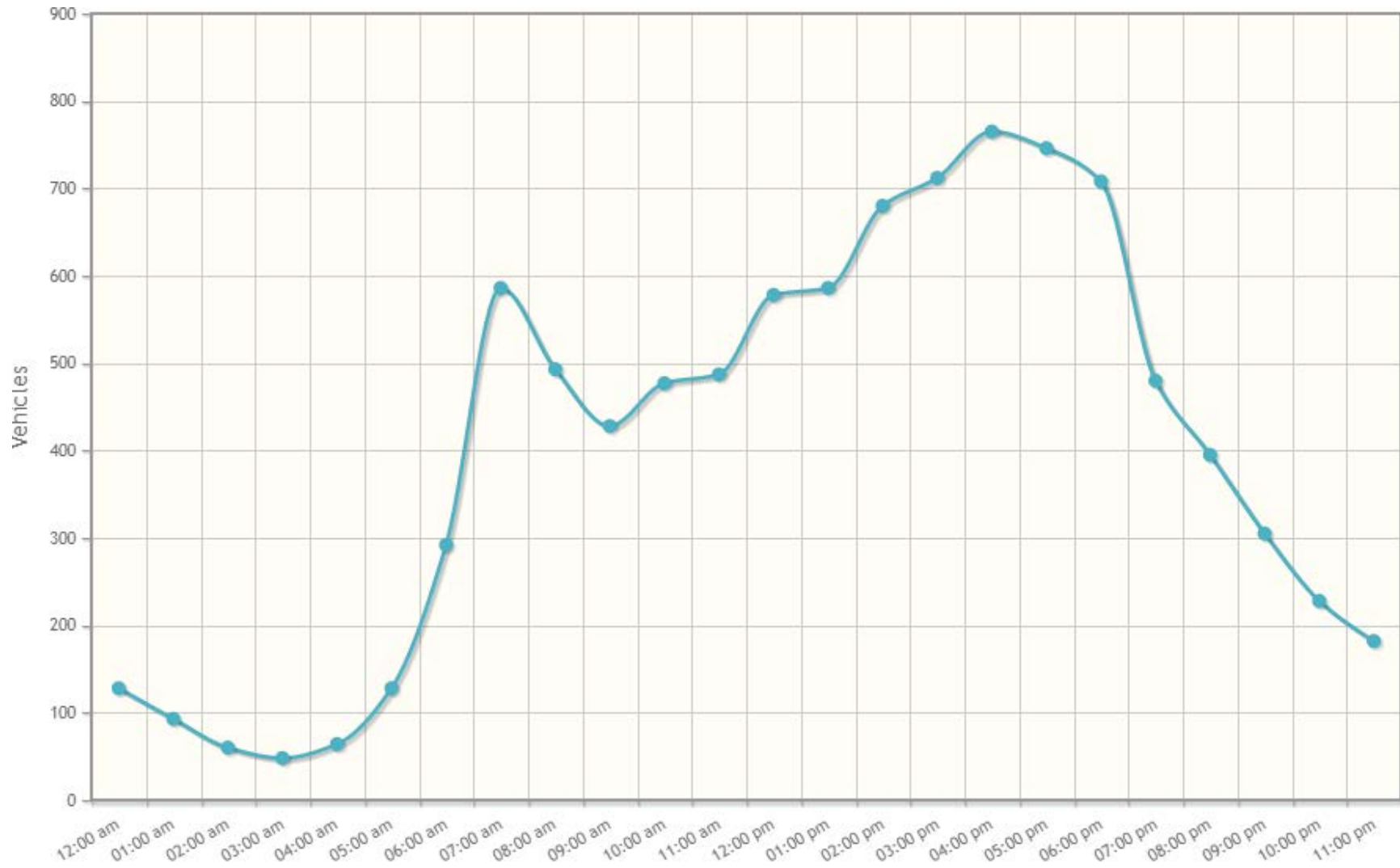
Hourly Distribution of Traffic Volumes from GDOT's TADA Count Stations



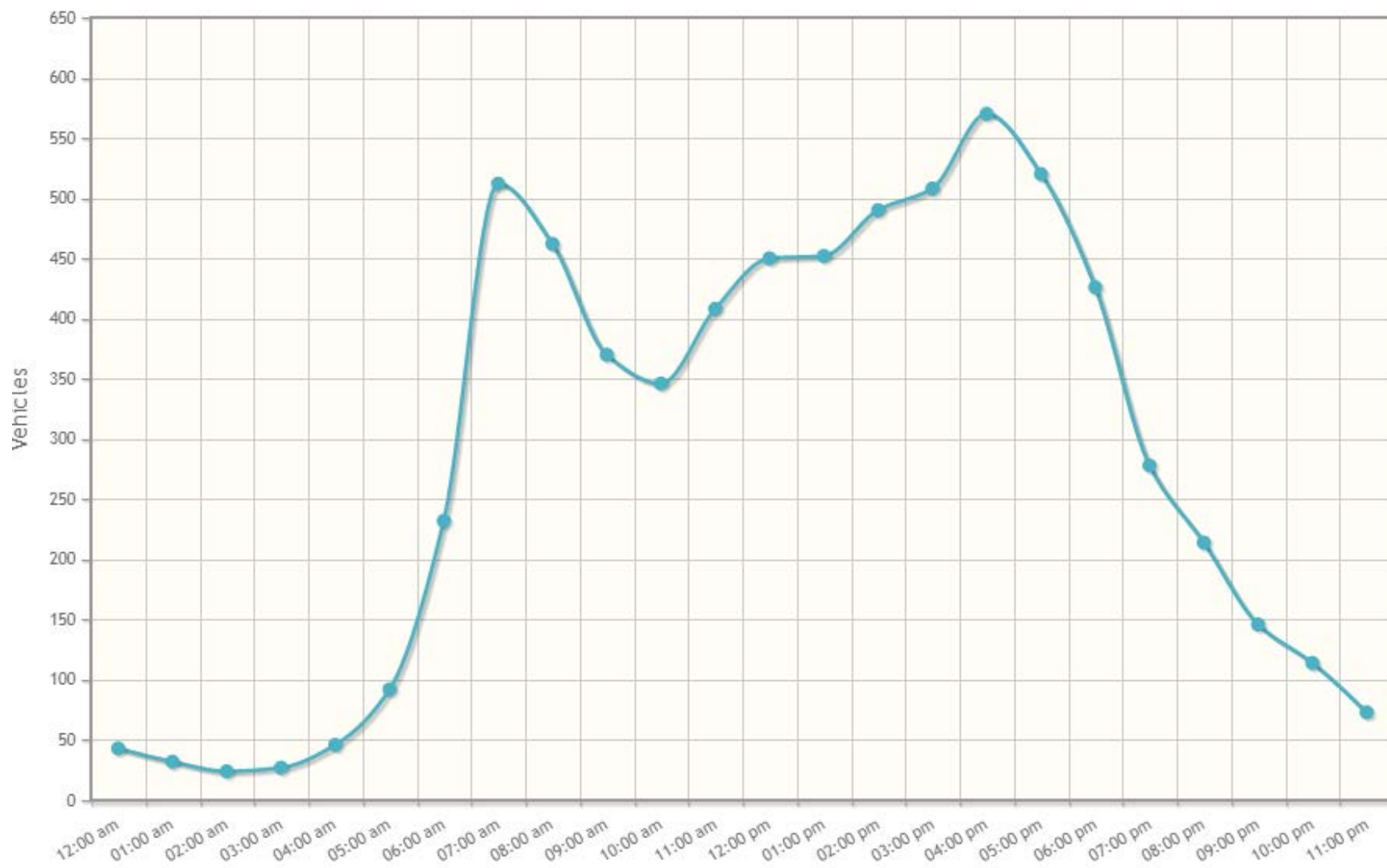
CAMP CREEK PKWY BETWEEN CENTRE PKWY AND NORTH COMMERCE DRIVE



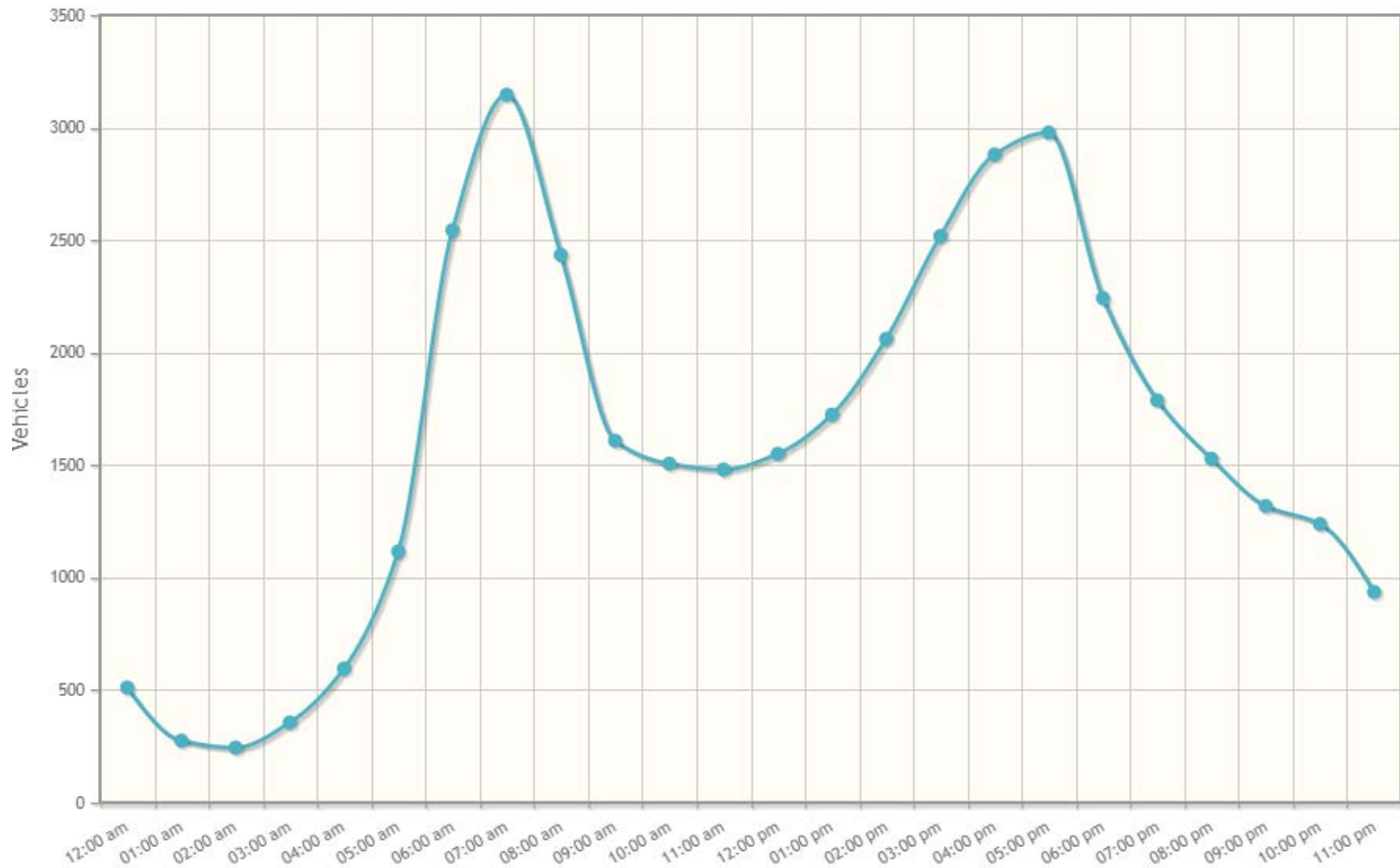
CAMP CREEK PKWY BETWEEN I-285 AND WASHINGTON ROAD



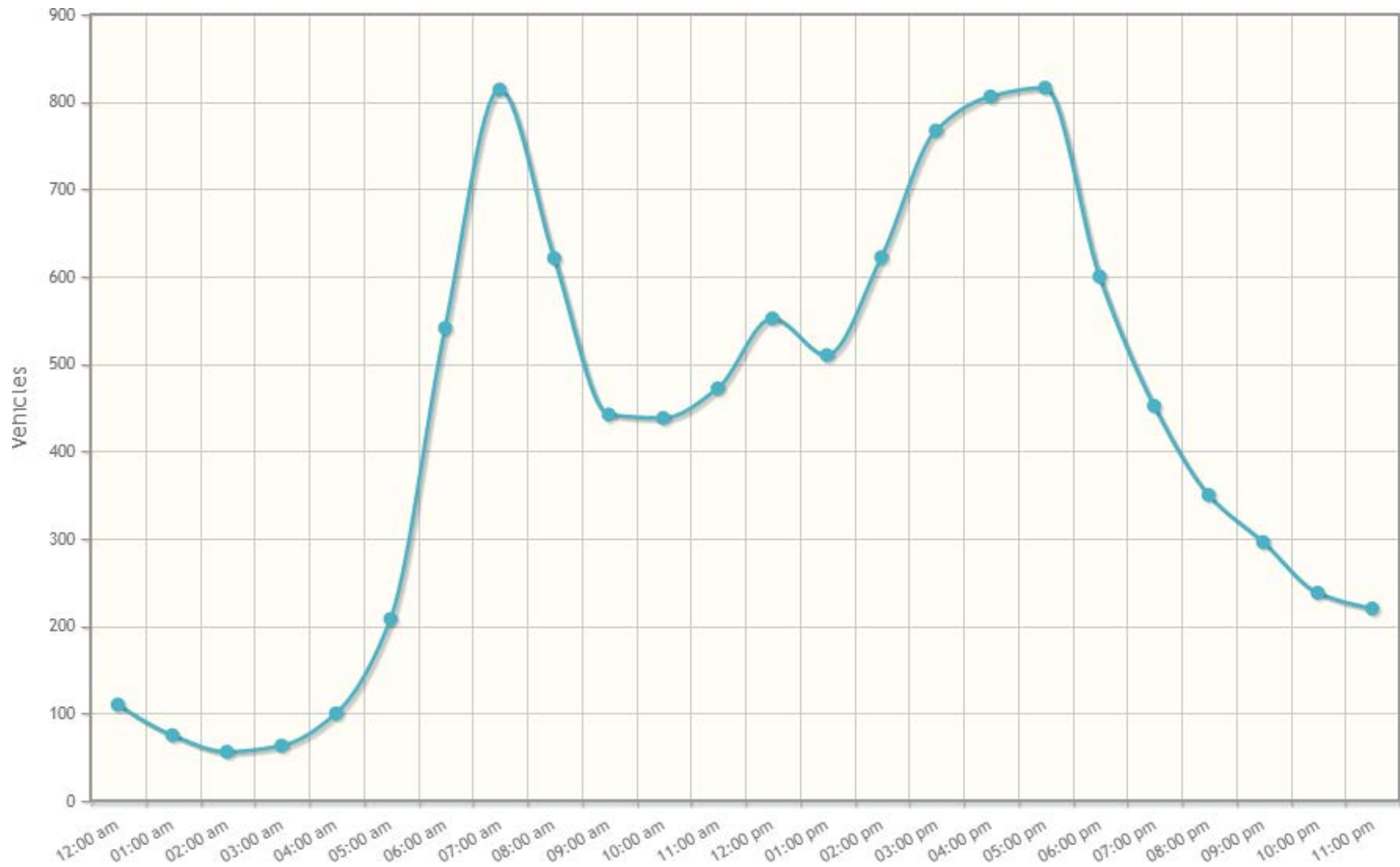
WASHINGTON ROAD SOUTH OF NORTH COMMERCE DRIVE



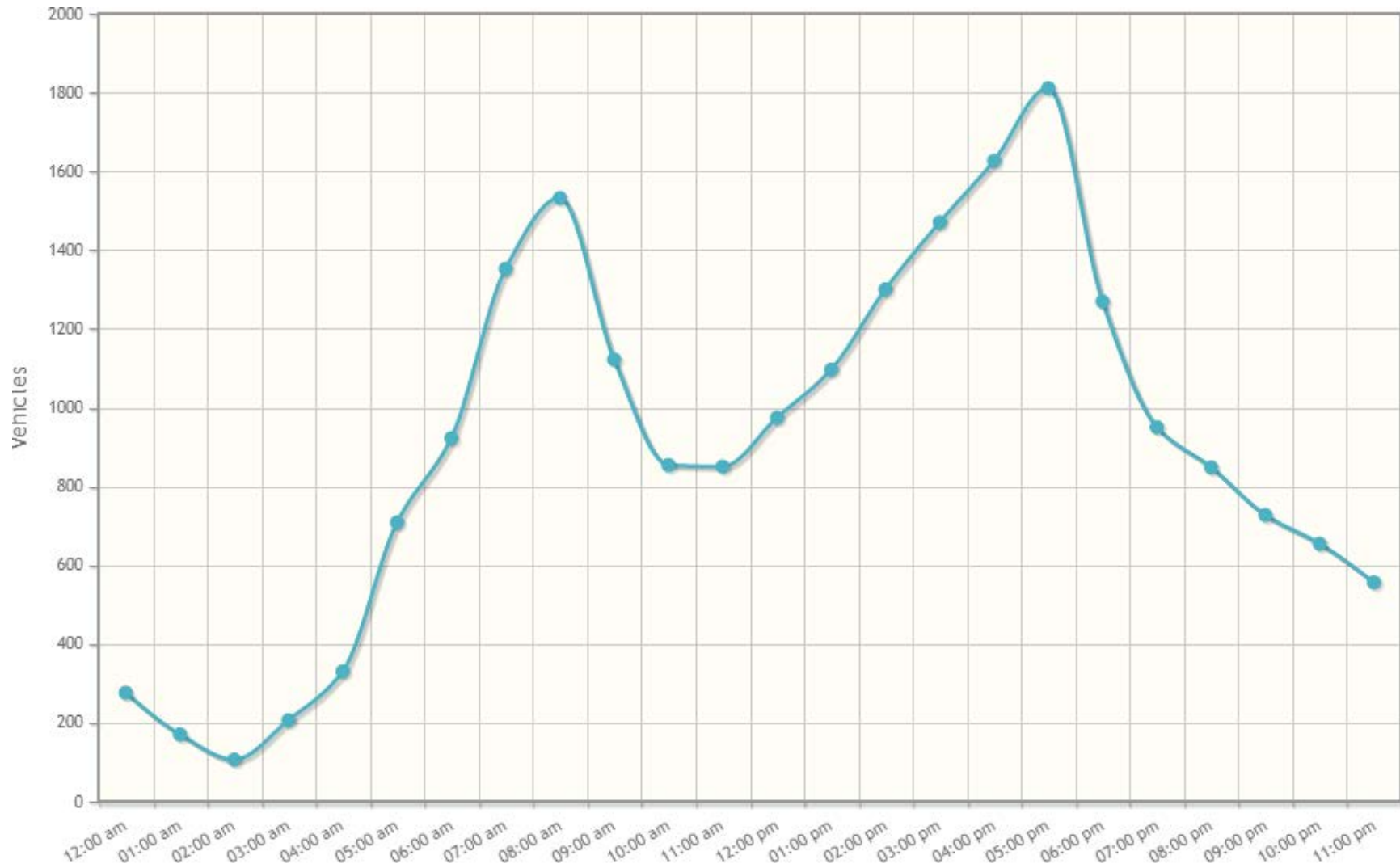
WELCOME ALL ROAD SOUTH OF BEN HILL ROAD



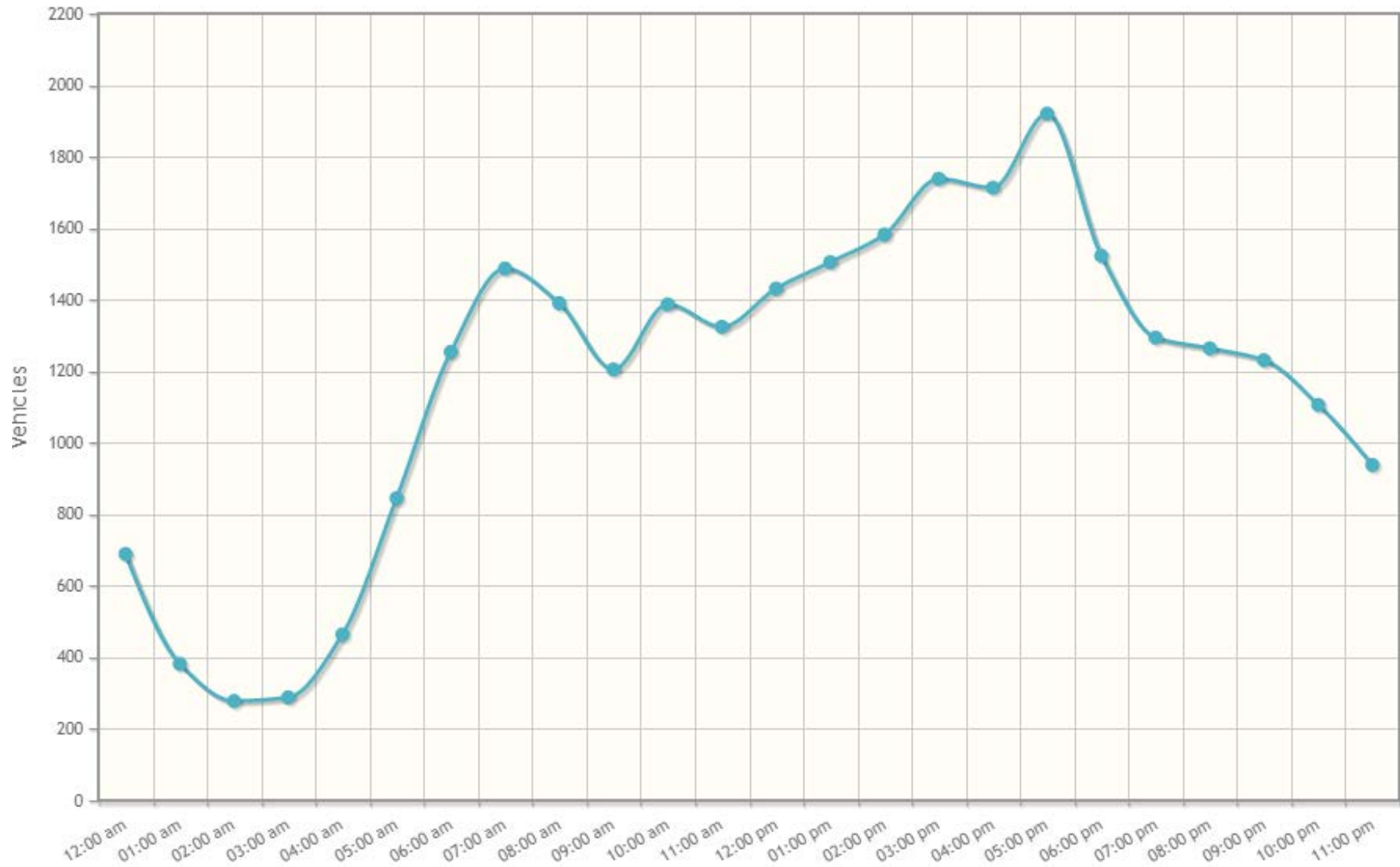
SOUTH FULTON PKWY WEST OF MAJESTIC PLACE



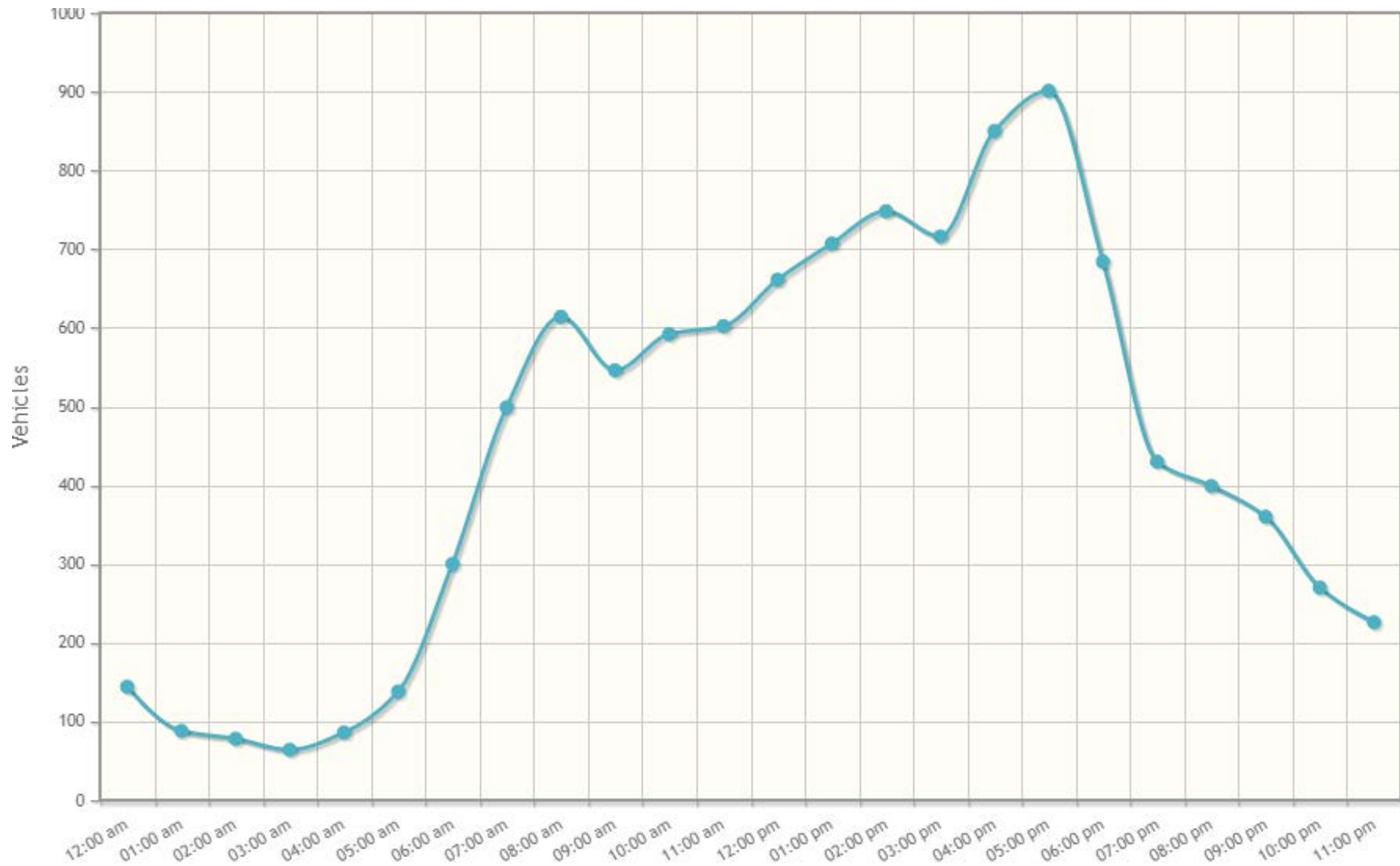
OLD NATIONAL HWY NORTH OF SULLIVAN ROAD



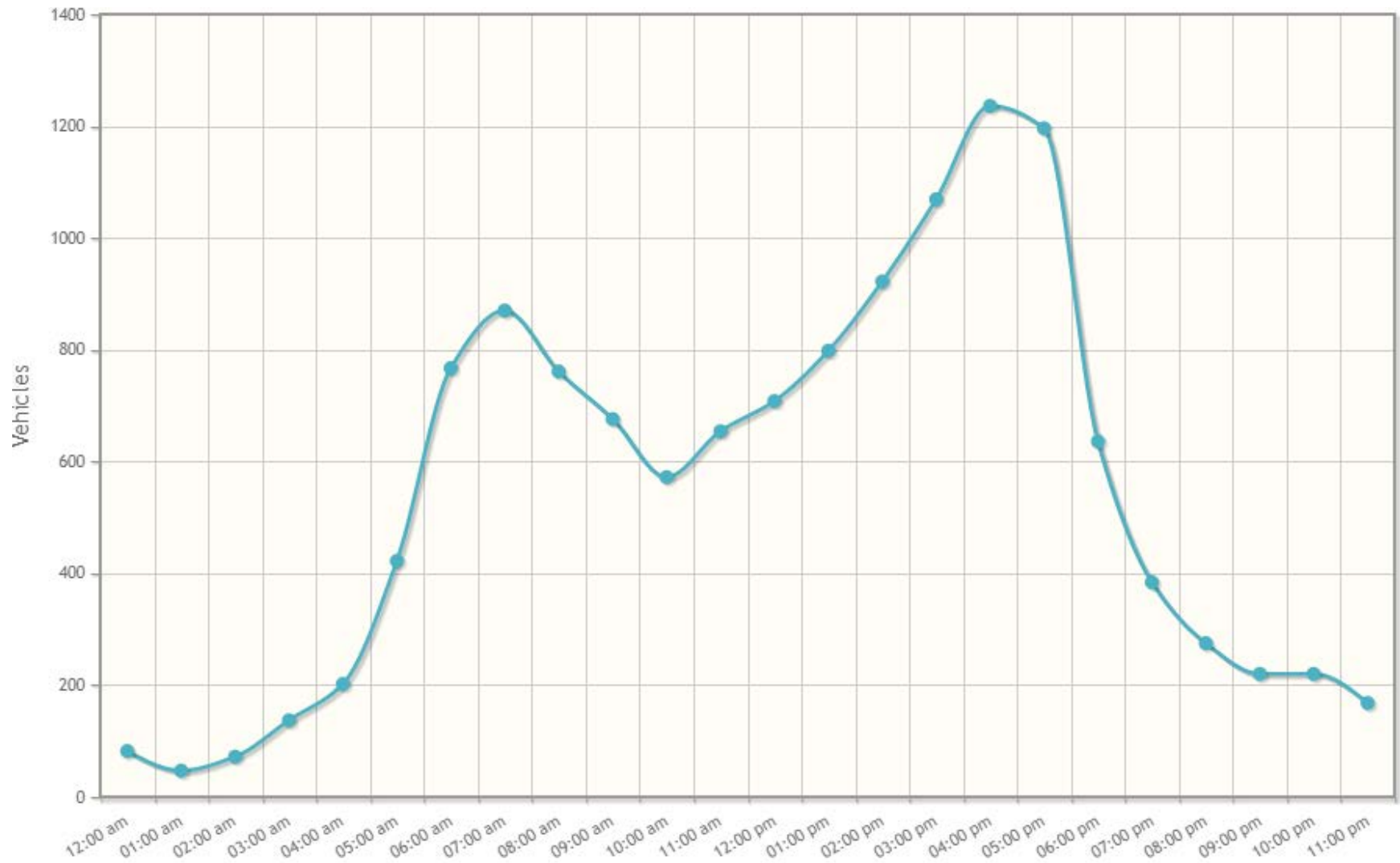
SOUTH LOOP ROAD WEST OF TOFFIE TERRACE



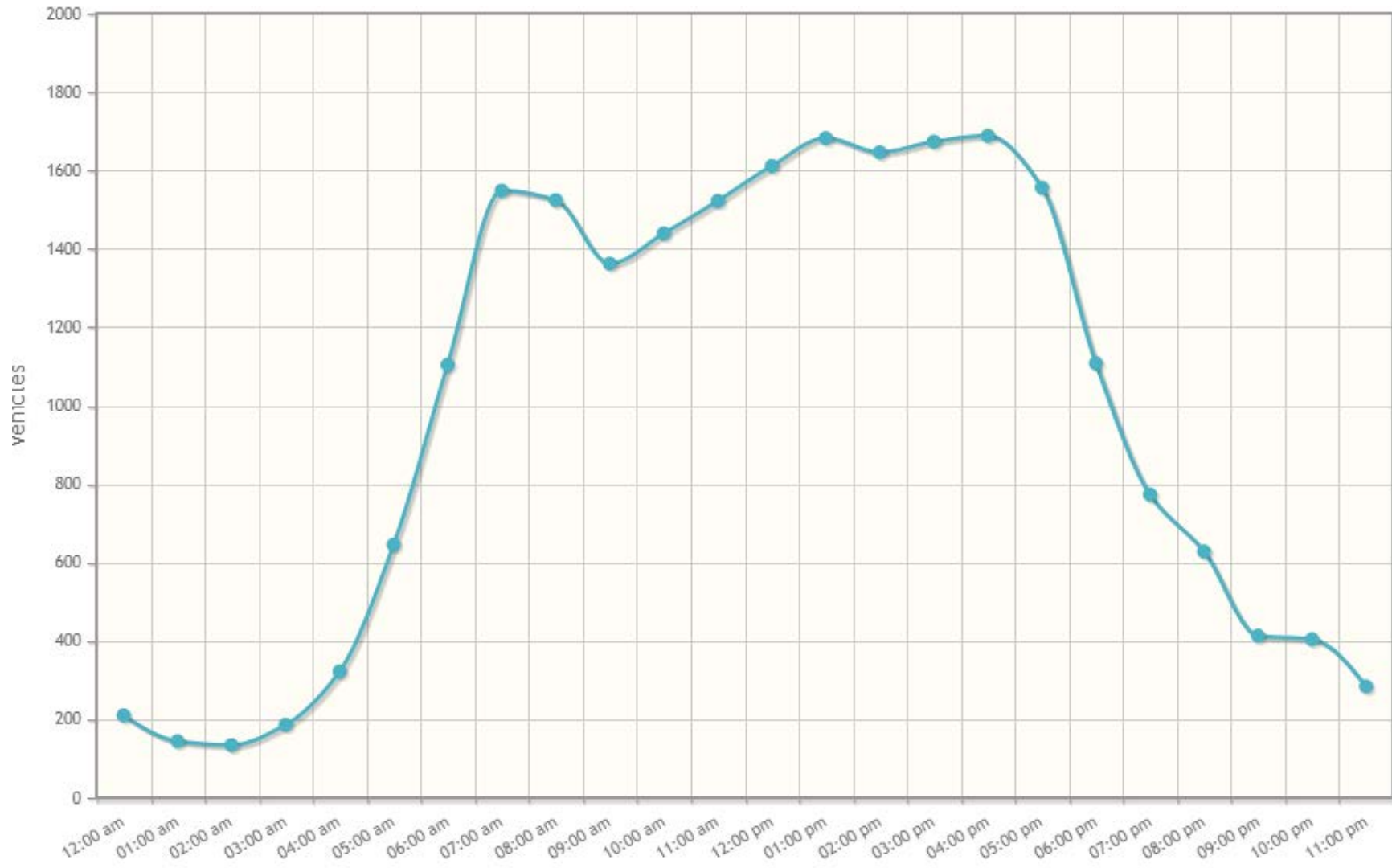
RIVERDALE ROAD NORTH OF SULLIVAN ROAD



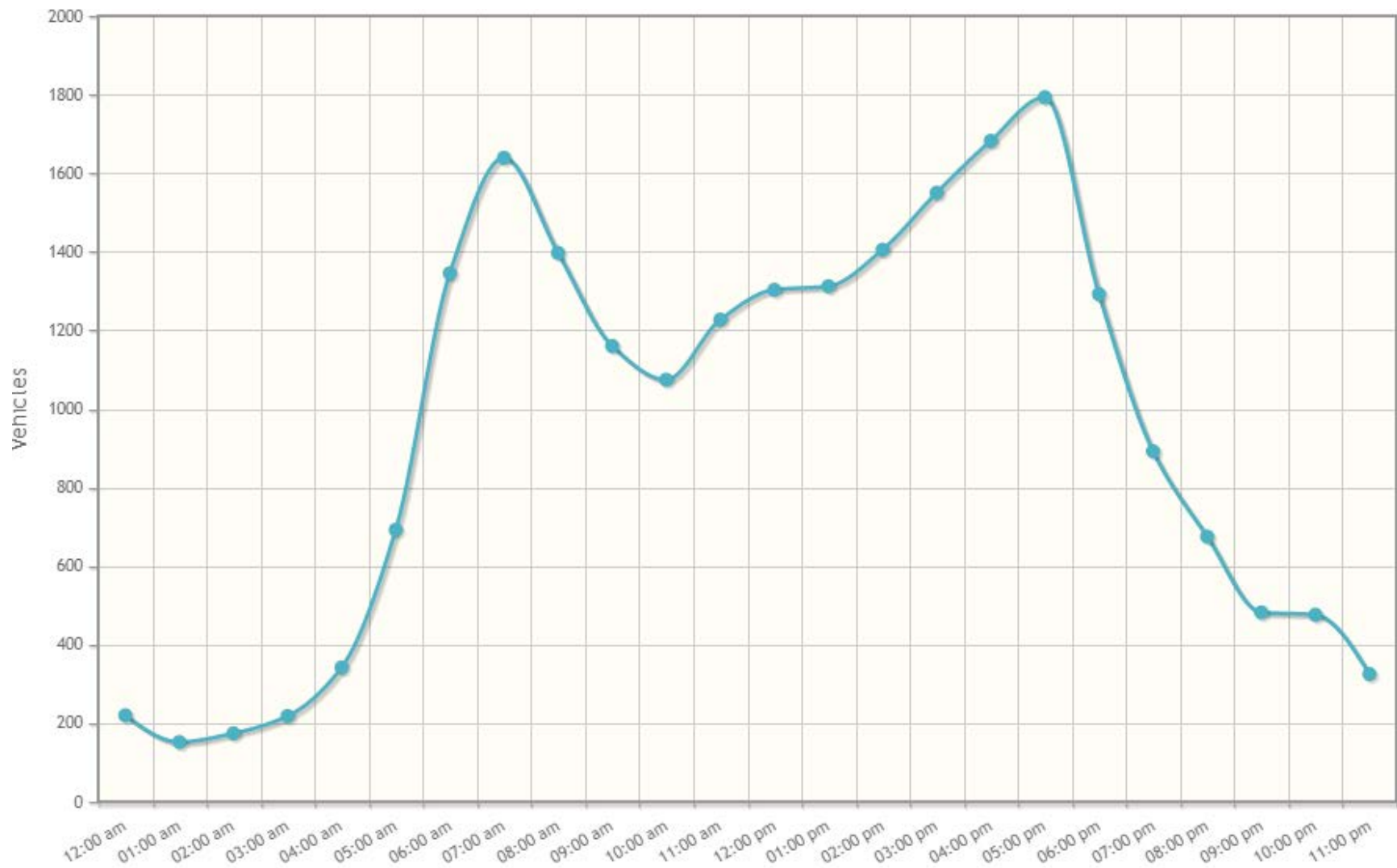
PHOENIX BLVD WEST OF RIVERDALE ROAD



CLARK HOWELL HWY SOUTH OF LAKE MIRROR ROAD



FOREST PKWY WEST OF OLD DIXIE ROAD



OLD DIXIE HWY NORTH OF FOREST PKWY

Appendix C

Raw Traffic Counts

National Data & Surveying Services

Intersection Turning Movement Count

Location: Welcome All Rd/Ben Hill Rd & Welcome All Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-001
Date: 9/12/2019

Total

NS/EW Streets:	Welcome All Rd/Ben Hill Rd				Welcome All Rd/Ben Hill Rd				Welcome All Rd				Welcome All Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	7	31	0	0	0	37	42	0	41	0	4	0	0	0	2	0	164
7:15 AM	2	29	1	0	0	28	40	0	59	0	5	0	0	0	0	0	164
7:30 AM	6	36	0	0	0	33	56	0	51	0	2	0	0	0	1	0	185
7:45 AM	13	36	0	0	0	32	60	0	58	1	4	0	0	0	1	0	205
8:00 AM	7	41	0	0	1	32	54	0	66	1	4	0	0	0	2	0	208
8:15 AM	5	26	0	0	0	38	46	0	52	1	0	0	0	0	1	0	169
8:30 AM	9	38	0	0	1	22	39	0	47	0	2	0	0	0	1	0	159
8:45 AM	5	36	0	0	1	28	40	0	37	0	5	0	0	0	0	0	152
TOTAL VOLUMES :	NL 54	NT 273	NR 1	NU 0	SL 3	ST 250	SR 377	SU 0	EL 411	ET 3	ER 26	EU 0	WL 0	WT 0	WR 8	WU 0	TOTAL 1406
APPROACH %'s :	16.46%	83.23%	0.30%	0.00%	0.48%	39.68%	59.84%	0.00%	93.41%	0.68%	5.91%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	31	139	0	0	1	135	216	0	227	3	10	0	0	0	5	0	767
PEAK HR FACTOR :	0.596	0.848	0.000	0.000	0.250	0.888	0.900	0.000	0.860	0.750	0.625	0.000	0.000	0.000	0.625	0.000	0.922
	0.867				0.957				0.845				0.625				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	8	42	0	0	1	46	48	0	71	0	9	0	0	0	1	0	226
4:15 PM	1	40	0	0	0	40	51	0	55	1	8	0	0	0	1	0	197
4:30 PM	3	48	1	0	0	41	72	0	76	0	12	0	0	0	0	0	253
4:45 PM	1	43	3	0	0	39	66	0	84	0	17	0	1	0	0	0	254
5:00 PM	1	55	0	0	1	42	62	0	54	2	9	0	0	0	2	0	228
5:15 PM	3	48	0	0	0	41	86	0	67	0	9	0	0	1	1	0	256
5:30 PM	4	43	0	0	0	47	97	0	72	0	11	0	0	0	3	0	277
5:45 PM	2	36	0	0	0	51	71	0	52	1	7	0	0	0	0	0	220
TOTAL VOLUMES :	NL 23	NT 355	NR 4	NU 0	SL 2	ST 347	SR 553	SU 0	EL 531	ET 4	ER 82	EU 0	WL 1	WT 1	WR 8	WU 0	TOTAL 1911
APPROACH %'s :	6.02%	92.93%	1.05%	0.00%	0.22%	38.47%	61.31%	0.00%	86.06%	0.65%	13.29%	0.00%	10.00%	10.00%	80.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	9	189	3	0	1	169	311	0	277	2	46	0	1	1	6	0	1015
PEAK HR FACTOR :	0.563	0.859	0.250	0.000	0.250	0.899	0.802	0.000	0.824	0.250	0.676	0.000	0.250	0.250	0.500	0.000	0.916
	0.897				0.835				0.804				0.667				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Welcome All Rd/Ben Hill Rd & Welcome All Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-001
Date: 9/12/2019

Cars

NS/EW Streets:	Welcome All Rd/Ben Hill Rd				Welcome All Rd/Ben Hill Rd				Welcome All Rd				Welcome All Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	6	29	0	0	0	34	41	0	38	0	4	0	0	0	1	0	153
7:15 AM	2	27	1	0	0	26	39	0	57	0	4	0	0	0	0	0	156
7:30 AM	5	30	0	0	0	33	55	0	47	0	2	0	0	0	1	0	173
7:45 AM	13	34	0	0	0	29	57	0	56	1	2	0	0	0	1	0	193
8:00 AM	7	36	0	0	1	29	51	0	62	1	4	0	0	0	2	0	193
8:15 AM	5	20	0	0	0	34	42	0	49	1	0	0	0	0	1	0	152
8:30 AM	8	34	0	0	1	21	37	0	40	0	2	0	0	0	1	0	144
8:45 AM	4	29	0	0	1	23	38	0	35	0	4	0	0	0	0	0	134
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	50	239	1	0	3	229	360	0	384	3	22	0	0	0	7	0	1298
	17.24%	82.41%	0.34%	0.00%	0.51%	38.68%	60.81%	0.00%	93.89%	0.73%	5.38%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	30	120	0	0	1	125	205	0	214	3	8	0	0	0	5	0	711
PEAK HR FACTOR :	0.58	0.833	0.000	0.000	0.250	0.919	0.899	0.000	0.863	0.750	0.500	0.000	0.000	0.000	0.625	0.000	0.921
	0.798				0.940				0.840				0.625				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	6	39	0	0	1	40	41	0	68	0	8	0	0	0	1	0	204
4:15 PM	1	34	0	0	0	38	43	0	51	1	6	0	0	0	1	0	175
4:30 PM	1	42	1	0	0	37	66	0	71	0	8	0	0	0	0	0	226
4:45 PM	1	39	2	0	0	34	61	0	76	0	17	0	1	0	0	0	231
5:00 PM	0	53	0	0	1	40	61	0	50	2	9	0	0	0	2	0	218
5:15 PM	3	45	0	0	0	40	82	0	61	0	9	0	0	1	1	0	242
5:30 PM	1	41	0	0	0	45	92	0	70	0	10	0	0	0	2	0	261
5:45 PM	2	33	0	0	0	49	68	0	51	1	6	0	0	0	0	0	210
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	15	326	3	0	2	323	514	0	498	4	73	0	1	1	7	0	1767
	4.36%	94.77%	0.87%	0.00%	0.24%	38.50%	61.26%	0.00%	86.61%	0.70%	12.70%	0.00%	11.11%	11.11%	77.78%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	5	178	2	0	1	159	296	0	257	2	45	0	1	1	5	0	952
PEAK HR FACTOR :	0.42	0.840	0.250	0.000	0.250	0.883	0.804	0.000	0.845	0.250	0.662	0.000	0.250	0.250	0.625	0.000	0.912
	0.873				0.832				0.817				0.875				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Welcome All Rd/Ben Hill Rd & Welcome All Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-001
Date: 9/12/2019

HT

NS/EW Streets:	Welcome All Rd/Ben Hill Rd				Welcome All Rd/Ben Hill Rd				Welcome All Rd				Welcome All Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	1	2	0	0	0	3	1	0	3	0	0	0	0	0	1	0	11
7:15 AM	0	2	0	0	0	2	1	0	2	0	1	0	0	0	0	0	8
7:30 AM	1	6	0	0	0	0	1	0	4	0	0	0	0	0	0	0	12
7:45 AM	0	2	0	0	0	3	3	0	2	0	2	0	0	0	0	0	12
8:00 AM	0	5	0	0	0	3	3	0	4	0	0	0	0	0	0	0	15
8:15 AM	0	6	0	0	0	4	4	0	3	0	0	0	0	0	0	0	17
8:30 AM	1	4	0	0	0	1	2	0	7	0	0	0	0	0	0	0	15
8:45 AM	1	7	0	0	0	5	2	0	2	0	1	0	0	0	0	0	18
TOTAL VOLUMES :	NL 4	NT 34	NR 0	NU 0	SL 0	ST 21	SR 17	SU 0	EL 27	ET 0	ER 4	EU 0	WL 0	WT 0	WR 1	WU 0	TOTAL 108
APPROACH %'s :	10.53%	89.47%	0.00%	0.00%	0.00%	55.26%	44.74%	0.00%	87.10%	0.00%	12.90%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	19	0	0	0	10	11	0	13	0	2	0	0	0	0	0	56
PEAK HR FACTOR :	0.250	0.792	0.000	0.000	0.000	0.625	0.688	0.000	0.813	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.824
	0.714				0.656				0.938								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	2	3	0	0	0	6	7	0	3	0	1	0	0	0	0	0	22
4:15 PM	0	6	0	0	0	2	8	0	4	0	2	0	0	0	0	0	22
4:30 PM	2	6	0	0	0	4	6	0	5	0	4	0	0	0	0	0	27
4:45 PM	0	4	1	0	0	5	5	0	8	0	0	0	0	0	0	0	23
5:00 PM	1	2	0	0	0	2	1	0	4	0	0	0	0	0	0	0	10
5:15 PM	0	3	0	0	0	1	4	0	6	0	0	0	0	0	0	0	14
5:30 PM	3	2	0	0	0	2	5	0	2	0	1	0	0	0	1	0	16
5:45 PM	0	3	0	0	0	2	3	0	1	0	1	0	0	0	0	0	10
TOTAL VOLUMES :	NL 8	NT 29	NR 1	NU 0	SL 0	ST 24	SR 39	SU 0	EL 33	ET 0	ER 9	EU 0	WL 0	WT 0	WR 1	WU 0	TOTAL 144
APPROACH %'s :	21.05%	76.32%	2.63%	0.00%	0.00%	38.10%	61.90%	0.00%	78.57%	0.00%	21.43%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	4	11	1	0	0	10	15	0	20	0	1	0	0	0	1	0	63
PEAK HR FACTOR :	0.33	0.688	0.250	0.000	0.000	0.500	0.750	0.000	0.625	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.685
	0.800				0.625				0.656				0.250				

Location: Welcome All Rd/Ben Hill Rd & Welcome All Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-001
Date: 9/12/2019

Bikes

NS/EW Streets:		Welcome All Rd/Ben Hill Rd				Welcome All Rd/Ben Hill Rd				Welcome All Rd				Welcome All Rd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES: APPROACH %'s :		NL 0 0.00%	NT 1 100.00%	NR 0 0.00%	NU 0 0.00%	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 1
PEAK HR : PEAK HR VOL : PEAK HR FACTOR :		07:30 AM - 08:30 AM				0 0.000 0.000				0 0.000 0.000				0 0.000 0.000				TOTAL 1 0.250

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1.5 EL	0.5 ET	1 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES: APPROACH %'s :		NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 0
PEAK HR : PEAK HR VOL : PEAK HR FACTOR :		04:45 PM - 05:45 PM				0 0.000 0.000				0 0.000 0.000				0 0.000 0.000				TOTAL 0

National Data & Surveying Services

Location: Welcome All Rd/Ben Hill Rd & Welcome All Rd
City: Atlanta

Project ID: 19-09596-001
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Welcome All Rd/Ben Hill Rd		Welcome All Rd/Ben Hill Rd		Welcome All Rd		Welcome All Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

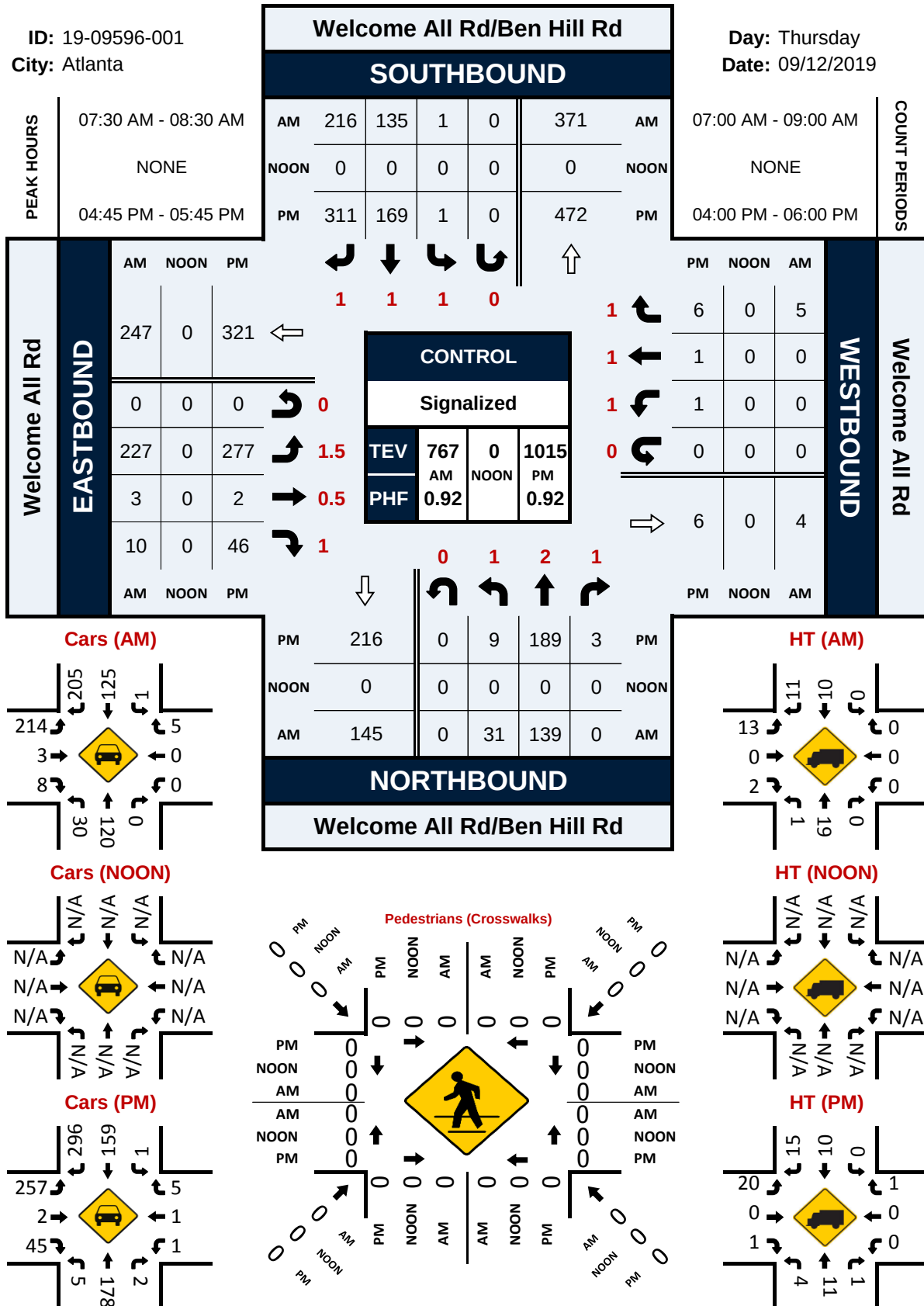
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 0
PEAK HR :	04:45 PM - 05:45 PM		0	0	0	0	0	0	TOTAL 0
PEAK HR VOL :	0	0							
PEAK HR FACTOR :									

Welcome All Rd/Ben Hill Rd & Welcome All Rd

Peak Hour Turning Movement Count

ID: 19-09596-001
City: Atlanta

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: S Outer Loop Rd & Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd
City: Atlanta
Control: Signalized

Project ID: 19-09596-002
Date: 9/12/2019

Total

NS/EW Streets:	S Outer Loop Rd				S Outer Loop Rd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2	2	1	0	2	1	1	0	1	3	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	91	51	44	2	75	16	37	0	42	84	31	0	14	170	129	0	786
7:15 AM	67	53	32	1	70	14	42	0	47	70	40	2	9	173	132	0	752
7:30 AM	71	58	42	1	59	26	39	0	42	79	32	2	12	162	143	0	768
7:45 AM	95	78	40	2	66	22	28	0	44	74	32	1	22	152	164	0	820
8:00 AM	70	85	27	1	53	20	33	1	33	67	31	1	37	146	139	0	744
8:15 AM	60	75	38	0	56	10	49	0	42	55	36	1	32	144	166	0	764
8:30 AM	61	44	18	1	57	12	46	0	56	54	34	1	27	115	162	0	688
8:45 AM	50	48	21	3	50	20	34	0	50	55	32	1	30	112	148	1	655
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	565	492	262	11	486	140	308	1	356	538	268	9	183	1174	1183	1	5977
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	324	240	158	6	270	78	146	0	175	307	135	5	57	657	568	0	3126
PEAK HR FACTOR :	0.853	0.769	0.898	0.750	0.900	0.750	0.869	0.000	0.931	0.914	0.844	0.625	0.648	0.949	0.866	0.000	0.953
	0.847				0.965				0.978				0.948				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2	2	1	0	2	1	1	0	1	3	1	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	42	18	20	2	135	40	50	1	72	300	150	0	44	127	64	0	1065
4:15 PM	33	27	33	2	144	33	53	1	69	213	140	0	50	135	65	0	998
4:30 PM	37	29	32	1	138	32	32	0	69	200	128	2	68	126	76	0	970
4:45 PM	36	20	25	1	155	54	45	0	67	171	109	0	43	98	88	0	912
5:00 PM	28	14	48	1	196	54	48	1	66	170	86	0	56	129	83	0	980
5:15 PM	41	23	31	1	182	49	31	0	75	179	91	1	42	108	75	0	929
5:30 PM	41	22	29	0	118	51	43	1	57	182	87	3	43	133	78	0	888
5:45 PM	46	24	33	3	148	42	35	1	74	152	96	0	62	107	75	0	898
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	304	177	251	11	1216	355	337	5	549	1567	887	6	408	963	604	0	7640
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	148	94	110	6	572	159	180	2	277	884	527	2	205	486	293	0	3945
PEAK HR FACTOR :	0.881	0.810	0.833	0.750	0.923	0.736	0.849	0.500	0.962	0.737	0.878	0.250	0.754	0.900	0.832	0.000	0.926
	0.904				0.899				0.809				0.911				

National Data & Surveying Services

Intersection Turning Movement Count

Location: S Outer Loop Rd & Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd
City: Atlanta
Control: Signalized

Project ID: 19-09596-002
Date: 9/12/2019

Cars

NS/EW Streets:	S Outer Loop Rd				S Outer Loop Rd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	2 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	1 EL	3 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	87	50	32	2	62	16	28	0	30	81	28	0	12	166	125	0	719
7:15 AM	62	51	29	1	67	14	30	0	32	65	33	2	6	169	127	0	688
7:30 AM	66	56	39	1	55	21	32	0	31	74	27	2	7	156	137	0	704
7:45 AM	90	72	35	2	64	20	23	0	31	64	25	1	14	142	160	0	743
8:00 AM	64	81	20	1	52	15	25	1	23	60	24	1	23	137	132	0	659
8:15 AM	54	70	29	0	52	9	43	0	25	50	26	1	20	139	161	0	679
8:30 AM	57	42	13	1	52	11	37	0	39	49	30	1	18	109	158	0	617
8:45 AM	42	46	16	2	49	16	25	0	37	52	25	1	23	109	141	1	585
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	522	468	213	10	453	122	243	1	248	495	218	9	123	1127	1141	1	5394
	43.03%	38.58%	17.56%	0.82%	55.31%	14.90%	29.67%	0.12%	25.57%	51.03%	22.47%	0.93%	5.14%	47.12%	47.70%	0.04%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	305	229	135	6	248	71	113	0	124	284	113	5	39	633	549	0	2854
PEAK HR FACTOR :	0.85	0.795	0.865	0.750	0.925	0.845	0.883	0.000	0.969	0.877	0.856	0.625	0.696	0.936	0.858	0.000	0.960
	0.848				0.973				0.946				0.966				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	2 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	1 EL	3 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	38	18	15	2	129	36	38	1	57	291	147	0	38	122	58	0	990
4:15 PM	29	25	24	2	143	32	43	1	53	206	134	0	43	127	60	0	922
4:30 PM	32	26	23	1	135	28	25	0	55	194	122	2	58	116	73	0	890
4:45 PM	33	18	20	1	152	52	31	0	53	167	98	0	40	91	80	0	836
5:00 PM	25	11	37	1	191	52	39	1	53	164	78	0	51	121	80	0	904
5:15 PM	34	21	25	1	179	46	27	0	59	174	78	1	38	104	67	0	854
5:30 PM	35	18	24	0	115	50	36	1	51	176	82	3	39	125	75	0	830
5:45 PM	38	20	26	3	146	37	31	1	66	144	87	0	54	98	72	0	823
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	264	157	194	11	1190	333	270	5	447	1516	826	6	361	904	565	0	7049
	42.17%	25.08%	30.99%	1.76%	66.18%	18.52%	15.02%	0.28%	15.99%	54.24%	29.55%	0.21%	19.73%	49.40%	30.87%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	132	87	82	6	559	148	137	2	218	858	501	2	179	456	271	0	3638
PEAK HR FACTOR :	0.87	0.837	0.854	0.750	0.919	0.712	0.797	0.500	0.956	0.737	0.852	0.250	0.772	0.898	0.847	0.000	0.919
	0.936				0.900				0.797				0.917				

National Data & Surveying Services

Intersection Turning Movement Count

Location: S Outer Loop Rd & Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd
City: Atlanta
Control: Signalized

Project ID: 19-09596-002
Date: 9/12/2019

HT

NS/EW Streets:	S Outer Loop Rd				S Outer Loop Rd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	2 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	1 EL	3 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	4	1	12	0	13	0	9	0	12	3	3	0	2	4	4	0	67
7:15 AM	5	2	3	0	3	0	12	0	15	5	7	0	3	4	5	0	64
7:30 AM	5	2	3	0	4	5	7	0	11	5	5	0	5	6	6	0	64
7:45 AM	5	6	5	0	2	2	5	0	13	10	7	0	8	10	4	0	77
8:00 AM	6	4	7	0	1	5	8	0	10	7	7	0	14	9	7	0	85
8:15 AM	6	5	9	0	4	1	6	0	17	5	10	0	12	5	5	0	85
8:30 AM	4	2	5	0	5	1	9	0	17	5	4	0	9	6	4	0	71
8:45 AM	8	2	5	1	1	4	9	0	13	3	7	0	7	3	7	0	70
TOTAL VOLUMES :	NL 43	NT 24	NR 49	NU 1	SL 33	ST 18	SR 65	SU 0	EL 108	ET 43	ER 50	EU 0	WL 60	WT 47	WR 42	WU 0	TOTAL 583
APPROACH %'s :	36.75%	20.51%	41.88%	0.85%	28.45%	15.52%	56.03%	0.00%	53.73%	21.39%	24.88%	0.00%	40.27%	31.54%	28.19%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	19	11	23	0	22	7	33	0	51	23	22	0	18	24	19	0	272
PEAK HR FACTOR :	0.950	0.458	0.479	0.000	0.423	0.350	0.688	0.000	0.850	0.575	0.786	0.000	0.563	0.600	0.792	0.000	0.883
	0.779				0.705				0.800				0.693				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	2 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	1 EL	3 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	4	0	5	0	6	4	12	0	15	9	3	0	6	5	6	0	75
4:15 PM	4	2	9	0	1	1	10	0	16	7	6	0	7	8	5	0	76
4:30 PM	5	3	9	0	3	4	7	0	14	6	6	0	10	10	3	0	80
4:45 PM	3	2	5	0	3	2	14	0	14	4	11	0	3	7	8	0	76
5:00 PM	3	3	11	0	5	2	9	0	13	6	8	0	5	8	3	0	76
5:15 PM	7	2	6	0	3	3	4	0	16	5	13	0	4	4	8	0	75
5:30 PM	6	4	5	0	3	1	7	0	6	6	5	0	4	8	3	0	58
5:45 PM	8	4	7	0	2	5	4	0	8	8	9	0	8	9	3	0	75
TOTAL VOLUMES :	NL 40	NT 20	NR 57	NU 0	SL 26	ST 22	SR 67	SU 0	EL 102	ET 51	ER 61	EU 0	WL 47	WT 59	WR 39	WU 0	TOTAL 591
APPROACH %'s :	34.19%	17.09%	48.72%	0.00%	22.61%	19.13%	58.26%	0.00%	47.66%	23.83%	28.50%	0.00%	32.41%	40.69%	26.90%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	16	7	28	0	13	11	43	0	59	26	26	0	26	30	22	0	307
PEAK HR FACTOR :	0.80	0.583	0.778	0.000	0.542	0.688	0.768	0.000	0.922	0.722	0.591	0.000	0.650	0.750	0.688	0.000	0.959
	0.750				0.761				0.957				0.848				

Location: S Outer Loop Rd & Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd
City: Atlanta
Control: Signalized

Project ID: 19-09596-002
Date: 9/12/2019

Bikes

NS/EW Streets:		S Outer Loop Rd				S Outer Loop Rd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		2 NL	2 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	1 EL	3 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :		NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 0
PEAK HR :		07:00 AM - 08:00 AM																TOTAL 0
PEAK HR VOL :		0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	
PEAK HR FACTOR :																		
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
		2 NL	2 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	1 EL	3 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	TOTAL
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :		NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 0
PEAK HR :		04:00 PM - 05:00 PM																TOTAL 0
PEAK HR VOL :		0 0.00	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000	
PEAK HR FACTOR :																		

National Data & Surveying Services

Location: S Outer Loop Rd & Charles W Grant Pkwy/Maynard H. Jackson Jr Bk
City: Atlanta

Project ID: 19-09596-002
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	S Outer Loop Rd	S Outer Loop Rd	Charles W Grant Pkwy/Maynard H. Jackson	Charles W Grant Pkwy/Maynard H. Jackson	
AM	NORTH LEG		EAST LEG		TOTAL
	EB	WB	EB	WB	
7:00 AM	0	0	0	0	1
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	1	0	1
8:45 AM	0	0	0	0	0
	EB	WB	EB	WB	
TOTAL VOLUMES :	0	0	2	1	3
APPROACH %'s :			66.67%	33.33%	
PEAK HR :	07:00 AM - 08:00 AM				TOTAL
PEAK HR VOL :	0	0	0	0	1
PEAK HR FACTOR :			0.250		0.250

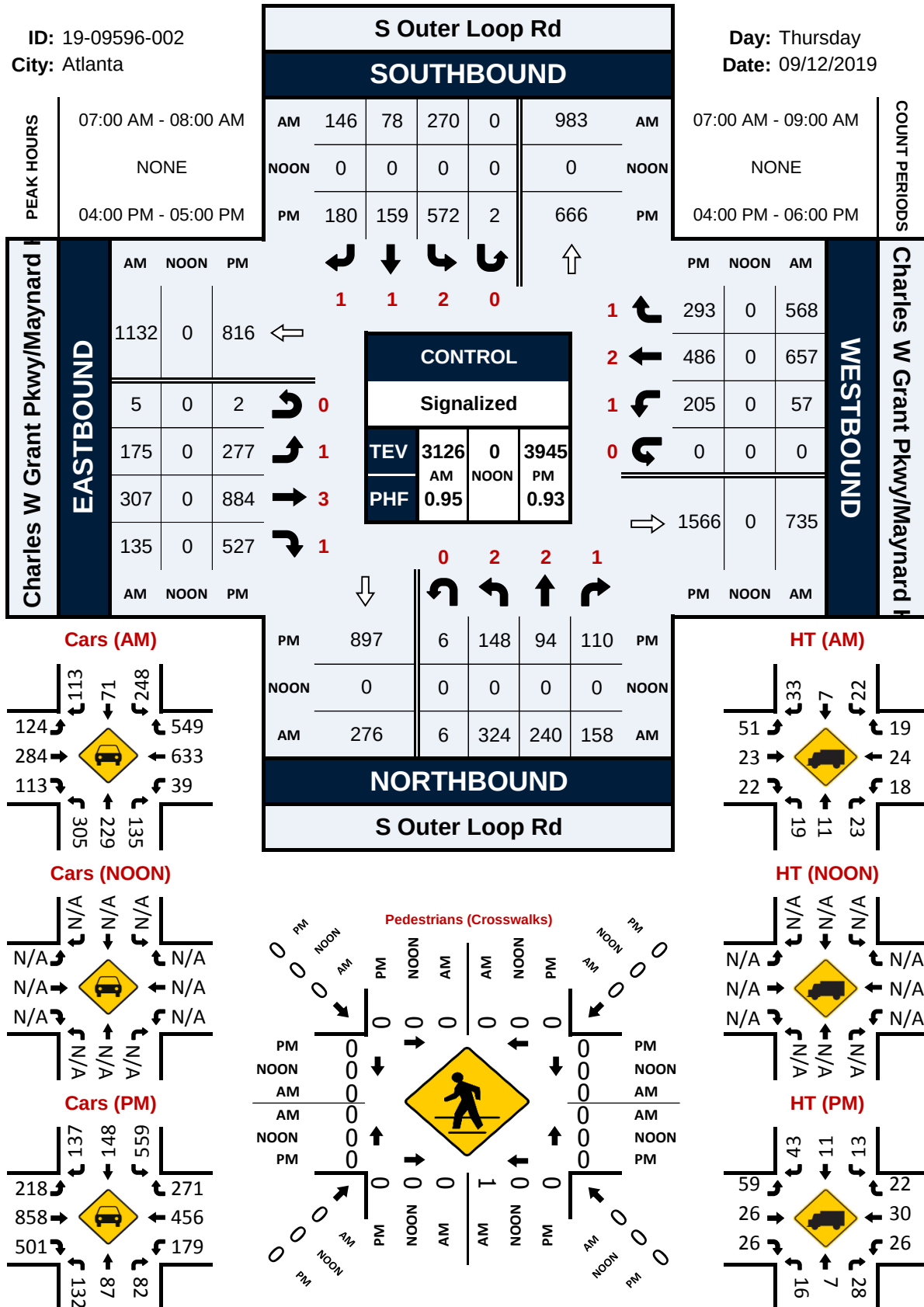
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 0
PEAK HR :	04:00 PM - 05:00 PM		0	0	0	0	0	0	TOTAL 0
PEAK HR VOL :	0	0							
PEAK HR FACTOR :									

S Outer Loop Rd & Charles W Grant Pkwy/Maynard H. Jackson Jr Blvd

Peak Hour Turning Movement Count

ID: 19-09596-002
City: Atlanta

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Washington Rd & N Commerce Dr/Adrians Auto Hand Wash
City: Atlanta
Control: Signalized

Project ID: 19-09596-003
Date: 9/12/2019

Total

NS/EW Streets:	Washington Rd				Washington Rd				N Commerce Dr/Adrians Auto Hand Wash				N Commerce Dr/Adrians Auto Hand Wash			
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU
7:00 AM	31	116	1	0	0	53	62	0	12	0	12	0	1	0	0	0
7:15 AM	19	111	1	0	0	77	84	0	17	1	18	0	1	0	0	0
7:30 AM	42	106	0	0	3	82	101	0	26	0	15	0	0	0	1	0
7:45 AM	40	112	0	0	2	83	123	0	26	1	25	0	1	1	0	0
8:00 AM	32	109	0	0	0	81	94	0	17	0	20	0	0	1	0	0
8:15 AM	29	85	2	0	0	69	108	0	9	0	15	0	0	0	0	0
8:30 AM	38	72	0	0	2	109	79	0	21	0	23	0	0	0	0	0
8:45 AM	34	55	0	0	1	107	70	0	15	0	27	0	3	0	1	0
TOTAL VOLUMES:	NL 265	NT 766	NR 4	NU 0	SL 8	ST 661	SR 721	SU 0	EL 143	ET 2	ER 155	EU 0	WL 6	WT 2	WR 2	WU 0
APPROACH %'s:	25.60%	74.01%	0.39%	0.00%	0.58%	47.55%	51.87%	0.00%	47.67%	0.67%	51.67%	0.00%	60.00%	20.00%	20.00%	0.00%
PEAK HR:	07:15 AM - 08:15 AM															
PEAK HR VOL:	133	438	1	0	5	323	402	0	86	2	78	0	2	2	1	0
PEAK HR FACTOR:	0.792	0.978	0.250	0.000	0.417	0.973	0.817	0.000	0.827	0.500	0.780	0.000	0.500	0.500	0.250	0.000
	0.941				0.877				0.798				0.625			
TOTAL																
288																
329																
376																
414																
354																
317																
344																
313																
2735																
1473																
0.889																
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU
4:00 PM	37	85	0	0	2	113	68	0	101	4	53	0	1	1	1	0
4:15 PM	33	87	1	0	4	138	62	0	85	1	44	0	1	0	2	0
4:30 PM	30	115	5	0	2	106	46	0	56	1	46	0	0	1	0	0
4:45 PM	27	78	0	0	4	129	49	0	66	0	45	0	3	0	1	0
5:00 PM	30	89	3	0	2	147	44	0	106	0	60	0	1	0	2	0
5:15 PM	29	86	0	0	7	157	63	0	93	1	58	0	1	0	2	0
5:30 PM	47	108	0	0	4	123	67	0	87	2	55	0	3	1	4	0
5:45 PM	32	109	0	0	1	115	69	0	104	5	58	0	0	0	1	0
TOTAL VOLUMES:	NL 265	NT 757	NR 9	NU 0	SL 26	ST 1028	SR 468	SU 0	EL 698	ET 14	ER 419	EU 0	WL 10	WT 3	WR 13	WU 0
APPROACH %'s:	25.70%	73.42%	0.87%	0.00%	1.71%	67.54%	30.75%	0.00%	61.72%	1.24%	37.05%	0.00%	38.46%	11.54%	50.00%	0.00%
PEAK HR:	05:00 PM - 06:00 PM															
PEAK HR VOL:	138	392	3	0	14	542	243	0	390	8	231	0	5	1	9	0
PEAK HR FACTOR:	0.734	0.899	0.250	0.000	0.500	0.863	0.880	0.000	0.920	0.400	0.963	0.000	0.417	0.250	0.563	0.000
	0.860				0.880				0.942				0.469			
1976																
0.986																

National Data & Surveying Services

Intersection Turning Movement Count

Location: Washington Rd & N Commerce Dr/Adrians Auto Hand Wash
City: Atlanta
Control: Signalized

Project ID: 19-09596-003
Date: 9/12/2019

Cars

NS/EW Streets:	Washington Rd				Washington Rd				N Commerce Dr/Adrians Auto Hand Wash				N Commerce Dr/Adrians Auto Hand Wash			
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU
7:00 AM	30	111	1	0	0	49	53	0	8	0	10	0	1	0	0	0
7:15 AM	18	106	1	0	0	72	78	0	11	1	17	0	1	0	0	0
7:30 AM	41	101	0	0	3	74	97	0	23	0	14	0	0	0	1	0
7:45 AM	36	108	0	0	2	78	115	0	19	1	23	0	1	1	0	0
8:00 AM	31	102	0	0	0	75	86	0	11	0	17	0	0	1	0	0
8:15 AM	27	78	2	0	0	62	96	0	5	0	15	0	0	0	0	0
8:30 AM	37	64	0	0	2	104	69	0	14	0	19	0	0	0	0	0
8:45 AM	31	51	0	0	1	96	60	0	9	0	24	0	3	0	1	0
TOTAL VOLUMES:	NL 251	NT 721	NR 4	NU 0	SL 8	ST 610	SR 654	SU 0	EL 100	ET 2	ER 139	EU 0	WL 6	WT 2	WR 2	WU 0
APPROACH %'s:	25.72%	73.87%	0.41%	0.00%	0.63%	47.96%	51.42%	0.00%	41.49%	0.83%	57.68%	0.00%	60.00%	20.00%	20.00%	0.00%
PEAK HR:	07:15 AM - 08:15 AM															
PEAK HR VOL:	126	417	1	0	5	299	376	0	64	2	71	0	2	2	1	0
PEAK HR FACTOR:	0.77	0.965	0.250	0.000	0.417	0.958	0.817	0.000	0.696	0.500	0.772	0.000	0.500	0.500	0.250	0.000
	0.944				0.872				0.797				0.625			
TOTAL	1366				1366				1366				1366			
0.889	0.889				0.889				0.889				0.889			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU
4:00 PM	34	81	0	0	2	108	59	0	97	4	51	0	1	1	0	0
4:15 PM	30	81	0	0	4	132	53	0	75	1	43	0	1	0	2	0
4:30 PM	26	111	5	0	2	98	37	0	50	1	45	0	0	1	0	0
4:45 PM	26	78	0	0	3	124	40	0	55	0	43	0	3	0	1	0
5:00 PM	29	85	3	0	2	140	30	0	100	0	58	0	1	0	2	0
5:15 PM	27	82	0	0	6	150	50	0	91	1	57	0	1	0	2	0
5:30 PM	45	103	0	0	4	118	56	0	81	2	54	0	3	1	4	0
5:45 PM	30	106	0	0	1	112	57	0	93	5	58	0	0	0	1	0
TOTAL VOLUMES:	NL 247	NT 727	NR 8	NU 0	SL 24	ST 982	SR 382	SU 0	EL 642	ET 14	ER 409	EU 0	WL 10	WT 3	WR 12	WU 0
APPROACH %'s:	25.15%	74.03%	0.81%	0.00%	1.73%	70.75%	27.52%	0.00%	60.28%	1.31%	38.40%	0.00%	40.00%	12.00%	48.00%	0.00%
PEAK HR:	05:00 PM - 06:00 PM															
PEAK HR VOL:	131	376	3	0	13	520	193	0	365	8	227	0	5	1	9	0
PEAK HR FACTOR:	0.73	0.887	0.250	0.000	0.542	0.867	0.846	0.000	0.913	0.400	0.978	0.000	0.417	0.250	0.563	0.000
	0.861				0.881				0.949				0.469			
TOTAL	1851				1851				1851				1851			
0.982	0.982				0.982				0.982				0.982			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Washington Rd & N Commerce Dr/Adrians Auto Hand Wash
City: Atlanta
Control: Signalized

Project ID: 19-09596-003
Date: 9/12/2019

HT

NS/EW Streets:	Washington Rd				Washington Rd				N Commerce Dr/Adrians Auto Hand Wash				N Commerce Dr/Adrians Auto Hand Wash				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	TOTAL
7:00 AM	1	5	0	0	0	4	9	0	4	0	2	0	0	0	0	0	25
7:15 AM	1	5	0	0	0	5	6	0	6	0	1	0	0	0	0	0	24
7:30 AM	1	5	0	0	0	8	4	0	3	0	1	0	0	0	0	0	22
7:45 AM	4	4	0	0	0	5	8	0	7	0	2	0	0	0	0	0	30
8:00 AM	1	7	0	0	0	6	8	0	6	0	3	0	0	0	0	0	31
8:15 AM	2	7	0	0	0	7	12	0	4	0	0	0	0	0	0	0	32
8:30 AM	1	8	0	0	0	5	10	0	7	0	4	0	0	0	0	0	35
8:45 AM	3	4	0	0	0	11	10	0	6	0	3	0	0	0	0	0	37
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	14	45	0	0	0	51	67	0	43	0	16	0	0	0	0	0	236
	23.73%	76.27%	0.00%	0.00%	0.00%	43.22%	56.78%	0.00%	72.88%	0.00%	27.12%	0.00%					
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	7	21	0	0	0	24	26	0	22	0	7	0	0	0	0	0	107
PEAK HR FACTOR:	0.438	0.750	0.000	0.000	0.000	0.750	0.813	0.000	0.786	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.863
	0.875				0.893				0.806								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	2 NT	0 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	TOTAL
4:00 PM	3	4	0	0	0	5	9	0	4	0	2	0	0	0	1	0	28
4:15 PM	3	6	1	0	0	6	9	0	10	0	1	0	0	0	0	0	36
4:30 PM	4	4	0	0	0	8	9	0	6	0	1	0	0	0	0	0	32
4:45 PM	1	0	0	0	1	5	9	0	11	0	2	0	0	0	0	0	29
5:00 PM	1	4	0	0	0	7	14	0	6	0	2	0	0	0	0	0	34
5:15 PM	2	4	0	0	1	7	13	0	2	0	1	0	0	0	0	0	30
5:30 PM	2	5	0	0	0	5	11	0	6	0	1	0	0	0	0	0	30
5:45 PM	2	3	0	0	0	3	12	0	11	0	0	0	0	0	0	0	31
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	18	30	1	0	2	46	86	0	56	0	10	0	0	0	1	0	250
	36.73%	61.22%	2.04%	0.00%	1.49%	34.33%	64.18%	0.00%	84.85%	0.00%	15.15%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	7	16	0	0	1	22	50	0	25	0	4	0	0	0	0	0	125
PEAK HR FACTOR:	0.88	0.800	0.000	0.000	0.250	0.786	0.893	0.000	0.568	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.919
	0.821				0.869				0.659								

Location: Washington Rd & N Commerce Dr/Adrians Auto Hand Wash
City: Atlanta
Control: Signalized

Project ID: 19-09596-003
Date: 9/12/2019

Bikes

[illegible]

National Data & Surveying Services

Location: Washington Rd & N Commerce Dr/Adrians Auto Hand Wash
City: Atlanta

Project ID: 19-09596-003
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Washington Rd		Washington Rd		N Commerce Dr/Adrians Auto Hand Wash		N Commerce Dr/Adrians Auto Hand Wash		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	3	0	1	0	4
7:15 AM	0	1	0	0	2	1	1	0	5
7:30 AM	0	1	0	0	2	0	2	1	6
7:45 AM	0	0	1	0	2	0	3	0	6
8:00 AM	0	0	0	0	3	0	2	0	5
8:15 AM	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	2	1	0	0	3
8:45 AM	0	0	1	0	1	0	1	0	3
TOTAL VOLUMES : APPROACH %'s :	EB 0	WB 2	EB 2	WB 0	NB 15	SB 2	NB 10	SB 2	TOTAL 33
	0.00%	100.00%	100.00%	0.00%	88.24%	11.76%	83.33%	16.67%	
PEAK HR :	07:15 AM - 08:15 AM								TOTAL 22 0.917
PEAK HR VOL :	0	2	1	0	9	1	8	1	
PEAK HR FACTOR :	0.500	0.500	0.250	0.250	0.750	0.250	0.667	0.250	
	0.500		0.250		0.833		0.750		

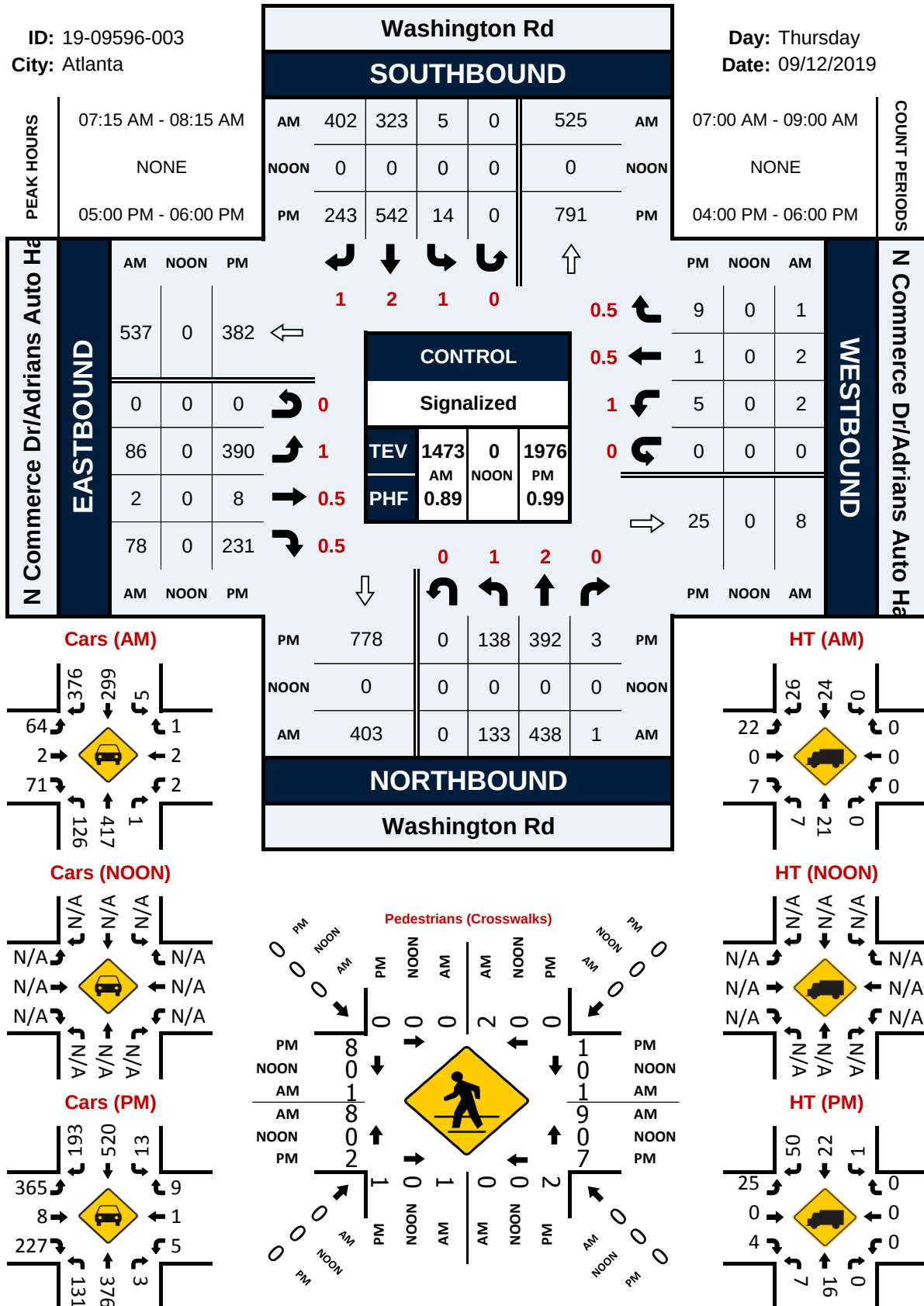
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	1	0	0	2	0	2	2	5	12
4:15 PM	0	0	1	0	0	0	4	1	6
4:30 PM	0	0	0	1	0	0	3	3	7
4:45 PM	0	0	1	0	3	2	2	2	10
5:00 PM	0	0	1	0	3	0	1	2	7
5:15 PM	0	0	0	2	0	1	0	3	6
5:30 PM	0	0	0	0	4	0	0	2	6
5:45 PM	0	0	0	0	0	0	1	1	2
TOTAL VOLUMES : APPROACH %'s :	EB 1	WB 0	EB 3	WB 5	NB 10	SB 5	NB 13	SB 19	TOTAL 56
	100.00%	0.00%	37.50%	62.50%	66.67%	33.33%	40.63%	59.38%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0		1		7		2		21
PEAK HR FACTOR :	0		0.250		0.438		0.500		0.750

Washington Rd & N Commerce Dr/Adrians Auto Hand Wash

Peak Hour Turning Movement Count

ID: 19-09596-003
City: Atlanta

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 139/Riverdale Rd & Phoenix Blvd/Forest Pkwy
City: College Park
Control: Signalized

Project ID: 19-09596-004
Date: 9/12/2019

Total

NS/EW Streets:	SR 139/Riverdale Rd				SR 139/Riverdale Rd				Phoenix Blvd/Forest Pkwy				Phoenix Blvd/Forest Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2	2	1	0	2	2	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	6	450	14	0	37	146	42	0	89	20	9	1	3	27	73	0	917
7:15 AM	10	404	26	0	46	171	41	0	77	30	16	1	14	45	89	0	970
7:30 AM	14	455	16	0	52	179	58	2	92	27	13	1	15	37	85	0	1046
7:45 AM	23	449	24	0	70	187	100	0	75	31	11	0	14	53	92	0	1129
8:00 AM	28	400	10	1	47	164	107	1	65	18	21	0	13	50	74	0	999
8:15 AM	28	355	18	0	55	167	96	0	52	36	21	1	18	53	67	0	967
8:30 AM	26	354	29	0	36	169	85	0	59	26	17	0	10	48	72	0	931
8:45 AM	38	300	13	0	47	161	79	1	55	29	20	0	12	36	83	0	874
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	173	3167	150	1	390	1344	608	4	564	217	128	4	99	349	635	0	7833
	4.96%	90.72%	4.30%	0.03%	16.62%	57.29%	25.92%	0.17%	61.77%	23.77%	14.02%	0.44%	9.14%	32.23%	58.63%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	75	1708	76	1	215	701	306	3	309	106	61	2	56	185	340	0	4144
PEAK HR FACTOR :	0.670	0.938	0.731	0.250	0.768	0.937	0.715	0.375	0.840	0.855	0.726	0.500	0.933	0.873	0.924	0.000	0.918
	0.938				0.858				0.898				0.914				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2	2	1	0	2	2	1	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	30	219	28	3	43	392	96	0	62	45	54	0	37	38	80	0	1127
4:15 PM	18	243	24	0	46	387	69	0	62	44	38	0	37	31	56	0	1055
4:30 PM	22	226	26	0	58	393	72	0	57	46	44	0	32	32	72	0	1080
4:45 PM	38	246	24	0	90	461	75	0	77	62	46	0	32	41	70	0	1262
5:00 PM	12	202	18	0	108	453	69	0	86	63	72	0	27	35	69	0	1214
5:15 PM	24	202	24	1	98	455	83	0	56	43	43	0	38	39	61	0	1167
5:30 PM	22	248	17	1	78	456	93	1	57	41	30	1	37	25	47	0	1154
5:45 PM	32	206	21	3	88	449	82	0	50	37	31	0	34	30	46	0	1109
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	198	1792	182	8	609	3446	639	1	507	381	358	1	274	271	501	0	9168
	9.08%	82.20%	8.35%	0.37%	12.97%	73.40%	13.61%	0.02%	40.66%	30.55%	28.71%	0.08%	26.20%	25.91%	47.90%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	96	898	83	2	374	1825	320	1	276	209	191	1	134	140	247	0	4797
PEAK HR FACTOR :	0.632	0.905	0.865	0.500	0.866	0.990	0.860	0.250	0.802	0.829	0.663	0.250	0.882	0.854	0.882	0.000	0.950
	0.876				0.991				0.766				0.911				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 139/Riverdale Rd & Phoenix Blvd/Forest Pkwy
City: College Park
Control: Signalized

Project ID: 19-09596-004
Date: 9/12/2019

Cars

NS/EW Streets:		SR 139/Riverdale Rd				SR 139/Riverdale Rd				Phoenix Blvd/Forest Pkwy				Phoenix Blvd/Forest Pkwy				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		2	2	1	0	2	2	1	0	2	2	1	0	2	2	1	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	7:00 AM	6	442	12	0	34	144	41	0	89	20	9	1	3	25	60	0	886
	7:15 AM	10	401	24	0	44	168	39	0	74	27	15	1	13	42	78	0	936
	7:30 AM	14	450	16	0	46	172	57	2	89	27	12	1	15	35	73	0	1009
	7:45 AM	23	439	23	0	65	181	98	0	74	29	11	0	14	49	87	0	1093
	8:00 AM	28	395	10	1	36	162	106	1	64	14	20	0	13	48	59	0	957
	8:15 AM	28	350	18	0	47	162	94	0	51	35	20	1	16	51	58	0	931
	8:30 AM	25	348	28	0	30	161	84	0	59	26	16	0	8	48	59	0	892
	8:45 AM	38	292	12	0	42	155	79	1	54	25	20	0	10	35	71	0	834
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		172	3117	143	1	344	1305	598	4	554	203	123	4	92	333	545	0	7538
PEAK HR :		07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :		75	1685	73	1	191	683	300	3	301	97	58	2	55	174	297	0	3995
PEAK HR FACTOR :		0.67	0.936	0.760	0.250	0.735	0.943	0.708	0.375	0.846	0.836	0.725	0.500	0.917	0.888	0.853	0.000	0.914
		0.945				0.855				0.888				0.877				
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		2	2	1	0	2	2	1	0	2	2	1	0	2	2	1	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	4:00 PM	29	212	26	3	35	383	96	0	62	43	54	0	37	37	74	0	1091
	4:15 PM	17	236	23	0	37	384	69	0	61	42	38	0	35	31	51	0	1024
	4:30 PM	22	225	24	0	50	387	70	0	56	44	44	0	30	32	66	0	1050
	4:45 PM	36	244	24	0	81	454	74	0	77	58	46	0	31	40	68	0	1233
	5:00 PM	12	191	17	0	99	448	68	0	86	63	71	0	27	33	66	0	1181
	5:15 PM	24	199	22	1	94	451	81	0	56	43	43	0	38	38	58	0	1148
	5:30 PM	22	247	17	1	73	450	92	1	57	40	30	1	36	25	47	0	1139
	5:45 PM	31	204	20	3	84	445	82	0	50	36	31	0	33	29	43	0	1091
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		193	1758	173	8	553	3402	632	1	505	369	357	1	267	265	473	0	8957
PEAK HR :		04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :		94	881	80	2	347	1803	315	1	276	204	190	1	132	136	239	0	4701
PEAK HR FACTOR :		0.65	0.892	0.833	0.500	0.876	0.993	0.856	0.250	0.802	0.810	0.669	0.250	0.868	0.850	0.879	0.000	0.953
		0.869				0.985				0.763				0.912				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 139/Riverdale Rd & Phoenix Blvd/Forest Pkwy
City: College Park
Control: Signalized

Project ID: 19-09596-004
Date: 9/12/2019

HT

NS/EW Streets:	SR 139/Riverdale Rd				SR 139/Riverdale Rd				Phoenix Blvd/Forest Pkwy				Phoenix Blvd/Forest Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	2 NT	1 NR	0 NU	2 SL	2 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	2 WT	1 WR	0 WU	
7:00 AM	0	8	2	0	3	2	1	0	0	0	0	0	0	2	13	0	31
7:15 AM	0	3	2	0	2	3	2	0	3	3	1	0	1	3	11	0	34
7:30 AM	0	5	0	0	6	7	1	0	3	0	1	0	0	2	12	0	37
7:45 AM	0	10	1	0	5	6	2	0	1	2	0	0	0	4	5	0	36
8:00 AM	0	5	0	0	11	2	1	0	1	4	1	0	0	2	15	0	42
8:15 AM	0	5	0	0	8	5	2	0	1	1	1	0	2	2	9	0	36
8:30 AM	1	6	1	0	6	8	1	0	0	0	1	0	2	0	13	0	39
8:45 AM	0	8	1	0	5	6	0	0	1	4	0	0	2	1	12	0	40
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	50	7	0	46	39	10	0	10	14	5	0	7	16	90	0	295
	1.72%	86.21%	12.07%	0.00%	48.42%	41.05%	10.53%	0.00%	34.48%	48.28%	17.24%	0.00%	6.19%	14.16%	79.65%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	23	3	0	24	18	6	0	8	9	3	0	1	11	43	0	149
PEAK HR FACTOR :	0.000	0.575	0.375	0.000	0.545	0.643	0.750	0.000	0.667	0.563	0.750	0.000	0.250	0.688	0.717	0.000	0.887
	0.591				0.857				0.714				0.809				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	2 NT	1 NR	0 NU	2 SL	2 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	2 WL	2 WT	1 WR	0 WU	
4:00 PM	1	7	2	0	8	9	0	0	0	2	0	0	0	1	6	0	36
4:15 PM	1	7	1	0	9	3	0	0	1	2	0	0	2	0	5	0	31
4:30 PM	0	1	2	0	8	6	2	0	1	2	0	0	2	0	6	0	30
4:45 PM	2	2	0	0	9	7	1	0	0	4	0	0	1	1	2	0	29
5:00 PM	0	11	1	0	9	5	1	0	0	0	1	0	0	2	3	0	33
5:15 PM	0	3	2	0	4	4	2	0	0	0	0	0	0	1	3	0	19
5:30 PM	0	1	0	0	5	6	1	0	0	1	0	0	1	0	0	0	15
5:45 PM	1	2	1	0	4	4	0	0	0	1	0	0	1	1	3	0	18
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	5	34	9	0	56	44	7	0	2	12	1	0	7	6	28	0	211
	10.42%	70.83%	18.75%	0.00%	52.34%	41.12%	6.54%	0.00%	13.33%	80.00%	6.67%	0.00%	17.07%	14.63%	68.29%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	2	17	3	0	27	22	5	0	0	5	1	0	2	4	8	0	96
PEAK HR FACTOR :	0.25	0.386	0.375	0.000	0.750	0.786	0.625	0.000	0.000	0.313	0.250	0.000	0.500	0.500	0.667	0.000	0.727
	0.458				0.794				0.375				0.700				

Location: SR 139/Riverdale Rd & Phoenix Blvd/Forest Pkwy
City: College Park
Control: Signalized

Project ID: 19-09596-004
Date: 9/12/2019

Bikes

[illegible][illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 139/Riverdale Rd & Phoenix Blvd/Forest Pkwy
City: College Park

Project ID: 19-09596-004
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR 139/Riverdale Rd		SR 139/Riverdale Rd		Phoenix Blvd/Forest Pkwy		Phoenix Blvd/Forest Pkwy	
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	0	0	0	0	0
7:15 AM	0	2	0	0	2	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	4	0
8:30 AM	0	0	0	3	0	0	0	0
8:45 AM	0	0	0	0	0	0	1	0
TOTAL VOLUMES :	EB 0	WB 2	EB 2	WB 4	NB 2	SB 0	NB 5	SB 0
APPROACH %'s :	0.00%	100.00%	33.33%	66.67%	100.00%	0.00%	100.00%	0.00%
PEAK HR :	07:15 AM - 08:15 AM							
PEAK HR VOL :	0	2	0	1	2	0	0	0
PEAK HR FACTOR :		0.250		0.250	0.250	0.250		
								TOTAL 5 0.313

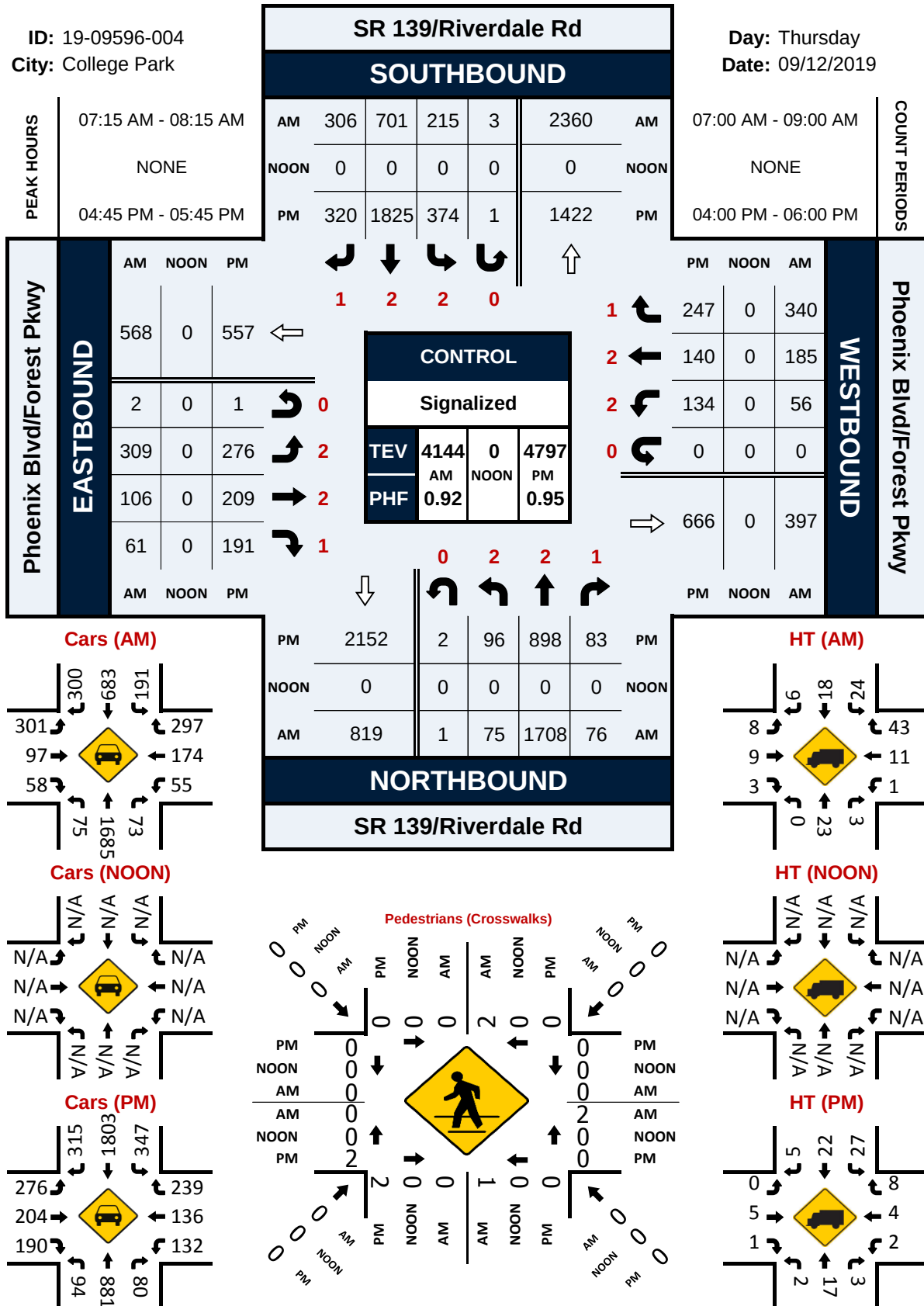
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	1	0	0	0	3
TOTAL VOLUMES :	EB 0	WB 0	EB 2	WB 1	NB 0	SB 0	NB 2	SB 3
APPROACH %'s :			66.67%	33.33%			40.00%	60.00%
PEAK HR :	04:45 PM - 05:45 PM							
PEAK HR VOL :	0	0	2	0	0	0	2	0
PEAK HR FACTOR :			0.250	0.250			0.250	0.250
								TOTAL 4 0.500

SR 139/Riverdale Rd & Phoenix Blvd/Forest Pkwy

Peak Hour Turning Movement Count

ID: 19-09596-004
City: College Park

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Majestic PI & S Fulton Pkwy
City: Atlanta
Control: 2-Way Stop (NB/SB)

Project ID: 19-09596-005
Date: 9/12/2019

Total

NS/EW Streets:	Majestic PI				Majestic PI				S Fulton Pkwy				S Fulton Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	1 SL	0 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	0	0	15	0	13	0	2	0	0	558	3	0	15	248	9	0	863
7:15 AM	0	0	8	0	2	1	0	0	0	546	4	0	13	240	22	1	837
7:30 AM	0	0	9	0	3	0	0	0	0	567	0	1	12	241	21	0	854
7:45 AM	0	0	12	0	7	0	0	0	1	517	3	0	10	240	31	0	821
8:00 AM	0	0	13	0	5	0	0	0	0	481	1	1	15	212	20	0	748
8:15 AM	2	0	8	0	2	1	0	0	0	467	1	1	14	198	12	0	706
8:30 AM	0	0	8	0	0	0	0	0	0	479	1	0	13	168	6	0	675
8:45 AM	1	0	10	0	3	0	0	0	3	431	2	1	8	186	4	2	651
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	3	0	83	0	35	2	2	0	4	4046	15	4	100	1733	125	3	6155
	3.49%	0.00%	96.51%	0.00%	89.74%	5.13%	5.13%	0.00%	0.10%	99.43%	0.37%	0.10%	5.10%	88.37%	6.37%	0.15%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	44	0	25	1	2	0	1	2188	10	1	50	969	83	1	3375
PEAK HR FACTOR :	0.000	0.000	0.733	0.000	0.481	0.250	0.250	0.000	0.250	0.965	0.625	0.250	0.833	0.977	0.669	0.250	0.978
	0.733				0.467				0.968				0.981				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	1 SL	0 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	4	0	11	0	39	0	3	0	0	258	0	0	6	433	5	2	761
4:15 PM	3	0	17	0	12	1	3	0	0	256	1	0	6	488	6	2	795
4:30 PM	0	0	21	0	19	0	1	0	0	269	0	0	6	516	4	2	838
4:45 PM	0	0	13	0	21	1	1	0	1	251	1	0	1	477	13	0	780
5:00 PM	1	0	6	0	18	0	1	0	0	353	2	2	4	526	16	4	933
5:15 PM	2	0	8	0	14	0	1	0	1	350	2	0	3	531	24	1	937
5:30 PM	0	0	11	0	10	0	0	1	1	262	0	0	9	520	26	12	852
5:45 PM	0	0	7	0	14	0	3	0	1	255	1	0	11	458	36	22	808
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	10	0	94	0	147	2	13	1	4	2254	7	2	46	3949	130	45	6704
	9.62%	0.00%	90.38%	0.00%	90.18%	1.23%	7.98%	0.61%	0.18%	99.43%	0.31%	0.09%	1.10%	94.70%	3.12%	1.08%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	3	0	32	0	56	0	5	1	3	1220	5	2	27	2035	102	39	3530
PEAK HR FACTOR :	0.375	0.000	0.727	0.000	0.778	0.000	0.417	0.250	0.750	0.864	0.625	0.250	0.614	0.958	0.708	0.443	0.942
	0.795				0.816				0.861				0.971				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Majestic Pl & S Fulton Pkwy
City: Atlanta
Control: 2-Way Stop (NB/SB)

Project ID: 19-09596-005
Date: 9/12/2019

Cars

NS/EW Streets:	Majestic Pl				Majestic Pl				S Fulton Pkwy				S Fulton Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	1 SL	0 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	13	0	2	0	0	548	2	0	10	239	8	0	822
7:15 AM	0	0	2	0	2	0	0	0	0	539	2	0	6	225	19	1	796
7:30 AM	0	0	0	0	3	0	0	0	0	558	0	1	1	235	21	0	819
7:45 AM	0	0	0	0	6	0	0	0	1	499	2	0	2	228	29	0	767
8:00 AM	0	0	3	0	4	0	0	0	0	466	0	1	2	206	16	0	698
8:15 AM	1	0	2	0	2	0	0	0	0	453	1	1	3	191	8	0	662
8:30 AM	0	0	1	0	0	0	0	0	0	466	0	0	4	159	4	0	634
8:45 AM	1	0	0	0	1	0	0	0	3	413	1	1	2	173	4	2	601
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	0	8	0	31	0	2	0	4	3942	8	4	30	1656	109	3	5799
	20.00%	0.00%	80.00%	0.00%	93.94%	0.00%	6.06%	0.00%	0.10%	99.60%	0.20%	0.10%	1.67%	92.10%	6.06%	0.17%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	2	0	24	0	2	0	1	2144	6	1	19	927	77	1	3204
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.462	0.000	0.250	0.000	0.250	0.961	0.750	0.250	0.475	0.970	0.664	0.250	0.974
	0.250				0.433				0.962				0.988				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	1 SL	0 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	4	0	6	0	39	0	3	0	0	243	0	0	2	413	2	2	714
4:15 PM	3	0	10	0	11	1	2	0	0	231	0	0	0	472	4	2	736
4:30 PM	0	0	13	0	18	0	1	0	0	254	0	0	2	499	3	2	792
4:45 PM	0	0	6	0	21	1	1	0	1	233	1	0	0	467	12	0	743
5:00 PM	1	0	1	0	17	0	1	0	0	340	2	2	1	503	14	4	886
5:15 PM	1	0	3	0	14	0	1	0	1	330	1	0	0	520	21	1	893
5:30 PM	0	0	6	0	10	0	0	1	1	250	0	0	4	509	25	11	817
5:45 PM	0	0	3	0	13	0	3	0	1	246	1	0	4	444	32	21	768
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	9	0	48	0	143	2	12	1	4	2127	5	2	13	3827	113	43	6349
	15.79%	0.00%	84.21%	0.00%	90.51%	1.27%	7.59%	0.63%	0.19%	99.49%	0.23%	0.09%	0.33%	95.77%	2.83%	1.08%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	2	0	13	0	54	0	5	1	3	1166	4	2	9	1976	92	37	3364
PEAK HR FACTOR :	0.50	0.000	0.542	0.000	0.794	0.000	0.417	0.250	0.750	0.857	0.500	0.250	0.563	0.950	0.719	0.440	0.942
	0.625				0.833				0.854				0.963				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Majestic PI & S Fulton Pkwy
City: Atlanta
Control: 2-Way Stop (NB/SB)

Project ID: 19-09596-005
Date: 9/12/2019

HT

NS/EW Streets:	Majestic PI				Majestic PI				S Fulton Pkwy				S Fulton Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	1 SL	0 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	0	0	15	0	0	0	0	0	0	10	1	0	5	9	1	0	41
7:15 AM	0	0	6	0	0	1	0	0	0	7	2	0	7	15	3	0	41
7:30 AM	0	0	9	0	0	0	0	0	0	9	0	0	11	6	0	0	35
7:45 AM	0	0	12	0	1	0	0	0	0	18	1	0	8	12	2	0	54
8:00 AM	0	0	10	0	1	0	0	0	0	15	1	0	13	6	4	0	50
8:15 AM	1	0	6	0	0	1	0	0	0	14	0	0	11	7	4	0	44
8:30 AM	0	0	7	0	0	0	0	0	0	13	1	0	9	9	2	0	41
8:45 AM	0	0	10	0	2	0	0	0	0	18	1	0	6	13	0	0	50
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	0	75	0	4	2	0	0	0	104	7	0	70	77	16	0	356
	1.32%	0.00%	98.68%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	93.69%	6.31%	0.00%	42.94%	47.24%	9.82%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	42	0	1	1	0	0	0	44	4	0	31	42	6	0	171
PEAK HR FACTOR :	0.000	0.000	0.700	0.000	0.250	0.250	0.000	0.000	0.000	0.611	0.500	0.000	0.705	0.700	0.500	0.000	0.792
	0.700				0.500				0.632				0.790				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	1 SL	0 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	0	0	5	0	0	0	0	0	0	15	0	0	4	20	3	0	47
4:15 PM	0	0	7	0	1	0	1	0	0	25	1	0	6	16	2	0	59
4:30 PM	0	0	8	0	1	0	0	0	0	15	0	0	4	17	1	0	46
4:45 PM	0	0	7	0	0	0	0	0	0	18	0	0	1	10	1	0	37
5:00 PM	0	0	5	0	1	0	0	0	0	13	0	0	3	23	2	0	47
5:15 PM	1	0	5	0	0	0	0	0	0	20	1	0	3	11	3	0	44
5:30 PM	0	0	5	0	0	0	0	0	0	12	0	0	5	11	1	1	35
5:45 PM	0	0	4	0	1	0	0	0	0	9	0	0	7	14	4	1	40
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	0	46	0	4	0	1	0	0	127	2	0	33	122	17	2	355
	2.13%	0.00%	97.87%	0.00%	80.00%	0.00%	20.00%	0.00%	0.00%	98.45%	1.55%	0.00%	18.97%	70.11%	9.77%	1.15%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	0	19	0	2	0	0	0	0	54	1	0	18	59	10	2	166
PEAK HR FACTOR :	0.25	0.000	0.950	0.000	0.500	0.000	0.000	0.000	0.000	0.675	0.250	0.000	0.643	0.641	0.625	0.500	0.883
	0.833				0.500				0.655				0.795				

Location: Majestic Pl & S Fulton Pkwy
City: Atlanta
Control: 2-Way Stop (NB/SB)

Project ID: 19-09596-005
Date: 9/12/2019

Bikes

[illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: Majestic PI & S Fulton Pkwy
City: Atlanta

Project ID: 19-09596-005
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Majestic PI		Majestic PI		S Fulton Pkwy		S Fulton Pkwy	
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB
APPROACH %'s :	0	0	0	0	0	0	0	2
PEAK HR :	07:00 AM - 08:00 AM						0.00%	100.00%
PEAK HR VOL :	0	0	0	0	0	0	0	2
PEAK HR FACTOR :							0.250	0.250
								0.250

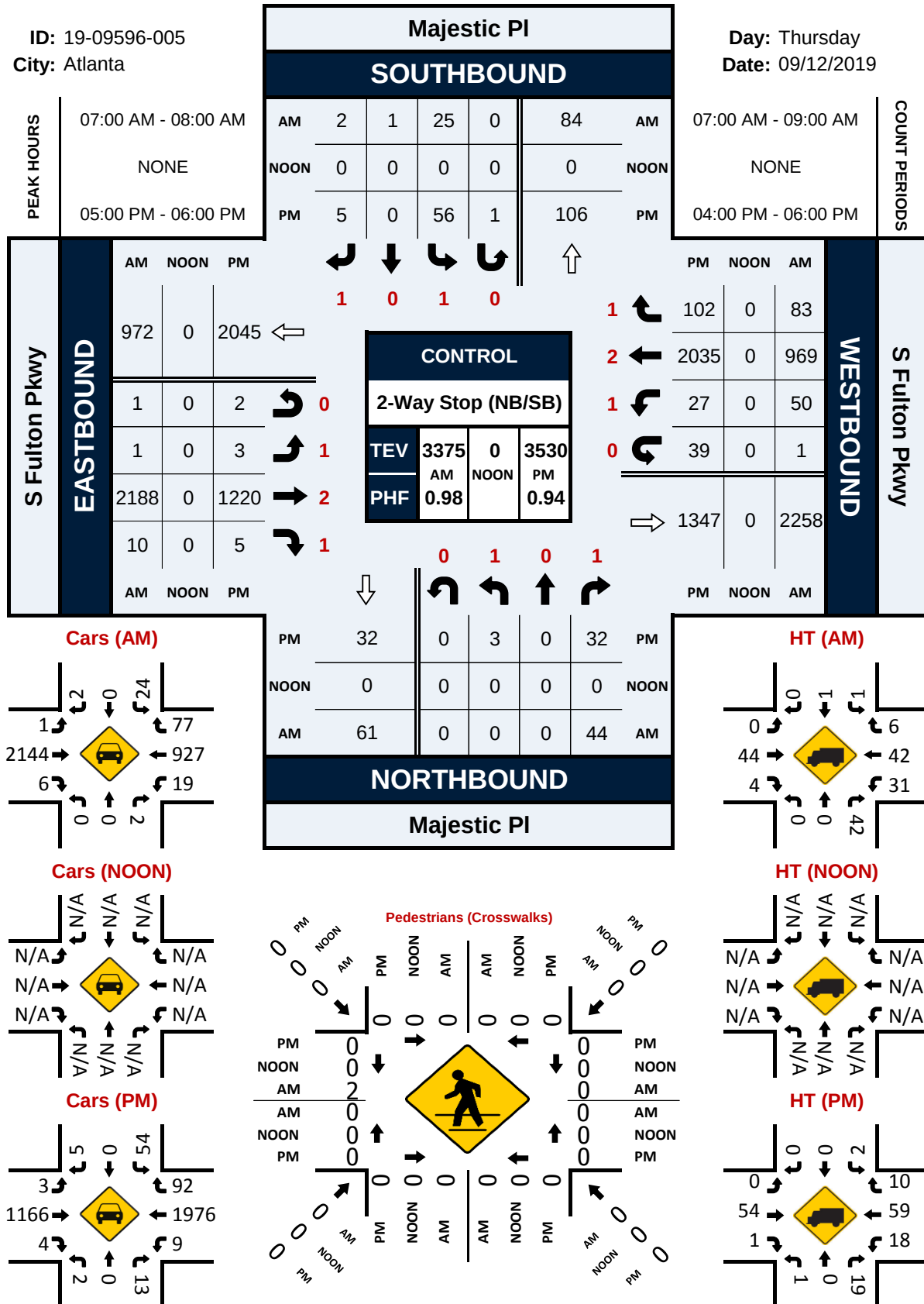
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB
APPROACH %'s :	0	0	0	0	0	0	0	0
PEAK HR :	05:00 PM - 06:00 PM							
PEAK HR VOL :	0	0	0	0	0	0	0	0
PEAK HR FACTOR :								

Majestic Pl & S Fulton Pkwy

Peak Hour Turning Movement Count

ID: 19-09596-005
City: Atlanta

Day: Thursday
Date: 09/12/2019



Location: SR 279/Old National Hwy & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09596-006
Date: 9/12/2019

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 279/Old National Hwy & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09596-006
Date: 9/12/2019

Cars

NS/EW Streets:	SR 279/Old National Hwy				SR 279/Old National Hwy				Sullivan Rd				Sullivan Rd			
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU
7:00 AM	19	102	64	0	3	27	1	0	0	1	21	0	29	4	1	0
7:15 AM	51	159	52	0	1	51	1	0	14	6	32	0	16	3	3	0
7:30 AM	49	162	80	0	1	69	2	0	1	7	25	0	28	3	2	0
7:45 AM	43	136	99	0	4	84	2	0	0	16	31	0	19	7	2	0
8:00 AM	62	95	89	0	6	56	3	0	2	14	50	0	44	9	2	0
8:15 AM	48	96	65	0	4	68	1	0	2	11	23	0	23	4	4	0
8:30 AM	33	89	67	0	4	53	0	0	0	5	49	0	27	6	2	0
8:45 AM	43	76	60	0	4	51	1	0	0	10	22	0	27	4	0	0
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s:	348	915	576	0	27	459	11	0	19	70	253	0	213	40	16	0
	18.92%	49.76%	31.32%	0.00%	5.43%	92.35%	2.21%	0.00%	5.56%	20.47%	73.98%	0.00%	79.18%	14.87%	5.95%	0.00%
PEAK HR:	07:15 AM - 08:15 AM															
PEAK HR VOL:	205	552	320	0	12	260	8	0	17	43	138	0	107	22	9	0
PEAK HR FACTOR:	0.83	0.852	0.808	0.000	0.500	0.774	0.667	0.000	0.304	0.672	0.690	0.000	0.608	0.611	0.750	0.000
	0.925				0.778				0.750				0.627			
TOTAL	1693				1693				1693				1693			
0.955	0.955				0.955				0.955				0.955			
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU
4:00 PM	37	87	34	0	2	105	4	0	5	17	45	0	54	8	5	0
4:15 PM	39	72	41	0	5	132	5	0	7	8	56	0	40	8	7	0
4:30 PM	31	76	45	0	2	97	4	0	1	9	52	0	51	13	7	0
4:45 PM	44	85	42	0	3	113	1	0	9	10	38	0	50	11	7	0
5:00 PM	42	77	43	0	4	97	4	0	7	12	72	0	60	11	4	0
5:15 PM	53	84	41	0	6	108	11	0	4	19	66	0	43	8	3	0
5:30 PM	48	77	27	0	4	111	4	0	9	18	60	0	49	8	2	0
5:45 PM	51	79	37	0	2	112	2	0	4	16	58	0	30	10	5	0
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s:	345	637	310	0	28	875	35	0	46	109	447	0	377	77	40	0
	26.70%	49.30%	23.99%	0.00%	2.99%	93.28%	3.73%	0.00%	7.64%	18.11%	74.25%	0.00%	76.32%	15.59%	8.10%	0.00%
PEAK HR:	04:45 PM - 05:45 PM															
PEAK HR VOL:	187	323	153	0	17	429	20	0	29	59	236	0	202	38	16	0
PEAK HR FACTOR:	0.88	0.950	0.890	0.000	0.708	0.949	0.455	0.000	0.806	0.776	0.819	0.000	0.842	0.864	0.571	0.000
	0.931				0.932				0.890				0.853			
TOTAL	1709				1709				1709				1709			
0.958	0.958				0.958				0.958				0.958			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 279/Old National Hwy & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09596-006
Date: 9/12/2019

HT

NS/EW Streets:	SR 279/Old National Hwy				SR 279/Old National Hwy				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
7:00 AM	0	1	8	0	0	2	0	0	0	0	1	0	6	0	0	0	18
7:15 AM	2	12	3	0	0	2	0	0	0	0	1	0	11	0	1	0	32
7:30 AM	3	1	7	0	0	7	0	0	0	1	3	0	7	0	0	0	29
7:45 AM	4	5	13	0	0	2	0	0	0	0	3	0	3	0	0	0	30
8:00 AM	1	5	6	0	0	3	0	0	0	2	3	0	5	0	0	0	25
8:15 AM	2	10	7	0	0	2	0	0	0	2	2	0	10	0	0	0	35
8:30 AM	3	7	11	0	0	5	0	0	0	0	2	0	8	0	0	0	36
8:45 AM	2	3	11	0	0	3	0	0	0	3	5	0	13	0	0	0	40
TOTAL VOLUMES :	NL 17	NT 44	NR 66	NU 0	SL 0	ST 26	SR 0	SU 0	EL 0	ET 8	ER 20	EU 0	WL 63	WT 0	WR 1	WU 0	TOTAL 245
APPROACH %'s :	13.39%	34.65%	51.97%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	28.57%	71.43%	0.00%	98.44%	0.00%	1.56%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	10	23	29	0	0	14	0	0	0	3	10	0	26	0	1	0	116
PEAK HR FACTOR :	0.625	0.479	0.558	0.000	0.000	0.500	0.000	0.000	0.000	0.375	0.833	0.000	0.591	0.000	0.250	0.000	0.906
	0.705				0.500				0.650				0.563				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU	
4:00 PM	3	5	9	0	1	7	0	0	0	3	2	0	8	0	0	0	38
4:15 PM	2	2	7	0	1	15	0	0	0	1	1	0	6	1	0	0	36
4:30 PM	1	3	11	0	0	8	1	0	0	0	1	0	7	0	0	0	32
4:45 PM	2	3	5	0	0	2	0	0	0	0	1	0	6	0	0	0	19
5:00 PM	0	0	4	0	0	4	0	0	0	0	0	0	3	0	1	0	12
5:15 PM	1	4	4	0	0	3	0	0	0	0	1	0	6	0	0	0	19
5:30 PM	0	1	6	0	0	3	0	0	0	0	0	0	3	0	0	0	13
5:45 PM	0	3	6	0	0	3	0	0	0	0	0	0	5	1	1	0	19
TOTAL VOLUMES :	NL 9	NT 21	NR 52	NU 0	SL 2	ST 45	SR 1	SU 0	EL 0	ET 4	ER 6	EU 0	WL 44	WT 2	WR 2	WU 0	TOTAL 188
APPROACH %'s :	10.98%	25.61%	63.41%	0.00%	4.17%	93.75%	2.08%	0.00%	0.00%	40.00%	60.00%	0.00%	91.67%	4.17%	4.17%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	3	8	19	0	0	12	0	0	0	0	2	0	18	0	1	0	63
PEAK HR FACTOR :	0.38	0.500	0.792	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.500	0.000	0.750	0.000	0.250	0.000	0.829
	0.750				0.750				0.500				0.792				

Location: SR 279/Old National Hwy & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09596-006
Date: 9/12/2019

Bikes

NS/EW Streets:		SR 279/Old National Hwy				SR 279/Old National Hwy				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU		
	7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0		1
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES : APPROACH %'s :	NL 0 0.00%	NT 0 0.00%	NR 1 100.00%	NU 0 0.00%	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 1	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL 0	
PEAK HR VOL :	0 0.000	0 0.000	0 0.000	0 0.000	0 0.000 0 0.000 0 0.000 0 0.000				0 0.000 0 0.000 0 0.000 0 0.000				0 0.000 0 0.000 0 0.000 0 0.000					

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	0 SR	0 SU	1 EL	0.5 ET	0.5 ER	0 EU	1 WL	0.5 WT	0.5 WR	0 WU		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 0	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL 0	
PEAK HR VOL :	0 0.00	0 0.000	0 0.000	0 0.000	0 0.000 0 0.000 0 0.000 0 0.000				0 0.000 0 0.000 0 0.000 0 0.000				0 0.000 0 0.000 0 0.000 0 0.000					

National Data & Surveying Services

Location: SR 279/Old National Hwy & Sullivan Rd

Project ID: 19-09596-006

Pedestrians (Crosswalks)

NS/EW Streets:	SR 279/Old National Hwy		SR 279/Old National Hwy		Sullivan Rd		Sullivan Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	1	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	1	0	2	0	1	4
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	0	0	1	0	1	0	0	2
PEAK HR FACTOR :			0.250		0.250				0.250

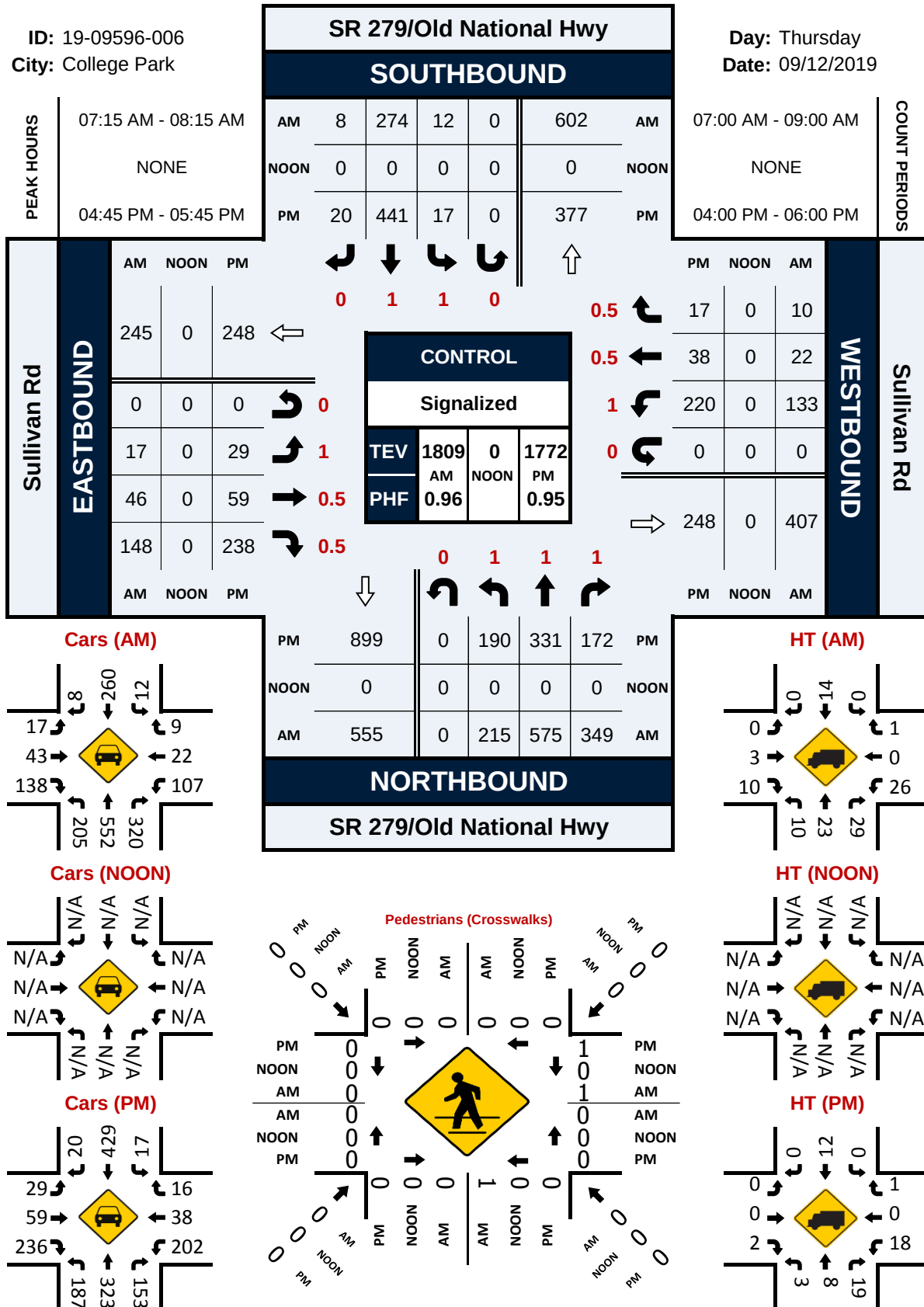
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 0	WB 1	EB 0	WB 0	NB 0	SB 1	NB 0	SB 2	TOTAL 4
APPROACH %'s :	0.00%	100.00%			0.00%	100.00%	0.00%	100.00%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0 0		0	0	0	1	0	0	1
PEAK HR FACTOR :						0.250			0.250

SR 279/Old National Hwy & Sullivan Rd

Peak Hour Turning Movement Count

ID: 19-09596-006
City: College Park

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy
City: Atlanta
Control: Signalized

Project ID: 19-09596-007
Date: 9/12/2019

Total

NS/EW Streets:	Centre Pkwy/Princeton Lakes Pkwy				Centre Pkwy/Princeton Lakes Pkwy				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	1	0	2	1	1	0	2	2	1	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	11	2	2	0	7	7	19	0	31	247	13	1	3	209	15	0	567
7:15 AM	9	4	2	0	19	3	27	0	28	312	22	0	3	241	15	1	686
7:30 AM	8	2	2	0	35	6	44	0	29	279	25	0	1	248	22	1	702
7:45 AM	18	0	1	0	14	6	36	0	38	277	35	1	2	263	35	2	728
8:00 AM	15	2	2	0	22	10	30	0	45	267	28	1	2	238	26	2	690
8:15 AM	8	3	1	0	27	6	25	0	45	237	21	0	8	247	24	1	653
8:30 AM	7	4	4	0	17	12	30	0	64	258	22	1	3	221	24	3	670
8:45 AM	8	4	2	0	28	11	19	0	55	210	16	0	6	201	40	4	604
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	69.42%	17.36%	13.22%	0.00%	36.74%	13.26%	50.00%	0.00%	12.85%	80.02%	6.98%	0.15%	1.33%	88.49%	9.52%	0.66%	5300
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	50	8	7	0	90	25	137	0	140	1135	110	2	8	990	98	6	2806
PEAK HR FACTOR :	0.694	0.500	0.875	0.000	0.643	0.625	0.778	0.000	0.778	0.909	0.786	0.500	0.667	0.941	0.700	0.750	0.964
	0.855				0.741				0.958				0.912				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	1	0	2	1	1	0	2	2	1	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	27	18	13	0	33	15	80	0	88	280	2	0	5	414	58	9	1042
4:15 PM	29	8	14	0	53	13	88	0	69	307	12	0	3	372	56	11	1035
4:30 PM	48	22	19	0	37	5	87	0	69	282	8	0	7	393	60	14	1051
4:45 PM	24	8	7	0	54	12	82	0	69	328	14	0	1	373	49	9	1030
5:00 PM	31	4	9	0	54	12	112	0	85	319	14	0	5	414	43	12	1114
5:15 PM	32	10	3	0	40	13	94	0	76	286	9	0	9	499	50	12	1133
5:30 PM	34	9	3	0	38	11	83	0	78	324	9	0	0	516	45	12	1162
5:45 PM	24	11	9	0	33	8	99	0	95	308	7	2	1	479	47	9	1132
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	59.86%	21.63%	18.51%	0.00%	29.58%	7.70%	62.72%	0.00%	20.03%	77.52%	2.39%	0.06%	0.78%	86.78%	10.23%	2.21%	8699
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	121	34	24	0	165	44	388	0	334	1237	39	2	15	1908	185	45	4541
PEAK HR FACTOR :	0.890	0.773	0.667	0.000	0.764	0.846	0.866	0.000	0.879	0.954	0.696	0.250	0.417	0.924	0.925	0.938	0.977
	0.973				0.838				0.964				0.939				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy
City: Atlanta
Control: Signalized

Project ID: 19-09596-007
Date: 9/12/2019

Cars

NS/EW Streets:	Centre Pkwy/Princeton Lakes Pkwy				Centre Pkwy/Princeton Lakes Pkwy				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	2	1	1	0	2	2	1	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	7	2	2	0	5	6	18	0	29	215	12	1	3	179	13	0	492
	7:00 AM																
	6	4	1	0	18	3	26	0	28	273	21	0	3	200	15	1	599
	7:15 AM																
	7	1	2	0	32	5	43	0	27	243	24	0	1	221	22	1	629
	7:30 AM																
	14	0	1	0	14	4	36	0	37	234	33	1	2	226	33	1	636
	7:45 AM																
12	2	2	0	21	8	30	0	44	220	27	1	2	210	25	2	606	
8:00 AM																	
6	3	1	0	26	6	23	0	43	190	19	0	8	208	22	1	556	
8:15 AM																	
5	3	4	0	16	10	28	0	63	203	17	1	3	180	21	3	557	
8:30 AM																	
7	3	2	0	25	10	19	0	54	159	12	0	6	160	34	4	495	
8:45 AM																	
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	64	18	15	0	157	52	223	0	325	1737	165	4	28	1584	185	13	4570
	65.98%	18.56%	15.46%	0.00%	36.34%	12.04%	51.62%	0.00%	14.57%	77.86%	7.40%	0.18%	1.55%	87.51%	10.22%	0.72%	
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	39	7	6	0	85	20	135	0	136	970	105	2	8	857	95	5	2470
PEAK HR FACTOR:	0.70	0.438	0.750	0.000	0.664	0.625	0.785	0.000	0.773	0.888	0.795	0.500	0.667	0.948	0.720	0.625	0.971
	0.813				0.750				0.942				0.921				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	2	1	1	0	2	2	1	0	1	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	23	17	12	0	31	12	78	0	86	237	1	0	5	378	58	9	947
	4:00 PM																
	22	8	14	0	53	12	88	0	69	272	9	0	3	331	55	11	947
	4:15 PM																
	42	22	19	0	34	4	87	0	67	233	6	0	7	350	59	14	944
	4:30 PM																
	20	8	7	0	52	9	81	0	69	285	13	0	1	324	47	9	925
	4:45 PM																
27	4	9	0	53	12	111	0	82	290	12	0	5	382	42	12	1041	
5:00 PM																	
30	10	3	0	39	12	93	0	75	260	8	0	9	465	50	12	1066	
5:15 PM																	
32	9	1	0	36	10	82	0	76	294	7	0	0	477	44	12	1080	
5:30 PM																	
22	11	8	0	33	8	98	0	95	284	7	2	1	445	47	9	1070	
5:45 PM																	
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	218	89	73	0	331	79	718	0	619	2155	63	2	31	3152	402	88	8020
	57.37%	23.42%	19.21%	0.00%	29.34%	7.00%	63.65%	0.00%	21.80%	75.91%	2.22%	0.07%	0.84%	85.82%	10.94%	2.40%	
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	111	34	21	0	161	42	384	0	328	1128	34	2	15	1769	183	45	4257
PEAK HR FACTOR:	0.87	0.773	0.583	0.000	0.759	0.875	0.865	0.000	0.863	0.959	0.708	0.250	0.417	0.927	0.915	0.938	0.985
	0.965				0.834				0.961				0.938				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy
City: Atlanta
Control: Signalized

Project ID: 19-09596-007
Date: 9/12/2019

HT

NS/EW Streets:	Centre Pkwy/Princeton Lakes Pkwy				Centre Pkwy/Princeton Lakes Pkwy				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	1 WL	3 WT	1 WR	0 WU	
7:00 AM	4	0	0	0	2	1	1	0	2	32	1	0	0	30	2	0	75
7:15 AM	3	0	1	0	1	0	1	0	0	39	1	0	0	41	0	0	87
7:30 AM	1	1	0	0	3	1	1	0	2	36	1	0	0	27	0	0	73
7:45 AM	4	0	0	0	0	2	0	0	1	43	2	0	0	37	2	1	92
8:00 AM	3	0	0	0	1	2	0	0	1	47	1	0	0	28	1	0	84
8:15 AM	2	0	0	0	1	0	2	0	2	47	2	0	0	39	2	0	97
8:30 AM	2	1	0	0	1	2	2	0	1	55	5	0	0	41	3	0	113
8:45 AM	1	1	0	0	3	1	0	0	1	51	4	0	0	41	6	0	109
TOTAL VOLUMES :	NL 20	NT 3	NR 1	NU 0	SL 12	ST 9	SR 7	SU 0	EL 10	ET 350	ER 17	EU 0	WL 0	WT 284	WR 16	WU 1	TOTAL 730
APPROACH %'s :	83.33%	12.50%	4.17%	0.00%	42.86%	32.14%	25.00%	0.00%	2.65%	92.84%	4.51%	0.00%	0.00%	94.35%	5.32%	0.33%	
PEAK HR :	07:15 AM - 08:15 AM				5	5	2	0	4	165	5	0	0	133	3	1	TOTAL 336
PEAK HR VOL :	11	1	1	0	5	5	2	0	4	165	5	0	0	133	3	1	
PEAK HR FACTOR :	0.688	0.250	0.250	0.000	0.417	0.625	0.500	0.000	0.500	0.878	0.625	0.000	0.000	0.811	0.375	0.250	0.913
	0.813				0.600				0.888				0.835				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	1 NR	0 NU	2 SL	1 ST	1 SR	0 SU	2 EL	2 ET	1 ER	0 EU	1 WL	3 WT	1 WR	0 WU	
4:00 PM	4	1	1	0	2	3	2	0	2	43	1	0	0	36	0	0	95
4:15 PM	7	0	0	0	0	1	0	0	0	35	3	0	0	41	1	0	88
4:30 PM	6	0	0	0	3	1	0	0	2	49	2	0	0	43	1	0	107
4:45 PM	4	0	0	0	2	3	1	0	0	43	1	0	0	49	2	0	105
5:00 PM	4	0	0	0	1	0	1	0	3	29	2	0	0	32	1	0	73
5:15 PM	2	0	0	0	1	1	1	0	1	26	1	0	0	34	0	0	67
5:30 PM	2	0	2	0	2	1	1	0	2	30	2	0	0	39	1	0	82
5:45 PM	2	0	1	0	0	0	1	0	0	24	0	0	0	34	0	0	62
TOTAL VOLUMES :	NL 31	NT 1	NR 4	NU 0	SL 11	ST 10	SR 7	SU 0	EL 10	ET 279	ER 12	EU 0	WL 0	WT 308	WR 6	WU 0	TOTAL 679
APPROACH %'s :	86.11%	2.78%	11.11%	0.00%	39.29%	35.71%	25.00%	0.00%	3.32%	92.69%	3.99%	0.00%	0.00%	98.09%	1.91%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM				4	2	4	0	6	109	5	0	0	139	2	0	TOTAL 284
PEAK HR VOL :	10	0	3	0	4	2	4	0	6	109	5	0	0	139	2	0	
PEAK HR FACTOR :	0.63	0.000	0.375	0.000	0.500	0.500	1.000	0.000	0.500	0.908	0.625	0.000	0.000	0.891	0.500	0.000	0.866
	0.813				0.625				0.882				0.881				

Location: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy
City: Atlanta
Control: Signalized

Project ID: 19-09596-007
Date: 9/12/2019

Bikes

[illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy
City: Atlanta

Project ID: 19-09596-007
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Centre Pkwy/Princeton Lakes Pkwy		Centre Pkwy/Princeton Lakes Pkwy		SR 6/Camp Creek Pkwy		SR 6/Camp Creek Pkwy	
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 1	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 1
APPROACH %'s :	100.00%	0.00%					0.00%	100.00%
PEAK HR :	07:15 AM - 08:15 AM							
PEAK HR VOL :	0	0	0	0	0	0	0	0
PEAK HR FACTOR :								

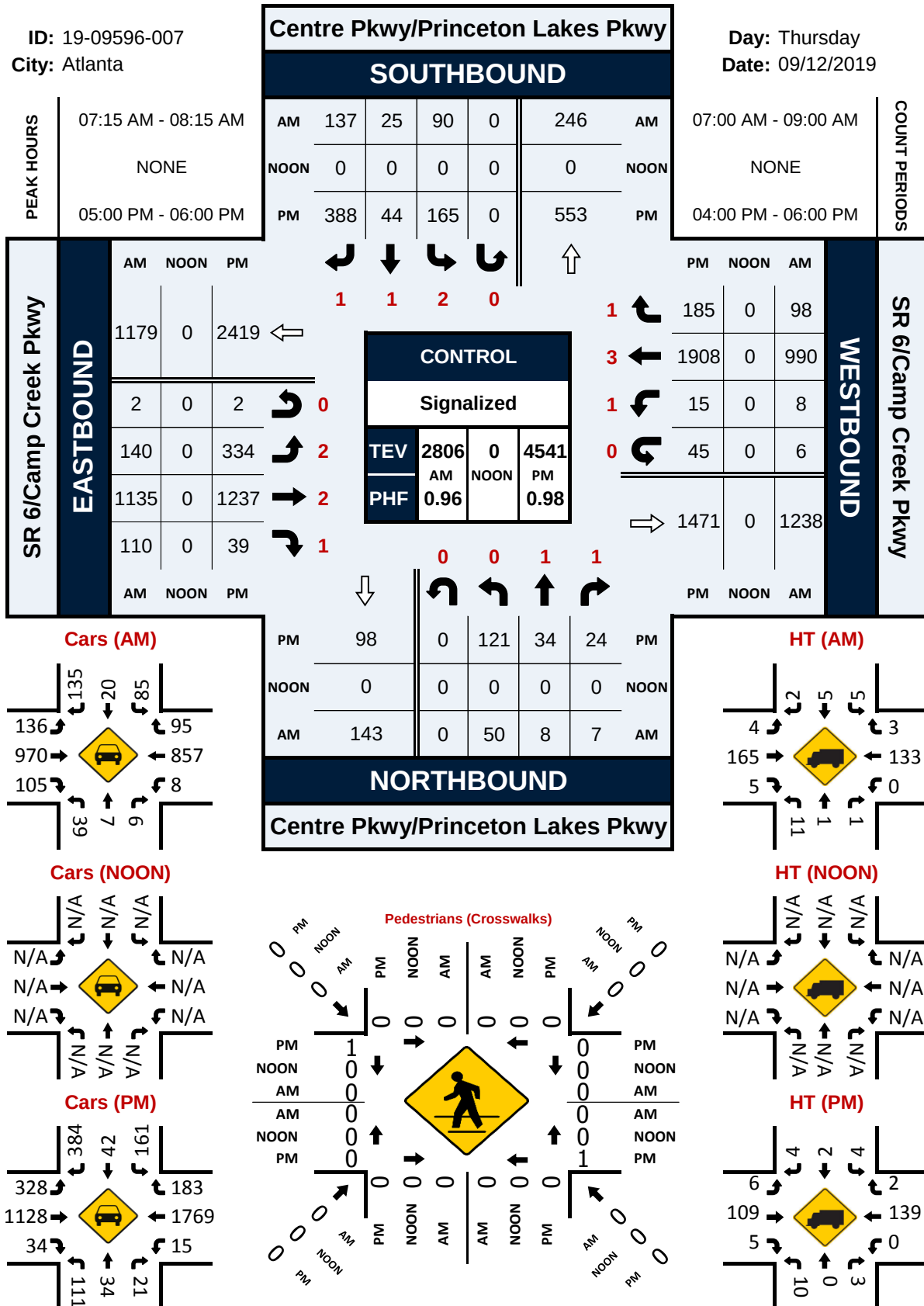
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	2	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	EB 0	WB 0	EB 0	WB 0	NB 1	SB 2	NB 0	SB 1
APPROACH %'s :					33.33%	66.67%	0.00%	100.00%
PEAK HR :	05:00 PM - 06:00 PM							
PEAK HR VOL :	0	0	0	0	1	0	0	1
PEAK HR FACTOR :					0.250	0.250	0.250	0.500

Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy

Peak Hour Turning Movement Count

ID: 19-09596-007
City: Atlanta

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Commerce Dr & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09596-008
Date: 9/12/2019

Total

NS/EW Streets:	N Commerce Dr				N Commerce Dr				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	3 SL	1 ST	1 SR	0 SU	2 EL	2.5 ET	0.5 ER	0 EU	2 WL	2.5 WT	0.5 WR	0 WU	
7:00 AM	25	13	41	0	34	17	3	0	6	257	8	1	47	214	23	11	700
7:15 AM	38	19	47	0	41	21	12	0	8	279	15	1	60	204	34	8	787
7:30 AM	33	17	43	0	53	24	6	0	10	269	22	0	88	265	38	14	882
7:45 AM	33	23	52	0	51	24	9	0	16	254	21	0	68	270	45	7	873
8:00 AM	45	20	41	0	55	17	20	0	7	239	10	0	58	239	43	8	802
8:15 AM	37	32	45	0	47	22	12	0	13	239	23	1	53	245	41	9	819
8:30 AM	36	34	34	0	43	25	11	0	18	199	22	0	63	226	39	7	757
8:45 AM	35	26	30	0	68	24	18	0	18	195	18	0	85	247	38	8	810
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	35.29%	23.03%	41.68%	0.00%	59.67%	26.48%	13.85%	0.00%	4.43%	89.03%	6.41%	0.14%	18.61%	68.09%	10.73%	2.57%	6430
PEAK HR:	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL:	148	92	181	0	206	87	47	0	46	1001	76	1	267	1019	167	38	3376
PEAK HR FACTOR:	0.822	0.719	0.870	0.000	0.936	0.906	0.588	0.000	0.719	0.930	0.826	0.250	0.759	0.944	0.928	0.679	0.957
	0.923				0.924				0.934				0.920				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	3 SL	1 ST	1 SR	0 SU	2 EL	2.5 ET	0.5 ER	0 EU	2 WL	2.5 WT	0.5 WR	0 WU	
4:00 PM	63	51	68	0	91	39	46	0	38	224	19	4	61	366	61	39	1170
4:15 PM	55	41	51	0	134	59	58	0	55	296	25	7	59	364	57	29	1290
4:30 PM	45	33	49	0	109	34	45	0	54	270	20	2	49	400	70	20	1200
4:45 PM	43	50	48	0	102	35	47	0	42	300	17	5	55	359	57	32	1192
5:00 PM	59	43	39	0	138	39	66	0	55	275	15	4	54	388	79	31	1285
5:15 PM	45	30	54	0	91	36	69	0	56	291	24	3	49	467	77	22	1314
5:30 PM	51	36	40	0	94	46	65	0	44	278	24	2	52	498	73	32	1335
5:45 PM	46	55	48	0	97	50	61	0	54	248	23	4	65	446	66	34	1297
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s:	35.61%	29.66%	34.73%	0.00%	51.85%	20.47%	27.68%	0.00%	14.33%	78.55%	6.01%	1.12%	9.84%	72.89%	11.97%	5.30%	10083
PEAK HR:	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL:	201	164	181	0	420	171	261	0	209	1092	86	13	220	1799	295	119	5231
PEAK HR FACTOR:	0.852	0.745	0.838	0.000	0.761	0.855	0.946	0.000	0.933	0.938	0.896	0.813	0.846	0.903	0.934	0.875	0.980
	0.916				0.877				0.936				0.929				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Commerce Dr & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09596-008
Date: 9/12/2019

Cars

NS/EW Streets:	N Commerce Dr				N Commerce Dr				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	3 SL	1 ST	1 SR	0 SU	2 EL	2.5 ET	0.5 ER	0 EU	2 WL	2.5 WT	0.5 WR	0 WU	
7:00 AM	22	11	36	0	31	16	3	0	6	221	7	1	44	179	22	11	610
7:15 AM	32	18	42	0	40	21	12	0	8	239	13	1	54	170	32	8	690
7:30 AM	29	17	36	0	53	21	6	0	9	237	20	0	79	239	36	14	796
7:45 AM	30	20	45	0	50	22	9	0	16	203	19	0	68	237	42	7	768
8:00 AM	39	19	36	0	53	17	20	0	7	201	9	0	51	212	41	8	713
8:15 AM	34	30	38	0	45	17	11	0	12	185	23	1	50	207	41	9	703
8:30 AM	32	34	31	0	40	23	11	0	17	149	19	0	57	191	37	6	647
8:45 AM	30	23	26	0	65	24	18	0	17	149	17	0	80	204	35	8	696
TOTAL VOLUMES :	NL 248	NT 172	NR 290	NU 0	SL 377	ST 161	SR 90	SU 0	EL 92	ET 1584	ER 127	EU 3	WL 483	WT 1639	WR 286	WU 71	TOTAL 5623
APPROACH %'s :	34.93%	24.23%	40.85%	0.00%	60.03%	25.64%	14.33%	0.00%	5.09%	87.71%	7.03%	0.17%	19.48%	66.12%	11.54%	2.86%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	132	86	155	0	201	77	46	0	44	826	71	1	248	895	160	38	2980
PEAK HR FACTOR :	0.85	0.717	0.861	0.000	0.948	0.875	0.575	0.000	0.688	0.871	0.772	0.250	0.785	0.936	0.952	0.679	0.936
	0.914				0.900				0.885				0.911				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	3 SL	1 ST	1 SR	0 SU	2 EL	2.5 ET	0.5 ER	0 EU	2 WL	2.5 WT	0.5 WR	0 WU	
4:00 PM	58	51	64	0	89	38	46	0	37	188	17	4	56	338	60	39	1085
4:15 PM	53	39	46	0	133	57	56	0	55	260	24	7	54	324	55	29	1192
4:30 PM	43	32	42	0	106	32	45	0	52	215	19	2	46	360	69	20	1083
4:45 PM	38	48	46	0	102	33	46	0	42	259	16	5	50	310	56	32	1083
5:00 PM	56	40	38	0	138	38	66	0	55	241	14	4	52	357	78	31	1208
5:15 PM	40	28	49	0	87	34	68	0	56	266	23	3	44	438	75	22	1233
5:30 PM	49	34	36	0	94	45	65	0	44	244	23	2	49	457	72	32	1246
5:45 PM	43	54	44	0	97	48	59	0	54	227	23	4	62	416	66	33	1230
TOTAL VOLUMES :	NL 380	NT 326	NR 365	NU 0	SL 846	ST 325	SR 451	SU 0	EL 395	ET 1900	ER 159	EU 31	WL 413	WT 3000	WR 531	WU 238	TOTAL 9360
APPROACH %'s :	35.48%	30.44%	34.08%	0.00%	52.16%	20.04%	27.81%	0.00%	15.90%	76.46%	6.40%	1.25%	9.88%	71.74%	12.70%	5.69%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	188	156	167	0	416	165	258	0	209	978	83	13	207	1668	291	118	4917
PEAK HR FACTOR :	0.84	0.722	0.852	0.000	0.754	0.859	0.949	0.000	0.933	0.919	0.902	0.813	0.835	0.912	0.933	0.894	0.987
	0.906				0.867				0.922				0.936				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Commerce Dr & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09596-008
Date: 9/12/2019

HT

NS/EW Streets:	N Commerce Dr				N Commerce Dr				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	3 SL	1 ST	1 SR	0 SU	2 EL	2.5 ET	0.5 ER	0 EU	2 WL	2.5 WT	0.5 WR	0 WU	
7:00 AM	3	2	5	0	3	1	0	0	0	36	1	0	3	35	1	0	90
7:15 AM	6	1	5	0	1	0	0	0	0	40	2	0	6	34	2	0	97
7:30 AM	4	0	7	0	0	3	0	0	1	32	2	0	9	26	2	0	86
7:45 AM	3	3	7	0	1	2	0	0	0	51	2	0	0	33	3	0	105
8:00 AM	6	1	5	0	2	0	0	0	0	38	1	0	7	27	2	0	89
8:15 AM	3	2	7	0	2	5	1	0	1	54	0	0	3	38	0	0	116
8:30 AM	4	0	3	0	3	2	0	0	1	50	3	0	6	35	2	1	110
8:45 AM	5	3	4	0	3	0	0	0	1	46	1	0	5	43	3	0	114
TOTAL VOLUMES :	NL 34	NT 12	NR 43	NU 0	SL 15	ST 13	SR 1	SU 0	EL 4	ET 347	ER 12	EU 0	WL 39	WT 271	WR 15	WU 1	TOTAL 807
APPROACH %'s :	38.20%	13.48%	48.31%	0.00%	51.72%	44.83%	3.45%	0.00%	1.10%	95.59%	3.31%	0.00%	11.96%	83.13%	4.60%	0.31%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	16	6	26	0	5	10	1	0	2	175	5	0	19	124	7	0	396
PEAK HR FACTOR :	0.667	0.500	0.929	0.000	0.625	0.500	0.250	0.000	0.500	0.810	0.625	0.000	0.528	0.816	0.583	0.000	0.853
	0.923				0.500				0.827				0.915				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	3 SL	1 ST	1 SR	0 SU	2 EL	2.5 ET	0.5 ER	0 EU	2 WL	2.5 WT	0.5 WR	0 WU	
4:00 PM	5	0	4	0	2	1	0	0	1	36	2	0	5	28	1	0	85
4:15 PM	2	2	5	0	1	2	2	0	0	36	1	0	5	40	2	0	98
4:30 PM	2	1	7	0	3	2	0	0	2	55	1	0	3	40	1	0	117
4:45 PM	5	2	2	0	0	2	1	0	0	41	1	0	5	49	1	0	109
5:00 PM	3	3	1	0	0	1	0	0	0	34	1	0	2	31	1	0	77
5:15 PM	5	2	5	0	4	2	1	0	0	25	1	0	5	29	2	0	81
5:30 PM	2	2	4	0	0	1	0	0	0	34	1	0	3	41	1	0	89
5:45 PM	3	1	4	0	0	2	2	0	0	21	0	0	3	30	0	1	67
TOTAL VOLUMES :	NL 27	NT 13	NR 32	NU 0	SL 10	ST 13	SR 6	SU 0	EL 3	ET 282	ER 8	EU 0	WL 31	WT 288	WR 9	WU 1	TOTAL 723
APPROACH %'s :	37.50%	18.06%	44.44%	0.00%	34.48%	44.83%	20.69%	0.00%	1.02%	96.25%	2.73%	0.00%	9.42%	87.54%	2.74%	0.30%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	13	8	14	0	4	6	3	0	0	114	3	0	13	131	4	1	314
PEAK HR FACTOR :	0.65	0.667	0.700	0.000	0.250	0.750	0.375	0.000	0.000	0.838	0.750	0.000	0.650	0.799	0.500	0.250	0.882
	0.729				0.464				0.836				0.828				

Location: N Commerce Dr & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09596-008
Date: 9/12/2019

Bikes

[illegible]

National Data & Surveying Services

Location: N Commerce Dr & SR 6/Camp Creek Pkwy

Project ID: 19-09596-008

Pedestrians (Crosswalks)

NS/EW Streets:	N Commerce Dr		N Commerce Dr		SR 6/Camp Creek Pkwy		SR 6/Camp Creek Pkwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	1	0	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	1	1	2	4
7:30 AM	0	0	0	0	0	0	1	0	1
7:45 AM	0	1	0	0	0	0	0	1	2
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	1	1	0	1	3
8:45 AM	2	0	0	0	2	2	0	0	6
TOTAL VOLUMES :	EB 4	WB 1	EB 0	WB 0	NB 3	SB 6	NB 2	SB 4	TOTAL 20
APPROACH %'s :	80.00%	20.00%			33.33%	66.67%	33.33%	66.67%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	1	1	0	0	0	1	1	1	5
PEAK HR FACTOR :	0.250	0.250			0.250	0.250	0.250	0.250	0.625
	0.500				0.250		0.500		

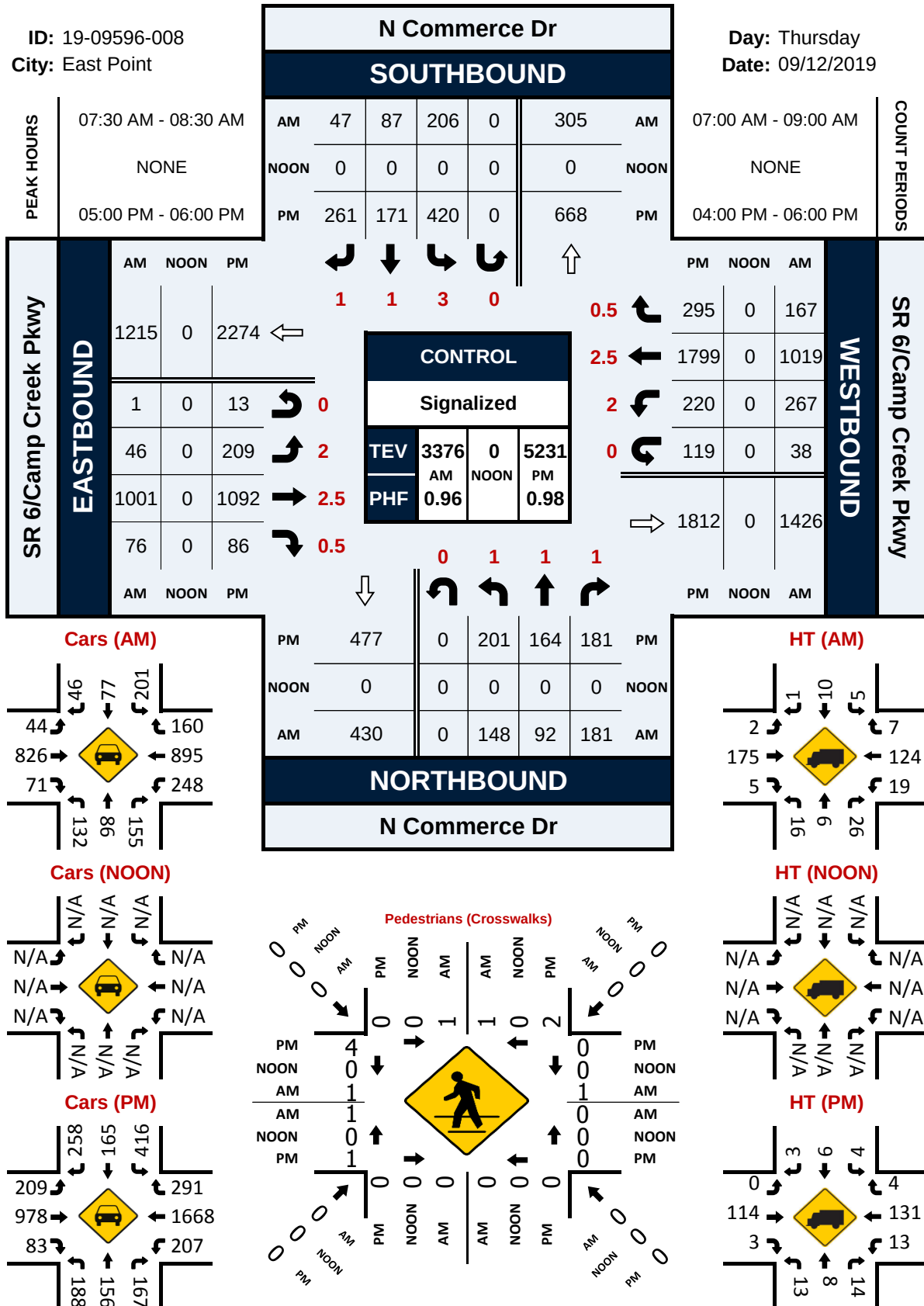
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	0	1	1	0	1	0	3
5:00 PM	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	1	1
5:30 PM	0	2	0	0	0	0	0	2	4
5:45 PM	0	0	0	0	0	0	0	1	1
TOTAL VOLUMES : APPROACH %'s :	EB 0 0.00%	WB 2 100.00%	EB 0 0.00%	WB 1 100.00%	NB 1 100.00%	SB 0 0.00%	NB 3 33.33%	SB 6 66.67%	TOTAL 13
	PEAK HR : 05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	02		00		00		14		7
PEAK HR FACTOR :	0.2500.250						0.2500.500		0.438

N Commerce Dr & SR 6/Camp Creek Pkwy

Peak Hour Turning Movement Count

ID: 19-09596-008
City: East Point

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: US 19/Old Dixie Hwy & SR 331/Forest Pkwy
City: Forest Park
Control: Signalized

Project ID: 19-09596-009
Date: 9/12/2019

Total

NS/EW Streets:	US 19/Old Dixie Hwy				US 19/Old Dixie Hwy				SR 331/Forest Pkwy				SR 331/Forest Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	26	165	25	0	31	48	35	0	59	77	22	1	20	71	70	5	655
7:15 AM	23	227	19	0	33	45	34	0	60	126	21	0	23	136	81	3	831
7:30 AM	31	201	39	0	33	85	27	0	49	135	31	2	23	127	119	1	903
7:45 AM	23	198	23	0	29	66	27	0	49	139	30	0	43	156	107	3	893
8:00 AM	32	180	31	0	28	66	51	0	48	146	25	0	31	161	96	3	898
8:15 AM	21	185	26	0	32	67	31	0	59	119	14	0	28	125	78	4	789
8:30 AM	25	198	28	0	22	49	41	0	52	106	22	0	27	115	103	2	790
8:45 AM	32	190	28	0	38	76	39	0	35	133	14	0	27	99	64	4	779
TOTAL VOLUMES:	NL 213	NT 1544	NR 219	NU 0	SL 246	ST 502	SR 285	SU 0	EL 411	ET 981	ER 179	EU 3	WL 222	WT 990	WR 718	WU 25	TOTAL 6538
APPROACH %'s:	10.78%	78.14%	11.08%	0.00%	23.81%	48.60%	27.59%	0.00%	26.11%	62.33%	11.37%	0.19%	11.36%	50.64%	36.73%	1.28%	
PEAK HR:	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL:	109	806	112	0	123	262	139	0	206	546	107	2	120	580	403	10	3525
PEAK HR FACTOR:	0.852	0.888	0.718	0.000	0.932	0.771	0.681	0.000	0.858	0.935	0.863	0.250	0.698	0.901	0.847	0.833	0.976
	0.947				0.903				0.983				0.900				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	40	72	54	0	73	147	33	0	35	133	34	1	34	146	22	5	829
4:15 PM	28	79	45	0	57	157	44	0	41	126	43	3	44	119	36	3	825
4:30 PM	23	88	61	0	73	187	38	0	42	161	31	0	44	111	25	1	885
4:45 PM	26	101	37	0	69	194	34	0	29	138	41	0	45	137	41	4	896
5:00 PM	23	95	36	0	77	176	42	0	49	177	34	2	48	136	47	3	945
5:15 PM	23	82	41	0	72	178	40	0	32	167	31	0	32	115	39	5	857
5:30 PM	24	83	35	0	83	161	45	0	39	168	29	2	43	118	35	5	870
5:45 PM	28	80	38	0	75	181	30	0	29	153	34	0	31	113	46	4	842
TOTAL VOLUMES:	NL 215	NT 680	NR 347	NU 0	SL 579	ST 1381	SR 306	SU 0	EL 296	ET 1223	ER 277	EU 8	WL 321	WT 995	WR 291	WU 30	TOTAL 6949
APPROACH %'s:	17.31%	54.75%	27.94%	0.00%	25.55%	60.94%	13.50%	0.00%	16.41%	67.79%	15.35%	0.44%	19.61%	60.78%	17.78%	1.83%	
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	95	366	175	0	291	735	154	0	152	643	137	2	169	499	152	13	3583
PEAK HR FACTOR:	0.913	0.906	0.717	0.000	0.945	0.947	0.917	0.000	0.776	0.908	0.835	0.250	0.880	0.911	0.809	0.650	0.948
	0.924				0.990				0.891				0.890				

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 19/Old Dixie Hwy & SR 331/Forest Pkwy
City: Forest Park
Control: Signalized

Project ID: 19-09596-009
Date: 9/12/2019

Cars

NS/EW Streets:	US 19/Old Dixie Hwy				US 19/Old Dixie Hwy				SR 331/Forest Pkwy				SR 331/Forest Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	18	144	22	0	29	39	26	0	51	71	15	1	17	65	70	5	573
7:15 AM	18	215	17	0	32	38	25	0	51	117	16	0	21	129	79	3	761
7:30 AM	26	187	35	0	26	71	22	0	40	131	25	2	21	124	115	1	826
7:45 AM	23	178	22	0	27	59	18	0	39	134	28	0	39	152	102	3	824
8:00 AM	26	152	30	0	26	56	35	0	39	137	20	0	30	152	90	3	796
8:15 AM	16	156	20	0	30	50	23	0	39	110	12	0	26	119	75	4	680
8:30 AM	24	178	26	0	21	40	31	0	43	95	17	0	19	108	91	2	695
8:45 AM	27	164	26	0	31	61	26	0	25	122	10	0	26	88	58	3	667
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	178	1374	198	0	222	414	206	0	327	917	143	3	199	937	680	24	5822
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	93	732	104	0	111	224	100	0	169	519	89	2	111	557	386	10	3207
PEAK HR FACTOR :	0.89	0.851	0.743	0.000	0.867	0.789	0.714	0.000	0.828	0.947	0.795	0.250	0.712	0.916	0.839	0.833	0.971
	0.929				0.914				0.969				0.899				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	37	60	50	0	69	132	26	0	26	125	32	1	31	135	19	5	748
4:15 PM	22	68	39	0	53	145	34	0	37	117	39	3	39	114	35	3	748
4:30 PM	22	79	58	0	65	169	29	0	35	156	27	0	38	102	25	1	806
4:45 PM	24	84	34	0	66	172	23	0	21	135	37	0	39	128	41	4	808
5:00 PM	20	88	31	0	72	154	36	0	42	172	32	2	45	129	44	3	870
5:15 PM	20	73	35	0	67	156	33	0	25	164	29	0	28	113	37	4	784
5:30 PM	21	74	35	0	82	142	33	0	36	159	28	2	43	117	33	5	810
5:45 PM	27	70	37	0	69	162	23	0	29	141	33	0	31	107	45	4	778
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	193	596	319	0	543	1232	237	0	251	1169	257	8	294	945	279	29	6352
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	86	324	158	0	270	651	121	0	123	627	125	2	150	472	147	12	3268
PEAK HR FACTOR :	0.90	0.920	0.681	0.000	0.938	0.946	0.840	0.000	0.732	0.911	0.845	0.250	0.833	0.915	0.835	0.750	0.939
	0.893				0.990				0.884				0.883				

National Data & Surveying Services

Intersection Turning Movement Count

Location: US 19/Old Dixie Hwy & SR 331/Forest Pkwy
City: Forest Park
Control: Signalized

Project ID: 19-09596-009
Date: 9/12/2019

HT

NS/EW Streets:		US 19/Old Dixie Hwy				US 19/Old Dixie Hwy				SR 331/Forest Pkwy				SR 331/Forest Pkwy				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
	7:00 AM	8	21	3	0	2	9	9	0	8	6	7	0	3	6	0	0	82
	7:15 AM	5	12	2	0	1	7	9	0	9	9	5	0	2	7	2	0	70
	7:30 AM	5	14	4	0	7	14	5	0	9	4	6	0	2	3	4	0	77
	7:45 AM	0	20	1	0	2	7	9	0	10	5	2	0	4	4	5	0	69
	8:00 AM	6	28	1	0	2	10	16	0	9	9	5	0	1	9	6	0	102
	8:15 AM	5	29	6	0	2	17	8	0	20	9	2	0	2	6	3	0	109
	8:30 AM	1	20	2	0	1	9	10	0	9	11	5	0	8	7	12	0	95
	8:45 AM	5	26	2	0	7	15	13	0	10	11	4	0	1	11	6	1	112
TOTAL VOLUMES :		NL 35	NT 170	NR 21	NU 0	SL 24	ST 88	SR 79	SU 0	EL 84	ET 64	ER 36	EU 0	WL 23	WT 53	WR 38	WU 1	TOTAL 716
APPROACH %'s :		15.49%	75.22%	9.29%	0.00%	12.57%	46.07%	41.36%	0.00%	45.65%	34.78%	19.57%	0.00%	20.00%	46.09%	33.04%	0.87%	
PEAK HR :		07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :		16	74	8	0	12	38	39	0	37	27	18	0	9	23	17	0	318
PEAK HR FACTOR :		0.667	0.661	0.500	0.000	0.429	0.679	0.609	0.000	0.925	0.750	0.750	0.000	0.563	0.639	0.708	0.000	0.779
		0.700				0.795				0.891				0.766				

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	1 SL	1.5 ST	0.5 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
	4:00 PM	3	12	4	0	4	15	7	0	9	8	2	0	3	11	3	0	81
	4:15 PM	6	11	6	0	4	12	10	0	4	9	4	0	5	5	1	0	77
	4:30 PM	1	9	3	0	8	18	9	0	7	5	4	0	6	9	0	0	79
	4:45 PM	2	17	3	0	3	22	11	0	8	3	4	0	6	9	0	0	88
	5:00 PM	3	7	5	0	5	22	6	0	7	5	2	0	3	7	3	0	75
	5:15 PM	3	9	6	0	5	22	7	0	7	3	2	0	4	2	2	1	73
	5:30 PM	3	9	0	0	1	19	12	0	3	9	1	0	0	1	2	0	60
	5:45 PM	1	10	1	0	6	19	7	0	0	12	1	0	0	6	1	0	64
TOTAL VOLUMES :		NL 22	NT 84	NR 28	NU 0	SL 36	ST 149	SR 69	SU 0	EL 45	ET 54	ER 20	EU 0	WL 27	WT 50	WR 12	WU 1	TOTAL 597
APPROACH %'s :		16.42%	62.69%	20.90%	0.00%	14.17%	58.66%	27.17%	0.00%	37.82%	45.38%	16.81%	0.00%	30.00%	55.56%	13.33%	1.11%	
PEAK HR :		04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :		9	42	17	0	21	84	33	0	29	16	12	0	19	27	5	1	315
PEAK HR FACTOR :		0.75	0.618	0.708	0.000	0.656	0.955	0.750	0.000	0.906	0.800	0.750	0.000	0.792	0.750	0.417	0.250	0.895
		0.773				0.958				0.891				0.867				

Location: US 19/Old Dixie Hwy & SR 331/Forest Pkwy
City: Forest Park
Control: Signalized

Project ID: 19-09596-009
Date: 9/12/2019

Bikes

NS/EW Streets:		US 19/Old Dixie Hwy				US 19/Old Dixie Hwy				SR 331/Forest Pkwy				SR 331/Forest Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	1.5	0.5	0	1	2	1	0	1	2	1	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s:	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	
PEAK HR:	07:15 AM - 08:15 AM								0.00%				100.00%				TOTAL	
PEAK HR VOL:	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
PEAK HR FACTOR:	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	1	2	0	0	1	1.5	0.5	0	1	2	1	0	1	2	1	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES:	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s:	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
PEAK HR:	04:30 PM - 05:30 PM								0.00%				100.00%				TOTAL	
PEAK HR VOL:	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
PEAK HR FACTOR:	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	

National Data & Surveying Services

Location: US 19/Old Dixie Hwy & SR 331/Forest Pkwy

Project ID: 19-09596-009

Pedestrians (Crosswalks)

NS/EW Streets:	US 19/Old Dixie Hwy		US 19/Old Dixie Hwy		SR 331/Forest Pkwy		SR 331/Forest Pkwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	2	0	0	0	2
7:15 AM	0	0	0	1	0	0	0	0	1
7:30 AM	0	1	0	3	0	1	0	0	5
7:45 AM	0	0	0	3	0	2	0	0	5
8:00 AM	0	0	0	1	0	0	0	0	1
8:15 AM	1	0	0	1	0	0	0	0	2
8:30 AM	0	0	0	1	2	0	0	0	3
8:45 AM	0	2	0	0	1	1	0	0	4
TOTAL VOLUMES :	EB 1	WB 3	EB 0	WB 10	NB 5	SB 4	NB 0	SB 0	TOTAL 23
APPROACH %'s :	25.00%	75.00%	0.00%	100.00%	55.56%	44.44%			
PEAK HR :	07:15 AM - 08:15 AM								TOTAL
PEAK HR VOL :	0	1	0	8	0	3	0	0	12
PEAK HR FACTOR :	0.250		0.667		0.375				0.600

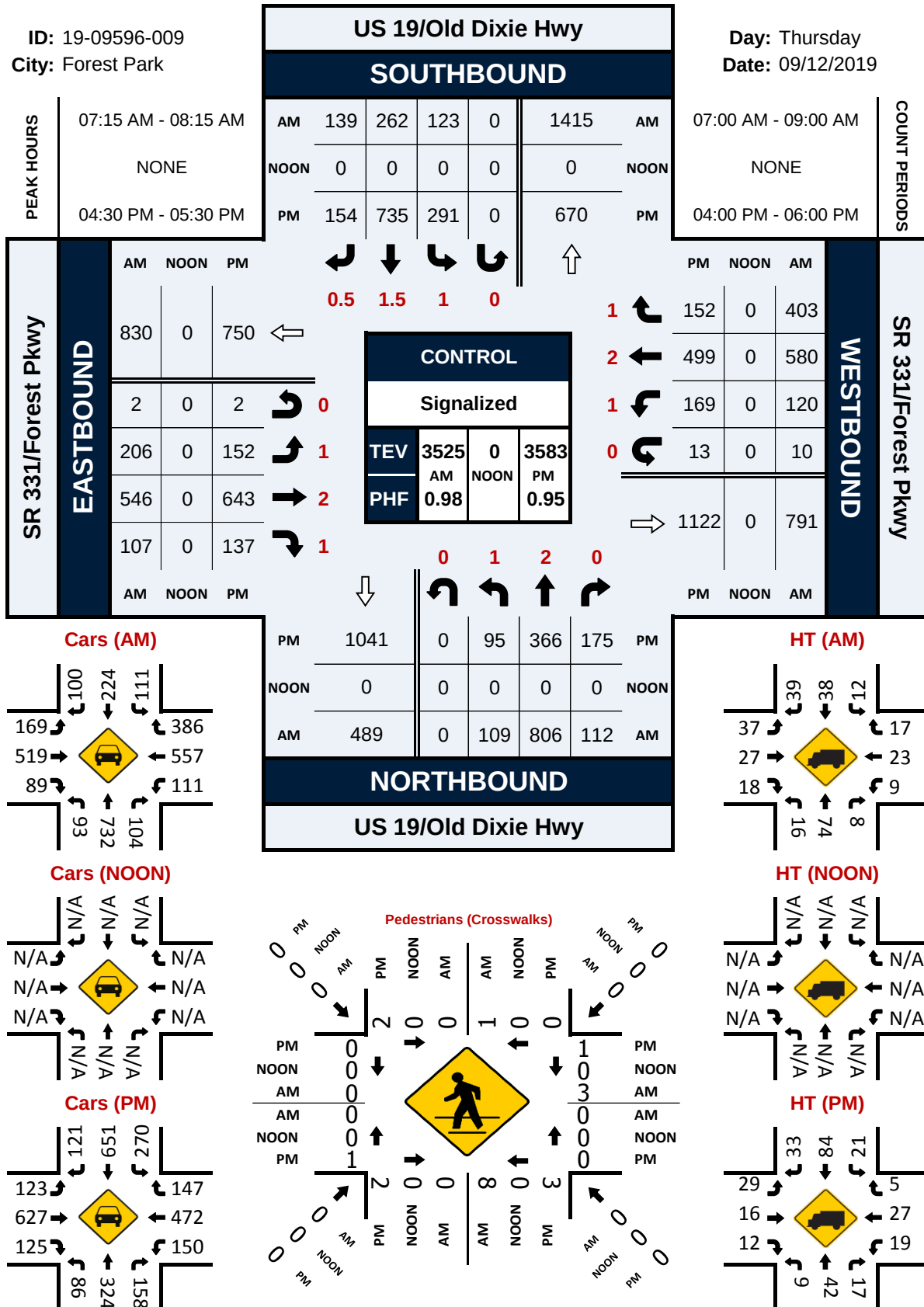
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	1	0	0	0	0	0	0	1
4:15 PM	3	0	1	0	1	0	0	1	6
4:30 PM	0	0	0	1	0	0	1	0	2
4:45 PM	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	2	1	0	0	0	0	3
5:15 PM	1	0	0	1	0	1	0	0	3
5:30 PM	3	0	6	0	3	2	0	0	14
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB 8	WB 1	EB 9	WB 3	NB 4	SB 3	NB 1	SB 1	TOTAL 30
	88.89%	11.11%	75.00%	25.00%	57.14%	42.86%	50.00%	50.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	20		23		01		10		9
PEAK HR FACTOR :	0.500		0.2500.750		0.2500.250		0.2500.250		0.750

US 19/Old Dixie Hwy & SR 331/Forest Pkwy

Peak Hour Turning Movement Count

ID: 19-09596-009
City: Forest Park

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Toffie Terrace/Bobby Brown Pkwy & Outer Loop Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-010
Date: 9/12/2019

Total

NS/EW Streets:	Toffie Terrace/Bobby Brown Pkwy				Toffie Terrace/Bobby Brown Pkwy				Outer Loop Rd				Outer Loop Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2.5 ET	0.5 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	37	9	5	0	13	12	20	0	33	126	59	0	26	72	25	0	437
7:15 AM	21	10	3	0	22	15	16	0	48	143	31	2	20	60	28	3	422
7:30 AM	14	2	10	0	25	15	25	0	40	158	47	0	16	63	38	7	460
7:45 AM	16	9	7	0	24	22	16	0	60	164	54	0	23	56	29	4	484
8:00 AM	13	9	7	0	35	16	32	0	35	190	74	1	24	71	52	8	567
8:15 AM	11	11	9	0	18	16	22	0	56	213	77	2	16	62	25	8	546
8:30 AM	12	2	6	0	23	20	18	0	39	176	71	1	30	71	25	8	502
8:45 AM	14	6	5	0	22	23	18	0	42	175	57	1	22	60	33	7	485
TOTAL VOLUMES:	NL 138	NT 58	NR 52	NU 0	SL 182	ST 139	SR 167	SU 0	EL 353	ET 1345	ER 470	EU 7	WL 177	WT 515	WR 255	WU 45	TOTAL 3903
APPROACH %'s:	55.65%	23.39%	20.97%	0.00%	37.30%	28.48%	34.22%	0.00%	16.23%	61.84%	21.61%	0.32%	17.84%	51.92%	25.71%	4.54%	
PEAK HR:	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL:	50	28	27	0	98	75	90	0	172	754	279	5	92	264	135	31	2100
PEAK HR FACTOR:	0.893	0.636	0.750	0.000	0.700	0.815	0.703	0.000	0.768	0.885	0.906	0.625	0.767	0.930	0.649	0.969	0.926
	0.847				0.792				0.869				0.842				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2.5 ET	0.5 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	58	17	30	0	17	6	32	0	37	88	18	1	6	196	22	8	536
4:15 PM	60	17	26	0	18	13	38	0	38	79	16	0	10	185	23	5	528
4:30 PM	62	12	16	0	23	7	38	0	37	87	12	2	5	175	34	8	518
4:45 PM	73	12	22	0	19	6	36	0	33	85	18	1	9	208	41	4	567
5:00 PM	82	19	19	0	21	6	32	0	33	68	6	1	10	190	41	7	535
5:15 PM	89	13	18	0	21	8	35	0	36	79	15	3	2	245	57	10	631
5:30 PM	56	16	15	0	25	4	35	0	27	75	11	1	8	184	40	14	511
5:45 PM	48	12	14	0	13	2	29	0	35	77	19	0	7	170	42	5	473
TOTAL VOLUMES:	NL 528	NT 118	NR 160	NU 0	SL 157	ST 52	SR 275	SU 0	EL 276	ET 638	ER 115	EU 9	WL 57	WT 1553	WR 300	WU 61	TOTAL 4299
APPROACH %'s:	65.51%	14.64%	19.85%	0.00%	32.44%	10.74%	56.82%	0.00%	26.59%	61.46%	11.08%	0.87%	2.89%	78.79%	15.22%	3.09%	
PEAK HR:	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL:	306	56	75	0	84	27	141	0	139	319	51	7	26	818	173	29	2251
PEAK HR FACTOR:	0.860	0.737	0.852	0.000	0.913	0.844	0.928	0.000	0.939	0.917	0.708	0.583	0.650	0.835	0.759	0.725	0.892
	0.910				0.926				0.935				0.833				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Toffie Terrace/Bobby Brown Pkwy & Outer Loop Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-010
Date: 9/12/2019

Cars

NS/EW Streets:	Toffie Terrace/Bobby Brown Pkwy				Toffie Terrace/Bobby Brown Pkwy				Outer Loop Rd				Outer Loop Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2.5 ET	0.5 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	30	9	5	0	13	11	15	0	32	117	55	0	25	60	24	0	396
7:15 AM	19	7	3	0	21	15	16	0	41	134	29	2	20	49	27	3	386
7:30 AM	12	2	9	0	23	15	23	0	37	150	43	0	16	56	35	7	428
7:45 AM	14	8	7	0	23	21	15	0	55	158	52	0	23	45	28	4	453
8:00 AM	10	9	7	0	33	16	27	0	33	180	71	1	23	65	46	8	529
8:15 AM	9	11	9	0	16	16	21	0	52	204	74	2	16	46	21	8	505
8:30 AM	8	2	6	0	23	18	16	0	37	168	69	1	29	60	23	8	468
8:45 AM	12	5	5	0	21	23	16	0	39	162	54	1	21	47	29	7	442
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	52.29%	24.31%	23.39%	0.00%	37.86%	29.54%	32.60%	0.00%	15.88%	62.01%	21.77%	0.34%	19.68%	48.69%	26.51%	5.12%	3607
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	39	27	27	0	93	73	80	0	161	714	268	5	89	218	119	31	1944
PEAK HR FACTOR :	0.81	0.614	0.750	0.000	0.705	0.793	0.741	0.000	0.774	0.875	0.905	0.625	0.767	0.838	0.647	0.969	0.919
	0.802				0.809				0.864				0.805				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2.5 ET	0.5 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	57	16	29	0	17	6	29	0	32	74	13	1	6	188	20	8	496
4:15 PM	58	16	26	0	18	12	34	0	32	71	12	0	10	173	22	5	489
4:30 PM	61	12	16	0	23	7	34	0	36	79	10	2	4	165	33	8	490
4:45 PM	71	11	21	0	18	6	33	0	31	75	14	1	9	200	39	4	533
5:00 PM	80	19	19	0	20	6	30	0	29	62	6	1	10	177	39	7	505
5:15 PM	86	13	18	0	21	8	33	0	29	75	11	3	2	233	53	10	595
5:30 PM	53	15	15	0	23	4	34	0	25	67	9	1	8	167	35	14	470
5:45 PM	45	11	14	0	12	2	29	0	28	65	15	0	7	165	39	5	437
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	65.35%	14.45%	20.20%	0.00%	33.12%	11.11%	55.77%	0.00%	26.62%	62.49%	9.90%	0.99%	3.00%	78.71%	15.01%	3.27%	4015
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	298	55	74	0	82	27	130	0	125	291	41	7	25	775	164	29	2123
PEAK HR FACTOR :	0.87	0.724	0.881	0.000	0.891	0.844	0.956	0.000	0.868	0.921	0.732	0.583	0.625	0.832	0.774	0.725	0.892
	0.905				0.934				0.913				0.833				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Toffie Terrace/Bobby Brown Pkwy & Outer Loop Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-010
Date: 9/12/2019

HT

NS/EW Streets:	Toffie Terrace/Bobby Brown Pkwy				Toffie Terrace/Bobby Brown Pkwy				Outer Loop Rd				Outer Loop Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2.5 ET	0.5 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
7:00 AM	7	0	0	0	0	1	5	0	1	9	4	0	1	12	1	0	41
7:15 AM	2	3	0	0	1	0	0	0	7	9	2	0	0	11	1	0	36
7:30 AM	2	0	1	0	2	0	2	0	3	8	4	0	0	7	3	0	32
7:45 AM	2	1	0	0	1	1	1	0	5	6	2	0	0	11	1	0	31
8:00 AM	3	0	0	0	2	0	5	0	2	10	3	0	1	6	6	0	38
8:15 AM	2	0	0	0	2	0	1	0	4	9	3	0	0	16	4	0	41
8:30 AM	4	0	0	0	0	2	2	0	2	8	2	0	1	11	2	0	34
8:45 AM	2	1	0	0	1	0	2	0	3	13	3	0	1	13	4	0	43
TOTAL VOLUMES :	NL 24	NT 5	NR 1	NU 0	SL 9	ST 4	SR 18	SU 0	EL 27	ET 72	ER 23	EU 0	WL 4	WT 87	WR 22	WU 0	TOTAL 296
APPROACH %'s :	80.00%	16.67%	3.33%	0.00%	29.03%	12.90%	58.06%	0.00%	22.13%	59.02%	18.85%	0.00%	3.54%	76.99%	19.47%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	11	1	0	0	5	2	10	0	11	40	11	0	3	46	16	0	156
PEAK HR FACTOR :	0.688	0.250	0.000	0.000	0.625	0.250	0.500	0.000	0.688	0.769	0.917	0.000	0.750	0.719	0.667	0.000	0.907
	0.750				0.607				0.816				0.813				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	1 SL	2 ST	0 SR	0 SU	1 EL	2.5 ET	0.5 ER	0 EU	1 WL	1 WT	1 WR	0 WU	
4:00 PM	1	1	1	0	0	0	3	0	5	14	5	0	0	8	2	0	40
4:15 PM	2	1	0	0	0	1	4	0	6	8	4	0	0	12	1	0	39
4:30 PM	1	0	0	0	0	0	4	0	1	8	2	0	1	10	1	0	28
4:45 PM	2	1	1	0	1	0	3	0	2	10	4	0	0	8	2	0	34
5:00 PM	2	0	0	0	1	0	2	0	4	6	0	0	0	13	2	0	30
5:15 PM	3	0	0	0	0	0	2	0	7	4	4	0	0	12	4	0	36
5:30 PM	3	1	0	0	2	0	1	0	2	8	2	0	0	17	5	0	41
5:45 PM	3	1	0	0	1	0	0	0	7	12	4	0	0	5	3	0	36
TOTAL VOLUMES :	NL 17	NT 5	NR 2	NU 0	SL 5	ST 1	SR 19	SU 0	EL 34	ET 70	ER 25	EU 0	WL 1	WT 85	WR 20	WU 0	TOTAL 284
APPROACH %'s :	70.83%	20.83%	8.33%	0.00%	20.00%	4.00%	76.00%	0.00%	26.36%	54.26%	19.38%	0.00%	0.94%	80.19%	18.87%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	8	1	1	0	2	0	11	0	14	28	10	0	1	43	9	0	128
PEAK HR FACTOR :	0.67	0.250	0.250	0.000	0.500	0.000	0.688	0.000	0.500	0.700	0.625	0.000	0.250	0.827	0.563	0.000	0.889
	0.625				0.813				0.813				0.828				

Location: Toffie Terrace/Bobby Brown Pkwy & Outer Loop Rd
City: Atlanta
Control: Signalized

Project ID: 19-09596-010
Date: 9/12/2019

Bikes

[illegible]

National Data & Surveying Services

Location: Toffie Terrace/Bobby Brown Pkwy & Outer Loop Rd
City: Atlanta

Project ID: 19-09596-010
Date: 9/12/2019

Pedestrians (Crosswalks)

NS/EW Streets:	Toffie Terrace/Bobby Brown Pkwy		Toffie Terrace/Bobby Brown Pkwy		Outer Loop Rd		Outer Loop Rd			
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL	
	EB	WB	EB	WB	NB	SB	NB	SB		
	7:00 AM	10	0	0	0	0	1	1		3
	7:15 AM	0	0	0	0	1	0	0		2
	7:30 AM	3	0	0	0	0	0	0		8
	7:45 AM	0	0	1	0	0	0	1		6
	8:00 AM	3	0	0	0	1	0	0		7
	8:15 AM	0	0	0	0	0	1	0		2
	8:30 AM	0	0	0	0	0	0	0		0
8:45 AM	0	0	0	0	0	0	0	0		
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL	
APPROACH %'s :	7	0	1	0	2	14	2	2	28	
	100.00%	0.00%	100.00%	0.00%	12.50%	87.50%	50.00%	50.00%		
PEAK HR :	08:00 AM - 09:00 AM								TOTAL	
PEAK HR VOL :	3	0	0	0	1	4	1	0	9	
PEAK HR FACTOR :	0.250				0.250	0.333	0.250		0.321	
	0.250				0.313		0.250			

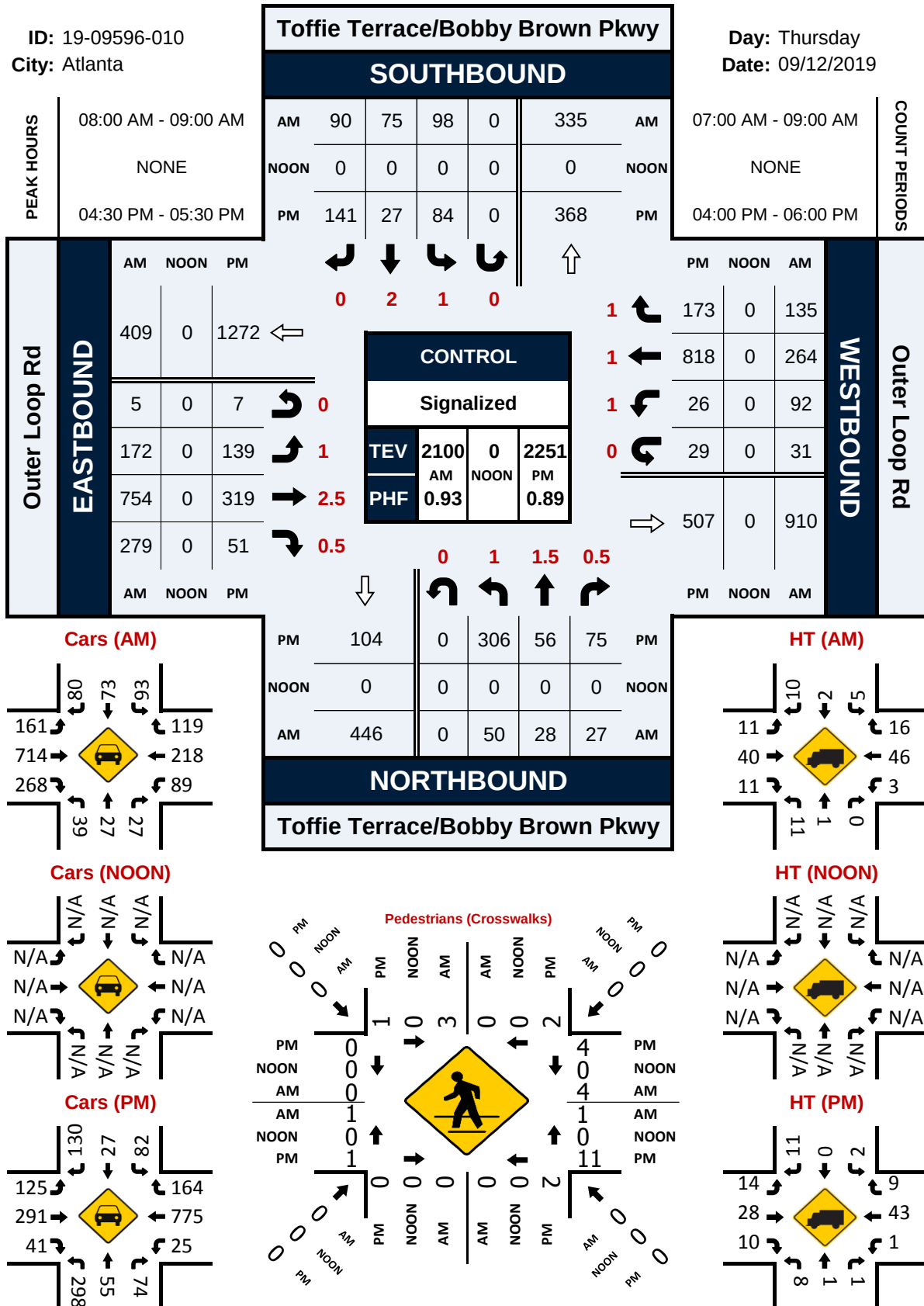
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	2	0	0	0	2
4:15 PM	0	0	0	0	4	1	0	0	5
4:30 PM	0	0	0	0	4	1	0	0	5
4:45 PM	1	2	0	0	2	3	0	0	8
5:00 PM	0	0	0	1	2	0	1	0	4
5:15 PM	0	0	0	1	3	0	0	0	4
5:30 PM	1	2	0	0	2	5	0	0	10
5:45 PM	2	0	0	0	0	2	0	0	4
TOTAL VOLUMES : APPROACH %'s :	EB 4	WB 4	EB 0	WB 2	NB 19	SB 12	NB 1	SB 0	TOTAL 42
	50.00%	50.00%	0.00%	100.00%	61.29%	38.71%	100.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	1	2	0	2	11	4	1	0	21
PEAK HR FACTOR :	0.250	0.250		0.500	0.688	0.333	0.250		0.656
	0.250		0.500		0.750		0.250		

Toffie Terrace/Bobby Brown Pkwy & Outer Loop Rd

Peak Hour Turning Movement Count

ID: 19-09596-010
City: Atlanta

Day: Thursday
Date: 09/12/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 139/Riverdale Rd & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09702-001
Date: 11-07-2019

Total

NS/EW Streets:	SR 139/Riverdale Rd				SR 139/Riverdale Rd				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1	2	1	0	1	2	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	50	246	18	0	53	58	2	0	1	13	22	0	9	8	44	0	524
7:15 AM	48	211	15	0	64	58	2	0	2	10	20	0	10	15	54	0	509
7:30 AM	51	203	18	0	59	78	2	0	2	9	22	0	15	15	42	0	516
7:45 AM	82	264	9	0	60	97	1	0	4	11	14	0	6	24	50	0	622
8:00 AM	70	197	13	0	74	77	0	1	6	12	18	0	5	20	56	0	549
8:15 AM	50	194	13	0	72	86	0	0	2	12	13	0	9	17	46	0	514
8:30 AM	40	217	19	0	73	72	0	0	3	11	19	0	7	20	58	0	539
8:45 AM	43	168	14	1	67	72	2	0	3	11	19	0	9	19	42	0	470
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	434	1700	119	1	522	598	9	1	23	89	147	0	70	138	392	0	4243
	19.25%	75.42%	5.28%	0.04%	46.19%	52.92%	0.80%	0.09%	8.88%	34.36%	56.76%	0.00%	11.67%	23.00%	65.33%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	242	872	54	0	279	332	1	1	15	46	64	0	27	81	210	0	2224
PEAK HR FACTOR :	0.738	0.826	0.711	0.000	0.943	0.856	0.250	0.250	0.625	0.958	0.842	0.000	0.750	0.844	0.905	0.000	0.894
	0.823				0.970				0.868				0.935				

NS/EW Streets:	SR 139/Riverdale Rd				SR 139/Riverdale Rd				Sullivan Rd				Sullivan Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1	2	1	0	1	2	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	25	123	10	0	61	203	2	1	3	12	28	0	13	18	111	0	610
4:15 PM	27	136	11	0	53	185	1	0	5	19	42	0	11	18	83	0	591
4:30 PM	35	117	9	0	58	215	2	0	4	25	48	0	16	15	89	0	633
4:45 PM	35	141	16	0	75	161	1	0	5	19	52	0	10	15	94	0	624
5:00 PM	26	139	10	0	55	198	0	0	3	29	44	0	13	11	125	0	653
5:15 PM	27	159	8	0	61	252	2	1	2	17	34	0	16	14	92	0	685
5:30 PM	33	170	14	0	80	195	4	3	4	16	44	0	13	5	81	0	662
5:45 PM	26	135	9	0	75	195	2	0	3	21	45	0	8	17	87	0	623
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	234	1120	87	0	518	1604	14	5	29	158	337	0	100	113	762	0	5081
	16.24%	77.72%	6.04%	0.00%	24.19%	74.92%	0.65%	0.23%	5.53%	30.15%	64.31%	0.00%	10.26%	11.59%	78.15%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	121	609	48	0	271	806	7	4	14	81	174	0	52	45	392	0	2624
PEAK HR FACTOR :	0.864	0.896	0.750	0.000	0.847	0.800	0.438	0.333	0.700	0.698	0.837	0.000	0.813	0.750	0.784	0.000	0.958
	0.896				0.861				0.885				0.820				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 139/Riverdale Rd & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09702-001
Date: 11-07-2019

Cars

NS/EW Streets:	SR 139/Riverdale Rd				SR 139/Riverdale Rd				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1	2	1	0	1	2	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	50	238	14	0	48	58	2	0	1	11	22	0	9	7	41	0	501
7:15 AM	46	204	14	0	60	55	1	0	2	9	19	0	10	13	47	0	480
7:30 AM	50	194	18	0	55	77	2	0	2	6	21	0	13	13	36	0	487
7:45 AM	78	250	9	0	58	90	1	0	4	11	12	0	6	23	44	0	586
8:00 AM	65	185	13	0	68	71	0	1	4	10	18	0	5	16	52	0	508
8:15 AM	49	181	13	0	67	78	0	0	2	10	12	0	8	13	40	0	473
8:30 AM	39	202	19	0	68	69	0	0	3	8	17	0	7	16	51	0	499
8:45 AM	40	159	12	1	62	64	2	0	2	8	15	0	8	16	36	0	425
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	417	1613	112	1	486	562	8	1	20	73	136	0	66	117	347	0	3959
	19.46%	75.27%	5.23%	0.05%	45.98%	53.17%	0.76%	0.09%	8.73%	31.88%	59.39%	0.00%	12.45%	22.08%	65.47%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	231	818	54	0	261	308	1	1	13	39	59	0	26	68	187	0	2066
PEAK HR FACTOR :	0.74	0.818	0.711	0.000	0.960	0.856	0.250	0.250	0.813	0.886	0.819	0.000	0.813	0.739	0.899	0.000	0.881
			0.818				0.958				0.867				0.949		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1	2	1	0	1	2	1	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	24	123	9	0	55	195	2	1	2	9	24	0	12	14	107	0	577
4:15 PM	26	134	11	0	49	179	1	0	4	13	39	0	10	16	79	0	561
4:30 PM	33	113	9	0	52	212	2	0	4	18	45	0	16	13	84	0	601
4:45 PM	33	139	15	0	69	155	1	0	5	16	51	0	8	11	87	0	590
5:00 PM	26	138	10	0	51	197	0	0	3	28	40	0	13	8	118	0	632
5:15 PM	26	157	8	0	54	248	2	1	2	8	34	0	15	11	87	0	653
5:30 PM	31	166	14	0	73	194	4	3	4	14	41	0	12	4	72	0	632
5:45 PM	25	131	9	0	67	193	2	0	2	18	44	0	8	12	78	0	589
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	224	1101	85	0	470	1573	14	5	26	124	318	0	94	89	712	0	4835
	15.89%	78.09%	6.03%	0.00%	22.79%	76.29%	0.68%	0.24%	5.56%	26.50%	67.95%	0.00%	10.50%	9.94%	79.55%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	116	600	47	0	247	794	7	4	14	66	166	0	48	34	364	0	2507
PEAK HR FACTOR :	0.88	0.904	0.783	0.000	0.846	0.800	0.438	0.333	0.700	0.589	0.814	0.000	0.800	0.773	0.771	0.000	0.960
			0.904				0.862				0.854				0.802		

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 139/Riverdale Rd & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09702-001
Date: 11-07-2019

HT

NS/EW Streets:	SR 139/Riverdale Rd				SR 139/Riverdale Rd				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
7:00 AM	0	8	4	0	5	0	0	0	0	2	0	0	0	1	3	0	23
7:15 AM	2	7	1	0	4	3	1	0	0	1	1	0	0	2	7	0	29
7:30 AM	1	9	0	0	4	1	0	0	0	3	1	0	2	2	6	0	29
7:45 AM	4	14	0	0	2	7	0	0	0	0	2	0	0	1	6	0	36
8:00 AM	5	12	0	0	6	6	0	0	2	2	0	0	0	4	4	0	41
8:15 AM	1	13	0	0	5	8	0	0	0	2	1	0	1	4	6	0	41
8:30 AM	1	15	0	0	5	3	0	0	0	3	2	0	0	4	7	0	40
8:45 AM	3	9	2	0	5	8	0	0	1	3	4	0	1	3	6	0	45
TOTAL VOLUMES :	NL 17	NT 87	NR 7	NU 0	SL 36	ST 36	SR 1	SU 0	EL 3	ET 16	ER 11	EU 0	WL 4	WT 21	WR 45	WU 0	TOTAL 284
APPROACH %'s :	15.32%	78.38%	6.31%	0.00%	49.32%	49.32%	1.37%	0.00%	10.00%	53.33%	36.67%	0.00%	5.71%	30.00%	64.29%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	11	54	0	0	18	24	0	0	2	7	5	0	1	13	23	0	158
PEAK HR FACTOR :	0.550	0.900	0.000	0.000	0.750	0.750	0.000	0.000	0.250	0.583	0.625	0.000	0.250	0.813	0.821	0.000	0.963
	0.903				0.808				0.700				0.841				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	1 NR	0 NU	1 SL	2 ST	1 SR	0 SU	1 EL	1 ET	0 ER	0 EU	1 WL	1 WT	0 WR	0 WU	
4:00 PM	1	0	1	0	6	8	0	0	1	3	4	0	1	4	4	0	33
4:15 PM	1	2	0	0	4	6	0	0	1	6	3	0	1	2	4	0	30
4:30 PM	2	4	0	0	6	3	0	0	0	7	3	0	0	2	5	0	32
4:45 PM	2	2	1	0	6	6	0	0	0	3	1	0	2	4	7	0	34
5:00 PM	0	1	0	0	4	1	0	0	0	1	4	0	0	3	7	0	21
5:15 PM	1	2	0	0	7	4	0	0	0	9	0	0	1	3	5	0	32
5:30 PM	2	4	0	0	7	1	0	0	0	2	3	0	1	1	9	0	30
5:45 PM	1	4	0	0	8	2	0	0	1	3	1	0	0	5	9	0	34
TOTAL VOLUMES :	NL 10	NT 19	NR 2	NU 0	SL 48	ST 31	SR 0	SU 0	EL 3	ET 34	ER 19	EU 0	WL 6	WT 24	WR 50	WU 0	TOTAL 246
APPROACH %'s :	32.26%	61.29%	6.45%	0.00%	60.76%	39.24%	0.00%	0.00%	5.36%	60.71%	33.93%	0.00%	7.50%	30.00%	62.50%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	5	9	1	0	24	12	0	0	0	15	8	0	4	11	28	0	117
PEAK HR FACTOR :	0.63	0.563	0.250	0.000	0.857	0.500	0.000	0.000	0.000	0.417	0.500	0.000	0.500	0.688	0.778	0.000	0.860
	0.625				0.750				0.639				0.827				

National Data & Surveying Services

Location: SR 139/Riverdale Rd & Sullivan Rd
City: College Park
Control: Signalized

Project ID: 19-09702-001
Date: 11-07-2019

Bikes

[illegible]

National Data & Surveying Services

Location: SR 139/Riverdale Rd & Sullivan Rd
City: College Park

Project ID: 19-09702-001
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR 139/Riverdale Rd		SR 139/Riverdale Rd		Sullivan Rd		Sullivan Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES : APPROACH %'s :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL 1
	0	0	0	0	0	0	1 100.00%	0 0.00%	
PEAK HR :	07:45 AM - 08:45 AM		0	0	0	0	0	0	TOTAL 0
PEAK HR VOL : PEAK HR FACTOR :	0	0							

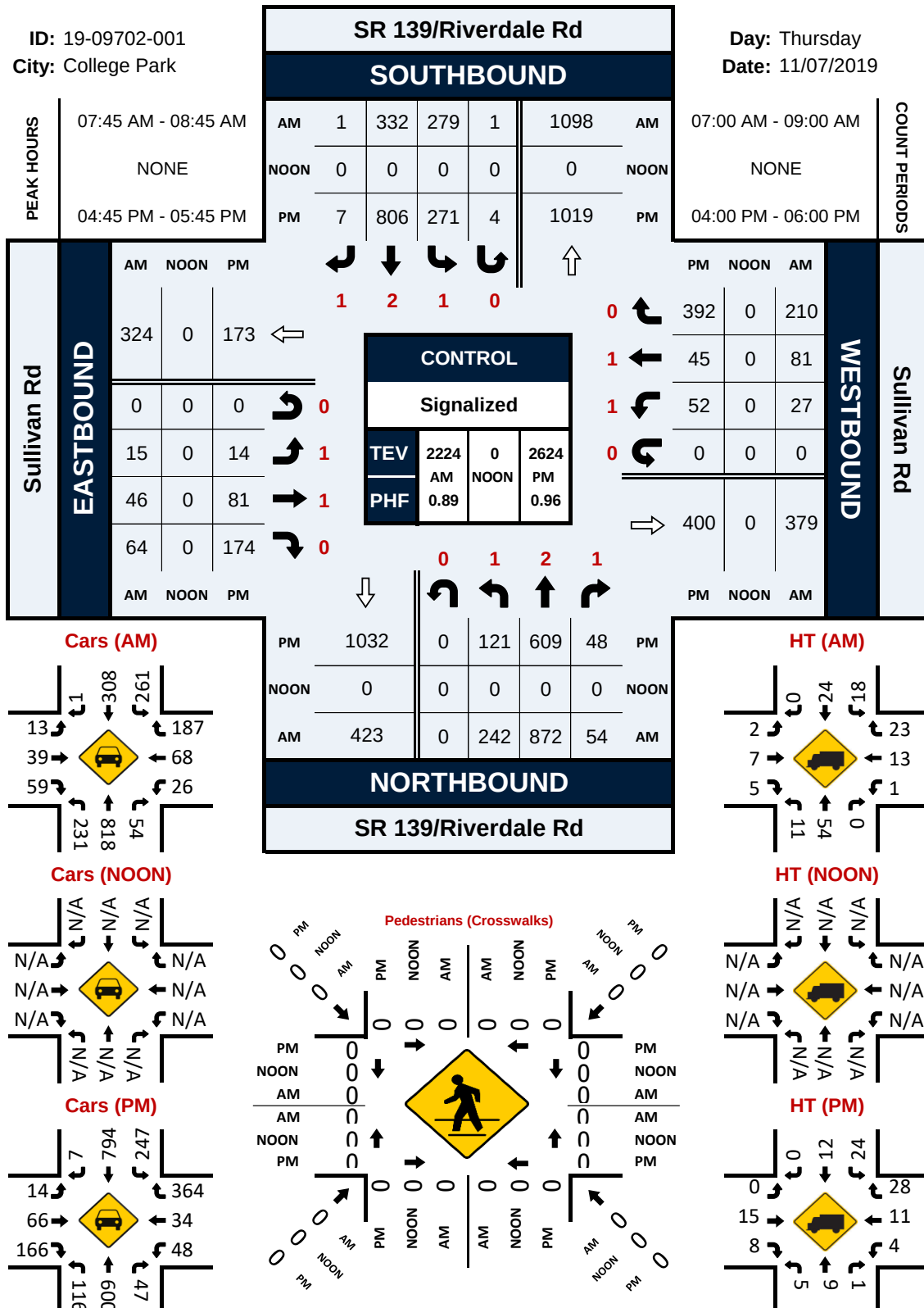
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

SR 139/Riverdale Rd & Sullivan Rd

Peak Hour Turning Movement Count

ID: 19-09702-001
City: College Park

Day: Thursday
Date: 11/07/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: I-285 Ramp /Lake Mirror Rd & S Outer Loop Rd/
City: College Park
Control: Signalized

Project ID: 19-09702-002
Date: 11-07-2019

		Total																								
NS/EW Streets:		I-285 Ramp/Lake Mirror Rd					I-285 Ramp /Lake Mirror Rd					S Outer Loop Rd					S Outer Loop Rd									
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2						
	0	0	1	0	0	0.5	1.5	0	0	0	0	3	1	0	0	0	0	0	0	0						
	7:00 AM	0	0	33	0	1	10	37	0	0	1	0	33	51	0	81	0	0	0	0	0					
	7:15 AM	0	0	26	0	1	14	38	0	0	3	0	21	51	0	74	0	0	0	0	0					
	7:30 AM	0	0	22	0	1	5	37	0	0	11	0	23	50	0	109	0	0	0	0	0					
	7:45 AM	0	0	30	0	2	10	42	0	0	5	0	29	42	0	110	0	0	0	0	0					
8:00 AM	0	0	34	0	1	8	27	0	0	11	0	32	77	0	91	0	0	0	0	0						
8:15 AM	0	0	18	0	4	9	47	0	0	14	0	23	67	0	96	0	0	0	0	0						
8:30 AM	0	0	20	0	1	10	33	0	0	5	0	26	56	0	66	0	0	0	0	0						
8:45 AM	0	0	15	0	2	11	38	0	0	1	0	26	49	0	65	0	0	0	0	0						
TOTAL VOLUMES :		NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2					
APPROACH %'s :		0.00%	0.00%	93.84%	0.00%	6.16%	18.03%	70.02%	0.00%	0.00%	11.94%	0.00%	15.80%	32.86%	0.00%	51.34%	0	0	0	0	0					
PEAK HR :		07:30 AM - 08:30 AM					32	153	0	0	41	0	107	236	0	406	0	0	0	0	0					
PEAK HR VOL :		0	0	104	0	8	0.800	0.814	0.000	0.000	0.732	0.000	0.836	0.766	0.000	0.923	0.000	0.000	0.000	0.000	0.000					
PEAK HR FACTOR :		0.000	0.000	0.765	0.000	0.500	0.800	0.814	0.000	0.000	0.807	0.000	0.836	0.766	0.000	0.923	0.000	0.000	0.000	0.000	0.000					
PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2						
	0	0	1	0	0	0.5	1.5	0	0	0	0	3	1	0	0	0	0	0	0	0						
	4:00 PM	0	0	51	0	1	34	91	0	0	5	0	71	72	0	75	0	0	0	0	0					
	4:15 PM	0	0	38	0	4	33	113	0	0	3	0	101	82	0	60	0	0	0	0	0					
	4:30 PM	0	0	44	0	1	28	107	0	0	1	0	105	90	0	73	0	0	0	0	0					
	4:45 PM	0	0	28	0	3	21	100	0	0	5	0	136	96	0	77	0	0	0	0	0					
5:00 PM	0	0	51	0	0	26	101	0	0	9	0	113	62	0	66	0	0	0	0	0						
5:15 PM	0	0	52	0	1	23	115	0	0	1	0	123	76	0	57	0	0	0	0	0						
5:30 PM	0	0	37	0	2	20	119	0	0	5	0	137	92	0	68	0	0	0	0	0						
5:45 PM	0	0	30	0	0	15	120	0	0	4	0	106	97	0	54	0	0	0	0	0						
TOTAL VOLUMES :		NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2					
APPROACH %'s :		0.00%	0.00%	93.31%	0.00%	3.50%	18.20%	78.80%	0.00%	0.00%	3.00%	0.00%	42.70%	31.93%	0.00%	25.37%	0	0	0	0	0					
PEAK HR :		04:45 PM - 05:45 PM					90	435	0	0	20	0	509	326	0	268	0	0	0	0	0					
PEAK HR VOL :		0.000	0.000	0.808	0.000	0.500	0.865	0.914	0.000	0.000	0.556	0.000	0.929	0.849	0.000	0.870	0.000	0.000	0.000	0.000	0.000					
PEAK HR FACTOR :		0.000	0.000	0.808	0.000	0.500	0.865	0.914	0.000	0.000	0.556	0.000	0.929	0.849	0.000	0.870	0.000	0.000	0.000	0.000	0.000					

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-285 Ramp /Lake Mirror Rd & S Outer Loop Rd/
City: Collece Park
Control: Signalized

Project ID: 19-09702-002
Date: 11-07-2019

NS/EW Streets:		Cars																			
		I-285 Ramp/Lake Mirror Rd					I-285 Ramp /Lake Mirror Rd					S Outer Loop Rd					S Outer Loop Rd				
AM		NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND				
		NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2
		0	0	1	0	0	0.5	1.5	0	0	0	0	3	1	0	0	0	0	0	0	0
		NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2
7:00 AM		0	0	25	0	1	8	31	0	0	1	0	29	48	0	77	0	0	0	0	0
7:15 AM		0	0	19	0	1	12	33	0	0	3	0	17	47	0	70	0	0	0	0	0
7:30 AM		0	0	19	0	0	4	29	0	0	11	0	20	45	0	107	0	0	0	0	0
7:45 AM		0	0	23	0	2	9	38	0	0	5	0	23	39	0	105	0	0	0	0	0
8:00 AM		0	0	22	0	1	7	24	0	0	11	0	28	67	0	88	0	0	0	0	0
8:15 AM		0	0	9	0	4	7	39	0	0	13	0	12	59	0	87	0	0	0	0	0
8:30 AM		0	0	16	0	1	4	36	0	0	5	0	15	42	0	60	0	0	0	0	0
8:45 AM		0	0	7	0	2	9	29	0	0	1	0	15	38	0	55	0	0	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2
APPROACH %'s :		0.00%	0.00%	92.11%	0.00%	7.89%	16.71%	69.36%	0.00%	0.00%	13.93%	0.00%	13.33%	32.27%	0.00%	54.40%	0	0	0	0	0
PEAK HR :		07:30 AM - 08:30 AM					27	130	0	0	40	0	83	210	0	387	0	0	0	0	0
PEAK HR VOL :		0.00	0.000	0.793	0.000	0.438	0.750	0.833	0.000	0.000	0.769	0.000	0.741	0.784	0.000	0.904	0.000	0.000	0.000	0.000	0.000
PEAK HR FACTOR :		0.800					0.835				0.835		0.929			0.929					
PM		NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND				
		NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2
		0	0	46	0	1	27	77	0	0	5	0	55	55	0	64	0	0	0	0	0
4:00 PM		0	0	36	0	4	30	100	0	0	3	0	88	64	0	57	0	0	0	0	0
4:15 PM		0	0	41	0	1	27	93	0	0	1	0	92	75	0	61	0	0	0	0	0
4:30 PM		0	0	28	0	3	20	82	0	0	5	0	117	79	0	63	0	0	0	0	0
4:45 PM		0	0	51	0	0	25	95	0	0	8	0	100	52	0	57	0	0	0	0	0
5:00 PM		0	0	50	0	1	22	104	0	0	1	0	110	61	0	49	0	0	0	0	0
5:15 PM		0	0	36	0	2	20	108	0	0	5	0	122	82	0	58	0	0	0	0	0
5:30 PM		0	0	26	0	0	15	112	0	0	4	0	87	86	0	41	0	0	0	0	0
5:45 PM		0	0	26	0	0	15	112	0	0	4	0	87	86	0	41	0	0	0	0	0
TOTAL VOLUMES :		NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2
APPROACH %'s :		0.00%	0.00%	96.32%	0.00%	3.68%	18.62%	76.18%	0.00%	0.00%	3.20%	0.00%	43.44%	31.21%	0.00%	25.35%	0	0	0	0	0
PEAK HR :		04:45 PM - 05:45 PM					87	399	0	0	19	0	449	274	0	227	0	0	0	0	0
PEAK HR VOL :		0.00	0.000	0.809	0.000	0.500	0.870	0.924	0.000	0.000	0.594	0.000	0.920	0.835	0.000	0.901	0.000	0.000	0.000	0.000	0.000
PEAK HR FACTOR :		0.838					0.949				0.949		0.906			0.906					

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-285 Ramp /Lake Mirror Rd & S Outer Loop Rd/
City: Colleee Park
Control: Signalized

Project ID: 19-09702-002
Date: 11-07-2019

NS/ EW Streets:		HT																								
		I-285 Ramp/Lake Mirror Rd					I-285 Ramp /Lake Mirror Rd					S Outer Loop Rd					S Outer Loop Rd									
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					TOTAL
	0	0	0	0	0	0.5	1.5	0	0	0	0	3	0	0	0	0	0	0	0	0						
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2						
	0	0	8	0	0	2	6	0	0	0	0	4	3	0	4	0	0	0	0	0						
	7:00 AM	0	0	7	0	0	2	5	0	0	0	0	4	4	0	4	0	0	0	0						
	7:15 AM	0	0	3	0	1	1	8	0	0	0	0	3	5	0	2	0	0	0	0						
	7:30 AM	0	0	7	0	0	1	4	0	0	0	0	6	3	0	5	0	0	0	0						
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
8:00 AM	0	0	12	0	0	1	3	0	0	0	0	4	10	0	3	0	0	0	0							
8:15 AM	0	0	9	0	0	2	8	0	0	1	0	11	8	0	9	0	0	0	0							
8:30 AM	0	0	4	0	0	6	7	0	0	0	0	11	14	0	6	0	0	0	0							
8:45 AM	0	0	8	0	0	2	9	0	0	0	0	11	11	0	10	0	0	0	0							
TOTAL VOLUMES	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2						
APPROACH %'s :	0.00%	0.00%	98.31%	0.00%	1.69%	25.00%	73.53%	0.00%	0.00%	1.47%	0.00%	34.84%	37.42%	0.00%	27.74%	0	0	0	0	0						
PEAK HR :	07:30 AM - 08:30 AM					5	23	0	0	1	0	24	26	0	19	0	0	0	0	0						
PEAK HR VOL :	0.000	0.000	0.31	0	1	0.625	0.719	0.000	0.000	0.250	0.000	0.545	0.650	0.000	0.528	0.000	0.000	0.000	0.000	0.000						
PEAK HR FACTOR :	0.000	0.000	0.667	0.000	0.250	0.625	0.719	0.000	0.000	0.250	0.000	0.545	0.616	0.000	0.538	0.000	0.000	0.000	0.000	0.000						
PM	NORTHBOUND					SOUTHBOUND					EASTBOUND					WESTBOUND					WESTBOUND2					TOTAL
	0	0	0	0	0	0.5	1.5	0	0	0	0	3	0	0	0	0	0	0	0	0						
	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2						
	0	0	5	0	0	7	14	0	0	0	0	16	17	0	11	0	0	0	0	0						
	4:00 PM	0	0	2	0	0	3	13	0	0	0	0	13	18	0	3	0	0	0	0						
	4:15 PM	0	0	3	0	0	1	14	0	0	0	0	13	15	0	12	0	0	0	0						
	4:30 PM	0	0	0	0	0	1	8	0	0	0	0	19	17	0	14	0	0	0	0						
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	13	10	0	9	0	0	0	0							
5:15 PM	0	0	2	0	0	1	11	0	0	0	0	13	15	0	8	0	0	0	0							
5:30 PM	0	0	1	0	0	0	11	0	0	0	0	15	10	0	10	0	0	0	0							
5:45 PM	0	0	4	0	0	0	8	0	0	0	0	19	11	0	13	0	0	0	0							
TOTAL VOLUMES	NL	NT	NR	NU	NR2	SL	ST	SR	SU	SL2	EL	ET	ER	EU	ET2	WL	WT	WR	WU	WU2						
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	14.00%	85.00%	0.00%	0.00%	1.00%	0.00%	38.54%	35.99%	0.00%	25.48%	0	0	0	0	0						
PEAK HR :	04:45 PM - 05:45 PM					3	36	0	0	1	0	60	52	0	41	0	0	0	0	0						
PEAK HR VOL :	0.00	0.000	0.375	0.000	0.000	0.750	0.818	0.000	0.000	0.250	0.000	0.789	0.765	0.000	0.732	0.000	0.000	0.000	0.000	0.000						
PEAK HR FACTOR :	0.00	0.000	0.375	0.000	0.000	0.750	0.818	0.000	0.000	0.250	0.000	0.789	0.765	0.000	0.732	0.000	0.000	0.000	0.000	0.000						

[illegible]

National Data & Surveying Services

Location: I-285 Ramp /Lake Mirror Rd & S Outer Loop Rd/
City: College Park

Project ID: 19-09702-002
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	I-285 Ramp/Lake Mirror Rd	I-285 Ramp /Lake Mirror Rd	S Outer Loop Rd	S Outer Loop Rd		
AM	NORTH LEG	SOUTH LEG	EAST LEG	WEST LEG	EAST LEG 2	TOTAL
	EB WB	EB WB	NB SB	NB SB	NB SB	
	0 0	0 0	0 0	0 0	0 0	0
	0 0	0 0	0 0	0 0	0 0	0
	0 0	0 0	0 0	0 0	0 0	0
	0 0	0 0	0 0	0 0	0 0	0
	0 0	0 0	0 0	0 0	0 0	0
8:00 AM	0 0	0 0	0 0	0 0	0 0	0
8:15 AM	0 0	0 0	0 0	0 0	0 0	0
8:30 AM	0 0	0 0	0 0	0 0	0 0	0
8:45 AM	0 0	0 0	0 0	0 0	0 0	0
TOTAL VOLUMES :	EB WB	EB WB	NB SB	NB SB	NB SB	TOTAL
APPROACH %'s :	0 0	0 0	0 0	0 0	0 0	0
PEAK HR :	07:30 AM - 08:30 AM					TOTAL
PEAK HR VOL :	0 0	0 0	0 0	0 0	0 0	0
PEAK HR FACTOR :						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG 2		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB 0	WB 0	EB 0	WB 0	NB 0	SB 0	NB 0	SB 0	NB 0	SB 0	TOTAL 0
APPROACH %'s :											
PEAK HR :	04:45 PM - 05:45 PM										TOTAL
PEAK HR VOL :	0 0		0 0		0 0		0 0		0 0		0
PEAK HR FACTOR :											

I-285 Ramp /Lake Mirror Rd & S Outer Loop Rd/

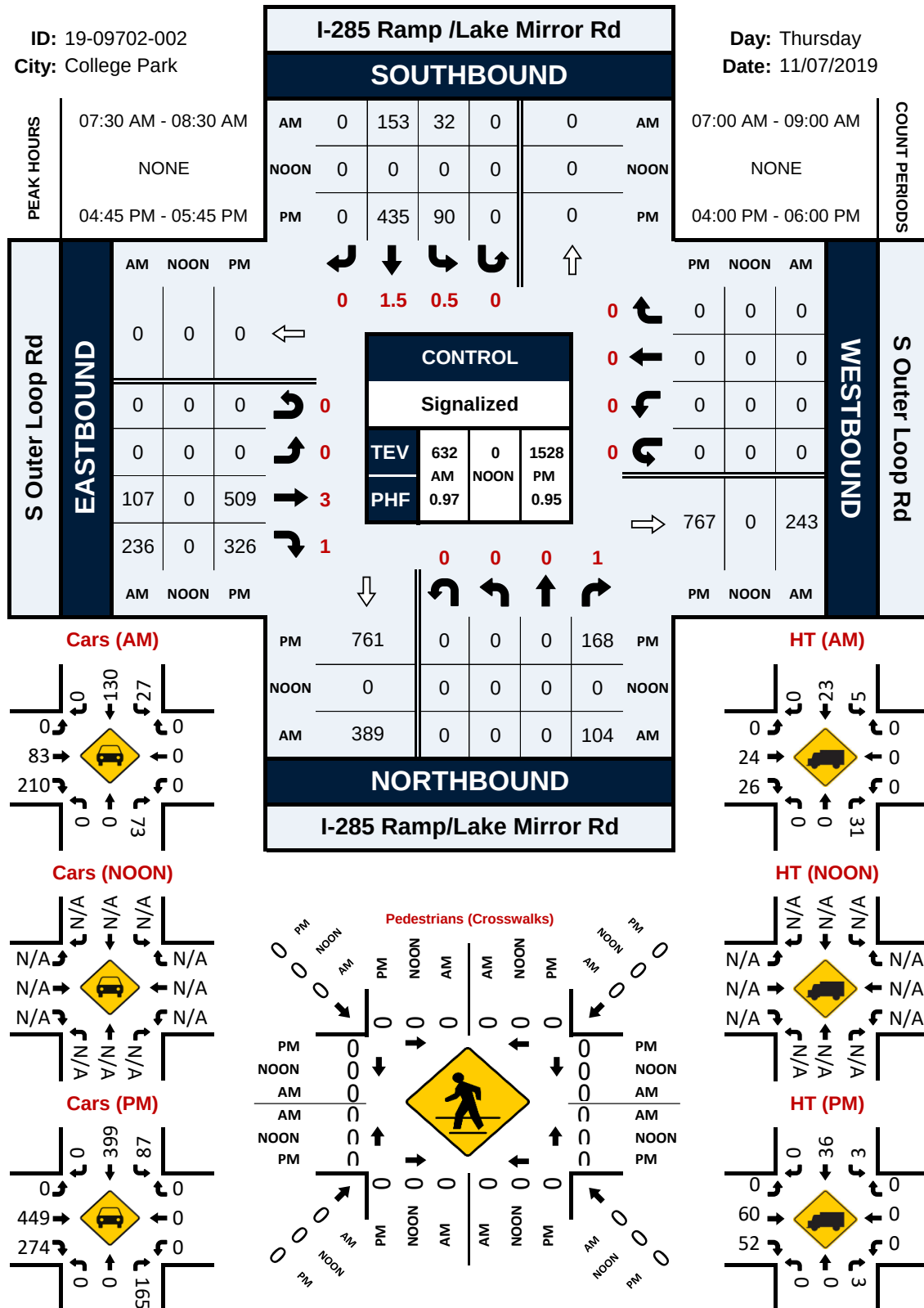
Peak Hour Turning Movement Count

ID: 19-09702-002

City: College Park

Day: Thursday

Date: 11/07/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Clark Howell Hwy & Lake Mirror Rd
City: College Park
Control: Signalized

Project ID: 19-09702-003
Date: 11-07-2019

Total

NS/EW Streets:	Clark Howell Hwy				Clark Howell Hwy				Lake Mirror Rd				Lake Mirror Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0.5 EL	0.5 ET	1 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
7:00 AM	32	121	25	0	0	0	0	0	3	27	54	0	4	3	2	0	271
7:15 AM	24	147	26	0	0	0	0	0	8	31	41	0	7	3	5	0	292
7:30 AM	26	119	17	0	0	0	0	0	7	22	57	0	0	5	3	0	256
7:45 AM	28	147	19	0	0	0	0	0	5	23	53	0	4	3	5	0	287
8:00 AM	40	112	17	0	0	0	0	0	10	20	59	0	3	2	3	0	266
8:15 AM	15	108	24	0	0	0	0	0	8	20	65	0	9	5	2	0	256
8:30 AM	25	92	22	0	0	0	0	0	11	22	60	0	6	2	8	0	248
8:45 AM	19	96	13	0	0	0	0	0	11	19	46	0	3	5	2	0	214
TOTAL VOLUMES :	NL 209	NT 942	NR 163	NU 0	SL 0	ST 0	SR 0	SU 0	EL 63	ET 184	ER 435	EU 0	WL 36	WT 28	WR 30	WU 0	TOTAL 2090
APPROACH %'s :	15.91%	71.69%	12.40%	0.00%					9.24%	26.98%	63.78%	0.00%	38.30%	29.79%	31.91%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM				0	0	0	0	23	103	205	0	15	14	15	0	TOTAL 1106
PEAK HR VOL :	110	534	87	0	0.000	0.000	0.000	0.000	0.719	0.831	0.899	0.000	0.536	0.700	0.750	0.000	0.947
PEAK HR FACTOR :	0.859	0.908	0.837	0.000					0.962				0.733				

NS/EW Streets:	Clark Howell Hwy				Clark Howell Hwy				Lake Mirror Rd				Lake Mirror Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0.5 EL	0.5 ET	1 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
4:00 PM	36	106	4	0	0	0	0	0	12	15	150	0	14	11	11	0	359
4:15 PM	24	66	11	0	0	0	0	0	16	5	171	0	17	12	13	0	335
4:30 PM	21	91	3	0	0	0	0	0	13	9	194	0	29	21	35	0	416
4:45 PM	15	82	2	0	0	0	0	0	19	4	188	0	8	9	14	0	341
5:00 PM	33	122	2	0	0	0	0	0	5	7	143	0	18	13	19	0	362
5:15 PM	41	119	4	0	0	0	0	0	10	4	190	0	13	13	12	0	406
5:30 PM	31	130	2	0	0	0	0	0	6	5	198	0	14	11	17	0	414
5:45 PM	17	62	2	0	0	0	0	0	12	4	200	0	7	6	8	0	318
TOTAL VOLUMES :	NL 218	NT 778	NR 30	NU 0	SL 0	ST 0	SR 0	SU 0	EL 93	ET 53	ER 1434	EU 0	WL 120	WT 96	WR 129	WU 0	TOTAL 2951
APPROACH %'s :	21.25%	75.83%	2.92%	0.00%					5.89%	3.35%	90.76%	0.00%	34.78%	27.83%	37.39%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM				0	0	0	0	47	24	715	0	68	56	80	0	TOTAL 1525
PEAK HR VOL :	110	414	11	0	0.000	0.000	0.000	0.000	0.618	0.667	0.921	0.000	0.586	0.667	0.571	0.000	0.916
PEAK HR FACTOR :	0.671	0.848	0.688	0.000					0.910				0.600				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Clark Howell Hwy & Lake Mirror Rd
City: College Park
Control: Signalized

Project ID: 19-09702-003
Date: 11-07-2019

Cars

NS/EW Streets:	Clark Howell Hwy				Clark Howell Hwy				Lake Mirror Rd				Lake Mirror Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0.5 EL	0.5 ET	1 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
7:00 AM	25	103	24	0	0	0	0	0	1	27	49	0	3	1	1	0	234
7:15 AM	20	132	26	0	0	0	0	0	4	30	37	0	4	1	3	0	257
7:30 AM	21	108	17	0	0	0	0	0	4	21	47	0	0	4	3	0	225
7:45 AM	24	127	19	0	0	0	0	0	1	22	49	0	2	3	2	0	249
8:00 AM	28	98	17	0	0	0	0	0	8	18	52	0	2	2	2	0	227
8:15 AM	9	95	24	0	0	0	0	0	4	17	56	0	5	2	1	0	213
8:30 AM	22	81	21	0	0	0	0	0	8	19	45	0	6	1	7	0	210
8:45 AM	14	80	12	0	0	0	0	0	5	16	35	0	2	2	2	0	168
TOTAL VOLUMES :	NL 163	NT 824	NR 160	NU 0	SL 0	ST 0	SR 0	SU 0	EL 35	ET 170	ER 370	EU 0	WL 24	WT 16	WR 21	WU 0	TOTAL 1783
APPROACH %'s :	14.21%	71.84%	13.95%	0.00%					6.09%	29.57%	64.35%	0.00%	39.34%	26.23%	34.43%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	90	470	86	0	0	0	0	0	10	100	182	0	9	9	9	0	965
PEAK HR FACTOR :	0.90	0.890	0.827	0.000	0.000	0.000	0.000	0.000	0.625	0.833	0.929	0.000	0.563	0.563	0.750	0.000	0.939
	0.907								0.948				0.844				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1.5 NT	0.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0.5 EL	0.5 ET	1 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
4:00 PM	33	93	4	0	0	0	0	0	9	6	129	0	11	10	9	0	304
4:15 PM	21	56	7	0	0	0	0	0	13	4	147	0	17	12	12	0	289
4:30 PM	20	75	2	0	0	0	0	0	9	8	167	0	26	20	31	0	358
4:45 PM	14	70	2	0	0	0	0	0	15	3	169	0	7	9	12	0	301
5:00 PM	33	108	2	0	0	0	0	0	3	4	133	0	18	13	19	0	333
5:15 PM	40	112	3	0	0	0	0	0	6	1	170	0	12	12	12	0	368
5:30 PM	30	118	1	0	0	0	0	0	3	1	184	0	13	11	15	0	376
5:45 PM	14	56	2	0	0	0	0	0	9	2	186	0	4	5	8	0	286
TOTAL VOLUMES :	NL 205	NT 688	NR 23	NU 0	SL 0	ST 0	SR 0	SU 0	EL 67	ET 29	ER 1285	EU 0	WL 108	WT 92	WR 118	WU 0	TOTAL 2615
APPROACH %'s :	22.38%	75.11%	2.51%	0.00%					4.85%	2.10%	93.05%	0.00%	33.96%	28.93%	37.11%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	107	365	9	0	0	0	0	0	33	16	639	0	63	54	74	0	1360
PEAK HR FACTOR :	0.67	0.815	0.750	0.000	0.000	0.000	0.000	0.000	0.550	0.500	0.940	0.000	0.606	0.675	0.597	0.000	0.924
	0.776								0.920				0.620				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Clark Howell Hwy & Lake Mirror Rd
City: College Park
Control: Signalized

Project ID: 19-09702-003
Date: 11-07-2019

HT

NS/EW Streets:		Clark Howell Hwy				Clark Howell Hwy				Lake Mirror Rd				Lake Mirror Rd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	1.5 NT	0.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0.5 EL	0.5 ET	1 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
	7:00 AM	7	18	1	0	0	0	0	0	2	0	5	0	1	2	1	0	37
	7:15 AM	4	15	0	0	0	0	0	0	4	1	4	0	3	2	2	0	35
	7:30 AM	5	11	0	0	0	0	0	0	3	1	10	0	0	1	0	0	31
	7:45 AM	4	20	0	0	0	0	0	0	4	1	4	0	2	0	3	0	38
	8:00 AM	12	14	0	0	0	0	0	0	2	2	7	0	1	0	1	0	39
	8:15 AM	6	13	0	0	0	0	0	0	4	3	9	0	4	3	1	0	43
	8:30 AM	3	11	1	0	0	0	0	0	3	3	15	0	0	1	1	0	38
	8:45 AM	5	16	1	0	0	0	0	0	6	3	11	0	1	3	0	0	46
TOTAL VOLUMES :		NL 46	NT 118	NR 3	NU 0	SL 0	ST 0	SR 0	SU 0	EL 28	ET 14	ER 65	EU 0	WL 12	WT 12	WR 9	WU 0	TOTAL 307
APPROACH %'s :		27.54%	70.66%	1.80%	0.00%					26.17%	13.08%	60.75%	0.00%	36.36%	36.36%	27.27%	0.00%	
PEAK HR :		07:00 AM - 08:00 AM				0	0	0	0	13	3	23	0	6	5	6	0	TOTAL 141
PEAK HR VOL :		20	64	1	0	0.000	0.000	0.000	0.000	0.813	0.750	0.575	0.000	0.500	0.625	0.500	0.000	0.928
PEAK HR FACTOR :		0.714	0.800	0.250	0.000					0.813	0.750	0.575	0.000	0.500	0.625	0.500	0.000	
		0.817								0.696				0.607				

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	1.5 NT	0.5 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0.5 EL	0.5 ET	1 ER	0 EU	0.5 WL	0.5 WT	1 WR	0 WU	
	4:00 PM	3	13	0	0	0	0	0	0	3	9	21	0	3	1	2	0	55
	4:15 PM	3	10	4	0	0	0	0	0	3	1	24	0	0	0	1	0	46
	4:30 PM	1	16	1	0	0	0	0	0	4	1	27	0	3	1	4	0	58
	4:45 PM	1	12	0	0	0	0	0	0	4	1	19	0	1	0	2	0	40
	5:00 PM	0	14	0	0	0	0	0	0	2	3	10	0	0	0	0	0	29
	5:15 PM	1	7	1	0	0	0	0	0	4	3	20	0	1	1	0	0	38
	5:30 PM	1	12	1	0	0	0	0	0	3	4	14	0	1	0	2	0	38
	5:45 PM	3	6	0	0	0	0	0	0	3	2	14	0	3	1	0	0	32
TOTAL VOLUMES :		NL 13	NT 90	NR 7	NU 0	SL 0	ST 0	SR 0	SU 0	EL 26	ET 24	ER 149	EU 0	WL 12	WT 4	WR 11	WU 0	TOTAL 336
APPROACH %'s :		11.82%	81.82%	6.36%	0.00%					13.07%	12.06%	74.87%	0.00%	44.44%	14.81%	40.74%	0.00%	
PEAK HR :		04:30 PM - 05:30 PM				0	0	0	0	14	8	76	0	5	2	6	0	TOTAL 165
PEAK HR VOL :		3	49	2	0	0.000	0.000	0.000	0.000	0.875	0.667	0.704	0.000	0.417	0.500	0.375	0.000	0.711
PEAK HR FACTOR :		0.75	0.766	0.500	0.000					0.875	0.667	0.704	0.000	0.417	0.500	0.375	0.000	
		0.750								0.766				0.406				

National Data & Surveying Services

Location: Clark Howell Hwy & Lake Mirror Rd
City: College Park
Control: Signalized

Project ID: 19-09702-003
Date: 11-07-2019

Bikes

[illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: Clark Howell Hwy & Lake Mirror Rd
City: College Park

Project ID: 19-09702-003
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	Clark Howell Hwy		Clark Howell Hwy		Lake Mirror Rd		Lake Mirror Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

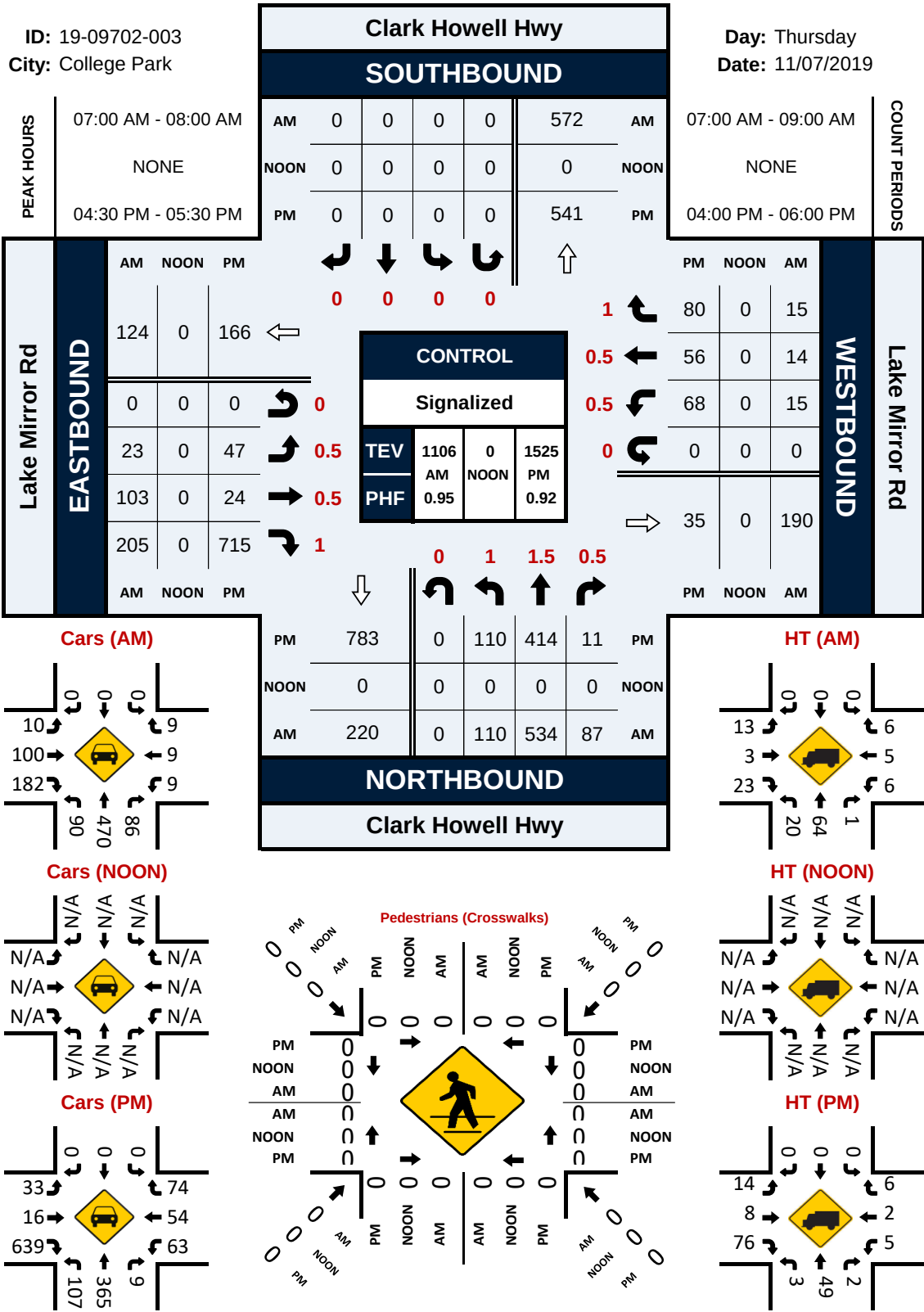
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	0	0
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Clark Howell Hwy & Lake Mirror Rd

Peak Hour Turning Movement Count

ID: 19-09702-003
City: College Park

Day: Thursday
Date: 11/07/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: N Commerce Dr & Centre Pkwy
City: East Point
Control: 2-Way Stop (EB/WB)

Project ID: 19-09702-004
Date: 11-07-2019

Total

NS/EW Streets:	N Commerce Dr				N Commerce Dr				Centre Pkwy				Centre Pkwy						
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	0 WR	0 WU			
	7:00 AM	31	40	0	0	0	40	11	0	8	0	13	0	0	0	0		0	143
	7:15 AM	33	35	0	0	0	43	15	0	10	0	13	0	0	0	0		0	149
	7:30 AM	24	44	0	0	0	43	20	0	18	0	27	0	0	0	0		0	177
	7:45 AM	51	52	0	0	0	64	22	2	17	0	51	0	0	0	0		0	259
	8:00 AM	41	60	0	0	0	60	28	0	16	0	20	0	0	0	0		0	225
	8:15 AM	45	56	0	0	0	41	27	0	10	0	21	0	0	0	0		0	200
	8:30 AM	39	57	1	0	0	41	28	1	14	0	25	0	1	0	0		0	207
	8:45 AM	48	37	0	0	0	40	17	1	14	0	22	0	0	0	0		0	179
TOTAL VOLUMES :	NL 312	NT 381	NR 1	NU 0	SL 1	ST 372	SR 168	SU 4	EL 107	ET 0	ER 192	EU 0	WL 1	WT 0	WR 0	WU 0	TOTAL 1539		
APPROACH %s :	44.96%	54.90%	0.14%	0.00%	0.18%	68.26%	30.83%	0.73%	35.79%	0.00%	64.21%	0.00%	100.00%	0.00%	0.00%	0.00%			
PEAK HR :	07:45 AM - 08:45 AM																	TOTAL	
PEAK HR VOL :	176	225	1	0	0	206	105	3	57	0	117	0	1	0	0	0	891		
PEAK HR FACTOR :	0.863	0.938	0.250	0.000	0.000	0.805	0.938	0.375	0.838	0.000	0.574	0.000	0.250	0.000	0.000	0.000	0.860		
	0.976				0.892				0.640				0.250						

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	0 WR	0 WU			
	4:00 PM	37	95	0	0	0	76	11	1	18	0	54	0	0	0	0		0	292
	4:15 PM	30	78	1	0	0	71	13	0	8	0	46	1	0	0	1		0	249
	4:30 PM	27	63	0	0	1	52	12	3	21	0	43	0	1	0	1		0	224
	4:45 PM	19	80	0	0	0	68	6	0	18	0	39	0	0	0	0		0	230
	5:00 PM	29	106	3	0	0	64	14	2	18	1	48	0	2	0	0		0	287
	5:15 PM	29	65	2	0	0	60	15	2	20	0	42	0	1	1	0		0	237
	5:30 PM	29	90	0	0	2	61	7	1	16	0	50	1	1	0	1		0	259
	5:45 PM	22	88	0	0	0	64	7	1	17	0	28	0	1	0	1		0	229
TOTAL VOLUMES :	NL 222	NT 665	NR 6	NU 0	SL 3	ST 516	SR 85	SU 10	EL 136	ET 1	ER 350	EU 2	WL 6	WT 1	WR 4	WU 0	TOTAL 2007		
APPROACH %s :	24.86%	74.47%	0.67%	0.00%	0.49%	84.04%	13.84%	1.63%	27.81%	0.20%	71.57%	0.41%	54.55%	9.09%	36.36%	0.00%			
PEAK HR :	04:45 PM - 05:45 PM																	TOTAL	
PEAK HR VOL :	106	341	5	0	2	253	42	5	72	1	179	1	4	1	1	0	1013		
PEAK HR FACTOR :	0.914	0.804	0.417	0.000	0.250	0.930	0.700	0.625	0.900	0.250	0.895	0.250	0.500	0.250	0.250	0.000	0.882		
	0.819				0.944				0.944				0.750						

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Commerce Dr & Centre Pkwy
City: East Point
Control: 2-Way Stop (EB/WB)

Project ID: 19-09702-004
Date: 11-07-2019

Cars

NS/EW Streets:	N Commerce Dr				N Commerce Dr				Centre Pkwy				Centre Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	30	35	0	0	0	34	10	0	4	0	10	0	0	0	0	0	123
7:15 AM	29	33	0	0	0	40	15	0	4	0	11	0	0	0	0	0	132
7:30 AM	24	37	0	0	1	39	17	0	12	0	23	0	0	0	0	0	153
7:45 AM	43	46	0	0	0	61	19	2	10	0	49	0	0	0	0	0	230
8:00 AM	39	50	0	0	0	51	26	0	14	0	16	0	0	0	0	0	196
8:15 AM	43	52	0	0	0	36	25	0	10	0	19	0	0	0	0	0	185
8:30 AM	36	51	1	0	0	38	26	1	11	0	22	0	1	0	0	0	187
8:45 AM	46	34	0	0	0	36	16	1	11	0	18	0	0	0	0	0	162
TOTAL VOLUMES :	NL 290	NT 338	NR 1	NU 0	SL 1	ST 335	SR 154	SU 4	EL 76	ET 0	ER 168	EU 0	WL 1	WT 0	WR 0	WU 0	TOTAL 1368
APPROACH %'s :	46.10%	53.74%	0.16%	0.00%	0.20%	67.81%	31.17%	0.81%	31.15%	0.00%	68.85%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	161	199	1	0	0	186	96	3	45	0	106	0	1	0	0	0	798
PEAK HR FACTOR :	0.94	0.957	0.250	0.000	0.000	0.762	0.923	0.375	0.804	0.000	0.541	0.000	0.250	0.000	0.000	0.000	0.867
	0.950				0.869				0.640				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	33	89	0	0	0	70	11	1	18	0	48	0	0	0	0	0	270
4:15 PM	23	73	0	0	0	69	12	0	7	0	43	1	0	0	0	0	228
4:30 PM	25	56	0	0	1	47	11	3	19	0	42	0	0	0	1	0	205
4:45 PM	13	75	0	0	0	61	5	0	14	0	36	0	0	0	0	0	204
5:00 PM	20	98	2	0	0	60	12	2	16	0	43	0	2	0	0	0	255
5:15 PM	24	62	0	0	0	59	11	2	20	0	35	0	0	0	0	0	213
5:30 PM	23	78	0	0	1	52	5	1	16	0	49	1	0	0	1	0	227
5:45 PM	15	83	0	0	0	57	4	1	16	0	27	0	0	0	0	0	203
TOTAL VOLUMES :	NL 176	NT 614	NR 2	NU 0	SL 2	ST 475	SR 71	SU 10	EL 126	ET 0	ER 323	EU 2	WL 2	WT 0	WR 2	WU 0	TOTAL 1805
APPROACH %'s :	22.22%	77.53%	0.25%	0.00%	0.36%	85.13%	12.72%	1.79%	27.94%	0.00%	71.62%	0.44%	50.00%	0.00%	50.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	80	313	2	0	1	232	33	5	66	0	163	1	2	0	1	0	899
PEAK HR FACTOR :	0.83	0.798	0.250	0.000	0.250	0.951	0.688	0.625	0.825	0.000	0.832	0.250	0.250	0.000	0.250	0.000	0.881
	0.823				0.916				0.871				0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Commerce Dr & Centre Pkwy
City: East Point
Control: 2-Way Stop (EB/WB)

Project ID: 19-09702-004
Date: 11-07-2019

HT

NS/EW Streets:		N Commerce Dr				N Commerce Dr				Centre Pkwy				Centre Pkwy				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	7:00 AM	1	5	0	0	0	6	1	0	4	0	3	0	0	0	0	0	20
	7:15 AM	4	2	0	0	0	3	0	0	6	0	2	0	0	0	0	0	17
	7:30 AM	0	7	0	0	0	4	3	0	6	0	4	0	0	0	0	0	24
	7:45 AM	8	6	0	0	0	3	3	0	7	0	2	0	0	0	0	0	29
	8:00 AM	2	10	0	0	0	9	2	0	2	0	4	0	0	0	0	0	29
	8:15 AM	2	4	0	0	0	5	2	0	0	0	2	0	0	0	0	0	15
	8:30 AM	3	6	0	0	0	3	2	0	3	0	3	0	0	0	0	0	20
	8:45 AM	2	3	0	0	0	4	1	0	3	0	4	0	0	0	0	0	17
TOTAL VOLUMES :		NL 22	NT 43	NR 0	NU 0	SL 0	ST 37	SR 14	SU 0	EL 31	ET 0	ER 24	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 171
APPROACH %'s :		33.85%	66.15%	0.00%	0.00%	0.00%	72.55%	27.45%	0.00%	56.36%	0.00%	43.64%	0.00%					
PEAK HR :		07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :		15	26	0	0	0	20	9	0	12	0	11	0	0	0	0	0	93
PEAK HR FACTOR :		0.469	0.650	0.000	0.000	0.000	0.556	0.750	0.000	0.429	0.000	0.688	0.000	0.000	0.000	0.000	0.000	0.802
		0.732				0.659				0.639								

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	1 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
	4:00 PM	4	6	0	0	0	6	0	0	0	0	6	0	0	0	0	0	22
	4:15 PM	7	5	1	0	0	2	1	0	1	0	3	0	0	0	1	0	21
	4:30 PM	2	7	0	0	0	5	1	0	2	0	1	0	1	0	0	0	19
	4:45 PM	6	5	0	0	0	7	1	0	4	0	3	0	0	0	0	0	26
	5:00 PM	9	8	1	0	0	4	2	0	2	1	5	0	0	0	0	0	32
	5:15 PM	5	3	2	0	0	1	4	0	0	0	7	0	1	1	0	0	24
	5:30 PM	6	12	0	0	1	9	2	0	0	0	1	0	1	0	0	0	32
	5:45 PM	7	5	0	0	0	7	3	0	1	0	1	0	1	0	1	0	26
TOTAL VOLUMES :		NL 46	NT 51	NR 4	NU 0	SL 1	ST 41	SR 14	SU 0	EL 10	ET 1	ER 27	EU 0	WL 4	WT 1	WR 2	WU 0	TOTAL 202
APPROACH %'s :		45.54%	50.50%	3.96%	0.00%	1.79%	73.21%	25.00%	0.00%	26.32%	2.63%	71.05%	0.00%	57.14%	14.29%	28.57%	0.00%	
PEAK HR :		04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :		26	28	3	0	1	21	9	0	6	1	16	0	2	1	0	0	114
PEAK HR FACTOR :		0.72	0.583	0.375	0.000	0.250	0.583	0.563	0.000	0.375	0.250	0.571	0.000	0.500	0.250	0.000	0.000	0.891
		0.792				0.646				0.719				0.375				

National Data & Surveying Services

Location: N Commerce Dr & Centre Pkwy
City: East Point
Control: 2-Way Stop (EB/WB)

Project ID: 19-09702-004
Date: 11-07-2019

Bikes

[illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: N Commerce Dr & Centre Pkwy
City: East Point

Project ID: 19-09702-004
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	N Commerce Dr		N Commerce Dr		Centre Pkwy		Centre Pkwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	1	0	0	0	0	1	2
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	1	2
8:00 AM	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	1	1	0	0	1	4	7
			50.00%	50.00%			20.00%	80.00%	
PEAK HR :	07:45 AM - 08:45 AM								TOTAL
PEAK HR VOL :	0	0	0	1	0	0	1	3	5
PEAK HR FACTOR :				0.250			0.250	0.750	0.625
				0.250				0.500	

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	1	0	0	0	1
5:00 PM	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	0	0	0	2	2	4
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	2	1	3	2	8
					66.67%	33.33%	60.00%	40.00%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	0	0	0	0	2	0	2	2	6
PEAK HR FACTOR :					0.500		0.250	0.250	0.375
						0.500		0.250	

National Data & Surveying Services

Location: SR 314/W Fayetteville Rd & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-005
Date: 11-07-2019

Total

NS/EW Streets:		SR 314/W Fayetteville Rd				SR 314/W Fayetteville Rd				SR 139/Riverdale Rd				SR 139/Riverdale Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	2 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU		
7:00 AM	149	0	45	0	0	0	0	0	0	28	53	0	44	159	0	1	479	
7:15 AM	135	0	26	0	0	0	0	0	0	30	54	0	42	135	0	0	422	
7:30 AM	133	0	30	0	0	0	0	0	0	49	67	0	40	147	0	0	466	
7:45 AM	151	0	30	0	0	0	0	0	0	38	71	1	49	193	0	0	533	
8:00 AM	119	0	18	0	0	0	0	0	0	36	63	1	52	175	0	1	465	
8:15 AM	107	0	26	0	0	0	0	0	0	46	58	0	42	135	0	0	414	
8:30 AM	125	0	21	0	0	0	0	0	0	34	60	0	44	154	0	1	439	
8:45 AM	110	0	20	0	0	0	0	0	0	43	57	1	42	106	0	1	380	
TOTAL VOLUMES :	NL 1029	NT 0	NR 216	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 304	ER 483	EU 3	WL 355	WT 1204	WR 0	WU 4	TOTAL 3598	
APPROACH %s :	82.65%	0.00%	17.35%	0.00%					0.00%	38.48%	61.14%	0.38%	22.71%	77.03%	0.00%	0.26%		
PEAK HR :	07:00 AM - 08:00 AM																TOTAL	
PEAK HR VOL :	568	0	131	0	0	0	0	0	0	145	245	1	175	634	0	1	1900	
PEAK HR FACTOR :	0.940	0.000	0.728	0.000	0.000	0.000	0.000	0.000	0.000	0.740	0.863	0.250	0.893	0.821	0.000	0.250	0.891	
0.901																		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	70	0	43	0	0	0	0	0	0	92	141	0	53	79	0	2	480
4:15 PM	86	0	33	0	0	0	0	0	0	131	126	1	52	93	0	2	524
4:30 PM	95	0	34	0	0	0	0	0	0	113	129	0	67	67	0	1	506
4:45 PM	90	0	36	0	0	0	0	0	0	130	113	0	74	88	0	2	533
5:00 PM	105	0	54	0	0	0	0	0	0	146	111	0	67	91	0	0	574
5:15 PM	80	0	30	0	0	0	0	0	0	150	140	0	81	115	0	1	597
5:30 PM	60	0	39	0	0	0	0	0	0	122	124	0	105	115	0	3	568
5:45 PM	87	0	27	0	0	0	0	0	0	121	132	0	91	105	0	1	564
TOTAL VOLUMES :	NL 673	NT 0	NR 296	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 1005	ER 1016	EU 1	WL 590	WT 753	WR 0	WU 12	TOTAL 4346
APPROACH %s :	69.45%	0.00%	30.55%	0.00%					0.00%	49.70%	50.25%	0.05%	43.54%	55.57%	0.00%	0.89%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	332	0	150	0	0	0	0	0	0	539	507	0	344	426	0	5	2303
PEAK HR FACTOR :	0.790	0.000	0.694	0.000	0.000	0.000	0.000	0.000	0.000	0.898	0.905	0.000	0.819	0.926	0.000	0.417	0.964
0.758																	

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 314/W Fayetteville Rd & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-005
Date: 11-07-2019

Cars

NS/EW Streets:	SR 314/W Fayetteville Rd				SR 314/W Fayetteville Rd				SR 139/Riverdale Rd				SR 139/Riverdale Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	146	0	44	0	0	0	0	0	0	26	53	0	44	152	0	1	466
7:15 AM	133	0	26	0	0	0	0	0	0	27	53	0	41	126	0	0	406
7:30 AM	130	0	29	0	0	0	0	0	0	47	65	0	40	141	0	0	452
7:45 AM	149	0	30	0	0	0	0	0	0	32	69	1	49	177	0	0	507
8:00 AM	117	0	18	0	0	0	0	0	0	34	60	1	51	159	0	1	441
8:15 AM	103	0	26	0	0	0	0	0	0	35	57	0	40	127	0	0	388
8:30 AM	119	0	21	0	0	0	0	0	0	32	58	0	43	144	0	1	418
8:45 AM	109	0	20	0	0	0	0	0	0	33	53	1	41	93	0	1	351
TOTAL VOLUMES :	NL 1006	NT 0	NR 214	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 266	ER 468	EU 3	WL 349	WT 1119	WR 0	WU 4	TOTAL 3429
APPROACH %'s :	82.46%	0.00%	17.54%	0.00%					0.00%	36.09%	63.50%	0.41%	23.71%	76.02%	0.00%	0.27%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	558	0	129	0	0	0	0	0	0	132	240	1	174	596	0	1	1831
PEAK HR FACTOR :	0.94	0.000	0.733	0.000	0.000	0.000	0.000	0.000	0.000	0.702	0.870	0.250	0.888	0.842	0.000	0.250	0.903
	0.904								0.833				0.853				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	2 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	70	0	42	0	0	0	0	0	0	83	135	0	52	75	0	2	459
4:15 PM	84	0	33	0	0	0	0	0	0	122	124	1	52	92	0	2	510
4:30 PM	95	0	31	0	0	0	0	0	0	109	129	0	65	62	0	1	492
4:45 PM	90	0	36	0	0	0	0	0	0	122	112	0	73	82	0	2	517
5:00 PM	105	0	54	0	0	0	0	0	0	144	110	0	67	91	0	0	571
5:15 PM	79	0	30	0	0	0	0	0	0	144	138	0	80	113	0	1	585
5:30 PM	59	0	39	0	0	0	0	0	0	118	124	0	105	111	0	3	559
5:45 PM	87	0	26	0	0	0	0	0	0	119	131	0	91	99	0	1	554
TOTAL VOLUMES :	NL 669	NT 0	NR 291	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 961	ER 1003	EU 1	WL 585	WT 725	WR 0	WU 12	TOTAL 4247
APPROACH %'s :	69.69%	0.00%	30.31%	0.00%					0.00%	48.91%	51.04%	0.05%	44.25%	54.84%	0.00%	0.91%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	330	0	149	0	0	0	0	0	0	525	503	0	343	414	0	5	2269
PEAK HR FACTOR :	0.79	0.000	0.690	0.000	0.000	0.000	0.000	0.000	0.000	0.911	0.911	0.000	0.817	0.916	0.000	0.417	0.970
	0.753								0.911				0.870				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 314/W Fayetteville Rd & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-005
Date: 11-07-2019

HT

NS/EW Streets:		SR 314/W Fayetteville Rd				SR 314/W Fayetteville Rd				SR 139/Riverdale Rd				SR 139/Riverdale Rd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		2 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
	7:00 AM	3	0	1	0	0	0	0	0	0	2	0	0	0	7	0	0	13
	7:15 AM	2	0	0	0	0	0	0	0	0	3	1	0	1	9	0	0	16
	7:30 AM	3	0	1	0	0	0	0	0	0	2	2	0	0	6	0	0	14
	7:45 AM	2	0	0	0	0	0	0	0	0	6	2	0	0	16	0	0	26
	8:00 AM	2	0	0	0	0	0	0	0	0	2	3	0	1	16	0	0	24
	8:15 AM	4	0	0	0	0	0	0	0	0	11	1	0	2	8	0	0	26
	8:30 AM	6	0	0	0	0	0	0	0	0	2	2	0	1	10	0	0	21
	8:45 AM	1	0	0	0	0	0	0	0	0	10	4	0	1	13	0	0	29
TOTAL VOLUMES :		NL 23	NT 0	NR 2	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 38	ER 15	EU 0	WL 6	WT 85	WR 0	WU 0	TOTAL 169
APPROACH %'s :		92.00%	0.00%	8.00%	0.00%					0.00%	71.70%	28.30%	0.00%	6.59%	93.41%	0.00%	0.00%	
PEAK HR :		07:00 AM - 08:00 AM				0	0	0	0	0	13	5	0	1	38	0	0	TOTAL 69
PEAK HR VOL :		10	0	2	0	0.000	0.000	0.000	0.000	0.000	0.542	0.625	0.000	0.250	0.594	0.000	0.000	0.663
PEAK HR FACTOR :		0.833	0.000	0.500	0.000						0.563				0.609			
		0.750																

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		2 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
	4:00 PM	0	0	1	0	0	0	0	0	0	9	6	0	1	4	0	0	21
	4:15 PM	2	0	0	0	0	0	0	0	0	9	2	0	0	1	0	0	14
	4:30 PM	0	0	3	0	0	0	0	0	0	4	0	0	2	5	0	0	14
	4:45 PM	0	0	0	0	0	0	0	0	0	8	1	0	1	6	0	0	16
	5:00 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
	5:15 PM	1	0	0	0	0	0	0	0	0	6	2	0	1	2	0	0	12
	5:30 PM	1	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	9
	5:45 PM	0	0	1	0	0	0	0	0	0	2	1	0	0	6	0	0	10
TOTAL VOLUMES :		NL 4	NT 0	NR 5	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 44	ER 13	EU 0	WL 5	WT 28	WR 0	WU 0	TOTAL 99
APPROACH %'s :		44.44%	0.00%	55.56%	0.00%					0.00%	77.19%	22.81%	0.00%	15.15%	84.85%	0.00%	0.00%	
PEAK HR :		05:00 PM - 06:00 PM				0	0	0	0	0	14	4	0	1	12	0	0	TOTAL 34
PEAK HR VOL :		2	0	1	0	0.000	0.000	0.000	0.000	0.000	0.583	0.500	0.000	0.250	0.500	0.000	0.000	0.708
PEAK HR FACTOR :		0.50	0.000	0.250	0.000						0.563				0.542			
		0.750																

National Data & Surveying Services

Location: SR 314/W Fayetteville Rd & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-005
Date: 11-07-2019

Bikes

[illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 314/W Fayetteville Rd & SR 139/Riverdale Rd
City: College Park

Project ID: 19-09702-005
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	SR 314/W Fayetteville Rd		SR 314/W Fayetteville Rd		SR 139/Riverdale Rd		SR 139/Riverdale Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	1	1	1	0	0	3
8:15 AM	0	0	0	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	2	2	1	0	0	5
			0.00%	100.00%	66.67%	33.33%			
PEAK HR :	07:00 AM - 08:00 AM								TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :					0.250	0.250			0.250

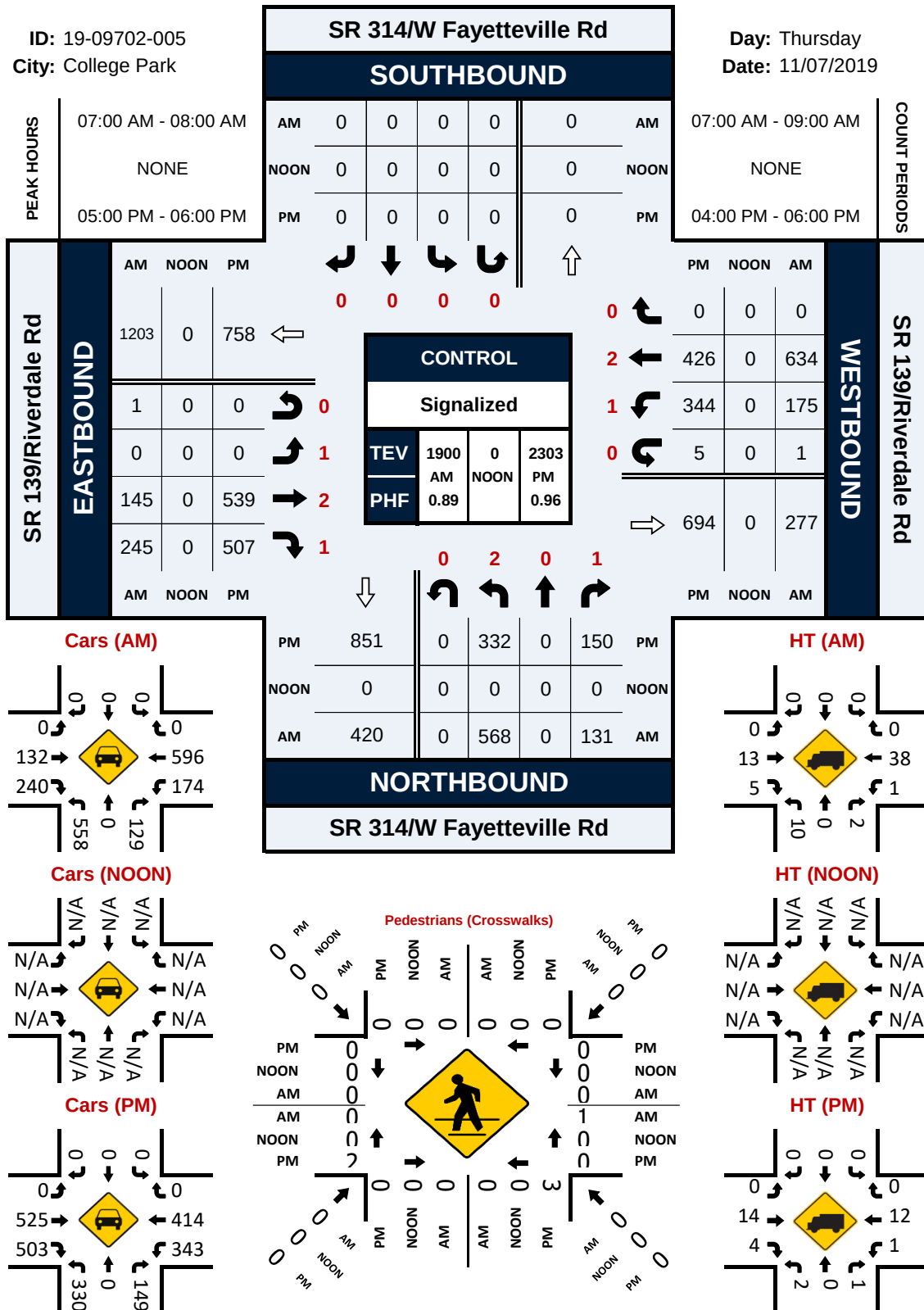
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	2	2	0	5
4:30 PM	0	0	0	0	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	3	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	2	0	2
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	3	2	2	4	0	11
			0.00%	100.00%	50.00%	50.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	0	0	0	3	0	0	2	0	5
PEAK HR FACTOR :				0.250			0.250	0.250	0.417

SR 314/W Fayetteville Rd & SR 139/Riverdale Rd

Peak Hour Turning Movement Count

ID: 19-09702-005
City: College Park

Day: Thursday
Date: 11/07/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Jamestown Ct/Global Gateway Connector & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-006
Date: 11-07-2019

Total

NS/EW Streets:	Jamestown Ct/Global Gateway Connector				Jamestown Ct/Global Gateway Connector				SR 139/Riverdale Rd				SR 139/Riverdale Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	3	5	6	0	25	3	3	0	6	28	3	0	20	36	46	0	184
7:15 AM	3	7	9	0	26	4	1	0	10	55	13	0	10	59	47	0	244
7:30 AM	8	21	16	0	17	5	4	0	8	56	10	0	32	51	40	0	268
7:45 AM	1	12	24	0	20	7	2	0	10	62	12	0	35	49	54	0	288
8:00 AM	1	5	27	0	28	5	2	0	7	34	8	0	26	35	50	0	228
8:15 AM	3	5	8	0	25	6	4	0	3	26	8	0	23	39	39	0	189
8:30 AM	4	4	11	0	30	4	3	0	3	17	3	0	26	31	42	0	178
8:45 AM	2	9	10	0	26	7	2	0	4	22	8	0	18	31	40	0	179
TOTAL VOLUMES :	NL 25	NT 68	NR 111	NU 0	SL 197	ST 41	SR 21	SU 0	EL 51	ET 300	ER 65	EU 0	WL 190	WT 331	WR 358	WU 0	TOTAL 1758
APPROACH %'s :	12.25%	33.33%	54.41%	0.00%	76.06%	15.83%	8.11%	0.00%	12.26%	72.12%	15.63%	0.00%	21.62%	37.66%	40.73%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	13	45	76	0	91	21	9	0	35	207	43	0	103	194	191	0	1028
PEAK HR FACTOR :	0.406	0.536	0.704	0.000	0.813	0.750	0.563	0.000	0.875	0.835	0.827	0.000	0.736	0.822	0.884	0.000	0.892
	0.744				0.864				0.848				0.884				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	7	3	29	0	50	11	12	0	3	52	12	0	17	62	33	0	291
4:15 PM	4	2	23	0	52	9	11	0	10	46	9	0	27	63	44	0	300
4:30 PM	8	9	33	0	63	19	9	0	3	52	6	0	16	46	25	0	289
4:45 PM	0	4	25	0	47	12	8	0	3	40	7	0	19	59	31	0	255
5:00 PM	7	3	24	0	47	18	6	0	3	38	4	0	21	59	35	0	265
5:15 PM	8	2	24	0	38	8	12	0	2	44	6	0	24	81	35	0	284
5:30 PM	9	7	21	0	44	11	15	0	6	39	2	0	17	77	36	0	284
5:45 PM	13	2	26	0	38	5	6	0	5	58	5	0	12	60	39	0	269
TOTAL VOLUMES :	NL 56	NT 32	NR 205	NU 0	SL 379	ST 93	SR 79	SU 0	EL 35	ET 369	ER 51	EU 0	WL 153	WT 507	WR 278	WU 0	TOTAL 2237
APPROACH %'s :	19.11%	10.92%	69.97%	0.00%	68.78%	16.88%	14.34%	0.00%	7.69%	81.10%	11.21%	0.00%	16.31%	54.05%	29.64%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	19	18	110	0	212	51	40	0	19	190	34	0	79	230	133	0	1135
PEAK HR FACTOR :	0.594	0.500	0.833	0.000	0.841	0.671	0.833	0.000	0.475	0.913	0.708	0.000	0.731	0.913	0.756	0.000	0.946
	0.735				0.832				0.907				0.825				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Jamestown Ct/Global Gateway Connector & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-006
Date: 11-07-2019

Cars

NS/EW Streets:	Jamestown Ct/Global Gateway Connector				Jamestown Ct/Global Gateway Connector				SR 139/Riverdale Rd				SR 139/Riverdale Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	3	5	5	0	24	3	3	0	5	28	3	0	18	36	41	0	174
7:15 AM	3	7	8	0	25	4	1	0	10	55	13	0	9	57	46	0	238
7:30 AM	7	19	13	0	17	5	4	0	8	56	10	0	28	49	40	0	256
7:45 AM	0	12	24	0	20	7	2	0	10	62	12	0	31	47	51	0	278
8:00 AM	1	4	20	0	27	5	2	0	6	34	8	0	23	34	50	0	214
8:15 AM	3	5	8	0	23	6	4	0	3	25	8	0	21	37	39	0	182
8:30 AM	4	3	10	0	30	4	3	0	2	16	3	0	19	29	42	0	165
8:45 AM	2	9	5	0	25	7	2	0	4	22	8	0	14	30	39	0	167
TOTAL VOLUMES :	NL 23	NT 64	NR 93	NU 0	SL 191	ST 41	SR 21	SU 0	EL 48	ET 298	ER 65	EU 0	WL 163	WT 319	WR 348	WU 0	TOTAL 1674
APPROACH %'s :	12.78%	35.56%	51.67%	0.00%	75.49%	16.21%	8.30%	0.00%	11.68%	72.51%	15.82%	0.00%	19.64%	38.43%	41.93%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	11	42	65	0	89	21	9	0	34	207	43	0	91	187	187	0	986
PEAK HR FACTOR :	0.39	0.553	0.677	0.000	0.824	0.750	0.563	0.000	0.850	0.835	0.827	0.000	0.734	0.820	0.917	0.000	0.887
	0.756				0.875				0.845				0.901				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	7	3	29	0	47	10	12	0	3	52	12	0	16	61	33	0	285
4:15 PM	4	2	20	0	49	9	11	0	10	43	9	0	25	63	44	0	289
4:30 PM	8	8	31	0	62	19	9	0	3	52	5	0	16	45	25	0	283
4:45 PM	0	4	23	0	46	12	8	0	3	40	6	0	19	58	30	0	249
5:00 PM	7	3	24	0	47	18	6	0	3	38	4	0	21	58	35	0	264
5:15 PM	8	2	23	0	38	7	12	0	2	44	6	0	24	81	33	0	280
5:30 PM	8	7	20	0	42	11	15	0	6	39	2	0	16	77	36	0	279
5:45 PM	13	2	26	0	35	5	6	0	5	56	5	0	12	59	37	0	261
TOTAL VOLUMES :	NL 55	NT 31	NR 196	NU 0	SL 366	ST 91	SR 79	SU 0	EL 35	ET 364	ER 49	EU 0	WL 149	WT 502	WR 273	WU 0	TOTAL 2190
APPROACH %'s :	19.50%	10.99%	69.50%	0.00%	68.28%	16.98%	14.74%	0.00%	7.81%	81.25%	10.94%	0.00%	16.13%	54.33%	29.55%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	19	17	103	0	204	50	40	0	19	187	32	0	76	227	132	0	1106
PEAK HR FACTOR :	0.59	0.531	0.831	0.000	0.823	0.658	0.833	0.000	0.475	0.899	0.667	0.000	0.760	0.901	0.750	0.000	0.957
	0.739				0.817				0.888				0.824				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Jamestown Ct/Global Gateway Connector & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-006
Date: 11-07-2019

HT

NS/EW Streets:	Jamestown Ct/Global Gateway Connector				Jamestown Ct/Global Gateway Connector				SR 139/Riverdale Rd				SR 139/Riverdale Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	0	0	1	0	1	0	0	0	1	0	0	0	2	0	5	0	10
7:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	1	2	1	0	6
7:30 AM	1	2	3	0	0	0	0	0	0	0	0	0	4	2	0	0	12
7:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	4	2	3	0	10
8:00 AM	0	1	7	0	1	0	0	0	1	0	0	0	3	1	0	0	14
8:15 AM	0	0	0	0	2	0	0	0	0	1	0	0	2	2	0	0	7
8:30 AM	0	1	1	0	0	0	0	0	1	1	0	0	7	2	0	0	13
8:45 AM	0	0	5	0	1	0	0	0	0	0	0	0	4	1	1	0	12
TOTAL VOLUMES :	NL 2	NT 4	NR 18	NU 0	SL 6	ST 0	SR 0	SU 0	EL 3	ET 2	ER 0	EU 0	WL 27	WT 12	WR 10	WU 0	TOTAL 84
APPROACH %'s :	8.33%	16.67%	75.00%	0.00%	100.00%	0.00%	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%	55.10%	24.49%	20.41%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	2	3	11	0	2	0	0	0	1	0	0	0	12	7	4	0	42
PEAK HR FACTOR :	0.500	0.375	0.393	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.875	0.333	0.000	0.750
	0.500				0.500				0.250				0.639				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	3	1	0	0	0	0	0	0	1	1	0	0	6
4:15 PM	0	0	3	0	3	0	0	0	0	3	0	0	2	0	0	0	11
4:30 PM	0	1	2	0	1	0	0	0	0	0	1	0	0	1	0	0	6
4:45 PM	0	0	2	0	1	0	0	0	0	0	1	0	0	1	1	0	6
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	4
5:30 PM	1	0	1	0	2	0	0	0	0	0	0	0	1	0	0	0	5
5:45 PM	0	0	0	0	3	0	0	0	0	2	0	0	0	1	2	0	8
TOTAL VOLUMES :	NL 1	NT 1	NR 9	NU 0	SL 13	ST 2	SR 0	SU 0	EL 0	ET 5	ER 2	EU 0	WL 4	WT 5	WR 5	WU 0	TOTAL 47
APPROACH %'s :	9.09%	9.09%	81.82%	0.00%	86.67%	13.33%	0.00%	0.00%	0.00%	71.43%	28.57%	0.00%	28.57%	35.71%	35.71%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	1	7	0	8	1	0	0	0	3	2	0	3	3	1	0	29
PEAK HR FACTOR :	0.00	0.250	0.583	0.000	0.667	0.250	0.000	0.000	0.000	0.250	0.500	0.000	0.375	0.750	0.250	0.000	0.659
	0.667				0.563				0.417				0.875				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Jamestown Ct/Global Gateway Connector & SR 139/Riverdale Rd
City: College Park
Control: Signalized

Project ID: 19-09702-006
Date: 11-07-2019

Bikes

NS/EW Streets:	Jamestown Ct/Global Gateway Connector				Jamestown Ct/Global Gateway Connector				SR 139/Riverdale Rd				SR 139/Riverdale Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 1	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 1	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 2
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM				0	0	0	0	0	0	1	0	0	0	0	0	TOTAL 2
PEAK HR VOL :	1	0	0	0	0.000	0.000	0.000	0.000	0	0	0.250	0	0.000	0.000	0.000	0.000	0.500
PEAK HR FACTOR :	0.250	0.000	0.000	0.000					0.000	0.000	0.250	0.000					

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0.5 NT	0.5 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	0 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 0
APPROACH %'s :																	
PEAK HR :	04:00 PM - 05:00 PM				0	0	0	0	0	0	0	0	0	0	0	0	TOTAL 0
PEAK HR VOL :	0	0	0	0	0.000	0.000	0.000	0.000	0	0	0	0	0.000	0.000	0.000	0.000	
PEAK HR FACTOR :	0.00	0.000	0.000	0.000					0.000	0.000	0.000	0.000					

National Data & Surveying Services

Intersection Turning Movement Count

Location: Jamestown Ct/Global Gateway Connector & SR 139/Riverdale Rd
City: College Park

Project ID: 19-09702-006
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	Jamestown Ct/Global Gateway Connector	Jamestown Ct/Global Gateway Connector	SR 139/Riverdale Rd	SR 139/Riverdale Rd	
AM	NORTH LEG		SOUTH LEG		TOTAL
	EB	WB	EB	WB	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	TOTAL
APPROACH %'s :	0	0	0	0	0
PEAK HR :	07:15 AM - 08:15 AM				TOTAL
PEAK HR VOL :	0	0	0	0	0
PEAK HR FACTOR :					

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	0	2	2
PEAK HR :	04:00 PM - 05:00 PM						0.00%	100.00%	TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	2	2
PEAK HR FACTOR :							0.500	0.500	0.500

Jamestown Ct/Global Gateway Connector & SR 139/Riverdale Rd

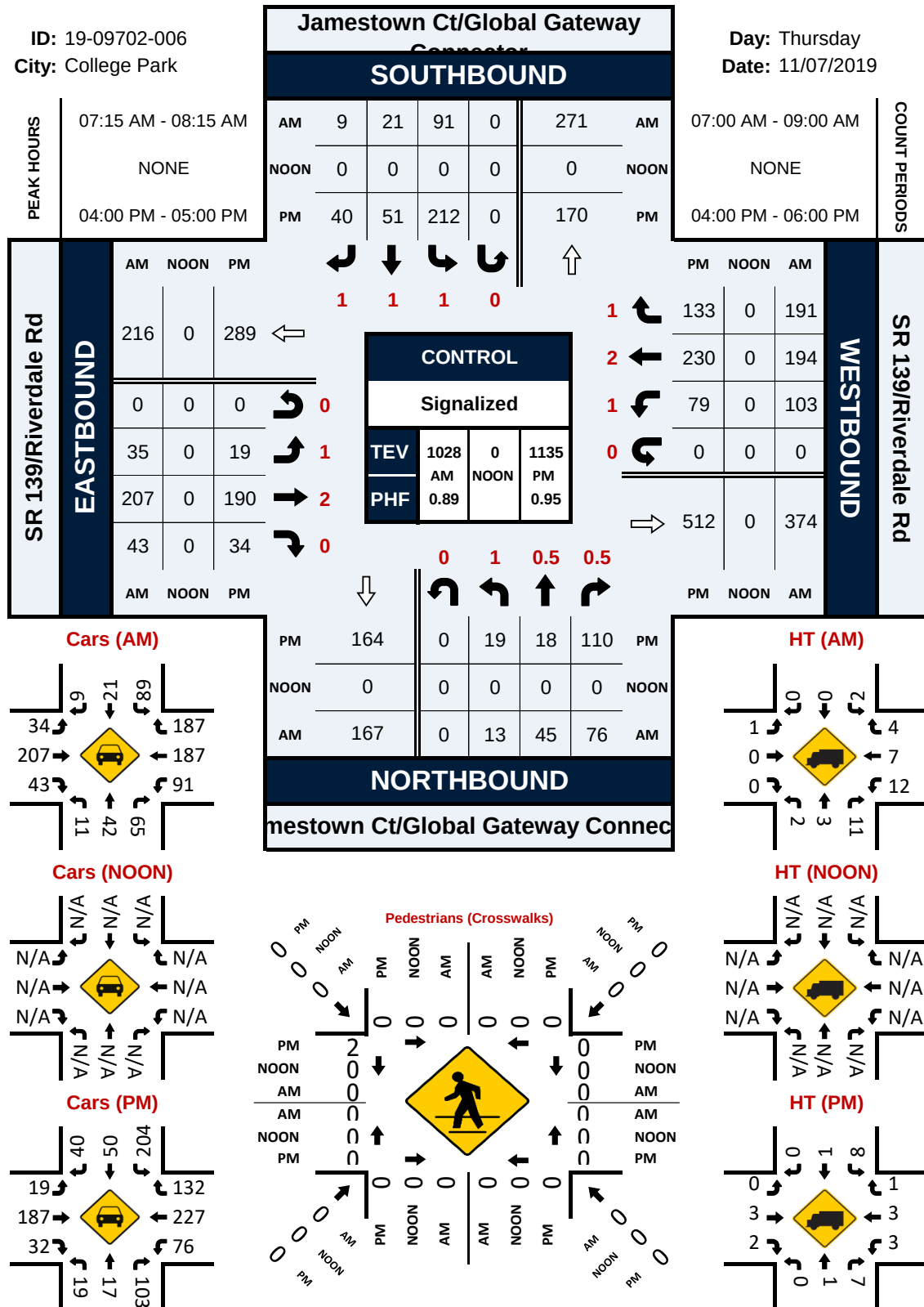
Peak Hour Turning Movement Count

ID: 19-09702-006

City: College Park

Day: Thursday

Date: 11/07/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Scarborough Rd/Welcome All Rd & Jaillette Rd/Welcome All Rd
City: Atlanta
Control: 4-Way Stop

Project ID: 19-09702-007
Date: 11-07-2019

Total

NS/EW Streets:	Scarborough Rd/Welcome All Rd				Scarborough Rd/Welcome All Rd				Jaillette Rd/Welcome All Rd				Jaillette Rd/Welcome All Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	7	26	21	0	14	12	3	0	8	28	7	0	17	25	34	0	202
7:15 AM	13	57	35	0	16	17	1	0	7	42	10	0	38	25	34	0	295
7:30 AM	17	47	42	0	22	11	3	0	14	56	21	0	24	19	49	0	325
7:45 AM	11	54	13	0	25	12	4	0	20	55	16	0	5	29	76	0	320
8:00 AM	8	41	5	0	48	15	8	0	27	58	7	0	7	38	62	0	324
8:15 AM	7	32	11	0	29	24	6	0	15	38	6	0	6	25	42	0	241
8:30 AM	7	34	5	0	35	21	6	0	4	27	7	0	7	21	51	0	225
8:45 AM	2	28	7	0	32	17	7	0	4	21	5	0	4	15	31	0	173
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	72	319	139	0	221	129	38	0	99	325	79	0	108	197	379	0	2105
	13.58%	60.19%	26.23%	0.00%	56.96%	33.25%	9.79%	0.00%	19.68%	64.61%	15.71%	0.00%	15.79%	28.80%	55.41%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	49	199	95	0	111	55	16	0	68	211	54	0	74	111	221	0	1264
PEAK HR FACTOR :	0.721	0.873	0.565	0.000	0.578	0.809	0.500	0.000	0.630	0.909	0.643	0.000	0.487	0.730	0.727	0.000	0.972
	0.809				0.641				0.905				0.923				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	8	27	8	0	74	27	12	0	14	17	10	0	10	35	41	0	283
4:15 PM	6	26	12	0	52	36	6	0	3	25	8	0	16	33	37	0	260
4:30 PM	14	24	10	0	45	47	9	0	6	32	10	0	19	42	19	0	277
4:45 PM	8	22	9	0	71	47	6	0	5	31	1	0	6	35	45	0	286
5:00 PM	8	17	8	0	67	39	7	0	3	28	5	0	5	43	31	0	261
5:15 PM	14	20	17	0	50	46	5	0	3	41	11	0	12	46	36	0	301
5:30 PM	11	21	9	0	51	45	7	0	8	48	9	0	13	39	35	0	296
5:45 PM	14	20	14	0	45	33	15	0	6	42	7	0	17	36	35	0	284
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	83	177	87	0	455	320	67	0	48	264	61	0	98	309	279	0	2248
	23.92%	51.01%	25.07%	0.00%	54.04%	38.00%	7.96%	0.00%	12.87%	70.78%	16.35%	0.00%	14.29%	45.04%	40.67%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	41	80	43	0	239	177	25	0	19	148	26	0	36	163	147	0	1144
PEAK HR FACTOR :	0.732	0.909	0.632	0.000	0.842	0.941	0.893	0.000	0.594	0.771	0.591	0.000	0.692	0.886	0.817	0.000	0.950
	0.804				0.889				0.742				0.920				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Scarborough Rd/Welcome All Rd & Jaillette Rd/Welcome All Rd
City: Atlanta
Control: 4-Way Stop

Project ID: 19-09702-007
Date: 11-07-2019

Cars

NS/EW Streets:	Scarborough Rd/Welcome All Rd				Scarborough Rd/Welcome All Rd				Jaillette Rd/Welcome All Rd				Jaillette Rd/Welcome All Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	6	24	20	0	14	9	2	0	8	27	7	0	15	24	31	0	187
7:15 AM	13	55	33	0	13	17	0	0	6	41	10	0	38	20	33	0	279
7:30 AM	15	47	41	0	22	10	2	0	14	56	20	0	24	15	47	0	313
7:45 AM	10	54	13	0	24	11	4	0	20	53	15	0	5	28	74	0	311
8:00 AM	7	41	5	0	44	15	6	0	26	58	5	0	7	36	59	0	309
8:15 AM	6	30	11	0	25	24	6	0	15	35	6	0	6	24	36	0	224
8:30 AM	7	29	5	0	33	18	5	0	4	26	6	0	7	21	44	0	205
8:45 AM	2	27	7	0	27	15	6	0	4	21	5	0	4	15	26	0	159
TOTAL VOLUMES :	NL 66	NT 307	NR 135	NU 0	SL 202	ST 119	SR 31	SU 0	EL 97	ET 317	ER 74	EU 0	WL 106	WT 183	WR 350	WU 0	TOTAL 1987
APPROACH %'s :	12.99%	60.43%	26.57%	0.00%	57.39%	33.81%	8.81%	0.00%	19.88%	64.96%	15.16%	0.00%	16.59%	28.64%	54.77%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	45	197	92	0	103	53	12	0	66	208	50	0	74	99	213	0	1212
PEAK HR FACTOR :	0.75	0.895	0.561	0.000	0.585	0.779	0.500	0.000	0.635	0.897	0.625	0.000	0.487	0.688	0.720	0.000	0.968
	0.811				0.646				0.900				0.902				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	8	22	7	0	70	26	12	0	7	17	8	0	9	33	36	0	255
4:15 PM	5	22	12	0	47	31	5	0	3	25	8	0	15	32	35	0	240
4:30 PM	14	24	10	0	38	41	9	0	6	32	10	0	19	40	16	0	259
4:45 PM	7	21	9	0	69	46	5	0	5	31	1	0	6	34	44	0	278
5:00 PM	8	17	8	0	65	39	7	0	3	25	5	0	4	42	30	0	253
5:15 PM	14	20	17	0	45	46	5	0	3	41	9	0	12	44	35	0	291
5:30 PM	11	21	9	0	51	44	7	0	8	46	8	0	13	38	34	0	290
5:45 PM	14	20	14	0	44	31	15	0	6	41	7	0	17	35	35	0	279
TOTAL VOLUMES :	NL 81	NT 167	NR 86	NU 0	SL 429	ST 304	SR 65	SU 0	EL 41	ET 258	ER 56	EU 0	WL 95	WT 298	WR 265	WU 0	TOTAL 2145
APPROACH %'s :	24.25%	50.00%	25.75%	0.00%	53.76%	38.10%	8.15%	0.00%	11.55%	72.68%	15.77%	0.00%	14.44%	45.29%	40.27%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	40	79	43	0	230	175	24	0	19	143	23	0	35	158	143	0	1112
PEAK HR FACTOR :	0.71	0.940	0.632	0.000	0.833	0.951	0.857	0.000	0.594	0.777	0.639	0.000	0.673	0.898	0.813	0.000	0.955
	0.794				0.894				0.746				0.923				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Scarborough Rd/Welcome All Rd & Jaillette Rd/Welcome All Rd
City: Atlanta
Control: 4-Way Stop

Project ID: 19-09702-007
Date: 11-07-2019

HT

NS/EW Streets:		Scarborough Rd/Welcome All Rd				Scarborough Rd/Welcome All Rd				Jaillette Rd/Welcome All Rd				Jaillette Rd/Welcome All Rd				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	7:00 AM	1	2	1	0	0	3	1	0	0	1	0	0	2	1	3	0	15
	7:15 AM	0	2	2	0	3	0	1	0	1	1	0	0	0	5	1	0	16
	7:30 AM	2	0	1	0	0	1	1	0	0	0	1	0	0	4	2	0	12
	7:45 AM	1	0	0	0	1	1	0	0	0	2	1	0	0	1	2	0	9
	8:00 AM	1	0	0	0	4	0	2	0	1	0	2	0	0	2	3	0	15
	8:15 AM	1	2	0	0	4	0	0	0	0	3	0	0	0	1	6	0	17
	8:30 AM	0	5	0	0	2	3	1	0	0	1	1	0	0	0	7	0	20
	8:45 AM	0	1	0	0	5	2	1	0	0	0	0	0	0	0	5	0	14
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		6	12	4	0	19	10	7	0	2	8	5	0	2	14	29	0	118
PEAK HR :		07:15 AM - 08:15 AM				52.78%	27.78%	19.44%	0.00%	13.33%	53.33%	33.33%	0.00%	4.44%	31.11%	64.44%	0.00%	
PEAK HR VOL :		4	2	3	0	8	2	4	0	2	3	4	0	0	12	8	0	52
PEAK HR FACTOR :		0.500	0.250	0.375	0.000	0.500	0.500	0.500	0.000	0.500	0.375	0.500	0.000	0.000	0.600	0.667	0.000	0.813
		0.563				0.583				0.750				0.833				

PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	4:00 PM	0	5	1	0	4	1	0	0	7	0	2	0	1	2	5	0	28
	4:15 PM	1	4	0	0	5	5	1	0	0	0	0	0	1	1	2	0	20
	4:30 PM	0	0	0	0	7	6	0	0	0	0	0	0	0	2	3	0	18
	4:45 PM	1	1	0	0	2	1	1	0	0	0	0	0	0	1	1	0	8
	5:00 PM	0	0	0	0	2	0	0	0	0	3	0	0	1	1	1	0	8
	5:15 PM	0	0	0	0	5	0	0	0	0	0	2	0	0	2	1	0	10
	5:30 PM	0	0	0	0	0	1	0	0	0	2	1	0	0	1	1	0	6
	5:45 PM	0	0	0	0	1	2	0	0	0	1	0	0	0	1	0	0	5
TOTAL VOLUMES :		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :		2	10	1	0	26	16	2	0	7	6	5	0	3	11	14	0	103
PEAK HR :		04:45 PM - 05:45 PM				59.09%	36.36%	4.55%	0.00%	38.89%	33.33%	27.78%	0.00%	10.71%	39.29%	50.00%	0.00%	
PEAK HR VOL :		1	1	0	0	9	2	1	0	0	5	3	0	1	5	4	0	32
PEAK HR FACTOR :		0.25	0.250	0.000	0.000	0.450	0.500	0.250	0.000	0.000	0.417	0.375	0.000	0.250	0.625	1.000	0.000	0.800
		0.250				0.600				0.667				0.833				

National Data & Surveying Services

Location: Scarborough Rd/Welcome All Rd & Jaiette Rd/Welcome All Rd
City: Atlanta
Control: 4-Way Stop

Project ID: 19-09702-007
Date: 11-07-2019

Bikes

[illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: Scarborough Rd/Welcome All Rd & Jaillette Rd/Welcome All Rd
City: Atlanta

Project ID: 19-09702-007
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	Scarborough Rd/Welcome All Rd	Scarborough Rd/Welcome All Rd	Jaillette Rd/Welcome All Rd	Jaillette Rd/Welcome All Rd	
AM	NORTH LEG		SOUTH LEG		TOTAL
	EB	WB	EB	WB	
7:00 AM	0	0	2	0	4
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES :	EB 0	WB 0	EB 2	WB 0	TOTAL 4
APPROACH %'s :			100.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM				TOTAL
PEAK HR VOL :	0	0	0	0	0
PEAK HR FACTOR :					

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	2	0	0	0	2
TOTAL VOLUMES :	EB 1	WB 1	EB 0	WB 1	NB 2	SB 0	NB 1	SB 0	TOTAL 6
APPROACH %'s :	50.00%	50.00%	0.00%	100.00%	100.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	1	1	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.250	0.250							0.250

Scarborough Rd/Welcome All Rd & Jaillette Rd/Welcome All Rd

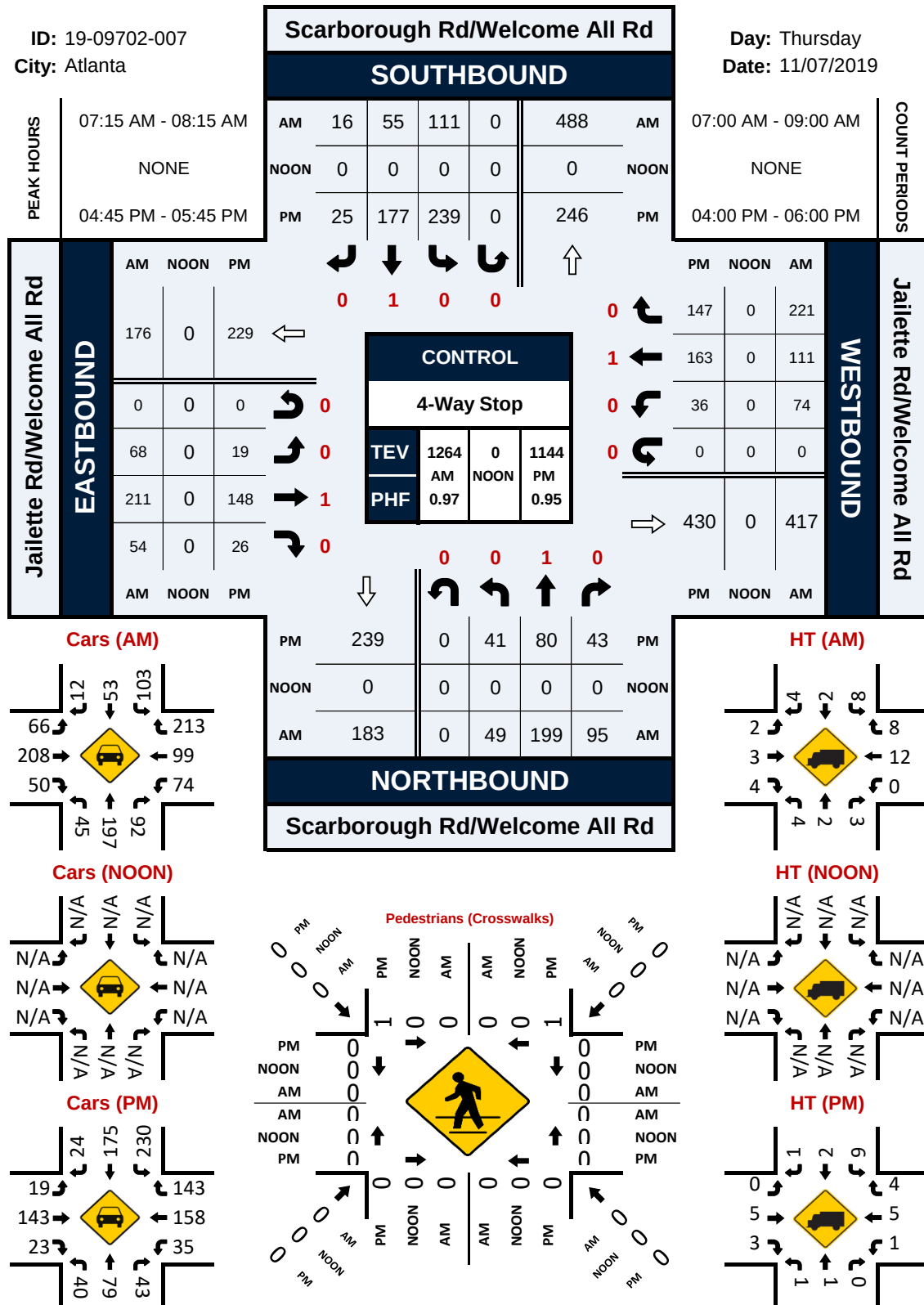
Peak Hour Turning Movement Count

ID: 19-09702-007

City: Atlanta

Day: Thursday

Date: 11/07/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: Washington Rd & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09702-008
Date: 11-07-2019

Total

NS/EW Streets:	Washington Rd				Washington Rd				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	21	52	23	1	1	34	50	0	46	217	16	0	19	127	9	0	616
7:15 AM	19	53	17	0	8	48	41	0	29	234	15	0	20	115	6	1	606
7:30 AM	25	65	28	0	10	47	57	0	50	235	12	0	10	108	5	1	653
7:45 AM	23	64	32	0	8	55	65	0	80	263	20	0	11	96	7	0	724
8:00 AM	21	57	24	0	7	35	59	0	76	278	9	0	22	117	6	0	711
8:15 AM	21	47	26	0	11	38	73	0	49	263	9	1	15	129	6	0	688
8:30 AM	16	41	23	0	6	44	57	0	37	217	5	0	12	121	2	0	581
8:45 AM	11	29	17	0	3	40	50	0	34	246	12	0	13	133	4	1	593
TOTAL VOLUMES :	NL 157	NT 408	NR 190	NU 1	SL 54	ST 341	SR 452	SU 0	EL 401	ET 1953	ER 98	EU 1	WL 122	WT 946	WR 45	WU 3	TOTAL 5172
APPROACH %'s :	20.77%	53.97%	25.13%	0.13%	6.38%	40.26%	53.36%	0.00%	16.35%	79.62%	4.00%	0.04%	10.93%	84.77%	4.03%	0.27%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	90	233	110	0	36	175	254	0	255	1039	50	1	58	450	24	1	2776
PEAK HR FACTOR :	0.900	0.896	0.859	0.000	0.818	0.795	0.870	0.000	0.797	0.934	0.625	0.250	0.659	0.872	0.857	0.250	0.959
	0.910				0.908				0.926				0.888				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	22	44	22	0	4	47	54	0	54	178	30	1	25	277	6	0	764
4:15 PM	22	39	29	0	9	49	42	0	59	158	19	0	31	320	7	0	784
4:30 PM	26	68	35	0	4	60	60	0	49	153	22	0	23	231	5	0	736
4:45 PM	19	40	24	0	3	55	61	0	70	178	25	0	41	272	7	0	795
5:00 PM	29	40	31	0	8	44	48	0	65	167	25	0	23	243	11	1	735
5:15 PM	15	54	29	1	6	48	57	0	56	149	32	0	21	266	6	0	740
5:30 PM	16	57	15	0	6	59	62	0	74	138	31	0	39	192	16	0	705
5:45 PM	19	36	23	0	3	42	51	0	58	171	28	0	35	291	3	1	761
TOTAL VOLUMES :	NL 168	NT 378	NR 208	NU 1	SL 43	ST 404	SR 435	SU 0	EL 485	ET 1292	ER 212	EU 1	WL 238	WT 2092	WR 61	WU 2	TOTAL 6020
APPROACH %'s :	22.25%	50.07%	27.55%	0.13%	4.88%	45.80%	49.32%	0.00%	24.37%	64.92%	10.65%	0.05%	9.95%	87.42%	2.55%	0.08%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	89	191	110	0	20	211	217	0	232	667	96	1	120	1100	25	0	3079
PEAK HR FACTOR :	0.856	0.702	0.786	0.000	0.556	0.879	0.889	0.000	0.829	0.937	0.800	0.250	0.732	0.859	0.893	0.000	0.968
	0.756				0.903				0.912				0.869				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Washington Rd & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09702-008
Date: 11-07-2019

Cars

NS/EW Streets:	Washington Rd				Washington Rd				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	20	46	22	1	1	32	49	0	45	213	15	0	17	122	7	0	590
7:15 AM	18	51	16	0	6	40	39	0	29	227	15	0	19	109	3	1	573
7:30 AM	25	63	27	0	10	42	57	0	49	231	12	0	8	103	5	1	633
7:45 AM	21	56	29	0	8	52	63	0	78	257	19	0	10	94	6	0	693
8:00 AM	21	52	23	0	7	28	59	0	73	270	9	0	21	107	6	0	676
8:15 AM	21	39	24	0	10	34	73	0	48	258	8	1	14	119	6	0	655
8:30 AM	16	36	22	0	5	32	56	0	37	212	4	0	9	117	2	0	548
8:45 AM	11	27	16	0	3	31	50	0	31	242	11	0	12	126	4	1	565
TOTAL VOLUMES :	NL 153	NT 370	NR 179	NU 1	SL 50	ST 291	SR 446	SU 0	EL 390	ET 1910	ER 93	EU 1	WL 110	WT 897	WR 39	WU 3	TOTAL 4933
APPROACH %'s :	21.76%	52.63%	25.46%	0.14%	6.35%	36.98%	56.67%	0.00%	16.29%	79.78%	3.88%	0.04%	10.49%	85.51%	3.72%	0.29%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	88	210	103	0	35	156	252	0	248	1016	48	1	53	423	23	1	2657
PEAK HR FACTOR :	0.88	0.833	0.888	0.000	0.875	0.750	0.863	0.000	0.795	0.941	0.632	0.250	0.631	0.889	0.958	0.250	0.959
	0.872				0.900				0.927				0.899				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
4:00 PM	21	40	21	0	4	42	54	0	54	173	26	1	24	270	5	0	735
4:15 PM	22	36	26	0	8	41	39	0	59	149	18	0	31	314	7	0	750
4:30 PM	25	63	33	0	3	50	60	0	49	148	22	0	21	222	4	0	700
4:45 PM	17	39	23	0	3	52	60	0	69	173	25	0	37	264	7	0	769
5:00 PM	29	36	30	0	8	41	47	0	65	164	25	0	21	239	11	1	717
5:15 PM	15	51	28	1	6	44	56	0	56	146	32	0	21	264	5	0	725
5:30 PM	16	54	15	0	6	56	61	0	72	134	31	0	37	186	16	0	684
5:45 PM	19	34	21	0	3	40	49	0	56	165	27	0	32	287	3	1	737
TOTAL VOLUMES :	NL 164	NT 353	NR 197	NU 1	SL 41	ST 366	SR 426	SU 0	EL 480	ET 1252	ER 206	EU 1	WL 224	WT 2046	WR 58	WU 2	TOTAL 5817
APPROACH %'s :	22.94%	49.37%	27.55%	0.14%	4.92%	43.94%	51.14%	0.00%	24.76%	64.57%	10.62%	0.05%	9.61%	87.81%	2.49%	0.09%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	85	178	103	0	18	185	213	0	231	643	91	1	113	1070	23	0	2954
PEAK HR FACTOR :	0.85	0.706	0.780	0.000	0.563	0.889	0.888	0.000	0.837	0.929	0.875	0.250	0.764	0.852	0.821	0.000	0.960
	0.756				0.904				0.904				0.857				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Washington Rd & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09702-008
Date: 11-07-2019

HT

NS/EW Streets:	Washington Rd				Washington Rd				SR 6/Camp Creek Pkwy				SR 6/Camp Creek Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	1 NR	0 NU	1 SL	1 ST	1 SR	0 SU	1 EL	2 ET	1 ER	0 EU	1 WL	2 WT	1 WR	0 WU	
7:00 AM	1	6	1	0	0	2	1	0	1	4	1	0	2	5	2	0	26
7:15 AM	1	2	1	0	2	8	2	0	0	7	0	0	1	6	3	0	33
7:30 AM	0	2	1	0	0	5	0	0	1	4	0	0	2	5	0	0	20
7:45 AM	2	8	3	0	0	3	2	0	2	6	1	0	1	2	1	0	31
8:00 AM	0	5	1	0	0	7	0	0	3	8	0	0	1	10	0	0	35
8:15 AM	0	8	2	0	1	4	0	0	1	5	1	0	1	10	0	0	33
8:30 AM	0	5	1	0	1	12	1	0	0	5	1	0	3	4	0	0	33
8:45 AM	0	2	1	0	0	9	0	0	3	4	1	0	1	7	0	0	28
TOTAL VOLUMES :	NL 4	NT 38	NR 11	NU 0	SL 4	ST 50	SR 6	SU 0	EL 11	ET 43	ER 5	EU 0	WL 12	WT 49	WR 6	WU 0	TOTAL 239
APPROACH %'s :	7.55%	71.70%	20.75%	0.00%	6.67%	83.33%	10.00%	0.00%	18.64%	72.88%	8.47%	0.00%	17.91%	73.13%	8.96%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	2	23	7	0	1	19	2	0	7	23	2	0	5	27	1	0	119
PEAK HR FACTOR :	0.250	0.719	0.583	0.000	0.250	0.679	0.250	0.000	0.583	0.719	0.500	0.000	0.625	0.675	0.250	0.000	0.850
	0.615				0.786				0.727				0.750				

National Data & Surveying Services

Location: Washington Rd & SR 6/Camp Creek Pkwy
City: East Point
Control: Signalized

Project ID: 19-09702-008
Date: 11-07-2019

Bikes

[illegible]

National Data & Surveying Services

Intersection Turning Movement Count

Location: Washington Rd & SR 6/Camp Creek Pkwy
City: East Point

Project ID: 19-09702-008
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	Washington Rd		Washington Rd		SR 6/Camp Creek Pkwy		SR 6/Camp Creek Pkwy		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	1	0	1	0	0	2
8:45 AM	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	1	0	3	1	0	5
			0.00%	100.00%	0.00%	100.00%	100.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM								TOTAL
PEAK HR VOL :	0	0	0	0	0	1	1	0	2
PEAK HR FACTOR :						0.250	0.250	0.250	0.500

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	1	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	1	1	0	1	1	1	0	5
	0.00%	100.00%	100.00%	0.00%	50.00%	50.00%	100.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM								TOTAL
PEAK HR VOL :	0	0	0	0	1	1	0	0	2
PEAK HR FACTOR :					0.250	0.250			0.250

Washington Rd & SR 6/Camp Creek Pkwy

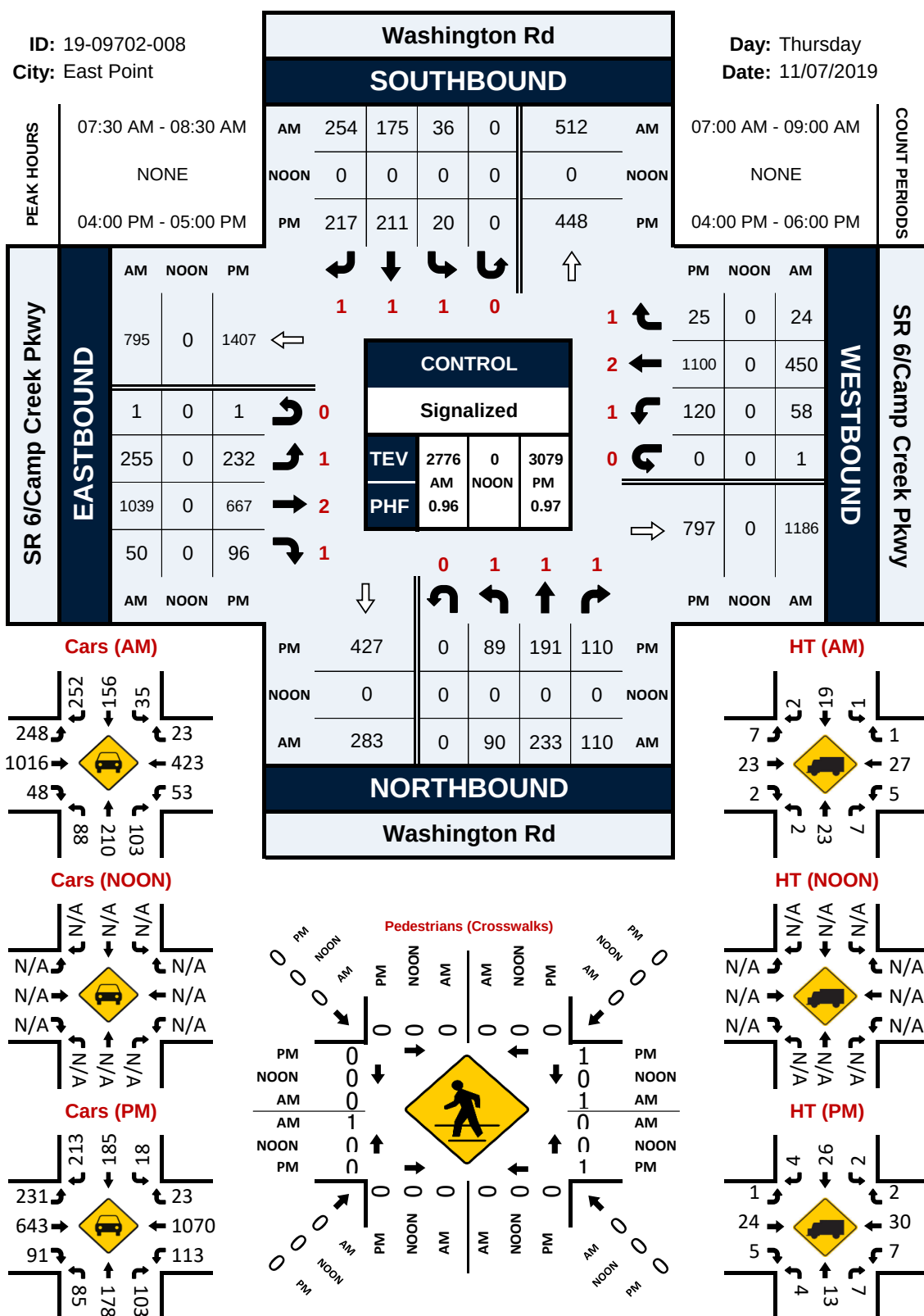
Peak Hour Turning Movement Count

ID: 19-09702-008

City: East Point

Day: Thursday

Date: 11/07/2019



National Data & Surveying Services

Intersection Turning Movement Count

Location: W Point Ave & Sullivan Rd
City: College Park
Control: 1-Way Stop (SB)

Project ID: 19-09702-009
Date: 11-07-2019

Total

NS/EW Streets:	W Point Ave				W Point Ave				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	1	0	0	0	12	47	0	0	0	31	5	0	96
7:15 AM	0	0	0	0	0	0	2	0	13	49	0	0	0	34	6	0	104
7:30 AM	0	0	0	0	0	0	1	0	25	69	0	0	0	28	2	0	125
7:45 AM	0	0	0	0	2	0	4	0	30	112	0	0	0	37	2	0	187
8:00 AM	0	0	0	0	0	0	7	0	22	91	0	0	0	52	0	0	172
8:15 AM	0	0	0	0	0	0	2	0	14	79	0	0	0	49	2	0	146
8:30 AM	0	0	0	0	0	0	3	0	9	67	0	0	0	33	2	0	114
8:45 AM	0	0	0	0	0	0	3	0	10	52	0	0	0	42	2	0	109
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	3	0	22	0	135	566	0	0	0	306	21	0	1053
PEAK HR :	07:30 AM - 08:30 AM				12.00%	0.00%	88.00%	0.00%	19.26%	80.74%	0.00%	0.00%	0.00%	93.58%	6.42%	0.00%	
PEAK HR VOL :	0	0	0	0	2	0	14	0	91	351	0	0	0	166	6	0	630
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.758	0.783	0.000	0.000	0.000	0.798	0.750	0.000	0.842
							0.571				0.778				0.827		

NS/EW Streets:	W Point Ave				W Point Ave				Sullivan Rd				Sullivan Rd				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	7	0	1	53	0	0	0	45	1	0	107
4:15 PM	0	0	0	0	0	0	6	0	6	53	0	0	0	57	0	0	122
4:30 PM	0	0	0	0	0	0	17	0	5	57	0	0	0	70	1	0	150
4:45 PM	0	0	0	0	1	0	5	0	4	61	0	0	0	73	1	0	145
5:00 PM	0	0	0	0	0	0	9	0	7	59	0	0	0	53	1	0	129
5:15 PM	0	0	0	0	0	0	7	0	5	45	0	0	0	62	0	0	119
5:30 PM	0	0	0	0	0	0	4	0	3	57	0	0	0	53	3	0	120
5:45 PM	0	0	0	0	1	0	4	0	3	51	0	0	0	49	0	0	108
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	2	0	59	0	34	436	0	0	0	462	7	0	1000
PEAK HR :	04:15 PM - 05:15 PM				3.28%	0.00%	96.72%	0.00%	7.23%	92.77%	0.00%	0.00%	0.00%	98.51%	1.49%	0.00%	
PEAK HR VOL :	0	0	0	0	1	0	37	0	22	230	0	0	0	253	3	0	546
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.544	0.000	0.786	0.943	0.000	0.000	0.000	0.866	0.750	0.000	0.910
							0.559				0.955				0.865		

National Data & Surveying Services

Intersection Turning Movement Count

Location: W Point Ave & Sullivan Rd
City: College Park
Control: 1-Way Stop (SB)

Project ID: 19-09702-009
Date: 11-07-2019

Cars

NS/EW Streets:	W Point Ave				W Point Ave				Sullivan Rd				Sullivan Rd			
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
7:00 AM	0	0	0	0	1	0	0	0	12	41	0	0	0	16	5	0
7:15 AM	0	0	0	0	0	0	2	0	12	42	0	0	0	26	4	0
7:30 AM	0	0	0	0	0	0	1	0	25	64	0	0	0	23	1	0
7:45 AM	0	0	0	0	1	0	2	0	26	105	0	0	0	27	2	0
8:00 AM	0	0	0	0	0	0	5	0	21	83	0	0	0	47	0	0
8:15 AM	0	0	0	0	0	0	1	0	13	69	0	0	0	42	2	0
8:30 AM	0	0	0	0	0	0	3	0	6	60	0	0	0	21	2	0
8:45 AM	0	0	0	0	0	0	2	0	8	43	0	0	0	32	1	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :	0	0	0	0	2	0	16	0	123	507	0	0	0	234	17	0
PEAK HR :	07:30 AM - 08:30 AM				11.11%	0.00%	88.89%	0.00%	19.52%	80.48%	0.00%	0.00%	0.00%	93.23%	6.77%	0.00%
PEAK HR VOL :	0	0	0	0	1	0	9	0	85	321	0	0	0	139	5	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.450	0.000	0.817	0.764	0.000	0.000	0.000	0.739	0.625	0.000
							0.500				0.775				0.766	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND			
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
4:00 PM	0	0	0	0	0	0	7	0	1	44	0	0	0	35	1	0
4:15 PM	0	0	0	0	0	0	6	0	4	44	0	0	0	52	0	0
4:30 PM	0	0	0	0	0	0	17	0	5	51	0	0	0	64	1	0
4:45 PM	0	0	0	0	1	0	5	0	3	54	0	0	0	68	1	0
5:00 PM	0	0	0	0	0	0	7	0	6	52	0	0	0	50	1	0
5:15 PM	0	0	0	0	0	0	6	0	4	36	0	0	0	54	0	0
5:30 PM	0	0	0	0	0	0	4	0	3	52	0	0	0	45	2	0
5:45 PM	0	0	0	0	1	0	4	0	3	47	0	0	0	45	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU
APPROACH %'s :	0	0	0	0	2	0	56	0	29	380	0	0	0	413	6	0
PEAK HR :	04:15 PM - 05:15 PM				3.45%	0.00%	96.55%	0.00%	7.09%	92.91%	0.00%	0.00%	0.00%	98.57%	1.43%	0.00%
PEAK HR VOL :	0	0	0	0	1	0	35	0	18	201	0	0	0	234	3	0
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.250	0.000	0.515	0.000	0.750	0.931	0.000	0.000	0.000	0.860	0.750	0.000
							0.529				0.944				0.859	

National Data & Surveying Services

Intersection Turning Movement Count

Location: W Point Ave & Sullivan Rd
City: College Park
Control: 1-Way Stop (SB)

Project ID: 19-09702-009
Date: 11-07-2019

HT

NS/EW Streets:	W Point Ave				W Point Ave				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	15	0	0	21
7:15 AM	0	0	0	0	0	0	0	0	1	7	0	0	0	8	2	0	18
7:30 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	5	1	0	11
7:45 AM	0	0	0	0	1	0	2	0	4	7	0	0	0	10	0	0	24
8:00 AM	0	0	0	0	0	0	2	0	1	8	0	0	0	5	0	0	16
8:15 AM	0	0	0	0	0	0	1	0	1	10	0	0	0	7	0	0	19
8:30 AM	0	0	0	0	0	0	0	0	3	7	0	0	0	12	0	0	22
8:45 AM	0	0	0	0	0	0	1	0	2	9	0	0	0	10	1	0	23
TOTAL VOLUMES :	NL 0	NT 0	NR 0	NU 0	SL 1	ST 0	SR 6	SU 0	EL 12	ET 59	ER 0	EU 0	WL 0	WT 72	WR 4	WU 0	TOTAL 154
APPROACH %'s :					14.29%	0.00%	85.71%	0.00%	16.90%	83.10%	0.00%	0.00%	0.00%	94.74%	5.26%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL 70
PEAK HR VOL :	0	0	0	0	1	0	5	0	6	30	0	0	0	27	1	0	70
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.625	0.000	0.375	0.750	0.000	0.000	0.000	0.675	0.250	0.000	0.729
							0.500				0.818				0.700		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	10	0	0	19
4:15 PM	0	0	0	0	0	0	0	0	2	9	0	0	0	5	0	0	16
4:30 PM	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	0	12
4:45 PM	0	0	0	0	0	0	0	0	1	7	0	0	0	5	0	0	13
5:00 PM	0	0	0	0	0	0	2	0	1	7	0	0	0	3	0	0	13
5:15 PM	0	0	0	0	0	0	1	0	1	9	0	0	0	8	0	0	19
5:30 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	8	1	0	14
5:45 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8
TOTAL VOLUMES :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 3	SU 0	EL 5	ET 56	ER 0	EU 0	WL 0	WT 49	WR 1	WU 0	TOTAL 114
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	8.20%	91.80%	0.00%	0.00%	0.00%	98.00%	2.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL 54
PEAK HR VOL :	0	0	0	0	0	0	2	0	4	29	0	0	0	19	0	0	54
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.806	0.000	0.000	0.000	0.792	0.000	0.000	0.844
							0.250				0.750				0.792		

National Data & Surveying Services

Intersection Turning Movement Count

Location: W Point Ave & Sullivan Rd
City: College Park
Control: 1-Way Stop (SB)

Project ID: 19-09702-009
Date: 11-07-2019

Bikes

NS/EW Streets:	W Point Ave				W Point Ave				Sullivan Rd				Sullivan Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOTAL
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 1	SU 0	EL 0	ET 1	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 2
PEAK HR VOL :	07:30 AM - 08:30 AM																TOTAL 1
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250
									0.250								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL VOLUMES : APPROACH %'s :	NL 0	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 0
PEAK HR VOL :	04:15 PM - 05:15 PM																TOTAL 0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: W Point Ave & Sullivan Rd
City: College Park

Project ID: 19-09702-009
Date: 11-07-2019

Pedestrians (Crosswalks)

NS/EW Streets:	W Point Ave		W Point Ave		Sullivan Rd		Sullivan Rd		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	1	2
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	1	1	2
PEAK HR :	07:30 AM - 08:30 AM						50.00%	50.00%	
PEAK HR VOL :	0	0	0	0	0	0	1	1	2
PEAK HR FACTOR :							0.250	0.250	0.250

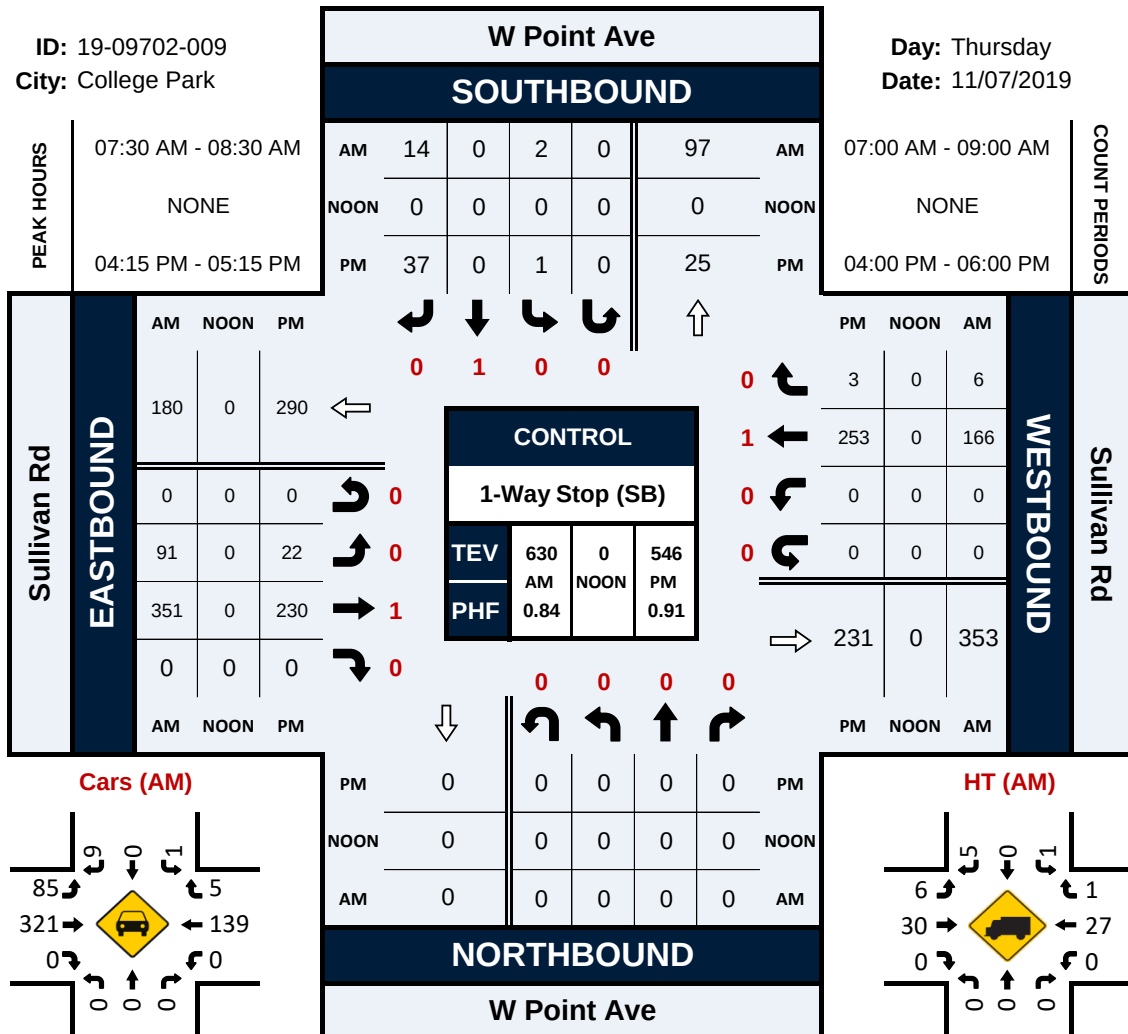
PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		TOTAL
	EB	WB	EB	WB	NB	SB	NB	SB	
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES :	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
APPROACH %'s :	0	0	0	0	0	0	5	0	5
PEAK HR :	04:15 PM - 05:15 PM						100.00%	0.00%	
PEAK HR VOL :	0	0	0	0	0	0	1	0	1
PEAK HR FACTOR :							0.250	0.250	0.250

W Point Ave & Sullivan Rd

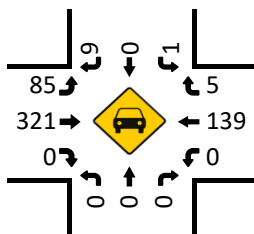
Peak Hour Turning Movement Count

ID: 19-09702-009
City: College Park

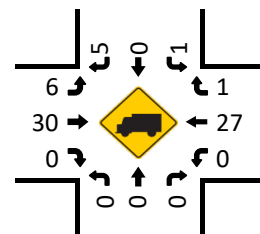
Day: Thursday
Date: 11/07/2019



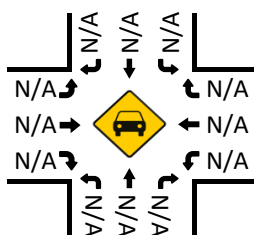
Cars (AM)



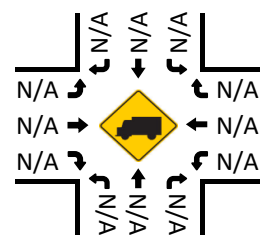
HT (AM)



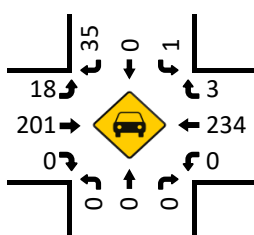
Cars (NOON)



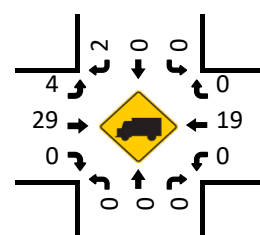
HT (NOON)



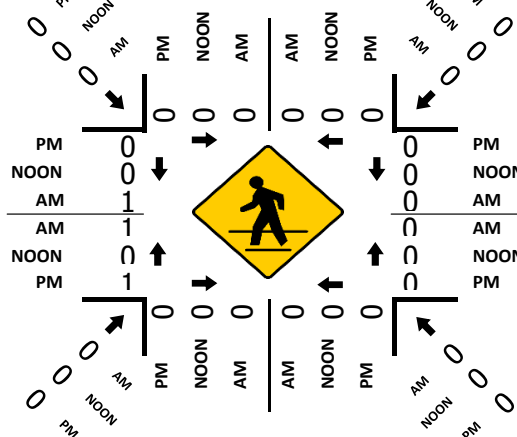
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



Appendix D

Detailed Crash Analysis

Crash Analysis
Ben Hill Rd @ Welcome All Rd
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	1	0	3	4	0	5	0	13
2015	0	0	2	4	0	4	0	10
2016	3	1	5	2	0	0	0	11
2017	2	0	0	2	0	5	0	9
2018	3	0	0	5	0	2	0	10
Total	9	1	10	17	0	16	0	53
	17.0%	1.9%	18.9%	32.1%	0.0%	30.2%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	9	4	0	13
2015	8	2	0	10
2016	11	0	0	11
2017	8	1	0	9
2018	10	0	0	10
Total	46	7	0	53
	87%	13%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	10	2	0	1	13
2015	7	3	0	0	10
2016	11	0	0	0	11
2017	8	1	0	0	9
2018	8	2	0	0	10
Total	44	8	0	1	53
	83%	15%	0%	2%	100.0%

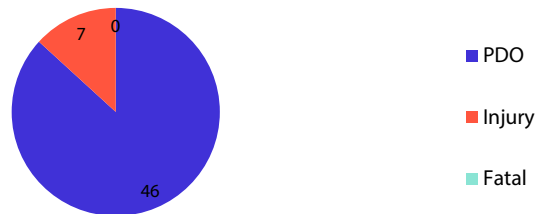
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	8	0	0	0	5	13
2015	0	7	0	0	0	3	10
2016	0	7	1	0	0	3	11
2017	0	7	0	0	0	2	9
2018	1	7	0	0	0	2	10
Total	1	36	1	0	0	15	53
	2%	68%	2%	0%	0%	28%	100.0%

Crash Analysis
Ben Hill Rd @ Welcome All Rd
Years 2014 to 2018

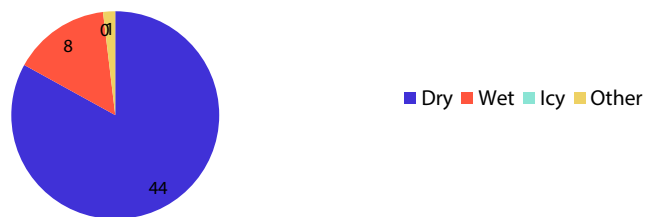
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Loop Rd @ Charles W. Grant Pkwy
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	6	1	14	2	0	0	0	23
2015	10	1	17	9	0	0	0	37
2016	13	1	15	9	0	1	0	39
2017	10	1	12	5	1	1	0	30
2018	14	1	23	8	0	1	0	47
Total	53	5	81	33	1	3	0	176
	30.1%	2.8%	46.0%	18.8%	0.6%	1.7%	0.0%	100.0%

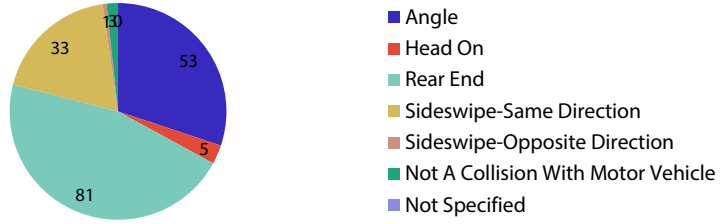
Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	16	7	0	23
2015	28	9	0	37
2016	32	7	0	39
2017	26	4	0	30
2018	38	9	0	47
Total	140	36	0	176
	80%	20%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	22	1	0	0	23
2015	32	5	0	0	37
2016	34	5	0	0	39
2017	26	3	0	1	30
2018	34	11	0	2	47
Total	148	25	0	3	176
	84%	14%	0%	2%	100.0%

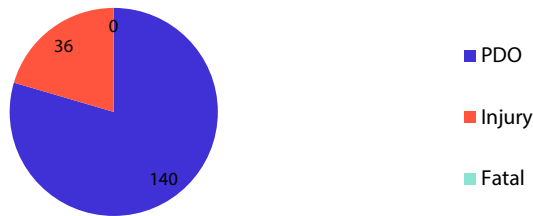
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	14	2	0	0	7	23
2015	4	22	1	0	0	10	37
2016	3	21	1	0	0	14	39
2017	1	24	0	0	0	5	30
2018	1	31	1	0	0	14	47
Total	9	112	5	0	0	50	176
	5%	64%	3%	0%	0%	28%	100.0%

Crash Analysis
Loop Rd @ Charles W. Grant Pkwy
Years 2014 to 2018

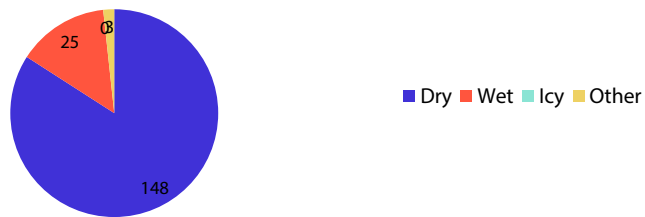
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
N Commerce Dr @ Washington Rd
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	2	1	0	0	1	1	0	5
2015	7	1	1	0	0	1	0	10
2016	9	2	3	4	1	1	0	20
2017	7	1	1	0	0	2	0	11
2018	8	2	1	2	0	1	0	14
Total	33	7	6	6	2	6	0	60
	55.0%	11.7%	10.0%	10.0%	3.3%	10.0%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	2	3	0	5
2015	5	5	0	10
2016	14	6	0	20
2017	7	4	0	11
2018	8	6	0	14
Total	36	24	0	60
	60%	40%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	5	0	0	0	5
2015	8	2	0	0	10
2016	19	1	0	0	20
2017	11	0	0	0	11
2018	12	2	0	0	14
Total	55	5	0	0	60
	92%	8%	0%	0%	100.0%

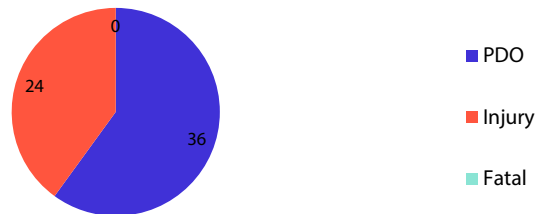
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	3	0	0	0	2	5
2015	0	7	0	0	0	3	10
2016	0	13	1	0	0	6	20
2017	1	5	0	0	0	5	11
2018	0	7	0	0	0	7	14
Total	1	35	1	0	0	23	60
	2%	58%	2%	0%	0%	38%	100.0%

Crash Analysis
N Commerce Dr @ Washington Rd
Years 2014 to 2018

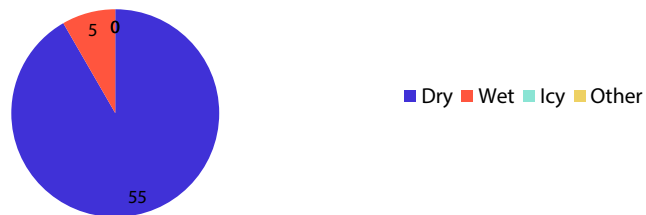
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Forest Pkwy @ Riverdale Rd (SR 139)
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	8	0	29	7	0	4	0	48
2015	8	1	41	7	2	0	1	60
2016	9	0	35	10	0	1	0	55
2017	11	0	39	8	0	0	0	58
2018	9	1	32	13	0	3	0	58
Total	45	2	176	45	2	8	1	279
	16.1%	0.7%	63.1%	16.1%	0.7%	2.9%	0.4%	100.0%

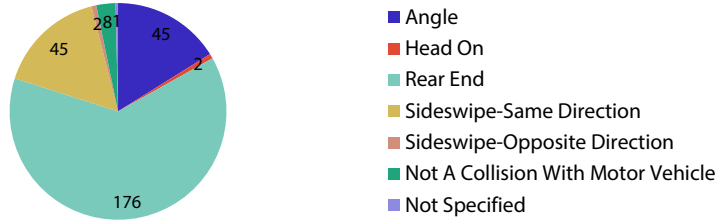
Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	38	10	0	48
2015	43	17	0	60
2016	41	14	0	55
2017	41	17	0	58
2018	49	9	0	58
Total	212	67	0	279
	76%	24%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	42	6	0	0	48
2015	46	13	0	1	60
2016	46	9	0	0	55
2017	49	9	0	0	58
2018	44	13	0	1	58
Total	227	50	0	2	279
	81%	18%	0%	1%	100.0%

Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	1	33	0	0	0	14	48
2015	0	38	0	0	0	22	60
2016	4	34	2	0	0	15	55
2017	1	37	1	0	0	19	58
2018	1	39	0	0	0	18	58
Total	7	181	3	0	0	88	279
	3%	65%	1%	0%	0%	32%	100.0%

Crash Analysis
Forest Pkwy @ Riverdale Rd (SR 139)
Years 2014 to 2018

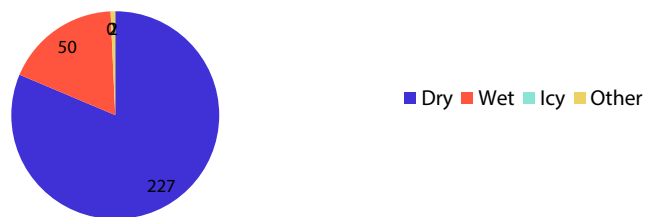
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
S Fulton Pkwy @ Majestic Pl
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	2	0	0	1	0	1	0	4
2015	2	0	1	0	0	1	0	4
2016	7	0	3	1	0	2	0	13
2017	5	1	4	3	0	1	0	14
2018	5	0	0	1	3	1	0	10
Total	21	1	8	6	3	6	0	45
	46.7%	2.2%	17.8%	13.3%	6.7%	13.3%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	3	1	0	4
2015	2	2	0	4
2016	9	4	0	13
2017	9	5	0	14
2018	6	4	0	10
Total	29	16	0	45
	64%	36%	0%	100.0%

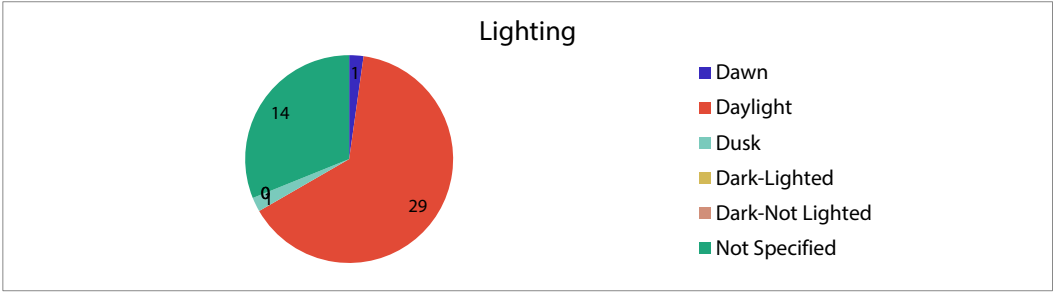
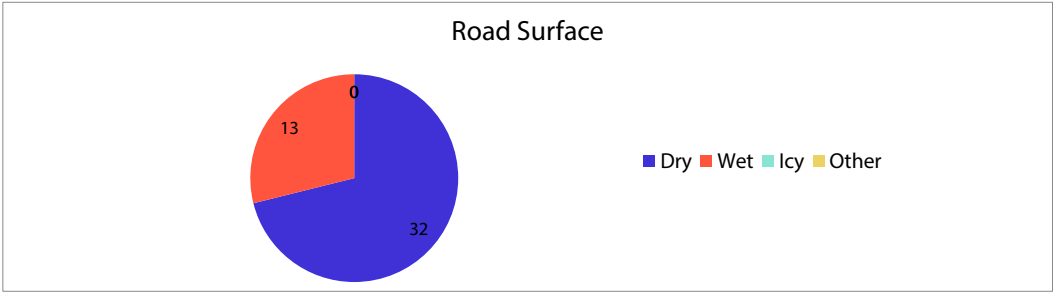
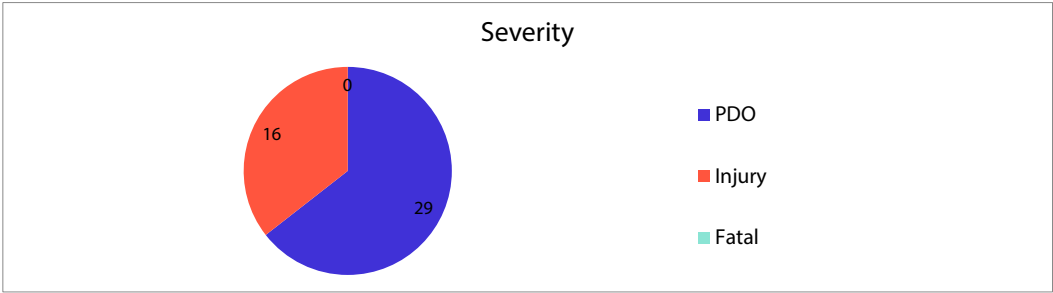
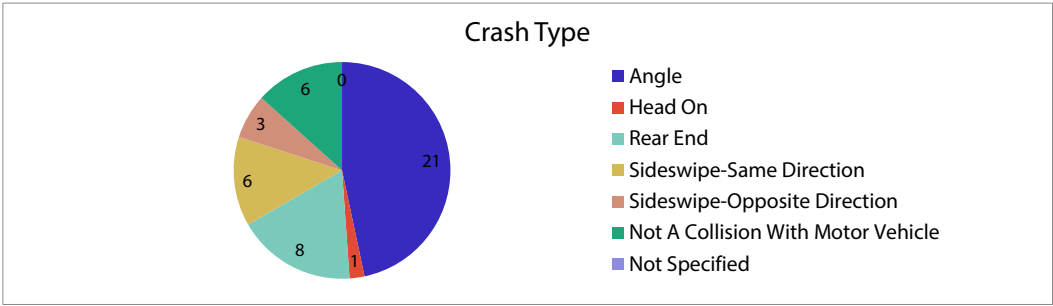
Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	3	1	0	0	4
2015	4	0	0	0	4
2016	10	3	0	0	13
2017	9	5	0	0	14
2018	6	4	0	0	10
Total	32	13	0	0	45
	71%	29%	0%	0%	100.0%

Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	3	0	0	0	1	4
2015	0	4	0	0	0	0	4
2016	0	7	1	0	0	5	13
2017	0	10	0	0	0	4	14
2018	1	5	0	0	0	4	10
Total	1	29	1	0	0	14	45
	2%	64%	2%	0%	0%	31%	100.0%

Crash Analysis

S Fulton Pkwy @ Majestic Pl

Years 2014 to 2018



Crash Analysis
Old National Hwy (SR 279) @ Sullivan Rd
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	7	2	5	8	2	0	0	24
2017	1	2	9	3	1	0	0	16
2018	17	1	16	6	0	0	0	40
Total	25	5	30	17	3	0	0	80
	31.3%	6.3%	37.5%	21.3%	3.8%	0.0%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	0	0	0	0
2015	0	0	0	0
2016	18	6	0	24
2017	13	3	0	16
2018	31	9	0	40
Total	62	18	0	80
	78%	23%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	21	3	0	0	24
2017	15	1	0	0	16
2018	32	5	0	3	40
Total	68	9	0	3	80
	85%	11%	0%	4%	100.0%

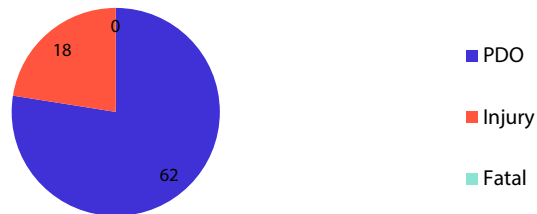
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0
2016	0	14	1	0	0	9	24
2017	0	11	0	0	0	5	16
2018	1	27	2	0	0	10	40
Total	1	52	3	0	0	24	80
	1%	65%	4%	0%	0%	30%	100.0%

Crash Analysis
Old National Hwy (SR 279) @ Sullivan Rd
Years 2014 to 2018

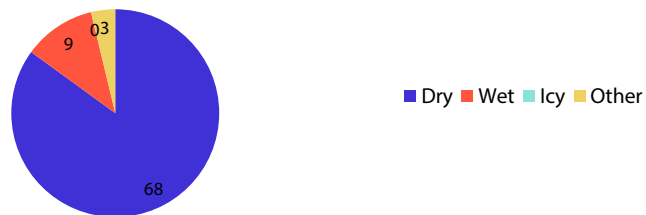
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Camp Creek Pkwy @ Princeton Lakes Pkwy/Centre Pkwy
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	9	0	34	9	0	2	0	54
2015	4	0	36	5	1	1	0	47
2016	15	2	37	7	1	0	0	62
2017	9	0	35	9	0	1	0	54
2018	5	0	31	4	1	0	1	42
Total	42	2	173	34	3	4	1	259
	16.2%	0.8%	66.8%	13.1%	1.2%	1.5%	0.4%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	47	7	0	54
2015	37	10	0	47
2016	52	10	0	62
2017	44	10	0	54
2018	32	10	0	42
Total	212	47	0	259
	82%	18%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	43	11	0	0	54
2015	36	11	0	0	47
2016	58	4	0	0	62
2017	45	9	0	0	54
2018	27	14	0	1	42
Total	209	49	0	1	259
	81%	19%	0%	0%	100.0%

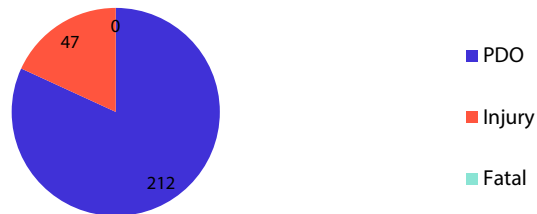
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	36	3	0	0	15	54
2015	0	34	0	0	0	13	47
2016	0	44	0	0	0	18	62
2017	0	38	0	0	0	16	54
2018	0	25	0	0	0	17	42
Total	0	177	3	0	0	79	259
	0%	68%	1%	0%	0%	31%	100.0%

Crash Analysis
Camp Creek Pkwy @ Princeton Lakes Pkwy/Centre Pkwy
Years 2014 to 2018

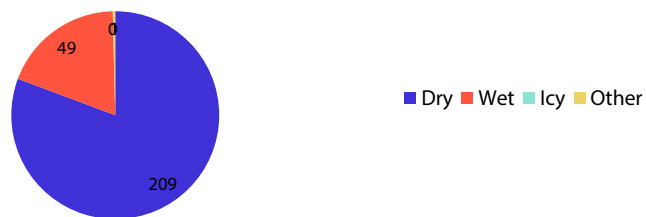
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Camp Creek Pkwy @ N Commerce Dr
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	13	1	63	18	0	1	0	96
2015	19	2	79	15	0	7	1	123
2016	25	1	70	18	1	4	0	119
2017	21	1	75	17	3	2	0	119
2018	21	2	72	18	1	0	0	114
Total	99	7	359	86	5	14	1	571
	17.3%	1.2%	62.9%	15.1%	0.9%	2.5%	0.2%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	85	11	0	96
2015	103	20	0	123
2016	100	19	0	119
2017	99	20	0	119
2018	99	15	0	114
Total	486	85	0	571
	85%	15%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	86	10	0	0	96
2015	100	22	0	1	123
2016	110	9	0	0	119
2017	102	17	0	0	119
2018	105	8	0	1	114
Total	503	66	0	2	571
	88%	12%	0%	0%	100.0%

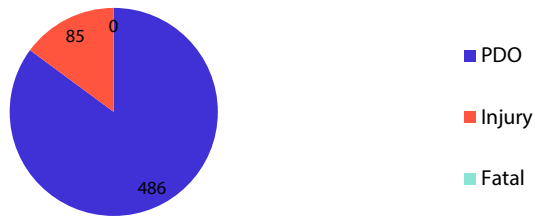
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	69	4	0	0	23	96
2015	0	84	1	0	0	38	123
2016	2	81	4	0	0	32	119
2017	2	84	0	0	0	33	119
2018	1	83	0	0	0	30	114
Total	5	401	9	0	0	156	571
	1%	70%	2%	0%	0%	27%	100.0%

Crash Analysis
Camp Creek Pkwy @ N Commerce Dr
Years 2014 to 2018

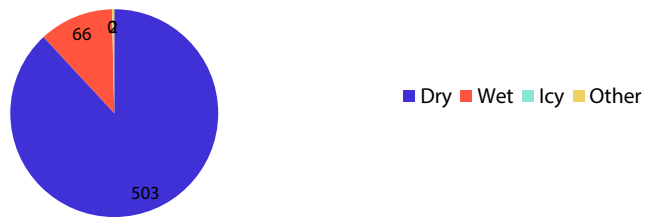
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Forest Pkwy (SR 331) @ Old Dixie Rd (US 19/41)
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	1	0	0	1	0	0	0	2
2015	0	0	0	0	0	0	0	0
2016	5	0	23	13	0	1	2	44
2017	16	4	21	15	0	4	0	60
2018	16	1	35	13	1	2	0	68
Total	38	5	79	42	1	7	2	174
	21.8%	2.9%	45.4%	24.1%	0.6%	4.0%	1.1%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	0	2	0	2
2015	0	0	0	0
2016	35	9	0	44
2017	42	18	0	60
2018	57	11	0	68
Total	134	40	0	174
	77%	23%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	1	1	0	0	2
2015	0	0	0	0	0
2016	38	4	0	2	44
2017	50	9	0	1	60
2018	55	13	0	0	68
Total	144	27	0	3	174
	83%	16%	0%	2%	100.0%

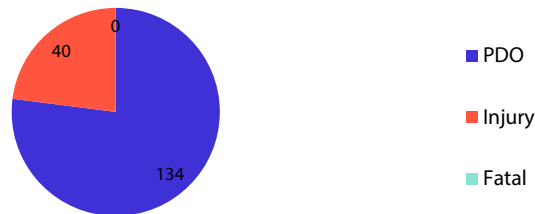
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	2	0	0	0	0	2
2015	0	0	0	0	0	0	0
2016	0	35	0	0	0	9	44
2017	1	41	0	0	0	18	60
2018	1	57	1	0	0	9	68
Total	2	135	1	0	0	36	174
	1%	78%	1%	0%	0%	21%	100.0%

Crash Analysis
Forest Pkwy (SR 331) @ Old Dixie Rd (US 19/41)
Years 2014 to 2018

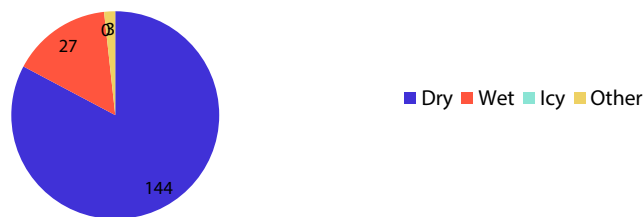
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Loop Rd @ Toffie Ter
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	7	0	4	1	0	0	0	12
2015	3	0	5	2	0	0	0	10
2016	5	1	4	4	0	0	0	14
2017	4	1	6	3	1	0	0	15
2018	4	1	5	2	0	1	0	13
Total	23	3	24	12	1	1	0	64
	35.9%	4.7%	37.5%	18.8%	1.6%	1.6%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	9	3	0	12
2015	7	3	0	10
2016	11	3	0	14
2017	11	4	0	15
2018	11	2	0	13
Total	49	15	0	64
	77%	23%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	10	2	0	0	12
2015	6	4	0	0	10
2016	10	4	0	0	14
2017	12	3	0	0	15
2018	12	1	0	0	13
Total	50	14	0	0	64
	78%	22%	0%	0%	100.0%

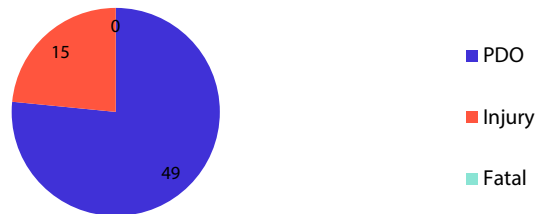
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	8	0	0	0	4	12
2015	0	4	1	0	0	5	10
2016	0	10	0	0	0	4	14
2017	0	10	0	0	0	5	15
2018	0	7	0	0	0	6	13
Total	0	39	1	0	0	24	64
	0%	61%	2%	0%	0%	38%	100.0%

Crash Analysis
Loop Rd @ Toffie Ter
Years 2014 to 2018

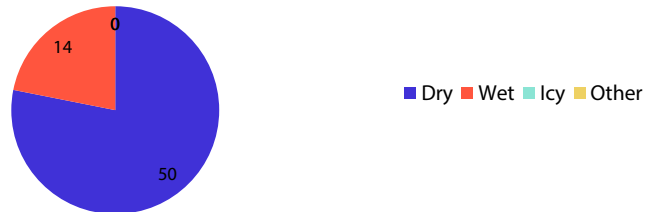
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Sullivan Rd @ Riverdale Rd (SR 139)
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	0	0	0	0	0	1	0	1
2015	0	0	0	0	0	0	0	0
2016	5	0	3	2	0	0	0	10
2017	18	0	2	0	0	0	0	20
2018	21	1	10	1	1	1	1	36
Total	44	1	15	3	1	2	1	67
	65.7%	1.5%	22.4%	4.5%	1.5%	3.0%	1.5%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	0	1	0	1
2015	0	0	0	0
2016	7	3	0	10
2017	11	9	0	20
2018	15	21	0	36
Total	33	34	0	67
	49%	51%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	1	0	0	0	1
2015	0	0	0	0	0
2016	9	1	0	0	10
2017	18	2	0	0	20
2018	28	7	0	1	36
Total	56	10	0	1	67
	84%	15%	0%	1%	100.0%

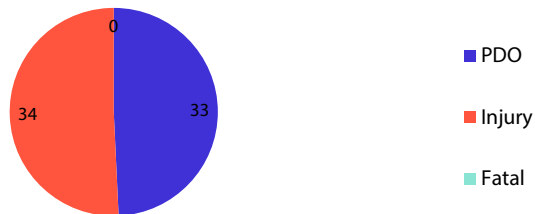
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	0	0	0	0	1	1
2015	0	0	0	0	0	0	0
2016	0	8	0	0	0	2	10
2017	0	10	0	0	0	10	20
2018	0	17	1	0	0	18	36
Total	0	35	1	0	0	31	67
	0%	52%	1%	0%	0%	46%	100.0%

Crash Analysis
Sullivan Rd @ Riverdale Rd (SR 139)
Years 2014 to 2018

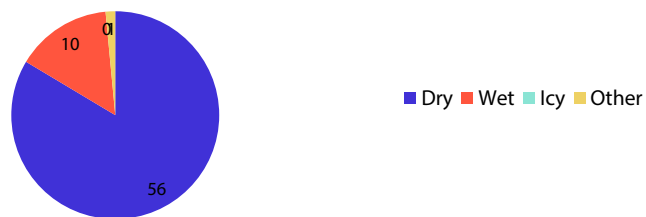
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
S Loop Rd @ Lake Mirror Rd
Years 2014 to 2018

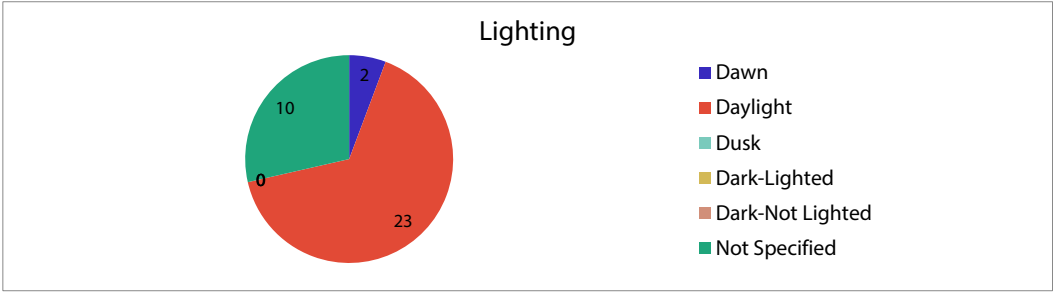
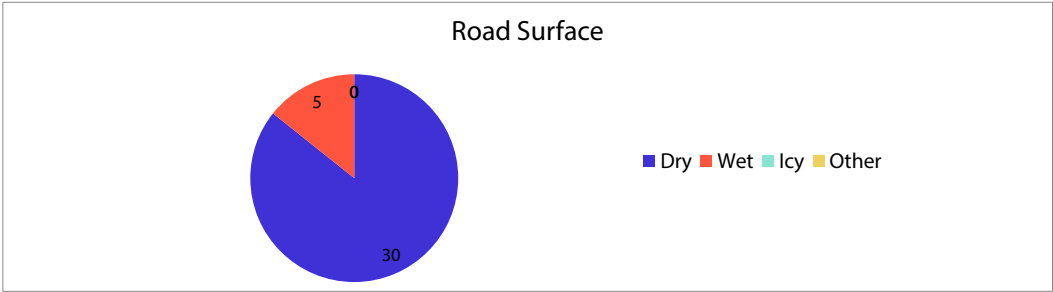
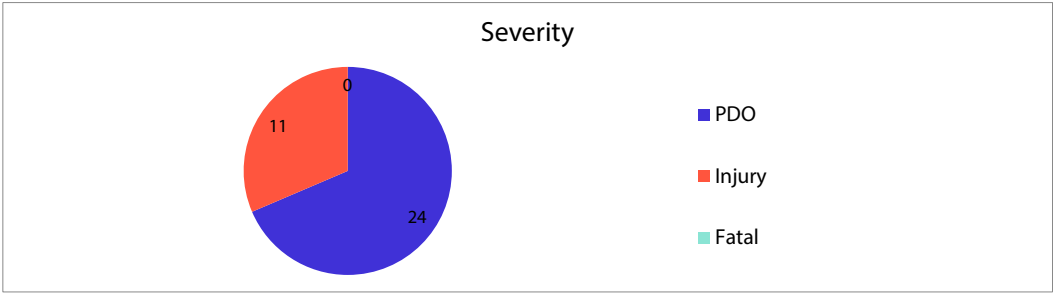
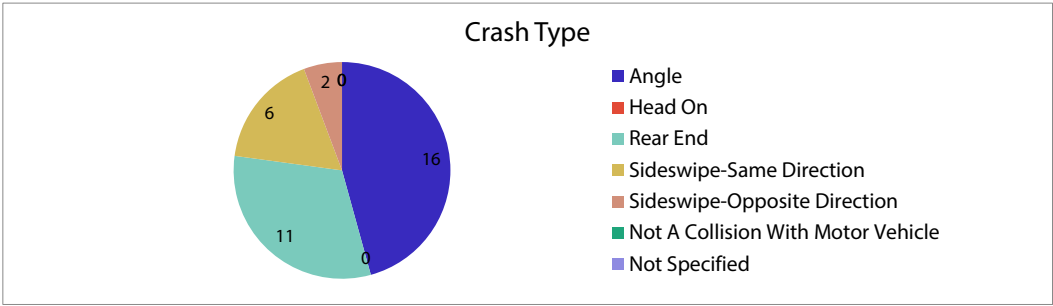
Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	1	0	1	3	0	0	0	5
2015	3	0	0	0	0	0	0	3
2016	5	0	2	0	0	0	0	7
2017	5	0	4	3	2	0	0	14
2018	2	0	4	0	0	0	0	6
Total	16	0	11	6	2	0	0	35
	45.7%	0.0%	31.4%	17.1%	5.7%	0.0%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	4	1	0	5
2015	3	0	0	3
2016	4	3	0	7
2017	8	6	0	14
2018	5	1	0	6
Total	24	11	0	35
	69%	31%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	4	1	0	0	5
2015	2	1	0	0	3
2016	6	1	0	0	7
2017	13	1	0	0	14
2018	5	1	0	0	6
Total	30	5	0	0	35
	86%	14%	0%	0%	100.0%

Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	1	2	0	0	0	2	5
2015	0	2	0	0	0	1	3
2016	0	5	0	0	0	2	7
2017	0	11	0	0	0	3	14
2018	1	3	0	0	0	2	6
Total	2	23	0	0	0	10	35
	6%	66%	0%	0%	0%	29%	100.0%

Crash Analysis
S Loop Rd @ Lake Mirror Rd
Years 2014 to 2018



Crash Analysis
Clark Howell Hwy @ Lake Mirror Rd
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	1	0	0	2	0	0	0	3
2015	0	1	1	0	0	0	0	2
2016	1	0	0	0	0	1	0	2
2017	1	0	2	1	0	0	0	4
2018	0	0	1	0	0	0	0	1
Total	3	1	4	3	0	1	0	12
	25.0%	8.3%	33.3%	25.0%	0.0%	8.3%	0.0%	100.0%

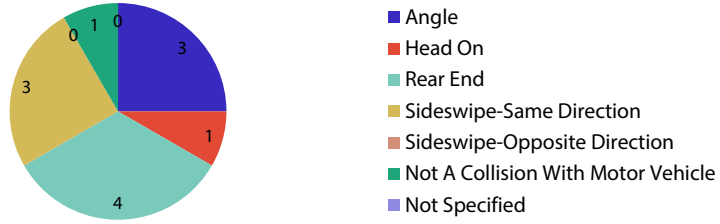
Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	2	1	0	3
2015	2	0	0	2
2016	1	1	0	2
2017	3	1	0	4
2018	1	0	0	1
Total	9	3	0	12
	75%	25%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	2	0	0	1	3
2015	2	0	0	0	2
2016	2	0	0	0	2
2017	4	0	0	0	4
2018	1	0	0	0	1
Total	11	0	0	1	12
	92%	0%	0%	8%	100.0%

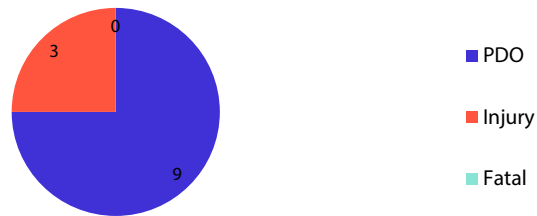
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	1	0	0	0	2	3
2015	0	2	0	0	0	0	2
2016	0	2	0	0	0	0	2
2017	0	4	0	0	0	0	4
2018	0	1	0	0	0	0	1
Total	0	10	0	0	0	2	12
	0%	83%	0%	0%	0%	17%	100.0%

Crash Analysis
Clark Howell Hwy @ Lake Mirror Rd
Years 2014 to 2018

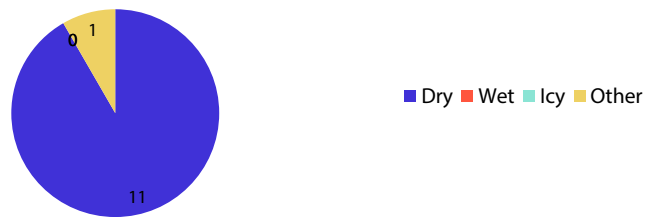
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Centre Pkwy @ N Commerce Dr
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	0	0	0	0	0	3	0	3
2015	5	0	3	1	0	1	0	10
2016	2	0	1	1	0	0	0	4
2017	2	0	2	0	1	1	0	6
2018	1	0	1	0	0	1	0	3
Total	10	0	7	2	1	6	0	26
	38.5%	0.0%	26.9%	7.7%	3.8%	23.1%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	2	1	0	3
2015	8	2	0	10
2016	3	1	0	4
2017	4	2	0	6
2018	3	0	0	3
Total	20	6	0	26
	77%	23%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	3	0	0	0	3
2015	8	2	0	0	10
2016	4	0	0	0	4
2017	6	0	0	0	6
2018	2	1	0	0	3
Total	23	3	0	0	26
	88%	12%	0%	0%	100.0%

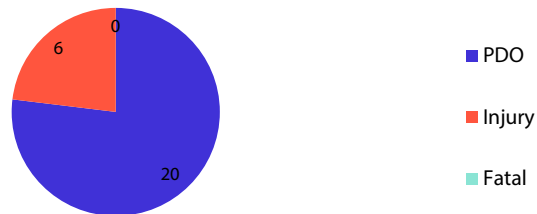
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	0	0	0	0	3	3
2015	0	8	0	0	0	2	10
2016	0	3	0	0	0	1	4
2017	0	4	1	0	0	1	6
2018	0	2	0	0	0	1	3
Total	0	17	1	0	0	8	26
	0%	65%	4%	0%	0%	31%	100.0%

Crash Analysis
Centre Pkwy @ N Commerce Dr
Years 2014 to 2018

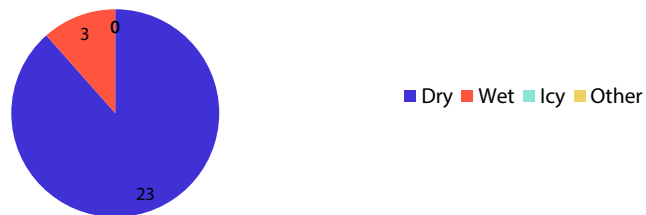
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
SR 314 @ SR 139
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	11	0	5	1	1	4	0	22
2017	7	1	4	2	0	1	1	16
2018	17	3	6	3	0	1	1	31
Total	35	4	15	6	1	6	2	69
	50.7%	5.8%	21.7%	8.7%	1.4%	8.7%	2.9%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	0	0	0	0
2015	0	0	0	0
2016	13	8	1	22
2017	11	5	0	16
2018	21	10	0	31
Total	45	23	1	69
	65%	33%	1%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	19	3	0	0	22
2017	11	4	0	1	16
2018	21	9	0	1	31
Total	51	16	0	2	69
	74%	23%	0%	3%	100.0%

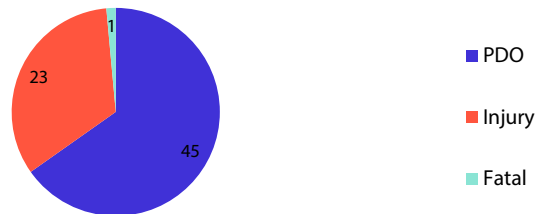
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	DarkLighted	DarkNot Lighted	Not Specified	
2014	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0
2016	0	12	0	7	3	0	22
2017	0	9	0	2	4	1	16
2018	2	16	0	9	3	1	31
Total	2	37	0	18	10	2	69
	3%	54%	0%	26%	14%	3%	100.0%

Crash Analysis
SR 314 @ SR 139
Years 2014 to 2018

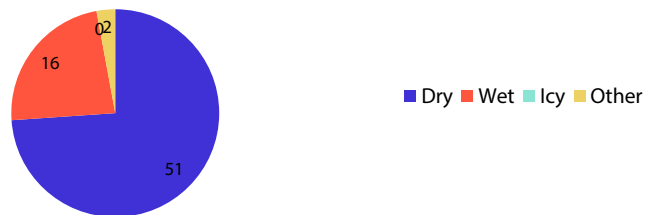
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Riverdale Rd (SR 139) @ Global Gateway Con
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	4	0	3	0	0	0	0	7
2017	2	0	0	1	0	0	0	3
2018	4	0	2	0	0	0	0	6
Total	10	0	5	1	0	0	0	16
	62.5%	0.0%	31.3%	6.3%	0.0%	0.0%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	0	0	0	0
2015	0	0	0	0
2016	2	5	0	7
2017	0	3	0	3
2018	5	1	0	6
Total	7	9	0	16
	44%	56%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	0	0	0	0	0
2015	0	0	0	0	0
2016	6	1	0	0	7
2017	1	2	0	0	3
2018	6	0	0	0	6
Total	13	3	0	0	16
	81%	19%	0%	0%	100.0%

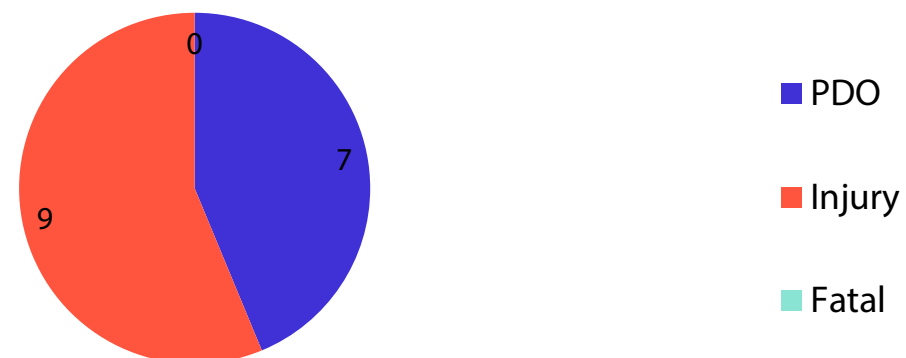
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	DarkLighted	DarkNot Lighted	Not Specified	
2014	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0
2016	0	5	0	1	1	0	7
2017	0	1	0	0	2	0	3
2018	1	4	0	1	0	0	6
Total	1	10	0	2	3	0	16
	6%	63%	0%	13%	19%	0%	100.0%

Crash Analysis
Riverdale Rd (SR 139) @ Global Gateway Con
Years 2014 to 2018

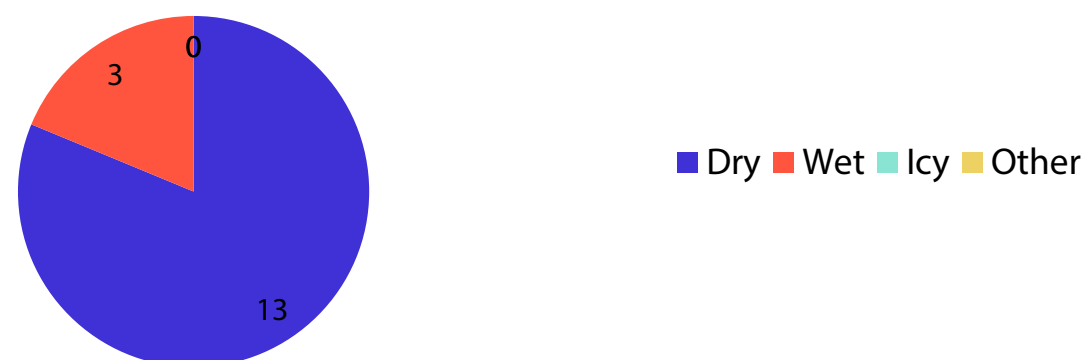
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Welcome All Rd @ Scarborough Rd
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	1	0	0	0	0	2	0	3
2015	4	0	1	0	0	0	0	5
2016	4	1	1	0	0	1	0	7
2017	6	0	0	1	1	0	0	8
2018	5	0	0	0	3	0	0	8
Total	20	1	2	1	4	3	0	31
	64.5%	3.2%	6.5%	3.2%	12.9%	9.7%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	2	1	0	3
2015	2	3	0	5
2016	6	1	0	7
2017	7	1	0	8
2018	6	2	0	8
Total	23	8	0	31
	74%	26%	0%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	3	0	0	0	3
2015	5	0	0	0	5
2016	3	4	0	0	7
2017	6	2	0	0	8
2018	5	3	0	0	8
Total	22	9	0	0	31
	71%	29%	0%	0%	100.0%

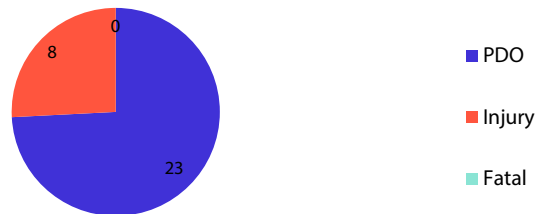
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	2	0	0	0	1	3
2015	0	4	0	0	0	1	5
2016	0	6	0	0	0	1	7
2017	0	6	0	0	0	2	8
2018	0	7	0	0	0	1	8
Total	0	25	0	0	0	6	31
	0%	81%	0%	0%	0%	19%	100.0%

Crash Analysis
Welcome All Rd @ Scarborough Rd
Years 2014 to 2018

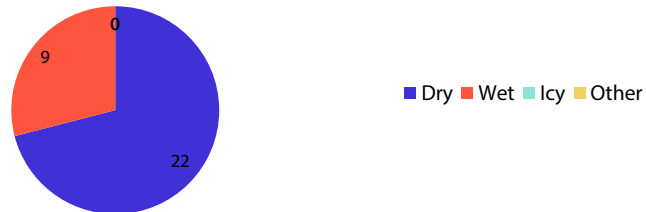
Crash Type



Severity



Road Surface



Lighting



Crash Analysis
Camp Creek Pkwy (SR 6) @ Washington Rd
Years 2014 to 2018

Year	Crash Type							Total Crashes
	Angle	Head On	Rear End	Sideswipe-Same Direction	Sideswipe-Opposite Direction	Not A Collision With Motor Vehicle	Not Specified	
2014	6	1	44	4	1	1	0	57
2015	9	0	47	3	2	2	0	63
2016	16	1	50	9	1	4	0	81
2017	15	5	42	11	1	1	0	75
2018	15	2	52	9	3	4	0	85
Total	61	9	235	36	8	12	0	361
	16.9%	2.5%	65.1%	10.0%	2.2%	3.3%	0.0%	100.0%

Year	Severity			Total Crashes
	PDO	Injury	Fatal	
2014	43	14	0	57
2015	49	13	1	63
2016	60	20	1	81
2017	55	20	0	75
2018	68	17	0	85
Total	275	84	2	361
	76%	23%	1%	100.0%

Year	Road Surface				Total Crashes
	Dry	Wet	Icy	Other	
2014	44	13	0	0	57
2015	45	18	0	0	63
2016	76	4	0	1	81
2017	65	10	0	0	75
2018	74	11	0	0	85
Total	304	56	0	1	361
	84%	16%	0%	0%	100.0%

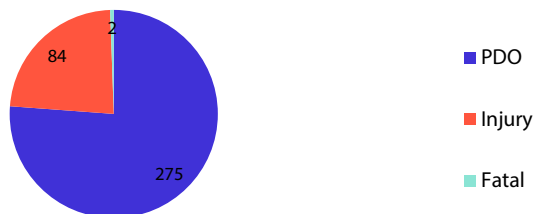
Year	Lighting						Total Crashes
	Dawn	Daylight	Dusk	Dark-Lighted	Dark-Not Lighted	Not Specified	
2014	0	36	0	0	0	21	57
2015	0	34	0	0	0	29	63
2016	0	59	0	0	0	22	81
2017	0	49	0	0	0	26	75
2018	1	54	0	0	0	30	85
Total	1	232	0	0	0	128	361
	0%	64%	0%	0%	0%	35%	100.0%

Crash Analysis
Camp Creek Pkwy (SR 6) @ Washington Rd
Years 2014 to 2018

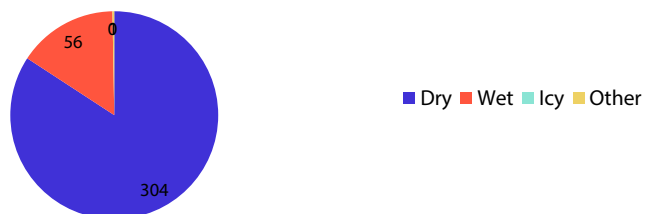
Crash Type



Severity



Road Surface



Lighting



Appendix E

Intersection Capacity Analyses

Existing Year (2019) Intersection Capacity Analysis

HCM 2010 Signalized Intersection Summary

1: Ben Hill Rd & Welcome All Rd

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	3	10	0	0	5	31	139	0	1	135	216
Future Volume (veh/h)	227	3	10	0	0	5	31	139	0	1	135	216
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1779	1652	1900	1900	1681	1776	1696	1900	1900	1759	1810
Adj Flow Rate, veh/h	249	0	0	0	0	0	34	151	0	1	147	0
Adj No. of Lanes	2	0	1	1	1	1	1	2	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	0	15	0	0	13	7	12	0	0	8	5
Cap, veh/h	570	0	237	8	8	6	619	1072	537	676	585	512
Arrive On Green	0.17	0.00	0.00	0.00	0.00	0.00	0.33	0.33	0.00	0.33	0.33	0.00
Sat Flow, veh/h	3382	0	1404	1810	1900	1429	1178	3223	1615	1256	1759	1538
Grp Volume(v), veh/h	249	0	0	0	0	0	34	151	0	1	147	0
Grp Sat Flow(s),veh/h/ln	1691	0	1404	1810	1900	1429	1178	1612	1615	1256	1759	1538
Q Serve(g_s), s	1.6	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.0	0.0	1.5	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	0.0	0.0	0.0	2.0	0.8	0.0	0.8	1.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	570	0	237	8	8	6	619	1072	537	676	585	512
V/C Ratio(X)	0.44	0.00	0.00	0.00	0.00	0.00	0.05	0.14	0.00	0.00	0.25	0.00
Avail Cap(c_a), veh/h	2250	0	934	527	553	416	1158	2546	1276	1250	1390	1215
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.0	0.0	0.0	0.0	0.0	0.0	6.6	5.6	0.0	5.9	5.8	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.0	0.0	1.3	0.0
LnGrp Delay(d),s/veh	9.5	0.0	0.0	0.0	0.0	0.0	6.6	5.7	0.0	5.9	6.1	0.0
LnGrp LOS	A						A	A		A	A	
Approach Vol, veh/h		249			0			185			148	
Approach Delay, s/veh		9.5			0.0			5.8			6.1	
Approach LOS		A						A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.0		10.1		14.0		0.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		19.0		16.0		19.0		7.0				
Max Q Clear Time (g_c+I1), s		3.5		3.6		4.0		0.0				
Green Ext Time (p_c), s		1.6		0.7		1.6		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			7.5									
HCM 2010 LOS			A									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 2010 Signalized Intersection Summary

2: Loop Rd & Maynard Jackson Blvd/Charles W Grant Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	307	135	57	657	568	330	240	158	270	78	146
Future Volume (veh/h)	180	307	135	57	657	568	330	240	158	270	78	146
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1462	1759	1597	1429	1827	1827	1759	1810	1597	1776	1681	1570
Adj Flow Rate, veh/h	189	323	0	60	692	0	347	253	0	284	82	154
Adj No. of Lanes	1	3	1	1	2	1	2	2	1	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	30	8	19	33	4	4	8	5	19	7	13	21
Cap, veh/h	319	1651	467	383	941	421	450	567	224	379	239	190
Arrive On Green	0.12	0.34	0.00	0.05	0.27	0.00	0.14	0.16	0.00	0.12	0.14	0.14
Sat Flow, veh/h	1392	4803	1357	1361	3471	1553	3250	3438	1357	3281	1681	1335
Grp Volume(v), veh/h	189	323	0	60	692	0	347	253	0	284	82	154
Grp Sat Flow(s),veh/h/ln	1392	1601	1357	1361	1736	1553	1625	1719	1357	1640	1681	1335
Q Serve(g_s), s	6.8	3.5	0.0	2.3	13.3	0.0	7.5	4.9	0.0	6.1	3.2	8.2
Cycle Q Clear(g_c), s	6.8	3.5	0.0	2.3	13.3	0.0	7.5	4.9	0.0	6.1	3.2	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1651	467	383	941	421	450	567	224	379	239	190
V/C Ratio(X)	0.59	0.20	0.00	0.16	0.74	0.00	0.77	0.45	0.00	0.75	0.34	0.81
Avail Cap(c_a), veh/h	436	2294	648	410	1184	530	665	657	259	537	252	200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	16.9	0.0	17.8	24.3	0.0	30.5	27.6	0.0	31.4	28.3	30.5
Incr Delay (d2), s/veh	1.8	0.1	0.0	0.2	1.8	0.0	3.3	0.6	0.0	3.6	0.8	20.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	2.8	0.0	1.6	10.8	0.0	6.4	4.2	0.0	5.3	2.8	7.4
LnGrp Delay(d),s/veh	18.7	17.0	0.0	18.0	26.1	0.0	33.7	28.1	0.0	35.0	29.2	51.4
LnGrp LOS	B	B		B	C		C	C		C	C	D
Approach Vol, veh/h	512			752			600			520		
Approach Delay, s/veh	17.6			25.5			31.4			38.9		
Approach LOS	B			C			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	25.9	16.1	16.4	9.5	31.2	14.5	18.1				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	25.0	15.0	11.0	5.0	35.0	12.0	14.0				
Max Q Clear Time (g_c+I1), s	8.8	15.3	9.5	10.2	4.3	5.5	8.1	6.9				
Green Ext Time (p_c), s	0.3	4.6	0.6	0.2	0.0	7.8	0.3	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay	28.2											
HCM 2010 LOS	C											

HCM 2010 Signalized Intersection Summary

3: Washington Rd & N Commerce Dr/Retail Dwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	2	78	2	2	1	133	438	1	5	323	402
Future Volume (veh/h)	86	2	78	2	2	1	133	438	1	5	323	402
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1462	1731	1900	1900	1900	1900	1810	1793	1900	1900	1759	1743
Adj Flow Rate, veh/h	97	2	88	2	2	1	149	492	1	6	363	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
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
Percent Heavy Veh, %	30	0	0	0	0	0	5	6	6	0	8	9
Cap, veh/h	394	5	201	353	167	83	628	1594	3	580	1528	677
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.46	0.46	0.46	0.46	0.46	0.00
Sat Flow, veh/h	1105	33	1443	1327	1196	598	986	3487	7	918	3343	1482
Grp Volume(v), veh/h	97	0	90	2	0	3	149	240	253	6	363	0
Grp Sat Flow(s),veh/h/ln	1105	0	1476	1327	0	1794	986	1703	1791	918	1671	1482
Q Serve(g_s), s	2.5	0.0	1.7	0.0	0.0	0.0	3.2	2.7	2.7	0.1	2.0	0.0
Cycle Q Clear(g_c), s	2.5	0.0	1.7	1.7	0.0	0.0	5.2	2.7	2.7	2.8	2.0	0.0
Prop In Lane	1.00		0.98	1.00		0.33	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	394	0	206	353	0	250	628	779	819	580	1528	677
V/C Ratio(X)	0.25	0.00	0.44	0.01	0.00	0.01	0.24	0.31	0.31	0.01	0.24	0.00
Avail Cap(c_a), veh/h	872	0	844	927	0	1026	1204	1775	1867	1117	3485	1545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.1	0.0	11.7	12.5	0.0	11.0	6.5	5.1	5.1	6.0	4.9	0.0
Incr Delay (d2), s/veh	0.3	0.0	1.5	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	0.0	1.4	0.0	0.0	0.0	1.6	2.2	2.4	0.1	1.7	0.0
LnGrp Delay(d),s/veh	12.4	0.0	13.2	12.5	0.0	11.1	6.7	5.3	5.3	6.0	5.0	0.0
LnGrp LOS	B		B	B		B	A	A	A	A	A	
Approach Vol, veh/h	187		5				642				369	
Approach Delay, s/veh	12.8		11.6				5.6				5.0	
Approach LOS	B		B				A				A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4				6		8			
Phs Duration (G+Y+Rc), s	19.6		10.1				19.6		10.1			
Change Period (Y+Rc), s	6.0		6.0				6.0		6.0			
Max Green Setting (Gmax), s	31.0		17.0				31.0		17.0			
Max Q Clear Time (g_c+l1), s	7.2		4.5				4.8		3.7			
Green Ext Time (p_c), s	6.4		0.7				6.6		0.7			
Intersection Summary												
HCM 2010 Ctrl Delay			6.6									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary

4: SR 139/Riverdale Rd & Phoenix Blvd/ Forest Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	311	106	61	56	185	340	76	1708	76	218	701	306
Future Volume (veh/h)	311	106	61	56	185	340	76	1708	76	218	701	306
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1792	1827	1776	1810	1667	1881	1863	1810	1696	1845	1863
Adj Flow Rate, veh/h	338	115	0	61	201	0	83	1857	0	237	762	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	6	4	7	5	14	1	2	5	12	3	2
Cap, veh/h	361	511	233	123	284	117	141	1855	806	246	1971	890
Arrive On Green	0.10	0.15	0.00	0.04	0.08	0.00	0.04	0.52	0.00	0.08	0.56	0.00
Sat Flow, veh/h	3442	3406	1553	3281	3438	1417	3476	3539	1538	3134	3505	1583
Grp Volume(v), veh/h	338	115	0	61	201	0	83	1857	0	237	762	0
Grp Sat Flow(s),veh/h/ln	1721	1703	1553	1640	1719	1417	1738	1770	1538	1567	1752	1583
Q Serve(g_s), s	11.2	3.4	0.0	2.1	6.5	0.0	2.7	60.0	0.0	8.6	13.9	0.0
Cycle Q Clear(g_c), s	11.2	3.4	0.0	2.1	6.5	0.0	2.7	60.0	0.0	8.6	13.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	361	511	233	123	284	117	141	1855	806	246	1971	890
V/C Ratio(X)	0.94	0.23	0.00	0.50	0.71	0.00	0.59	1.00	0.00	0.96	0.39	0.00
Avail Cap(c_a), veh/h	361	655	298	143	451	186	182	1855	806	246	1971	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.8	42.8	0.0	54.0	51.2	0.0	54.0	27.2	0.0	52.6	14.0	0.0
Incr Delay (d2), s/veh	31.5	0.2	0.0	3.1	3.2	0.0	3.9	21.1	0.0	46.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	2.9	0.0	1.8	5.8	0.0	2.5	62.2	0.0	9.1	10.9	0.0
LnGrp Delay(d),s/veh	82.4	43.0	0.0	57.1	54.4	0.0	57.8	48.3	0.0	99.1	14.1	0.0
LnGrp LOS	F	D		E	D		E	F		F	B	
Approach Vol, veh/h		453			262			1940			999	
Approach Delay, s/veh		72.4			55.0			48.7			34.3	
Approach LOS		E			E			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	70.4	10.3	23.2	15.0	66.0	18.0	15.5				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	63.0	63.0	5.0	22.0	9.0	60.0	12.0	15.0				
Max Q Clear Time (g_c+I1), s	4.7	15.9	4.1	5.4	10.6	62.0	13.2	8.5				
Green Ext Time (p_c), s	0.0	32.4	0.0	1.6	0.0	0.0	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			48.2									
HCM 2010 LOS			D									

HCM 2010 TWSC

5: Majestic PI & SR 14

01/19/2020

Intersection													
Int Delay, s/veh	23.4												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	2	2188	10	1	50	969	83	0	0	44	25	1	2
Future Vol, veh/h	2	2188	10	1	50	969	83	0	0	44	25	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	215	-	250	-	320	-	215	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	47	68	68	4	13	33	0	90	11	100	0
Mvmt Flow	2	2233	10	1	51	989	85	0	0	45	26	1	2
Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	989	0	0	2233	2233	0	0	2836	3330	1117	2214	3330	495
Stage 1	-	-	-	-	-	-	-	2237	2237	-	1093	1093	-
Stage 2	-	-	-	-	-	-	-	599	1093	-	1121	2237	-
Critical Hdwy	4.1	-	-	7.76	5.46	-	-	8.16	6.5	8.7	7.72	8.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	7.16	5.5	-	6.72	7.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	7.16	5.5	-	6.72	7.5	-
Follow-up Hdwy	2.2	-	-	3.18	2.88	-	-	3.83	4	4.2	3.61	5	3.3
Pot Cap-1 Maneuver	707	-	-	21	91	-	-	5	8	103	~22	~1	525
Stage 1	-	-	-	-	-	-	-	29	80	-	213	144	-
Stage 2	-	-	-	-	-	-	-	386	293	-	205	22	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	707	-	-	81	81	-	-	2	3	103	~6	0	525
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	2	3	-	~6	0	-
Stage 1	-	-	-	-	-	-	-	29	80	-	212	51	-
Stage 2	-	-	-	-	-	-	-	134	104	-	115	22	-
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0			5			64.6			\$ 2518.7			
HCM LOS							F			F			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	-	103	707	-	-	81	-	-	6	525			
HCM Lane V/C Ratio	-	0.436	0.003	-	-	0.642	-	-	4.422	0.004			
HCM Control Delay (s)	0	64.6	10.1	-	-	109	-	-	\$ 2711.5	11.9			
HCM Lane LOS	A	F	B	-	-	F	-	-	F	B			
HCM 95th %tile Q(veh)	-	1.8	0	-	-	3	-	-	4.7	0			
Notes													
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon													

HCM 2010 Signalized Intersection Summary

6: SR 279/Old National Hwy & Sullivan Rd

01/19/2020

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (veh/h)	17	46	148	133	22	10	215	575	349	12	274	8		
Future Volume (veh/h)	17	46	148	133	22	10	215	575	349	12	274	8		
Number	7	4	14	3	8	18	1	6	16	5	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1900	1764	1900	1545	1866	1900	1810	1810	1727	1900	1812	1900		
Adj Flow Rate, veh/h	18	48	154	139	23	10	224	599	364	12	285	8		
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	0	10	10	23	0	0	5	5	10	0	5	5		
Cap, veh/h	531	111	358	320	373	162	533	879	713	265	852	24		
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.49	0.49	0.49	0.49	0.49	0.49		
Sat Flow, veh/h	1398	369	1185	975	1235	537	1051	1810	1468	593	1754	49		
Grp Volume(v), veh/h	18	0	202	139	0	33	224	599	364	12	0	293		
Grp Sat Flow(s),veh/h/ln	1398	0	1555	975	0	1771	1051	1810	1468	593	0	1803		
Q Serve(g_s), s	0.5	0.0	5.9	7.5	0.0	0.7	9.4	14.4	9.6	0.9	0.0	5.6		
Cycle Q Clear(g_c), s	1.3	0.0	5.9	13.4	0.0	0.7	15.0	14.4	9.6	15.3	0.0	5.6		
Prop In Lane	1.00		0.76	1.00		0.30	1.00		1.00	1.00		0.03		
Lane Grp Cap(c), veh/h	531	0	469	320	0	535	533	879	713	265	0	876		
V/C Ratio(X)	0.03	0.00	0.43	0.43	0.00	0.06	0.42	0.68	0.51	0.05	0.00	0.33		
Avail Cap(c_a), veh/h	777	0	743	492	0	846	971	1633	1325	511	0	1627		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	14.5	0.0	15.8	21.2	0.0	14.0	13.5	11.2	9.9	17.0	0.0	8.9		
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.9	0.0	0.0	0.5	0.9	0.6	0.1	0.0	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(95%),veh/ln	0.4	0.0	4.7	3.8	0.0	0.7	5.0	11.8	7.1	0.3	0.0	5.1		
LnGrp Delay(d),s/veh	14.5	0.0	16.5	22.2	0.0	14.1	14.1	12.1	10.5	17.1	0.0	9.1		
LnGrp LOS	B		B	C		B	B	B	B	B		A		
Approach Vol, veh/h	220		172				1187				305			
Approach Delay, s/veh	16.3		20.6				12.0				9.5			
Approach LOS	B		C				B				A			
Timer	1	2	3	4	5	6	7	8						
Assigned Phs	2		4		6		8							
Phs Duration (G+Y+Rc), s	33.5		23.1		33.5		23.1							
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0							
Max Green Setting (Gmax), s	51.0		27.0		51.0		27.0							
Max Q Clear Time (g_c+I1), s	17.3		7.9		17.0		15.4							
Green Ext Time (p_c), s	10.2		2.1		10.2		1.7							
Intersection Summary														
HCM 2010 Ctrl Delay			12.9											
HCM 2010 LOS			B											

HCM 2010 Signalized Intersection Summary

7: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	1135	110	14	990	98	50	8	7	90	25	137
Future Volume (veh/h)	142	1135	110	14	990	98	50	8	7	90	25	137
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1624	1743	1863	1652	1759	1900	1571	1900	1776	1652	1845
Adj Flow Rate, veh/h	148	1182	0	15	1031	0	52	8	0	94	26	0
Adj No. of Lanes	2	2	1	1	3	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	17	9	2	15	8	14	14	14	7	15	3
Cap, veh/h	205	2091	1004	29	2859	948	120	13	0	142	258	245
Arrive On Green	0.06	0.68	0.00	0.02	0.84	0.00	0.06	0.06	0.00	0.04	0.16	0.00
Sat Flow, veh/h	3408	3085	1482	1774	4510	1495	1012	205	0	3281	1652	1568
Grp Volume(v), veh/h	148	1182	0	15	1031	0	60	0	0	94	26	0
Grp Sat Flow(s),veh/h/ln	1704	1543	1482	1774	1503	1495	1216	0	0	1640	1652	1568
Q Serve(g_s), s	5.1	24.0	0.0	1.0	6.2	0.0	5.6	0.0	0.0	3.4	1.6	0.0
Cycle Q Clear(g_c), s	5.1	24.0	0.0	1.0	6.2	0.0	5.8	0.0	0.0	3.4	1.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.87		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	2091	1004	29	2859	948	132	0	0	142	258	245
V/C Ratio(X)	0.72	0.57	0.00	0.52	0.36	0.00	0.45	0.00	0.00	0.66	0.10	0.00
Avail Cap(c_a), veh/h	312	2091	1004	74	2859	948	207	0	0	191	386	366
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.85	0.85	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.4	10.1	0.0	58.2	3.9	0.0	55.4	0.0	0.0	56.5	43.4	0.0
Incr Delay (d2), s/veh	4.8	1.1	0.0	11.5	0.3	0.0	2.4	0.0	0.0	5.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	15.8	0.0	1.1	4.5	0.0	3.7	0.0	0.0	3.0	1.3	0.0
LnGrp Delay(d),s/veh	60.2	11.2	0.0	69.7	4.2	0.0	57.8	0.0	0.0	61.8	43.6	0.0
LnGrp LOS	E	B		E	A		E			E	D	
Approach Vol, veh/h	1330				1046		60				120	
Approach Delay, s/veh	16.7				5.2		57.8				57.8	
Approach LOS	B				A		E				E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.0	87.3		24.7	13.2	82.1	11.2	13.5				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	69.0		28.0	11.0	63.0	7.0	15.0				
Max Q Clear Time (g_c+I1), s	3.0	26.0		3.6	7.1	8.2	5.4	7.8				
Green Ext Time (p_c), s	0.0	23.6		0.4	0.1	26.5	0.0	0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			14.9									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

8: N Commerce Dr & SR 6/Camp Creek Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 					  		
Traffic Volume (veh/h)	47	1001	76	305	1019	167	148	92	181	206	87	47
Future Volume (veh/h)	47	1001	76	305	1019	167	148	92	181	206	87	47
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1619	1900	1776	1685	1900	1696	1776	1681	1827	1776	1881
Adj Flow Rate, veh/h	49	1043	0	318	1061	0	154	96	0	215	91	0
Adj No. of Lanes	2	3	0	2	3	0	1	1	1	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	18	18	7	14	14	12	7	13	4	7	1
Cap, veh/h	113	2220	0	381	2691	0	181	215	173	298	123	111
Arrive On Green	0.07	1.00	0.00	0.12	0.58	0.00	0.11	0.12	0.00	0.06	0.07	0.00
Sat Flow, veh/h	3375	4565	0	3281	4753	0	1616	1776	1429	4907	1776	1599
Grp Volume(v), veh/h	49	1043	0	318	1061	0	154	96	0	215	91	0
Grp Sat Flow(s),veh/h/ln	1688	1473	0	1640	1534	0	1616	1776	1429	1636	1776	1599
Q Serve(g_s), s	1.7	0.0	0.0	11.4	14.9	0.0	11.2	6.0	0.0	5.2	6.0	0.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	11.4	14.9	0.0	11.2	6.0	0.0	5.2	6.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	2220	0	381	2691	0	181	215	173	298	123	111
V/C Ratio(X)	0.43	0.47	0.00	0.84	0.39	0.00	0.85	0.45	0.00	0.72	0.74	0.00
Avail Cap(c_a), veh/h	141	2220	0	519	2691	0	283	355	286	368	178	160
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.9	0.0	0.0	51.9	13.4	0.0	52.3	49.0	0.0	55.3	54.8	0.0
Incr Delay (d2), s/veh	2.1	0.6	0.0	8.5	0.4	0.0	13.4	1.5	0.0	5.2	9.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.2	0.0	9.5	10.5	0.0	9.6	5.5	0.0	4.5	5.9	0.0
LnGrp Delay(d),s/veh	57.0	0.6	0.0	60.4	13.9	0.0	65.7	50.5	0.0	60.5	63.7	0.0
LnGrp LOS	E	A		E	B		E	D		E	E	
Approach Vol, veh/h	1092		1379				250				306	
Approach Delay, s/veh	3.1		24.6				59.9				61.5	
Approach LOS	A		C				E				E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.9	66.3	19.5	14.3	10.0	76.2	13.3	20.5				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	44.0	44.0	21.0	12.0	5.0	58.0	9.0	24.0				
Max Q Clear Time (g_c+I1), s	13.4	2.0	13.2	8.0	3.7	16.9	7.2	8.0				
Green Ext Time (p_c), s	0.5	21.4	0.2	0.3	0.0	21.2	0.1	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			23.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

9: US 41/Old Dixie & SR 331/Forest Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	546	107	130	580	403	109	806	112	123	262	139
Future Volume (veh/h)	208	546	107	130	580	403	109	806	112	123	262	139
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1583	1776	1583	1727	1810	1810	1638	1714	1900	1727	1610	1484
Adj Flow Rate, veh/h	212	557	0	133	592	411	111	822	114	126	267	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	20	7	20	10	5	5	16	11	11	10	18	28
Cap, veh/h	241	925	369	162	732	328	403	869	120	185	892	368
Arrive On Green	0.16	0.27	0.00	0.10	0.21	0.21	0.07	0.30	0.30	0.06	0.29	0.00
Sat Flow, veh/h	1508	3374	1346	1645	3438	1538	1560	2873	398	1645	3059	1262
Grp Volume(v), veh/h	212	557	0	133	592	411	111	466	470	126	267	0
Grp Sat Flow(s),veh/h/ln	1508	1687	1346	1645	1719	1538	1560	1628	1643	1645	1530	1262
Q Serve(g_s), s	12.3	12.8	0.0	7.1	14.6	19.0	4.4	24.9	24.9	4.8	6.0	0.0
Cycle Q Clear(g_c), s	12.3	12.8	0.0	7.1	14.6	19.0	4.4	24.9	24.9	4.8	6.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	241	925	369	162	732	328	403	492	497	185	892	368
V/C Ratio(X)	0.88	0.60	0.00	0.82	0.81	1.25	0.28	0.95	0.95	0.68	0.30	0.00
Avail Cap(c_a), veh/h	254	925	369	184	732	328	404	493	497	185	892	368
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.7	28.1	0.0	39.5	33.4	35.1	20.0	30.4	30.4	24.3	24.5	0.0
Incr Delay (d2), s/veh	27.3	1.1	0.0	22.7	6.7	137.3	0.4	27.5	27.3	9.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.3	10.1	0.0	7.6	12.1	36.9	3.4	21.2	21.4	4.7	4.6	0.0
LnGrp Delay(d),s/veh	63.9	29.2	0.0	62.1	40.1	172.4	20.4	57.9	57.8	33.8	24.7	0.0
LnGrp LOS	E	C		E	D	F	C	E	E	C	C	
Approach Vol, veh/h		769			1136			1047			393	
Approach Delay, s/veh		38.8			90.5			53.9			27.6	
Approach LOS		D			F			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.2	25.0	12.0	32.0	14.8	30.5	11.0	33.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	19.0	6.0	26.0	10.0	24.0	5.0	27.0				
Max Q Clear Time (g_c+I1), s	14.3	21.0	6.4	8.0	9.1	14.8	6.8	26.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	7.2	0.0	5.6	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			59.8									
HCM 2010 LOS			E									

HCM 2010 Signalized Intersection Summary

10: Toffie Ter & Loop Rd

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	754	279	123	264	135	50	28	27	98	75	90
Future Volume (veh/h)	177	754	279	123	264	135	50	28	27	98	75	90
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1810	1900	1863	1662	1900	1624	1800	1900	1810	1770	1900
Adj Flow Rate, veh/h	190	811	300	132	284	145	54	30	29	105	81	97
Adj No. of Lanes	1	3	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	5	5	2	17	17	17	9	9	5	3	3
Cap, veh/h	430	989	363	306	497	247	305	545	461	325	247	221
Arrive On Green	0.11	0.28	0.28	0.08	0.24	0.24	0.05	0.31	0.31	0.15	0.15	0.15
Sat Flow, veh/h	1675	3563	1309	1774	2045	1017	1547	1759	1488	1300	1681	1504
Grp Volume(v), veh/h	190	749	362	132	218	211	54	29	30	105	81	97
Grp Sat Flow(s),veh/h/ln	1675	1647	1579	1774	1579	1483	1547	1710	1537	1300	1681	1504
Q Serve(g_s), s	4.4	11.5	11.6	2.9	6.5	6.8	1.5	0.6	0.7	4.0	2.3	3.2
Cycle Q Clear(g_c), s	4.4	11.5	11.6	2.9	6.5	6.8	1.5	0.6	0.7	4.0	2.3	3.2
Prop In Lane	1.00		0.83	1.00		0.69	1.00		0.97	1.00		1.00
Lane Grp Cap(c), veh/h	430	914	438	306	384	360	305	529	476	325	247	221
V/C Ratio(X)	0.44	0.82	0.83	0.43	0.57	0.59	0.18	0.05	0.06	0.32	0.33	0.44
Avail Cap(c_a), veh/h	518	975	467	329	384	360	369	664	597	374	311	278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	18.3	18.3	14.6	18.0	18.1	16.6	13.1	13.1	21.4	20.6	21.0
Incr Delay (d2), s/veh	0.7	5.3	11.0	1.0	2.0	2.5	0.3	0.0	0.1	0.6	0.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	9.9	10.5	2.7	5.5	5.4	1.1	0.6	0.6	2.7	2.0	2.5
LnGrp Delay(d),s/veh	13.8	23.6	29.3	15.5	19.9	20.5	16.9	13.1	13.2	22.0	21.4	22.4
LnGrp LOS	B	C	C	B	B	C	B	B	B	C	C	C
Approach Vol, veh/h	1301				561		113				283	
Approach Delay, s/veh	23.8				19.1		15.0				21.9	
Approach LOS	C				B		B				C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	12.2	19.1	8.8	14.0	10.3	21.0	22.7					
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0					
Max Green Setting (Gmax), s	9.0	12.0	5.0	10.0	5.0	16.0	21.0					
Max Q Clear Time (g_c+I1), s	6.4	8.8	3.5	6.0	4.9	13.6	2.7					
Green Ext Time (p_c), s	0.1	2.4	0.0	0.6	0.0	1.4	1.5					
Intersection Summary												
HCM 2010 Ctrl Delay			21.9									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

11: SR 139/Riverdale Road & Sullivan Road

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	46	64	27	81	210	242	872	54	280	332	1
Future Volume (veh/h)	15	46	64	27	81	210	242	872	54	280	332	1
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1702	1900	1792	1695	1900	1827	1810	1792	1776	1792	1712
Adj Flow Rate, veh/h	17	52	72	30	91	236	272	980	0	315	373	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
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
Percent Heavy Veh, %	13	18	18	6	15	15	4	5	6	7	6	11
Cap, veh/h	137	164	227	322	106	275	618	1269	562	401	1330	568
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.12	0.37	0.00	0.14	0.39	0.00
Sat Flow, veh/h	947	648	897	1214	418	1085	1740	3438	1524	1691	3406	1455
Grp Volume(v), veh/h	17	0	124	30	0	327	272	980	0	315	373	0
Grp Sat Flow(s),veh/h/ln	947	0	1544	1214	0	1503	1740	1719	1524	1691	1703	1455
Q Serve(g_s), s	1.3	0.0	5.0	1.6	0.0	16.0	7.3	19.4	0.0	8.6	5.8	0.0
Cycle Q Clear(g_c), s	17.3	0.0	5.0	6.6	0.0	16.0	7.3	19.4	0.0	8.6	5.8	0.0
Prop In Lane	1.00		0.58	1.00		0.72	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	0	392	322	0	381	618	1269	562	401	1330	568
V/C Ratio(X)	0.12	0.00	0.32	0.09	0.00	0.86	0.44	0.77	0.00	0.79	0.28	0.00
Avail Cap(c_a), veh/h	142	0	400	329	0	390	675	1560	691	530	1766	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	0.0	23.4	26.0	0.0	27.5	12.0	21.5	0.0	15.6	16.1	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.5	0.1	0.0	16.8	0.5	2.0	0.0	5.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	3.9	1.0	0.0	13.2	6.3	14.5	0.0	8.1	4.9	0.0
LnGrp Delay(d),s/veh	36.1	0.0	23.8	26.2	0.0	44.3	12.5	23.4	0.0	21.2	16.2	0.0
LnGrp LOS	D		C	C		D	B	C		C	B	
Approach Vol, veh/h	141			357			1252			688		
Approach Delay, s/veh	25.3			42.8			21.0			18.5		
Approach LOS	C			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.5	36.1		25.6	17.1	34.5		25.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	40.0			20.0	17.0	35.0		20.0				
Max Q Clear Time (g_c+I1), s	9.3	7.8		19.3	10.6	21.4		18.0				
Green Ext Time (p_c), s	0.2	10.6		0.2	0.5	7.1		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay	23.8											
HCM 2010 LOS	C											

HCM Signalized Intersection Capacity Analysis

12: Lake Mirror Road & S Loop Road & I-285 On Ramp

01/19/2020



Movement	EBL	EBT	EBR	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	268	509	326	168	6	20	90	435
Future Volume (vph)	268	509	326	168	6	20	90	435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0				6.0
Lane Util. Factor	1.00	0.95	1.00	1.00				0.95
Flt	1.00	1.00	0.85	0.86				1.00
Flt Protected	1.00	1.00	1.00	1.00				0.99
Satd. Flow (prot)	1900	3167	1380	1567				3273
Flt Permitted	1.00	1.00	1.00	1.00				0.99
Satd. Flow (perm)	1900	3167	1380	1567				3273
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	285	541	347	179	7	22	96	463
RTOR Reduction (vph)	0	0	239	150	0	0	0	122
Lane Group Flow (vph)	285	541	108	36	0	0	0	459
Heavy Vehicles (%)	0%	14%	17%	5%	2%	2%	7%	10%
Turn Type	Split	NA	Prot	Perm		Perm	Perm	NA
Protected Phases	6	6	6					7
Permitted Phases				8		7	7	
Actuated Green, G (s)	16.1	16.1	16.1	4.3				13.2
Effective Green, g (s)	16.1	16.1	16.1	4.3				13.2
Actuated g/C Ratio	0.31	0.31	0.31	0.08				0.26
Clearance Time (s)	6.0	6.0	6.0	6.0				6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0				3.0
Lane Grp Cap (vph)	592	988	430	130				837
v/s Ratio Prot	0.15	c0.17	0.08					
v/s Ratio Perm				c0.02				0.14
v/c Ratio	0.48	0.55	0.25	0.27				0.55
Uniform Delay, d1	14.4	14.7	13.3	22.2				16.6
Progression Factor	1.00	1.00	1.00	1.00				1.00
Incremental Delay, d2	0.6	0.6	0.3	1.1				0.7
Delay (s)	15.0	15.4	13.6	23.3				17.4
Level of Service	B	B	B	C				B
Approach Delay (s)		14.7						17.4
Approach LOS		B						B
Intersection Summary								
HCM 2000 Control Delay			16.3		HCM 2000 Level of Service			B
HCM 2000 Volume to Capacity ratio			0.51					
Actuated Cycle Length (s)			51.6		Sum of lost time (s)			18.0
Intersection Capacity Utilization			55.8%		ICU Level of Service			B
Analysis Period (min)			15					
c Critical Lane Group								

HCM 2010 Signalized Intersection Summary

13: Clark Howell Hwy & Lake Mirror Road

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	103	205	15	14	15	110	534	87	0	0	0
Future Volume (veh/h)	23	103	205	15	14	15	110	534	87	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1659	1652	1900	1378	1462	1557	1705	1900			
Adj Flow Rate, veh/h	24	108	0	16	15	16	116	562	0			
Adj No. of Lanes	0	1	1	0	1	1	1	2	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	8	8	15	43	43	30	22	13	22			
Cap, veh/h	210	197	204	294	115	181	524	1144	0			
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.35	0.35	0.00			
Sat Flow, veh/h	222	1357	1404	456	790	1242	1483	3324	0			
Grp Volume(v), veh/h	132	0	0	31	0	16	116	562	0			
Grp Sat Flow(s),veh/h/ln	1579	0	1404	1246	0	1242	1483	1620	0			
Q Serve(g_s), s	1.1	0.0	0.0	0.0	0.0	0.3	1.3	3.2	0.0			
Cycle Q Clear(g_c), s	1.8	0.0	0.0	0.5	0.0	0.3	1.3	3.2	0.0			
Prop In Lane	0.18		1.00	0.52		1.00	1.00		0.00			
Lane Grp Cap(c), veh/h	407	0	204	409	0	181	524	1144	0			
V/C Ratio(X)	0.32	0.00	0.00	0.08	0.00	0.09	0.22	0.49	0.00			
Avail Cap(c_a), veh/h	1352	0	1056	1086	0	934	1239	2706	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	9.5	0.0	0.0	8.9	0.0	8.9	5.4	6.1	0.0			
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	0.0	0.2	0.2	0.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	1.5	0.0	0.0	0.3	0.0	0.2	1.0	2.6	0.0			
LnGrp Delay(d),s/veh	10.0	0.0	0.0	9.0	0.0	9.1	5.6	6.4	0.0			
LnGrp LOS	A			A		A	A	A				
Approach Vol, veh/h		132			47			678				
Approach Delay, s/veh		10.0			9.0			6.3				
Approach LOS		A			A			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				9.5		14.5		9.5				
Change Period (Y+Rc), s				6.0		6.0		6.0				
Max Green Setting (Gmax), s				18.0		20.0		18.0				
Max Q Clear Time (g_c+I1), s				3.8		5.2		2.5				
Green Ext Time (p_c), s				0.7		3.3		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			7.0									
HCM 2010 LOS			A									

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↗			↕↗	
Traffic Vol, veh/h	57	0	117	1	0	0	176	225	1	3	206	105
Future Vol, veh/h	57	0	117	1	0	0	176	225	1	3	206	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	-	175	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	29	0	13	0	0	0	7	11	0	0	10	8
Mvmt Flow	66	0	136	1	0	0	205	262	1	3	240	122
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	848	980	181	799	1041	132	362	0	0	263	0	0
Stage 1	307	307	-	673	673	-	-	-	-	-	-	-
Stage 2	541	673	-	126	368	-	-	-	-	-	-	-
Critical Hdwy	8.08	6.5	7.16	7.5	6.5	6.9	4.24	-	-	4.1	-	-
Critical Hdwy Stg 1	7.08	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.08	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.79	4	3.43	3.5	4	3.3	2.27	-	-	2.2	-	-
Pot Cap-1 Maneuver	214	252	797	280	232	899	1158	-	-	1313	-	-
Stage 1	608	665	-	416	457	-	-	-	-	-	-	-
Stage 2	430	457	-	870	625	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	184	207	797	200	190	899	1158	-	-	1313	-	-
Mov Cap-2 Maneuver	184	207	-	200	190	-	-	-	-	-	-	-
Stage 1	500	663	-	342	376	-	-	-	-	-	-	-
Stage 2	354	376	-	719	623	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	18.5			23.1			3.8			0.1		
HCM LOS	C			C								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1158	-	-	184	797	200	1313	-	-			
HCM Lane V/C Ratio	0.177	-	-	0.36	0.171	0.006	0.003	-	-			
HCM Control Delay (s)	8.8	-	-	35.2	10.4	23.1	7.7	0	-			
HCM Lane LOS	A	-	-	E	B	C	A	A	-			
HCM 95th %tile Q(veh)	0.6	-	-	1.5	0.6	0	0	-	-			

HCM 2010 Signalized Intersection Summary

15: SR 314/W Fayetteville Road & SR 139/Riverdale Road

01/19/2020

								
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations								
Traffic Volume (veh/h)	0	145	245	176	634	568	131	
Future Volume (veh/h)	0	145	245	176	634	568	131	
Number		6	16	5	2	3	18	
Initial Q (Qb), veh		0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln		1681	1845	1863	1776	1863	1881	
Adj Flow Rate, veh/h		163	275	198	712	638	0	
Adj No. of Lanes		2	1	1	2	2	1	
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	
Percent Heavy Veh, %		13	3	2	7	2	1	
Cap, veh/h		961	472	576	1760	864	401	
Arrive On Green		0.30	0.30	0.11	0.52	0.25	0.00	
Sat Flow, veh/h		3279	1568	1774	3463	3442	1599	
Grp Volume(v), veh/h		163	275	198	712	638	0	
Grp Sat Flow(s),veh/h/ln		1597	1568	1774	1687	1721	1599	
Q Serve(g_s), s		2.0	7.9	3.7	6.8	9.0	0.0	
Cycle Q Clear(g_c), s		2.0	7.9	3.7	6.8	9.0	0.0	
Prop In Lane			1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		961	472	576	1760	864	401	
V/C Ratio(X)		0.17	0.58	0.34	0.40	0.74	0.00	
Avail Cap(c_a), veh/h		1634	802	856	3003	2021	939	
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh		13.6	15.7	9.3	7.7	18.2	0.0	
Incr Delay (d2), s/veh		0.1	1.1	0.4	0.2	1.3	0.0	
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(95%),veh/ln		1.6	6.3	3.3	5.6	7.8	0.0	
LnGrp Delay(d),s/veh		13.7	16.8	9.7	7.8	19.4	0.0	
LnGrp LOS		B	B	A	A	B		
Approach Vol, veh/h		438			910	638		
Approach Delay, s/veh		15.6			8.2	19.4		
Approach LOS		B			A	B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		33.5			11.7	21.9		19.3
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		47.0			14.0	27.0		31.0
Max Q Clear Time (g_c+I1), s		8.8			5.7	9.9		11.0
Green Ext Time (p_c), s		7.5			0.3	6.0		2.3
Intersection Summary								
HCM 2010 Ctrl Delay			13.5					
HCM 2010 LOS			B					
Notes								
User approved ignoring U-Turning movement.								

HCM 2010 Signalized Intersection Summary

16: Global Gateway Connector & SR 139/Riverdale Road

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	207	43	103	194	191	13	45	76	91	21	9
Future Volume (veh/h)	35	207	43	103	194	191	13	45	76	91	21	9
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1884	1900	1667	1827	1845	1759	1693	1900	1845	1900	1900
Adj Flow Rate, veh/h	39	233	48	116	218	0	15	51	0	102	24	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	1
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
Percent Heavy Veh, %	6	1	1	14	4	3	8	6	6	3	0	0
Cap, veh/h	379	559	113	424	1448	783	270	130	0	379	571	485
Arrive On Green	0.19	0.19	0.19	0.09	0.42	0.00	0.08	0.08	0.00	0.08	0.30	0.00
Sat Flow, veh/h	1115	2968	601	1587	3471	1568	1305	1693	0	1757	1900	1615
Grp Volume(v), veh/h	39	139	142	116	218	0	15	51	0	102	24	0
Grp Sat Flow(s),veh/h/ln	1115	1790	1778	1587	1736	1568	1305	1693	0	1757	1900	1615
Q Serve(g_s), s	1.3	2.9	3.0	2.3	1.7	0.0	0.5	1.2	0.0	2.1	0.4	0.0
Cycle Q Clear(g_c), s	1.3	2.9	3.0	2.3	1.7	0.0	0.5	1.2	0.0	2.1	0.4	0.0
Prop In Lane	1.00		0.34	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	379	337	335	424	1448	783	270	130	0	379	571	485
V/C Ratio(X)	0.10	0.41	0.42	0.27	0.15	0.00	0.06	0.39	0.00	0.27	0.04	0.00
Avail Cap(c_a), veh/h	773	969	962	695	3267	1605	753	757	0	771	1699	1444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.5	15.2	15.2	10.8	7.7	0.0	18.3	18.7	0.0	14.3	10.5	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.9	0.3	0.0	0.0	0.1	1.9	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	2.7	2.8	1.8	1.4	0.0	0.3	1.1	0.0	1.9	0.4	0.0
LnGrp Delay(d),s/veh	14.6	16.0	16.1	11.2	7.8	0.0	18.4	20.6	0.0	14.7	10.6	0.0
LnGrp LOS	B	B	B	B	A		B	C		B	B	
Approach Vol, veh/h	320					334		66		126		
Approach Delay, s/veh	15.9					8.9		20.1		13.9		
Approach LOS	B					A		C		B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		5		6		7		8	
Phs Duration (G+Y+Rc), s	23.7		18.8		9.7		14.0		9.5		9.3	
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0		6.0		6.0	
Max Green Setting (Gmax), s	40.0		38.0		11.0		23.0		13.0		19.0	
Max Q Clear Time (g_c+l1), s	3.7		2.4		4.3		5.0		4.1		3.2	
Green Ext Time (p_c), s	3.1		0.4		0.1		2.7		0.1		0.3	
Intersection Summary												
HCM 2010 Ctrl Delay			13.2									
HCM 2010 LOS			B									

HCM 2010 AWSC

17: Scarborough Rd & Welcome All Road

01/19/2020

Intersection

Intersection Delay, s/veh 24.4

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	68	211	54	74	111	221	49	199	95	111	55	16
Future Vol, veh/h	68	211	54	74	111	221	49	199	95	111	55	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	6	2	7	8	8	4	3	9	8	18
Mvmt Flow	70	218	56	76	114	228	51	205	98	114	57	16
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	23.1	28.4	25	16.4
HCM LOS	C	D	C	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	20%	18%	61%
Vol Thru, %	58%	63%	27%	30%
Vol Right, %	28%	16%	54%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	343	333	406	182
LT Vol	49	68	74	111
Through Vol	199	211	111	55
RT Vol	95	54	221	16
Lane Flow Rate	354	343	419	188
Geometry Grp	1	1	1	1
Degree of Util (X)	0.697	0.667	0.768	0.41
Departure Headway (Hd)	7.091	6.999	6.604	7.864
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	509	515	544	456
Service Time	5.157	5.07	4.669	5.947
HCM Lane V/C Ratio	0.695	0.666	0.77	0.412
HCM Control Delay	25	23.1	28.4	16.4
HCM Lane LOS	C	C	D	C
HCM 95th-tile Q	5.4	4.9	6.9	2

HCM 2010 Signalized Intersection Summary 18: Washington Road & SR 6/Camp Creek Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	1039	50	59	450	24	90	233	110	36	175	254
Future Volume (veh/h)	256	1039	50	59	450	24	90	233	110	36	175	254
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1863	1810	1727	1810	1681	1845	1743	1792	1776	1652	1881
Adj Flow Rate, veh/h	267	1082	0	61	469	0	94	243	115	38	182	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	2	5	10	5	13	3	9	6	7	15	1
Cap, veh/h	316	1440	626	247	946	393	269	318	278	208	261	252
Arrive On Green	0.18	0.41	0.00	0.05	0.28	0.00	0.06	0.18	0.18	0.04	0.16	0.00
Sat Flow, veh/h	1757	3539	1538	1645	3438	1429	1757	1743	1524	1691	1652	1599
Grp Volume(v), veh/h	267	1082	0	61	469	0	94	243	115	38	182	0
Grp Sat Flow(s),veh/h/ln	1757	1770	1538	1645	1719	1429	1757	1743	1524	1691	1652	1599
Q Serve(g_s), s	10.8	19.2	0.0	1.9	8.4	0.0	3.3	9.8	4.9	1.4	7.7	0.0
Cycle Q Clear(g_c), s	10.8	19.2	0.0	1.9	8.4	0.0	3.3	9.8	4.9	1.4	7.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	316	1440	626	247	946	393	269	318	278	208	261	252
V/C Ratio(X)	0.84	0.75	0.00	0.25	0.50	0.00	0.35	0.76	0.41	0.18	0.70	0.00
Avail Cap(c_a), veh/h	525	1778	773	280	946	393	304	450	393	261	404	391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.2	18.7	0.0	18.2	22.4	0.0	24.2	28.6	26.6	24.9	29.3	0.0
Incr Delay (d2), s/veh	6.5	1.4	0.0	0.5	0.4	0.0	0.8	4.9	1.0	0.4	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.8	14.7	0.0	1.6	7.2	0.0	2.9	8.8	3.8	1.2	6.7	0.0
LnGrp Delay(d),s/veh	35.6	20.1	0.0	18.7	22.8	0.0	24.9	33.5	27.6	25.3	32.7	0.0
LnGrp LOS	D	C		B	C		C	C	C	C	C	
Approach Vol, veh/h	1349				530		452				220	
Approach Delay, s/veh	23.2				22.3		30.2				31.4	
Approach LOS	C				C		C				C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.3	26.3	10.5	17.6	9.6	36.0	8.7	19.4				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	22.0	20.0	6.0	18.0	5.0	37.0	5.0	19.0				
Max Q Clear Time (g_c+I1), s	12.8	10.4	5.3	9.7	3.9	21.2	3.4	11.8				
Green Ext Time (p_c), s	0.5	6.2	0.0	1.8	0.0	8.7	0.0	1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			25.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

1: Ben Hill Rd & Welcome All Rd

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	2	46	1	1	6	9	189	3	1	169	311
Future Volume (veh/h)	277	2	46	1	1	6	9	189	3	1	169	311
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1794	1712	1900	1900	1681	1407	1759	1520	1900	1776	1776
Adj Flow Rate, veh/h	302	0	0	1	1	0	10	205	0	1	184	0
Adj No. of Lanes	2	0	1	1	1	1	1	2	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	11	0	0	13	35	8	25	0	7	7
Cap, veh/h	544	0	232	6	6	5	387	862	333	482	458	389
Arrive On Green	0.16	0.00	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.26	0.26	0.00
Sat Flow, veh/h	3414	0	1455	1810	1900	1429	903	3343	1292	1196	1776	1509
Grp Volume(v), veh/h	302	0	0	1	1	0	10	205	0	1	184	0
Grp Sat Flow(s),veh/h/ln	1707	0	1455	1810	1900	1429	903	1671	1292	1196	1776	1509
Q Serve(g_s), s	2.5	0.0	0.0	0.0	0.0	0.0	0.3	1.5	0.0	0.0	2.7	0.0
Cycle Q Clear(g_c), s	2.5	0.0	0.0	0.0	0.0	0.0	3.0	1.5	0.0	1.5	2.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	544	0	232	6	6	5	387	862	333	482	458	389
V/C Ratio(X)	0.55	0.00	0.00	0.17	0.16	0.00	0.03	0.24	0.00	0.00	0.40	0.00
Avail Cap(c_a), veh/h	1760	0	750	408	429	322	707	2046	791	906	1087	924
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	0.0	0.0	15.4	15.4	0.0	10.8	9.1	0.0	9.7	9.5	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	13.3	12.0	0.0	0.0	0.1	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.0	0.0	0.1	0.1	0.0	0.1	1.3	0.0	0.0	2.4	0.0
LnGrp Delay(d),s/veh	12.9	0.0	0.0	28.8	27.4	0.0	10.8	9.2	0.0	9.7	10.1	0.0
LnGrp LOS	B			C	C		B	A		A	B	
Approach Vol, veh/h		302			2			215			185	
Approach Delay, s/veh		12.9			28.1			9.3			10.1	
Approach LOS		B			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.0		10.9		14.0		6.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		19.0		16.0		19.0		7.0				
Max Q Clear Time (g_c+I1), s		4.7		4.5		5.0		2.0				
Green Ext Time (p_c), s		2.0		0.8		2.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			11.1									
HCM 2010 LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 2010 Signalized Intersection Summary

2: Loop Rd & Maynard Jackson Blvd/Charles W Grant Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	279	884	527	205	486	293	154	94	110	574	159	180
Future Volume (veh/h)	279	884	527	205	486	293	154	94	110	574	159	180
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1610	1845	1776	1696	1792	1792	1681	1712	1545	1863	1792	1583
Adj Flow Rate, veh/h	300	951	0	220	523	0	166	101	0	617	171	194
Adj No. of Lanes	1	3	1	1	2	1	2	2	1	2	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	18	3	7	12	6	6	13	11	23	2	6	20
Cap, veh/h	436	1445	433	363	820	367	247	209	84	733	355	267
Arrive On Green	0.17	0.29	0.00	0.13	0.24	0.00	0.08	0.06	0.00	0.21	0.20	0.20
Sat Flow, veh/h	1533	5036	1509	1616	3406	1524	3107	3252	1313	3442	1792	1346
Grp Volume(v), veh/h	300	951	0	220	523	0	166	101	0	617	171	194
Grp Sat Flow(s),veh/h/ln	1533	1679	1509	1616	1703	1524	1553	1626	1313	1721	1792	1346
Q Serve(g_s), s	11.1	12.9	0.0	7.7	10.7	0.0	4.0	2.3	0.0	13.4	6.6	10.5
Cycle Q Clear(g_c), s	11.1	12.9	0.0	7.7	10.7	0.0	4.0	2.3	0.0	13.4	6.6	10.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	436	1445	433	363	820	367	247	209	84	733	355	267
V/C Ratio(X)	0.69	0.66	0.00	0.61	0.64	0.00	0.67	0.48	0.00	0.84	0.48	0.73
Avail Cap(c_a), veh/h	525	1683	504	448	963	431	359	209	84	929	392	294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	24.4	0.0	18.9	26.5	0.0	34.8	35.2	0.0	29.4	27.7	29.2
Incr Delay (d2), s/veh	2.9	0.8	0.0	1.6	1.1	0.0	3.2	1.7	0.0	5.7	1.0	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	10.1	0.0	6.5	8.9	0.0	3.3	2.0	0.0	11.2	6.0	8.0
LnGrp Delay(d),s/veh	20.7	25.1	0.0	20.6	27.6	0.0	38.0	36.9	0.0	35.1	28.7	37.2
LnGrp LOS	C	C		C	C		D	D		D	C	D
Approach Vol, veh/h	1251			743			267			982		
Approach Delay, s/veh	24.1			25.5			37.6			34.4		
Approach LOS	C			C			D			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.5	24.7	12.2	21.4	15.9	28.3	22.6	11.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	8.0	22.0	9.0	17.0	14.0	26.0	21.0	5.0				
Max Q Clear Time (g_c+I1), s	13.1	12.7	6.0	12.5	9.7	14.9	15.4	4.3				
Green Ext Time (p_c), s	0.4	6.0	0.1	0.9	0.2	6.9	1.2	0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			28.6									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: Washington Rd & N Commerce Dr/Retail Dwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	8	231	5	1	9	138	392	3	14	542	243
Future Volume (veh/h)	390	8	231	5	1	9	138	392	3	14	542	243
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1864	1900	1900	1772	1900	1776	1826	1900	1759	1827	1610
Adj Flow Rate, veh/h	394	8	233	5	1	9	139	396	3	14	547	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	0	0	0	0	0	7	4	4	8	4	18
Cap, veh/h	627	19	563	442	56	503	370	1359	10	435	1337	527
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.39	0.39	0.39	0.39	0.39	0.00
Sat Flow, veh/h	1321	53	1539	1157	153	1377	816	3529	27	927	3471	1369
Grp Volume(v), veh/h	394	0	241	5	0	10	139	195	204	14	547	0
Grp Sat Flow(s),veh/h/ln	1321	0	1592	1157	0	1529	816	1735	1821	927	1736	1369
Q Serve(g_s), s	13.1	0.0	5.4	0.2	0.0	0.2	7.2	3.7	3.7	0.5	5.5	0.0
Cycle Q Clear(g_c), s	13.3	0.0	5.4	5.6	0.0	0.2	12.7	3.7	3.7	4.3	5.5	0.0
Prop In Lane	1.00		0.97	1.00		0.90	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	627	0	582	442	0	559	370	668	702	435	1337	527
V/C Ratio(X)	0.63	0.00	0.41	0.01	0.00	0.02	0.38	0.29	0.29	0.03	0.41	0.00
Avail Cap(c_a), veh/h	858	0	860	644	0	826	429	793	832	501	1586	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.0	0.0	11.4	13.5	0.0	9.8	15.5	10.2	10.3	11.7	10.8	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.5	0.0	0.0	0.0	0.6	0.2	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	0.0	4.4	0.1	0.0	0.2	3.0	3.3	3.5	0.2	4.9	0.0
LnGrp Delay(d),s/veh	15.0	0.0	11.9	13.5	0.0	9.8	16.1	10.5	10.5	11.8	11.0	0.0
LnGrp LOS	B		B	B		A	B	B	B	B	B	
Approach Vol, veh/h	635				15			538			561	
Approach Delay, s/veh	13.8				11.0			11.9			11.0	
Approach LOS	B				B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	24.5		23.6		24.5		23.6					
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0					
Max Green Setting (Gmax), s	22.0		26.0		22.0		26.0					
Max Q Clear Time (g_c+I1), s	14.7		15.3		7.5		7.6					
Green Ext Time (p_c), s	3.8		2.3		6.0		2.9					
Intersection Summary												
HCM 2010 Ctrl Delay	12.3											
HCM 2010 LOS	B											

HCM 2010 Signalized Intersection Summary

4: SR 139/Riverdale Rd & Phoenix Blvd/ Forest Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (veh/h)	277	209	191	134	140	247	98	898	83	375	1825	320
Future Volume (veh/h)	277	209	191	134	140	247	98	898	83	375	1825	320
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1863	1792	1863	1863	1810	1743	1881	1881
Adj Flow Rate, veh/h	292	220	0	141	147	0	103	945	0	395	1921	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	3	0	3	2	6	2	2	5	9	1	1
Cap, veh/h	350	365	168	197	220	95	149	1721	748	463	2096	938
Arrive On Green	0.10	0.10	0.00	0.06	0.06	0.00	0.04	0.49	0.00	0.14	0.59	0.00
Sat Flow, veh/h	3510	3505	1615	3408	3539	1524	3442	3539	1538	3221	3574	1599
Grp Volume(v), veh/h	292	220	0	141	147	0	103	945	0	395	1921	0
Grp Sat Flow(s),veh/h/ln	1755	1752	1615	1704	1770	1524	1721	1770	1538	1610	1787	1599
Q Serve(g_s), s	9.4	6.9	0.0	4.7	4.7	0.0	3.4	21.6	0.0	13.8	55.4	0.0
Cycle Q Clear(g_c), s	9.4	6.9	0.0	4.7	4.7	0.0	3.4	21.6	0.0	13.8	55.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	365	168	197	220	95	149	1721	748	463	2096	938
V/C Ratio(X)	0.83	0.60	0.00	0.72	0.67	0.00	0.69	0.55	0.00	0.85	0.92	0.00
Avail Cap(c_a), veh/h	366	396	182	237	277	119	149	1721	748	615	2172	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.9	49.3	0.0	53.3	52.8	0.0	54.3	20.7	0.0	48.1	21.3	0.0
Incr Delay (d2), s/veh	14.8	2.3	0.0	7.9	4.2	0.0	12.6	0.4	0.0	8.8	6.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	6.3	0.0	4.4	4.3	0.0	3.4	15.9	0.0	11.0	37.7	0.0
LnGrp Delay(d),s/veh	65.8	51.6	0.0	61.3	57.1	0.0	66.9	21.1	0.0	56.9	27.9	0.0
LnGrp LOS	E	D		E	E		E	C		E	C	
Approach Vol, veh/h		512			288			1048			2316	
Approach Delay, s/veh		59.7			59.1			25.6			32.8	
Approach LOS		E			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	73.5	12.7	18.0	22.5	62.0	17.5	13.2				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	70.0	8.0	13.0	22.0	53.0	12.0	9.0				
Max Q Clear Time (g_c+I1), s	5.4	57.4	6.7	8.9	15.8	23.6	11.4	6.7				
Green Ext Time (p_c), s	0.0	10.2	0.0	0.8	0.8	24.4	0.1	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			36.1									
HCM 2010 LOS			D									

HCM 2010 TWSC
5: Majestic PI & SR 14

01/19/2020

Intersection													
Int Delay, s/veh	132.7												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Vol, veh/h	5	1220	5	39	27	2035	102	3	0	32	57	0	5
Future Vol, veh/h	5	1220	5	39	27	2035	102	3	0	32	57	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	215	-	250	-	320	-	215	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	29	38	38	3	13	10	0	49	3	0	8
Mvmt Flow	5	1298	5	41	29	2165	109	3	0	34	61	0	5
Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	2165	0	0	1298	1298	0	0	2531	3613	649	2964	3613	1083
Stage 1	-	-	-	-	-	-	-	1308	1308	-	2305	2305	-
Stage 2	-	-	-	-	-	-	-	1223	2305	-	659	1308	-
Critical Hdwy	4.1	-	-	7.16	4.86	-	-	7.7	6.5	7.88	7.56	6.5	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.7	5.5	-	6.56	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.7	5.5	-	6.56	5.5	-
Follow-up Hdwy	2.2	-	-	2.88	2.58	-	-	3.6	4	3.79	3.53	4	3.38
Pot Cap-1 Maneuver	251	-	-	152	372	-	-	12	5	317	~ 6	5	203
Stage 1	-	-	-	-	-	-	-	157	231	-	~ 39	74	-
Stage 2	-	-	-	-	-	-	-	178	74	-	417	231	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	251	-	-	185	185	-	-	8	3	317	~ 4	3	203
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	8	3	-	~ 4	3	-
Stage 1	-	-	-	-	-	-	-	154	226	-	~ 38	46	-
Stage 2	-	-	-	-	-	-	-	108	46	-	365	226	-
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0.1			1.1			70.6			\$ 7473.4			
HCM LOS							F			F			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2			
Capacity (veh/h)	8	317	251	-	-	185	-	-	4	203			
HCM Lane V/C Ratio	0.399	0.107	0.021	-	-	0.38	-	-	15.16	0.026			
HCM Control Delay (s)	\$ 634.5	17.7	19.7	-	-	36	-	-	\$ 8126.9	23.2			
HCM Lane LOS	F	C	C	-	-	E	-	-	F	C			
HCM 95th %tile Q(veh)	0.8	0.4	0.1	-	-	1.6	-	-	9.5	0.1			
Notes													
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon													

HCM 2010 Signalized Intersection Summary

6: SR 279/Old National Hwy & Sullivan Rd

01/19/2020

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (veh/h)	29	59	238	220	38	17	190	331	172	17	441	20		
Future Volume (veh/h)	29	59	238	220	38	17	190	331	172	17	441	20		
Number	7	4	14	3	8	18	1	6	16	5	2	12		
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1900	1870	1900	1727	1834	1900	1845	1845	1667	1776	1811	1900		
Adj Flow Rate, veh/h	31	62	251	232	40	18	200	348	181	18	464	21		
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	0	4	4	10	3	3	3	3	14	7	5	5		
Cap, veh/h	601	130	526	337	480	216	319	852	655	362	795	36		
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.46	0.46	0.46	0.46	0.46	0.46		
Sat Flow, veh/h	1366	325	1314	985	1199	540	898	1845	1417	830	1719	78		
Grp Volume(v), veh/h	31	0	313	232	0	58	200	348	181	18	0	485		
Grp Sat Flow(s),veh/h/ln	1366	0	1638	985	0	1738	898	1845	1417	830	0	1797		
Q Serve(g_s), s	1.3	0.0	12.4	19.9	0.0	1.8	18.4	10.9	6.9	1.3	0.0	17.3		
Cycle Q Clear(g_c), s	3.1	0.0	12.4	32.3	0.0	1.8	35.8	10.9	6.9	12.2	0.0	17.3		
Prop In Lane	1.00		0.80	1.00		0.31	1.00		1.00	1.00		0.04		
Lane Grp Cap(c), veh/h	601	0	656	337	0	696	319	852	655	362	0	831		
V/C Ratio(X)	0.05	0.00	0.48	0.69	0.00	0.08	0.63	0.41	0.28	0.05	0.00	0.58		
Avail Cap(c_a), veh/h	618	0	676	349	0	717	336	888	682	378	0	865		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh	17.2	0.0	19.4	31.4	0.0	16.2	30.5	15.6	14.5	19.6	0.0	17.3		
Incr Delay (d2), s/veh	0.0	0.0	0.5	5.4	0.0	0.1	3.4	0.3	0.2	0.1	0.0	0.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(95%),veh/ln	0.9	0.0	9.6	9.9	0.0	1.6	8.5	9.5	4.9	0.5	0.0	13.7		
LnGrp Delay(d),s/veh	17.2	0.0	19.9	36.7	0.0	16.3	33.9	15.9	14.7	19.7	0.0	18.2		
LnGrp LOS	B		B	D		B	C	B	B	B		B		
Approach Vol, veh/h	344				290		729				503			
Approach Delay, s/veh	19.7				32.6		20.5				18.3			
Approach LOS	B				C		C				B			
Timer	1	2	3	4	5	6	7	8						
Assigned Phs	2		4		6		8							
Phs Duration (G+Y+Rc), s	46.3		40.9		46.3		40.9							
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0							
Max Green Setting (Gmax), s	42.0		36.0		42.0		36.0							
Max Q Clear Time (g_c+I1), s	19.3		14.4		37.8		34.3							
Green Ext Time (p_c), s	7.6		3.6		2.6		0.7							
Intersection Summary														
HCM 2010 Ctrl Delay			21.6											
HCM 2010 LOS			C											

HCM 2010 Signalized Intersection Summary

7: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	336	1237	39	60	1908	185	121	34	24	165	44	388
Future Volume (veh/h)	336	1237	39	60	1908	185	121	34	24	165	44	388
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1712	1638	1900	1743	1881	1900	1744	1900	1845	1712	1881
Adj Flow Rate, veh/h	343	1262	0	61	1947	0	123	35	0	168	45	0
Adj No. of Lanes	2	2	1	1	3	1	0	1	0	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	11	16	0	9	1	1	1	1	3	11	1
Cap, veh/h	399	1811	775	79	2306	775	195	40	0	221	427	399
Arrive On Green	0.12	0.56	0.00	0.03	0.32	0.00	0.13	0.13	0.00	0.06	0.25	0.00
Sat Flow, veh/h	3442	3252	1392	1810	4759	1599	1051	299	0	3408	1712	1599
Grp Volume(v), veh/h	343	1262	0	61	1947	0	158	0	0	168	45	0
Grp Sat Flow(s),veh/h/ln	1721	1626	1392	1810	1586	1599	1350	0	0	1704	1712	1599
Q Serve(g_s), s	11.7	33.7	0.0	4.0	45.7	0.0	13.8	0.0	0.0	5.8	2.4	0.0
Cycle Q Clear(g_c), s	11.7	33.7	0.0	4.0	45.7	0.0	13.8	0.0	0.0	5.8	2.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.78		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	1811	775	79	2306	775	235	0	0	221	427	399
V/C Ratio(X)	0.86	0.70	0.00	0.77	0.84	0.00	0.67	0.00	0.00	0.76	0.11	0.00
Avail Cap(c_a), veh/h	430	1811	775	136	2306	775	278	0	0	227	485	453
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.26	0.26	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	52.1	19.3	0.0	57.6	36.3	0.0	50.9	0.0	0.0	55.2	34.7	0.0
Incr Delay (d2), s/veh	15.2	2.2	0.0	4.2	1.1	0.0	4.9	0.0	0.0	13.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.6	22.1	0.0	3.3	24.1	0.0	9.3	0.0	0.0	5.7	2.1	0.0
LnGrp Delay(d),s/veh	67.3	21.5	0.0	61.8	37.4	0.0	55.8	0.0	0.0	68.6	34.8	0.0
LnGrp LOS	E	C		E	D		E			E	C	
Approach Vol, veh/h	1605			2008			158			213		
Approach Delay, s/veh	31.3			38.1			55.8			61.5		
Approach LOS	C			D			E			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	72.8		35.9	19.9	64.2	13.8	22.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	59.0	59.0		34.0	15.0	53.0	8.0	20.0				
Max Q Clear Time (g_c+I1), s	6.0	35.7		4.4	13.7	47.7	7.8	15.8				
Green Ext Time (p_c), s	0.0	20.9		1.2	0.2	5.1	0.0	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				37.3								
HCM 2010 LOS				D								

HCM 2010 Signalized Intersection Summary

8: N Commerce Dr & SR 6/Camp Creek Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 				 	 		
Traffic Volume (veh/h)	222	1092	86	339	1799	295	201	164	181	420	171	261
Future Volume (veh/h)	222	1092	86	339	1799	295	201	164	181	420	171	261
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1690	1900	1810	1759	1900	1776	1827	1759	1881	1827	1881
Adj Flow Rate, veh/h	227	1114	0	346	1836	0	205	167	0	429	174	0
Adj No. of Lanes	2	3	0	2	3	0	1	1	1	3	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	13	13	5	9	9	7	4	8	1	4	1
Cap, veh/h	261	1998	0	409	2307	0	230	264	216	505	198	173
Arrive On Green	0.15	0.87	0.00	0.12	0.48	0.00	0.14	0.14	0.00	0.10	0.11	0.00
Sat Flow, veh/h	3476	4766	0	3343	4960	0	1691	1827	1495	5052	1827	1599
Grp Volume(v), veh/h	227	1114	0	346	1836	0	205	167	0	429	174	0
Grp Sat Flow(s),veh/h/ln	1738	1538	0	1672	1601	0	1691	1827	1495	1684	1827	1599
Q Serve(g_s), s	7.7	7.5	0.0	12.2	38.6	0.0	14.3	10.3	0.0	10.0	11.3	0.0
Cycle Q Clear(g_c), s	7.7	7.5	0.0	12.2	38.6	0.0	14.3	10.3	0.0	10.0	11.3	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	1998	0	409	2307	0	230	264	216	505	198	173
V/C Ratio(X)	0.87	0.56	0.00	0.85	0.80	0.00	0.89	0.63	0.00	0.85	0.88	0.00
Avail Cap(c_a), veh/h	261	1998	0	529	2307	0	240	274	224	505	198	173
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.4	5.1	0.0	51.5	26.2	0.0	50.9	48.3	0.0	53.1	52.7	0.0
Incr Delay (d2), s/veh	17.2	0.7	0.0	9.6	2.9	0.0	30.4	4.4	0.0	12.9	33.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.9	5.2	0.0	10.2	24.5	0.0	13.4	9.4	0.0	9.0	12.0	0.0
LnGrp Delay(d),s/veh	67.6	5.7	0.0	61.2	29.2	0.0	81.3	52.8	0.0	66.0	86.0	0.0
LnGrp LOS	E	A		E	C		F	D		E	F	
Approach Vol, veh/h	1341		2182				372			603		
Approach Delay, s/veh	16.2		34.2				68.5			71.8		
Approach LOS	B		C				E			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.7	58.0	22.3	19.0	15.0	63.7	18.0	23.3				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	47.0	47.0	17.0	13.0	9.0	57.0	12.0	18.0				
Max Q Clear Time (g_c+I1), s	9.5	9.5	16.3	13.3	9.7	40.6	12.0	12.3				
Green Ext Time (p_c), s	0.5	29.6	0.0	0.0	0.0	14.6	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			36.7									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

9: US 41/Old Dixie & SR 331/Forest Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	643	137	182	499	152	95	366	175	291	735	154
Future Volume (veh/h)	154	643	137	182	499	152	95	366	175	291	735	154
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1652	1827	1776	1759	1810	1827	1727	1716	1900	1792	1712	1545
Adj Flow Rate, veh/h	162	677	0	192	525	160	100	385	184	306	774	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	15	4	7	8	5	4	10	12	12	6	11	23
Cap, veh/h	192	863	375	224	895	404	217	394	186	357	930	375
Arrive On Green	0.12	0.25	0.00	0.13	0.26	0.26	0.06	0.18	0.18	0.16	0.29	0.00
Sat Flow, veh/h	1573	3471	1509	1675	3438	1553	1645	2153	1015	1707	3252	1313
Grp Volume(v), veh/h	162	677	0	192	525	160	100	290	279	306	774	0
Grp Sat Flow(s),veh/h/ln	1573	1736	1509	1675	1719	1553	1645	1630	1537	1707	1626	1313
Q Serve(g_s), s	8.8	15.9	0.0	9.8	11.7	7.4	4.3	15.5	15.8	12.1	19.5	0.0
Cycle Q Clear(g_c), s	8.8	15.9	0.0	9.8	11.7	7.4	4.3	15.5	15.8	12.1	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	192	863	375	224	895	404	217	298	281	357	930	375
V/C Ratio(X)	0.84	0.78	0.00	0.86	0.59	0.40	0.46	0.97	0.99	0.86	0.83	0.00
Avail Cap(c_a), veh/h	234	953	414	230	904	408	217	298	281	357	930	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.6	30.7	0.0	37.0	28.2	26.7	27.6	35.5	35.6	23.3	29.3	0.0
Incr Delay (d2), s/veh	20.2	4.0	0.0	25.4	1.0	0.6	1.5	44.6	51.0	18.2	6.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	12.8	0.0	10.2	9.6	5.9	3.6	16.0	16.0	11.9	14.6	0.0
LnGrp Delay(d),s/veh	57.8	34.7	0.0	62.5	29.2	27.3	29.1	80.1	86.7	41.4	35.8	0.0
LnGrp LOS	E	C		E	C	C	C	F	F	D	D	
Approach Vol, veh/h	839			877			669			1080		
Approach Delay, s/veh	39.1			36.1			75.2			37.4		
Approach LOS	D			D			E			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.7	28.8	11.0	31.0	17.7	27.7	20.0	22.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	30.0	23.0	5.0	25.0	12.0	24.0	14.0	16.0				
Max Q Clear Time (g_c+I1), s	13.7	13.7	6.3	21.5	11.8	17.9	14.1	17.8				
Green Ext Time (p_c), s	0.1	5.3	0.0	2.4	0.0	3.8	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	44.8											
HCM 2010 LOS	D											

HCM 2010 Signalized Intersection Summary

10: Toffie Ter & Loop Rd

01/19/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳	↱ ↲ ↳		↰ ↱ ↲ ↳	↱ ↲ ↳		↰ ↱ ↲ ↳	↱ ↲ ↳		↰ ↱ ↲ ↳	↱ ↲ ↳	
Traffic Volume (veh/h)	146	319	51	55	818	173	306	56	75	84	27	141
Future Volume (veh/h)	146	319	51	55	818	173	306	56	75	84	27	141
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1689	1900	1881	1804	1900	1845	1858	1900	1845	1789	1900
Adj Flow Rate, veh/h	164	358	57	62	919	194	344	63	84	94	30	158
Adj No. of Lanes	1	3	0	1	2	0	1	2	0	1	2	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
Percent Heavy Veh, %	12	11	11	1	5	5	3	4	4	3	2	2
Cap, veh/h	246	1645	255	503	1041	220	382	603	540	208	174	156
Arrive On Green	0.08	0.41	0.41	0.04	0.37	0.37	0.17	0.34	0.34	0.10	0.10	0.10
Sat Flow, veh/h	1616	4027	625	1792	2818	594	1757	1765	1579	1224	1700	1521
Grp Volume(v), veh/h	164	271	144	62	559	554	344	63	84	94	30	158
Grp Sat Flow(s),veh/h/ln	1616	1537	1578	1792	1713	1699	1757	1765	1579	1224	1700	1521
Q Serve(g_s), s	5.4	5.0	5.2	1.8	26.8	26.8	15.0	2.1	3.2	6.6	1.4	9.0
Cycle Q Clear(g_c), s	5.4	5.0	5.2	1.8	26.8	26.8	15.0	2.1	3.2	6.6	1.4	9.0
Prop In Lane	1.00		0.40	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	1255	645	503	633	628	382	603	540	208	174	156
V/C Ratio(X)	0.67	0.22	0.22	0.12	0.88	0.88	0.90	0.10	0.16	0.45	0.17	1.01
Avail Cap(c_a), veh/h	259	1296	666	525	664	658	382	603	540	208	174	156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	16.8	16.9	15.6	25.9	25.9	27.7	19.7	20.1	38.3	36.0	39.4
Incr Delay (d2), s/veh	6.0	0.1	0.2	0.1	12.9	13.1	23.4	0.1	0.1	1.5	0.5	75.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
%ile BackOfQ(95%),veh/ln	5.0	3.8	4.2	1.6	21.1	21.1	14.6	1.9	2.6	4.2	1.2	12.6
LnGrp Delay(d),s/veh	26.1	16.9	17.1	15.7	38.7	39.0	51.1	19.8	20.2	39.8	36.4	114.9
LnGrp LOS	C	B	B	B	D	D	D	B	C	D	D	F
Approach Vol, veh/h	579			1175			491			282		
Approach Delay, s/veh	19.5			37.6			41.8			81.5		
Approach LOS	B			D			D			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	38.4	21.0	15.0	9.9	41.8		36.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	34.0	15.0	9.0	5.0	37.0		30.0				
Max Q Clear Time (g_c+I1), s	7.4	28.8	17.0	11.0	3.8	7.2		5.2				
Green Ext Time (p_c), s	0.0	3.6	0.0	0.0	0.0	11.3		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay	39.2											
HCM 2010 LOS	D											

HCM 2010 Signalized Intersection Summary

11: SR 139/Riverdale Road & Sullivan Road

01/19/2020

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Traffic Volume (veh/h)	14	81	174	52	45	392	121	609	48	275	806	7						
Future Volume (veh/h)	14	81	174	52	45	392	121	609	48	275	806	7						
Number	7	4	14	3	8	18	1	6	16	5	2	12						
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0						
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00						
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Adj Sat Flow, veh/h/ln	1727	1711	1900	1792	1752	1900	1827	1863	1863	1743	1863	1900						
Adj Flow Rate, veh/h	15	84	181	54	47	408	126	634	0	286	840	0						
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1						
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96						
Percent Heavy Veh, %	10	22	22	6	21	21	4	2	2	9	2	0						
Cap, veh/h	142	164	354	308	53	461	317	986	441	428	1250	570						
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.07	0.28	0.00	0.15	0.35	0.00						
Sat Flow, veh/h	865	484	1043	1068	156	1356	1740	3539	1583	1660	3539	1615						
Grp Volume(v), veh/h	15	0	265	54	0	455	126	634	0	286	840	0						
Grp Sat Flow(s),veh/h/ln	865	0	1527	1068	0	1513	1740	1770	1583	1660	1770	1615						
Q Serve(g_s), s	1.3	0.0	10.6	3.3	0.0	21.8	3.9	12.1	0.0	8.8	15.4	0.0						
Cycle Q Clear(g_c), s	23.1	0.0	10.6	13.9	0.0	21.8	3.9	12.1	0.0	8.8	15.4	0.0						
Prop In Lane	1.00		0.68	1.00		0.90	1.00		1.00	1.00		1.00						
Lane Grp Cap(c), veh/h	142	0	518	308	0	514	317	986	441	428	1250	570						
V/C Ratio(X)	0.11	0.00	0.51	0.18	0.00	0.89	0.40	0.64	0.00	0.67	0.67	0.00						
Avail Cap(c_a), veh/h	153	0	538	322	0	533	395	1246	558	573	1662	758						
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00						
Uniform Delay (d), s/veh	34.8	0.0	20.2	25.8	0.0	23.9	18.2	24.3	0.0	16.1	21.0	0.0						
Incr Delay (d2), s/veh	0.3	0.0	0.8	0.3	0.0	16.0	0.8	0.8	0.0	1.8	0.7	0.0						
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0						
%ile BackOfQ(95%),veh/ln	0.6	0.0	8.1	1.8	0.0	16.9	3.5	10.0	0.0	7.5	12.1	0.0						
LnGrp Delay(d),s/veh	35.1	0.0	21.0	26.1	0.0	39.9	19.0	25.0	0.0	18.0	21.7	0.0						
LnGrp LOS	D		C	C		D	B	C		B	C							
Approach Vol, veh/h	280		509				760				1126							
Approach Delay, s/veh	21.8		38.4				24.0				20.7							
Approach LOS	C		D				C				C							
Timer	1	2	3	4	5	6	7	8										
Assigned Phs	1	2		4	5	6		8										
Phs Duration (G+Y+Rc), s	11.6	33.1		32.0	17.3	27.4		32.0										
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0										
Max Green Setting (Gmax), s	9.0	36.0		27.0	18.0	27.0		27.0										
Max Q Clear Time (g_c+I1), s	5.9	17.4		25.1	10.8	14.1		23.8										
Green Ext Time (p_c), s	0.1	9.1		1.0	0.5	7.3		1.5										
Intersection Summary																		
HCM 2010 Ctrl Delay			25.2															
HCM 2010 LOS			C															

HCM Signalized Intersection Capacity Analysis

12: Lake Mirror Road & S Loop Road & I-285 On Ramp

01/19/2020



Movement	EBL	EBT	EBR	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	268	509	326	168	6	20	90	435
Future Volume (vph)	268	509	326	168	6	20	90	435
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0				6.0
Lane Util. Factor	1.00	0.95	1.00	1.00				0.95
Flt	1.00	1.00	0.85	0.86				1.00
Flt Protected	1.00	1.00	1.00	1.00				0.99
Satd. Flow (prot)	1900	3167	1380	1567				3273
Flt Permitted	1.00	1.00	1.00	1.00				0.99
Satd. Flow (perm)	1900	3167	1380	1567				3273
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	285	541	347	179	7	22	96	463
RTOR Reduction (vph)	0	0	239	150	0	0	0	122
Lane Group Flow (vph)	285	541	108	36	0	0	0	459
Heavy Vehicles (%)	0%	14%	17%	5%	2%	2%	7%	10%
Turn Type	Split	NA	Prot	Perm		Perm	Perm	NA
Protected Phases	6	6	6					7
Permitted Phases				8		7	7	
Actuated Green, G (s)	16.1	16.1	16.1	4.3				13.2
Effective Green, g (s)	16.1	16.1	16.1	4.3				13.2
Actuated g/C Ratio	0.31	0.31	0.31	0.08				0.26
Clearance Time (s)	6.0	6.0	6.0	6.0				6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0				3.0
Lane Grp Cap (vph)	592	988	430	130				837
v/s Ratio Prot	0.15	c0.17	0.08					
v/s Ratio Perm				c0.02				0.14
v/c Ratio	0.48	0.55	0.25	0.27				0.55
Uniform Delay, d1	14.4	14.7	13.3	22.2				16.6
Progression Factor	1.00	1.00	1.00	1.00				1.00
Incremental Delay, d2	0.6	0.6	0.3	1.1				0.7
Delay (s)	15.0	15.4	13.6	23.3				17.4
Level of Service	B	B	B	C				B
Approach Delay (s)		14.7						17.4
Approach LOS		B						B
Intersection Summary								
HCM 2000 Control Delay			16.3		HCM 2000 Level of Service			B
HCM 2000 Volume to Capacity ratio			0.51					
Actuated Cycle Length (s)			51.6		Sum of lost time (s)			18.0
Intersection Capacity Utilization			55.8%		ICU Level of Service			B
Analysis Period (min)			15					
c Critical Lane Group								

HCM 2010 Signalized Intersection Summary

13: Clark Howell Hwy & Lake Mirror Road

01/19/2020

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	47	24	715	68	56	80	110	414	11	0	0	0				
Future Volume (veh/h)	47	24	715	68	56	80	110	414	11	0	0	0				
Number	7	4	14	3	8	18	1	6	16							
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0							
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00							
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Adj Sat Flow, veh/h/ln	1900	1421	1727	1900	1771	1743	1792	1692	1900							
Adj Flow Rate, veh/h	51	26	0	74	61	87	120	450	0							
Adj No. of Lanes	0	1	1	0	1	1	1	2	0							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Percent Heavy Veh, %	45	45	10	4	4	9	6	12	6							
Cap, veh/h	327	97	276	363	163	279	554	1044	0							
Arrive On Green	0.19	0.19	0.00	0.19	0.19	0.19	0.32	0.32	0.00							
Sat Flow, veh/h	449	516	1468	729	867	1482	1707	3300	0							
Grp Volume(v), veh/h	77	0	0	135	0	87	120	450	0							
Grp Sat Flow(s),veh/h/ln	965	0	1468	1596	0	1482	1707	1608	0							
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	1.2	1.3	2.7	0.0							
Cycle Q Clear(g_c), s	2.0	0.0	0.0	1.7	0.0	1.2	1.3	2.7	0.0							
Prop In Lane	0.66		1.00	0.55		1.00	1.00		0.00							
Lane Grp Cap(c), veh/h	424	0	276	526	0	279	554	1044	0							
V/C Ratio(X)	0.18	0.00	0.00	0.26	0.00	0.31	0.22	0.43	0.00							
Avail Cap(c_a), veh/h	1044	0	1133	1393	0	1143	1317	2480	0							
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00							
Uniform Delay (d), s/veh	8.7	0.0	0.0	8.8	0.0	8.6	6.0	6.5	0.0							
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.6	0.2	0.3	0.0							
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
%ile BackOfQ(95%),veh/ln	0.9	0.0	0.0	1.5	0.0	1.0	1.1	2.2	0.0							
LnGrp Delay(d),s/veh	8.9	0.0	0.0	9.1	0.0	9.3	6.2	6.8	0.0							
LnGrp LOS	A			A		A	A	A								
Approach Vol, veh/h	77		222				570									
Approach Delay, s/veh	8.9		9.1				6.7									
Approach LOS	A		A				A									
Timer	1	2	3	4	5	6	7	8								
Assigned Phs				4	6			8								
Phs Duration (G+Y+Rc), s				10.6	14.0			10.6								
Change Period (Y+Rc), s				6.0	6.0			6.0								
Max Green Setting (Gmax), s				19.0	19.0			19.0								
Max Q Clear Time (g_c+I1), s				4.0	4.7			3.7								
Green Ext Time (p_c), s				1.3	2.6			1.3								
Intersection Summary																
HCM 2010 Ctrl Delay				7.5												
HCM 2010 LOS				A												

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕			↕	
Traffic Vol, veh/h	73	1	179	4	1	1	106	341	5	7	253	42
Future Vol, veh/h	73	1	179	4	1	1	106	341	5	7	253	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	-	175	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	7	100	8	67	100	50	21	8	67	8	8	16
Mvmt Flow	83	1	203	5	1	1	120	388	6	8	288	48
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	763	962	168	792	983	197	336	0	0	394	0	0
Stage 1	328	328	-	631	631	-	-	-	-	-	-	-
Stage 2	435	634	-	161	352	-	-	-	-	-	-	-
Critical Hdwy	7.64	8.5	7.06	8.84	8.5	7.9	4.52	-	-	4.26	-	-
Critical Hdwy Stg 1	6.64	7.5	-	7.84	7.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.64	7.5	-	7.84	7.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.57	5	3.38	4.17	5	3.8	2.41	-	-	2.28	-	-
Pot Cap-1 Maneuver	285	135	828	189	130	681	1094	-	-	1119	-	-
Stage 1	645	453	-	308	290	-	-	-	-	-	-	-
Stage 2	557	289	-	666	437	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	257	119	828	129	115	681	1094	-	-	1119	-	-
Mov Cap-2 Maneuver	257	119	-	129	115	-	-	-	-	-	-	-
Stage 1	574	449	-	274	258	-	-	-	-	-	-	-
Stage 2	493	257	-	497	433	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	15.3			30.9			2			0.2		
HCM LOS	C			D								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1094	-	-	253	828	146	1119	-	-			
HCM Lane V/C Ratio	0.11	-	-	0.332	0.246	0.047	0.007	-	-			
HCM Control Delay (s)	8.7	-	-	26.2	10.8	30.9	8.2	0	-			
HCM Lane LOS	A	-	-	D	B	D	A	A	-			
HCM 95th %tile Q(veh)	0.4	-	-	1.4	1	0.1	0	-	-			

HCM 2010 Signalized Intersection Summary

15: SR 314/W Fayetteville Road & SR 139/Riverdale Road

01/19/2020

								
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations								
Traffic Volume (veh/h)	0	539	507	349	426	332	150	
Future Volume (veh/h)	0	539	507	349	426	332	150	
Number		6	16	5	2	3	18	
Initial Q (Qb), veh		0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln		1827	1881	1881	1827	1881	1863	
Adj Flow Rate, veh/h		561	528	364	444	346	0	
Adj No. of Lanes		2	1	1	2	2	1	
Peak Hour Factor		0.96	0.96	0.96	0.96	0.96	0.96	
Percent Heavy Veh, %		4	1	1	4	1	2	
Cap, veh/h		1498	690	539	2326	486	222	
Arrive On Green		0.43	0.43	0.14	0.67	0.14	0.00	
Sat Flow, veh/h		3563	1599	1792	3563	3476	1583	
Grp Volume(v), veh/h		561	528	364	444	346	0	
Grp Sat Flow(s),veh/h/ln		1736	1599	1792	1736	1738	1583	
Q Serve(g_s), s		6.9	17.7	6.3	3.1	6.0	0.0	
Cycle Q Clear(g_c), s		6.9	17.7	6.3	3.1	6.0	0.0	
Prop In Lane			1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		1498	690	539	2326	486	222	
V/C Ratio(X)		0.37	0.77	0.67	0.19	0.71	0.00	
Avail Cap(c_a), veh/h		1977	911	792	3295	990	451	
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh		12.2	15.3	8.2	3.9	26.0	0.0	
Incr Delay (d2), s/veh		0.2	2.8	1.5	0.0	1.9	0.0	
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(95%),veh/ln		5.9	13.0	5.9	2.6	5.4	0.0	
LnGrp Delay(d),s/veh		12.3	18.1	9.7	4.0	27.9	0.0	
LnGrp LOS		B	B	A	A	C		
Approach Vol, veh/h		1089			808	346		
Approach Delay, s/veh		15.1			6.6	27.9		
Approach LOS		B			A	C		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		48.4			15.1	33.3		14.8
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		60.0			18.0	36.0		18.0
Max Q Clear Time (g_c+I1), s		5.1			8.3	19.7		8.0
Green Ext Time (p_c), s		10.8			0.8	7.6		0.9
Intersection Summary								
HCM 2010 Ctrl Delay			14.0					
HCM 2010 LOS			B					
Notes								
User approved ignoring U-Turning movement.								

HCM 2010 Signalized Intersection Summary

16: Global Gateway Connector & SR 139/Riverdale Road

01/19/2020

	           											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	190	34	79	230	133	19	18	110	212	51	40
Future Volume (veh/h)	19	190	34	79	230	133	19	18	110	212	51	40
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1873	1900	1845	1881	1863	1863	1829	1900	1845	1863	1900
Adj Flow Rate, veh/h	20	200	36	83	242	0	20	19	0	223	54	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1	3	1	2	2	3	3	3	2	0
Cap, veh/h	360	530	94	414	1351	598	260	139	0	515	669	580
Arrive On Green	0.18	0.18	0.18	0.07	0.38	0.00	0.08	0.08	0.00	0.15	0.36	0.00
Sat Flow, veh/h	1156	3023	535	1757	3574	1583	1345	1829	0	1757	1863	1615
Grp Volume(v), veh/h	20	116	120	83	242	0	20	19	0	223	54	0
Grp Sat Flow(s),veh/h/ln	1156	1779	1778	1757	1787	1583	1345	1829	0	1757	1863	1615
Q Serve(g_s), s	0.7	2.6	2.7	1.6	2.1	0.0	0.6	0.4	0.0	4.8	0.9	0.0
Cycle Q Clear(g_c), s	0.7	2.6	2.7	1.6	2.1	0.0	0.6	0.4	0.0	4.8	0.9	0.0
Prop In Lane	1.00		0.30	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	312	312	414	1351	598	260	139	0	515	669	580
V/C Ratio(X)	0.06	0.37	0.38	0.20	0.18	0.00	0.08	0.14	0.00	0.43	0.08	0.00
Avail Cap(c_a), veh/h	664	779	779	558	2584	1145	600	601	0	1172	1836	1592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.8	16.6	16.6	12.3	9.5	0.0	19.8	19.7	0.0	14.0	9.7	0.0
Incr Delay (d2), s/veh	0.1	0.7	0.8	0.2	0.1	0.0	0.1	0.4	0.0	0.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	2.4	2.5	1.4	1.8	0.0	0.4	0.4	0.0	4.3	0.8	0.0
LnGrp Delay(d),s/veh	15.9	17.4	17.4	12.6	9.5	0.0	19.9	20.1	0.0	14.5	9.7	0.0
LnGrp LOS	B	B	B	B	A		B	C		B	A	
Approach Vol, veh/h	256			325			39			277		
Approach Delay, s/veh	17.3			10.3			20.0			13.6		
Approach LOS	B			B			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		5		6		7		8	
Phs Duration (G+Y+Rc), s	23.3		22.4		9.3		14.0		12.9		9.5	
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0		6.0		6.0	
Max Green Setting (Gmax), s	33.0		45.0		7.0		20.0		24.0		15.0	
Max Q Clear Time (g_c+l1), s	4.1		2.9		3.6		4.7		6.8		2.6	
Green Ext Time (p_c), s	2.8		0.4		0.0		2.4		0.5		0.2	
Intersection Summary												
HCM 2010 Ctrl Delay	13.7											
HCM 2010 LOS	B											

HCM 2010 AWSC

17: Scarborough Rd & Welcome All Road

01/19/2020

Intersection

Intersection Delay, s/veh 23.1

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	148	26	36	163	147	41	80	43	239	177	25
Future Vol, veh/h	19	148	26	36	163	147	41	80	43	239	177	25
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	15	2	8	3	4	5	2	6	1	6	5	3
Mvmt Flow	20	156	27	38	172	155	43	84	45	252	186	26
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB	WB		NB		SB						
Opposing Approach	WB	EB		SB		NB						
Opposing Lanes	1	1		1		1						
Conflicting Approach Left	SB	NB		EB		WB						
Conflicting Lanes Left	1	1		1		1						
Conflicting Approach Right	NB	SB		WB		EB						
Conflicting Lanes Right	1	1		1		1						
HCM Control Delay	14.9	20.2		13.3		32.7						
HCM LOS	B	C		B		D						

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	10%	10%	54%
Vol Thru, %	49%	77%	47%	40%
Vol Right, %	26%	13%	42%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	164	193	346	441
LT Vol	41	19	36	239
Through Vol	80	148	163	177
RT Vol	43	26	147	25
Lane Flow Rate	173	203	364	464
Geometry Grp	1	1	1	1
Degree of Util (X)	0.329	0.401	0.642	0.823
Departure Headway (Hd)	6.863	7.107	6.35	6.385
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	520	504	565	566
Service Time	4.954	5.194	4.423	4.452
HCM Lane V/C Ratio	0.333	0.403	0.644	0.82
HCM Control Delay	13.3	14.9	20.2	32.7
HCM Lane LOS	B	B	C	D
HCM 95th-tile Q	1.4	1.9	4.6	8.3

HCM 2010 Signalized Intersection Summary

18: Washington Road & SR 6/Camp Creek Pkwy

01/19/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	667	96	120	1100	25	89	191	110	20	211	217
Future Volume (veh/h)	233	667	96	120	1100	25	89	191	110	20	211	217
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1845	1845	1792	1863	1810	1863	1776	1810	1810	1743	1863
Adj Flow Rate, veh/h	240	688	0	124	1134	0	92	197	113	21	218	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	3	6	2	5	2	7	5	5	9	2
Cap, veh/h	273	1523	682	411	1232	535	234	347	300	222	278	253
Arrive On Green	0.15	0.43	0.00	0.07	0.35	0.00	0.06	0.20	0.20	0.02	0.16	0.00
Sat Flow, veh/h	1792	3505	1568	1707	3539	1538	1774	1776	1538	1723	1743	1583
Grp Volume(v), veh/h	240	688	0	124	1134	0	92	197	113	21	218	0
Grp Sat Flow(s),veh/h/ln	1792	1752	1568	1707	1770	1538	1774	1776	1538	1723	1743	1583
Q Serve(g_s), s	11.2	11.8	0.0	3.9	26.2	0.0	3.6	8.6	5.4	0.9	10.2	0.0
Cycle Q Clear(g_c), s	11.2	11.8	0.0	3.9	26.2	0.0	3.6	8.6	5.4	0.9	10.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	1523	682	411	1232	535	234	347	300	222	278	253
V/C Ratio(X)	0.88	0.45	0.00	0.30	0.92	0.00	0.39	0.57	0.38	0.09	0.78	0.00
Avail Cap(c_a), veh/h	273	1523	682	419	1245	541	234	375	325	284	368	334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.4	17.0	0.0	15.9	26.7	0.0	28.2	31.1	29.8	29.0	34.4	0.0
Incr Delay (d2), s/veh	26.2	0.2	0.0	0.4	11.1	0.0	1.1	1.7	0.8	0.2	7.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.0	9.6	0.0	3.4	20.9	0.0	3.3	7.8	4.3	0.8	9.4	0.0
LnGrp Delay(d),s/veh	61.6	17.2	0.0	16.4	37.8	0.0	29.2	32.8	30.6	29.2	42.2	0.0
LnGrp LOS	E	B		B	D		C	C	C	C	D	
Approach Vol, veh/h		928			1258			402			239	
Approach Delay, s/veh		28.7			35.7			31.4			41.1	
Approach LOS		C			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.0	35.7	11.0	19.6	11.6	43.1	8.0	22.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	30.0	30.0	5.0	18.0	6.0	37.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	33.2	28.2	5.6	12.2	5.9	13.8	2.9	10.6				
Green Ext Time (p_c), s	0.0	1.5	0.0	1.4	0.0	13.1	0.0	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			33.2									
HCM 2010 LOS			C									

Future Year (2029) Capacity Analysis – without Improvements

HCM 2010 Signalized Intersection Summary

1: Ben Hill Rd & Welcome All Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	4	12	0	0	6	37	165	0	1	161	257
Future Volume (veh/h)	270	4	12	0	0	6	37	165	0	1	161	257
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1779	1652	1900	1900	1681	1776	1696	1900	1900	1759	1810
Adj Flow Rate, veh/h	296	0	0	0	0	0	40	179	0	1	175	0
Adj No. of Lanes	2	0	1	1	1	1	1	2	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	0	15	0	0	13	7	12	0	0	8	5
Cap, veh/h	601	0	250	7	8	6	589	1060	531	650	579	506
Arrive On Green	0.18	0.00	0.00	0.00	0.00	0.00	0.33	0.33	0.00	0.33	0.33	0.00
Sat Flow, veh/h	3382	0	1404	1810	1900	1429	1148	3223	1615	1224	1759	1538
Grp Volume(v), veh/h	296	0	0	0	0	0	40	179	0	1	175	0
Grp Sat Flow(s),veh/h/ln	1691	0	1404	1810	1900	1429	1148	1612	1615	1224	1759	1538
Q Serve(g_s), s	1.9	0.0	0.0	0.0	0.0	0.0	0.7	1.0	0.0	0.0	1.8	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	0.0	0.0	0.0	2.5	1.0	0.0	1.0	1.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	601	0	250	7	8	6	589	1060	531	650	579	506
V/C Ratio(X)	0.49	0.00	0.00	0.00	0.00	0.00	0.07	0.17	0.00	0.00	0.30	0.00
Avail Cap(c_a), veh/h	2225	0	924	521	547	411	1108	2518	1262	1204	1374	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.0	0.0	0.0	0.0	0.0	0.0	7.0	5.8	0.0	6.1	6.1	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.0	0.0	1.7	0.0
LnGrp Delay(d),s/veh	9.6	0.0	0.0	0.0	0.0	0.0	7.0	5.9	0.0	6.1	6.4	0.0
LnGrp LOS	A						A	A		A	A	
Approach Vol, veh/h		296			0			219			176	
Approach Delay, s/veh		9.6			0.0			6.1			6.4	
Approach LOS		A						A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.0		10.3		14.0		0.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		19.0		16.0		19.0		7.0				
Max Q Clear Time (g_c+I1), s		3.8		3.9		4.5		0.0				
Green Ext Time (p_c), s		1.9		0.8		1.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			7.7									
HCM 2010 LOS			A									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 2010 Signalized Intersection Summary

2: Loop Rd & Maynard Jackson Blvd/Charles W Grant Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	331	145	223	708	618	356	259	421	310	84	157
Future Volume (veh/h)	194	331	145	223	708	618	356	259	421	310	84	157
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1462	1759	1597	1429	1827	1827	1759	1810	1597	1776	1681	1570
Adj Flow Rate, veh/h	204	348	0	235	745	0	375	273	0	326	88	165
Adj No. of Lanes	1	3	1	1	2	1	2	2	1	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	30	8	19	33	4	4	8	5	19	7	13	21
Cap, veh/h	313	1181	334	449	929	416	471	590	233	407	253	201
Arrive On Green	0.13	0.25	0.00	0.15	0.27	0.00	0.14	0.17	0.00	0.12	0.15	0.15
Sat Flow, veh/h	1392	4803	1357	1361	3471	1553	3250	3438	1357	3281	1681	1335
Grp Volume(v), veh/h	204	348	0	235	745	0	375	273	0	326	88	165
Grp Sat Flow(s),veh/h/ln	1392	1601	1357	1361	1736	1553	1625	1719	1357	1640	1681	1335
Q Serve(g_s), s	8.4	4.6	0.0	9.9	15.8	0.0	8.8	5.6	0.0	7.6	3.7	9.4
Cycle Q Clear(g_c), s	8.4	4.6	0.0	9.9	15.8	0.0	8.8	5.6	0.0	7.6	3.7	9.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	1181	334	449	929	416	471	590	233	407	253	201
V/C Ratio(X)	0.65	0.29	0.00	0.52	0.80	0.00	0.80	0.46	0.00	0.80	0.35	0.82
Avail Cap(c_a), veh/h	358	1181	334	549	1056	473	659	785	310	458	277	220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	24.2	0.0	17.3	26.9	0.0	32.6	29.4	0.0	33.6	30.0	32.5
Incr Delay (d2), s/veh	3.4	0.1	0.0	0.9	4.0	0.0	4.6	0.6	0.0	8.9	0.8	19.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.2	3.7	0.0	6.8	12.7	0.0	7.6	4.9	0.0	7.1	3.2	8.1
LnGrp Delay(d),s/veh	23.2	24.3	0.0	18.3	31.0	0.0	37.2	30.0	0.0	42.5	30.8	52.4
LnGrp LOS	C	C		B	C		D	C		D	C	D
Approach Vol, veh/h		552			980			648			579	
Approach Delay, s/veh		23.9			27.9			34.2			43.5	
Approach LOS		C			C			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.4	27.1	17.4	17.9	18.2	25.4	15.8	19.5				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	24.0	16.0	13.0	18.0	19.0	11.0	18.0				
Max Q Clear Time (g_c+I1), s	10.4	17.8	10.8	11.4	11.9	6.6	9.6	7.6				
Green Ext Time (p_c), s	0.1	3.3	0.6	0.4	0.4	5.7	0.2	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			31.9									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: Washington Rd & N Commerce Dr/Retail Dwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	2	86	2	2	1	147	484	1	6	357	444
Future Volume (veh/h)	95	2	86	2	2	1	147	484	1	6	357	444
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1462	1730	1900	1900	1900	1900	1810	1793	1900	1900	1759	1743
Adj Flow Rate, veh/h	107	2	97	2	2	1	165	544	1	7	401	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
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
Percent Heavy Veh, %	30	0	0	0	0	0	5	6	6	0	8	9
Cap, veh/h	386	4	217	339	180	90	611	1674	3	558	1604	711
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.48	0.48	0.48	0.48	0.48	0.00
Sat Flow, veh/h	1105	30	1446	1317	1196	598	952	3488	6	875	3343	1482
Grp Volume(v), veh/h	107	0	99	2	0	3	165	266	279	7	401	0
Grp Sat Flow(s),veh/h/ln	1105	0	1475	1317	0	1794	952	1703	1792	875	1671	1482
Q Serve(g_s), s	3.0	0.0	2.0	0.0	0.0	0.0	4.0	3.1	3.1	0.2	2.3	0.0
Cycle Q Clear(g_c), s	3.0	0.0	2.0	2.0	0.0	0.0	6.3	3.1	3.1	3.3	2.3	0.0
Prop In Lane	1.00		0.98	1.00		0.33	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	386	0	222	339	0	270	611	817	860	558	1604	711
V/C Ratio(X)	0.28	0.00	0.45	0.01	0.00	0.01	0.27	0.32	0.32	0.01	0.25	0.00
Avail Cap(c_a), veh/h	765	0	727	790	0	884	1093	1679	1766	1000	3295	1460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	0.0	12.6	13.5	0.0	11.7	6.9	5.2	5.2	6.2	5.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	1.4	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.7	0.0	1.6	0.0	0.0	0.0	2.0	2.6	2.7	0.1	1.9	0.0
LnGrp Delay(d),s/veh	13.4	0.0	14.0	13.5	0.0	11.8	7.1	5.4	5.4	6.2	5.1	0.0
LnGrp LOS	B		B	B		B	A	A	A	A	A	
Approach Vol, veh/h	206					5	710			408		
Approach Delay, s/veh	13.7					12.4	5.8			5.1		
Approach LOS	B					B	A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4			6		8				
Phs Duration (G+Y+Rc), s	21.6		10.9			21.6		10.9				
Change Period (Y+Rc), s	6.0		6.0			6.0		6.0				
Max Green Setting (Gmax), s	32.0		16.0			32.0		16.0				
Max Q Clear Time (g_c+I1), s	8.3		5.0			5.3		4.0				
Green Ext Time (p_c), s	7.3		0.7			7.5		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			6.8									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary

4: SR 139/Riverdale Rd & Phoenix Blvd/ Forest Pkwy

06/02/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	344	117	67	62	204	376	80	1873	80	229	853	322
Future Volume (veh/h)	344	117	67	62	204	376	80	1873	80	229	853	322
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1792	1827	1776	1810	1667	1881	1863	1810	1696	1845	1863
Adj Flow Rate, veh/h	374	127	0	67	222	253	87	2036	0	249	927	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	6	4	7	5	14	1	2	5	12	3	2
Cap, veh/h	287	668	305	122	516	212	137	1799	782	183	1848	835
Arrive On Green	0.08	0.20	0.00	0.04	0.15	0.15	0.04	0.51	0.00	0.06	0.53	0.00
Sat Flow, veh/h	3442	3406	1553	3281	3438	1417	3476	3539	1538	3134	3505	1583
Grp Volume(v), veh/h	374	127	0	67	222	253	87	2036	0	249	927	0
Grp Sat Flow(s),veh/h/ln	1721	1703	1553	1640	1719	1417	1738	1770	1538	1567	1752	1583
Q Serve(g_s), s	10.0	3.7	0.0	2.4	7.0	18.0	3.0	61.0	0.0	7.0	20.4	0.0
Cycle Q Clear(g_c), s	10.0	3.7	0.0	2.4	7.0	18.0	3.0	61.0	0.0	7.0	20.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	287	668	305	122	516	213	137	1799	782	183	1848	835
V/C Ratio(X)	1.30	0.19	0.00	0.55	0.43	1.19	0.64	1.13	0.00	1.36	0.50	0.00
Avail Cap(c_a), veh/h	287	668	305	137	516	213	174	1799	782	183	1848	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.0	40.3	0.0	56.8	46.3	51.0	56.8	29.5	0.0	56.5	18.2	0.0
Incr Delay (d2), s/veh	159.9	0.1	0.0	3.8	0.6	122.7	4.8	66.9	0.0	193.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.0	3.2	0.0	2.1	6.1	25.7	2.7	83.2	0.0	14.3	15.0	0.0
LnGrp Delay(d),s/veh	214.9	40.4	0.0	60.6	46.9	173.7	61.6	96.4	0.0	250.4	18.4	0.0
LnGrp LOS	F	D		E	D	F	E	F		F	B	
Approach Vol, veh/h	501				542				2123			
Approach Delay, s/veh	170.6				107.8				94.9			
Approach LOS	F				F				F			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	69.3	10.5	29.5	13.0	67.0	16.0	24.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	6.0	62.0	5.0	23.0	7.0	61.0	10.0	18.0				
Max Q Clear Time (g_c+I1), s	5.0	22.4	4.4	5.7	9.0	63.0	12.0	20.0				
Green Ext Time (p_c), s	0.0	32.3	0.0	2.7	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	97.9											
HCM 2010 LOS	F											

HCM 2010 TWSC

5: Majestic PI & SR 14

05/26/2020

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	2562	11	55	1377	89	0	0	47	27	1	2
Future Vol, veh/h	2	2562	11	55	1377	89	0	0	47	27	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	215	-	250	320	-	215	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	47	68	4	13	33	0	90	11	100	0
Mvmt Flow	2	2614	11	56	1405	91	0	0	48	28	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1405	0	0	2614	0	0	3433	4135	1307	2828	4135	703
Stage 1	-	-	-	-	-	-	2618	2618	-	1517	1517	-
Stage 2	-	-	-	-	-	-	815	1517	-	1311	2618	-
Critical Hdwy	4.1	-	-	5.46	-	-	8.16	6.5	8.7	7.72	8.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	7.16	5.5	-	6.72	7.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	7.16	5.5	-	6.72	7.5	-
Follow-up Hdwy	2.2	-	-	2.88	-	-	3.83	4	4.2	3.61	5	3.3
Pot Cap-1 Maneuver	492	-	-	57	-	-	1	2	71	~ 7	0	385
Stage 1	-	-	-	-	-	-	15	51	-	114	73	-
Stage 2	-	-	-	-	-	-	278	183	-	155	12	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	492	-	-	57	-	-	0	0	71	0	0	385
Mov Cap-2 Maneuver	-	-	-	-	-	-	0	0	-	0	0	-
Stage 1	-	-	-	-	-	-	15	51	-	114	~ 1	-
Stage 2	-	-	-	-	-	-	-	3	-	50	12	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.4	126.7	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	-	71	492	-	-	57	-	-	-	385
HCM Lane V/C Ratio	-	0.675	0.004	-	-	0.985	-	-	-	0.005
HCM Control Delay (s)	0	126.7	12.3	-	-	232	-	-	-	14.4
HCM Lane LOS	A	F	B	-	-	F	-	-	-	B
HCM 95th %tile Q(veh)	-	3	0	-	-	4.5	-	-	-	0

Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

HCM 2010 Signalized Intersection Summary
6: SR 279/Old National Hwy & Sullivan Rd

06/03/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	77	163	225	62	11	237	635	438	13	303	9
Future Volume (veh/h)	19	77	163	225	62	11	237	635	438	13	303	9
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1760	1900	1545	1884	1900	1810	1810	1727	1900	1812	1900
Adj Flow Rate, veh/h	20	80	170	234	65	11	247	661	456	14	316	9
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	10	10	23	0	0	5	5	10	0	5	5
Cap, veh/h	585	199	422	351	621	105	433	827	671	163	802	23
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1344	503	1069	933	1571	266	1021	1810	1468	512	1753	50
Grp Volume(v), veh/h	20	0	250	234	0	76	247	661	456	14	0	325
Grp Sat Flow(s),veh/h/ln	1344	0	1571	933	0	1837	1021	1810	1468	512	0	1803
Q Serve(g_s), s	0.8	0.0	9.3	19.6	0.0	2.1	17.2	25.4	19.9	2.0	0.0	9.7
Cycle Q Clear(g_c), s	2.9	0.0	9.3	28.9	0.0	2.1	26.9	25.4	19.9	27.4	0.0	9.7
Prop In Lane	1.00		0.68	1.00		0.14	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	585	0	621	351	0	726	433	827	671	163	0	825
V/C Ratio(X)	0.03	0.00	0.40	0.67	0.00	0.10	0.57	0.80	0.68	0.09	0.00	0.39
Avail Cap(c_a), veh/h	631	0	675	383	0	789	505	955	775	199	0	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	17.7	28.1	0.0	15.5	23.5	18.9	17.4	30.6	0.0	14.6
Incr Delay (d2), s/veh	0.0	0.0	0.4	3.9	0.0	0.1	1.2	4.3	2.0	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	0.0	7.4	9.2	0.0	2.0	8.6	19.7	13.1	0.5	0.0	8.5
LnGrp Delay(d),s/veh	16.5	0.0	18.1	32.0	0.0	15.6	24.7	23.2	19.4	30.8	0.0	14.9
LnGrp LOS	B		B	C		B	C	C	B	C		B
Approach Vol, veh/h	270					310				1364		
Approach Delay, s/veh	18.0					28.0				22.2	15.6	
Approach LOS	B					C				C	B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4			6	8					
Phs Duration (G+Y+Rc), s	43.2		38.2			43.2	38.2					
Change Period (Y+Rc), s	6.0		6.0			6.0	6.0					
Max Green Setting (Gmax), s	43.0		35.0			43.0	35.0					
Max Q Clear Time (g_c+I1), s	29.4		11.3			28.9	30.9					
Green Ext Time (p_c), s	7.9		3.4			8.0	1.3					
Intersection Summary												
HCM 2010 Ctrl Delay			21.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

7: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1493	116	15	1144	103	58	9	8	104	29	159
Future Volume (veh/h)	149	1493	116	15	1144	103	58	9	8	104	29	159
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1624	1743	1863	1652	1759	1900	1571	1900	1776	1652	1845
Adj Flow Rate, veh/h	155	1555	0	16	1192	0	60	9	0	108	30	0
Adj No. of Lanes	2	2	1	1	3	1	0	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	17	9	2	15	8	14	14	14	7	15	3
Cap, veh/h	211	2049	984	31	2794	926	128	14	0	157	279	264
Arrive On Green	0.06	0.66	0.00	0.02	0.82	0.00	0.07	0.07	0.00	0.05	0.17	0.00
Sat Flow, veh/h	3408	3085	1482	1774	4510	1495	1013	198	0	3281	1652	1568
Grp Volume(v), veh/h	155	1555	0	16	1192	0	69	0	0	108	30	0
Grp Sat Flow(s),veh/h/ln	1704	1543	1482	1774	1503	1495	1211	0	0	1640	1652	1568
Q Serve(g_s), s	5.4	40.9	0.0	1.1	8.6	0.0	6.5	0.0	0.0	3.9	1.8	0.0
Cycle Q Clear(g_c), s	5.4	40.9	0.0	1.1	8.6	0.0	6.7	0.0	0.0	3.9	1.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.87		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	2049	984	31	2794	926	142	0	0	157	279	264
V/C Ratio(X)	0.73	0.76	0.00	0.52	0.43	0.00	0.49	0.00	0.00	0.69	0.11	0.00
Avail Cap(c_a), veh/h	284	2049	984	74	2794	926	177	0	0	164	330	314
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.77	0.77	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.3	13.6	0.0	58.1	4.8	0.0	54.9	0.0	0.0	56.3	42.2	0.0
Incr Delay (d2), s/veh	6.5	2.7	0.0	10.3	0.4	0.0	2.6	0.0	0.0	11.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	25.0	0.0	1.1	6.2	0.0	4.3	0.0	0.0	3.6	1.5	0.0
LnGrp Delay(d),s/veh	61.8	16.3	0.0	68.5	5.1	0.0	57.4	0.0	0.0	67.2	42.4	0.0
LnGrp LOS	E	B		E	A		E			E	D	
Approach Vol, veh/h		1710			1208			69			138	
Approach Delay, s/veh		20.5			6.0			57.4			61.8	
Approach LOS		C			A			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	85.7		26.2	13.4	80.3	11.7	14.5				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	73.0		24.0	10.0	68.0	6.0	12.0				
Max Q Clear Time (g_c+I1), s	3.1	42.9		3.8	7.4	10.6	5.9	8.7				
Green Ext Time (p_c), s	0.0	23.7		0.4	0.1	38.1	0.0	0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			17.5									
HCM 2010 LOS			B									
Notes												
User approved ignoring U-Turning movement.												

HCM 2010 Signalized Intersection Summary

8: N Commerce Dr & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱	↰ ↱		↰ ↱	↰ ↱		↰	↱	↰ ↱	↰ ↱	↱	↰ ↱
Traffic Volume (veh/h)	52	1406	84	337	1229	184	172	107	210	239	101	55
Future Volume (veh/h)	52	1406	84	337	1229	184	172	107	210	239	101	55
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1617	1900	1776	1684	1900	1696	1776	1681	1827	1776	1881
Adj Flow Rate, veh/h	54	1465	0	351	1280	0	179	111	0	249	105	0
Adj No. of Lanes	2	3	0	2	3	0	1	1	1	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	18	18	7	14	14	12	7	13	4	7	1
Cap, veh/h	117	2093	0	404	2587	0	205	241	194	327	134	121
Arrive On Green	0.07	0.95	0.00	0.12	0.56	0.00	0.13	0.14	0.00	0.07	0.08	0.00
Sat Flow, veh/h	3375	4560	0	3281	4749	0	1616	1776	1429	4907	1776	1599
Grp Volume(v), veh/h	54	1465	0	351	1280	0	179	111	0	249	105	0
Grp Sat Flow(s),veh/h/ln	1688	1472	0	1640	1532	0	1616	1776	1429	1636	1776	1599
Q Serve(g_s), s	1.8	6.1	0.0	12.6	20.2	0.0	13.1	6.9	0.0	6.0	7.0	0.0
Cycle Q Clear(g_c), s	1.8	6.1	0.0	12.6	20.2	0.0	13.1	6.9	0.0	6.0	7.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	2093	0	404	2587	0	205	241	194	327	134	121
V/C Ratio(X)	0.46	0.70	0.00	0.87	0.49	0.00	0.87	0.46	0.00	0.76	0.78	0.00
Avail Cap(c_a), veh/h	141	2093	0	437	2587	0	256	311	250	327	148	133
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.7	1.8	0.0	51.6	15.9	0.0	51.4	47.8	0.0	55.1	54.5	0.0
Incr Delay (d2), s/veh	1.7	1.2	0.0	15.9	0.7	0.0	22.9	1.4	0.0	10.1	21.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	3.8	0.0	10.8	13.5	0.0	11.5	6.3	0.0	5.4	7.6	0.0
LnGrp Delay(d),s/veh	56.5	3.0	0.0	67.5	16.6	0.0	74.3	49.1	0.0	65.2	75.9	0.0
LnGrp LOS	E	A		E	B		E	D		E	E	
Approach Vol, veh/h	1519			1631			290			354		
Approach Delay, s/veh	4.9			27.5			64.7			68.4		
Approach LOS	A			C			E			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.8	62.9	21.2	15.1	10.2	73.5	14.0	22.3				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	6.0	51.0	19.0	10.0	5.0	62.0	8.0	21.0				
Max Q Clear Time (g_c+I1), s	4.6	8.1	15.1	9.0	3.8	22.2	8.0	8.9				
Green Ext Time (p_c), s	0.2	30.4	0.2	0.1	0.0	28.8	0.0	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			25.1									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

9: US 41/Old Dixie & SR 331/Forest Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	676	121	147	696	475	123	932	127	145	303	163
Future Volume (veh/h)	255	676	121	147	696	475	123	932	127	145	303	163
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1583	1776	1583	1727	1810	1810	1638	1714	1900	1727	1610	1484
Adj Flow Rate, veh/h	260	690	0	150	710	485	126	951	130	148	309	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	20	7	20	10	5	5	16	11	11	10	18	28
Cap, veh/h	264	991	395	175	774	346	402	960	131	172	1045	431
Arrive On Green	0.17	0.29	0.00	0.11	0.22	0.22	0.06	0.33	0.33	0.07	0.34	0.00
Sat Flow, veh/h	1508	3374	1346	1645	3438	1538	1560	2879	393	1645	3059	1262
Grp Volume(v), veh/h	260	690	0	150	710	485	126	538	543	148	309	0
Grp Sat Flow(s),veh/h/ln	1508	1687	1346	1645	1719	1538	1560	1628	1644	1645	1530	1262
Q Serve(g_s), s	20.6	21.8	0.0	10.8	24.2	27.0	6.4	39.5	39.5	7.1	8.9	0.0
Cycle Q Clear(g_c), s	20.6	21.8	0.0	10.8	24.2	27.0	6.4	39.5	39.5	7.1	8.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	264	991	395	175	774	346	402	543	548	172	1045	431
V/C Ratio(X)	0.99	0.70	0.00	0.86	0.92	1.40	0.31	0.99	0.99	0.86	0.30	0.00
Avail Cap(c_a), veh/h	264	991	395	206	774	346	402	543	548	172	1045	431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.3	37.6	0.0	52.7	45.4	46.5	24.5	39.8	39.8	30.4	28.9	0.0
Incr Delay (d2), s/veh	51.1	2.1	0.0	25.6	15.8	197.3	0.4	36.2	36.1	33.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.1	15.8	0.0	10.2	19.1	54.7	5.0	31.0	31.2	8.4	6.8	0.0
LnGrp Delay(d),s/veh	100.5	39.8	0.0	78.3	61.3	243.8	24.9	76.0	76.0	63.7	29.1	0.0
LnGrp LOS	F	D		E	E	F	C	E	E	E	C	
Approach Vol, veh/h		950			1345			1207			457	
Approach Delay, s/veh		56.4			129.0			70.6			40.3	
Approach LOS		E			F			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.0	33.0	13.0	47.0	18.8	41.2	14.0	46.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	21.0	27.0	7.0	41.0	15.0	33.0	8.0	40.0				
Max Q Clear Time (g_c+I1), s	22.6	29.0	8.4	10.9	12.8	23.8	9.1	41.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	10.6	0.1	6.5	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			83.5									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary

10: Toffie Ter & Loop Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↱ ↱			↰ ↱ ↱			↰ ↱ ↱			↰ ↱ ↱		
Traffic Volume (veh/h)	186	793	293	129	278	142	58	32	31	114	87	104
Future Volume (veh/h)	186	793	293	129	278	142	58	32	31	114	87	104
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1810	1900	1863	1662	1900	1624	1800	1900	1810	1770	1900
Adj Flow Rate, veh/h	200	853	315	139	299	153	62	34	33	123	94	112
Adj No. of Lanes	1	3	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	5	5	2	17	17	17	9	9	5	3	3
Cap, veh/h	485	1327	488	325	698	349	260	494	420	289	235	210
Arrive On Green	0.11	0.37	0.37	0.08	0.34	0.34	0.05	0.28	0.28	0.14	0.14	0.14
Sat Flow, veh/h	1675	3562	1309	1774	2042	1020	1547	1754	1492	1291	1681	1504
Grp Volume(v), veh/h	200	788	380	139	230	222	62	33	34	123	94	112
Grp Sat Flow(s),veh/h/ln	1675	1647	1578	1774	1579	1482	1547	1710	1537	1291	1681	1504
Q Serve(g_s), s	5.0	13.1	13.2	3.3	7.4	7.7	2.2	0.9	1.1	6.0	3.4	4.6
Cycle Q Clear(g_c), s	5.0	13.1	13.2	3.3	7.4	7.7	2.2	0.9	1.1	6.0	3.4	4.6
Prop In Lane	1.00		0.83	1.00		0.69	1.00		0.97	1.00		1.00
Lane Grp Cap(c), veh/h	485	1226	588	325	540	507	260	481	432	289	235	210
V/C Ratio(X)	0.41	0.64	0.65	0.43	0.43	0.44	0.24	0.07	0.08	0.43	0.40	0.53
Avail Cap(c_a), veh/h	610	1636	784	459	737	692	320	747	671	439	430	385
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	17.2	17.2	13.6	16.8	16.9	21.3	17.5	17.5	27.2	26.0	26.6
Incr Delay (d2), s/veh	0.6	0.6	1.2	0.9	0.5	0.6	0.5	0.1	0.1	1.0	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	10.0	9.9	3.0	6.0	5.8	1.7	0.8	0.8	4.0	2.9	3.6
LnGrp Delay(d),s/veh	12.6	17.8	18.4	14.5	17.4	17.5	21.8	17.5	17.6	28.2	27.1	28.6
LnGrp LOS	B	B	B	B	B	B	C	B	B	C	C	C
Approach Vol, veh/h	1368				591				129			
Approach Delay, s/veh	17.2				16.7				19.6			
Approach LOS	B				B				B			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	28.7	9.4	15.3	11.0	30.7		24.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	62.0	31.0	6.0	17.0	10.0	33.0		29.0				
Max Q Clear Time (g_c+I1), s	7.0	9.7	4.2	8.0	5.3	15.2		3.1				
Green Ext Time (p_c), s	0.2	10.5	0.0	1.3	0.1	9.5		1.9				
Intersection Summary												
HCM 2010 Ctrl Delay	18.7											
HCM 2010 LOS	B											

HCM 2010 Signalized Intersection Summary

11: SR 139/Riverdale Road & Sullivan Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	128	69	145	203	342	261	940	136	380	358	1
Future Volume (veh/h)	16	128	69	145	203	342	261	940	136	380	358	1
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1665	1900	1792	1689	1900	1827	1810	1792	1776	1792	1712
Adj Flow Rate, veh/h	18	144	78	163	228	384	293	1056	0	427	402	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
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
Percent Heavy Veh, %	13	18	18	6	15	15	4	5	6	7	6	11
Cap, veh/h	80	316	171	299	176	297	572	1070	474	384	1204	515
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.14	0.31	0.00	0.18	0.35	0.00
Sat Flow, veh/h	728	1017	551	1111	567	954	1740	3438	1524	1691	3406	1455
Grp Volume(v), veh/h	18	0	222	163	0	612	293	1056	0	427	402	0
Grp Sat Flow(s),veh/h/ln	728	0	1568	1111	0	1521	1740	1719	1524	1691	1703	1455
Q Serve(g_s), s	0.0	0.0	10.2	12.4	0.0	28.0	10.1	27.5	0.0	16.0	7.8	0.0
Cycle Q Clear(g_c), s	28.0	0.0	10.2	22.7	0.0	28.0	10.1	27.5	0.0	16.0	7.8	0.0
Prop In Lane	1.00		0.35	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	0	488	299	0	473	572	1070	474	384	1204	515
V/C Ratio(X)	0.22	0.00	0.46	0.54	0.00	1.29	0.51	0.99	0.00	1.11	0.33	0.00
Avail Cap(c_a), veh/h	80	0	488	299	0	473	588	1070	474	384	1204	515
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.0	0.0	24.9	34.0	0.0	31.0	16.7	30.8	0.0	25.3	21.3	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.7	2.0	0.0	147.2	0.7	24.4	0.0	80.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	8.0	7.2	0.0	55.9	8.4	23.4	0.0	32.5	6.6	0.0
LnGrp Delay(d),s/veh	46.4	0.0	25.5	36.0	0.0	178.2	17.4	55.2	0.0	105.6	21.5	0.0
LnGrp LOS	D		C	D		F	B	E		F	C	
Approach Vol, veh/h	240		775				1349				829	
Approach Delay, s/veh	27.1		148.3				47.0				64.8	
Approach LOS	C		F				D				E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.2	37.8		34.0	22.0	34.0		34.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	31.0	31.0		28.0	16.0	28.0		28.0				
Max Q Clear Time (g_c+I1), s	32.1	9.8		30.0	18.0	29.5		30.0				
Green Ext Time (p_c), s	0.1	9.9		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	74.7											
HCM 2010 LOS	E											

HCM Signalized Intersection Capacity Analysis

12: Lake Mirror Road & S Loop Road & I-285 On Ramp

05/26/2020

								
Movement	EBL	EBT	EBR	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	427	112	364	133	10	520	41	196
Future Volume (vph)	427	112	364	133	10	520	41	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0				6.0
Lane Util. Factor	1.00	0.95	1.00	1.00				0.95
Flt	1.00	1.00	0.85	0.86				1.00
Flt Protected	1.00	1.00	1.00	1.00				0.96
Satd. Flow (prot)	1900	2888	1429	1293				3252
Flt Permitted	1.00	1.00	1.00	1.00				0.96
Satd. Flow (perm)	1900	2888	1429	1293				3252
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.92	0.92	0.90	0.90
Adj. Flow (vph)	474	124	404	148	11	565	46	218
RTOR Reduction (vph)	0	0	261	96	0	0	0	173
Lane Group Flow (vph)	474	124	143	63	0	0	0	656
Heavy Vehicles (%)	0%	25%	13%	29%	2%	2%	22%	17%
Turn Type	Split	NA	Prot	Perm		Perm	Perm	NA
Protected Phases	6	6	6					7
Permitted Phases				8		7	7	
Actuated Green, G (s)	25.4	25.4	25.4	8.8				19.8
Effective Green, g (s)	25.4	25.4	25.4	8.8				19.8
Actuated g/C Ratio	0.35	0.35	0.35	0.12				0.28
Clearance Time (s)	6.0	6.0	6.0	6.0				6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0				3.0
Lane Grp Cap (vph)	670	1018	504	158				894
v/s Ratio Prot	c0.25	0.04	0.10					
v/s Ratio Perm				c0.05				0.20
v/c Ratio	0.71	0.12	0.28	0.40				0.94dl
Uniform Delay, d1	20.1	15.8	16.8	29.2				23.7
Progression Factor	1.00	1.00	1.00	1.00				1.00
Incremental Delay, d2	3.4	0.1	0.3	1.7				3.1
Delay (s)	23.5	15.8	17.1	30.8				26.8
Level of Service	C	B	B	C				C
Approach Delay (s)		20.0						26.8
Approach LOS		B						C
Intersection Summary								
HCM 2000 Control Delay			23.7		HCM 2000 Level of Service			C
HCM 2000 Volume to Capacity ratio			0.67					
Actuated Cycle Length (s)			72.0		Sum of lost time (s)			18.0
Intersection Capacity Utilization			76.3%		ICU Level of Service			D
Analysis Period (min)			15					
dl Defacto Left Lane. Recode with 1 though lane as a left lane.								
c Critical Lane Group								

HCM 2010 Signalized Intersection Summary

13: Clark Howell Hwy & Lake Mirror Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	117	348	17	16	17	125	683	99	0	0	0
Future Volume (veh/h)	26	117	348	17	16	17	125	683	99	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1660	1652	1900	1378	1462	1557	1702	1900			
Adj Flow Rate, veh/h	27	123	0	18	17	18	132	719	0			
Adj No. of Lanes	0	1	1	0	1	1	1	2	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	8	8	15	43	43	30	22	13	22			
Cap, veh/h	184	209	212	259	127	187	618	1348	0			
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.42	0.42	0.00			
Sat Flow, veh/h	204	1382	1404	412	844	1242	1483	3320	0			
Grp Volume(v), veh/h	150	0	0	35	0	18	132	719	0			
Grp Sat Flow(s),veh/h/ln	1586	0	1404	1256	0	1242	1483	1617	0			
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.3	1.6	4.6	0.0			
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.6	0.0	0.3	1.6	4.6	0.0			
Prop In Lane	0.18		1.00	0.51		1.00	1.00		0.00			
Lane Grp Cap(c), veh/h	392	0	212	386	0	187	618	1348	0			
V/C Ratio(X)	0.38	0.00	0.00	0.09	0.00	0.10	0.21	0.53	0.00			
Avail Cap(c_a), veh/h	1280	0	1012	1017	0	895	1496	3262	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	11.0	0.0	0.0	10.3	0.0	10.2	5.2	6.1	0.0			
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.1	0.0	0.2	0.2	0.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	2.0	0.0	0.0	0.4	0.0	0.2	1.2	3.7	0.0			
LnGrp Delay(d),s/veh	11.6	0.0	0.0	10.4	0.0	10.4	5.4	6.4	0.0			
LnGrp LOS	B			B		B	A	A				
Approach Vol, veh/h	150			53			851					
Approach Delay, s/veh	11.6			10.4			6.2					
Approach LOS	B			B			A					
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4	6			8				
Phs Duration (G+Y+Rc), s				10.2	17.6			10.2				
Change Period (Y+Rc), s				6.0	6.0			6.0				
Max Green Setting (Gmax), s				20.0	28.0			20.0				
Max Q Clear Time (g_c+I1), s				4.4	6.6			2.6				
Green Ext Time (p_c), s				0.9	5.0			0.9				
Intersection Summary												
HCM 2010 Ctrl Delay	7.2											
HCM 2010 LOS	A											

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↗			↕↗	
Traffic Vol, veh/h	60	0	123	1	0	0	185	237	1	3	217	110
Future Vol, veh/h	60	0	123	1	0	0	185	237	1	3	217	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	-	175	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	29	0	13	0	0	0	7	11	0	0	10	8
Mvmt Flow	70	0	143	1	0	0	215	276	1	3	252	128
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	890	1029	190	839	1093	139	380	0	0	277	0	0
Stage 1	322	322	-	707	707	-	-	-	-	-	-	-
Stage 2	568	707	-	132	386	-	-	-	-	-	-	-
Critical Hdwy	8.08	6.5	7.16	7.5	6.5	6.9	4.24	-	-	4.1	-	-
Critical Hdwy Stg 1	7.08	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.08	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.79	4	3.43	3.5	4	3.3	2.27	-	-	2.2	-	-
Pot Cap-1 Maneuver	199	236	786	262	216	890	1140	-	-	1298	-	-
Stage 1	595	655	-	397	441	-	-	-	-	-	-	-
Stage 2	413	441	-	864	614	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	170	191	786	183	175	890	1140	-	-	1298	-	-
Mov Cap-2 Maneuver	170	191	-	183	175	-	-	-	-	-	-	-
Stage 1	483	653	-	322	358	-	-	-	-	-	-	-
Stage 2	335	358	-	705	612	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	20.3			24.8			3.9			0.1		
HCM LOS	C			C								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1140	-	-	170	786	183	1298	-	-			
HCM Lane V/C Ratio	0.189	-	-	0.41	0.182	0.006	0.003	-	-			
HCM Control Delay (s)	8.9	-	-	40.2	10.6	24.8	7.8	0	-			
HCM Lane LOS	A	-	-	E	B	C	A	A	-			
HCM 95th %tile Q(veh)	0.7	-	-	1.8	0.7	0	0	-	-			

HCM 2010 Signalized Intersection Summary

15: SR 314/W Fayetteville Road & SR 139/Riverdale Road

05/26/2020

								
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations								
Traffic Volume (veh/h)	0	272	322	190	761	651	141	
Future Volume (veh/h)	0	272	322	190	761	651	141	
Number		6	16	5	2	3	18	
Initial Q (Qb), veh		0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln		1681	1845	1863	1776	1863	1881	
Adj Flow Rate, veh/h		306	362	213	855	731	0	
Adj No. of Lanes		2	1	1	2	2	1	
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	
Percent Heavy Veh, %		13	3	2	7	2	1	
Cap, veh/h		1101	540	508	1832	924	429	
Arrive On Green		0.34	0.34	0.10	0.54	0.27	0.00	
Sat Flow, veh/h		3279	1568	1774	3463	3442	1599	
Grp Volume(v), veh/h		306	362	213	855	731	0	
Grp Sat Flow(s),veh/h/ln		1597	1568	1774	1687	1721	1599	
Q Serve(g_s), s		4.4	12.5	4.5	9.9	12.6	0.0	
Cycle Q Clear(g_c), s		4.4	12.5	4.5	9.9	12.6	0.0	
Prop In Lane			1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		1101	540	508	1832	924	429	
V/C Ratio(X)		0.28	0.67	0.42	0.47	0.79	0.00	
Avail Cap(c_a), veh/h		1456	715	658	2492	1676	779	
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh		15.1	17.8	10.2	8.9	21.6	0.0	
Incr Delay (d2), s/veh		0.1	1.5	0.6	0.2	1.6	0.0	
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(95%),veh/ln		3.6	9.6	4.0	8.1	10.1	0.0	
LnGrp Delay(d),s/veh		15.2	19.3	10.8	9.1	23.2	0.0	
LnGrp LOS		B	B	B	A	C		
Approach Vol, veh/h		668			1068	731		
Approach Delay, s/veh		17.4			9.4	23.2		
Approach LOS		B			A	C		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		40.6			12.6	27.9		23.1
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		47.0			12.0	29.0		31.0
Max Q Clear Time (g_c+I1), s		11.9			6.5	14.5		14.6
Green Ext Time (p_c), s		10.9			0.3	7.4		2.5
Intersection Summary								
HCM 2010 Ctrl Delay			15.7					
HCM 2010 LOS			B					
Notes								
User approved ignoring U-Turning movement.								

HCM 2010 Signalized Intersection Summary

16: Global Gateway Connector & SR 139/Riverdale Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	240	78	162	225	325	24	169	116	124	56	10
Future Volume (veh/h)	41	240	78	162	225	325	24	169	116	124	56	10
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1886	1900	1667	1827	1845	1759	1726	1900	1845	1900	1900
Adj Flow Rate, veh/h	46	270	88	182	253	0	27	190	0	139	63	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	1
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
Percent Heavy Veh, %	6	1	1	14	4	3	8	6	6	3	0	0
Cap, veh/h	332	488	156	404	1435	787	338	279	0	358	688	585
Arrive On Green	0.18	0.18	0.18	0.12	0.41	0.00	0.16	0.16	0.00	0.09	0.36	0.00
Sat Flow, veh/h	1080	2674	853	1587	3471	1568	1260	1726	0	1757	1900	1615
Grp Volume(v), veh/h	46	179	179	182	253	0	27	190	0	139	63	0
Grp Sat Flow(s),veh/h/ln	1080	1791	1735	1587	1736	1568	1260	1726	0	1757	1900	1615
Q Serve(g_s), s	1.9	4.8	5.0	4.6	2.5	0.0	1.0	5.5	0.0	3.3	1.2	0.0
Cycle Q Clear(g_c), s	1.9	4.8	5.0	4.6	2.5	0.0	1.0	5.5	0.0	3.3	1.2	0.0
Prop In Lane	1.00		0.49	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	327	317	404	1435	787	338	279	0	358	688	585
V/C Ratio(X)	0.14	0.55	0.57	0.45	0.18	0.00	0.08	0.68	0.00	0.39	0.09	0.00
Avail Cap(c_a), veh/h	499	604	585	572	2339	1195	748	840	0	532	1494	1270
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.6	19.8	19.9	13.8	9.9	0.0	19.2	21.1	0.0	15.3	11.2	0.0
Incr Delay (d2), s/veh	0.2	1.4	1.6	0.8	0.1	0.0	0.1	2.9	0.0	0.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	4.5	4.5	3.7	2.1	0.0	0.6	5.2	0.0	2.9	1.1	0.0
LnGrp Delay(d),s/veh	18.8	21.3	21.5	14.6	10.0	0.0	19.3	24.0	0.0	16.0	11.3	0.0
LnGrp LOS	B	C	C	B	A		B	C		B	B	
Approach Vol, veh/h	404				435		217				202	
Approach Delay, s/veh	21.1				11.9		23.4				14.6	
Approach LOS	C				B		C				B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		5		6		7		8	
Phs Duration (G+Y+Rc), s	28.1		25.3		12.3		15.8		10.7		14.6	
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0		6.0		6.0	
Max Green Setting (Gmax), s	36.0		42.0		12.0		18.0		10.0		26.0	
Max Q Clear Time (g_c+I1), s	4.5		3.2		6.6		7.0		5.3		7.5	
Green Ext Time (p_c), s	3.8		1.4		0.2		2.7		0.1		1.2	
Intersection Summary												
HCM 2010 Ctrl Delay			17.3									
HCM 2010 LOS			B									

HCM 2010 AWSC

17: Scarborough Rd & Welcome All Road

05/26/2020

Intersection

Intersection Delay, s/veh 64.7

Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	245	63	86	129	256	57	231	110	129	64	19
Future Vol, veh/h	79	245	63	86	129	256	57	231	110	129	64	19
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	6	2	7	8	8	4	3	9	8	18
Mvmt Flow	81	253	65	89	133	264	59	238	113	133	66	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB	WB		NB		SB						
Opposing Approach	WB	EB		SB		NB						
Opposing Lanes	1	1		1		1						
Conflicting Approach Left	SB	NB		EB		WB						
Conflicting Lanes Left	1	1		1		1						
Conflicting Approach Right	NB	SB		WB		EB						
Conflicting Lanes Right	1	1		1		1						
HCM Control Delay	54.5	95.4		59.6		25						
HCM LOS	F	F		F		C						

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	20%	18%	61%
Vol Thru, %	58%	63%	27%	30%
Vol Right, %	28%	16%	54%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	398	387	471	212
LT Vol	57	79	86	129
Through Vol	231	245	129	64
RT Vol	110	63	256	19
Lane Flow Rate	410	399	486	219
Geometry Grp	1	1	1	1
Degree of Util (X)	0.938	0.912	1.084	0.567
Departure Headway (Hd)	8.631	8.625	8.04	9.846
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	423	423	456	369
Service Time	6.631	6.625	6.04	7.846
HCM Lane V/C Ratio	0.969	0.943	1.066	0.593
HCM Control Delay	59.6	54.5	95.4	25
HCM Lane LOS	F	F	F	C
HCM 95th-tile Q	10.6	9.9	16	3.4

HCM 2010 Signalized Intersection Summary

18: Washington Road & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	1653	55	65	637	27	99	257	122	40	193	281
Future Volume (veh/h)	283	1653	55	65	637	27	99	257	122	40	193	281
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1863	1810	1727	1810	1681	1845	1743	1792	1776	1652	1881
Adj Flow Rate, veh/h	295	1722	0	68	664	0	103	268	127	42	201	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	2	5	10	5	13	3	9	6	7	15	1
Cap, veh/h	329	1900	826	155	1336	555	200	308	269	145	272	263
Arrive On Green	0.19	0.54	0.00	0.04	0.39	0.00	0.04	0.18	0.18	0.03	0.16	0.00
Sat Flow, veh/h	1757	3539	1538	1645	3438	1429	1757	1743	1524	1691	1652	1599
Grp Volume(v), veh/h	295	1722	0	68	664	0	103	268	127	42	201	0
Grp Sat Flow(s),veh/h/ln	1757	1770	1538	1645	1719	1429	1757	1743	1524	1691	1652	1599
Q Serve(g_s), s	18.3	49.1	0.0	2.8	16.4	0.0	5.0	16.7	8.4	2.3	12.9	0.0
Cycle Q Clear(g_c), s	18.3	49.1	0.0	2.8	16.4	0.0	5.0	16.7	8.4	2.3	12.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	329	1900	826	155	1336	555	200	308	269	145	272	263
V/C Ratio(X)	0.90	0.91	0.00	0.44	0.50	0.00	0.52	0.87	0.47	0.29	0.74	0.00
Avail Cap(c_a), veh/h	487	2026	881	163	1336	555	200	343	300	165	325	315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.3	23.4	0.0	25.5	25.9	0.0	39.0	44.8	41.3	38.1	44.4	0.0
Incr Delay (d2), s/veh	13.9	6.1	0.0	2.0	0.3	0.0	2.3	19.4	1.3	1.1	7.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.4	33.5	0.0	2.4	12.4	0.0	1.4	14.8	6.5	2.0	10.6	0.0
LnGrp Delay(d),s/veh	58.2	29.5	0.0	27.4	26.2	0.0	41.3	64.1	42.6	39.1	51.5	0.0
LnGrp LOS	E	C		C	C		D	E	D	D	D	
Approach Vol, veh/h	2017		732				498				243	
Approach Delay, s/veh	33.7		26.3				53.9				49.4	
Approach LOS	C		C				D				D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.9	49.4	11.0	24.4	10.4	66.0	9.6	25.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	31.0	38.0	5.0	22.0	5.0	64.0	5.0	22.0				
Max Q Clear Time (g_c+I1), s	20.3	18.4	7.0	14.9	4.8	51.1	4.3	18.7				
Green Ext Time (p_c), s	0.6	15.4	0.0	1.8	0.0	8.9	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			36.1									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

1: Ben Hill Rd & Welcome All Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	2	55	1	1	7	11	225	4	1	201	370
Future Volume (veh/h)	329	2	55	1	1	7	11	225	4	1	201	370
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1794	1712	1900	1900	1681	1407	1759	1520	1900	1776	1776
Adj Flow Rate, veh/h	359	0	0	1	1	0	12	245	0	1	218	0
Adj No. of Lanes	2	0	1	1	1	1	1	2	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	11	0	0	13	35	8	25	0	7	7
Cap, veh/h	619	0	264	6	6	4	357	855	330	451	454	386
Arrive On Green	0.18	0.00	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.26	0.26	0.00
Sat Flow, veh/h	3414	0	1455	1810	1900	1429	875	3343	1292	1153	1776	1509
Grp Volume(v), veh/h	359	0	0	1	1	0	12	245	0	1	218	0
Grp Sat Flow(s),veh/h/ln	1707	0	1455	1810	1900	1429	875	1671	1292	1153	1776	1509
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.4	1.9	0.0	0.0	3.3	0.0
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.0	0.0	0.0	3.7	1.9	0.0	1.9	3.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	619	0	264	6	6	4	357	855	330	451	454	386
V/C Ratio(X)	0.58	0.00	0.00	0.18	0.17	0.00	0.03	0.29	0.00	0.00	0.48	0.00
Avail Cap(c_a), veh/h	1700	0	725	282	296	222	705	2185	844	910	1161	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	0.0	0.0	16.0	16.0	0.0	11.7	9.6	0.0	10.4	10.1	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	14.4	12.9	0.0	0.0	0.2	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	0.0	0.0	0.1	0.1	0.0	0.2	1.6	0.0	0.0	3.1	0.0
LnGrp Delay(d),s/veh	12.9	0.0	0.0	30.3	28.9	0.0	11.8	9.8	0.0	10.4	10.9	0.0
LnGrp LOS	B			C	C		B	A		B	B	
Approach Vol, veh/h		359			2			257			219	
Approach Delay, s/veh		12.9			29.6			9.9			10.9	
Approach LOS		B			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.2		11.8		14.2		6.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		21.0		16.0		21.0		5.0				
Max Q Clear Time (g_c+I1), s		5.3		5.1		5.7		2.0				
Green Ext Time (p_c), s		2.5		1.0		2.5		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			11.5									
HCM 2010 LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 2010 Signalized Intersection Summary

2: Loop Rd & Maynard Jackson Blvd/Charles W Grant Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	953	568	410	524	351	166	101	346	644	171	194
Future Volume (veh/h)	301	953	568	410	524	351	166	101	346	644	171	194
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1610	1845	1776	1696	1792	1792	1681	1712	1545	1863	1792	1583
Adj Flow Rate, veh/h	324	1025	0	441	563	0	178	109	0	692	184	209
Adj No. of Lanes	1	3	1	1	2	1	2	2	1	2	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	18	3	7	12	6	6	13	11	23	2	6	20
Cap, veh/h	450	1142	342	454	899	402	250	216	87	718	349	262
Arrive On Green	0.18	0.23	0.00	0.22	0.26	0.00	0.08	0.07	0.00	0.21	0.19	0.19
Sat Flow, veh/h	1533	5036	1509	1616	3406	1524	3107	3252	1313	3442	1792	1346
Grp Volume(v), veh/h	324	1025	0	441	563	0	178	109	0	692	184	209
Grp Sat Flow(s),veh/h/ln	1533	1679	1509	1616	1703	1524	1553	1626	1313	1721	1792	1346
Q Serve(g_s), s	13.6	17.1	0.0	18.1	12.6	0.0	4.8	2.8	0.0	17.2	7.9	12.8
Cycle Q Clear(g_c), s	13.6	17.1	0.0	18.1	12.6	0.0	4.8	2.8	0.0	17.2	7.9	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	450	1142	342	454	899	402	250	216	87	718	349	262
V/C Ratio(X)	0.72	0.90	0.00	0.97	0.63	0.00	0.71	0.51	0.00	0.96	0.53	0.80
Avail Cap(c_a), veh/h	472	1167	350	454	899	402	324	339	137	718	374	281
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	32.4	0.0	20.6	28.0	0.0	38.7	38.9	0.0	33.8	31.2	33.1
Incr Delay (d2), s/veh	5.0	9.3	0.0	34.9	1.4	0.0	5.1	1.8	0.0	24.9	1.2	14.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.4	13.7	0.0	18.0	10.1	0.0	4.1	2.4	0.0	16.0	7.3	9.7
LnGrp Delay(d),s/veh	25.0	41.7	0.0	55.5	29.4	0.0	43.8	40.7	0.0	58.7	32.4	47.2
LnGrp LOS	C	D		E	C		D	D		E	C	D
Approach Vol, veh/h	1349				1004				287			
Approach Delay, s/veh	37.7				40.9				42.6			
Approach LOS	D				D				D			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.8	28.8	12.9	22.8	25.0	25.6	24.0	11.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	17.0	22.0	9.0	18.0	19.0	20.0	18.0	9.0				
Max Q Clear Time (g_c+I1), s	15.6	14.6	6.8	14.8	20.1	19.1	19.2	4.8				
Green Ext Time (p_c), s	0.2	5.3	0.1	0.8	0.0	0.5	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay	43.1											
HCM 2010 LOS	D											

HCM 2010 Signalized Intersection Summary

3: Washington Rd & N Commerce Dr/Retail Dwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	431	9	255	6	1	10	152	433	3	15	599	268
Future Volume (veh/h)	431	9	255	6	1	10	152	433	3	15	599	268
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1864	1900	1900	1771	1900	1776	1826	1900	1759	1827	1610
Adj Flow Rate, veh/h	435	9	258	6	1	10	154	437	3	15	605	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	0	0	0	0	0	7	4	4	8	4	18
Cap, veh/h	632	21	588	424	53	530	341	1399	10	411	1375	542
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.40	0.40	0.40	0.40	0.40	0.00
Sat Flow, veh/h	1320	54	1539	1130	139	1388	774	3532	24	893	3471	1369
Grp Volume(v), veh/h	435	0	267	6	0	11	154	215	225	15	605	0
Grp Sat Flow(s),veh/h/ln	1320	0	1592	1130	0	1526	774	1735	1822	893	1736	1369
Q Serve(g_s), s	16.5	0.0	6.7	0.2	0.0	0.2	9.8	4.6	4.6	0.6	6.9	0.0
Cycle Q Clear(g_c), s	16.8	0.0	6.7	6.9	0.0	0.2	16.7	4.6	4.6	5.3	6.9	0.0
Prop In Lane	1.00		0.97	1.00		0.91	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	632	0	609	424	0	583	341	687	722	411	1375	542
V/C Ratio(X)	0.69	0.00	0.44	0.01	0.00	0.02	0.45	0.31	0.31	0.04	0.44	0.00
Avail Cap(c_a), veh/h	737	0	736	514	0	705	363	737	774	436	1475	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.6	0.0	12.4	15.0	0.0	10.4	18.1	11.3	11.3	13.1	12.0	0.0
Incr Delay (d2), s/veh	2.2	0.0	0.5	0.0	0.0	0.0	0.9	0.3	0.2	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.4	0.0	5.5	0.1	0.0	0.2	3.9	4.1	4.3	0.3	6.0	0.0
LnGrp Delay(d),s/veh	17.8	0.0	12.9	15.0	0.0	10.4	19.0	11.5	11.5	13.1	12.2	0.0
LnGrp LOS	B		B	B		B	B	B	B	B	B	
Approach Vol, veh/h	702					17		594		620		
Approach Delay, s/veh	16.0					12.0		13.5		12.2		
Approach LOS	B					B		B		B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	27.4		26.7		27.4		26.7					
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0					
Max Green Setting (Gmax), s	23.0		25.0		23.0		25.0					
Max Q Clear Time (g_c+l1), s	18.7		18.8		8.9		8.9					
Green Ext Time (p_c), s	2.7		1.9		6.6		3.1					
Intersection Summary												
HCM 2010 Ctrl Delay	14.0											
HCM 2010 LOS	B											

HCM 2010 Signalized Intersection Summary

4: SR 139/Riverdale Rd & Phoenix Blvd/ Forest Pkwy

06/02/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	231	211	148	155	273	103	1021	87	394	2019	336
Future Volume (veh/h)	306	231	211	148	155	273	103	1021	87	394	2019	336
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1863	1792	1863	1863	1810	1743	1881	1881
Adj Flow Rate, veh/h	322	243	0	156	163	178	108	1075	0	415	2125	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	3	0	3	2	6	2	2	5	9	1	1
Cap, veh/h	293	454	209	212	383	165	143	1626	706	480	2025	906
Arrive On Green	0.08	0.13	0.00	0.06	0.11	0.11	0.04	0.46	0.00	0.15	0.57	0.00
Sat Flow, veh/h	3510	3505	1615	3408	3539	1524	3442	3539	1538	3221	3574	1599
Grp Volume(v), veh/h	322	243	0	156	163	178	108	1075	0	415	2125	0
Grp Sat Flow(s),veh/h/ln	1755	1752	1615	1704	1770	1524	1721	1770	1538	1610	1787	1599
Q Serve(g_s), s	10.0	7.8	0.0	5.4	5.2	13.0	3.7	28.3	0.0	15.1	68.0	0.0
Cycle Q Clear(g_c), s	10.0	7.8	0.0	5.4	5.2	13.0	3.7	28.3	0.0	15.1	68.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	454	209	212	383	165	143	1626	706	480	2025	906
V/C Ratio(X)	1.10	0.54	0.00	0.74	0.43	1.08	0.75	0.66	0.00	0.86	1.05	0.00
Avail Cap(c_a), veh/h	293	454	209	284	383	165	143	1626	706	617	2025	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.0	48.9	0.0	55.3	50.0	53.5	56.9	25.2	0.0	49.9	26.0	0.0
Incr Delay (d2), s/veh	82.3	1.2	0.0	6.6	0.7	92.5	19.9	1.0	0.0	10.0	34.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.7	6.9	0.0	4.9	4.6	17.5	3.9	20.1	0.0	11.9	77.1	0.0
LnGrp Delay(d),s/veh	137.3	50.1	0.0	61.9	50.8	146.0	76.8	26.2	0.0	59.9	60.3	0.0
LnGrp LOS	F	D		E	D	F	E	C		E	F	
Approach Vol, veh/h		565			497			1183			2540	
Approach Delay, s/veh		99.8			88.4			30.8			60.3	
Approach LOS		F			F			C			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	74.0	13.5	21.5	23.9	61.1	16.0	19.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	68.0	10.0	13.0	23.0	50.0	10.0	13.0				
Max Q Clear Time (g_c+I1), s	5.7	70.0	7.4	9.8	17.1	30.3	12.0	15.0				
Green Ext Time (p_c), s	0.0	0.0	0.1	1.0	0.8	18.2	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			60.6									
HCM 2010 LOS			E									

HCM 2010 TWSC

5: Majestic PI & SR 14

05/26/2020

Intersection												
Int Delay, s/veh	521.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1561	5	71	2330	110	3	0	34	61	0	5
Future Vol, veh/h	5	1561	5	71	2330	110	3	0	34	61	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	215	-	250	320	-	215	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	29	38	3	13	10	0	49	3	0	8
Mvmt Flow	5	1661	5	76	2479	117	3	0	36	65	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2479	0	0	1661	0	0	3063	4302	831	3472	4302	1240
Stage 1	-	-	-	-	-	-	1671	1671	-	2631	2631	-
Stage 2	-	-	-	-	-	-	1392	2631	-	841	1671	-
Critical Hdwy	4.1	-	-	4.86	-	-	7.7	6.5	7.88	7.56	6.5	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.5	-	6.56	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.56	5.5	-
Follow-up Hdwy	2.2	-	-	2.58	-	-	3.6	4	3.79	3.53	4	3.38
Pot Cap-1 Maneuver	189	-	-	254	-	-	5	2	231	~ 2	2	158
Stage 1	-	-	-	-	-	-	92	154	-	~ 24	50	-
Stage 2	-	-	-	-	-	-	139	50	-	323	154	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	189	-	-	254	-	-	4	1	231	~ 1	1	158
Mov Cap-2 Maneuver	-	-	-	-	-	-	4	1	-	~ 1	1	-
Stage 1	-	-	-	-	-	-	90	150	-	~ 23	35	-
Stage 2	-	-	-	-	-	-	94	35	-	265	150	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.7	137.5	\$ 32941.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	4	231	189	-	-	254	-	-	1	158
HCM Lane V/C Ratio	0.798	0.157	0.028	-	-	0.297	-	-	64.894	0.034
HCM Control Delay (s)	\$ 1429.8	23.5	24.6	-	-	25.1	-	-	\$-35638.9	28.6
HCM Lane LOS	F	C	C	-	-	D	-	-	F	D
HCM 95th %tile Q(veh)	1	0.5	0.1	-	-	1.2	-	-	10.3	0.1

Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

HCM 2010 Signalized Intersection Summary
6: SR 279/Old National Hwy & Sullivan Rd

06/03/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	91	263	310	75	19	210	366	242	19	487	22
Future Volume (veh/h)	32	91	263	310	75	19	210	366	242	19	487	22
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1867	1900	1727	1837	1900	1845	1845	1667	1776	1811	1900
Adj Flow Rate, veh/h	34	96	277	326	79	20	221	385	255	20	513	23
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	4	4	10	3	3	3	3	14	7	5	5
Cap, veh/h	606	184	531	330	614	155	245	799	614	293	745	33
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1317	425	1226	932	1416	358	857	1845	1417	749	1720	77
Grp Volume(v), veh/h	34	0	373	326	0	99	221	385	255	20	0	536
Grp Sat Flow(s),veh/h/ln	1317	0	1651	932	0	1774	857	1845	1417	749	0	1797
Q Serve(g_s), s	1.4	0.0	14.9	24.1	0.0	3.0	17.3	13.5	11.2	1.8	0.0	21.7
Cycle Q Clear(g_c), s	4.4	0.0	14.9	39.0	0.0	3.0	39.0	13.5	11.2	15.2	0.0	21.7
Prop In Lane	1.00		0.74	1.00		0.20	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	606	0	715	330	0	769	245	799	614	293	0	779
V/C Ratio(X)	0.06	0.00	0.52	0.99	0.00	0.13	0.90	0.48	0.42	0.07	0.00	0.69
Avail Cap(c_a), veh/h	606	0	715	330	0	769	245	799	614	293	0	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	18.7	35.8	0.0	15.3	38.5	18.3	17.6	23.7	0.0	20.6
Incr Delay (d2), s/veh	0.0	0.0	0.7	46.4	0.0	0.1	32.9	0.5	0.4	0.1	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	11.2	18.1	0.0	2.7	12.2	11.3	7.8	0.7	0.0	16.8
LnGrp Delay(d),s/veh	16.7	0.0	19.4	82.1	0.0	15.4	71.4	18.7	18.1	23.8	0.0	23.2
LnGrp LOS	B		B	F		B	E	B	B	C		C
Approach Vol, veh/h	407				425				861			
Approach Delay, s/veh	19.1				66.6				32.0			
Approach LOS	B				E				C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	45.0		45.0		45.0		45.0					
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0					
Max Green Setting (Gmax), s	39.0		39.0		39.0		39.0					
Max Q Clear Time (g_c+I1), s	23.7		16.9		41.0		41.0					
Green Ext Time (p_c), s	7.4		5.1		0.0		0.0					
Intersection Summary												
HCM 2010 Ctrl Delay	34.0											
HCM 2010 LOS	C											

HCM 2010 Signalized Intersection Summary

7: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	353	1462	41	63	2312	194	140	39	28	191	51	450
Future Volume (veh/h)	353	1462	41	63	2312	194	140	39	28	191	51	450
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1712	1638	1900	1743	1881	1900	1744	1900	1845	1712	1881
Adj Flow Rate, veh/h	360	1492	0	64	2359	0	143	40	0	195	52	0
Adj No. of Lanes	2	2	1	1	3	1	0	1	0	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	11	16	0	9	1	1	1	1	3	11	1
Cap, veh/h	373	1776	760	83	2300	773	211	44	0	199	442	413
Arrive On Green	0.11	0.55	0.00	0.03	0.32	0.00	0.15	0.15	0.00	0.06	0.26	0.00
Sat Flow, veh/h	3442	3252	1392	1810	4759	1599	1049	293	0	3408	1712	1599
Grp Volume(v), veh/h	360	1492	0	64	2359	0	183	0	0	195	52	0
Grp Sat Flow(s),veh/h/ln	1721	1626	1392	1810	1586	1599	1342	0	0	1704	1712	1599
Q Serve(g_s), s	12.5	46.2	0.0	4.2	58.0	0.0	16.1	0.0	0.0	6.9	2.8	0.0
Cycle Q Clear(g_c), s	12.5	46.2	0.0	4.2	58.0	0.0	16.1	0.0	0.0	6.9	2.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.78		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	1776	760	83	2300	773	255	0	0	199	442	413
V/C Ratio(X)	0.97	0.84	0.00	0.77	1.03	0.00	0.72	0.00	0.00	0.98	0.12	0.00
Avail Cap(c_a), veh/h	373	1776	760	90	2300	773	255	0	0	199	442	413
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.09	0.09	0.00	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	22.8	0.0	57.6	40.6	0.0	50.2	0.0	0.0	56.4	34.0	0.0
Incr Delay (d2), s/veh	37.5	5.0	0.0	3.5	13.9	0.0	9.4	0.0	0.0	58.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.5	29.4	0.0	2.9	50.1	0.0	10.8	0.0	0.0	8.4	2.4	0.0
LnGrp Delay(d),s/veh	90.7	27.8	0.0	61.1	54.4	0.0	59.6	0.0	0.0	114.5	34.2	0.0
LnGrp LOS	F	C		E	F		E			F	C	
Approach Vol, veh/h	1852				2423				183		247	
Approach Delay, s/veh	40.1				54.6				59.6		97.6	
Approach LOS	D				D				E		F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2			4	5	6	7	8			
Phs Duration (G+Y+Rc), s	11.5	71.5			37.0	19.0	64.0	13.0	24.0			
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0	6.0	6.0	6.0			
Max Green Setting (Gmax), s	65.0	65.0			31.0	13.0	58.0	7.0	18.0			
Max Q Clear Time (g_c+I1), s	48.2	48.2			4.8	14.5	60.0	8.9	18.1			
Green Ext Time (p_c), s	0.0	16.3			1.4	0.0	0.0	0.0	0.0			
Intersection Summary												
HCM 2010 Ctrl Delay			51.3									
HCM 2010 LOS			D									
Notes												
User approved ignoring U-Turning movement.												

HCM 2010 Signalized Intersection Summary

8: N Commerce Dr & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	245	1368	95	374	2293	326	233	190	210	487	198	303
Future Volume (veh/h)	245	1368	95	374	2293	326	233	190	210	487	198	303
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1689	1900	1810	1757	1900	1776	1827	1759	1881	1827	1881
Adj Flow Rate, veh/h	250	1396	0	382	2340	0	238	194	0	497	202	0
Adj No. of Lanes	2	3	0	2	3	0	1	1	1	3	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	13	13	5	9	9	7	4	8	1	4	1
Cap, veh/h	203	2044	0	440	2478	0	211	228	187	505	183	160
Arrive On Green	0.12	0.89	0.00	0.13	0.52	0.00	0.13	0.13	0.00	0.10	0.10	0.00
Sat Flow, veh/h	3476	4764	0	3343	4955	0	1691	1827	1495	5052	1827	1599
Grp Volume(v), veh/h	250	1396	0	382	2340	0	238	194	0	497	202	0
Grp Sat Flow(s),veh/h/ln	1738	1537	0	1672	1599	0	1691	1827	1495	1684	1827	1599
Q Serve(g_s), s	7.0	10.4	0.0	13.4	55.2	0.0	15.0	12.5	0.0	11.8	12.0	0.0
Cycle Q Clear(g_c), s	7.0	10.4	0.0	13.4	55.2	0.0	15.0	12.5	0.0	11.8	12.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	2044	0	440	2478	0	211	228	187	505	183	160
V/C Ratio(X)	1.23	0.68	0.00	0.87	0.94	0.00	1.13	0.85	0.00	0.98	1.11	0.00
Avail Cap(c_a), veh/h	203	2044	0	501	2478	0	211	228	187	505	183	160
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.0	4.4	0.0	51.1	27.4	0.0	52.5	51.4	0.0	53.9	54.0	0.0
Incr Delay (d2), s/veh	122.4	0.8	0.0	13.6	9.0	0.0	99.8	24.9	0.0	35.7	97.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.2	6.2	0.0	11.4	34.8	0.0	23.1	12.5	0.0	11.5	19.8	0.0
LnGrp Delay(d),s/veh	175.4	5.2	0.0	64.7	36.4	0.0	152.3	76.3	0.0	89.6	151.7	0.0
LnGrp LOS	F	A		E	D		F	E		F	F	
Approach Vol, veh/h	1646		2722				432		699			
Approach Delay, s/veh	31.1		40.4				118.2		107.6			
Approach LOS	C		D				F		F			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.8	59.2	21.0	18.0	13.0	68.0	18.0	21.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	8.0	51.0	15.0	12.0	7.0	62.0	12.0	15.0				
Max Q Clear Time (g_c+l1), s	15.4	12.4	17.0	14.0	9.0	57.2	13.8	14.5				
Green Ext Time (p_c), s	0.4	35.4	0.0	0.0	0.0	4.7	0.0	0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			52.2									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

9: US 41/Old Dixie & SR 331/Forest Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	767	155	206	615	197	108	439	198	364	867	209
Future Volume (veh/h)	199	767	155	206	615	197	108	439	198	364	867	209
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1652	1827	1776	1759	1810	1827	1727	1715	1900	1792	1712	1545
Adj Flow Rate, veh/h	209	807	0	217	647	207	114	462	208	383	913	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	15	4	7	8	5	4	10	12	12	6	11	23
Cap, veh/h	226	949	413	227	911	411	189	445	199	378	1099	444
Arrive On Green	0.14	0.27	0.00	0.14	0.26	0.26	0.05	0.20	0.20	0.19	0.34	0.00
Sat Flow, veh/h	1573	3471	1509	1675	3438	1553	1645	2192	980	1707	3252	1313
Grp Volume(v), veh/h	209	807	0	217	647	207	114	343	327	383	913	0
Grp Sat Flow(s),veh/h/ln	1573	1736	1509	1675	1719	1553	1645	1630	1543	1707	1626	1313
Q Serve(g_s), s	15.5	26.1	0.0	15.2	20.2	13.4	6.0	24.0	24.0	22.0	30.6	0.0
Cycle Q Clear(g_c), s	15.5	26.1	0.0	15.2	20.2	13.4	6.0	24.0	24.0	22.0	30.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	226	949	413	227	911	411	189	330	313	378	1099	444
V/C Ratio(X)	0.92	0.85	0.00	0.96	0.71	0.50	0.60	1.04	1.05	1.01	0.83	0.00
Avail Cap(c_a), veh/h	226	997	434	227	959	433	189	330	313	378	1099	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.0	40.7	0.0	50.8	39.4	36.9	37.8	47.2	47.2	35.1	36.1	0.0
Incr Delay (d2), s/veh	39.7	6.9	0.0	47.9	2.3	1.0	5.3	59.3	63.7	49.6	5.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(95%),veh/ln	14.2	19.3	0.0	15.3	15.0	9.8	2.1	29.1	28.3	31.5	20.8	0.0
LnGrp Delay(d),s/veh	89.8	47.6	0.0	98.8	41.7	37.8	43.1	106.5	110.8	84.7	41.6	0.0
LnGrp LOS	F	D		F	D	D	D	F	F	F	D	
Approach Vol, veh/h	1016				1071				784			
Approach Delay, s/veh	56.3				52.5				99.1			
Approach LOS	E				D				F			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.0	37.4	12.0	46.0	22.0	38.4	28.0	30.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	17.0	33.0	6.0	40.0	16.0	34.0	22.0	24.0				
Max Q Clear Time (g_c+I1), s	17.5	22.2	8.0	32.6	17.2	28.1	24.0	26.0				
Green Ext Time (p_c), s	0.0	7.0	0.0	5.1	0.0	4.3	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	62.8											
HCM 2010 LOS	E											

HCM 2010 Signalized Intersection Summary

10: Toffie Ter & Loop Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↱ ↱	↰ ↱ ↱ ↱		↰ ↱ ↱ ↱	↰ ↱ ↱ ↱		↰ ↱ ↱ ↱	↰ ↱ ↱ ↱		↰ ↱ ↱ ↱	↰ ↱ ↱ ↱	
Traffic Volume (veh/h)	153	335	54	58	860	182	355	65	87	97	31	164
Future Volume (veh/h)	153	335	54	58	860	182	355	65	87	97	31	164
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1688	1900	1881	1804	1900	1845	1858	1900	1845	1789	1900
Adj Flow Rate, veh/h	172	376	61	65	966	204	399	73	98	109	35	184
Adj No. of Lanes	1	3	0	1	2	0	1	2	0	1	2	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
Percent Heavy Veh, %	12	11	11	1	5	5	3	4	4	3	2	2
Cap, veh/h	233	1666	264	499	1074	227	377	596	533	202	172	154
Arrive On Green	0.08	0.42	0.42	0.04	0.38	0.38	0.17	0.34	0.34	0.10	0.10	0.10
Sat Flow, veh/h	1616	4014	635	1792	2818	594	1757	1765	1579	1197	1700	1521
Grp Volume(v), veh/h	172	286	151	65	587	583	399	73	98	109	35	184
Grp Sat Flow(s),veh/h/ln	1616	1536	1576	1792	1713	1699	1757	1765	1579	1197	1700	1521
Q Serve(g_s), s	5.7	5.3	5.5	1.9	28.6	28.8	15.0	2.5	3.9	8.0	1.7	9.0
Cycle Q Clear(g_c), s	5.7	5.3	5.5	1.9	28.6	28.8	15.0	2.5	3.9	8.0	1.7	9.0
Prop In Lane	1.00		0.40	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	1276	654	499	653	648	377	596	533	202	172	154
V/C Ratio(X)	0.74	0.22	0.23	0.13	0.90	0.90	1.06	0.12	0.18	0.54	0.20	1.20
Avail Cap(c_a), veh/h	233	1279	656	520	675	669	377	596	533	202	172	154
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	16.8	16.8	15.2	25.9	25.9	29.9	20.4	20.8	39.5	36.7	39.9
Incr Delay (d2), s/veh	11.6	0.1	0.2	0.1	14.7	15.0	62.2	0.1	0.2	2.8	0.6	134.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	4.1	4.4	1.7	22.8	22.7	11.7	2.3	3.1	5.0	1.5	17.1
LnGrp Delay(d),s/veh	32.2	16.9	17.0	15.3	40.5	40.9	92.1	20.4	21.0	42.3	37.2	174.5
LnGrp LOS	C	B	B	B	D	D	F	C	C	D	D	F
Approach Vol, veh/h	609			1235			570			328		
Approach Delay, s/veh	21.2			39.4			70.7			115.9		
Approach LOS	C			D			E			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	13.0	39.9	21.0	15.0	10.0	42.9		36.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	35.0	15.0	9.0	5.0	37.0		30.0				
Max Q Clear Time (g_c+I1), s	7.7	30.8	17.0	11.0	3.9	7.5		5.9				
Green Ext Time (p_c), s	0.0	3.1	0.0	0.0	0.0	12.1		2.7				
Intersection Summary												
HCM 2010 Ctrl Delay	51.0											
HCM 2010 LOS	D											

HCM 2010 Signalized Intersection Summary

11: SR 139/Riverdale Road & Sullivan Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	165	187	156	148	522	130	656	130	374	869	8
Future Volume (veh/h)	15	165	187	156	148	522	130	656	130	374	869	8
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1727	1674	1900	1792	1726	1900	1827	1863	1863	1743	1863	1900
Adj Flow Rate, veh/h	16	172	195	162	154	544	135	683	0	390	905	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	22	22	6	21	21	4	2	2	9	2	0
Cap, veh/h	80	273	309	260	127	449	275	809	362	427	1244	568
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.07	0.23	0.00	0.19	0.35	0.00
Sat Flow, veh/h	690	717	813	973	335	1182	1740	3539	1583	1660	3539	1615
Grp Volume(v), veh/h	16	0	367	162	0	698	135	683	0	390	905	0
Grp Sat Flow(s),veh/h/ln	690	0	1531	973	0	1517	1740	1770	1583	1660	1770	1615
Q Serve(g_s), s	0.0	0.0	17.5	14.6	0.0	34.0	5.3	16.5	0.0	15.4	19.9	0.0
Cycle Q Clear(g_c), s	34.0	0.0	17.5	32.1	0.0	34.0	5.3	16.5	0.0	15.4	19.9	0.0
Prop In Lane	1.00		0.53	1.00		0.78	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	0	582	260	0	577	275	809	362	427	1244	568
V/C Ratio(X)	0.20	0.00	0.63	0.62	0.00	1.21	0.49	0.84	0.00	0.91	0.73	0.00
Avail Cap(c_a), veh/h	80	0	582	260	0	577	275	831	372	427	1266	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.7	0.0	22.6	35.7	0.0	27.7	24.6	33.0	0.0	20.9	25.3	0.0
Incr Delay (d2), s/veh	1.2	0.0	2.2	4.6	0.0	110.1	1.4	7.8	0.0	23.7	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	0.0	12.2	7.6	0.0	57.1	4.7	13.8	0.0	14.9	15.2	0.0
LnGrp Delay(d),s/veh	45.9	0.0	24.8	40.2	0.0	137.9	26.0	40.8	0.0	44.7	27.4	0.0
LnGrp LOS	D		C	D		F	C	D		D	C	
Approach Vol, veh/h	383			860			818			1295		
Approach Delay, s/veh	25.7			119.5			38.3			32.6		
Approach LOS	C			F			D			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	37.5		40.0	23.0	26.5		40.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	6.0	32.0		34.0	17.0	21.0		34.0				
Max Q Clear Time (g_c+I1), s	7.3	21.9		36.0	17.4	18.5		36.0				
Green Ext Time (p_c), s	0.0	6.5		0.0	0.0	2.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	55.5											
HCM 2010 LOS	E											

HCM Signalized Intersection Capacity Analysis

12: Lake Mirror Road & S Loop Road & I-285 On Ramp

05/26/2020



Movement	EBL	EBT	EBR	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	282	535	443	215	8	26	115	557
Future Volume (vph)	282	535	443	215	8	26	115	557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0				6.0
Lane Util. Factor	1.00	0.95	1.00	1.00				0.95
Flt	1.00	1.00	0.85	0.86				1.00
Flt Protected	1.00	1.00	1.00	1.00				0.99
Satd. Flow (prot)	1900	3167	1380	1567				3273
Flt Permitted	1.00	1.00	1.00	1.00				0.99
Satd. Flow (perm)	1900	3167	1380	1567				3273
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	300	569	471	229	9	28	122	593
RTOR Reduction (vph)	0	0	314	92	0	0	0	79
Lane Group Flow (vph)	300	569	157	146	0	0	0	664
Heavy Vehicles (%)	0%	14%	17%	5%	2%	2%	7%	10%
Turn Type	Split	NA	Prot	Perm		Perm	Perm	NA
Protected Phases	6	6	6					7
Permitted Phases				8		7	7	
Actuated Green, G (s)	24.8	24.8	24.8	11.6				20.2
Effective Green, g (s)	24.8	24.8	24.8	11.6				20.2
Actuated g/C Ratio	0.33	0.33	0.33	0.16				0.27
Clearance Time (s)	6.0	6.0	6.0	6.0				6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0				3.0
Lane Grp Cap (vph)	631	1052	458	243				886
v/s Ratio Prot	0.16	c0.18	0.11					
v/s Ratio Perm				c0.09				0.20
v/c Ratio	0.48	0.54	0.34	0.60				0.75
Uniform Delay, d1	19.7	20.3	18.8	29.3				24.9
Progression Factor	1.00	1.00	1.00	1.00				1.00
Incremental Delay, d2	0.6	0.6	0.4	4.1				3.5
Delay (s)	20.3	20.8	19.2	33.5				28.4
Level of Service	C	C	B	C				C
Approach Delay (s)		20.1						28.4
Approach LOS		C						C
Intersection Summary								
HCM 2000 Control Delay			24.1		HCM 2000 Level of Service			C
HCM 2000 Volume to Capacity ratio			0.63					
Actuated Cycle Length (s)			74.6		Sum of lost time (s)			18.0
Intersection Capacity Utilization			63.9%		ICU Level of Service			B
Analysis Period (min)			15					
c Critical Lane Group								

HCM 2010 Signalized Intersection Summary

13: Clark Howell Hwy & Lake Mirror Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	27	911	77	63	91	125	546	12	0	0	0
Future Volume (veh/h)	53	27	911	77	63	91	125	546	12	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1421	1727	1900	1770	1743	1792	1693	1900			
Adj Flow Rate, veh/h	58	29	0	84	68	99	136	593	0			
Adj No. of Lanes	0	1	1	0	1	1	1	2	0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	45	45	10	4	4	9	6	12	6			
Cap, veh/h	322	101	323	357	199	325	580	1093	0			
Arrive On Green	0.22	0.22	0.00	0.22	0.22	0.22	0.34	0.34	0.00			
Sat Flow, veh/h	463	460	1468	694	906	1482	1707	3301	0			
Grp Volume(v), veh/h	87	0	0	152	0	99	136	593	0			
Grp Sat Flow(s),veh/h/ln	922	0	1468	1599	0	1482	1707	1608	0			
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	1.5	1.6	4.1	0.0			
Cycle Q Clear(g_c), s	2.7	0.0	0.0	2.0	0.0	1.5	1.6	4.1	0.0			
Prop In Lane	0.67		1.00	0.55		1.00	1.00		0.00			
Lane Grp Cap(c), veh/h	423	0	323	556	0	325	580	1093	0			
V/C Ratio(X)	0.21	0.00	0.00	0.27	0.00	0.30	0.23	0.54	0.00			
Avail Cap(c_a), veh/h	1346	0	1616	1861	0	1631	1128	2125	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	9.2	0.0	0.0	9.1	0.0	8.9	6.4	7.3	0.0			
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.5	0.2	0.4	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	1.1	0.0	0.0	1.8	0.0	1.2	1.4	3.2	0.0			
LnGrp Delay(d),s/veh	9.4	0.0	0.0	9.3	0.0	9.4	6.7	7.7	0.0			
LnGrp LOS	A			A		A	A	A				
Approach Vol, veh/h	87			251			729					
Approach Delay, s/veh	9.4			9.4			7.5					
Approach LOS	A			A			A					
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4	6			8				
Phs Duration (G+Y+Rc), s				12.0	15.3			12.0				
Change Period (Y+Rc), s				6.0	6.0			6.0				
Max Green Setting (Gmax), s				30.0	18.0			30.0				
Max Q Clear Time (g_c+I1), s				4.7	6.1			4.0				
Green Ext Time (p_c), s				1.8	3.2			1.8				
Intersection Summary												
HCM 2010 Ctrl Delay	8.1											
HCM 2010 LOS	A											

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↗			↕↗	
Traffic Vol, veh/h	77	1	188	4	1	1	111	358	5	7	266	44
Future Vol, veh/h	77	1	188	4	1	1	111	358	5	7	266	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	-	175	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	7	100	8	67	100	50	21	8	67	8	8	16
Mvmt Flow	88	1	214	5	1	1	126	407	6	8	302	50
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	799	1008	176	830	1030	207	352	0	0	413	0	0
Stage 1	343	343	-	662	662	-	-	-	-	-	-	-
Stage 2	456	665	-	168	368	-	-	-	-	-	-	-
Critical Hdwy	7.64	8.5	7.06	8.84	8.5	7.9	4.52	-	-	4.26	-	-
Critical Hdwy Stg 1	6.64	7.5	-	7.84	7.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.64	7.5	-	7.84	7.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.57	5	3.38	4.17	5	3.8	2.41	-	-	2.28	-	-
Pot Cap-1 Maneuver	268	124	818	175	119	670	1078	-	-	1101	-	-
Stage 1	632	443	-	292	277	-	-	-	-	-	-	-
Stage 2	541	276	-	659	427	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	240	109	818	116	104	670	1078	-	-	1101	-	-
Mov Cap-2 Maneuver	240	109	-	116	104	-	-	-	-	-	-	-
Stage 1	558	439	-	258	245	-	-	-	-	-	-	-
Stage 2	475	244	-	481	423	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	16.2			33.8			2.1			0.2		
HCM LOS	C			D								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1078	-	-	236	818	132	1101	-	-			
HCM Lane V/C Ratio	0.117	-	-	0.376	0.261	0.052	0.007	-	-			
HCM Control Delay (s)	8.8	-	-	29.1	10.9	33.8	8.3	0	-			
HCM Lane LOS	A	-	-	D	B	D	A	A	-			
HCM 95th %tile Q(veh)	0.4	-	-	1.7	1	0.2	0	-	-			

HCM 2010 Signalized Intersection Summary

15: SR 314/W Fayetteville Road & SR 139/Riverdale Road

05/26/2020

								
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations								
Traffic Volume (veh/h)	0	682	596	376	536	397	162	
Future Volume (veh/h)	0	682	596	376	536	397	162	
Number		6	16	5	2	3	18	
Initial Q (Qb), veh		0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln		1827	1881	1881	1827	1881	1863	
Adj Flow Rate, veh/h		710	621	392	558	414	0	
Adj No. of Lanes		2	1	1	2	2	1	
Peak Hour Factor		0.96	0.96	0.96	0.96	0.96	0.96	
Percent Heavy Veh, %		4	1	1	4	1	2	
Cap, veh/h		1522	701	492	2337	542	247	
Arrive On Green		0.44	0.44	0.15	0.67	0.16	0.00	
Sat Flow, veh/h		3563	1599	1792	3563	3476	1583	
Grp Volume(v), veh/h		710	621	392	558	414	0	
Grp Sat Flow(s),veh/h/ln		1736	1599	1792	1736	1738	1583	
Q Serve(g_s), s		10.1	25.1	7.6	4.4	8.0	0.0	
Cycle Q Clear(g_c), s		10.1	25.1	7.6	4.4	8.0	0.0	
Prop In Lane			1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		1522	701	492	2337	542	247	
V/C Ratio(X)		0.47	0.89	0.80	0.24	0.76	0.00	
Avail Cap(c_a), veh/h		1581	728	785	2964	890	406	
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh		13.9	18.1	11.1	4.5	28.4	0.0	
Incr Delay (d2), s/veh		0.2	12.3	3.0	0.1	2.3	0.0	
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(95%),veh/ln		8.5	19.2	7.4	3.8	7.2	0.0	
LnGrp Delay(d),s/veh		14.2	30.5	14.1	4.5	30.7	0.0	
LnGrp LOS		B	C	B	A	C		
Approach Vol, veh/h		1331			950	414		
Approach Delay, s/veh		21.8			8.5	30.7		
Approach LOS		C			A	C		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		53.3			16.5	36.8		17.0
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		60.0			22.0	32.0		18.0
Max Q Clear Time (g_c+I1), s		6.4			9.6	27.1		10.0
Green Ext Time (p_c), s		15.5			1.0	3.8		0.9
Intersection Summary								
HCM 2010 Ctrl Delay			18.4					
HCM 2010 LOS			B					
Notes								
User approved ignoring U-Turning movement.								

HCM 2010 Signalized Intersection Summary

16: Global Gateway Connector & SR 139/Riverdale Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	221	53	114	267	200	52	110	215	359	180	46
Future Volume (veh/h)	22	221	53	114	267	200	52	110	215	359	180	46
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1870	1900	1845	1881	1863	1863	1833	1900	1845	1863	1900
Adj Flow Rate, veh/h	23	233	56	120	281	0	55	116	0	378	189	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1	3	1	2	2	3	3	3	2	0
Cap, veh/h	304	453	107	348	1216	539	271	222	0	591	833	722
Arrive On Green	0.16	0.16	0.16	0.08	0.34	0.00	0.12	0.12	0.00	0.22	0.45	0.00
Sat Flow, veh/h	1116	2856	673	1757	3574	1583	1189	1833	0	1757	1863	1615
Grp Volume(v), veh/h	23	143	146	120	281	0	55	116	0	378	189	0
Grp Sat Flow(s),veh/h/ln	1116	1777	1752	1757	1787	1583	1189	1833	0	1757	1863	1615
Q Serve(g_s), s	1.0	4.2	4.3	3.0	3.2	0.0	2.4	3.4	0.0	9.7	3.5	0.0
Cycle Q Clear(g_c), s	1.0	4.2	4.3	3.0	3.2	0.0	2.4	3.4	0.0	9.7	3.5	0.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	282	278	348	1216	539	271	222	0	591	833	722
V/C Ratio(X)	0.08	0.51	0.52	0.34	0.23	0.00	0.20	0.52	0.00	0.64	0.23	0.00
Avail Cap(c_a), veh/h	503	598	589	372	1899	841	570	682	0	858	1583	1373
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	21.7	21.8	16.6	13.3	0.0	22.9	23.3	0.0	14.4	9.6	0.0
Incr Delay (d2), s/veh	0.1	1.4	1.5	0.6	0.1	0.0	0.4	1.9	0.0	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	3.9	3.9	2.7	2.8	0.0	1.5	3.2	0.0	8.4	3.3	0.0
LnGrp Delay(d),s/veh	20.5	23.2	23.3	17.2	13.4	0.0	23.2	25.2	0.0	15.5	9.7	0.0
LnGrp LOS	C	C	C	B	B		C	C		B	A	
Approach Vol, veh/h		312			401			171			567	
Approach Delay, s/veh		23.0			14.5			24.6			13.6	
Approach LOS		C			B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		25.2		31.3	10.3	15.0	18.4	12.8				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s		30.0		48.0	5.0	19.0	21.0	21.0				
Max Q Clear Time (g_c+I1), s		5.2		5.5	5.0	6.3	11.7	5.4				
Green Ext Time (p_c), s		3.3		1.8	0.0	2.6	0.8	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			17.2									
HCM 2010 LOS			B									

HCM 2010 AWSC

17: Scarborough Rd & Welcome All Road

05/26/2020

Intersection

Intersection Delay, s/veh 49.8

Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	172	30	42	189	171	48	93	50	277	205	29
Future Vol, veh/h	22	172	30	42	189	171	48	93	50	277	205	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	15	2	8	3	4	5	2	6	1	6	5	3
Mvmt Flow	23	181	32	44	199	180	51	98	53	292	216	31
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	20	36.4	17.2	85.5
HCM LOS	C	E	C	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	10%	10%	54%
Vol Thru, %	49%	77%	47%	40%
Vol Right, %	26%	13%	43%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	191	224	402	511
LT Vol	48	22	42	277
Through Vol	93	172	189	205
RT Vol	50	30	171	29
Lane Flow Rate	201	236	423	538
Geometry Grp	1	1	1	1
Degree of Util (X)	0.435	0.52	0.826	1.065
Departure Headway (Hd)	8.116	8.317	7.335	7.131
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	446	436	495	506
Service Time	6.116	6.317	5.335	5.22
HCM Lane V/C Ratio	0.451	0.541	0.855	1.063
HCM Control Delay	17.2	20	36.4	85.5
HCM Lane LOS	C	C	E	F
HCM 95th-tile Q	2.2	2.9	8.1	16.3

HCM 2010 Signalized Intersection Summary

18: Washington Road & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	257	991	106	133	1746	28	98	211	122	22	233	240
Future Volume (veh/h)	257	991	106	133	1746	28	98	211	122	22	233	240
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1845	1845	1792	1863	1810	1863	1776	1810	1810	1743	1863
Adj Flow Rate, veh/h	265	1022	0	137	1800	0	101	218	126	23	240	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	3	6	2	5	2	7	5	5	9	2
Cap, veh/h	254	1928	863	352	1652	718	150	301	260	152	261	237
Arrive On Green	0.14	0.55	0.00	0.06	0.47	0.00	0.04	0.17	0.17	0.02	0.15	0.00
Sat Flow, veh/h	1792	3505	1568	1707	3539	1538	1774	1776	1538	1723	1743	1583
Grp Volume(v), veh/h	265	1022	0	137	1800	0	101	218	126	23	240	0
Grp Sat Flow(s),veh/h/ln	1792	1752	1568	1707	1770	1538	1774	1776	1538	1723	1743	1583
Q Serve(g_s), s	17.0	22.2	0.0	5.0	56.0	0.0	5.0	13.9	8.9	1.3	16.3	0.0
Cycle Q Clear(g_c), s	17.0	22.2	0.0	5.0	56.0	0.0	5.0	13.9	8.9	1.3	16.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	1928	863	352	1652	718	150	301	260	152	261	237
V/C Ratio(X)	1.04	0.53	0.00	0.39	1.09	0.00	0.67	0.72	0.48	0.15	0.92	0.00
Avail Cap(c_a), veh/h	254	1928	863	395	1652	718	150	301	260	185	261	237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.5	17.1	0.0	15.6	32.0	0.0	44.9	47.2	45.1	42.2	50.3	0.0
Incr Delay (d2), s/veh	68.5	0.3	0.0	0.7	50.9	0.0	11.2	8.4	1.4	0.5	34.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	23.8	16.1	0.0	4.2	70.2	0.0	2.5	12.0	7.0	1.2	15.7	0.0
LnGrp Delay(d),s/veh	120.0	17.4	0.0	16.3	82.9	0.0	56.0	55.6	46.5	42.7	84.9	0.0
LnGrp LOS	F	B		B	F		E	E	D	D	F	
Approach Vol, veh/h	1287			1937			445			263		
Approach Delay, s/veh	38.5			78.2			53.1			81.2		
Approach LOS	D			E			D			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.0	62.0	11.0	24.0	13.0	72.0	8.7	26.3				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	56.0	5.0	18.0	10.0	63.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	19.0	58.0	7.0	18.3	7.0	24.2	3.3	15.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	30.0	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay	62.6											
HCM 2010 LOS	E											

Future Year (2029) Capacity Analysis – with Improvements

HCM 2010 Signalized Intersection Summary

1: Ben Hill Rd & Welcome All Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	4	12	0	0	6	37	165	0	1	161	257
Future Volume (veh/h)	270	4	12	0	0	6	37	165	0	1	161	257
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1779	1652	1900	1900	1681	1776	1696	1900	1900	1759	1810
Adj Flow Rate, veh/h	296	0	0	0	0	0	40	179	0	1	175	0
Adj No. of Lanes	2	0	1	1	1	1	1	2	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	0	15	0	0	13	7	12	0	0	8	5
Cap, veh/h	601	0	250	7	8	6	589	1060	531	650	579	506
Arrive On Green	0.18	0.00	0.00	0.00	0.00	0.00	0.33	0.33	0.00	0.33	0.33	0.00
Sat Flow, veh/h	3382	0	1404	1810	1900	1429	1148	3223	1615	1224	1759	1538
Grp Volume(v), veh/h	296	0	0	0	0	0	40	179	0	1	175	0
Grp Sat Flow(s),veh/h/ln	1691	0	1404	1810	1900	1429	1148	1612	1615	1224	1759	1538
Q Serve(g_s), s	1.9	0.0	0.0	0.0	0.0	0.0	0.7	1.0	0.0	0.0	1.8	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	0.0	0.0	0.0	2.5	1.0	0.0	1.0	1.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	601	0	250	7	8	6	589	1060	531	650	579	506
V/C Ratio(X)	0.49	0.00	0.00	0.00	0.00	0.00	0.07	0.17	0.00	0.00	0.30	0.00
Avail Cap(c_a), veh/h	2225	0	924	521	547	411	1108	2518	1262	1204	1374	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.0	0.0	0.0	0.0	0.0	0.0	7.0	5.8	0.0	6.1	6.1	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.0	0.0	1.7	0.0
LnGrp Delay(d),s/veh	9.6	0.0	0.0	0.0	0.0	0.0	7.0	5.9	0.0	6.1	6.4	0.0
LnGrp LOS	A						A	A		A	A	
Approach Vol, veh/h		296			0			219			176	
Approach Delay, s/veh		9.6			0.0			6.1			6.4	
Approach LOS		A						A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.0		10.3		14.0		0.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		19.0		16.0		19.0		7.0				
Max Q Clear Time (g_c+I1), s		3.8		3.9		4.5		0.0				
Green Ext Time (p_c), s		1.9		0.8		1.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			7.7									
HCM 2010 LOS			A									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 2010 Signalized Intersection Summary

2: Loop Rd & Maynard Jackson Blvd/Charles W Grant Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	331	145	223	708	618	356	259	421	310	84	157
Future Volume (veh/h)	194	331	145	223	708	618	356	259	421	310	84	157
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1462	1759	1597	1429	1827	1827	1759	1810	1597	1776	1681	1570
Adj Flow Rate, veh/h	204	348	0	235	745	0	375	273	0	326	88	165
Adj No. of Lanes	2	3	1	1	2	1	2	2	1	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	30	8	19	33	4	4	8	5	19	7	13	21
Cap, veh/h	270	1091	308	442	989	443	477	583	230	413	250	332
Arrive On Green	0.10	0.23	0.00	0.16	0.28	0.00	0.15	0.17	0.00	0.13	0.15	0.15
Sat Flow, veh/h	2700	4803	1357	1361	3471	1553	3250	3438	1357	3281	1681	1335
Grp Volume(v), veh/h	204	348	0	235	745	0	375	273	0	326	88	165
Grp Sat Flow(s),veh/h/ln	1350	1601	1357	1361	1736	1553	1625	1719	1357	1640	1681	1335
Q Serve(g_s), s	5.5	4.5	0.0	9.6	14.7	0.0	8.4	5.4	0.0	7.2	3.5	8.0
Cycle Q Clear(g_c), s	5.5	4.5	0.0	9.6	14.7	0.0	8.4	5.4	0.0	7.2	3.5	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	1091	308	442	989	443	477	583	230	413	250	332
V/C Ratio(X)	0.75	0.32	0.00	0.53	0.75	0.00	0.79	0.47	0.00	0.79	0.35	0.50
Avail Cap(c_a), veh/h	324	1091	308	554	1202	538	693	916	361	481	336	400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	24.2	0.0	17.1	24.4	0.0	30.9	28.1	0.0	31.9	28.7	24.2
Incr Delay (d2), s/veh	8.0	0.2	0.0	1.0	2.2	0.0	3.8	0.6	0.0	7.5	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	3.6	0.0	6.6	11.8	0.0	7.2	4.7	0.0	6.6	3.1	5.4
LnGrp Delay(d),s/veh	40.9	24.3	0.0	18.1	26.6	0.0	34.6	28.7	0.0	39.4	29.6	25.3
LnGrp LOS	D	C		B	C		C	C		D	C	C
Approach Vol, veh/h		552			980			648			579	
Approach Delay, s/veh		30.5			24.6			32.1			33.9	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.5	27.4	17.0	17.2	17.9	23.1	15.4	18.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	9.0	26.0	16.0	15.0	18.0	17.0	11.0	20.0				
Max Q Clear Time (g_c+I1), s	7.5	16.7	10.4	10.0	11.6	6.5	9.2	7.4				
Green Ext Time (p_c), s	0.1	4.7	0.7	1.2	0.4	5.1	0.2	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			29.5									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

3: Washington Rd & N Commerce Dr/Retail Dwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	2	86	2	2	1	147	484	1	6	357	444
Future Volume (veh/h)	95	2	86	2	2	1	147	484	1	6	357	444
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1462	1730	1900	1900	1900	1900	1810	1793	1900	1900	1759	1743
Adj Flow Rate, veh/h	107	2	97	2	2	1	165	544	1	7	401	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
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
Percent Heavy Veh, %	30	0	0	0	0	0	5	6	6	0	8	9
Cap, veh/h	338	4	205	288	169	85	555	1929	4	441	982	435
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.11	0.55	0.55	0.29	0.29	0.00
Sat Flow, veh/h	1105	30	1446	1317	1196	598	1723	3488	6	875	3343	1482
Grp Volume(v), veh/h	107	0	99	2	0	3	165	266	279	7	401	0
Grp Sat Flow(s),veh/h/ln	1105	0	1475	1317	0	1794	1723	1703	1792	875	1671	1482
Q Serve(g_s), s	3.6	0.0	2.4	0.1	0.0	0.1	2.3	3.2	3.2	0.2	3.8	0.0
Cycle Q Clear(g_c), s	3.7	0.0	2.4	2.5	0.0	0.1	2.3	3.2	3.2	0.2	3.8	0.0
Prop In Lane	1.00		0.98	1.00		0.33	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	338	0	209	288	0	254	555	942	991	441	982	435
V/C Ratio(X)	0.32	0.00	0.47	0.01	0.00	0.01	0.30	0.28	0.28	0.02	0.41	0.00
Avail Cap(c_a), veh/h	519	0	451	504	0	548	591	1561	1642	740	2127	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.1	0.0	15.5	16.7	0.0	14.5	7.1	4.7	4.7	9.9	11.1	0.0
Incr Delay (d2), s/veh	0.5	0.0	1.7	0.0	0.0	0.0	0.3	0.2	0.2	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.0	2.0	0.0	0.0	0.1	2.0	2.7	2.9	0.1	3.2	0.0
LnGrp Delay(d),s/veh	16.6	0.0	17.2	16.7	0.0	14.5	7.4	4.8	4.8	9.9	11.4	0.0
LnGrp LOS	B		B	B		B	A	A	A	A	B	
Approach Vol, veh/h	206					5		710			408	
Approach Delay, s/veh	16.9					15.4		5.4			11.4	
Approach LOS	B					B		A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		5		6		8			
Phs Duration (G+Y+Rc), s	27.7		11.6		10.2		17.5		11.6			
Change Period (Y+Rc), s	6.0		6.0		6.0		6.0		6.0			
Max Green Setting (Gmax), s	36.0		12.0		5.0		25.0		12.0			
Max Q Clear Time (g_c+l1), s	5.2		5.7		4.3		5.8		4.5			
Green Ext Time (p_c), s	6.6		0.5		0.0		5.8		0.6			
Intersection Summary												
HCM 2010 Ctrl Delay			9.1									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary

4: SR 139/Riverdale Rd & Phoenix Blvd/ Forest Pkwy

06/02/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	344	117	67	62	204	188	80	1873	80	229	853	322
Future Volume (veh/h)	344	117	67	62	204	188	80	1873	80	229	853	322
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1792	1827	1776	1810	1667	1881	1863	1810	1696	1845	1863
Adj Flow Rate, veh/h	374	127	0	67	222	127	87	2036	0	249	927	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	6	4	7	5	14	1	2	5	12	3	2
Cap, veh/h	344	498	227	122	287	118	137	1917	833	235	2023	914
Arrive On Green	0.10	0.15	0.00	0.04	0.08	0.08	0.04	0.54	0.00	0.08	0.58	0.00
Sat Flow, veh/h	3442	3406	1553	3281	3438	1417	3476	3539	1538	3134	3505	1583
Grp Volume(v), veh/h	374	127	0	67	222	127	87	2036	0	249	927	0
Grp Sat Flow(s),veh/h/ln	1721	1703	1553	1640	1719	1417	1738	1770	1538	1567	1752	1583
Q Serve(g_s), s	12.0	4.0	0.0	2.4	7.6	10.0	3.0	65.0	0.0	9.0	18.2	0.0
Cycle Q Clear(g_c), s	12.0	4.0	0.0	2.4	7.6	10.0	3.0	65.0	0.0	9.0	18.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	498	227	122	287	118	137	1917	833	235	2023	914
V/C Ratio(X)	1.09	0.26	0.00	0.55	0.77	1.08	0.64	1.06	0.00	1.06	0.46	0.00
Avail Cap(c_a), veh/h	344	498	227	137	287	118	174	1917	833	235	2023	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.0	45.4	0.0	56.8	53.9	55.0	56.8	27.5	0.0	55.5	14.6	0.0
Incr Delay (d2), s/veh	73.7	0.3	0.0	3.8	12.5	104.6	4.8	39.3	0.0	75.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.6	3.4	0.0	2.1	7.4	13.2	2.7	75.4	0.0	11.4	13.7	0.0
LnGrp Delay(d),s/veh	127.7	45.7	0.0	60.6	66.4	159.7	61.6	66.8	0.0	130.7	14.7	0.0
LnGrp LOS	F	D		E	E	F	E	F		F	B	
Approach Vol, veh/h	501				416				2123			
Approach Delay, s/veh	106.9				93.9				66.6			
Approach LOS	F				F				E			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.7	75.3	10.5	23.5	15.0	71.0	18.0	16.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	6.0	68.0	5.0	17.0	9.0	65.0	12.0	10.0				
Max Q Clear Time (g_c+I1), s	5.0	20.2	4.4	6.0	11.0	67.0	14.0	12.0				
Green Ext Time (p_c), s	0.0	37.5	0.0	1.9	0.0	0.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	66.5											
HCM 2010 LOS	E											

HCM 2010 TWSC

5: Majestic PI & SR 14

05/26/2020

Intersection												
Int Delay, s/veh	5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	2589	13	56	1377	89	0	0	47	0	0	30
Future Vol, veh/h	2	2589	13	56	1377	89	0	0	47	0	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Stop	-	-	Stop
Storage Length	215	-	250	320	-	215	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	0	3	47	68	4	13	33	0	90	11	100	0
Mvmt Flow	2	2642	13	57	1405	91	0	0	48	0	0	31

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1405	0	0	2642	0	0	-	-	1321	-	-	703
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	5.46	-	-	-	-	8.7	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	2.88	-	-	-	-	4.2	-	-	3.3
Pot Cap-1 Maneuver	492	-	-	~ 55	-	-	0	0	69	0	0	385
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	492	-	-	~ 55	-	-	-	-	69	-	-	385
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	9.4	133.6	15.2
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	69	492	-	-	~ 55	-	-	385
HCM Lane V/C Ratio	0.695	0.004	-	-	1.039	-	-	0.08
HCM Control Delay (s)	133.6	12.3	-	-	254.4	-	-	15.2
HCM Lane LOS	F	B	-	-	F	-	-	C
HCM 95th %tile Q(veh)	3.1	0	-	-	4.8	-	-	0.3

Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

HCM 2010 Signalized Intersection Summary
6: SR 279/Old National Hwy & Sullivan Rd

06/03/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	77	163	225	62	11	237	635	438	13	303	9
Future Volume (veh/h)	19	77	163	225	62	11	237	635	438	13	303	9
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1727	1776	1545	1884	1900	1810	1810	1727	1900	1812	1900
Adj Flow Rate, veh/h	20	80	0	234	65	11	247	661	0	14	316	9
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	10	7	23	0	0	5	5	10	0	5	5
Cap, veh/h	207	130	114	387	521	88	445	890	722	262	484	14
Arrive On Green	0.08	0.08	0.00	0.17	0.33	0.33	0.13	0.49	0.00	0.28	0.28	0.28
Sat Flow, veh/h	1344	1727	1509	1471	1571	266	1723	1810	1468	786	1753	50
Grp Volume(v), veh/h	20	80	0	234	0	76	247	661	0	14	0	325
Grp Sat Flow(s),veh/h/ln	1344	1727	1509	1471	0	1837	1723	1810	1468	786	0	1803
Q Serve(g_s), s	0.9	3.1	0.0	9.3	0.0	2.0	6.5	19.9	0.0	1.0	0.0	10.8
Cycle Q Clear(g_c), s	0.9	3.1	0.0	9.3	0.0	2.0	6.5	19.9	0.0	6.2	0.0	10.8
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	207	130	114	387	0	610	445	890	722	262	0	498
V/C Ratio(X)	0.10	0.61	0.00	0.61	0.00	0.12	0.56	0.74	0.00	0.05	0.00	0.65
Avail Cap(c_a), veh/h	284	229	200	464	0	810	555	1278	1037	381	0	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.5	30.5	0.0	21.6	0.0	15.8	14.4	13.8	0.0	22.2	0.0	21.7
Incr Delay (d2), s/veh	0.2	4.6	0.0	1.6	0.0	0.1	1.1	1.4	0.0	0.1	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	2.9	0.0	7.0	0.0	1.8	5.7	15.3	0.0	0.4	0.0	9.4
LnGrp Delay(d),s/veh	29.7	35.1	0.0	23.2	0.0	15.9	15.5	15.3	0.0	22.3	0.0	23.2
LnGrp LOS	C	D		C		B	B	B		C		C
Approach Vol, veh/h		100			310			908			339	
Approach Delay, s/veh		34.0			21.4			15.3			23.2	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	14.7	24.8	17.4	11.1		39.4		28.6				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	13.0	29.0	15.0	9.0		48.0		30.0				
Max Q Clear Time (g_c+I1), s	8.5	12.8	11.3	5.1		21.9		4.0				
Green Ext Time (p_c), s	0.3	5.9	0.2	0.3		7.2		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			19.2									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

7: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1493	116	15	1144	103	58	9	8	110	29	159
Future Volume (veh/h)	149	1493	116	15	1144	103	58	9	8	110	29	159
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1624	1743	1863	1652	1759	1532	1724	1900	1776	1652	1845
Adj Flow Rate, veh/h	155	1555	0	16	1192	0	60	9	0	115	30	0
Adj No. of Lanes	2	2	1	1	3	1	1	1	0	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	17	9	2	15	8	24	14	14	7	15	3
Cap, veh/h	211	2136	1026	31	2921	968	156	69	0	166	81	77
Arrive On Green	0.06	0.69	0.00	0.02	0.86	0.00	0.04	0.04	0.00	0.05	0.05	0.00
Sat Flow, veh/h	3408	3085	1482	1774	4510	1495	1459	1724	0	3281	1652	1568
Grp Volume(v), veh/h	155	1555	0	16	1192	0	60	9	0	115	30	0
Grp Sat Flow(s),veh/h/ln	1704	1543	1482	1774	1503	1495	1459	1724	0	1640	1652	1568
Q Serve(g_s), s	5.4	37.5	0.0	1.1	6.8	0.0	4.7	0.6	0.0	4.1	2.1	0.0
Cycle Q Clear(g_c), s	5.4	37.5	0.0	1.1	6.8	0.0	4.7	0.6	0.0	4.1	2.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	2136	1026	31	2921	968	156	69	0	166	81	77
V/C Ratio(X)	0.73	0.73	0.00	0.52	0.41	0.00	0.38	0.13	0.00	0.69	0.37	0.00
Avail Cap(c_a), veh/h	284	2136	1026	74	2921	968	156	115	0	219	151	144
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.77	0.77	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.3	11.5	0.0	58.1	3.4	0.0	52.8	55.6	0.0	56.1	55.3	0.0
Incr Delay (d2), s/veh	6.5	2.2	0.0	10.3	0.3	0.0	1.5	0.8	0.0	6.1	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.9	23.1	0.0	1.1	5.0	0.0	3.5	0.5	0.0	3.6	1.9	0.0
LnGrp Delay(d),s/veh	61.8	13.7	0.0	68.5	3.7	0.0	54.3	56.4	0.0	62.1	58.1	0.0
LnGrp LOS	E	B		E	A		D	E		E	E	
Approach Vol, veh/h		1710			1208			69			145	
Approach Delay, s/veh		18.0			4.6			54.6			61.3	
Approach LOS		B			A			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	89.1	11.0	11.9	13.4	83.7	12.1	10.8				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	75.0	5.0	11.0	10.0	70.0	8.0	8.0				
Max Q Clear Time (g_c+l1), s	3.1	39.5	6.7	4.1	7.4	8.8	6.1	2.6				
Green Ext Time (p_c), s	0.0	27.0	0.0	0.1	0.1	39.7	0.1	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			15.7									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

8: N Commerce Dr & SR 6/Camp Creek Pkwy

05/26/2020

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱	↰ ↱		↰ ↱	↰ ↱		↰	↱	↰ ↱	↰ ↱	↱	↰ ↱
Traffic Volume (veh/h)	52	1406	84	358	1229	184	172	107	210	260	101	55
Future Volume (veh/h)	52	1406	84	358	1229	184	172	107	210	260	101	55
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1617	1900	1776	1684	1900	1696	1776	1681	1827	1776	1881
Adj Flow Rate, veh/h	54	1465	0	373	1280	0	179	111	0	271	105	0
Adj No. of Lanes	2	3	0	2	3	0	1	1	1	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	18	18	7	14	14	12	7	13	4	7	1
Cap, veh/h	117	2063	0	427	2587	0	205	233	187	350	134	121
Arrive On Green	0.07	0.93	0.00	0.13	0.56	0.00	0.13	0.13	0.00	0.07	0.08	0.00
Sat Flow, veh/h	3375	4560	0	3281	4749	0	1616	1776	1429	4907	1776	1599
Grp Volume(v), veh/h	54	1465	0	373	1280	0	179	111	0	271	105	0
Grp Sat Flow(s),veh/h/ln	1688	1472	0	1640	1532	0	1616	1776	1429	1636	1776	1599
Q Serve(g_s), s	1.8	7.8	0.0	13.4	20.2	0.0	13.1	7.0	0.0	6.5	7.0	0.0
Cycle Q Clear(g_c), s	1.8	7.8	0.0	13.4	20.2	0.0	13.1	7.0	0.0	6.5	7.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	2063	0	427	2587	0	205	233	187	350	134	121
V/C Ratio(X)	0.46	0.71	0.00	0.87	0.49	0.00	0.87	0.48	0.00	0.77	0.78	0.00
Avail Cap(c_a), veh/h	141	2063	0	465	2587	0	256	296	238	368	148	133
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.7	2.3	0.0	51.2	15.9	0.0	51.4	48.3	0.0	54.8	54.5	0.0
Incr Delay (d2), s/veh	1.9	1.4	0.0	15.7	0.7	0.0	22.9	1.5	0.0	9.4	21.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	4.8	0.0	11.3	13.5	0.0	11.5	6.3	0.0	5.8	7.6	0.0
LnGrp Delay(d),s/veh	56.6	3.8	0.0	66.9	16.6	0.0	74.3	49.8	0.0	64.2	75.9	0.0
LnGrp LOS	E	A		E	B		E	D		E	E	
Approach Vol, veh/h	1519			1653			290			376		
Approach Delay, s/veh	5.6			27.9			64.9			67.5		
Approach LOS	A			C			E			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.6	62.1	21.2	15.1	10.2	73.5	14.6	21.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	50.0	19.0	10.0	5.0	62.0	9.0	20.0				
Max Q Clear Time (g_c+I1), s	9.4	9.8	15.1	9.0	3.8	22.2	8.5	9.0				
Green Ext Time (p_c), s	0.2	29.0	0.2	0.1	0.0	28.8	0.1	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay			25.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

9: US 41/Old Dixie & SR 331/Forest Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	676	121	147	696	475	123	932	127	145	303	163
Future Volume (veh/h)	255	676	121	147	696	475	123	932	127	145	303	163
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1583	1776	1583	1727	1810	1810	1638	1712	1727	1727	1610	1484
Adj Flow Rate, veh/h	260	690	0	150	710	485	126	951	0	148	309	0
Adj No. of Lanes	2	2	1	2	2	1	1	2	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	20	7	20	10	5	5	16	11	10	10	18	28
Cap, veh/h	312	1071	427	206	946	523	409	1083	489	208	1021	421
Arrive On Green	0.11	0.32	0.00	0.06	0.28	0.28	0.06	0.33	0.00	0.07	0.33	0.00
Sat Flow, veh/h	2925	3374	1346	3191	3438	1538	1560	3252	1468	3191	3059	1262
Grp Volume(v), veh/h	260	690	0	150	710	485	126	951	0	148	309	0
Grp Sat Flow(s),veh/h/ln	1463	1687	1346	1596	1719	1538	1560	1626	1468	1596	1530	1262
Q Serve(g_s), s	9.5	19.1	0.0	5.0	20.6	30.0	5.8	30.1	0.0	5.0	8.2	0.0
Cycle Q Clear(g_c), s	9.5	19.1	0.0	5.0	20.6	30.0	5.8	30.1	0.0	5.0	8.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	312	1071	427	206	946	523	409	1083	489	208	1021	421
V/C Ratio(X)	0.83	0.64	0.00	0.73	0.75	0.93	0.31	0.88	0.00	0.71	0.30	0.00
Avail Cap(c_a), veh/h	349	1071	427	263	946	523	409	1163	525	410	1291	532
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.7	31.9	0.0	50.1	36.1	34.7	21.9	34.3	0.0	50.0	26.9	0.0
Incr Delay (d2), s/veh	14.5	1.3	0.0	7.2	3.4	22.7	0.4	7.5	0.0	4.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	14.1	0.0	4.3	15.4	24.1	4.5	20.9	0.0	4.2	6.2	0.0
LnGrp Delay(d),s/veh	62.2	33.3	0.0	57.3	39.5	57.4	22.3	41.8	0.0	54.4	27.1	0.0
LnGrp LOS	E	C		E	D	E	C	D		D	C	
Approach Vol, veh/h		950			1345			1077			457	
Approach Delay, s/veh		41.2			47.9			39.5			35.9	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.6	36.0	13.0	42.4	13.0	40.6	13.1	42.3				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	30.0	7.0	46.0	9.0	34.0	14.0	39.0				
Max Q Clear Time (g_c+I1), s	11.5	32.0	7.8	10.2	7.0	21.1	7.0	32.1				
Green Ext Time (p_c), s	0.1	0.0	0.0	10.5	0.1	8.4	0.2	4.2				
Intersection Summary												
HCM 2010 Ctrl Delay			42.5									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

10: Toffie Ter & Loop Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	793	293	129	278	142	58	32	31	114	87	104
Future Volume (veh/h)	186	793	293	129	278	142	58	32	31	114	87	104
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1810	1810	1863	1662	1900	1624	1800	1900	1810	1845	1712
Adj Flow Rate, veh/h	200	853	315	139	299	153	62	34	33	123	94	112
Adj No. of Lanes	1	2	1	1	2	0	2	1	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	5	5	2	17	17	17	9	9	5	3	11
Cap, veh/h	488	1299	581	323	713	356	154	233	226	284	251	348
Arrive On Green	0.10	0.38	0.38	0.07	0.35	0.35	0.05	0.28	0.28	0.14	0.14	0.14
Sat Flow, veh/h	1675	3438	1538	1774	2042	1020	3000	840	816	1291	1845	1455
Grp Volume(v), veh/h	200	853	315	139	230	222	62	0	67	123	94	112
Grp Sat Flow(s),veh/h/ln	1675	1719	1538	1774	1579	1482	1500	0	1656	1291	1845	1455
Q Serve(g_s), s	4.9	13.7	10.7	3.3	7.4	7.7	1.3	0.0	2.0	6.1	3.1	4.2
Cycle Q Clear(g_c), s	4.9	13.7	10.7	3.3	7.4	7.7	1.3	0.0	2.0	6.1	3.1	4.2
Prop In Lane	1.00		1.00	1.00		0.69	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	488	1299	581	323	551	517	154	0	460	284	251	348
V/C Ratio(X)	0.41	0.66	0.54	0.43	0.42	0.43	0.40	0.00	0.15	0.43	0.37	0.32
Avail Cap(c_a), veh/h	541	1858	831	430	854	801	225	0	671	418	443	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	17.1	16.2	13.5	16.5	16.6	30.6	0.0	18.1	27.5	26.2	20.9
Incr Delay (d2), s/veh	0.6	0.6	0.8	0.9	0.5	0.6	1.7	0.0	0.1	1.0	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.1	10.7	8.2	2.9	5.9	5.7	1.1	0.0	1.7	4.0	2.9	3.2
LnGrp Delay(d),s/veh	12.5	17.7	17.0	14.4	17.0	17.2	32.3	0.0	18.3	28.5	27.1	21.4
LnGrp LOS	B	B	B	B	B	B	C		B	C	C	C
Approach Vol, veh/h	1368				591			129			329	
Approach Delay, s/veh	16.8				16.5			25.0			25.7	
Approach LOS	B				B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	12.9	29.2	9.4	15.1	11.0	31.2		24.5				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	9.0	36.0	5.0	16.0	9.0	36.0		27.0				
Max Q Clear Time (g_c+I1), s	9.9	9.7	3.3	8.1	5.3	15.7		4.0				
Green Ext Time (p_c), s	0.1	10.7	0.0	1.0	0.1	9.5		1.6				
Intersection Summary												
HCM 2010 Ctrl Delay	18.4											
HCM 2010 LOS	B											
Notes												
User approved ignoring U-Turning movement.												

HCM 2010 Signalized Intersection Summary

11: SR 139/Riverdale Road & Sullivan Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	128	69	145	203	342	261	940	136	380	358	1
Future Volume (veh/h)	16	128	69	145	203	342	261	940	136	380	358	1
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1665	1900	1792	1652	1712	1827	1810	1792	1776	1792	1712
Adj Flow Rate, veh/h	18	144	78	163	228	384	293	1056	0	427	402	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
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
Percent Heavy Veh, %	13	18	18	6	15	11	4	5	6	7	6	11
Cap, veh/h	158	228	124	193	371	619	653	1244	551	464	1476	631
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.13	0.36	0.00	0.20	0.43	0.00
Sat Flow, veh/h	728	1017	551	1111	1652	1455	1740	3438	1524	1691	3406	1455
Grp Volume(v), veh/h	18	0	222	163	228	384	293	1056	0	427	402	0
Grp Sat Flow(s),veh/h/ln	728	0	1568	1111	1652	1455	1740	1719	1524	1691	1703	1455
Q Serve(g_s), s	1.9	0.0	10.8	8.2	10.5	17.4	8.7	23.9	0.0	14.5	6.4	0.0
Cycle Q Clear(g_c), s	12.4	0.0	10.8	19.0	10.5	17.4	8.7	23.9	0.0	14.5	6.4	0.0
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	0	352	193	371	619	653	1244	551	464	1476	631
V/C Ratio(X)	0.11	0.00	0.63	0.85	0.61	0.62	0.45	0.85	0.00	0.92	0.27	0.00
Avail Cap(c_a), veh/h	158	0	352	193	371	619	696	1342	595	525	1611	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	29.6	39.6	29.5	19.0	13.2	24.8	0.0	20.1	15.4	0.0
Incr Delay (d2), s/veh	0.3	0.0	3.6	27.8	3.0	1.9	0.5	5.0	0.0	20.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	8.7	9.0	8.7	11.8	7.6	17.9	0.0	17.9	5.5	0.0
LnGrp Delay(d),s/veh	35.4	0.0	33.2	67.4	32.5	20.9	13.7	29.9	0.0	40.2	15.5	0.0
LnGrp LOS	D		C	E	C	C	B	C		D	B	
Approach Vol, veh/h	240			775			1349			829		
Approach Delay, s/veh	33.4			34.1			26.4			28.2		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.9	42.7		25.0	23.0	36.6		25.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	30.0	40.0		19.0	20.0	33.0		19.0				
Max Q Clear Time (g_c+I1), s	10.7	8.4		14.4	16.5	25.9		21.0				
Green Ext Time (p_c), s	0.2	11.7		2.1	0.5	4.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	29.2											
HCM 2010 LOS	C											

HCM Signalized Intersection Capacity Analysis

12: Lake Mirror Road & S Loop Road & I-285 On Ramp

05/26/2020

								
Movement	EBL	EBT	EBR	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	427	112	364	133	10	520	41	196
Future Volume (vph)	427	112	364	133	10	520	41	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0				6.0
Lane Util. Factor	1.00	0.95	1.00	1.00				0.95
Flt	1.00	1.00	0.85	0.86				1.00
Flt Protected	1.00	1.00	1.00	1.00				0.96
Satd. Flow (prot)	1900	2888	1429	1293				3252
Flt Permitted	1.00	1.00	1.00	1.00				0.96
Satd. Flow (perm)	1900	2888	1429	1293				3252
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.92	0.92	0.90	0.90
Adj. Flow (vph)	474	124	404	148	11	565	46	218
RTOR Reduction (vph)	0	0	260	96	0	0	0	173
Lane Group Flow (vph)	474	124	144	63	0	0	0	656
Heavy Vehicles (%)	0%	25%	13%	29%	2%	2%	22%	17%
Turn Type	Split	NA	Prot	Perm		Perm	Perm	NA
Protected Phases	6	6	6					7
Permitted Phases				8		7	7	
Actuated Green, G (s)	26.1	26.1	26.1	8.8				20.1
Effective Green, g (s)	26.1	26.1	26.1	8.8				20.1
Actuated g/C Ratio	0.36	0.36	0.36	0.12				0.28
Clearance Time (s)	6.0	6.0	6.0	6.0				6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0				3.0
Lane Grp Cap (vph)	679	1032	510	155				895
v/s Ratio Prot	c0.25	0.04	0.10					
v/s Ratio Perm				c0.05				0.20
v/c Ratio	0.70	0.12	0.28	0.41				0.94dl
Uniform Delay, d1	20.1	15.7	16.8	29.7				24.0
Progression Factor	1.00	1.00	1.00	1.00				1.00
Incremental Delay, d2	3.1	0.1	0.3	1.7				3.1
Delay (s)	23.2	15.8	17.1	31.4				27.1
Level of Service	C	B	B	C				C
Approach Delay (s)		19.8						27.1
Approach LOS		B						C
Intersection Summary								
HCM 2000 Control Delay			23.8		HCM 2000 Level of Service			C
HCM 2000 Volume to Capacity ratio			0.66					
Actuated Cycle Length (s)			73.0		Sum of lost time (s)			18.0
Intersection Capacity Utilization			76.3%		ICU Level of Service			D
Analysis Period (min)			15					
dl Defacto Left Lane. Recode with 1 though lane as a left lane.								
c Critical Lane Group								

HCM 2010 Signalized Intersection Summary

13: Clark Howell Hwy & Lake Mirror Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	117	348	17	16	17	125	683	99	0	0	0
Future Volume (veh/h)	26	117	348	17	16	17	125	683	99	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1660	1652	1900	1378	1462	1557	1702	1900			
Adj Flow Rate, veh/h	27	123	0	18	17	18	132	719	0			
Adj No. of Lanes	0	1	1	0	1	1	1	2	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	8	8	15	43	43	30	22	13	22			
Cap, veh/h	184	212	215	259	130	190	613	1337	0			
Arrive On Green	0.15	0.15	0.00	0.15	0.15	0.15	0.41	0.41	0.00			
Sat Flow, veh/h	202	1385	1404	406	847	1242	1483	3320	0			
Grp Volume(v), veh/h	150	0	0	35	0	18	132	719	0			
Grp Sat Flow(s),veh/h/ln	1587	0	1404	1253	0	1242	1483	1617	0			
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.3	1.6	4.6	0.0			
Cycle Q Clear(g_c), s	2.4	0.0	0.0	0.6	0.0	0.3	1.6	4.6	0.0			
Prop In Lane	0.18		1.00	0.51		1.00	1.00		0.00			
Lane Grp Cap(c), veh/h	397	0	215	389	0	190	613	1337	0			
V/C Ratio(X)	0.38	0.00	0.00	0.09	0.00	0.09	0.22	0.54	0.00			
Avail Cap(c_a), veh/h	1396	0	1116	1099	0	987	1393	3037	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	10.9	0.0	0.0	10.2	0.0	10.1	5.2	6.1	0.0			
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.1	0.0	0.2	0.2	0.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	2.0	0.0	0.0	0.4	0.0	0.2	1.2	3.7	0.0			
LnGrp Delay(d),s/veh	11.5	0.0	0.0	10.3	0.0	10.3	5.4	6.5	0.0			
LnGrp LOS	B			B		B	A	A				
Approach Vol, veh/h	150				53			851				
Approach Delay, s/veh	11.5				10.3			6.3				
Approach LOS	B				B			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4	6			8				
Phs Duration (G+Y+Rc), s				10.2	17.4			10.2				
Change Period (Y+Rc), s				6.0	6.0			6.0				
Max Green Setting (Gmax), s				22.0	26.0			22.0				
Max Q Clear Time (g_c+I1), s				4.4	6.6			2.6				
Green Ext Time (p_c), s				1.0	4.8			1.0				
Intersection Summary												
HCM 2010 Ctrl Delay				7.2								
HCM 2010 LOS				A								

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕			↕	
Traffic Vol, veh/h	60	0	123	1	0	0	185	237	1	3	217	110
Future Vol, veh/h	60	0	123	1	0	0	185	237	1	3	217	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	-	175	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	29	0	13	0	0	0	7	11	0	0	10	8
Mvmt Flow	70	0	143	1	0	0	215	276	1	3	252	128
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	890	1029	190	839	1093	139	380	0	0	277	0	0
Stage 1	322	322	-	707	707	-	-	-	-	-	-	-
Stage 2	568	707	-	132	386	-	-	-	-	-	-	-
Critical Hdwy	8.08	6.5	7.16	7.5	6.5	6.9	4.24	-	-	4.1	-	-
Critical Hdwy Stg 1	7.08	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.08	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.79	4	3.43	3.5	4	3.3	2.27	-	-	2.2	-	-
Pot Cap-1 Maneuver	199	236	786	262	216	890	1140	-	-	1298	-	-
Stage 1	595	655	-	397	441	-	-	-	-	-	-	-
Stage 2	413	441	-	864	614	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	170	191	786	183	175	890	1140	-	-	1298	-	-
Mov Cap-2 Maneuver	170	191	-	183	175	-	-	-	-	-	-	-
Stage 1	483	653	-	322	358	-	-	-	-	-	-	-
Stage 2	335	358	-	705	612	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	20.3			24.8			3.9			0.1		
HCM LOS	C			C								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1140	-	-	170	786	183	1298	-	-			
HCM Lane V/C Ratio	0.189	-	-	0.41	0.182	0.006	0.003	-	-			
HCM Control Delay (s)	8.9	-	-	40.2	10.6	24.8	7.8	0	-			
HCM Lane LOS	A	-	-	E	B	C	A	A	-			
HCM 95th %tile Q(veh)	0.7	-	-	1.8	0.7	0	0	-	-			

HCM 2010 Signalized Intersection Summary

15: SR 314/W Fayetteville Road & SR 139/Riverdale Road

05/26/2020

								
Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations								
Traffic Volume (veh/h)	0	272	322	190	761	651	141	
Future Volume (veh/h)	0	272	322	190	761	651	141	
Number		6	16	5	2	3	18	
Initial Q (Qb), veh		0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00	
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln		1681	1845	1863	1776	1863	1881	
Adj Flow Rate, veh/h		306	362	213	855	731	158	
Adj No. of Lanes		2	1	1	2	2	1	
Peak Hour Factor		0.89	0.89	0.89	0.89	0.89	0.89	
Percent Heavy Veh, %		13	3	2	7	2	1	
Cap, veh/h		1094	537	505	1820	944	438	
Arrive On Green		0.34	0.34	0.10	0.54	0.27	0.27	
Sat Flow, veh/h		3279	1568	1774	3463	3442	1599	
Grp Volume(v), veh/h		306	362	213	855	731	158	
Grp Sat Flow(s),veh/h/ln		1597	1568	1774	1687	1721	1599	
Q Serve(g_s), s		4.5	12.7	4.6	10.1	12.6	5.1	
Cycle Q Clear(g_c), s		4.5	12.7	4.6	10.1	12.6	5.1	
Prop In Lane			1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h		1094	537	505	1820	944	438	
V/C Ratio(X)		0.28	0.67	0.42	0.47	0.77	0.36	
Avail Cap(c_a), veh/h		1437	705	651	2460	1655	769	
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)		1.00	1.00	1.00	1.00	1.00	1.00	
Uniform Delay (d), s/veh		15.4	18.1	10.5	9.2	21.6	18.8	
Incr Delay (d2), s/veh		0.1	1.6	0.6	0.2	1.4	0.5	
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(95%),veh/ln		3.6	9.6	4.1	8.2	10.2	4.1	
LnGrp Delay(d),s/veh		15.5	19.7	11.0	9.3	22.9	19.3	
LnGrp LOS		B	B	B	A	C	B	
Approach Vol, veh/h		668			1068	889		
Approach Delay, s/veh		17.8			9.7	22.3		
Approach LOS		B			A	C		
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		40.8			12.7	28.1		23.7
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0
Max Green Setting (Gmax), s		47.0			12.0	29.0		31.0
Max Q Clear Time (g_c+I1), s		12.1			6.6	14.7		14.6
Green Ext Time (p_c), s		10.9			0.3	7.4		3.1
Intersection Summary								
HCM 2010 Ctrl Delay			16.0					
HCM 2010 LOS			B					
Notes								
User approved ignoring U-Turning movement.								

HCM 2010 Signalized Intersection Summary

16: Global Gateway Connector & SR 139/Riverdale Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	240	78	162	225	325	24	169	116	124	56	10
Future Volume (veh/h)	41	240	78	162	225	325	24	169	116	124	56	10
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1886	1900	1667	1827	1845	1759	1726	1900	1845	1900	1900
Adj Flow Rate, veh/h	46	270	88	182	253	0	27	190	0	139	63	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	1
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
Percent Heavy Veh, %	6	1	1	14	4	3	8	6	6	3	0	0
Cap, veh/h	335	498	159	405	1443	652	337	278	0	356	686	583
Arrive On Green	0.19	0.19	0.19	0.12	0.42	0.00	0.16	0.16	0.00	0.09	0.36	0.00
Sat Flow, veh/h	1080	2674	853	1587	3471	1568	1260	1726	0	1757	1900	1615
Grp Volume(v), veh/h	46	179	179	182	253	0	27	190	0	139	63	0
Grp Sat Flow(s),veh/h/ln	1080	1791	1735	1587	1736	1568	1260	1726	0	1757	1900	1615
Q Serve(g_s), s	1.9	4.8	5.0	4.6	2.5	0.0	1.0	5.6	0.0	3.3	1.2	0.0
Cycle Q Clear(g_c), s	1.9	4.8	5.0	4.6	2.5	0.0	1.0	5.6	0.0	3.3	1.2	0.0
Prop In Lane	1.00		0.49	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	334	323	405	1443	652	337	278	0	356	686	583
V/C Ratio(X)	0.14	0.54	0.55	0.45	0.18	0.00	0.08	0.68	0.00	0.39	0.09	0.00
Avail Cap(c_a), veh/h	536	668	647	544	2393	1081	744	836	0	496	1451	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.6	19.7	19.8	13.7	9.9	0.0	19.3	21.2	0.0	15.4	11.3	0.0
Incr Delay (d2), s/veh	0.2	1.3	1.5	0.8	0.1	0.0	0.1	2.9	0.0	0.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	4.5	4.5	3.6	2.1	0.0	0.6	5.2	0.0	3.0	1.1	0.0
LnGrp Delay(d),s/veh	18.7	21.1	21.3	14.5	9.9	0.0	19.4	24.2	0.0	16.1	11.4	0.0
LnGrp LOS	B	C	C	B	A		B	C		B	B	
Approach Vol, veh/h		404			435			217			202	
Approach Delay, s/veh		20.9			11.9			23.6			14.7	
Approach LOS		C			B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		28.3		25.4	12.3	16.0	10.7	14.7				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s		37.0		41.0	11.0	20.0	9.0	26.0				
Max Q Clear Time (g_c+I1), s		4.5		3.2	6.6	7.0	5.3	7.6				
Green Ext Time (p_c), s		3.9		1.4	0.2	3.0	0.1	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			17.2									
HCM 2010 LOS			B									

HCM 2010 AWSC

17: Scarborough Rd & Welcome All Road

05/26/2020

Intersection	
Intersection Delay, s/veh	64.7
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	245	63	86	129	256	57	231	110	129	64	19
Future Vol, veh/h	79	245	63	86	129	256	57	231	110	129	64	19
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	6	2	7	8	8	4	3	9	8	18
Mvmt Flow	81	253	65	89	133	264	59	238	113	133	66	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	54.5	95.4	59.6	25
HCM LOS	F	F	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	20%	18%	61%
Vol Thru, %	58%	63%	27%	30%
Vol Right, %	28%	16%	54%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	398	387	471	212
LT Vol	57	79	86	129
Through Vol	231	245	129	64
RT Vol	110	63	256	19
Lane Flow Rate	410	399	486	219
Geometry Grp	1	1	1	1
Degree of Util (X)	0.938	0.912	1.084	0.567
Departure Headway (Hd)	8.631	8.625	8.04	9.846
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	423	423	456	369
Service Time	6.631	6.625	6.04	7.846
HCM Lane V/C Ratio	0.969	0.943	1.066	0.593
HCM Control Delay	59.6	54.5	95.4	25
HCM Lane LOS	F	F	F	C
HCM 95th-tile Q	10.6	9.9	16	3.4

HCM 2010 Signalized Intersection Summary

18: Washington Road & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	1653	55	65	637	27	99	257	122	40	193	281
Future Volume (veh/h)	283	1653	55	65	637	27	99	257	122	40	193	281
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1863	1810	1727	1810	1681	1845	1743	1792	1776	1652	1881
Adj Flow Rate, veh/h	295	1722	0	68	664	0	103	268	127	42	201	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	2	5	10	5	13	3	9	6	7	15	1
Cap, veh/h	329	1900	826	155	1336	555	200	308	269	145	272	263
Arrive On Green	0.19	0.54	0.00	0.04	0.39	0.00	0.04	0.18	0.18	0.03	0.16	0.00
Sat Flow, veh/h	1757	3539	1538	1645	3438	1429	1757	1743	1524	1691	1652	1599
Grp Volume(v), veh/h	295	1722	0	68	664	0	103	268	127	42	201	0
Grp Sat Flow(s),veh/h/ln	1757	1770	1538	1645	1719	1429	1757	1743	1524	1691	1652	1599
Q Serve(g_s), s	18.3	49.1	0.0	2.8	16.4	0.0	5.0	16.7	8.4	2.3	12.9	0.0
Cycle Q Clear(g_c), s	18.3	49.1	0.0	2.8	16.4	0.0	5.0	16.7	8.4	2.3	12.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	329	1900	826	155	1336	555	200	308	269	145	272	263
V/C Ratio(X)	0.90	0.91	0.00	0.44	0.50	0.00	0.52	0.87	0.47	0.29	0.74	0.00
Avail Cap(c_a), veh/h	487	2026	881	163	1336	555	200	343	300	165	325	315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.3	23.4	0.0	25.5	25.9	0.0	39.0	44.8	41.3	38.1	44.4	0.0
Incr Delay (d2), s/veh	13.9	6.1	0.0	2.0	0.3	0.0	2.3	19.4	1.3	1.1	7.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.4	33.5	0.0	2.4	12.4	0.0	1.4	14.8	6.5	2.0	10.6	0.0
LnGrp Delay(d),s/veh	58.2	29.5	0.0	27.4	26.2	0.0	41.3	64.1	42.6	39.1	51.5	0.0
LnGrp LOS	E	C		C	C		D	E	D	D	D	
Approach Vol, veh/h	2017			732			498			243		
Approach Delay, s/veh	33.7			26.3			53.9			49.4		
Approach LOS	C			C			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	26.9	49.4	11.0	24.4	10.4	66.0	9.6	25.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	31.0	38.0	5.0	22.0	5.0	64.0	5.0	22.0				
Max Q Clear Time (g_c+I1), s	20.3	18.4	7.0	14.9	4.8	51.1	4.3	18.7				
Green Ext Time (p_c), s	0.6	15.4	0.0	1.8	0.0	8.9	0.0	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay	36.1											
HCM 2010 LOS	D											

HCM 2010 Signalized Intersection Summary

1: Ben Hill Rd & Welcome All Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	2	55	1	1	7	11	225	4	1	201	370
Future Volume (veh/h)	329	2	55	1	1	7	11	225	4	1	201	370
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1794	1712	1900	1900	1681	1407	1759	1520	1900	1776	1776
Adj Flow Rate, veh/h	359	0	0	1	1	0	12	245	0	1	218	0
Adj No. of Lanes	2	0	1	1	1	1	1	2	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	11	0	0	13	35	8	25	0	7	7
Cap, veh/h	619	0	264	6	6	4	357	855	330	451	454	386
Arrive On Green	0.18	0.00	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.26	0.26	0.00
Sat Flow, veh/h	3414	0	1455	1810	1900	1429	875	3343	1292	1153	1776	1509
Grp Volume(v), veh/h	359	0	0	1	1	0	12	245	0	1	218	0
Grp Sat Flow(s),veh/h/ln	1707	0	1455	1810	1900	1429	875	1671	1292	1153	1776	1509
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.4	1.9	0.0	0.0	3.3	0.0
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.0	0.0	0.0	3.7	1.9	0.0	1.9	3.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	619	0	264	6	6	4	357	855	330	451	454	386
V/C Ratio(X)	0.58	0.00	0.00	0.18	0.17	0.00	0.03	0.29	0.00	0.00	0.48	0.00
Avail Cap(c_a), veh/h	1700	0	725	282	296	222	705	2185	844	910	1161	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	0.0	0.0	16.0	16.0	0.0	11.7	9.6	0.0	10.4	10.1	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	14.4	12.9	0.0	0.0	0.2	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	0.0	0.0	0.1	0.1	0.0	0.2	1.6	0.0	0.0	3.1	0.0
LnGrp Delay(d),s/veh	12.9	0.0	0.0	30.3	28.9	0.0	11.8	9.8	0.0	10.4	10.9	0.0
LnGrp LOS	B			C	C		B	A		B	B	
Approach Vol, veh/h		359			2			257			219	
Approach Delay, s/veh		12.9			29.6			9.9			10.9	
Approach LOS		B			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.2		11.8		14.2		6.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		21.0		16.0		21.0		5.0				
Max Q Clear Time (g_c+I1), s		5.3		5.1		5.7		2.0				
Green Ext Time (p_c), s		2.5		1.0		2.5		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			11.5									
HCM 2010 LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 2010 Signalized Intersection Summary

2: Loop Rd & Maynard Jackson Blvd/Charles W Grant Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	953	568	410	524	351	166	101	346	644	171	194
Future Volume (veh/h)	301	953	568	410	524	351	166	101	346	644	171	194
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1610	1845	1776	1696	1792	1792	1681	1712	1545	1863	1792	1583
Adj Flow Rate, veh/h	324	1025	0	441	563	0	178	109	0	692	184	209
Adj No. of Lanes	2	3	1	1	2	1	2	2	1	2	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	18	3	7	12	6	6	13	11	23	2	6	20
Cap, veh/h	399	1142	342	454	1066	477	250	216	87	718	349	442
Arrive On Green	0.13	0.23	0.00	0.22	0.31	0.00	0.08	0.07	0.00	0.21	0.19	0.19
Sat Flow, veh/h	2975	5036	1509	1616	3406	1524	3107	3252	1313	3442	1792	1346
Grp Volume(v), veh/h	324	1025	0	441	563	0	178	109	0	692	184	209
Grp Sat Flow(s),veh/h/ln	1487	1679	1509	1616	1703	1524	1553	1626	1313	1721	1792	1346
Q Serve(g_s), s	9.1	17.1	0.0	18.1	11.7	0.0	4.8	2.8	0.0	17.2	7.9	10.7
Cycle Q Clear(g_c), s	9.1	17.1	0.0	18.1	11.7	0.0	4.8	2.8	0.0	17.2	7.9	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	399	1142	342	454	1066	477	250	216	87	718	349	442
V/C Ratio(X)	0.81	0.90	0.00	0.97	0.53	0.00	0.71	0.51	0.00	0.96	0.53	0.47
Avail Cap(c_a), veh/h	517	1167	350	454	1066	477	324	339	137	718	374	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	32.4	0.0	21.1	24.4	0.0	38.7	38.9	0.0	33.8	31.2	23.0
Incr Delay (d2), s/veh	7.5	9.3	0.0	34.9	0.5	0.0	5.1	1.8	0.0	24.9	1.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	13.7	0.0	21.0	9.4	0.0	4.1	2.4	0.0	16.0	7.3	7.3
LnGrp Delay(d),s/veh	43.8	41.7	0.0	56.0	24.9	0.0	43.8	40.7	0.0	58.7	32.4	23.8
LnGrp LOS	D	D		E	C		D	D		E	C	C
Approach Vol, veh/h		1349			1004			287			1085	
Approach Delay, s/veh		42.2			38.5			42.6			47.5	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.6	33.0	12.9	22.8	25.0	25.6	24.0	11.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	15.0	24.0	9.0	18.0	19.0	20.0	18.0	9.0				
Max Q Clear Time (g_c+I1), s	11.1	13.7	6.8	12.7	20.1	19.1	19.2	4.8				
Green Ext Time (p_c), s	0.4	6.9	0.1	1.1	0.0	0.5	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			42.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

3: Washington Rd & N Commerce Dr/Retail Dwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	431	9	255	6	1	10	152	433	3	15	599	268
Future Volume (veh/h)	431	9	255	6	1	10	152	433	3	15	599	268
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1864	1900	1900	1771	1900	1776	1826	1900	1759	1827	1610
Adj Flow Rate, veh/h	435	9	258	6	1	10	154	437	3	15	605	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	8	0	0	0	0	0	7	4	4	8	4	18
Cap, veh/h	616	20	576	408	52	520	318	1460	10	323	759	299
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.09	0.41	0.41	0.22	0.22	0.00
Sat Flow, veh/h	1320	54	1539	1130	139	1388	1691	3532	24	893	3471	1369
Grp Volume(v), veh/h	435	0	267	6	0	11	154	215	225	15	605	0
Grp Sat Flow(s),veh/h/ln	1320	0	1592	1130	0	1526	1691	1735	1822	893	1736	1369
Q Serve(g_s), s	17.5	0.0	7.1	0.2	0.0	0.3	3.7	4.7	4.7	0.8	9.3	0.0
Cycle Q Clear(g_c), s	17.8	0.0	7.1	7.4	0.0	0.3	3.7	4.7	4.7	0.8	9.3	0.0
Prop In Lane	1.00		0.97	1.00		0.91	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	616	0	597	408	0	572	318	717	753	323	759	299
V/C Ratio(X)	0.71	0.00	0.45	0.01	0.00	0.02	0.48	0.30	0.30	0.05	0.80	0.00
Avail Cap(c_a), veh/h	681	0	676	464	0	648	318	736	773	332	798	315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.7	0.0	13.3	16.1	0.0	11.1	14.9	11.1	11.1	17.6	20.9	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.5	0.0	0.0	0.0	1.1	0.2	0.2	0.1	5.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.1	0.0	5.8	0.1	0.0	0.2	3.3	4.1	4.3	0.3	8.7	0.0
LnGrp Delay(d),s/veh	19.7	0.0	13.8	16.1	0.0	11.2	16.0	11.3	11.3	17.6	26.4	0.0
LnGrp LOS	B		B	B		B	B	B	B	B	C	
Approach Vol, veh/h	702					17	594			620		
Approach Delay, s/veh	17.5					12.9	12.5			26.1		
Approach LOS	B					B	B			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	29.4		27.2		11.0	18.4	27.2					
Change Period (Y+Rc), s	6.0		6.0		6.0	6.0	6.0					
Max Green Setting (Gmax), s	24.0		24.0		5.0	13.0	24.0					
Max Q Clear Time (g_c+I1), s	6.7		19.8		5.7	11.3	9.4					
Green Ext Time (p_c), s	6.3		1.4		0.0	1.0	3.0					
Intersection Summary												
HCM 2010 Ctrl Delay			18.7									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary

4: SR 139/Riverdale Rd & Phoenix Blvd/ Forest Pkwy

06/02/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	306	231	211	148	155	177	103	1021	87	394	2019	336
Future Volume (veh/h)	306	231	211	148	155	177	103	1021	87	394	2019	336
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1863	1792	1863	1863	1810	1743	1881	1881
Adj Flow Rate, veh/h	322	243	0	156	163	116	108	1075	0	415	2125	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	3	0	3	2	6	2	2	5	9	1	1
Cap, veh/h	322	380	175	199	265	114	143	1714	745	480	2115	946
Arrive On Green	0.09	0.11	0.00	0.06	0.08	0.08	0.04	0.48	0.00	0.15	0.59	0.00
Sat Flow, veh/h	3510	3505	1615	3408	3539	1524	3442	3539	1538	3221	3574	1599
Grp Volume(v), veh/h	322	243	0	156	163	116	108	1075	0	415	2125	0
Grp Sat Flow(s),veh/h/ln	1755	1752	1615	1704	1770	1524	1721	1770	1538	1610	1787	1599
Q Serve(g_s), s	11.0	8.0	0.0	5.4	5.4	9.0	3.7	27.0	0.0	15.1	71.0	0.0
Cycle Q Clear(g_c), s	11.0	8.0	0.0	5.4	5.4	9.0	3.7	27.0	0.0	15.1	71.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	322	380	175	199	265	114	143	1714	745	480	2115	946
V/C Ratio(X)	1.00	0.64	0.00	0.78	0.61	1.02	0.75	0.63	0.00	0.86	1.00	0.00
Avail Cap(c_a), veh/h	322	380	175	199	265	114	143	1714	745	617	2115	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.5	51.3	0.0	55.8	53.8	55.5	56.9	22.9	0.0	49.9	24.5	0.0
Incr Delay (d2), s/veh	50.3	3.6	0.0	18.4	4.2	88.3	19.9	0.7	0.0	10.0	20.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.6	7.3	0.0	5.5	5.0	11.8	3.9	19.3	0.0	11.9	73.3	0.0
LnGrp Delay(d),s/veh	104.8	54.8	0.0	74.1	58.0	143.9	76.8	23.6	0.0	59.9	45.2	0.0
LnGrp LOS	F	D		E	E	F	E	C		E	F	
Approach Vol, veh/h		565			435			1183			2540	
Approach Delay, s/veh		83.3			86.7			28.5			47.6	
Approach LOS		F			F			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	77.0	13.0	19.0	23.9	64.1	17.0	15.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	71.0	7.0	13.0	23.0	53.0	11.0	9.0				
Max Q Clear Time (g_c+I1), s	5.7	73.0	7.4	10.0	17.1	29.0	13.0	11.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.8	21.8	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			50.7									
HCM 2010 LOS			D									

HCM 2010 TWSC

5: Majestic PI & SR 14

05/26/2020

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1622	5	113	2333	110	0	0	37	0	0	66
Future Vol, veh/h	5	1622	5	113	2333	110	0	0	37	0	0	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Yield	-	-	Yield	-	-	Stop	-	-	Stop
Storage Length	215	-	250	320	-	215	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	6	29	38	3	13	10	0	49	3	0	8
Mvmt Flow	5	1726	5	120	2482	117	0	0	39	0	0	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2482	0	0	1726	0	0	-	-	863	-	-	1241
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	4.86	-	-	-	-	7.88	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.2	-	-	2.58	-	-	-	-	3.79	-	-	3.38
Pot Cap-1 Maneuver	188	-	-	237	-	-	0	0	219	0	0	158
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	188	-	-	237	-	-	-	-	219	-	-	158
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.5	25	44.8
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	219	188	-	-	237	-	-	158
HCM Lane V/C Ratio	0.18	0.028	-	-	0.507	-	-	0.444
HCM Control Delay (s)	25	24.7	-	-	34.9	-	-	44.8
HCM Lane LOS	D	C	-	-	D	-	-	E
HCM 95th %tile Q(veh)	0.6	0.1	-	-	2.6	-	-	2

HCM 2010 Signalized Intersection Summary
6: SR 279/Old National Hwy & Sullivan Rd

06/03/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	91	263	310	75	19	210	366	242	19	487	22
Future Volume (veh/h)	32	91	263	310	75	19	210	366	242	19	487	22
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1881	1727	1837	1900	1845	1845	1667	1776	1811	1900
Adj Flow Rate, veh/h	34	96	0	326	79	20	221	385	0	20	513	23
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	4	1	10	3	3	3	3	14	7	5	5
Cap, veh/h	192	144	126	424	476	120	320	953	732	411	586	26
Arrive On Green	0.08	0.08	0.00	0.18	0.34	0.34	0.10	0.52	0.00	0.34	0.34	0.34
Sat Flow, veh/h	1317	1827	1599	1645	1416	358	1757	1845	1417	948	1720	77
Grp Volume(v), veh/h	34	96	0	326	0	99	221	385	0	20	0	536
Grp Sat Flow(s),veh/h/ln	1317	1827	1599	1645	0	1774	1757	1845	1417	948	0	1797
Q Serve(g_s), s	2.0	4.2	0.0	14.4	0.0	3.2	6.2	10.4	0.0	1.2	0.0	22.8
Cycle Q Clear(g_c), s	2.0	4.2	0.0	14.4	0.0	3.2	6.2	10.4	0.0	1.2	0.0	22.8
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	192	144	126	424	0	596	320	953	732	411	0	612
V/C Ratio(X)	0.18	0.67	0.00	0.77	0.00	0.17	0.69	0.40	0.00	0.05	0.00	0.88
Avail Cap(c_a), veh/h	234	202	176	424	0	653	377	1086	834	449	0	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.5	36.5	0.0	26.2	0.0	19.0	18.1	12.0	0.0	18.1	0.0	25.3
Incr Delay (d2), s/veh	0.4	5.3	0.0	8.3	0.0	0.1	4.3	0.3	0.0	0.0	0.0	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	4.2	0.0	11.9	0.0	2.9	6.1	9.1	0.0	0.5	0.0	19.2
LnGrp Delay(d),s/veh	36.0	41.8	0.0	34.5	0.0	19.2	22.3	12.3	0.0	18.2	0.0	36.6
LnGrp LOS	D	D		C		B	C	B		B		D
Approach Vol, veh/h		130			425			606			556	
Approach Delay, s/veh		40.3			30.9			16.0			36.0	
Approach LOS		D			C			B			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	14.4	33.8	21.0	12.4		48.1		33.4				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0		6.0		6.0				
Max Green Setting (Gmax), s	11.0	31.0	15.0	9.0		48.0		30.0				
Max Q Clear Time (g_c+I1), s	8.2	24.8	16.4	6.2		12.4		5.2				
Green Ext Time (p_c), s	0.2	2.9	0.0	0.3		6.9		1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			28.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

7: Centre Pkwy/Princeton Lakes Pkwy & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	353	1462	41	63	2312	194	140	39	28	238	51	450
Future Volume (veh/h)	353	1462	41	63	2312	194	140	39	28	238	51	450
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1712	1638	1900	1743	1881	1696	1850	1900	1845	1712	1881
Adj Flow Rate, veh/h	360	1492	0	64	2359	0	143	40	0	243	52	0
Adj No. of Lanes	2	2	1	1	3	1	1	1	0	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	11	16	0	9	1	12	1	1	3	11	1
Cap, veh/h	373	2029	869	82	2670	897	178	77	0	303	152	142
Arrive On Green	0.11	0.62	0.00	0.05	0.56	0.00	0.04	0.04	0.00	0.09	0.09	0.00
Sat Flow, veh/h	3442	3252	1392	1810	4759	1599	1616	1850	0	3408	1712	1599
Grp Volume(v), veh/h	360	1492	0	64	2359	0	143	40	0	243	52	0
Grp Sat Flow(s),veh/h/ln	1721	1626	1392	1810	1586	1599	1616	1850	0	1704	1712	1599
Q Serve(g_s), s	12.5	38.3	0.0	4.2	51.8	0.0	5.0	2.5	0.0	8.4	3.4	0.0
Cycle Q Clear(g_c), s	12.5	38.3	0.0	4.2	51.8	0.0	5.0	2.5	0.0	8.4	3.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	373	2029	869	82	2670	897	178	77	0	303	152	142
V/C Ratio(X)	0.97	0.74	0.00	0.78	0.88	0.00	0.80	0.52	0.00	0.80	0.34	0.00
Avail Cap(c_a), veh/h	373	2029	869	90	2670	897	178	170	0	398	285	267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.09	0.09	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.3	15.7	0.0	56.7	22.9	0.0	55.6	56.3	0.0	53.6	51.4	0.0
Incr Delay (d2), s/veh	37.5	2.4	0.0	3.6	0.5	0.0	22.4	5.3	0.0	8.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.5	24.6	0.0	2.9	25.0	0.0	6.5	2.5	0.0	7.7	3.0	0.0
LnGrp Delay(d),s/veh	90.7	18.1	0.0	60.2	23.4	0.0	78.0	61.6	0.0	62.2	52.7	0.0
LnGrp LOS	F	B		E	C		E	E		E	D	
Approach Vol, veh/h	1852			2423			183			295		
Approach Delay, s/veh	32.2			24.4			74.4			60.5		
Approach LOS	C			C			E			E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.5	80.9	11.0	16.7	19.0	73.3	16.7	11.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	6.0	65.0	5.0	20.0	13.0	58.0	14.0	11.0				
Max Q Clear Time (g_c+l1), s	6.2	40.3	7.0	5.4	14.5	53.8	10.4	4.5				
Green Ext Time (p_c), s	0.0	23.6	0.0	0.3	0.0	4.2	0.3	0.2				
Intersection Summary												
HCM 2010 Ctrl Delay				31.6								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

8: N Commerce Dr & SR 6/Camp Creek Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↔↔↔		↔↔	↔↔↔		↔	↑	↔	↔↔↔	↑	↔
Traffic Volume (veh/h)	245	1368	95	309	2293	326	233	190	210	552	198	303
Future Volume (veh/h)	245	1368	95	309	2293	326	233	190	210	552	198	303
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1689	1900	1810	1757	1900	1776	1827	1759	1881	1827	1881
Adj Flow Rate, veh/h	250	1396	0	315	2340	0	238	194	0	563	202	0
Adj No. of Lanes	2	3	0	2	3	0	1	1	1	3	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	13	13	5	9	9	7	4	8	1	4	1
Cap, veh/h	203	2137	0	373	2478	0	211	213	174	547	183	160
Arrive On Green	0.12	0.93	0.00	0.11	0.52	0.00	0.13	0.12	0.00	0.11	0.10	0.00
Sat Flow, veh/h	3476	4764	0	3343	4955	0	1691	1827	1495	5052	1827	1599
Grp Volume(v), veh/h	250	1396	0	315	2340	0	238	194	0	563	202	0
Grp Sat Flow(s),veh/h/ln	1738	1537	0	1672	1599	0	1691	1827	1495	1684	1827	1599
Q Serve(g_s), s	7.0	6.8	0.0	11.1	55.2	0.0	15.0	12.6	0.0	13.0	12.0	0.0
Cycle Q Clear(g_c), s	7.0	6.8	0.0	11.1	55.2	0.0	15.0	12.6	0.0	13.0	12.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	2137	0	373	2478	0	211	213	174	547	183	160
V/C Ratio(X)	1.23	0.65	0.00	0.84	0.94	0.00	1.13	0.91	0.00	1.03	1.11	0.00
Avail Cap(c_a), veh/h	203	2137	0	446	2478	0	211	213	174	547	183	160
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.0	2.6	0.0	52.3	27.4	0.0	52.5	52.4	0.0	53.5	54.0	0.0
Incr Delay (d2), s/veh	126.1	0.9	0.0	12.0	9.0	0.0	99.8	37.9	0.0	46.0	97.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	4.4	0.0	9.7	34.8	0.0	23.1	13.4	0.0	15.1	19.8	0.0
LnGrp Delay(d),s/veh	179.1	3.5	0.0	64.3	36.4	0.0	152.3	90.3	0.0	99.5	151.7	0.0
LnGrp LOS	F	A		E	D		F	F		F	F	
Approach Vol, veh/h	1646			2655			432			765		
Approach Delay, s/veh	30.1			39.7			124.5			113.3		
Approach LOS	C			D			F			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.4	61.6	21.0	18.0	13.0	68.0	19.0	20.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	60.0	53.0	15.0	12.0	7.0	62.0	13.0	14.0				
Max Q Clear Time (g_c+I1), s	83.1	8.8	17.0	14.0	9.0	57.2	15.0	14.6				
Green Ext Time (p_c), s	0.3	40.2	0.0	0.0	0.0	4.7	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				53.7								
HCM 2010 LOS				D								

HCM 2010 Signalized Intersection Summary

9: US 41/Old Dixie & SR 331/Forest Pkwy

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	767	155	206	615	197	108	439	198	364	867	209
Future Volume (veh/h)	199	767	155	206	615	197	108	439	198	364	867	209
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1652	1827	1776	1759	1810	1827	1727	1696	1759	1792	1712	1545
Adj Flow Rate, veh/h	209	807	0	217	647	207	114	462	0	383	913	0
Adj No. of Lanes	2	2	1	2	2	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	15	4	7	8	5	4	10	12	8	6	11	23
Cap, veh/h	268	1025	446	276	1005	669	217	843	391	458	1084	438
Arrive On Green	0.09	0.30	0.00	0.08	0.29	0.29	0.07	0.26	0.00	0.14	0.33	0.00
Sat Flow, veh/h	3053	3471	1509	3250	3438	1553	1645	3223	1495	3312	3252	1313
Grp Volume(v), veh/h	209	807	0	217	647	207	114	462	0	383	913	0
Grp Sat Flow(s),veh/h/ln	1526	1736	1509	1625	1719	1553	1645	1612	1495	1656	1626	1313
Q Serve(g_s), s	7.3	23.3	0.0	7.1	17.9	9.5	5.5	13.5	0.0	12.3	28.4	0.0
Cycle Q Clear(g_c), s	7.3	23.3	0.0	7.1	17.9	9.5	5.5	13.5	0.0	12.3	28.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	1025	446	276	1005	669	217	843	391	458	1084	438
V/C Ratio(X)	0.78	0.79	0.00	0.79	0.64	0.31	0.53	0.55	0.00	0.84	0.84	0.00
Avail Cap(c_a), veh/h	392	1146	498	328	1041	685	228	843	391	638	1223	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	35.3	0.0	48.9	33.6	20.4	28.9	34.7	0.0	45.8	33.7	0.0
Incr Delay (d2), s/veh	6.0	3.4	0.0	10.2	1.3	0.3	2.0	0.8	0.0	6.9	5.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.9	17.2	0.0	6.5	13.4	7.4	4.7	10.1	0.0	10.1	19.4	0.0
LnGrp Delay(d),s/veh	54.7	38.6	0.0	59.1	34.9	20.7	30.9	35.4	0.0	52.7	38.7	0.0
LnGrp LOS	D	D		E	C	C	C	D		D	D	
Approach Vol, veh/h		1016			1071			576			1296	
Approach Delay, s/veh		41.9			37.1			34.5			42.8	
Approach LOS		D			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.6	37.9	13.2	42.3	15.3	38.2	21.1	34.5				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	14.0	33.0	8.0	41.0	11.0	36.0	21.0	28.0				
Max Q Clear Time (g_c+I1), s	9.3	19.9	7.5	30.4	9.1	25.3	14.3	15.5				
Green Ext Time (p_c), s	0.3	8.0	0.0	6.0	0.1	6.9	0.8	7.0				
Intersection Summary												
HCM 2010 Ctrl Delay			39.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

10: Toffie Ter & Loop Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	335	54	58	860	182	355	65	87	97	31	164
Future Volume (veh/h)	153	335	54	58	860	182	355	65	87	97	31	164
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1696	1712	1557	1881	1804	1900	1845	1858	1900	1845	1863	1776
Adj Flow Rate, veh/h	172	376	61	65	966	204	399	73	98	109	35	184
Adj No. of Lanes	1	2	1	1	2	0	2	1	0	1	1	1
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
Percent Heavy Veh, %	12	11	22	1	5	5	3	4	4	3	2	7
Cap, veh/h	245	1374	559	495	1078	227	463	237	318	231	232	316
Arrive On Green	0.09	0.42	0.42	0.05	0.38	0.38	0.14	0.33	0.33	0.12	0.12	0.12
Sat Flow, veh/h	1616	3252	1324	1792	2818	594	3408	720	967	1197	1863	1509
Grp Volume(v), veh/h	172	376	61	65	587	583	399	0	171	109	35	184
Grp Sat Flow(s),veh/h/ln	1616	1626	1324	1792	1713	1699	1704	0	1687	1197	1863	1509
Q Serve(g_s), s	5.6	6.7	2.5	1.9	28.4	28.5	10.1	0.0	6.7	7.7	1.5	9.7
Cycle Q Clear(g_c), s	5.6	6.7	2.5	1.9	28.4	28.5	10.1	0.0	6.7	7.7	1.5	9.7
Prop In Lane	1.00		1.00	1.00		0.35	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	245	1374	559	495	656	650	463	0	554	231	232	316
V/C Ratio(X)	0.70	0.27	0.11	0.13	0.89	0.90	0.86	0.00	0.31	0.47	0.15	0.58
Avail Cap(c_a), veh/h	254	1400	570	515	679	673	463	0	554	231	232	316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	16.6	15.4	15.1	25.6	25.6	37.3	0.0	22.2	37.2	34.5	31.4
Incr Delay (d2), s/veh	8.1	0.1	0.1	0.1	14.2	14.5	15.2	0.0	0.3	1.5	0.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.5	5.4	1.6	1.7	22.5	22.4	9.7	0.0	5.6	4.8	1.4	7.6
LnGrp Delay(d),s/veh	28.1	16.7	15.5	15.2	39.7	40.1	52.5	0.0	22.5	38.7	34.8	34.1
LnGrp LOS	C	B	B	B	D	D	D		C	D	C	C
Approach Vol, veh/h		609			1235			570			328	
Approach Delay, s/veh		19.8			38.6			43.5			35.7	
Approach LOS		B			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	39.8	18.0	17.0	10.0	43.3		35.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s8.0		35.0	12.0	11.0	5.0	38.0		29.0				
Max Q Clear Time (g_c+I1), s7.6		30.5	12.1	11.7	3.9	8.7		8.7				
Green Ext Time (p_c), s		0.0	3.3	0.0	0.0	12.0		2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			35.1									
HCM 2010 LOS			D									
Notes												
User approved ignoring U-Turning movement.												

HCM 2010 Signalized Intersection Summary

11: SR 139/Riverdale Road & Sullivan Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	165	187	156	148	522	130	656	130	374	869	8
Future Volume (veh/h)	15	165	187	156	148	522	130	656	130	374	869	8
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1727	1674	1900	1792	1570	1776	1827	1863	1863	1743	1863	1900
Adj Flow Rate, veh/h	16	172	195	162	154	544	135	683	0	390	905	0
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	22	22	6	21	7	4	2	2	9	2	0
Cap, veh/h	277	249	282	224	545	822	306	850	380	455	1272	580
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.08	0.24	0.00	0.20	0.36	0.00
Sat Flow, veh/h	690	717	813	973	1570	1509	1740	3539	1583	1660	3539	1615
Grp Volume(v), veh/h	16	0	367	162	154	544	135	683	0	390	905	0
Grp Sat Flow(s),veh/h/ln	690	0	1531	973	1570	1509	1740	1770	1583	1660	1770	1615
Q Serve(g_s), s	1.4	0.0	17.2	11.8	5.9	21.5	4.8	15.2	0.0	13.8	18.4	0.0
Cycle Q Clear(g_c), s	7.4	0.0	17.2	29.0	5.9	21.5	4.8	15.2	0.0	13.8	18.4	0.0
Prop In Lane	1.00		0.53	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	0	531	224	545	822	306	850	380	455	1272	580
V/C Ratio(X)	0.06	0.00	0.69	0.72	0.28	0.66	0.44	0.80	0.00	0.86	0.71	0.00
Avail Cap(c_a), veh/h	277	0	531	224	545	822	337	890	398	565	1483	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.4	0.0	23.4	36.8	19.7	13.6	21.6	29.9	0.0	18.5	23.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.8	11.1	0.3	2.0	1.0	5.2	0.0	10.5	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	0.0	12.4	7.8	4.7	14.2	4.2	12.7	0.0	12.0	14.1	0.0
LnGrp Delay(d),s/veh	22.5	0.0	27.2	47.8	20.0	15.6	22.6	35.1	0.0	29.0	24.4	0.0
LnGrp LOS	C		C	D	C	B	C	D		C	C	
Approach Vol, veh/h	383			860			818			1295		
Approach Delay, s/veh	27.0			22.4			33.0			25.8		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.5	36.0		35.0	22.5	26.1		35.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	35.0		29.0	22.0	21.0		29.0				
Max Q Clear Time (g_c+I1), s	6.8	20.4		19.2	15.8	17.2		31.0				
Green Ext Time (p_c), s	0.0	8.5		4.5	0.7	2.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay	26.8											
HCM 2010 LOS	C											

HCM Signalized Intersection Capacity Analysis

12: Lake Mirror Road & S Loop Road & I-285 On Ramp

05/26/2020



Movement	EBL	EBT	EBR	NBR	NBR2	SBL2	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	282	535	443	215	8	26	115	557
Future Volume (vph)	282	535	443	215	8	26	115	557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0				6.0
Lane Util. Factor	1.00	0.95	1.00	1.00				0.95
Flt	1.00	1.00	0.85	0.86				1.00
Flt Protected	1.00	1.00	1.00	1.00				0.99
Satd. Flow (prot)	1900	3167	1380	1567				3273
Flt Permitted	1.00	1.00	1.00	1.00				0.99
Satd. Flow (perm)	1900	3167	1380	1567				3273
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	300	569	471	229	9	28	122	593
RTOR Reduction (vph)	0	0	314	92	0	0	0	79
Lane Group Flow (vph)	300	569	157	146	0	0	0	664
Heavy Vehicles (%)	0%	14%	17%	5%	2%	2%	7%	10%
Turn Type	Split	NA	Prot	Perm		Perm	Perm	NA
Protected Phases	6	6	6					7
Permitted Phases				8		7	7	
Actuated Green, G (s)	24.8	24.8	24.8	11.6				20.2
Effective Green, g (s)	24.8	24.8	24.8	11.6				20.2
Actuated g/C Ratio	0.33	0.33	0.33	0.16				0.27
Clearance Time (s)	6.0	6.0	6.0	6.0				6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0				3.0
Lane Grp Cap (vph)	631	1052	458	243				886
v/s Ratio Prot	0.16	c0.18	0.11					
v/s Ratio Perm				c0.09				0.20
v/c Ratio	0.48	0.54	0.34	0.60				0.75
Uniform Delay, d1	19.7	20.3	18.8	29.3				24.9
Progression Factor	1.00	1.00	1.00	1.00				1.00
Incremental Delay, d2	0.6	0.6	0.4	4.1				3.5
Delay (s)	20.3	20.8	19.2	33.5				28.4
Level of Service	C	C	B	C				C
Approach Delay (s)		20.1						28.4
Approach LOS		C						C
Intersection Summary								
HCM 2000 Control Delay			24.1		HCM 2000 Level of Service			C
HCM 2000 Volume to Capacity ratio			0.63					
Actuated Cycle Length (s)			74.6		Sum of lost time (s)			18.0
Intersection Capacity Utilization			63.9%		ICU Level of Service			B
Analysis Period (min)			15					
c Critical Lane Group								

HCM 2010 Signalized Intersection Summary

13: Clark Howell Hwy & Lake Mirror Road

05/26/2020

																
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR				
Lane Configurations																
Traffic Volume (veh/h)	53	27	911	77	63	91	125	546	12	0	0	0				
Future Volume (veh/h)	53	27	911	77	63	91	125	546	12	0	0	0				
Number	7	4	14	3	8	18	1	6	16							
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0							
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00							
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Adj Sat Flow, veh/h/ln	1900	1421	1727	1900	1770	1743	1792	1693	1900							
Adj Flow Rate, veh/h	58	29	0	84	68	99	136	593	0							
Adj No. of Lanes	0	1	1	0	1	1	1	2	0							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92							
Percent Heavy Veh, %	45	45	10	4	4	9	6	12	6							
Cap, veh/h	322	101	323	357	199	325	580	1093	0							
Arrive On Green	0.22	0.22	0.00	0.22	0.22	0.22	0.34	0.34	0.00							
Sat Flow, veh/h	463	460	1468	694	906	1482	1707	3301	0							
Grp Volume(v), veh/h	87	0	0	152	0	99	136	593	0							
Grp Sat Flow(s),veh/h/ln	922	0	1468	1599	0	1482	1707	1608	0							
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	1.5	1.6	4.1	0.0							
Cycle Q Clear(g_c), s	2.7	0.0	0.0	2.0	0.0	1.5	1.6	4.1	0.0							
Prop In Lane	0.67		1.00	0.55		1.00	1.00		0.00							
Lane Grp Cap(c), veh/h	423	0	323	556	0	325	580	1093	0							
V/C Ratio(X)	0.21	0.00	0.00	0.27	0.00	0.30	0.23	0.54	0.00							
Avail Cap(c_a), veh/h	1346	0	1616	1861	0	1631	1128	2125	0							
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00							
Uniform Delay (d), s/veh	9.2	0.0	0.0	9.1	0.0	8.9	6.4	7.3	0.0							
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.5	0.2	0.4	0.0							
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0							
%ile BackOfQ(95%),veh/ln	1.1	0.0	0.0	1.8	0.0	1.2	1.4	3.2	0.0							
LnGrp Delay(d),s/veh	9.4	0.0	0.0	9.3	0.0	9.4	6.7	7.7	0.0							
LnGrp LOS	A			A		A	A	A								
Approach Vol, veh/h	87			251			729									
Approach Delay, s/veh	9.4			9.4			7.5									
Approach LOS	A			A			A									
Timer	1	2	3	4	5	6	7	8								
Assigned Phs				4	6			8								
Phs Duration (G+Y+Rc), s				12.0	15.3			12.0								
Change Period (Y+Rc), s				6.0	6.0			6.0								
Max Green Setting (Gmax), s				30.0	18.0			30.0								
Max Q Clear Time (g_c+l1), s				4.7	6.1			4.0								
Green Ext Time (p_c), s				1.8	3.2			1.8								
Intersection Summary																
HCM 2010 Ctrl Delay				8.1												
HCM 2010 LOS				A												

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕↗			↕↗	
Traffic Vol, veh/h	77	1	188	4	1	1	111	358	5	7	266	44
Future Vol, veh/h	77	1	188	4	1	1	111	358	5	7	266	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	250	-	-	-	175	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	7	100	8	67	100	50	21	8	67	8	8	16
Mvmt Flow	88	1	214	5	1	1	126	407	6	8	302	50
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	799	1008	176	830	1030	207	352	0	0	413	0	0
Stage 1	343	343	-	662	662	-	-	-	-	-	-	-
Stage 2	456	665	-	168	368	-	-	-	-	-	-	-
Critical Hdwy	7.64	8.5	7.06	8.84	8.5	7.9	4.52	-	-	4.26	-	-
Critical Hdwy Stg 1	6.64	7.5	-	7.84	7.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.64	7.5	-	7.84	7.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.57	5	3.38	4.17	5	3.8	2.41	-	-	2.28	-	-
Pot Cap-1 Maneuver	268	124	818	175	119	670	1078	-	-	1101	-	-
Stage 1	632	443	-	292	277	-	-	-	-	-	-	-
Stage 2	541	276	-	659	427	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	240	109	818	116	104	670	1078	-	-	1101	-	-
Mov Cap-2 Maneuver	240	109	-	116	104	-	-	-	-	-	-	-
Stage 1	558	439	-	258	245	-	-	-	-	-	-	-
Stage 2	475	244	-	481	423	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	16.2		33.8		2.1		0.2					
HCM LOS	C		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1078	-	-	236	818	132	1101	-	-			
HCM Lane V/C Ratio	0.117	-	-	0.376	0.261	0.052	0.007	-	-			
HCM Control Delay (s)	8.8	-	-	29.1	10.9	33.8	8.3	0	-			
HCM Lane LOS	A	-	-	D	B	D	A	A	-			
HCM 95th %tile Q(veh)	0.4	-	-	1.7	1	0.2	0	-	-			

HCM 2010 Signalized Intersection Summary

1: Ben Hill Rd & Welcome All Rd

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	2	55	1	1	7	11	225	4	1	201	370
Future Volume (veh/h)	329	2	55	1	1	7	11	225	4	1	201	370
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1794	1712	1900	1900	1681	1407	1759	1520	1900	1776	1776
Adj Flow Rate, veh/h	359	0	0	1	1	0	12	245	0	1	218	0
Adj No. of Lanes	2	0	1	1	1	1	1	2	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	6	0	11	0	0	13	35	8	25	0	7	7
Cap, veh/h	619	0	264	6	6	4	357	855	330	451	454	386
Arrive On Green	0.18	0.00	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.26	0.26	0.00
Sat Flow, veh/h	3414	0	1455	1810	1900	1429	875	3343	1292	1153	1776	1509
Grp Volume(v), veh/h	359	0	0	1	1	0	12	245	0	1	218	0
Grp Sat Flow(s),veh/h/ln	1707	0	1455	1810	1900	1429	875	1671	1292	1153	1776	1509
Q Serve(g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.4	1.9	0.0	0.0	3.3	0.0
Cycle Q Clear(g_c), s	3.1	0.0	0.0	0.0	0.0	0.0	3.7	1.9	0.0	1.9	3.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	619	0	264	6	6	4	357	855	330	451	454	386
V/C Ratio(X)	0.58	0.00	0.00	0.18	0.17	0.00	0.03	0.29	0.00	0.00	0.48	0.00
Avail Cap(c_a), veh/h	1700	0	725	282	296	222	705	2185	844	910	1161	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	0.0	0.0	16.0	16.0	0.0	11.7	9.6	0.0	10.4	10.1	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	14.4	12.9	0.0	0.0	0.2	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	0.0	0.0	0.1	0.1	0.0	0.2	1.6	0.0	0.0	3.1	0.0
LnGrp Delay(d),s/veh	12.9	0.0	0.0	30.3	28.9	0.0	11.8	9.8	0.0	10.4	10.9	0.0
LnGrp LOS	B			C	C		B	A		B	B	
Approach Vol, veh/h		359			2			257			219	
Approach Delay, s/veh		12.9			29.6			9.9			10.9	
Approach LOS		B			C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.2		11.8		14.2		6.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		21.0		16.0		21.0		5.0				
Max Q Clear Time (g_c+I1), s		5.3		5.1		5.7		2.0				
Green Ext Time (p_c), s		2.5		1.0		2.5		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			11.5									
HCM 2010 LOS			B									
Notes												
User approved volume balancing among the lanes for turning movement.												

HCM 2010 Signalized Intersection Summary

16: Global Gateway Connector & SR 139/Riverdale Road

05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	221	53	114	267	200	52	110	215	359	180	46
Future Volume (veh/h)	22	221	53	114	267	200	52	110	215	359	180	46
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1870	1900	1845	1881	1863	1863	1833	1900	1845	1863	1900
Adj Flow Rate, veh/h	23	233	56	120	281	0	55	116	0	378	189	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1	3	1	2	2	3	3	3	2	0
Cap, veh/h	304	453	107	348	1216	539	271	222	0	591	833	722
Arrive On Green	0.16	0.16	0.16	0.08	0.34	0.00	0.12	0.12	0.00	0.22	0.45	0.00
Sat Flow, veh/h	1116	2856	673	1757	3574	1583	1189	1833	0	1757	1863	1615
Grp Volume(v), veh/h	23	143	146	120	281	0	55	116	0	378	189	0
Grp Sat Flow(s),veh/h/ln	1116	1777	1752	1757	1787	1583	1189	1833	0	1757	1863	1615
Q Serve(g_s), s	1.0	4.2	4.3	3.0	3.2	0.0	2.4	3.4	0.0	9.7	3.5	0.0
Cycle Q Clear(g_c), s	1.0	4.2	4.3	3.0	3.2	0.0	2.4	3.4	0.0	9.7	3.5	0.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	282	278	348	1216	539	271	222	0	591	833	722
V/C Ratio(X)	0.08	0.51	0.52	0.34	0.23	0.00	0.20	0.52	0.00	0.64	0.23	0.00
Avail Cap(c_a), veh/h	503	598	589	372	1899	841	570	682	0	858	1583	1373
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	21.7	21.8	16.6	13.3	0.0	22.9	23.3	0.0	14.4	9.6	0.0
Incr Delay (d2), s/veh	0.1	1.4	1.5	0.6	0.1	0.0	0.4	1.9	0.0	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	3.9	3.9	2.7	2.8	0.0	1.5	3.2	0.0	8.4	3.3	0.0
LnGrp Delay(d),s/veh	20.5	23.2	23.3	17.2	13.4	0.0	23.2	25.2	0.0	15.5	9.7	0.0
LnGrp LOS	C	C	C	B	B		C	C		B	A	
Approach Vol, veh/h		312			401			171			567	
Approach Delay, s/veh		23.0			14.5			24.6			13.6	
Approach LOS		C			B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s		25.2		31.3	10.3	15.0	18.4	12.8				
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s		30.0		48.0	5.0	19.0	21.0	21.0				
Max Q Clear Time (g_c+I1), s		5.2		5.5	5.0	6.3	11.7	5.4				
Green Ext Time (p_c), s		3.3		1.8	0.0	2.6	0.8	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			17.2									
HCM 2010 LOS			B									

HCM 2010 AWSC

17: Scarborough Rd & Welcome All Road

05/26/2020

Intersection

Intersection Delay, s/veh 49.8

Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	172	30	42	189	171	48	93	50	277	205	29
Future Vol, veh/h	22	172	30	42	189	171	48	93	50	277	205	29
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	15	2	8	3	4	5	2	6	1	6	5	3
Mvmt Flow	23	181	32	44	199	180	51	98	53	292	216	31
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	20	36.4	17.2	85.5
HCM LOS	C	E	C	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	25%	10%	10%	54%
Vol Thru, %	49%	77%	47%	40%
Vol Right, %	26%	13%	43%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	191	224	402	511
LT Vol	48	22	42	277
Through Vol	93	172	189	205
RT Vol	50	30	171	29
Lane Flow Rate	201	236	423	538
Geometry Grp	1	1	1	1
Degree of Util (X)	0.435	0.52	0.826	1.065
Departure Headway (Hd)	8.116	8.317	7.335	7.131
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	446	436	495	506
Service Time	6.116	6.317	5.335	5.22
HCM Lane V/C Ratio	0.451	0.541	0.855	1.063
HCM Control Delay	17.2	20	36.4	85.5
HCM Lane LOS	C	C	E	F
HCM 95th-tile Q	2.2	2.9	8.1	16.3

HCM 2010 Signalized Intersection Summary

18: Washington Road & SR 6/Camp Creek Pkwy

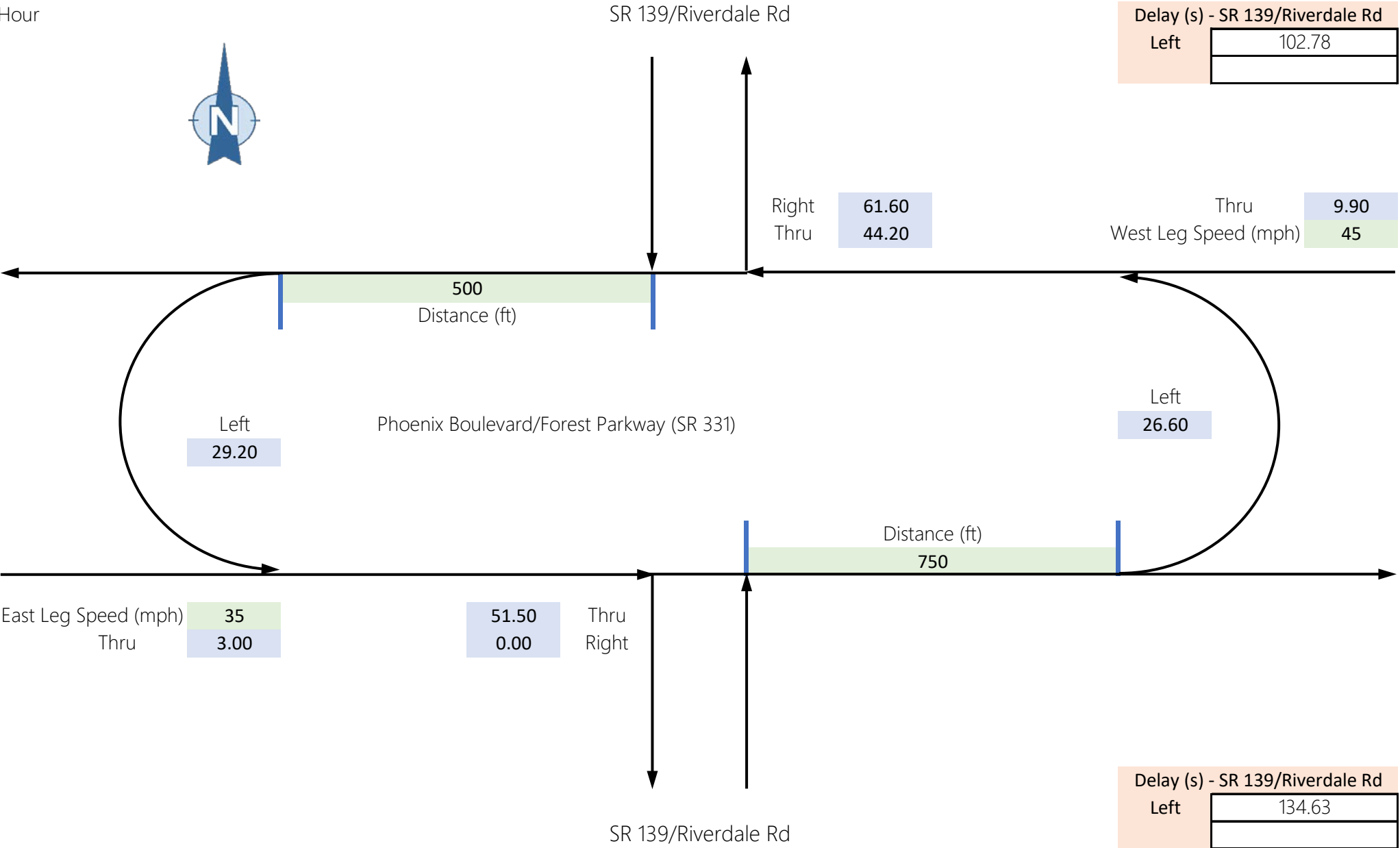
05/26/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 						 	
Traffic Volume (veh/h)	257	991	106	133	1746	28	98	211	122	22	233	240
Future Volume (veh/h)	257	991	106	133	1746	28	98	211	122	22	233	240
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1845	1845	1792	1863	1810	1863	1776	1810	1810	1743	1863
Adj Flow Rate, veh/h	265	1022	0	137	1800	0	101	218	126	23	240	0
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	3	3	6	2	5	2	7	5	5	9	2
Cap, veh/h	254	1928	863	352	1652	718	150	301	260	152	261	237
Arrive On Green	0.14	0.55	0.00	0.06	0.47	0.00	0.04	0.17	0.17	0.02	0.15	0.00
Sat Flow, veh/h	1792	3505	1568	1707	3539	1538	1774	1776	1538	1723	1743	1583
Grp Volume(v), veh/h	265	1022	0	137	1800	0	101	218	126	23	240	0
Grp Sat Flow(s),veh/h/ln	1792	1752	1568	1707	1770	1538	1774	1776	1538	1723	1743	1583
Q Serve(g_s), s	17.0	22.2	0.0	5.0	56.0	0.0	5.0	13.9	8.9	1.3	16.3	0.0
Cycle Q Clear(g_c), s	17.0	22.2	0.0	5.0	56.0	0.0	5.0	13.9	8.9	1.3	16.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	1928	863	352	1652	718	150	301	260	152	261	237
V/C Ratio(X)	1.04	0.53	0.00	0.39	1.09	0.00	0.67	0.72	0.48	0.15	0.92	0.00
Avail Cap(c_a), veh/h	254	1928	863	395	1652	718	150	301	260	185	261	237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.5	17.1	0.0	15.6	32.0	0.0	44.9	47.2	45.1	42.2	50.3	0.0
Incr Delay (d2), s/veh	68.5	0.3	0.0	0.7	50.9	0.0	11.2	8.4	1.4	0.5	34.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	23.8	16.1	0.0	4.2	70.2	0.0	2.5	12.0	7.0	1.2	15.7	0.0
LnGrp Delay(d),s/veh	120.0	17.4	0.0	16.3	82.9	0.0	56.0	55.6	46.5	42.7	84.9	0.0
LnGrp LOS	F	B		B	F		E	E	D	D	F	
Approach Vol, veh/h	1287				1937		445				263	
Approach Delay, s/veh	38.5				78.2		53.1				81.2	
Approach LOS	D				E		D				F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.0	62.0	11.0	24.0	13.0	72.0	8.7	26.3				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	56.0	5.0	18.0	10.0	63.0	5.0	18.0				
Max Q Clear Time (g_c+I1), s	19.0	58.0	7.0	18.3	7.0	24.2	3.3	15.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	30.0	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			62.6									
HCM 2010 LOS			E									

Peak Hour Delays

Based on SYNCHRO Model

2029 AM Peak Hour



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume	344	117	67	62	204	376	80	1873	80	229	853	322
Delay (s)	134.63	54.50	0	102.78	54.10	0	61.6	37.6	0	130.7	11.9	0
*												
	EB			WB			NB			SB		
Volume	528			642			2033			1404		
Delay (s)	99.79			27.12			37.06			28.55		
	99.79			27.1165			37.06483			28.54772		

Overall Delay (s)

40.27

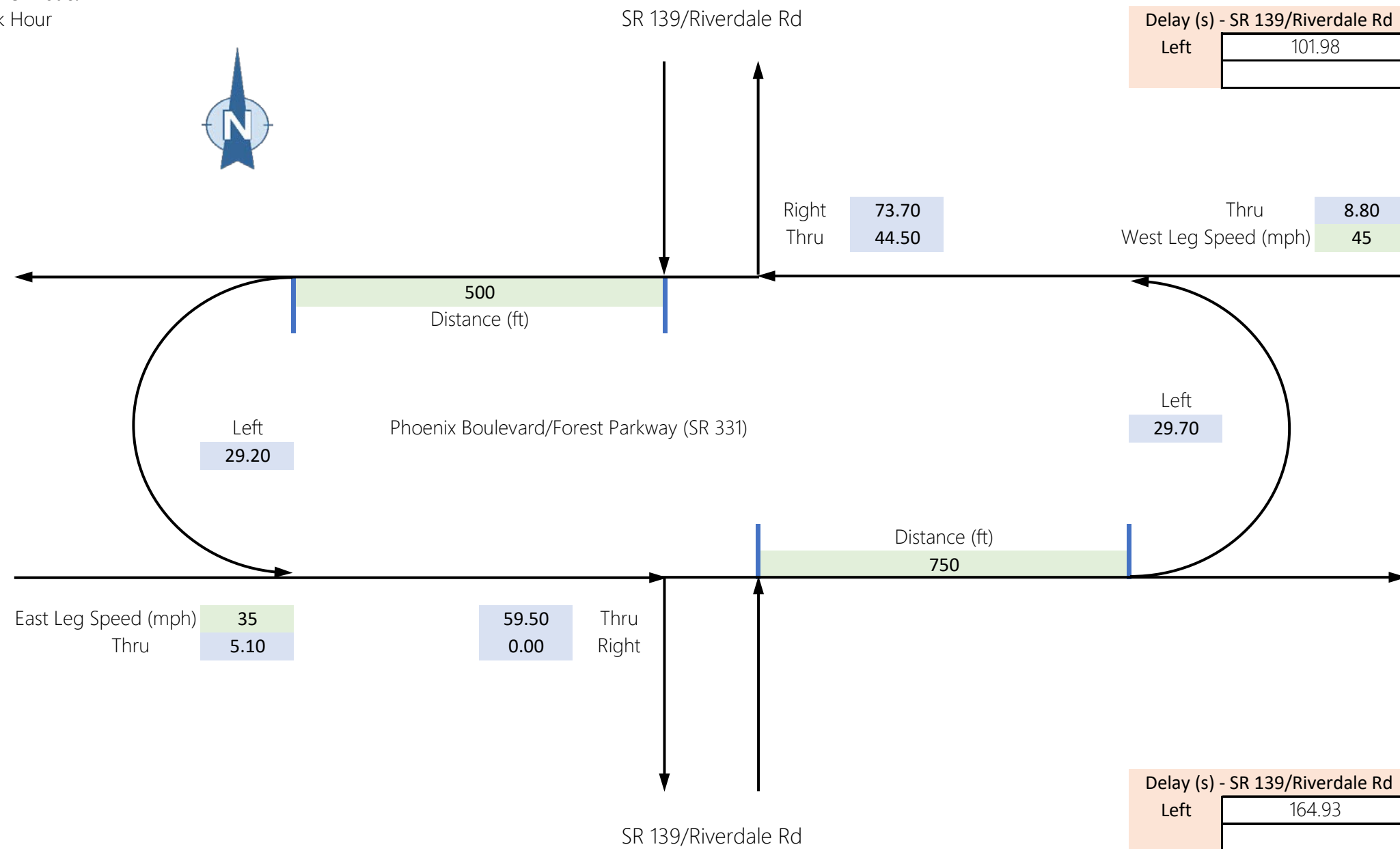
40.27

Peak Hour Delays

Based on SYNCHRO Model
2029 PM Peak Hour

Peak Hour Delays

Based on SYNCHRO Model
2029 PM Peak Hour



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume	306	231	211	148	155	273	103	1021	87	394	2019	336
Delay (s)	164.93	64.60	0	101.98	53.30	0	75.8	22.1	0	59.4	37.7	0

*

	EB	WB	NB	SB
Volume	748	576	1211	2749
Delay (s)	87.42	40.55	25.08	36.20

Overall Delay (s)	41.38
-------------------	-------

87.42229

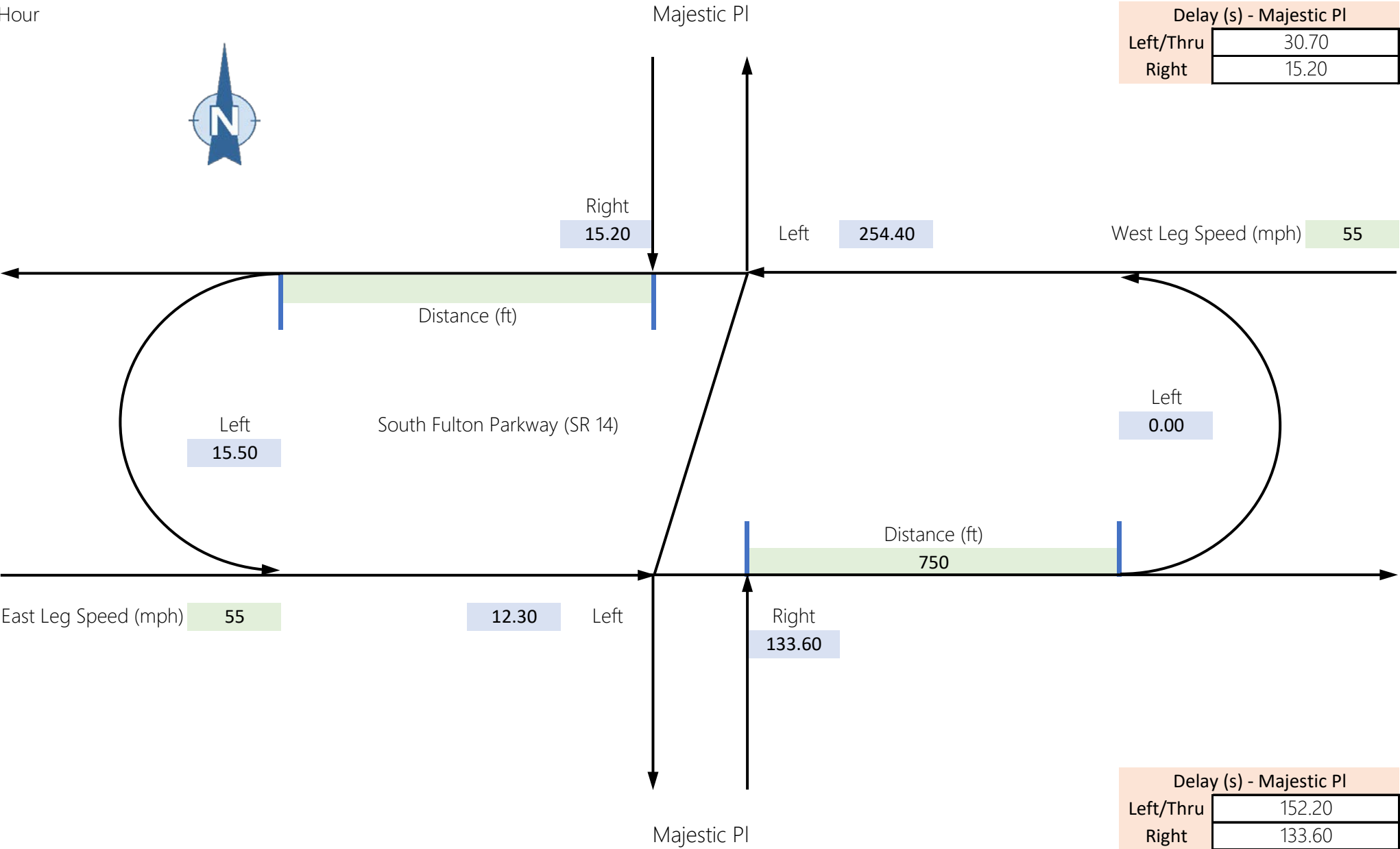
40.54621

25.07969

36.20222

41.38

Peak Hour Delays
 Based on SYNCHRO Model
 2029 AM Peak Hour



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume	2	2562	11	55	1377	89	0	0	47	27	1	2
Delay (s)	12.3	0	0	254.40	0	0	152.2	152.2	133.6	30.7	30.7	15.2

	EB			WB			NB			SB		
Volume	2575			1521			47			30		
Delay (s)	0.01			9.20			133.60			29.67		

Overall Delay (s)
5.08

0.009553

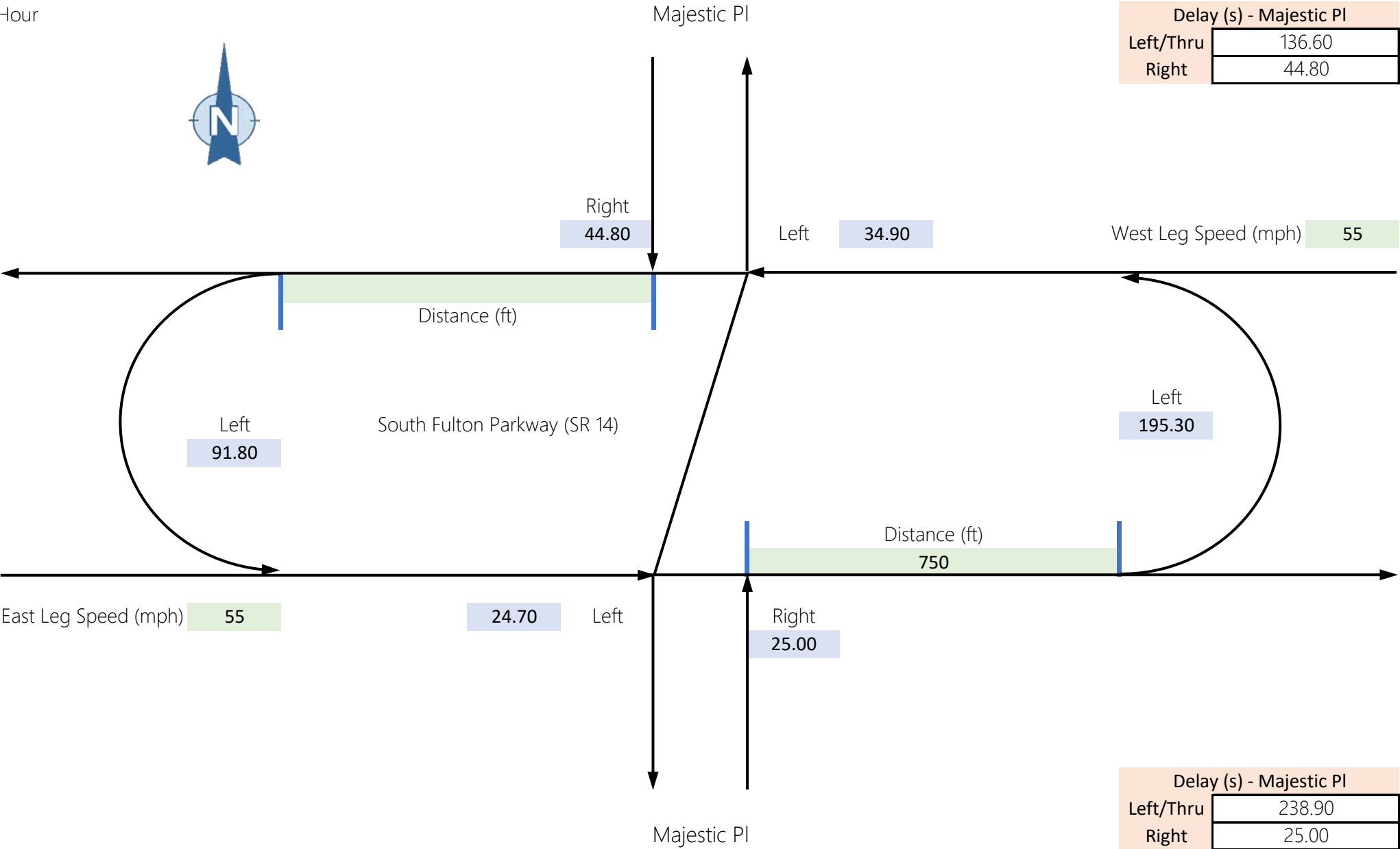
9.199211

133.6

29.66667

5.08

Peak Hour Delays
 Based on SYNCHRO Model
 2029 PM Peak Hour



	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume	5	1561	5	71	2330	110	3	0	34	61	0	5
Delay (s)	24.7	0	0	34.90	0	0	238.9	238.9	25	136.6	136.6	44.80

	EB			WB			NB			SB		
Volume	1571			2511			37			66		
Delay (s)	0.08			0.99			42.34			129.65		

Overall Delay (s)
3.04

0.078612

0.986818

42.34284

129.6455

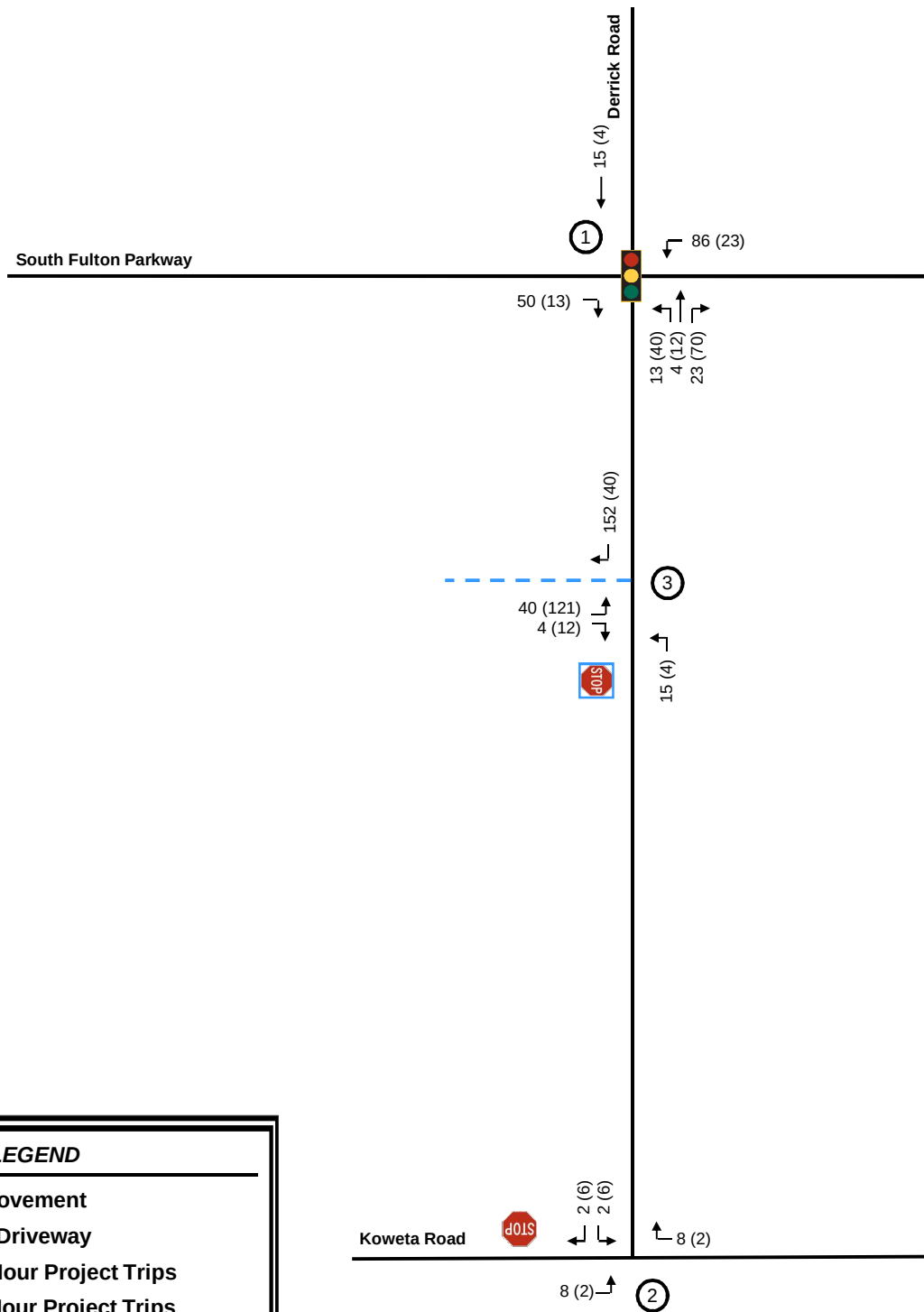
3.04

Appendix F

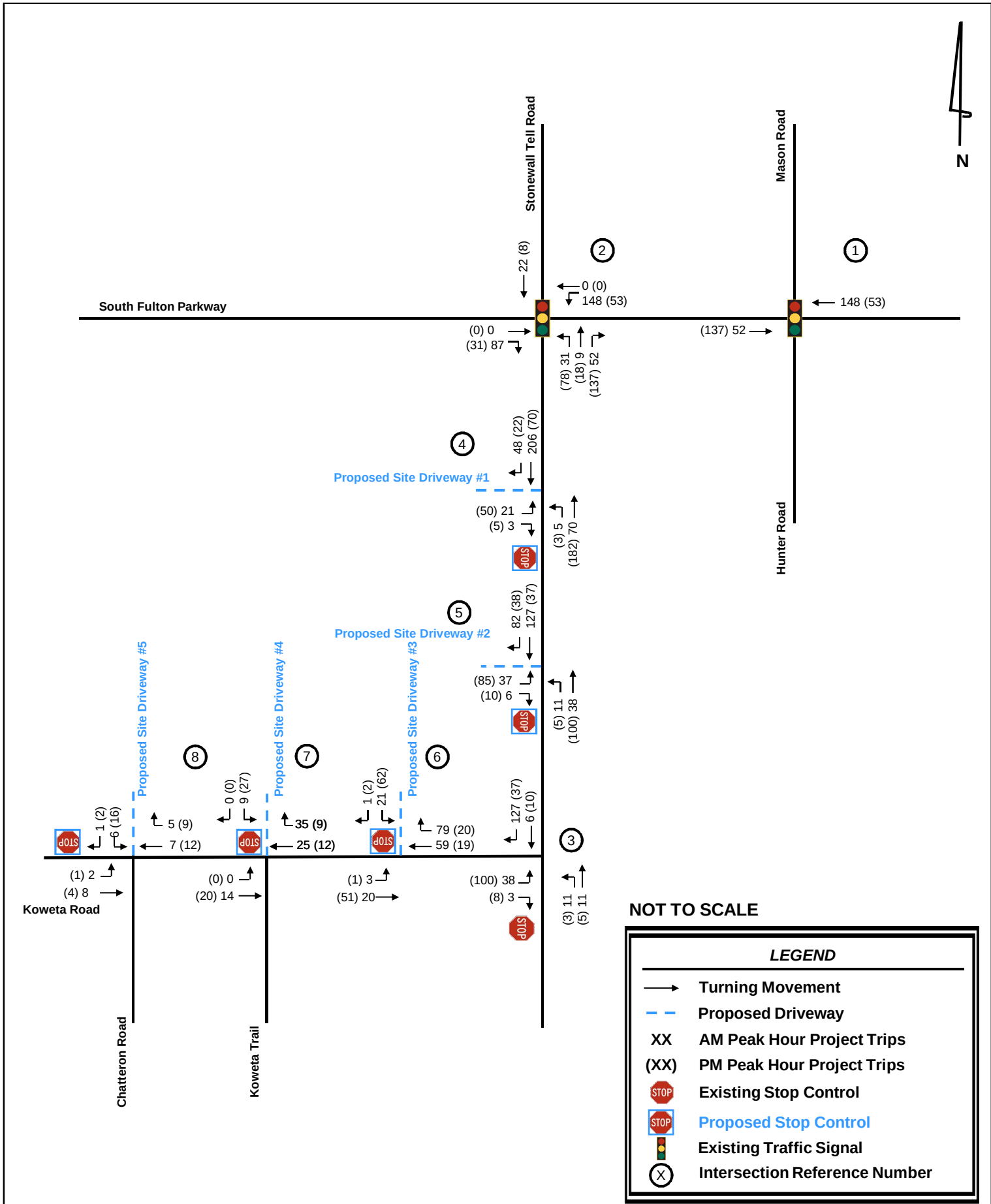
Intersection Growth Rate Analyses

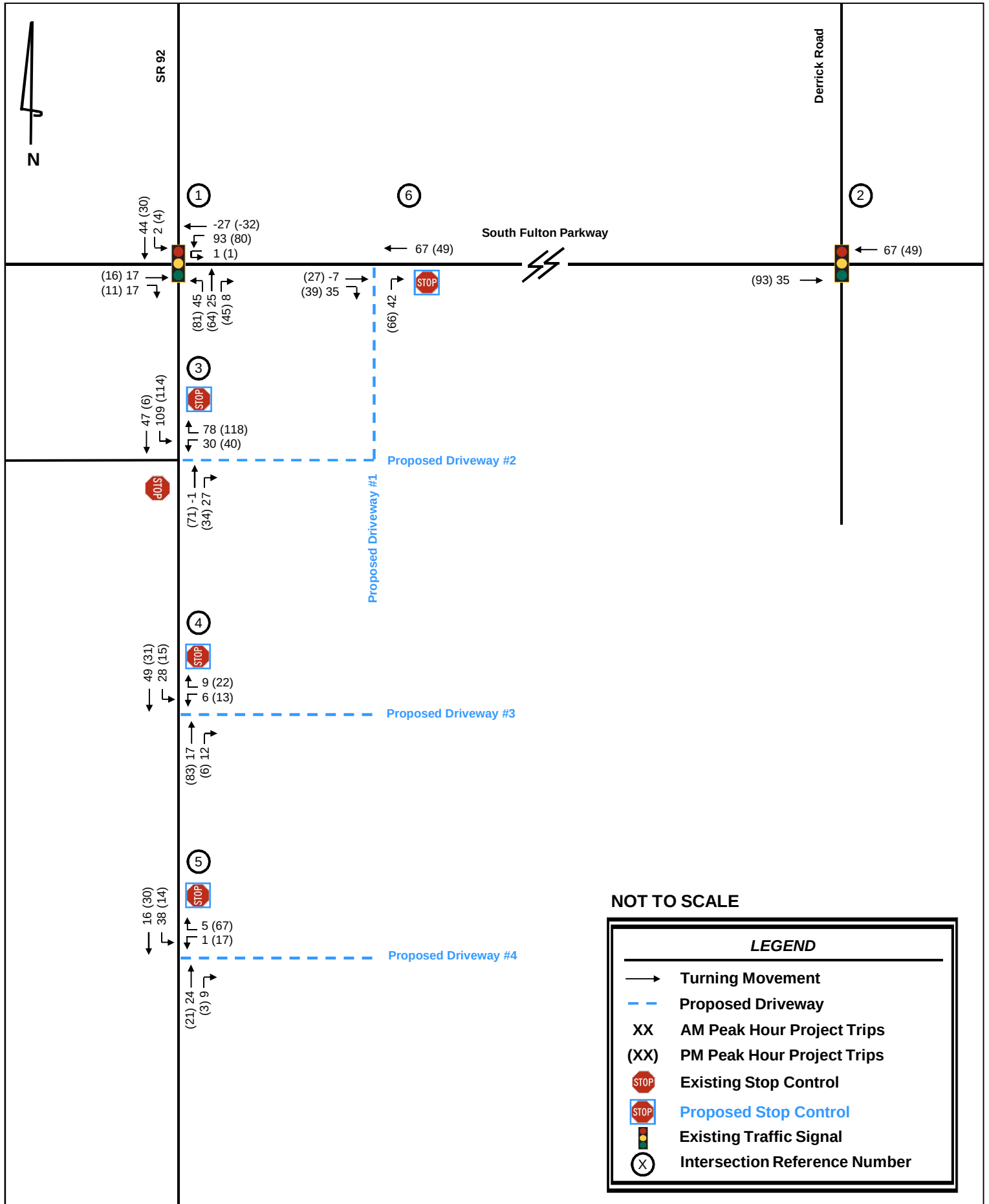
ARC ABM FORECASTED GROWTH RATES

Location	ARC Travel Demand Model Output (Mainline/ Sidestreet)		
	2015	2040	Growth Rate
Ben Hill Road @ Welcome All Road	9,099/ 4,772	13,824/ 6,847	1.7%/ 1.5%
Loop Road @ Charles W. Grant Pkwy/Maynard H. Jackson Jr. Boulevard	73,385/ 27,591	90,345/ 33,854	0.8%/ 0.8%
North Commerce Drive @ Washington Road	6,550/ -	8,605/ -	1.1%/ 1.1%
Riverdale Road (SR 139) @ Phoenix Boulevard/Forest Parkway (SR 331)	95,301/ 25,441	107,751/ 32,560	0.5%/ 1.0%
South Fulton Parkway (SR 14) @ Majestic Place	66,738/ 4,072	81,944/ 5,000	0.8%/ 0.8%
Old National Highway (SR 279) @ Sullivan Road	24,718/ 8,439	32,470/ 11,101	1.1%/ 1.1%
Camp Creek Parkway (SR 6) @ Centre Parkway/Princeton Lakes Parkway	55,428/ 4,018	70,101/ 4,492	0.9%/ 0.4%
Camp Creek Parkway (SR 6) @ North Commerce Drive	68,402/ -	90,373/ -	1.1%/ 1.1%
Forest Parkway (SR 331) @ Old Dixie Road (US 19/41/SR 3)	64,804/ 3,3857	57,663/ 45,027	0.5%/ 1.1%
Loop Road @ Toffie Terrace	16,298/ 13,202	23,810/ 15,311	1.5%/ 0.6%
Riverdale Road (SR 139) @ Sullivan Road	43,720/ -	52,314/ -	0.7%/ 0.7%
South Loop Road @ Lake Mirror Road	15,830/ 11,343	26,718/ 12,028	2.1%/ 0.2%
Clark Howell Highway @ Lake Mirror Road	16,685/ 10,127	22,925/ 9,949	1.3%/ 0.5%
Riverdale Road (SR 139) @ West Fayetteville Road (SR 314)	19,748/ 13,987	22,653/ 16,575	0.6%/ 0.7%
Riverdale Road (SR 139) @ Global Gateway Connector	15,022/ 2,013	20,808/ 3,014	1.3%/ 1.6%
Welcome All Road @ Scarborough Road	7,083/ 2,653	9,759/ 4,364	1.3%/ 2.0%
Camp Creek Parkway (SR 6) @ Washington Road	62,602/ 16,676	84,797/ 24,789	1.2%/ 1.6%



NOT TO SCALE







Emily Estes, Planner, State Road & Tollway Authority

245 Peachtree Center Avenue, Suite 2200, Atlanta, GA 30303

Telephone: 404-893-6171

Email: eestes@srta.ga.gov

Re: Expedited Review Request for DRI #2767 Hillwood Hall Road Site in Union City, GA

Dear Ms. Estes,

An expedited DRI review is requested for the planned 572,000 square foot high-cube (43 feet high) warehouse/distribution center on 57.478 acres located northwest of Campbellton-Fairburn Road (SR 92) and South Fulton Parkway and southeast of Hall Road in Union City, Fulton County, Georgia. The primary vehicular access will be on SR 92 at the existing intersection with Thompson Road and a secondary access restricting truck use will be provided on Hall Road. Although the final user has not yet been determined, it is estimated that there will be approximately 150 employees and 183 trucks on site daily. Completion is planned for late 2019.

According to GRTA's Procedures and Principles for DRI Review, the proposed DRI complies with the Expedited Review Criteria in Section 3-102, Part B – Limited Trip Generation, which states "*...the land uses within the proposed DRI are such that the amount of trips generated by the development is likely to have minimal impact on the road network.*" Complying with both:

1. No more than one thousand (1,000) gross daily trips generated by the DRI..., and

3. The proposed DRI is projected to generate no more than one hundred (100) gross PM peak hour weekday trips...

The data and methodology from the Institute of Transportation Engineers (ITE) *Trip Generation*, 9th Edition determined the trip generation shown in the following table:

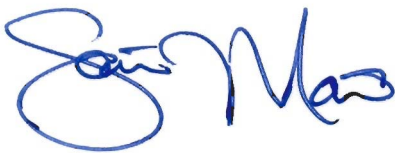
572 ksf High-Cube Warehouse Distribution Center (152 LUC)		Project Trips		
		Total	Inbound	Outbound
Personal Vehicles	Daily	596	298	298
	AM Peak Hour	37	26	11
	PM Peak Hour	71	22	49
Trucks	Daily	366	183	183
	AM Peak Hour	17	12	5
	PM Peak Hour	23	7	16
Total Trips Generated	Daily	962	481	481
	AM Peak Hour	54	38	16
	PM Peak Hour	94	29	55

Developer Applicant Contact: Scott Martin, Hillwood (770.407.4763)

Site Designer Contact: Scott Gardner, Eberly & Associates, Inc. (770.452.7849)

Traffic Engineering Contact: Randall C. Parker, CAYLYX Engineers, Inc. (770.316.1452)

Sincerely,

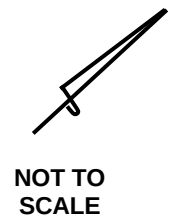


Scott Martin

Development Director - Hillwood

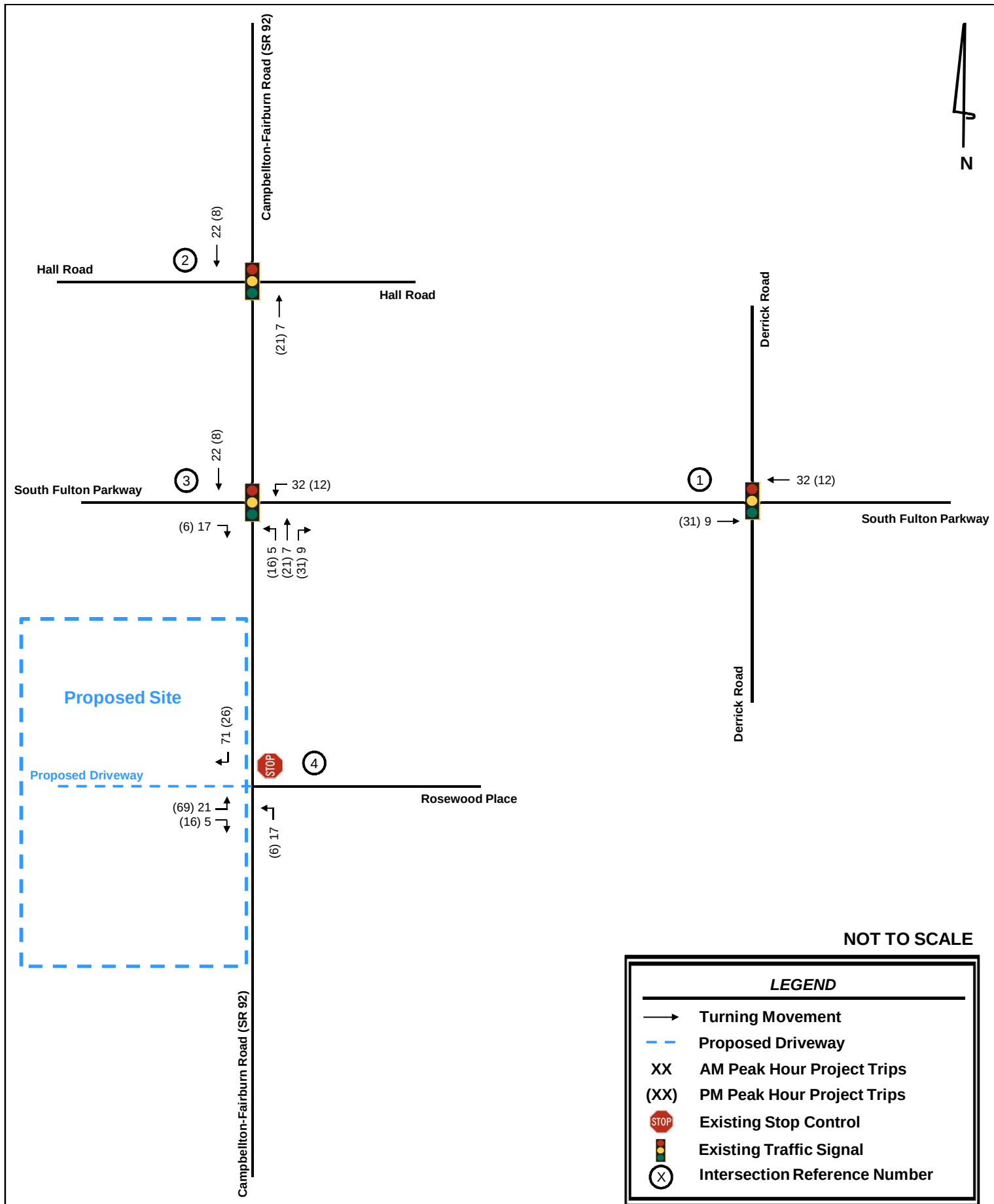
Cc: Ellis Still – Community Development Director, City of Union City, GA

Andrew Smith – Principal Planner, Community Development, Atlanta Regional Commission



LEGEND

	Turning Movement
	Proposed Driveway
XX	AM Peak Hour Project Trips
(XX)	PM Peak Hour Project Trips
	Existing Traffic Signal
	Existing Stop Control
	Proposed Stop Control
	Intersection Reference Number



I-285 interchange access is achieved at Conley Road, will be highly desirable for regionally accessible uses.

4.2.3 Concept Plan

Figure 4.2g provides a concept plan for the character areas with the proposed street grid incorporated. This plan highlights locations for potential uses as described previously.

4.2.4 Phase I

Phase I, as depicted in Figures 4.2h and i, focuses on the International Mixed Use Office District and the Regional Mixed Use Retail District. The phase I Office District is envisioned at the future MARTA station to create a Class A Office TOD site. According to the market analysis it is anticipated that in the coming five years, the airport area will gain increased momentum, as new lodging and airport investment further enhances the attractiveness of the area. An office absorption rate of approximately 150,000 square feet is anticipated for the Mountain View area by 2026.

The Regional Mixed Use Retail District focuses on providing luxury outlet retail. While not high paying jobs, this district complements the office district with retail and restaurants and has the potential to draw greater office demand and increase County tax revenue.

The Mountain View area is 25 or more miles from any significant outlet retail and, given its strong regional access via I-75 and I-275, its airport proximity, and its ease of access to in-town Atlanta, this site represents a very real target for outlet retail. The market study anticipates a regional outlet retail demand of



4.2f: Fashion Outlets of Chicago

around 260,000 square feet of space. Figure 4.2f showcases the Fashion Outlets of Chicago, a case study example of the type of premium outlet retail Mountain View should aim to attract. The Fashion Outlets of Chicago were developed in 2013, adjacent to O'Hare International Airport and 15 minutes from Downtown Chicago. The outlets focus on providing an outlet experience with upscale and national retailers. The outlets cater to both local residents and tourists, with a strong focus on providing services to travelers such as accessibility to and from O'Hare International Airport with a concierge service that allows travelers to print boarding passes and check luggage, in addition to providing amenities such as luggage and shopping bag storage, translation services, and currency exchange.