Transportation Analysis

Minter Drive Development of Regional Impact #3495
City of Hampton, Georgia

December 17, 2021

Revised February 15, 2022

MARC R. ACAMPORA, PE, LLC
TRAFFIC ENGINEERING

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City of Hampton, Georgia

study prepared for:

General Holdings Unlimited LLC
PO Box 1796
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Summary

This Transportation Analysis was prepared for the Minter Drive Development of Regional Impact (DRI) #3495, in compliance with the requirements of the Georgia Regional Transportation Authority, as well as the Atlanta Regional Commission, the City of Hampton, and the Georgia Department of Transportation. The following is a summary of the findings of this study:

1. The site is located along the west side of US 19/41 at Minter Drive. The project is a mix of residential and retail land uses, with a total of 685 residential units and 69,600 square feet of retail.

2. The proposed Minter Drive DRI will generate 354 new trips in the a.m. peak hour, 556 new trips in the p.m. peak hour, and 6,686 new daily trips.

3. The existing condition analysis identified two failing locations – the signalized westbound approach of Woolsey Road at US 19/41 and the side street stop sign controlled approach of Lower Woolsey Road at US 19/41. The following existing condition mitigation is recommended:

    a. Spilt the east/west phasing on Woolsey Road / Richard Petty Boulevard.
    b. Signalize US 19/41 at Lower Woolsey Road when warranted.

4. Background traffic volume growth in this area is projected at 2% per year for ten years to the project build-out date of 2031. In addition, the trips from three other DRIs in the area were included in the future no-build and build analyses.

5. The no-build analysis recommended the following mitigation:

    a. Add a second eastbound right turn lane and accompanying right turn overlap phase on Lower Woolsey Road at US 19/41. This mitigation assumes the intersection is signalized, as recommended above.

6. No mitigation was identified for the future build condition.

7. At the north project access there is an existing median break and northbound U-Turn lane which will serve as the project's left turn lane. A southbound right turn lane is required on US 19/41 at this access.

8. At the south project access at Minter Drive there is an existing median break and a northbound left turn lane and southbound right turn lane which will serve the project.

9. The access analysis assumes side street stop sign control at both accesses. However, high delays are projected exiting and entering with this control. Therefore, a signal warrant study should be performed to determine if signalization is appropriate at either access. The Georgia DOT will also require an Intersection Control Evaluation (ICE) for each access.

10. The project civil engineer should ensure that each access meets all applicable design standards including sight distances, lane widths, tapers and storage lengths for auxiliary lanes, minimum distances to internal intersecting roadways, turn radii, grades, etc.

Tables A and B summarize the locations with failing levels of service and the levels of service with the recommended mitigation, for the no-build condition and the build condition, respectively.

Table A – No-Build Levels of Service at Failing Locations, Without and With Mitigation

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	Without Mitigation		With Mitigation		Without Mitigation		With Mitigation	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
2. US 19/41 at Woolsey Road/Richard Petty Blvd								
westbound approach	*E*	*57.9*	D	46.0	*F*	*200.8*	D	50.2
3. US 19/41 at Lower Woolsey Road	*E*	*37.1*	B	12.1	*F*	*NA**	C	20.6
eastbound left turn	*F*	*NA**	D**	44.4	*F*	*NA**	D**	44.4
eastbound right turn	C	21.0			*F*	*NA**		

*NA – limits of methodology exceeded **approach LOS with signal

Table B – Build Levels of Service at Failing Locations, Without and With Mitigation

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	Without Mitigation		With Mitigation		Without Mitigation		With Mitigation	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)
2. US 19/41 at Woolsey Road/Richard Petty Blvd								
westbound approach	*E*	*60.1*	D	48.5	*F*	*200.8*	D	52.0
3. US 19/41 at Lower Woolsey Road	*E*	*44.9*	B	15.0	*F*	*NA**	C	24.9
eastbound left turn	*F*	*NA**	D**	54.7	*F*	*NA**	D**	53.5
eastbound right turn	D	25.6			*F*	*NA**		

*NA – limits of methodology exceeded **approach LOS with signal

Table C presents the project's added trips and their percentage of the overall total volumes for failing locations in the build condition.

Table C – Minter Drive DRI Project-Added Trips at Failing Locations

Intersection / Approach	A.M. Peak Hour			P.M. Peak Hour		
	Project Trips	Total Build Volume	% Project Trips	Project Trips	Total Build Volume	% Project Trips
2. US 19/41 at Woolsey Road/Richard Petty Blvd						
westbound approach	4	248	1.6%	14	348	4.0%
3. US 19/41 at Lower Woolsey Road						
eastbound left turn	0	87	0%	0	200	0%
eastbound right turn	31	342	9.1%	96	599	16.0%
total approach	31	429	7.2%	96	799	12.0%

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1. Project Description

This Transportation Analysis was performed for the proposed Minter Drive Development of Regional Impact (DRI) #3495. The project is a mix of residential and retail land uses, with a total of 685 residential units and 69,600 square feet of retail. The site is located along the west side of US 19/41 at Minter Drive, as presented in Figure 1. The qualifying DRI thresholds exceeded are 400,000 square feet of mixed-use and 120 acres in a rural area, as set forth in the Rules of the Georgia Department of Community Affairs (DCA), Chapter 110-12-7-.05. This study was performed to meet the Georgia Regional Transportation Authority's (GRTA) Development of Regional Impact non-expedited review requirements, according to the GRTA DRI Review Package Technical Guidelines. The scope of the study was set forth in the Letter of Understanding (LOU) dated October 12, 2021.

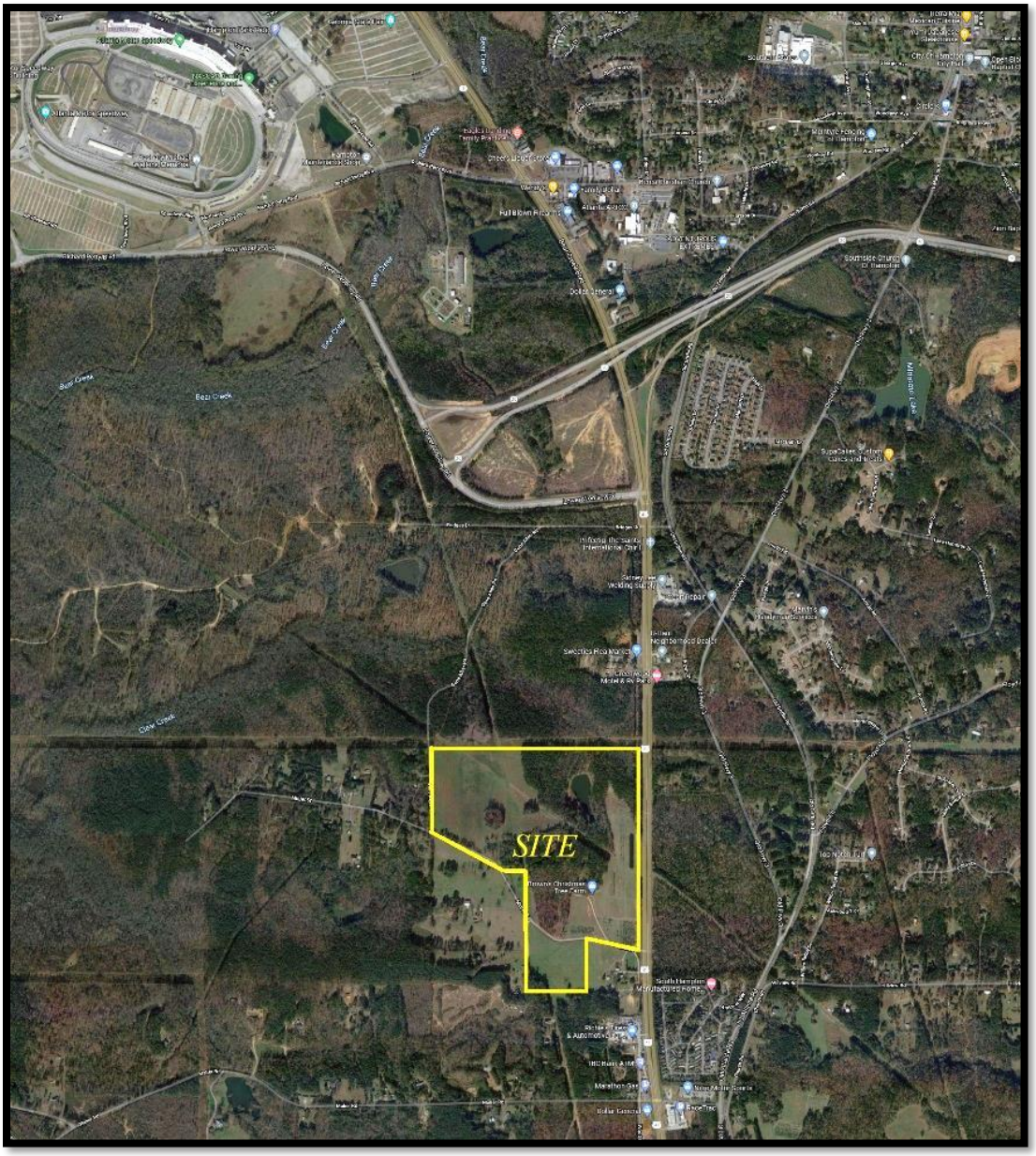


Figure 1 – Location Map

1.1 Project Phasing, Pods, and Land Uses

The subject site is approximately 141 acres and is primarily undeveloped. The trigger that initiated DRI review was a request to the City of Hampton for annexation and rezoning.

The project land uses and sizes are summarized in Table 1. The project will be developed in one continuous phase, with a tentative ten-year build-out (2031), which will be influenced by market conditions.

Table 1 – Minter Drive DRI #3495 Proposed Land Uses and Sizes

Land Use	Size
Single Family Homes	133 units
Townhomes	252 units
Apartments	300 units
Retail / Commercial / Outparcels	69,600 ft²

1.2 Site Plan

The site plan is presented in Figure 2.

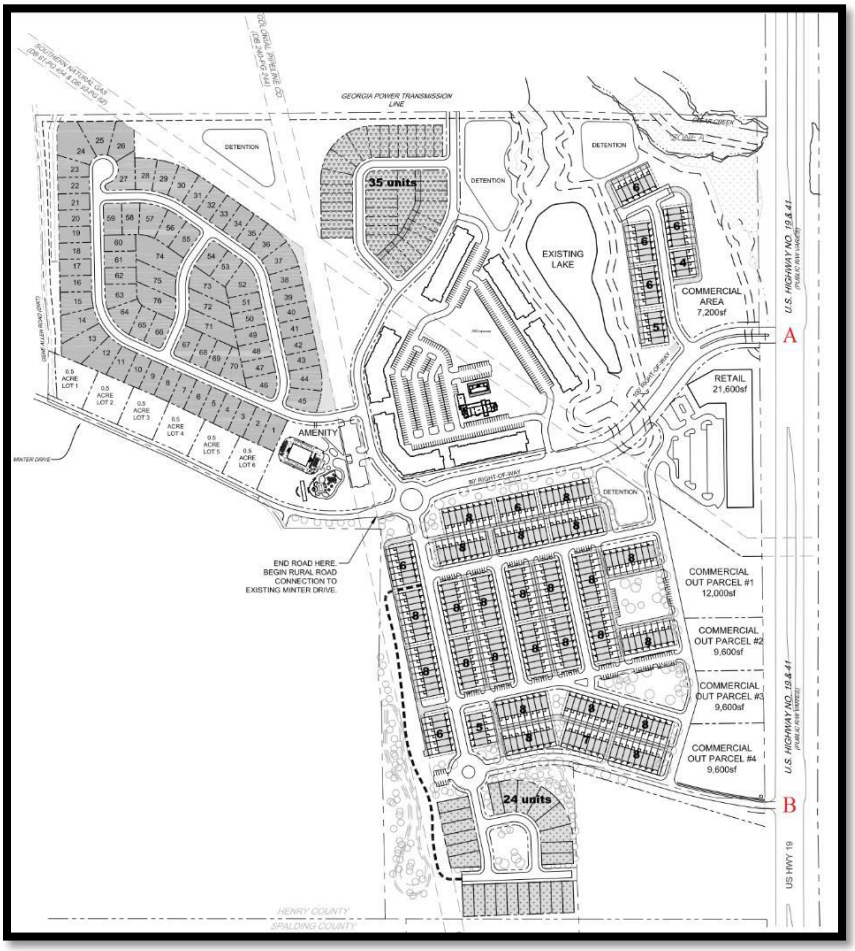


Figure 2 – Minter Drive DRI #3495 Site Plan

1.3 Site Vehicular Access

The project will be served by two vehicular accesses on the west side of US 19/41. The highway is median divided and both access locations are at existing median breaks, the southern location being the existing intersection with Minter Drive. The retail tracts will have internal connections to the internal project roadways, but no direct access to US 19/41. The site plan in Figure 2 shows the two accesses on US 19/41, labelled “A” and “B”.

1.4 On-Site Pedestrian and Bicycle Facilities

The site plan includes a multi-use path along one side of the main internal parkway from US 19/41 to the traffic circle. Sidewalks will be built along all other internal roadways. There are no external alternative mode facilities (transit, pedestrian, bicycle) with which to connect. No separate bicycle lanes exist in the study area and none are proposed within the DRI site.

1.5 Transit Access

There is no regularly scheduled mass transit service in the vicinity of the subject site.

1.6 Parking

Parking will be provided on each individual single-family house and townhome property. Each house and townhouse will have a private driveway and a two-car garage. Parking for the apartments will be provided at two (2) spaces per unit plus one (1) guest space for every four (4) units. Parking for the retail / commercial use will be provided at one (1) space 500 square feet, or a minimum of 139 spaces total.

2. Study Network

The study network for this project was agreed to with the reviewing agencies as specified in GRTA's Letter of Understanding (LOU) dated October 12, 2021. The network intersections are presented in Table 2.

Table 2 – Intersections Included in the Study Network

#	Description	Control
1	US 19/41 at Oak Street / Tara Place	signalized
2	US 19/41 at Woolsey Road / Richard Petty Boulevard	signalized
3	US 19/41 at Lower Woolsey Road	unsignalized
4	US 19/41 at Malier Road	signalized
5	GA 20 at East Main Street / Old Highway 3	signalized
6	US 19/41 at north full-movement project access	unsignalized, future build
7	US 19/41 at south full-movement project access (at Minter Drive)	unsignalized

2.1 Peak Time Periods and Analysis Conditions

All analyses are performed for the weekday a.m. peak hour (counted 7:00-9:00 a.m.) and the weekday p.m. peak hour (counted 4:00-6:00 p.m.). The existing 2021, 2031 no-build, and 2031 build conditions are evaluated.

2.2 Level of Service Standard

The level of service standard is that level of service considered to be the minimum that provides acceptable operating conditions. A level of service (LOS) standard of D is used for suburban and urban areas, and for this study a LOS D standard was applied to all facilities. In the facilities needs analysis, mitigation is developed with LOS D as the minimum goal. Appendix B includes a description of the methodology used for the intersection analysis.

3. Existing Transportation Facilities

This section provides a description of the existing transportation infrastructure that will serve the proposed Minter Drive DRI. An inventory was performed of the lanes and method of control at the existing traffic facilities in the vicinity of the site. The availability of transit, bicycle, and pedestrian facilities adjacent to the site was also reviewed. Figure 6 in the Existing Traffic Analysis section of this report depicts the existing lanes and control for the intersections in the study network. The following is a brief description of the transportation facilities in the vicinity of the site.

3.1 US Highway 19/41

US Highway 19/41 (Georgia State Route 3) is a north/south urban principal arterial that provides regional mobility through central Georgia. Adjacent to the site there are two northbound and three southbound (dropping to two south of Minter Drive) through travel lanes per direction with a landscaped median and exclusive turn lanes at most intersections. Development along US 19/41 in this area primarily consists of undeveloped land and small retail nodes. A short distance to the north is the Atlanta Motor Speedway and Henry County Airport. The terrain along US 19/41 is gently rolling and the posted speed limit is 55 mph. In 2019 (pre-pandemic) the Georgia Department of Transportation (Georgia DOT) recorded an Annual Average Daily Traffic (AADT) volume of 26,500 vehicles per day (vpd) on US 19/41 north of Minter Drive, while in 2020 (during the pandemic) the volume dropped to 24,900 vpd. A 24-hour bi-directional count collected on US 19/41 north of Minter Drive for this study on Thursday October 28, 2021 revealed a northbound count of 13,551 vehicles and a southbound count of 13,092 vehicles, for a two-way count of 26,643 vehicles, which is slightly above the average pre-pandemic level.

3.2 Pedestrian and Bicycle Facilities

There are no sidewalks or dedicated or bicycle lanes on US 19/41 in the vicinity of the site. There are crosswalks and pedestrian signals at the signalized intersection of US 19/41 at Malier Road, approximately 2,000 feet south of Minter Drive, but the next signalized intersection, and opportunity to cross US 19/41, to the north is at Woolsey Road, almost two miles from the site.

3.3 Transit Service

There is no regularly scheduled mass transit service in the vicinity of the subject site.

4. Project Traffic Characteristics

This section describes the anticipated traffic characteristics of the proposed Minter Drive DRI, including a site description, how much traffic the project will generate, and where that traffic will travel.

4.1 Trip Generation

Trip generation is an estimate of the number of entering and exiting vehicular trips that will be generated by the proposed DRI. The trip generation was calculated using the standard equations and rates in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, *11th Edition*. The trip generation for the single family homes was calculated using ITE Land Use 210 – Single-Family Detached Housing. ITE Land Use 220 – Multi-Family Attached Housing (Low-Rise) was used for the townhomes and ITE Land Use 221 – Multi-Family Attached Housing (Mid-Rise) was used for the apartments.

ITE Land Use 820 – Shopping Center was used for the retail with an assumed level of development of 10,000 square feet per acre. The average trip rates were used for this land use due to its small size compared with the data sources. A pass-by adjustment was applied for this retail use to account for trips already passing the site on US 19/41 that will stop for shopping or dining purposes then continue on their original trip. The p.m. peak hour pass-by trip percentage was the average taken from the ITE *Trip Generation Handbook* for the Shopping Center land use, 34%, while the a.m. and 24-hour pass-by percentages were each reduced from the p.m. percentage by 10% to 24%.

A multi-use adjustment was made using the methodology and spreadsheets of the National Cooperative Highway Research Program's (NCHRP) *Report 684.* This methodology is used to calculate how many trips will occur between compatible land uses within the same development (internal trips between the residential and the retail). The mixed-use adjustment calculation worksheets are attached to this memorandum. No transit or pedestrian adjustments were applied. Table 3 presents the trip generation for the Minter Drive DRI.

Table 3 – Minter Drive DRI Trip Generation

Land Use	ITE Code	Size	AM Peak Hour			PM Peak Hour			24-Hour
			Enter	Exit	2-Way	Enter	Exit	2-Way	2-Way
Single Family Homes	210	133 units	25	74	99	84	50	134	1,352
Townhomes	220	252 units	26	89	115	84	50	134	1,864
Apartments	221	300 units	26	74	100	77	50	127	1,632
Residential Subtotal		685 units	77	237	314	245	150	395	4,848
-multi-use adjustment			-2	-3	-5	-6	-2	-8	-80
Residential New Trips			*75*	*234*	*309*	*239*	*148*	*387*	*4,768*
Retail*	820	69,600 ft²	40	25	65	127	138	265	2,628
-multi-use adjustment			-3	-2	-5	-2	-6	-8	-80
-pass-by adjustment			-9	-6	-15	-43	-45	-88	-630
Retail New Trips			*28*	*17*	*45*	*82*	*87*	*169*	*1,918*
Project Total New Trips			*103*	*251*	*354*	*321*	*235*	*556*	*6,686*

*ITE average rates used for retail due to small size – average size of shopping center for weekday data is 453,000 ft²

The proposed Minter Drive DRI will generate 354 new trips in the a.m. peak hour, 556 new trips in the p.m. peak hour, and 6,686 new daily trips.

4.2 Trip Distribution and Assignment

The trip distribution percentages indicate what proportion of the project's trips will travel to and from various directions. Two trip distributions were developed, one for all residential uses and one for the retail. The trip distribution for the residential was developed based on the locations and proximity of likely trip origins and destinations, including regional trip attractors and employment centers such as the Cities of Atlanta, McDonough, and Griffin, and Hartfield Jackson Airport; local schools; retail and offices in the area; and the major routes of travel to those attractors, including US 19/41, GA 20, and Interstate 75. The distribution for the retail is based on population density in the area and the distances of those populations to the site. The trip distribution percentages for the residential are presented in Figure 3 while the distribution percentages for the retail are presented in Figure 4.

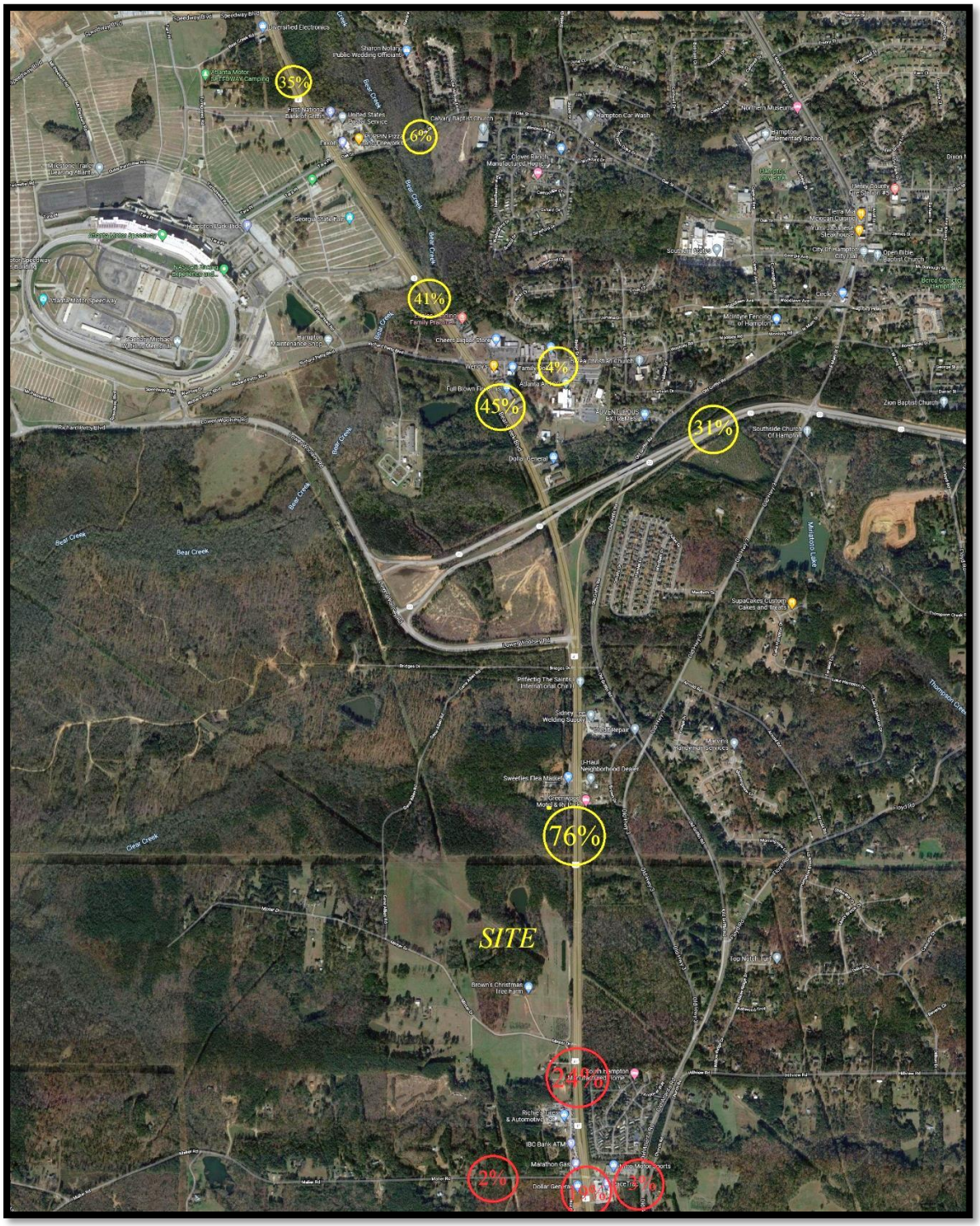


Figure 3 – Residential Trip Distribution Percentages

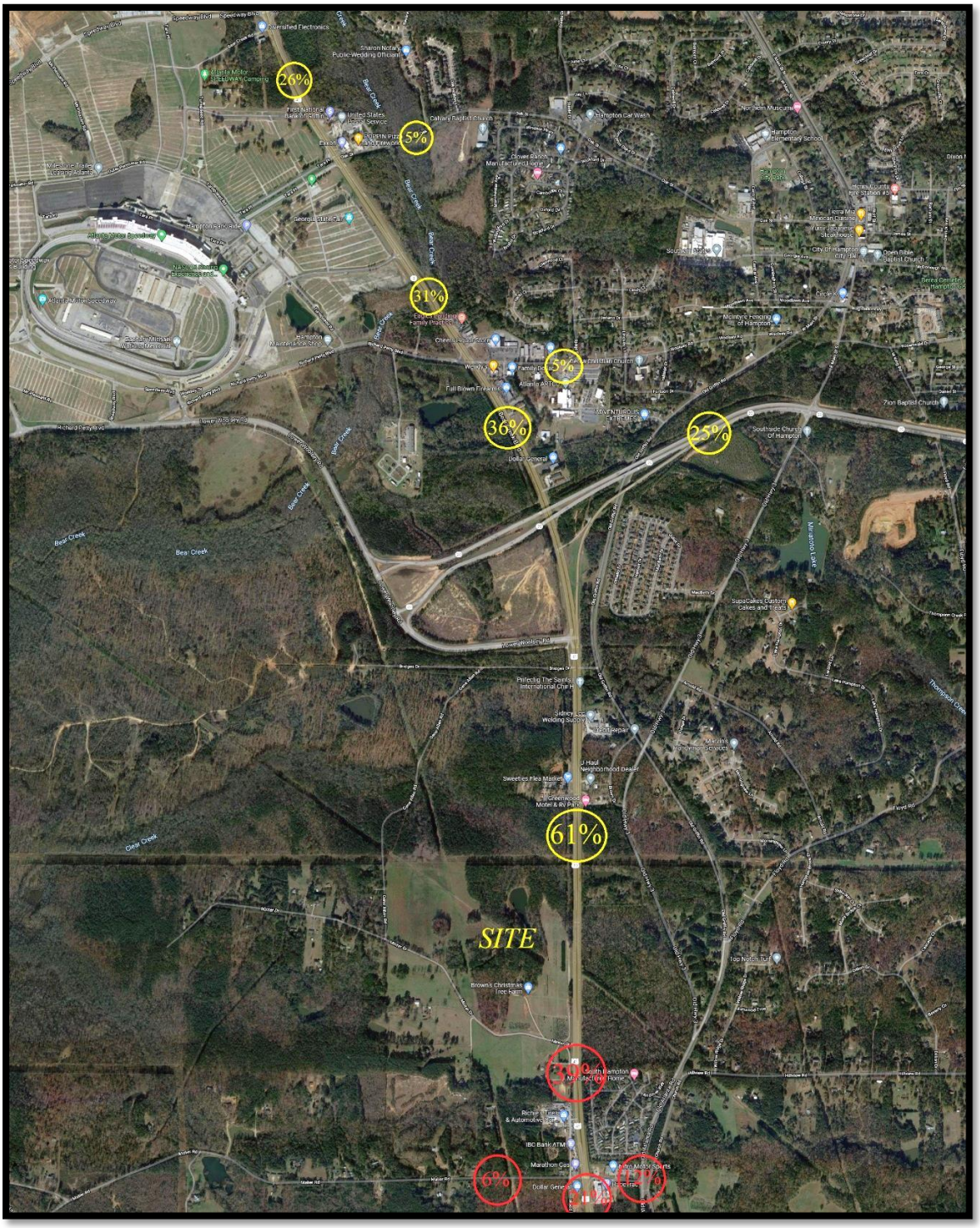


Figure 4 – Retail Trip Distribution Percentages

The Minter Drive DRI trips, shown in Table 3, were assigned to the roadway network based on the distribution percentages shown in Figures 3 and 4. The a.m. and p.m. peak hour trips expected to be generated by the Minter Drive DRI, are shown in Figure 5. Traffic volume worksheets for each intersection are found in Appendix A which show the trips separately for the residential and retail land uses.

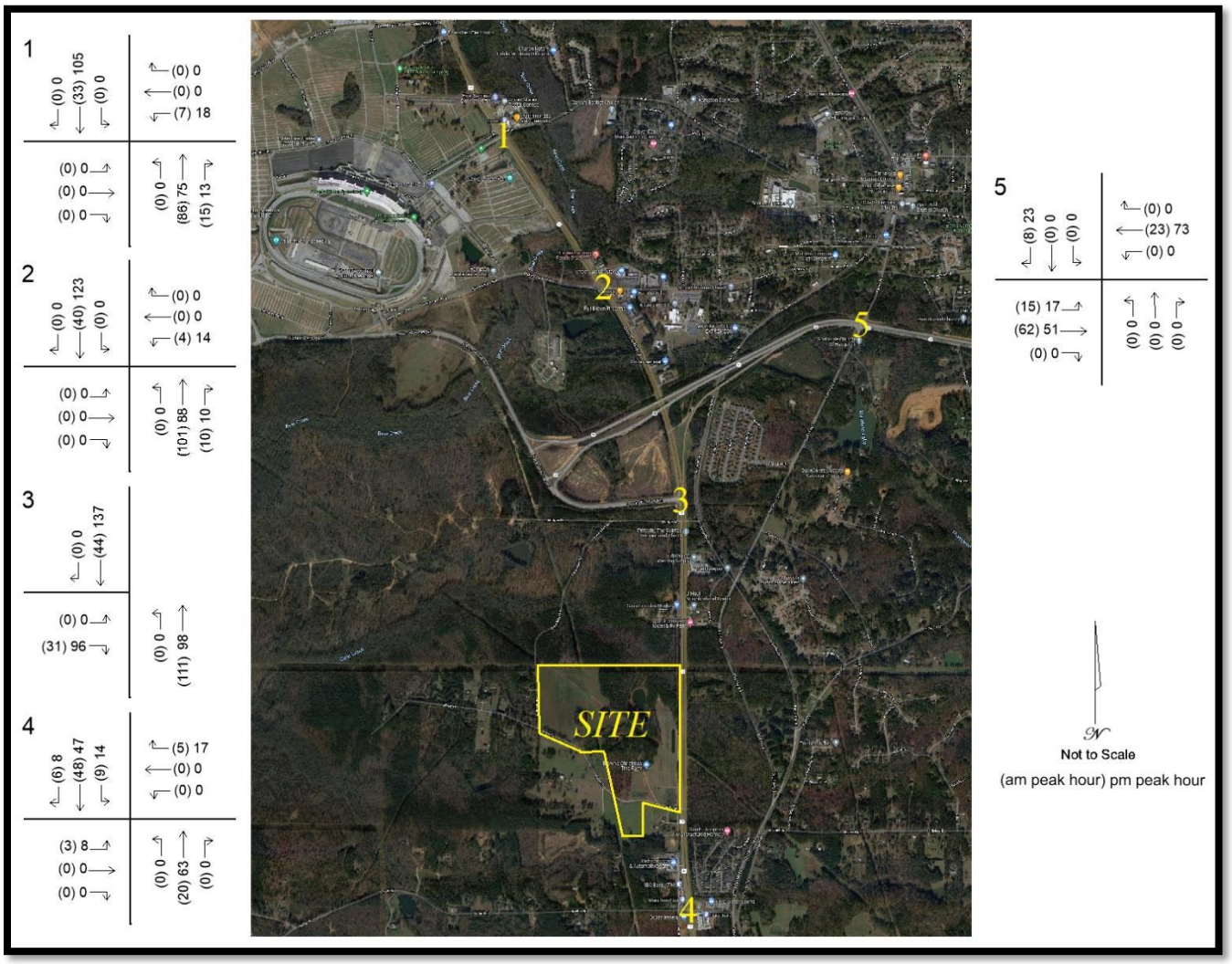


Figure 5 – Weekday A.M. and P.M. Peak Hour Project-Generated Trips

Note that there is a ramp from northbound US 19/41 to eastbound GA 20 that removes some northbound project trips from US 19/41 between the project accesses and the Lower Woolsey Road intersection.

5. Existing Traffic Analysis

This chapter presents the results of the capacity analysis and facilities needs analysis for the existing conditions.

5.1 Existing Lanes and Traffic Control

A description of the existing conditions was provided previously in this report. Figure 6 presents the existing lane configuration and method of traffic control at each study intersection.

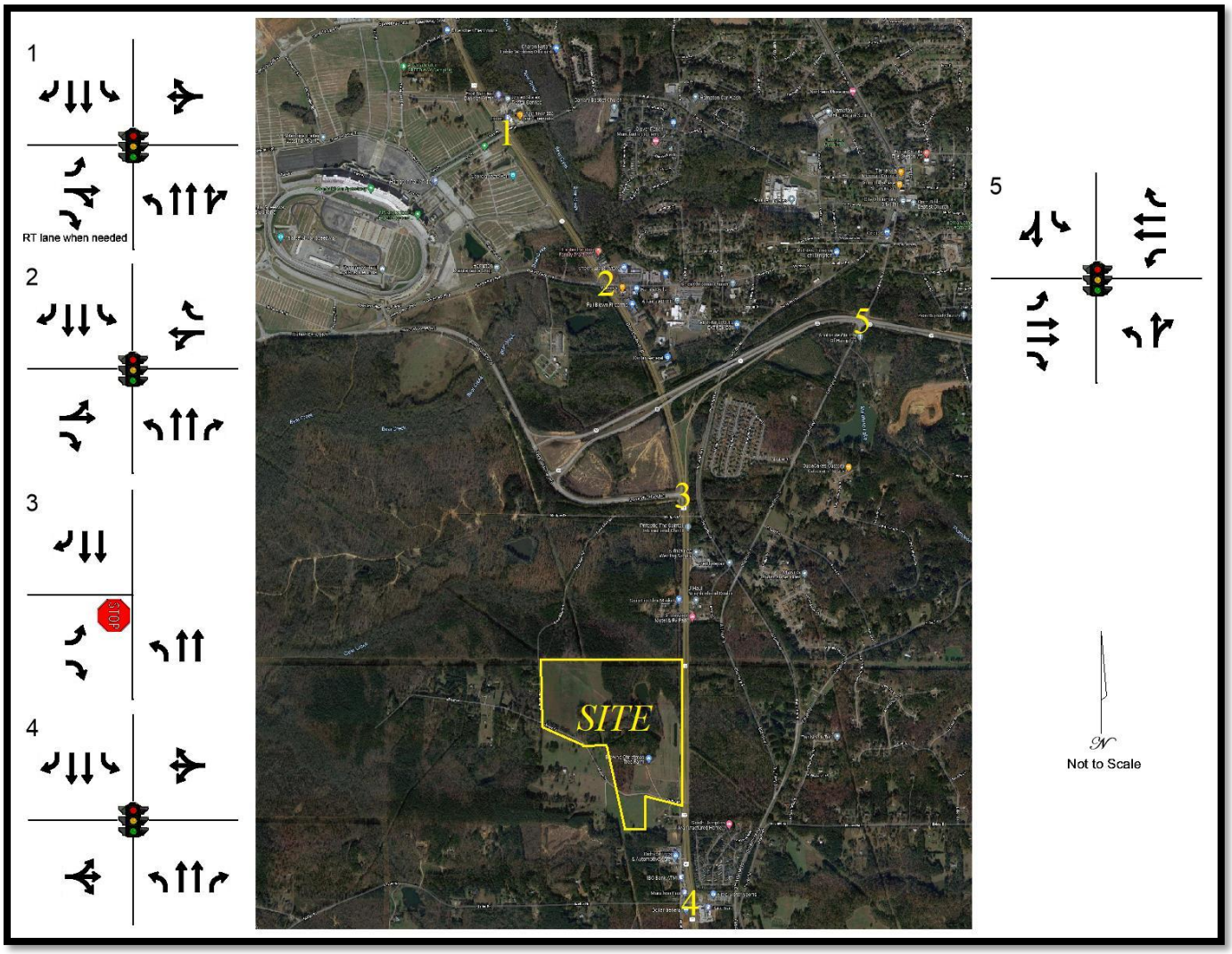


Figure 6 – Existing Lane Configuration and Traffic Control

5.2 Existing Traffic Volumes

Existing peak hour traffic volume count data was collected on Thursday, October 28, 2021 from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Area schools were in session on the day of the counts. From the collected two-hour traffic counts in each time period, the highest four consecutive 15-minute interval volumes at each intersection were determined. These volumes make up the typical weekday a.m. and p.m. peak hour traffic volumes at that intersection. The existing a.m. and p.m. peak hour turning movement volumes are shown in Figure 7. All intersection raw count data is found in Appendix A.

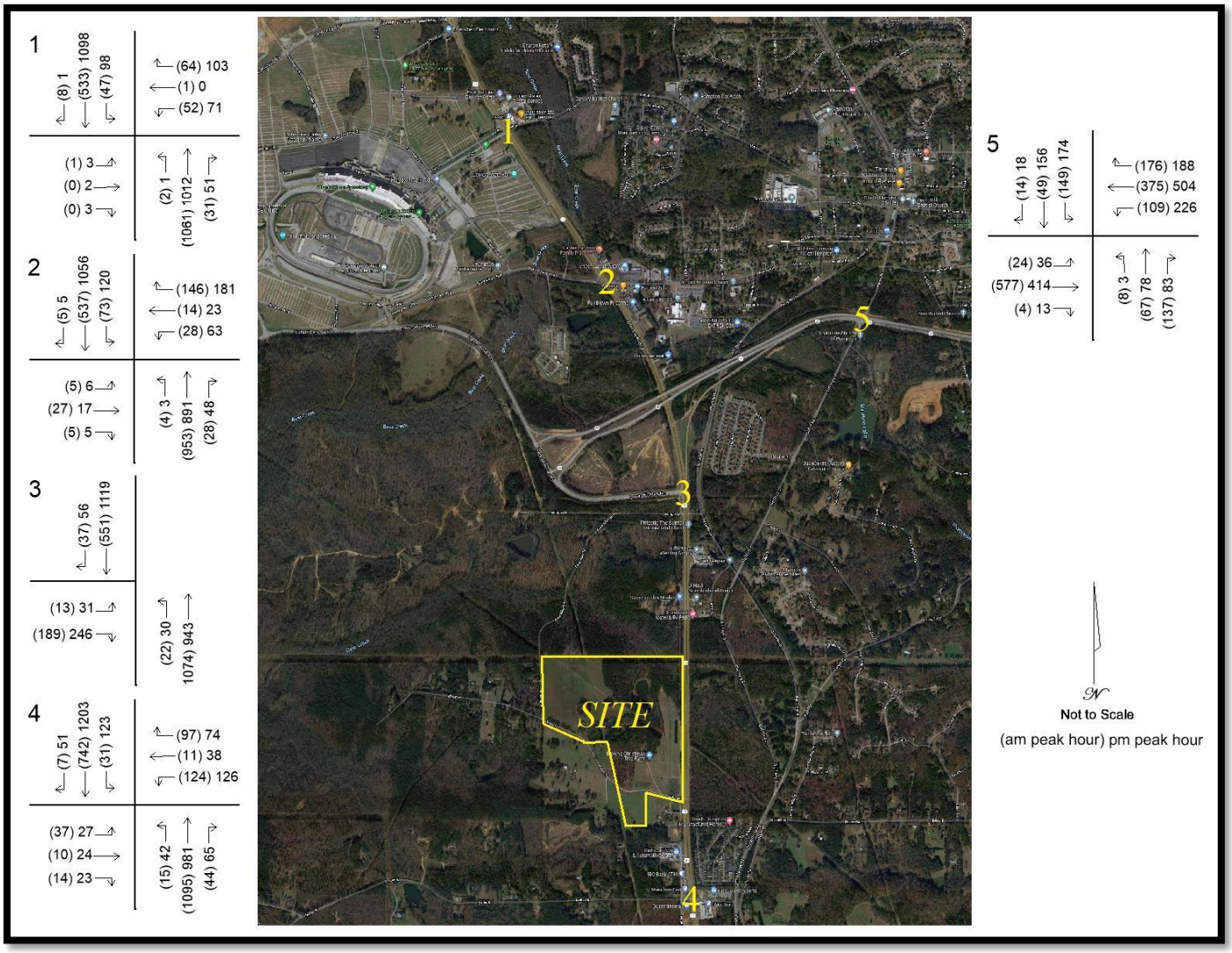


Figure 7 – Existing A.M. and P.M. Peak Hour Volumes

5.3 Existing Intersection Operations

An analysis was performed for each study intersection based on the counted 2021 traffic volumes, existing lane configurations, and method of traffic control. The results of the analysis are shown in Table 4. All locations that do not satisfy the Level of Service D standard are highlighted with bold text. The Synchro computer worksheets for the existing analysis are presented in Appendix C.

Table 4 – Existing Intersection Levels of Service

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. US 19/41 at Oak Street / Tara Place	A	7.4	B	10.6
northbound approach	A	5.5	A	8.1
southbound approach	A	3.7	A	7.1
eastbound approach	D	37.3	D	35.3
westbound approach	D	42.8	D	43.5
2. US 19/41 at Woolsey Road/Richard Petty Blvd	B	11.0	C	25.4
northbound approach	A	7.0	B	12.8
southbound approach	A	4.5	B	11.2
eastbound approach	D	40.5	D	36.6
westbound approach	D	49.5	***F***	***124.8***
3. US 19/41 at Lower Woolsey Road	A	1.8	A	6.8
northbound left turn	A	9.1	B	13.6
eastbound left turn	D	29.3	***F***	***164.1***
eastbound right turn	B	12.9	***E***	***39.6***
4. US 19/41 at Malier Road	B	13.3	B	15.9
northbound approach	B	11.1	B	12.7
southbound approach	A	9.2	B	13.6
eastbound approach	C	28.2	C	27.9
westbound approach	C	34.3	D	35.1
5. GA 20 at East Main Street / Old Highway 3	C	23.6	C	22.6
northbound approach	C	20.1	C	20.3
southbound approach	B	12.9	B	14.2
eastbound approach	C	29.5	C	30.1
westbound approach	C	23.4	C	22.6

5.4 Existing Facilities Needs Analysis

The analysis of existing conditions reveals that the large majority of study intersections and approaches/movements operate acceptably. Two locations do not meet the LOS D standard – the signalized westbound approach of Woolsey Road at US 19/41 in the p.m. peak and the unsignalized eastbound left and right turn from Lower Woolsey Road at US 19/41, also in the p.m. peak. This is summarized in Table 5. GRTA DRI Review Procedures requires a queue length analysis for all intersection approaches with a failing LOS where the project is adding additional trips to that approach. The Minter Drive DRI will add trips to westbound Woolsey Road and to eastbound Lower Woolsey Road at US 42, both of which have failing LOS. Therefore, Table 5 also includes the queue lengths on those approaches. A discussion of mitigation follows the table.

Table 5 – Existing Locations That Do Not Meet LOS D Standard

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)
2. US 19/41 at Woolsey Road/Richard Petty Blvd								
westbound approach	D	49.5			*F*	*124.8*		
westbound left/through			28	64			57	114
westbound right			0	60			0	64
3. US 19/41 at Lower Woolsey Road								
eastbound left turn	D	29.3	NA	20	*F*	*164.1*	NA	60
eastbound right turn	B	12.9	NA	40	*E*	*39.6*	NA	140

Intersection 2 – US 19/41 at Woolsey Road / Richard Petty Boulevard

This intersection operates acceptably in the a.m. peak and overall operates acceptably at LOS C in the p.m. peak. The cause of the failure in the p.m. peak is the high side street left turn and through movement delays from Woolsey Road. This is attributable to the signal timing that heavily favors US 19/41, which is appropriate. The left turns and throughs from Woolsey Road are made from a shared left/through lane which precludes adding a protected westbound left turn arrow. Splitting the eastbound and westbound phasing is the next available option and, while this tends to be inefficient phasing, because the side street approach volumes are very unbalanced, with the Woolsey Road approach volumes notably higher than those on Richard Petty Boulevard, the split phasing addresses the issue without the need for any widening. Therefore, the split phasing is the recommended mitigation here.

Intersection 3 – US 19/41 at Lower Woolsey Road

The failure at this intersection occurs in the p.m. peak on the stop sign controlled side street approach from Lower Woolsey Road. This is not unusual for a stop sign controlled approach at a busy thoroughfare such as

US 19/41. Mitigation would require change in control to a signal or possibly a roundabout. Signalization is considered the more likely control option for this location. In order to determine if signalization is appropriate, a signal warrant analysis is required according to the Georgia DOT-accepted standards set forth in the Federal Highway Administration's *Manual on Uniform Traffic Control Devices* (MUTCD). Therefore, the recommended mitigation is to signalize this intersection if/when signalization is warranted.

Figure 8 presents the mitigation recommendations graphically while Table 6 presents the operations at each intersection with the recommended mitigation.

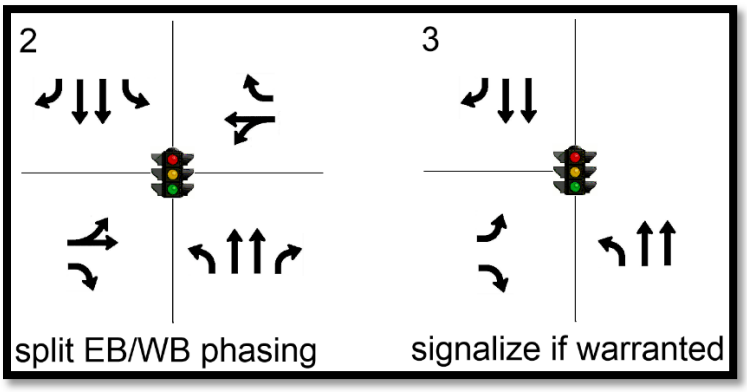


Figure 8 – Existing Recommended Mitigation

Table 6 – Existing Levels of Service with Recommended Mitigation

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)
2. US 19/41 at Woolsey Road/Richard Petty Blvd	B	14.4			B	16.2		
northbound approach	B	11.5			B	12.5		
southbound approach	A	7.7			B	10.7		
eastbound approach	D	51.1			D	50.1		
westbound approach	D	45.9			D	47.0		
westbound left/through			27	63			56	110
westbound right			0	59			0	65
3. US 19/41 at Lower Woolsey Road	B	10.6			B	13.4		
northbound approach	A	5.7			A	8.0		
southbound approach	A	4.3			A	9.2		
eastbound approach	D	50.9			D	47.3		
eastbound left			9	27			20	42
eastbound right			0	58			155	219

6. No-Build Traffic Analysis

A no-build analysis condition was developed for the DRI's build-out year of 2031. The no-build analysis provides a reference by which to measure the traffic impact of the proposed Minter Drive DRI.

6.1 Programmed Infrastructure Projects

Planned (anticipated) or programmed (funded and scheduled) transportation infrastructure projects in the vicinity of the DRI site were researched. The search included the Henry Joint County/Cities Comprehensive Transportation Plan Update (Henry County and the Cities of Hampton, Locust Grove, McDonough, and Stockbridge), May 2016, the Atlanta Regional Commission's (ARC) Regional Transportation Plan (RTP), and the Georgia DOT's projects website. No projects were identified in the vicinity of the study network that would affect traffic patterns, volumes, or capacity.

6.2 No-Build Lanes and Traffic Control

The no-build condition assumes the same lanes and traffic control as the existing condition.

6.3 No-Build Traffic Volumes

The no-build condition includes background increases in traffic volumes that will occur whether or not the Minter Drive DRI is built. Georgia DOT historic traffic volume count data was collected at the Georgia DOT count stations closest to the subject development. The data was obtained for the five years 2016 through 2020. This data was used to develop annual growth rates for each year, and overall growth percentages from 2016 to 2020. Table 7 presents this historic Georgia DOT data and the growth rates.

Table 7 – Historic Georgia DOT Traffic Volume Counts and Annual Growth Rates

Year	US 19/41 N of Minter	Annual Growth	US 19/41 N of Malier	Annual Growth	Old Hwy 3 S of GA 20	Annual Growth	GA 20 W of Dorsey	Annual Growth
Station ID	151-0141		255-0027		151-0127		151-0163	
2016	22,400		24,000		4,290		14,000	
2017	23,700	5.8%	25,400	5.8%	4,380	2.1%	14,800	5.7%
2018	26,300	11.0%	25,600	0.8%	4,500	2.7%	14,800	0.0%
2019	26,500	0.8%	25,800	0.8%	4,590	2.0%	16,500	11.5%
2020	24,900	-6.0%	25,900	0.4%	4,270	-7.0%	15,200	-7.9%
Avg Growth		*2.1%*		*1.5%*		*-0.1%*		*1.7%*

It is noted that 2020 was during the pandemic and the data from that year is considered an anomaly. Therefore, the decreases generally seen from 2019 to 2020 were recognized as likely atypical. Based on a review of the overall trends and the annual fluctuations, an annual growth rate of 2.0%, for ten years, to the anticipated project build-out year of 2031, was chosen and agreed to by the reviewing agencies. This equates to a growth

rate of 21.9% applied to the existing counts. This growth rate accounts for increases in volumes due to general growth and development in the area, independent of the proposed Minter Drive DRI.

In addition to the general background growth, the City of Hampton has identified the following other private developments for inclusion in the no-build and build analysis:

1. Lower Woolsey Industrial DRI #2808 (study from August 2018)
2. Garden Lakes DRI #3049 (study from November 2019)
3. Speedway Commerce Center DRI #3216 (study from February 2021)

Figure 9 shows the locations of these three projects.

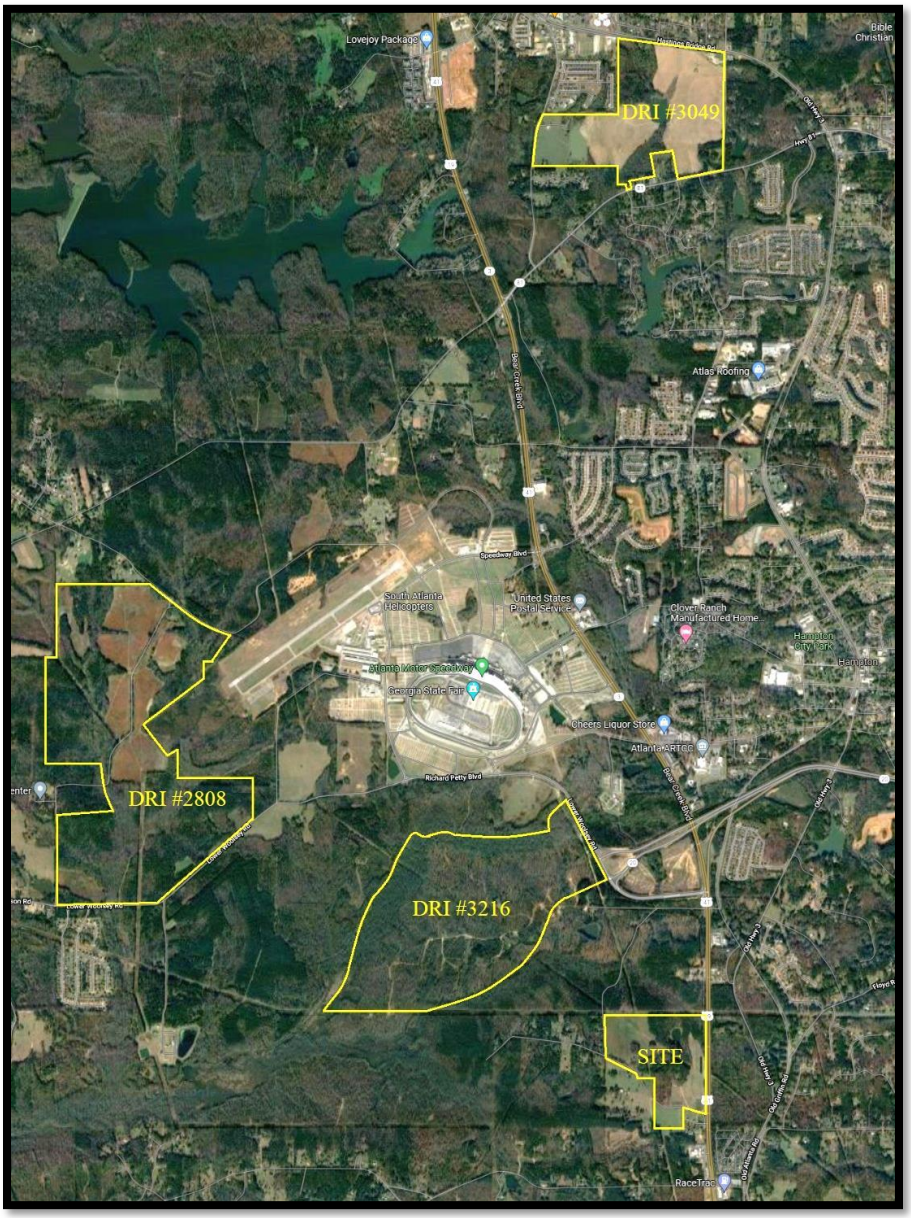


Figure 9 – Other Private Developments Included in No-Build and Build Analysis

The traffic impact studies that were prepared for each of these developments was obtained from GRTA. It was confirmed in the field that none of these projects had been developed at the time of the traffic counts for this study. Therefore one hundred percent of each project's trips were included in the no-build volumes developed in this traffic analysis. The trips that were generated and assigned for each of those projects in each study were added, by turn movement, to each intersection in this study. This included extrapolating trips from adjacent intersections when those previous studies did not include intersections evaluated in this study. The traffic volume worksheets in Appendix A show the trips added by each of these developments at each study intersection.

The 2031 no-build volumes, therefore, consist of the 2021 existing volumes, increased by the 21.9% background growth factor plus the specific trips from each of the three other specific private developments. Figure 10 shows the no-build weekday a.m. and p.m. peak hour traffic volumes at the study intersections. These are the traffic volumes that will be at each study intersection when the Minter Drive DRI is completed and fully operational, but excluding the DRI's trips. These volumes are also shown in the intersection volume worksheets in Appendix A.

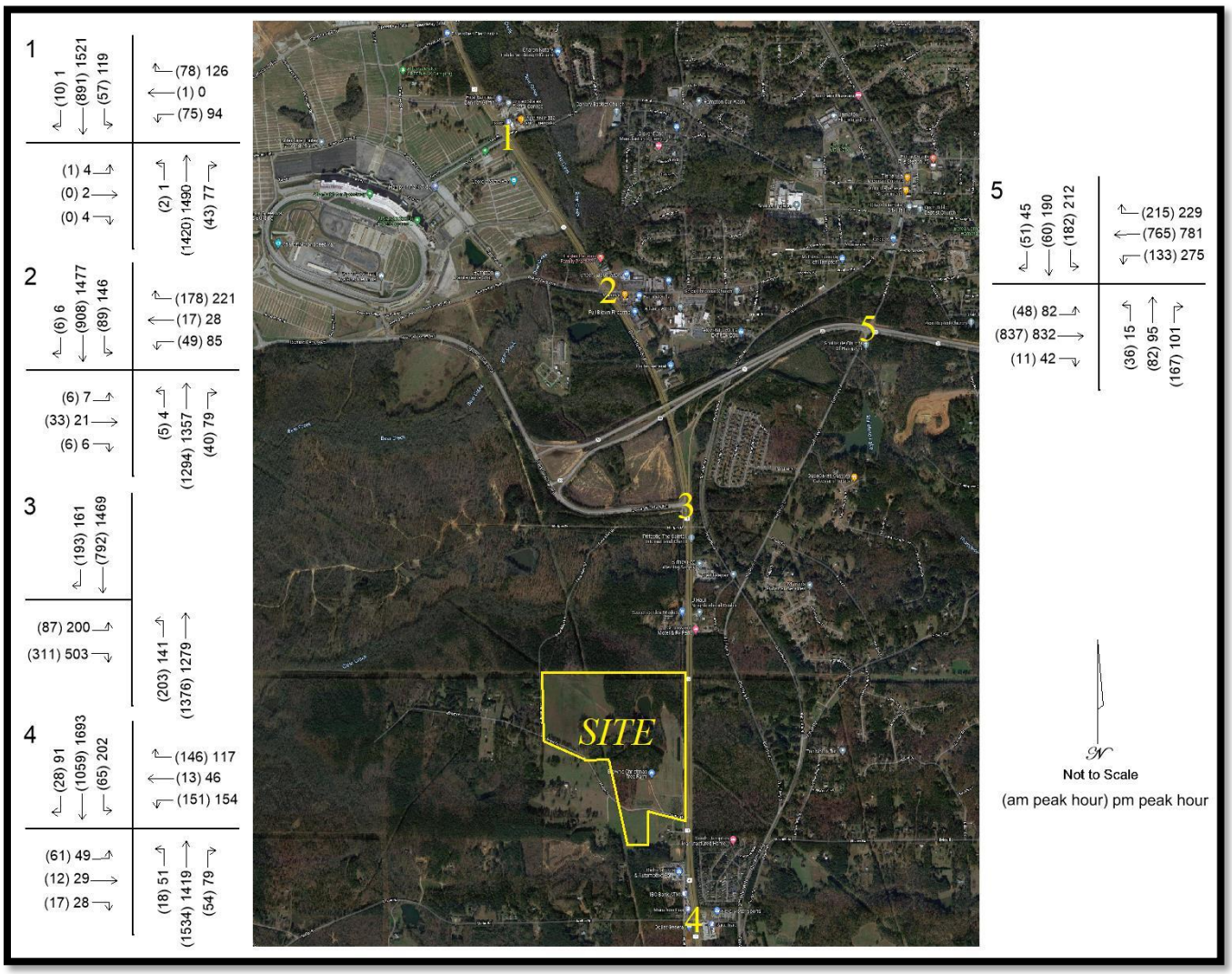


Figure 10 – No-Build A.M. and P.M. Peak Hour Volumes

6.4 No-Build Intersection Operations

Each study intersection was evaluated for the 2031 no-build condition. The no-build levels of service at each intersection are shown in Table 8. The Synchro computer printouts are found in Appendix D.

Table 8 – No-Build Intersection Levels of Service

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. US 19/41 at Oak Street / Tara Place	A	9.0	B	14.1
northbound approach	A	7.6	B	11.4
southbound approach	A	5.5	B	11.3
eastbound approach	D	37.6	D	35.8
westbound approach	D	44.6	D	48.1
2. US 19/41 at Woolsey Road/Richard Petty Blvd	B	13.2	C	32.4
northbound approach	A	9.5	B	13.8
southbound approach	A	6.4	B	12.1
eastbound approach	D	42.1	D	40.0
westbound approach	*E*	*57.9*	*F*	*200.8*
3. US 19/41 at Lower Woolsey Road	*E*	*37.1*	*F*	*NA**
northbound left turn	B	13.7	D	27.0
eastbound left turn	*F*	*NA**	*F*	*NA**
eastbound right turn	C	21.0	*F*	*NA**
4. US 19/41 at Malier Road	C	20.7	C	31.1
northbound approach	C	20.6	C	23.8
southbound approach	B	15.0	C	32.6
eastbound approach	C	29.6	C	29.4
westbound approach	D	41.9	D	53.1
5. GA 20 at East Main Street / Old Highway 3	C	27.5	C	27.5
northbound approach	C	30.5	D	35.8
southbound approach	B	19.6	C	24.7
eastbound approach	C	32.3	C	32.8
westbound approach	C	25.3	C	23.6

*NA – limits of methodology exceeded

6.5 No-Build Facilities Needs Analysis

The no-build analysis reveals increases in delays at most locations and the same locations that fail in the existing condition fail in the no-build condition, specifically the westbound approach on Woolsey Road at US 19/41 and the eastbound approach of Lower Woolsey Road at US 19/41. In the no-build condition, these failures will

extend to the a.m. peak, in addition to the already-failing p.m. peak. The locations that fail in the no-build condition are summarized in Table 9, with a discussion of mitigation at each location following.

Table 9 – No-Build Locations that Do Not Meet LOS D Standard

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)
4. US 19/41 at Woolsey Road/Richard Petty Blvd								
westbound approach	*E*	*57.9*			*F*	*200.8*		
westbound left/through			45	95			80	147
westbound right			25	99			55	143
5. US 19/41 at Lower Woolsey Road	*E*	*37.1*			*F*	*NA**		
eastbound left turn	*F*	*NA**	NA	220	*F*	*NA**	NA	560
eastbound right turn	C	21.0	NA	80	*F*	*NA**	NA	680

*NA – limits of methodology exceeded

Intersection 2 – US 19/41 at Woolsey Road / Richard Petty Boulevard

The mitigation identified for the existing condition at US 19/41 at Lower Woolsey Road – the splitting of the eastbound and westbound phasing – will continue to be appropriate. No additional mitigation is required for the no-build condition.

Intersection 3 – US 19/41 at Lower Woolsey Road

At the US 19/41 / Lower Woolsey Road intersection, the signalization identified in the existing analysis is still appropriate but signalization itself will not be sufficient. A second eastbound right turn lane and accompanying right turn overlap phase will be necessary to achieve acceptable LOS. There is already sufficient width on eastbound Lower Woolsey Road to add the second right turn lane though restriping, without the need for any widening.

Figure 11 presents the no-build recommendations graphically while Table 10 presents the levels of service with the recommended mitigation.

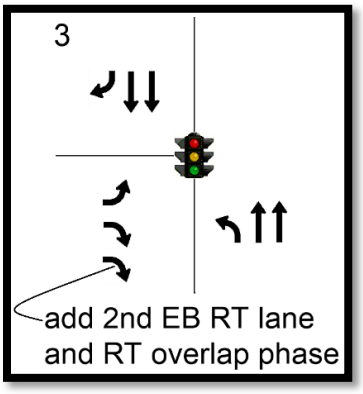


Figure 11 – No-Build Recommended Mitigation

Table 10 – No-Build Intersection Levels of Service with Recommended Mitigation

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)
2. US 19/41 at Woolsey Road/Richard Petty Blvd	B	17.5			C	21.7		
northbound approach	B	16.2			B	19.2		
southbound approach	B	11.1			B	16.7		
eastbound approach	D	52.6			D	53.1		
westbound approach	D	46.0			D	50.2		
westbound left/through			42	87			76	137
westbound right			0	64			0	70
3. US 19/41 at Lower Woolsey Road	B	12.1			C	20.6		
northbound approach	A	5.9			B	10.3		
southbound approach	A	8.1			B	17.2		
eastbound approach	D	44.4			D	49.0		
eastbound left			66	121			150	236
eastbound right			43	84			178	237

7. Future (Build) Traffic Analysis

The analysis of the 2031 future build scenario identifies the traffic impact of the proposed Minter Drive DRI. This future condition includes all traffic volumes and programmed improvements (none identified) from the 2031 no-build scenario, plus the traffic that will be added by the Minter Drive project.

7.1 Build Lanes and Traffic Control

All intersections were modeled with the same lane configuration and control as the no-build condition. Lane configuration and control at the site accesses will be discussed in the Project Access Traffic Analysis section of this report.

7.2 Build Traffic Volumes

The no-build volumes, shown previously in Figure 10, were combined with the project-generated trips, shown previously in Figure 5. This produces the 2031 build traffic volumes at each study intersection after the Minter Drive DRI is fully constructed and operational. These volumes are presented in Figure 12 and are also shown in the intersection volume worksheets in Appendix A.

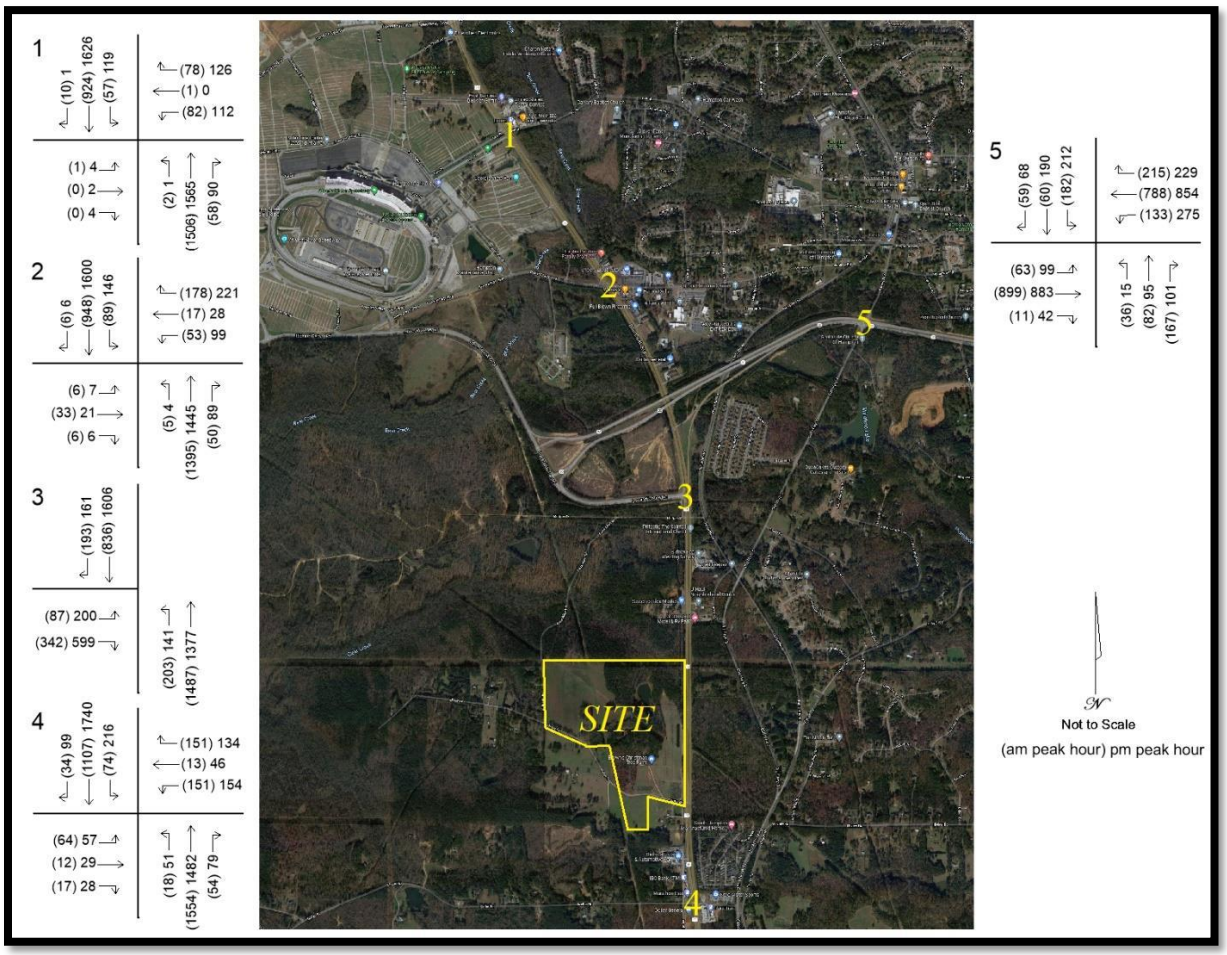


Figure 12 – Build A.M. and P.M. Peak Hour Volumes

7.3 Build Intersection Operations

Each study intersection was re-evaluated for the 2031 build condition. The build levels of service at each intersection are shown in Table 11. The Synchro computer printouts are located in Appendix E.

Table 11 – Build Intersection Levels of Service

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
1. US 19/41 at Oak Street / Tara Place	A	9.5	B	15.8
northbound approach	A	8.2	B	12.7
southbound approach	A	5.8	B	13.4
eastbound approach	D	37.4	D	35.1
westbound approach	D	44.6	D	49.9
2. US 19/41 at Woolsey Road/Richard Petty Blvd	B	13.6	D	38.0
northbound approach	B	10.1	B	13.8
southbound approach	A	6.7	B	13.3
eastbound approach	D	42.6	D	40.2
westbound approach	***E***	***60.1***	***F***	***200.8***
3. US 19/41 at Lower Woolsey Road	***E***	***44.9***	***F***	***NA****
northbound left turn	B	14.2	D	34.1
eastbound left turn	***F***	***NA****	***F***	***NA****
eastbound right turn	D	25.6	***F***	***NA****
4. US 19/41 at Malier Road	C	21.6	D	40.0
northbound approach	C	21.6	C	31.4
southbound approach	B	15.9	D	44.8
eastbound approach	C	29.9	C	28.8
westbound approach	D	43.1	D	52.6
5. GA 20 at East Main Street / Old Highway 3	C	28.0	C	28.6
northbound approach	C	33.1	D	37.8
southbound approach	C	21.0	C	26.6
eastbound approach	C	32.3	C	32.9
westbound approach	C	24.9	C	25.0

*NA – limits of methodology exceeded

7.4 Build Facilities Needs Analysis

The build analysis reveals that the same locations identified in the existing and no-build conditions will continue to fail in the build condition. These locations are presented in Table 12, with a discussion of each following.

Table 12 – Build Locations that Do Not Meet LOS D Standard

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)
2. US 19/41 at Woolsey Road/Richard Petty Blvd								
westbound approach	*E*	*60.1*			*F*	*200.8*		
westbound left/through			49	100			91	163
westbound right			41	117			58	148
3. US 19/41 at Lower Woolsey Road	*E*	*44.9*			*F*	*NA**		
eastbound left turn	*F*	*NA**	NA	240	*F*	*NA**	NA	580
eastbound right turn	D	25.6	NA	120	*F*	*NA**	NA	1,000

*NA – limits of methodology exceeded

The mitigation identified previously, for the existing and no-build conditions, will continue to be appropriate and will allow all intersections and controlled approaches and movements to meet the LOS D standard in the build condition. No new mitigation is required for the build condition. Table 13 presents the build intersection levels of service with the mitigation that has been previously identified.

Table 13 – Build Intersection Levels of Service with Previously-Recommended Mitigation

Intersection / Approach	A.M. Peak Hour				P.M. Peak Hour			
	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)	LOS	Delay (s/veh)	Avg (50%ile) Queue (ft)	Max (95%ile) Queue (ft)
2. US 19/41 at Woolsey Road/Richard Petty Blvd	B	18.4			C	23.2		
northbound approach	B	17.4			C	20.4		
southbound approach	B	11.5			B	18.6		
eastbound approach	D	53.4			D	54.5		
westbound approach	D	48.5			D	52.0		
westbound left/through			44	91			85	151
westbound right			0	63			0	68
3. US 19/41 at Lower Woolsey Road	B	15.0			C	24.9		
northbound approach	A	7.4			B	12.5		
southbound approach	A	9.5			C	22.3		
eastbound approach	D	54.7			D	53.5		
eastbound left			64	118			147	230
eastbound right			0	46			222	286

8. Project Access Traffic Analysis

This section provides an analysis of the two (2) proposed Minter Drive DRI access locations in the future build condition.

8.1 Project Access Lanes and Traffic Control

Both proposed accesses are located at existing median breaks on US 19/41.

At the north access location there are existing northbound and southbound U-Turn lanes at the median break. The northbound U-turn lane will serve as the left turn lane for the project.

In order to determine if a southbound right turn lane is required at the north access, the Georgia DOT standards for determining the need for right turn lanes, as set forth in their *Regulations for Driveway and Encroachment Control (Driveway Manual)*, revision 5.0 dated 7/3/2019, were reviewed. The right turn lane analysis was based on *Driveway Manual* Table 4-6, Minimum Volumes Requiring Right Turn Lanes, which is shown below as Table 14.

Table 14 – Georgia DOT Right Turn Lane Standards

Posted Speed	2 Lane Routes		More than 2 Lanes on Main Road	
	AADT		AADT	
	< 6000	>=6000	<10000	>=10000
35 MPH or Less	200 RTV a day	100 RTV a day	200 RTV a day	100 RTV a day
40 to 50 MPH	150 RTV a day	75 RTV a day	150 RTV a day	75 RTV a day
55 to 60 MPH	100 RTV a day	50 RTV a day	100 RTV a day	50 RTV a day
>= 65 MPH	Always	Always	Always	Always

Table 4-6 Minimum Volumes Requiring Right Turn Lanes

The AADT on US 19/41 was 26,500 vpd in 2019 (pre-pandemic) and counted for this study at 26,634 vehicles. This is well above the 10,000 vpd threshold for a main road with more than two lanes. For a 55 mph speed limit, above 10,000 vpd, the right turn volume (RTV) above which a right turn lane is required is 50 right turn vehicles (RTV) per day. The daily southbound right turn volume at the north access is projected as 1,895 RTV. This is well above the 50 RTV threshold and, therefore, a southbound right turn lane is required on US 19/41 at this access.

At the south access location at Minter Drive, there is an existing northbound left turn lane and a southbound right turn lane on US 19/41. Therefore, no new turn lanes are required on US 19/41 at this access.

The access analysis assumes that exclusive left and right turn lanes will be provided on US 19/41 at each project access. Both accesses are assumed to include two exiting and one entering lane with the exiting approaches controlled by side street stop sign. Figure 13 presents the lane configuration and control at each access that was used in the analysis.

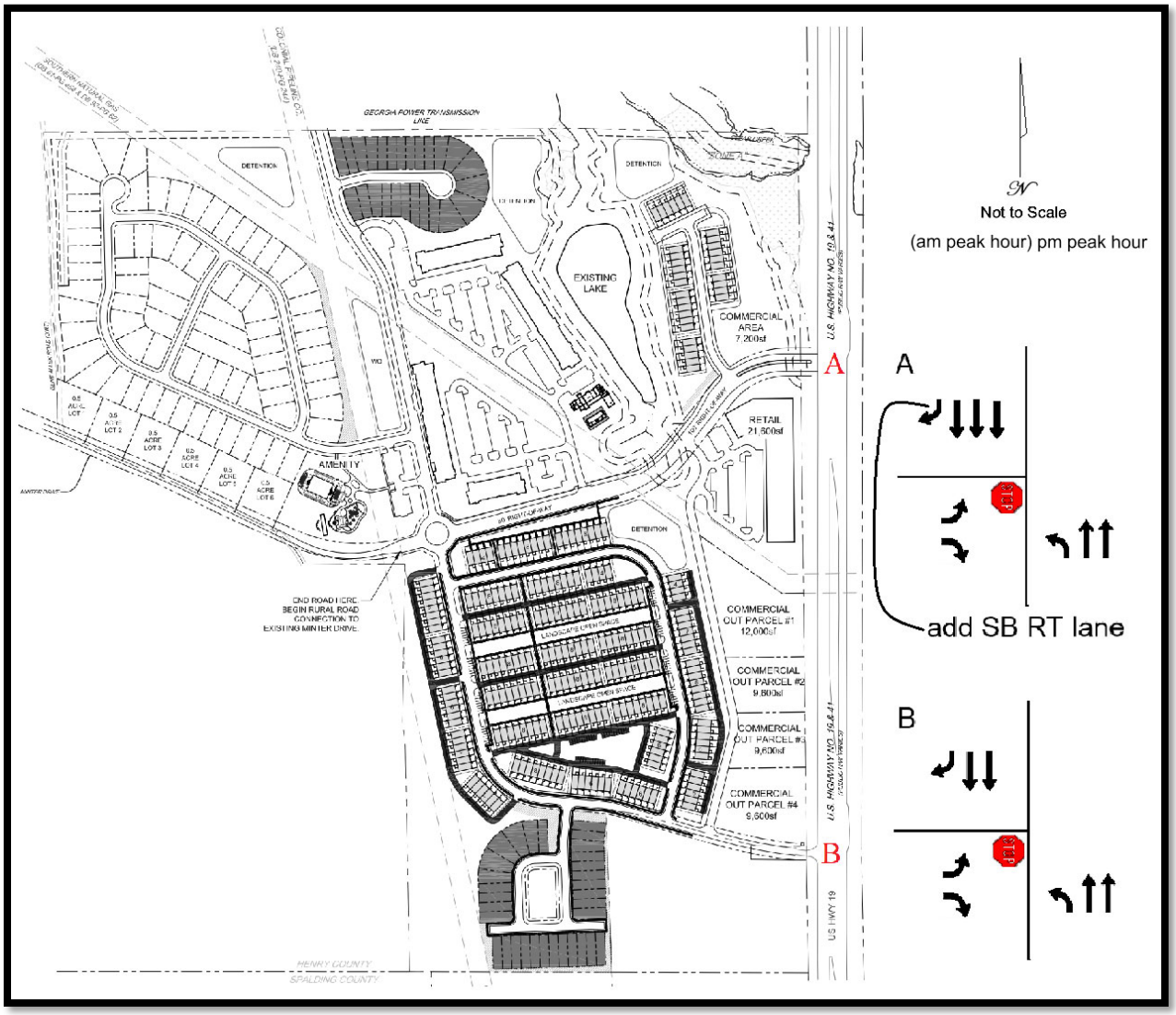


Figure 13 – Access Lane Configuration and Traffic Control

8.2 Project Access Traffic Volumes

The volumes projected at each project access in the future build condition are presented in Figure 14, and are also shown in the intersection volume worksheets in Appendix A.

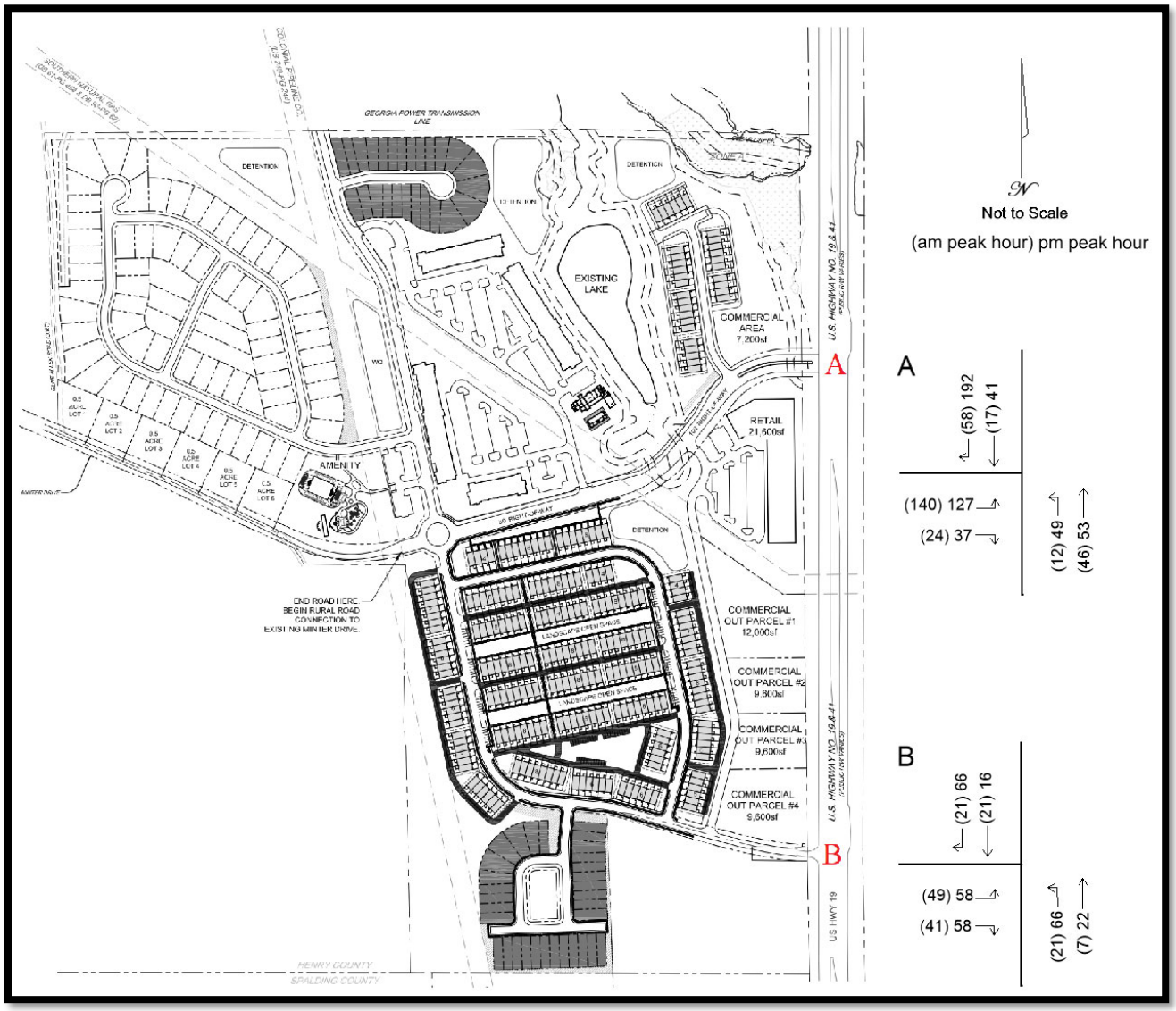


Figure 14 – Project Access A.M. and P.M. Peak Hour Volumes

8.3 Project Access Intersection Operations

Each project access was evaluated for the 2031 build condition. The build levels of service at each access are shown in Table 15. The Synchro computer printouts are located in Appendix E.

Table 15 – Project Access Intersection Levels of Service

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
A. US 19/41 at Project North Access	*E*	*43.7*	*F*	*NA**
northbound left turn (entering project)	C	17.3	*F*	*99.5*
eastbound left turn (exiting project)	*F*	*NA**	*F*	*NA**
eastbound right turn (exiting project)	B	14.9	D	30.3
B. US 19/41 at Project South Access (Minter Drive)	A	7.5	*F*	*76.9*
northbound left turn (entering project)	B	11.4	D	25.6
eastbound left turn (exiting project)	*F*	*NA**	*F*	**NA*
eastbound right turn (exiting project)	B	13.9	D	25.6

*NA – limits of methodology exceeded

The analysis of the project accesses reveals that both locations will not meet the LOS D standard. The most challenging movement at each access will be the exiting left turns. This is not unusual on side street stop sign controlled approaches at major thoroughfares such as US 19/41. In order to mitigate this condition at each access, a change in control would be required, most appropriately to a signal. A signal warrant study based on the MUTCD should be performed for each access. The Georgia DOT will also require an Intersection Control Evaluation (ICE) at each access.

Figure 15 presents the access recommendations graphically while Table 16 presents the levels of service with the recommended mitigation.

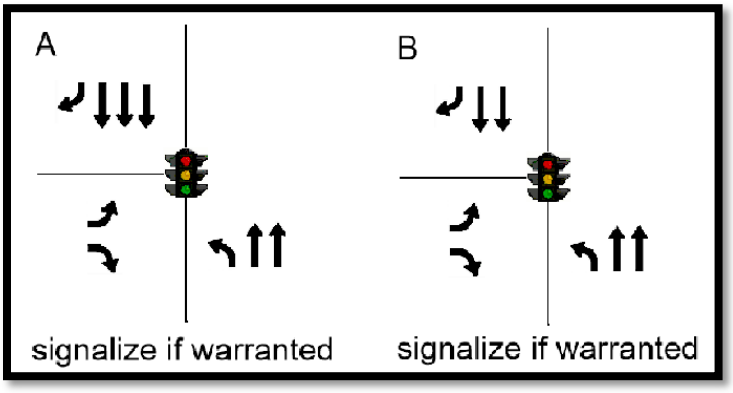


Figure 15 – Project Access Recommended Mitigation

Table 16 – Project Access Intersection Levels of Service with Recommended Mitigation

Intersection / Approach	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay (s/veh)	LOS	Delay (s/veh)
A. US 19/41 at Project North Access	A	7.3	A	6.8
northbound approach	A	5.1	A	4.6
southbound approach	A	2.9	A	4.0
eastbound approach (exiting project)	D	53.8	D	54.8
B. US 19/41 at Project South Access (Minter Drive)	A	4.4	A	6.2
northbound approach	A	2.7	A	3.5
southbound approach	A	2.0	A	4.8
eastbound approach (exiting project)	D	54.8	D	54.7

9. Summary of Recommended Mitigation

The following is a summary of the mitigation recommended in this study.

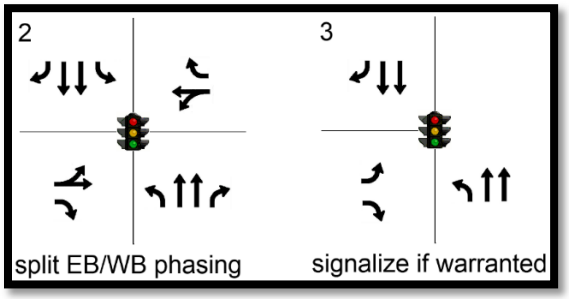
9.1 Summary of Existing Mitigation

Intersection 2 – US 19/41 at Woolsey Road / Richard Petty Boulevard

Split the eastbound and westbound phasing.

Intersection 3 – US 19/41 at Lower Woolsey Road

Signalize this intersection if or when signalization is warranted. In order to determine if signalization is appropriate, a signal warrant analysis is required according to the Georgia DOT-accepted standards set forth in the Federal Highway Administration's *Manual on Uniform Traffic Control Devices* (MUTCD).

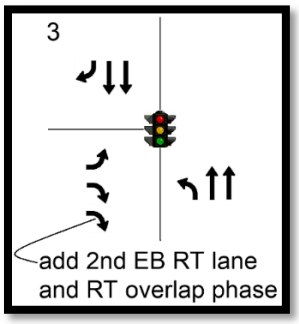


Existing Recommended Mitigation

9.2 Summary of No-Build Mitigation

Intersection 3 – US 19/41 at Lower Woolsey Road

Assuming signalization as recommended in the existing analysis, add a second eastbound right turn lane and accompanying right turn overlap phase. There is already sufficient width on eastbound Lower Woolsey Road to add the second right turn lane though restriping, without the need for any widening.



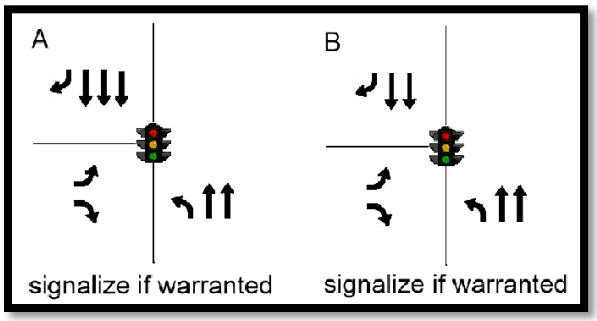
No-Build Recommended Mitigation

9.3 Summary of Build Mitigation

No mitigation is identified for the future build condition.

9.4 Summary of Project Access Mitigation

A southbound right turn lane should be added on US 19/41 at the north project access. This is not identified as mitigation, but as a Georgia DOT requirement. Signalization is needed at each access to achieve the LOS D standard. In order to determine if signalization is appropriate, a signal warrant analysis is required according to the Georgia DOT-accepted standards set forth in the Federal Highway Administration's *Manual on Uniform Traffic Control Devices* (MUTCD).



Access Recommended Mitigation

10. Site Internal Circulation and Connectivity

The Minter Drive DRI is accessed at two locations on US 19/41. The north access will be the primary access and will serve an east/west roadway through the center of the site. This roadway will intersect a north/south roadway that parallels US 19/41 which will serve the retail development along US 19/41. The retail will have no direct access to US 19/41, but will have connections along the north/south roadway. Deeper into the site, a second north/south roadway will provide access to the residential portions of the site. The east/west and north/south spine roadways will intersect at a traffic circle. The south access will also serve an east/west roadway along the current alignment of Minter Drive. This roadway will intersect a traffic circle at the west north/south spine roadway, providing additional access to the residential portions of the project.

The site plan includes a multi-use path along one side of the main internal parkway from US 19/41 to the traffic circle. Sidewalks will be built along all other internal roadways. There are no external alternative mode facilities (transit, pedestrian, bicycle) with which to connect. No separate bicycle lanes exist in the study area and none are proposed within the DRI site.

11. Compliance with GRTA Criteria

This section addresses the compliance of the Minter Drive DRI #3495 with the five criteria presented in Section 3-101 – General Criteria Applicable to All Proposed DRIs, and the three criteria presented in Section 3-103 – Criteria for GRTA DRI Non-Expedited Review, both found in *Procedures and Principles for GRTA Development of Regional Impact Review*, effective February 13, 2013.

11.1 General Criteria Applicable to All Proposed DRIs

A. **Accessibility** – The proposed DRI is designed to provide safe, quality, and convenient access and provides the flexibility of non-vehicular transportation options from the proposed development to existing or planned pedestrian, bicycle, or transit facilities such that there is a likelihood of significant use by residents, employees, and visitors to the proposed DRI.

   The Minter Drive DRI will be served by two safe, quality vehicular accesses which the preceding analysis shows could operate well with signalization. The character of the area is rural, with no sidewalks, bicycle lanes, or mass-transit adjacent to the site. Therefore, significant use of those non-vehicular transportation modes is not expected, through no deficiency of the proposed DRI.

B. **Connectivity –** The proposed DRI is likely to promote improved regional mobility in terms of new vehicular connections, on-site vehicular movements, and alternate routes that are likely to operate in a safe and efficient manner, increase the public roadway network, and avoid delays during peak periods.

   There is good vehicular connectivity between the various residential tracts and the retail tract. All internal routes and connections to the public roadways are expected to operate in a safe and efficient manner. The project will not increase the public roadway network for regional mobility purposes.

C. **Access Management –** The proposed DRI is designed so that vehicular ingress and egress to any on-site parking facilities and all access points to adjacent public roads are likely to operate in a safe and efficient manner and are not reasonably anticipated to result in peak hour ingress and egress congestion on adjacent roads and at nearby intersections, referred to as an Access Analysis.

   The analysis of the site accesses reveals that acceptable operations can be achieved at both locations. Internal access to parking areas are anticipated to operate safely and efficiently.

D. **Regional Policies and Adopted Plans –** The proposed DRI is likely to promote improved regional mobility because it is located in a center or corridor identified in the Regional Development Plan (RDP) designated by an RC; or the DRI has included in the proposed site plan components which will assist in the implementation of a transportation project currently in the Regional Transportation Plan (RTP) or Transportation Improvement Program (TIP), or other adopted regional plan designated by an RC.

The Minter Drive DRI is compatible with land use plans for this portion of the City of Hampton and Henry County. While the project does not specifically assist in the implementation of any planned transportation project (none were identified), it is not anticipated to preclude any such improvements or plans.

E. Local Standards Supporting Regional Policies – The proposed DRI is located within a local jurisdiction, or other jurisdictional agencies, with adopted codes that support regionally adopted policies, or the development codes and standards do not prohibit or impede the proposed DRI from meeting the GRTA DRI review criteria stated in Sections 3-101, 3-102, and 3-103.

The Minter Drive DRI is located in the City of Hampton. The City controls land development patterns and uses through a comprehensive code of zoning ordinances, a comprehensive land use plan, and a transportation plan. No applicable code or standard of the City has been identified through this transportation study that would impede or prohibit the Minter Drive DRI from meeting regional goals.

11.2 Criteria for GRTA DRI Non-Expedited Review

1. Vehicle Miles of Travel – The proposed DRI is likely to promote improved regional mobility and regional air quality by reducing vehicle miles of travel, and is designed to encourage the use of alternative transportation modes, or is located within an area with, or is proposing, a mixture of complimentary land uses. Offsite trip generation from the proposed DRI is reduced by at least fifteen percent (15%), or, in the event that a proposed DRI is unable to satisfy the trip reduction standard established in this subsection because of conditions which are beyond the control of the developer or the affected local government, the proposed DRI implements all available trip reduction techniques which are reasonably practical.

   There will be a modest degree of interaction between the residential and retail components of this project which would replace external trips with internal trips, reducing the number of additional vehicle miles that could be generated. The project will not encourage alternative modes of travel due to the unavailability of alternative facilities in this vicinity. Therefore, this project does not satisfy this criterion.

2. Transportation and Traffic Analysis – The proposed DRI is reasonably anticipated to comply with planned or programmed improvements, maintain performance measures for preserving regional mobility, provide safe and efficient operations, and minimizes congestion when the proposed development or phase of development is complete. The quality of the proposed and existing infrastructure in the transportation network operates in a safe manner and adequately serves new trips generated by the proposed DRI in the build-out year. The proposed DRI identifies impacts on existing or programmed infrastructure, and proposes mitigation that is feasible and within the control of the applicant or appropriate agencies to implement.

   The proposed DRI does not conflict with or preclude any planned or programmed improvements (none were identified). This study identifies mitigation that will allow the infrastructure in the study network to operate in a safe and efficient manner. The mitigation identified in this report is feasible and within the control of the appropriate agencies or the applicant.

3. **Relationship to Existing Development and Infrastructure** – The proposed DRI is not located in any area where the existing level of development and availability of infrastructure is such that the proposed DRI is reasonably anticipated to result in unplanned and poorly served development which would not otherwise occur until well-planned growth and development and adequate public facilities are available.

   The Minter Drive DRI represents planned growth and development that is appropriate and anticipated for this largely-undeveloped area. This DRI does not preclude any known, planned development or infrastructure potential.

Appendix A

Traffic Count Data and Volume Worksheets

Minter Drive DRI #3495 Transportation Analysis

City of Hampton, Georgia

December 2021

Intersection: 1. US 19/41 at Tara Place / Oak Street

Weekday A.M. Peak Hour	Northbound US 19/41				Southbound US 19/41				Eastbound Tara Place				Westbound Oak Street			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 7:15-8:15)	**2**	**1061**	**31**	**1094**	**47**	**533**	**8**	**588**	**1**	**0**	**0**	**1**	**52**	**1**	**64**	**117**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*2*	*1293*	*38*	*1334*	*57*	*650*	*10*	*717*	*1*	*0*	*0*	*1*	*63*	*1*	*78*	*143*
Lower Woolsey Industrial DRI #2808 trips	0	34	0	34	0	19	0	19	0	0	0	0	0	0	0	0
Garden Lakes DRI #3049 trips	0	43	0	43	0	130	0	130	0	0	0	0	0	0	0	0
Speedway Commerce Center DRI #3216 trips	0	50	5	55	0	92	0	92	0	0	0	0	12	0	0	12
subtotal trips of specific projects	*0*	*127*	*5*	*132*	*0*	*241*	*0*	*241*	*0*	*0*	*0*	*0*	*12*	*0*	*0*	*12*
2031 No-Build Volumes	**2**	**1420**	**43**	**1466**	**57**	**891**	**10**	**958**	**1**	**0**	**0**	**1**	**75**	**1**	**78**	**155**
Minter Drive Residential Trips	0	82	14	96	0	26	0	26	0	0	0	0	5	0	0	5
Minter Drive Retail New Trips	0	4	1	5	0	7	0	7	0	0	0	0	2	0	0	2
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**86**	**15**	**101**	**0**	**33**	**0**	**33**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**7**
2031 Build Volumes	**2**	**1506**	**58**	**1567**	**57**	**924**	**10**	**991**	**1**	**0**	**0**	**1**	**82**	**1**	**78**	**162**

Weekday A.M. Peak Hour	Northbound US 19/41				Southbound US 19/41				Eastbound Tara Place				Westbound Oak Street			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 4:15-5:15)	**1**	**1012**	**51**	**1064**	**98**	**1098**	**1**	**1197**	**3**	**2**	**3**	**8**	**71**	**0**	**103**	**174**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*1*	*1234*	*62*	*1297*	*119*	*1338*	*1*	*1459*	*4*	*2*	*4*	*10*	*87*	*0*	*126*	*212*
Lower Woolsey Industrial DRI #2808 trips	0	25	0	25	0	42	0	42	0	0	0	0	0	0	0	0
Garden Lakes DRI #3049 trips	0	141	0	141	0	85	0	85	0	0	0	0	0	0	0	0
Speedway Commerce Center DRI #3216 trips	0	90	15	105	0	56	0	56	0	0	0	0	7	0	0	7
subtotal trips of specific projects	*0*	*256*	*15*	*271*	*0*	*183*	*0*	*183*	*0*	*0*	*0*	*0*	*7*	*0*	*0*	*7*
2031 No-Build Volumes	**1**	**1490**	**77**	**1568**	**119**	**1521**	**1**	**1642**	**4**	**2**	**4**	**10**	**94**	**0**	**126**	**219**
Minter Drive Residential Trips	0	52	9	61	0	84	0	84	0	0	0	0	14	0	0	14
Minter Drive Retail New Trips	0	23	4	27	0	21	0	21	0	0	0	0	4	0	0	4
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**75**	**13**	**88**	**0**	**105**	**0**	**105**	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**18**
2031 Build Volumes	**1**	**1565**	**90**	**1656**	**119**	**1626**	**1**	**1747**	**4**	**2**	**4**	**10**	**112**	**0**	**126**	**237**

Minter Drive DRI #3495 Transportation Analysis

City of Hampton, Georgia

December 2021

Intersection: 2. US 19/41 at Richard Petty Boulevard / Woolsey Road

Weekday A.M. Peak Hour	Northbound US 19/41				Southbound US 19/41				Eastbound Richard Petty Boulevard				Westbound Woolsey Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 7:15-8:15)	**4**	**953**	**28**	**985**	**73**	**537**	**5**	**615**	**5**	**27**	**5**	**37**	**28**	**14**	**146**	**188**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*5*	*1162*	*34*	*1201*	*89*	*655*	*6*	*750*	*6*	*33*	*6*	*45*	*34*	*17*	*178*	*229*
Lower Woolsey Industrial DRI #2808 trips	0	34	0	34	0	19	0	19	0	0	0	0	0	0	0	0
Garden Lakes DRI #3049 trips	0	43	0	43	0	130	0	130	0	0	0	0	0	0	0	0
Speedway Commerce Center DRI #3216 trips	0	55	6	61	0	104	0	104	0	0	0	0	15	0	0	15
subtotal trips of specific projects	*0*	*132*	*6*	*138*	*0*	*253*	*0*	*253*	*0*	*0*	*0*	*0*	*15*	*0*	*0*	*15*
2031 No-Build Volumes	**5**	**1294**	**40**	**1339**	**89**	**908**	**6**	**1003**	**6**	**33**	**6**	**45**	**49**	**17**	**178**	**244**
Minter Drive Residential Trips	0	96	9	105	0	31	0	31	0	0	0	0	3	0	0	3
Minter Drive Retail New Trips	0	5	1	6	0	9	0	9	0	0	0	0	1	0	0	1
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**101**	**10**	**111**	**0**	**40**	**0**	**40**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**4**
2031 Build Volumes	**5**	**1395**	**50**	**1450**	**89**	**948**	**6**	**1043**	**6**	**33**	**6**	**45**	**53**	**17**	**178**	**248**

Weekday A.M. Peak Hour	Northbound US 19/41				Southbound US 19/41				Eastbound Richard Petty Boulevard				Westbound Woolsey Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 4:15-5:15)	**3**	**891**	**48**	**942**	**120**	**1056**	**5**	**1181**	**6**	**17**	**5**	**28**	**63**	**23**	**181**	**267**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*4*	*1086*	*59*	*1148*	*146*	*1287*	*6*	*1440*	*7*	*21*	*6*	*34*	*77*	*28*	*221*	*325*
Lower Woolsey Industrial DRI #2808 trips	0	25	0	25	0	42	0	42	0	0	0	0	0	0	0	0
Garden Lakes DRI #3049 trips	0	141	0	141	0	85	0	85	0	0	0	0	0	0	0	0
Speedway Commerce Center DRI #3216 trips	0	105	20	125	0	63	0	63	0	0	0	0	8	0	0	8
subtotal trips of specific projects	*0*	*271*	*20*	*291*	*0*	*190*	*0*	*190*	*0*	*0*	*0*	*0*	*8*	*0*	*0*	*8*
2031 No-Build Volumes	**4**	**1357**	**79**	**1439**	**146**	**1477**	**6**	**1630**	**7**	**21**	**6**	**34**	**85**	**28**	**221**	**333**
Minter Drive Residential Trips	0	61	6	67	0	98	0	98	0	0	0	0	10	0	0	10
Minter Drive Retail New Trips	0	27	4	31	0	25	0	25	0	0	0	0	4	0	0	4
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**88**	**10**	**98**	**0**	**123**	**0**	**123**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**14**
2031 Build Volumes	**4**	**1445**	**89**	**1537**	**146**	**1600**	**6**	**1753**	**7**	**21**	**6**	**34**	**99**	**28**	**221**	**347**

Minter Drive DRI #3495 Transportation Analysis

City of Hampton, Georgia

December 2021

Intersection: 3. US 19/41 at Lower Woolsey Road

Weekday A.M. Peak Hour	Northbound US 19/41			Southbound US 19/41			Eastbound Lower Woolsey Road		
	L	T	Tot	T	R	Tot	L	R	Tot
Counted Volumes (Thursday, October 28, 2021 7:00-8:00)	**22**	**1074**	**1096**	**551**	**37**	**588**	**13**	**189**	**202**
Total Annual Background Growth	21.9%	21.9%		21.9%	21.9%		21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*27*	*1309*	*1336*	*672*	*45*	*717*	*16*	*230*	*246*
Lower Woolsey Industrial DRI #2808 trips	81	32	113	10	9	19	2	25	27
Garden Lakes DRI #3049 trips	0	35	35	110	20	130	8	0	8
Speedway Commerce Center DRI #3216 trips	95	0	95	0	119	119	61	56	117
subtotal trips of specific projects	*176*	*67*	*243*	*120*	*148*	*268*	*71*	*81*	*152*
2031 No-Build Volumes	**203**	**1376**	**1579**	**792**	**193**	**985**	**87**	**311**	**398**
Minter Drive Residential Trips	0	105	105	34	0	34	0	24	24
Minter Drive Retail New Trips	0	6	6	10	0	10	0	7	7
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**111**	**111**	**44**	**0**	**44**	**0**	**31**	**31**
2031 Build Volumes	**203**	**1487**	**1690**	**836**	**193**	**1029**	**87**	**342**	**429**

Weekday A.M. Peak Hour	Northbound US 19/41			Southbound US 19/41			Eastbound Lower Woolsey Road		
	L	T	Tot	T	R	Tot	L	R	Tot
Counted Volumes (Thursday, October 28, 2021 4:30-5:30)	**30**	**943**	**973**	**1119**	**56**	**1175**	**31**	**246**	**277**
Total Annual Background Growth	21.9%	21.9%		21.9%	21.9%		21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*37*	*1150*	*1186*	*1364*	*68*	*1432*	*38*	*300*	*338*
Lower Woolsey Industrial DRI #2808 trips	38	14	52	35	7	42	11	99	110
Garden Lakes DRI #3049 trips	0	115	115	70	15	85	26	0	26
Speedway Commerce Center DRI #3216 trips	66	0	66	0	71	71	125	104	229
subtotal trips of specific projects	*104*	*129*	*233*	*105*	*93*	*198*	*162*	*203*	*365*
2031 No-Build Volumes	**141**	**1279**	**1419**	**1469**	**161**	**1630**	**200**	**503**	**703**
Minter Drive Residential Trips	0	67	67	108	0	108	0	74	74
Minter Drive Retail New Trips	0	31	31	29	0	29	0	22	22
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**98**	**98**	**137**	**0**	**137**	**0**	**96**	**96**
2031 Build Volumes	**141**	**1377**	**1517**	**1606**	**161**	**1767**	**200**	**599**	**799**

Minter Drive DRI #3495 Transportation Analysis

City of Hampton, Georgia

December 2021

Intersection: 4. US 19/41 at Malier Road

Weekday A.M. Peak Hour	Northbound US 19/41				Southbound US 19/41				Eastbound Malier Road				Westbound Malier Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 7:00-8:00)	**15**	**1095**	**44**	**1154**	**31**	**742**	**7**	**780**	**37**	**10**	**14**	**61**	**124**	**11**	**97**	**232**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*18*	*1335*	*54*	*1407*	*38*	*904*	*9*	*951*	*45*	*12*	*17*	*74*	*151*	*13*	*118*	*283*
Lower Woolsey Industrial DRI #2808 trips	0	94	0	94	5	27	3	35	6	0	0	6	0	0	13	13
Garden Lakes DRI #3049 trips	0	27	0	27	15	85	10	110	3	0	0	3	0	0	5	5
Speedway Commerce Center DRI #3216 trips	0	78	0	78	7	43	6	56	7	0	0	7	0	0	10	10
subtotal trips of specific projects	*0*	*199*	*0*	*199*	*27*	*155*	*19*	*201*	*16*	*0*	*0*	*16*	*0*	*0*	*28*	*28*
2031 No-Build Volumes	**18**	**1534**	**54**	**1606**	**65**	**1059**	**28**	**1152**	**61**	**12**	**17**	**90**	**151**	**13**	**146**	**311**
Minter Drive Residential Trips	0	14	0	14	7	44	5	56	1	0	0	1	0	0	2	2
Minter Drive Retail New Trips	0	6	0	6	2	4	1	7	2	0	0	2	0	0	3	3
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**20**	**0**	**20**	**9**	**48**	**6**	**63**	**3**	**0**	**0**	**3**	**0**	**0**	**5**	**5**
2031 Build Volumes	**18**	**1554**	**54**	**1626**	**74**	**1107**	**34**	**1215**	**64**	**12**	**17**	**93**	**151**	**13**	**151**	**316**

Weekday A.M. Peak Hour	Northbound US 19/41				Southbound US 19/41				Eastbound Malier Road				Westbound Malier Road			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 4:30-5:30)	**42**	**981**	**65**	**1088**	**123**	**1203**	**51**	**1377**	**27**	**24**	**23**	**74**	**126**	**38**	**74**	**238**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*51*	*1196*	*79*	*1326*	*150*	*1466*	*62*	*1679*	*33*	*29*	*28*	*90*	*154*	*46*	*90*	*290*
Lower Woolsey Industrial DRI #2808 trips	0	43	0	43	30	89	15	134	3	0	0	3	0	0	6	6
Garden Lakes DRI #3049 trips	0	92	0	92	10	54	6	70	8	0	0	8	0	0	15	15
Speedway Commerce Center DRI #3216 trips	0	88	0	88	12	84	8	104	5	0	0	5	0	0	6	6
subtotal trips of specific projects	*0*	*223*	*0*	*223*	*52*	*227*	*29*	*308*	*16*	*0*	*0*	*16*	*0*	*0*	*27*	*27*
2031 No-Build Volumes	**51**	**1419**	**79**	**1549**	**202**	**1693**	**91**	**1987**	**49**	**29**	**28**	**106**	**154**	**46**	**117**	**317**
Minter Drive Residential Trips	0	45	0	45	4	28	3	35	5	0	0	5	0	0	7	7
Minter Drive Retail New Trips	0	18	0	18	10	19	5	34	3	0	0	3	0	0	10	10
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**63**	**0**	**63**	**14**	**47**	**8**	**69**	**8**	**0**	**0**	**8**	**0**	**0**	**17**	**17**
2031 Build Volumes	**51**	**1482**	**79**	**1612**	**216**	**1740**	**99**	**2056**	**57**	**29**	**28**	**114**	**154**	**46**	**134**	**334**

Minter Drive DRI #3495 Transportation Analysis

City of Hampton, Georgia

December 2021

Intersection: 5. GA 20 at Old Highway 3 / East Main Street

Weekday A.M. Peak Hour	Northbound Old Highway 3				Southbound East Main Street				Eastbound GA 20				Westbound GA 20			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 7:00-8:00)	**8**	**67**	**137**	**212**	**149**	**49**	**14**	**212**	**24**	**577**	**4**	**605**	**109**	**375**	**176**	**660**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*10*	*82*	*167*	*258*	*182*	*60*	*17*	*258*	*29*	*703*	*5*	*737*	*133*	*457*	*215*	*805*
Lower Woolsey Industrial DRI #2808 trips	1	0	0	1	0	0	4	4	1	37	0	38	0	121	0	121
Garden Lakes DRI #3049 trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Speedway Commerce Center DRI #3216 trips	25	0	0	25	0	0	30	30	18	97	6	121	0	187	0	187
subtotal trips of specific projects	*26*	*0*	*0*	*26*	*0*	*0*	*34*	*34*	*19*	*134*	*6*	*159*	*0*	*308*	*0*	*308*
2031 No-Build Volumes	**36**	**82**	**167**	**284**	**182**	**60**	**51**	**292**	**48**	**837**	**11**	**896**	**133**	**765**	**215**	**1113**
Minter Drive Residential Trips	0	0	0	0	0	0	5	5	14	59	0	73	0	19	0	19
Minter Drive Retail New Trips	0	0	0	0	0	0	3	3	1	3	0	4	0	4	0	4
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**8**	**15**	**62**	**0**	**77**	**0**	**23**	**0**	**23**
2031 Build Volumes	**36**	**82**	**167**	**284**	**182**	**60**	**59**	**300**	**63**	**899**	**11**	**973**	**133**	**788**	**215**	**1136**

Weekday A.M. Peak Hour	Northbound Old Highway 3				Southbound East Main Street				Eastbound GA 20				Westbound GA 20			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Counted Volumes (Thursday, October 28, 2021 4:30-5:30)	**3**	**78**	**83**	**164**	**174**	**156**	**18**	**348**	**36**	**414**	**13**	**463**	**226**	**504**	**188**	**918**
Total Annual Background Growth	21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%		21.9%	21.9%	21.9%	
subtotal 2031 No-Build without specific projects	*4*	*95*	*101*	*200*	*212*	*190*	*22*	*424*	*44*	*505*	*16*	*564*	*275*	*614*	*229*	*1119*
Lower Woolsey Industrial DRI #2808 trips	1	0	0	1	0	0	2	2	5	129	2	136	0	50	0	50
Garden Lakes DRI #3049 trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Speedway Commerce Center DRI #3216 trips	10	0	0	10	0	0	21	21	33	198	24	255	0	117	0	117
subtotal trips of specific projects	*11*	*0*	*0*	*11*	*0*	*0*	*23*	*23*	*38*	*327*	*26*	*391*	*0*	*167*	*0*	*167*
2031 No-Build Volumes	**15**	**95**	**101**	**211**	**212**	**190**	**45**	**447**	**82**	**832**	**42**	**955**	**275**	**781**	**229**	**1286**
Minter Drive Residential Trips	0	0	0	0	0	0	14	14	9	37	0	46	0	60	0	60
Minter Drive Retail New Trips	0	0	0	0	0	0	9	9	8	14	0	22	0	13	0	13
Minter Drive Retail Pass-by Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Minter Drive DRI Trips	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**23**	**17**	**51**	**0**	**68**	**0**	**73**	**0**	**73**
2031 Build Volumes	**15**	**95**	**101**	**211**	**212**	**190**	**68**	**470**	**99**	**883**	**42**	**1023**	**275**	**854**	**229**	**1359**

Minter Drive DRI #3495 Transportation Analysis

City of Hampton, Georgia

December 2021

Intersection: A. US 19/41 at Minter Drive DRI North Access

Weekday A.M. Peak Hour	Northbound US 19/41			Southbound US 19/41			Eastbound DRI North Access			
	L	T	Tot	T	R	Tot	L	R	Tot	
Counted Volumes (Thursday, October 28, 2021 7:00-8:00)		**1091**	**1091**	**727**		**727**				
Total Annual Background Growth		21.9%		21.9%						
subtotal 2031 No-Build without specific projects		*1330*	*1330*	*886*		*886*				
Lower Woolsey Industrial DRI #2808 trips		113	113	35		35				
Garden Lakes DRI #3049 trips		35	35	110		110				
Speedway Commerce Center DRI #3216 trips		95	95	56		56				
subtotal trips of specific projects		*243*	*243*	*201*		*201*				
2031 No-Build Volumes		**1573**	**1573**	**1087**		**1087**				
Minter Drive Residential Trips	6	44	50	12	46	58	134	20	154	
Minter Drive Retail New Trips	4	4	8	7	10	17	3	3	6	
Minter Drive Retail Pass-by Trips	2	-2	0	-2	2	0	3	1	4	
Total Minter Drive DRI Trips	**12**	**46**	**58**	**17**	**58**	**75**	**140**	**24**	**164**	
2031 Build Volumes	**12**	**1619**	**1631**	**1104**	**58**	**1162**	**140**	**24**	**164**	

Weekday A.M. Peak Hour	Northbound US 19/41			Southbound US 19/41			Eastbound DRI North Access			
	L	T	Tot	T	R	Tot	L	R	Tot	
Counted Volumes (Thursday, October 28, 2021 4:45-5:45)		**933**	**933**	**1286**		**1286**				
Total Annual Background Growth		21.9%		21.9%						
subtotal 2031 No-Build without specific projects		*1137*	*1137*	*1568*		*1568*				
Lower Woolsey Industrial DRI #2808 trips		52	52	134		134				
Garden Lakes DRI #3049 trips		115	115	70		70				
Speedway Commerce Center DRI #3216 trips		66	66	104		104				
subtotal trips of specific projects		*233*	*233*	*308*		*308*				
2031 No-Build Volumes		**1370**	**1370**	**1876**		**1876**				
Minter Drive Residential Trips	20	29	49	36	146	182	84	12	96	
Minter Drive Retail New Trips	22	31	53	20	31	51	32	14	46	
Minter Drive Retail Pass-by Trips	7	-7	0	-15	15	0	11	11	22	
Total Minter Drive DRI Trips	**49**	**53**	**102**	**41**	**192**	**233**	**127**	**37**	**164**	
2031 Build Volumes	**49**	**1423**	**1472**	**1917**	**192**	**2109**	**127**	**37**	**164**	

US 19/41 at project access location **Thursday, October 28, 2021**
Peak Hour Calculation

Begin Time	**NB**	**Hourly**	**SB**	**Hourly**	**2-Way**	**Hourly**
7:00 AM	270		146		416	
7:15 AM	278		190		468	
7:30 AM	257		197		454	
7:45 AM	***286***	***1091***	***194***	***727***	***480***	***1818***
8:00 AM	242	1063	170	751	412	1814
8:15 AM	237	1022	158	719	395	1741
8:30 AM	247	1012	163	685	410	1697
8:45 AM	172	898	157	648	329	1546
4:00 PM	239		298		537	
4:15 PM	237		320		557	
4:30 PM	234		353		587	
4:45 PM	230	940	307	1278	537	2218
5:00 PM	228	929	267	1247	495	2176
5:15 PM	243	935	353	1280	596	2215
5:30 PM	***232***	***933***	***359***	***1286***	***591***	***2219***
5:45 PM	212	915	300	1279	512	2194
6:00 PM	178	865	243	1255	421	2120
6:15 PM	177	799	224	1126	401	1925
24-Hour	**13551**		**13092**		**26643**	

Minter Drive DRI #3495 Transportation Analysis

City of Hampton, Georgia

December 2021

Intersection: B. US 19/41 at Minter Drive

Weekday A.M. Peak Hour	**Northbound US 19/41**			**Southbound US 19/41**			**Eastbound Minter Drive**			
	L	**T**	**Tot**	**T**	**R**	**Tot**	**L**	**R**	**Tot**	
Counted Volumes (Thursday, October 28, 2021 7:00-8:00)		**1091**	**1091**	**727**		**727**				
Total Annual Background Growth		21.9%		21.9%						
subtotal 2031 No-Build without specific projects		*1330*	*1330*	*886*		*886*				
Lower Woolsey Industrial DRI #2808 trips		113	113	35		35				
Garden Lakes DRI #3049 trips		35	35	110		110				
Speedway Commerce Center DRI #3216 trips		95	95	56		56				
subtotal trips of specific projects		*243*	*243*	*201*		*201*				
2031 No-Build Volumes		**1573**	**1573**	**1087**		**1087**				
Minter Drive Residential Trips	11	6	17	20	12	32	44	36	80	
Minter Drive Retail New Trips	7	4	11	3	7	10	4	4	8	
Minter Drive Retail Pass-by Trips	3	-3	0	-2	2	0	1	1	2	
Total Minter Drive DRI Trips	**21**	**7**	**28**	**21**	**21**	**42**	**49**	**41**	**90**	
2031 Build Volumes	**21**	**1580**	**1601**	**1108**	**21**	**1129**	**49**	**41**	**90**	

Weekday A.M. Peak Hour	**Northbound US 19/41**			**Southbound US 19/41**			**Eastbound Minter Drive**			
	L	**T**	**Tot**	**T**	**R**	**Tot**	**L**	**R**	**Tot**	
Counted Volumes (Thursday, October 28, 2021 4:45-5:45)		**933**	**933**	**1286**		**1286**				
Total Annual Background Growth		21.9%		21.9%						
subtotal 2031 No-Build without specific projects		*1137*	*1137*	*1568*		*1568*				
Lower Woolsey Industrial DRI #2808 trips		52	52	134		134				
Garden Lakes DRI #3049 trips		115	115	70		70				
Speedway Commerce Center DRI #3216 trips		66	66	104		104				
subtotal trips of specific projects		*233*	*233*	*308*		*308*				
2031 No-Build Volumes		**1370**	**1370**	**1876**		**1876**				
Minter Drive Residential Trips	37	20	57	12	36	48	29	23	52	
Minter Drive Retail New Trips	18	13	31	14	20	34	21	20	41	
Minter Drive Retail Pass-by Trips	11	-11	0	-10	10	0	8	15	23	
Total Minter Drive DRI Trips	**66**	**22**	**88**	**16**	**66**	**82**	**58**	**58**	**116**	
2031 Build Volumes	**66**	**1392**	**1458**	**1892**	**66**	**1958**	**58**	**58**	**116**	

US 19/41 at project access location **Thursday, October 28, 2021**
Peak Hour Calculation

Begin Time	**NB**	**Hourly**	**SB**	**Hourly**	**2-Way**	**Hourly**
7:00 AM	270		146		416	
7:15 AM	278		190		468	
7:30 AM	257		197		454	
7:45 AM	***286***	***1091***	***194***	***727***	***480***	***1818***
8:00 AM	242	1063	170	751	412	1814
8:15 AM	237	1022	158	719	395	1741
8:30 AM	247	1012	163	685	410	1697
8:45 AM	172	898	157	648	329	1546
4:00 PM	239		298		537	
4:15 PM	237		320		557	
4:30 PM	234		353		587	
4:45 PM	230	940	307	1278	537	2218
5:00 PM	228	929	267	1247	495	2176
5:15 PM	243	935	353	1280	596	2215
5:30 PM	***232***	***933***	***359***	***1286***	***591***	***2219***
5:45 PM	212	915	300	1279	512	2194
6:00 PM	178	865	243	1255	421	2120
6:15 PM	177	799	224	1126	401	1925
24-Hour	**13551**		**13092**		**26643**	

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TMC Data
US19/41 @ Oak St/Tara Pl
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500001
Site Code : 45500001
Start Date : 10/28/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	US19/41 Northbound					US19/41 Southbound					Tara Place Eastbound					Oak St Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	243	8	0	253	7	107	0	0	114	0	0	2	0	2	10	0	12	0	22	391
07:15 AM	1	260	7	0	268	12	119	1	0	132	0	0	0	0	0	16	0	14	0	30	430
07:30 AM	0	273	9	0	282	9	152	3	0	164	0	0	0	0	0	14	0	17	0	31	477
07:45 AM	1	286	6	0	293	13	134	3	0	150	0	0	0	0	0	12	1	15	0	28	471
Total	4	1062	30	0	1096	41	512	7	0	560	0	0	2	0	2	52	1	58	0	111	1769
08:00 AM	0	242	9	0	251	13	128	1	0	142	1	0	0	0	1	10	0	18	0	28	422
08:15 AM	0	227	10	0	237	14	123	1	0	138	0	0	1	0	1	7	0	25	0	32	408
08:30 AM	1	224	9	0	234	17	117	2	0	136	1	0	0	0	1	13	0	21	0	34	405
08:45 AM	0	218	6	0	224	14	113	0	0	127	1	0	0	0	1	12	0	16	0	28	380
Total	1	911	34	0	946	58	481	4	0	543	3	0	1	0	4	42	0	80	0	122	1615
*** BREAK ***																					
04:00 PM	2	234	9	0	245	33	235	0	0	268	0	0	0	0	0	16	0	24	0	40	553
04:15 PM	1	251	12	0	264	26	273	0	0	299	1	2	0	0	3	19	0	32	0	51	617
04:30 PM	0	256	18	0	274	24	282	1	0	307	1	0	0	0	1	20	0	26	0	46	628
04:45 PM	0	257	10	0	267	28	274	0	0	302	0	0	1	0	1	15	0	25	0	40	610
Total	3	998	49	0	1050	111	1064	1	0	1176	2	2	1	0	5	70	0	107	0	177	2408
05:00 PM	0	248	11	0	259	20	269	0	0	289	1	0	2	0	3	17	0	20	0	37	588
05:15 PM	0	245	7	0	252	21	264	0	0	285	1	0	1	0	2	23	2	18	0	43	582
05:30 PM	0	224	9	0	233	26	272	1	0	299	1	0	0	0	1	17	1	24	0	42	575
05:45 PM	0	213	12	0	225	29	267	1	0	297	0	0	2	0	2	14	1	13	0	28	552
Total	0	930	39	0	969	96	1072	2	0	1170	3	0	5	0	8	71	4	75	0	150	2297
Grand Total	8	3901	152	0	4061	306	3129	14	0	3449	8	2	9	0	19	235	5	320	0	560	8089
Apprch %	0.2	96.1	3.7	0		8.9	90.7	0.4	0		42.1	10.5	47.4	0		42	0.9	57.1	0		
Total %	0.1	48.2	1.9	0	50.2	3.8	38.7	0.2	0	42.6	0.1	0	0.1	0	0.2	2.9	0.1	4	0	6.9	

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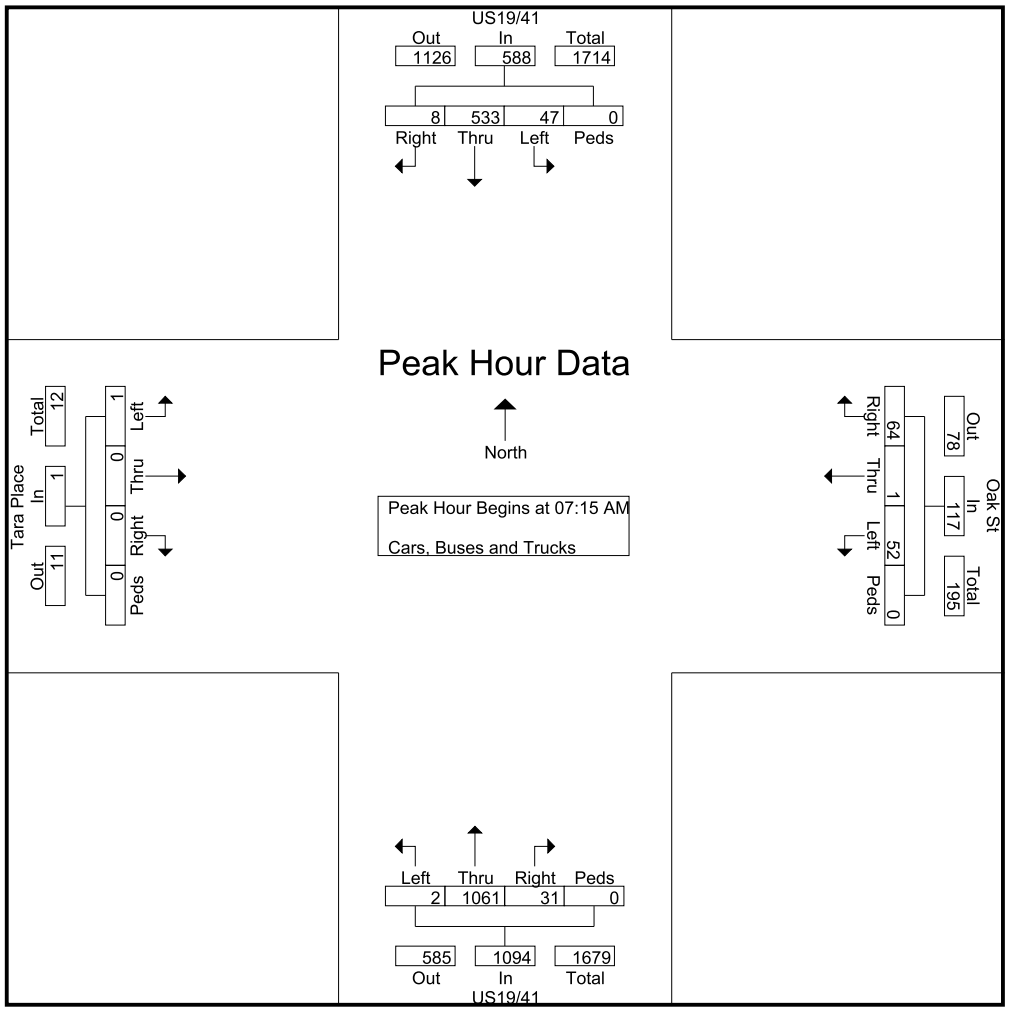
TMC Data
US19/41 @ Oak St/Tara Pl
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500001
Site Code : 45500001
Start Date : 10/28/2021
Page No : 2

	US19/41 Northbound					US19/41 Southbound					Tara Place Eastbound					Oak St Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**1**	260	7	0	268	12	119	1	0	132	0	0	0	0	0	**16**	0	14	0	30	430
07:30 AM	0	273	**9**	0	282	9	**152**	**3**	0	**164**	0	0	0	0	0	14	0	17	0	**31**	**477**
07:45 AM	1	**286**	6	0	**293**	**13**	134	3	0	150	0	0	0	0	0	12	**1**	15	0	28	471
08:00 AM	0	242	9	0	251	13	128	1	0	142	**1**	0	0	0	**1**	10	0	**18**	0	28	422
Total Volume	2	1061	31	0	1094	47	533	8	0	588	1	0	0	0	1	52	1	64	0	117	1800
% App. Total	0.2	97	2.8	0		8	90.6	1.4	0		100	0	0	0		44.4	0.9	54.7	0		
PHF	.500	.927	.861	.000	.933	.904	.877	.667	.000	.896	.250	.000	.000	.000	.250	.813	.250	.889	.000	.944	.943



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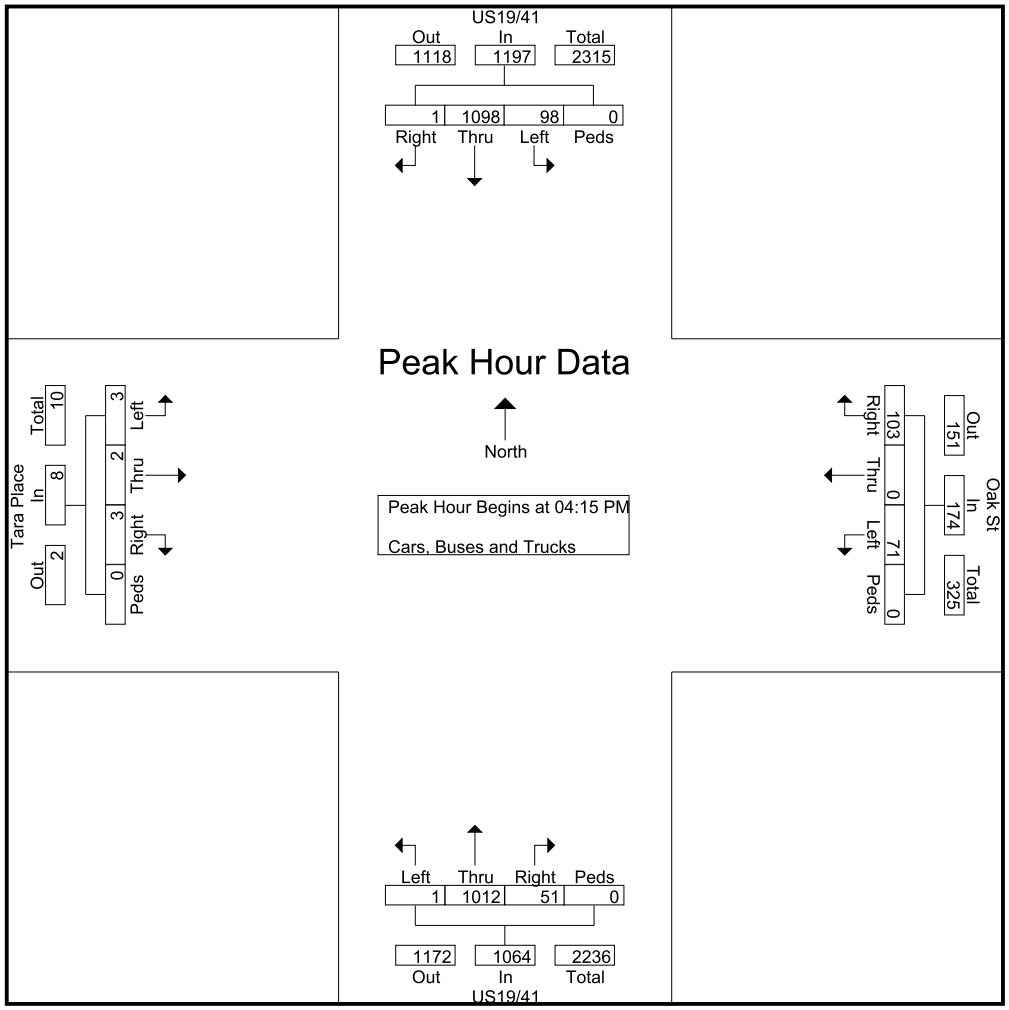
TMC Data
US19/41 @ Oak St/Tara Pl
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500001
Site Code : 45500001
Start Date : 10/28/2021

	US19/41 Northbound					US19/41 Southbound					Tara Place Eastbound					Oak St Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	**1**	251	12	0	264	26	273	0	0	299	**1**	**2**	0	0	**3**	19	0	**32**	0	**51**	617
04:30 PM	0	256	**18**	0	**274**	24	**282**	**1**	0	**307**	1	0	0	0	1	**20**	0	26	0	46	**628**
04:45 PM	0	**257**	10	0	267	**28**	274	0	0	302	0	0	1	0	1	15	0	25	0	40	610
05:00 PM	0	248	11	0	259	20	269	0	0	289	1	0	**2**	0	3	17	0	20	0	37	588
Total Volume	1	1012	51	0	1064	98	1098	1	0	1197	3	2	3	0	8	71	0	103	0	174	2443
% App. Total	0.1	95.1	4.8	0		8.2	91.7	0.1	0		37.5	25	37.5	0		40.8	0	59.2	0		
PHF	.250	.984	.708	.000	.971	.875	.973	.250	.000	.975	.750	.250	.375	.000	.667	.888	.000	.805	.000	.853	.973



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TMC Data
US19/41 @ Woolsey Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500002
Site Code : 45500002
Start Date : 10/28/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	US19/41 Northbound					US19/41 Southbound					Richard Petty Blvd Eastbound					Woolsey Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	219	9	0	229	8	100	0	0	108	0	4	1	0	5	3	4	21	0	28	370
07:15 AM	1	237	7	0	245	9	125	2	0	136	0	8	2	0	10	8	5	37	0	50	441
07:30 AM	0	248	9	0	257	20	167	0	0	187	2	6	2	0	10	5	1	43	0	49	503
07:45 AM	2	257	7	0	266	22	126	2	0	150	3	9	0	0	12	7	2	39	0	48	476
Total	4	961	32	0	997	59	518	4	0	581	5	27	5	0	37	23	12	140	0	175	1790
08:00 AM	1	211	5	0	217	22	119	1	0	142	0	4	1	0	5	8	6	27	0	41	405
08:15 AM	2	195	4	0	201	17	107	0	0	124	2	3	3	0	8	2	1	28	0	31	364
08:30 AM	3	220	9	0	232	15	112	2	0	129	1	7	1	0	9	3	2	32	0	37	407
08:45 AM	0	184	6	0	190	21	121	3	0	145	0	3	0	0	3	4	0	25	0	29	367
Total	6	810	24	0	840	75	459	6	0	540	3	17	5	0	25	17	9	112	0	138	1543
*** BREAK ***																					
04:00 PM	0	194	8	0	202	35	228	0	0	263	1	5	0	0	6	18	8	47	0	73	544
04:15 PM	0	213	12	0	225	33	262	0	0	295	1	2	3	0	6	9	2	62	0	73	599
04:30 PM	2	232	15	0	249	23	273	1	0	297	2	7	1	0	10	25	3	42	0	70	626
04:45 PM	1	234	13	0	248	33	265	2	0	300	0	3	0	0	3	15	13	41	0	69	620
Total	3	873	48	0	924	124	1028	3	0	1155	4	17	4	0	25	67	26	192	0	285	2389
05:00 PM	0	212	8	0	220	31	256	2	0	289	3	5	1	0	9	14	5	36	0	55	573
05:15 PM	1	222	10	0	233	47	255	0	0	302	0	2	1	0	3	14	0	44	0	58	596
05:30 PM	2	196	13	0	211	42	259	0	0	301	4	5	5	0	14	13	4	44	0	61	587
05:45 PM	2	171	17	0	190	38	243	1	0	282	2	4	0	0	6	10	2	41	0	53	531
Total	5	801	48	0	854	158	1013	3	0	1174	9	16	7	0	32	51	11	165	0	227	2287
Grand Total	18	3445	152	0	3615	416	3018	16	0	3450	21	77	21	0	119	158	58	609	0	825	8009
Apprch %	0.5	95.3	4.2	0		12.1	87.5	0.5	0		17.6	64.7	17.6	0		19.2	7	73.8	0		
Total %	0.2	43	1.9	0	45.1	5.2	37.7	0.2	0	43.1	0.3	1	0.3	0	1.5	2	0.7	7.6	0	10.3	

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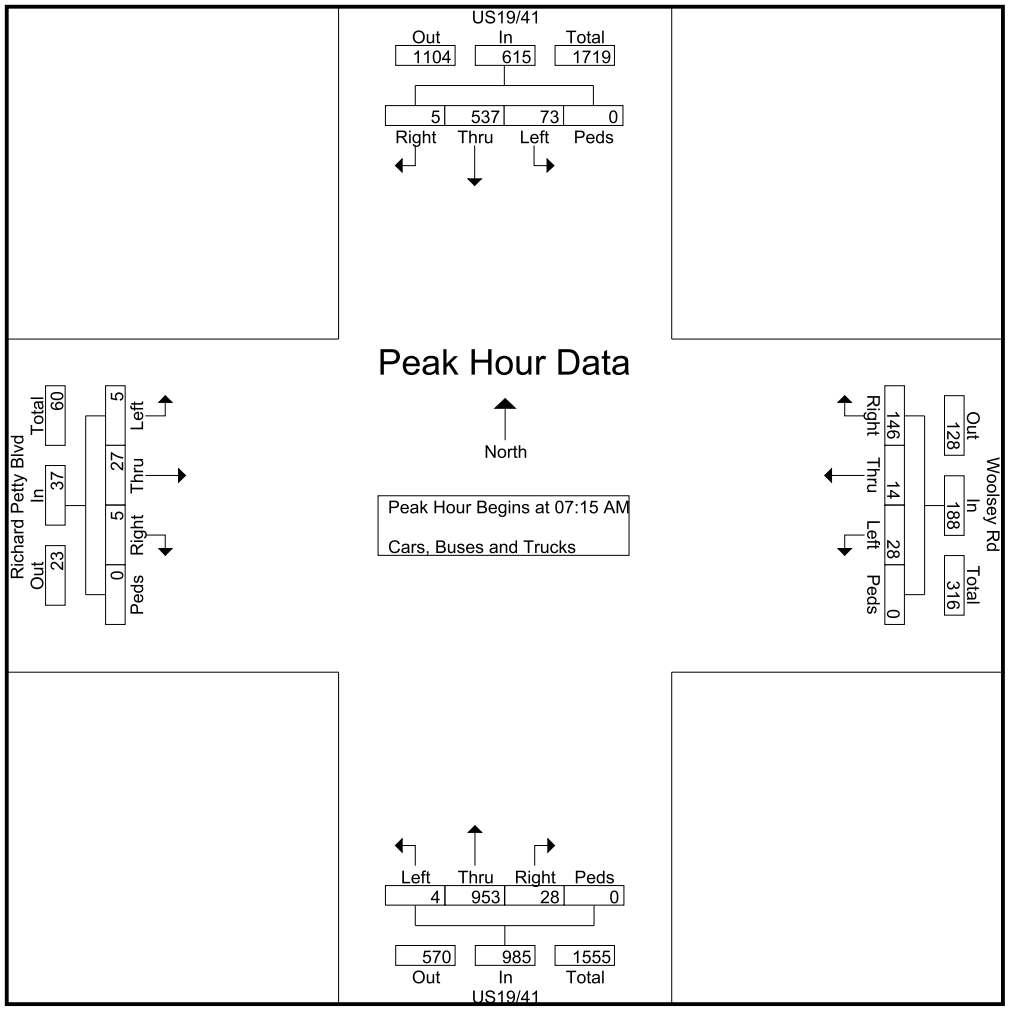
TMC Data
US19/41 @ Woolsey Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500002
Site Code : 45500002
Start Date : 10/28/2021
Page No : 2

	US19/41 Northbound					US19/41 Southbound					Richard Petty Blvd Eastbound					Woolsey Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	237	7	0	245	9	125	**2**	0	136	0	8	**2**	0	10	**8**	5	37	0	**50**	441
07:30 AM	0	248	**9**	0	257	20	**167**	0	0	**187**	2	6	2	0	10	5	1	**43**	0	49	**503**
07:45 AM	**2**	**257**	7	0	**266**	**22**	126	2	0	150	**3**	**9**	0	0	**12**	7	2	39	0	48	476
08:00 AM	1	211	5	0	217	22	119	1	0	142	0	4	1	0	5	8	**6**	27	0	41	405
Total Volume	4	953	28	0	985	73	537	5	0	615	5	27	5	0	37	28	14	146	0	188	1825
% App. Total		96.8				11.9	87.3				13.5		13.5			14.9		77.7			
PHF	.500	.927	.778	.000	.926	.830	.804	.625	.000	.822	.417	.750	.625	.000	.771	.875	.583	.849	.000	.940	.907



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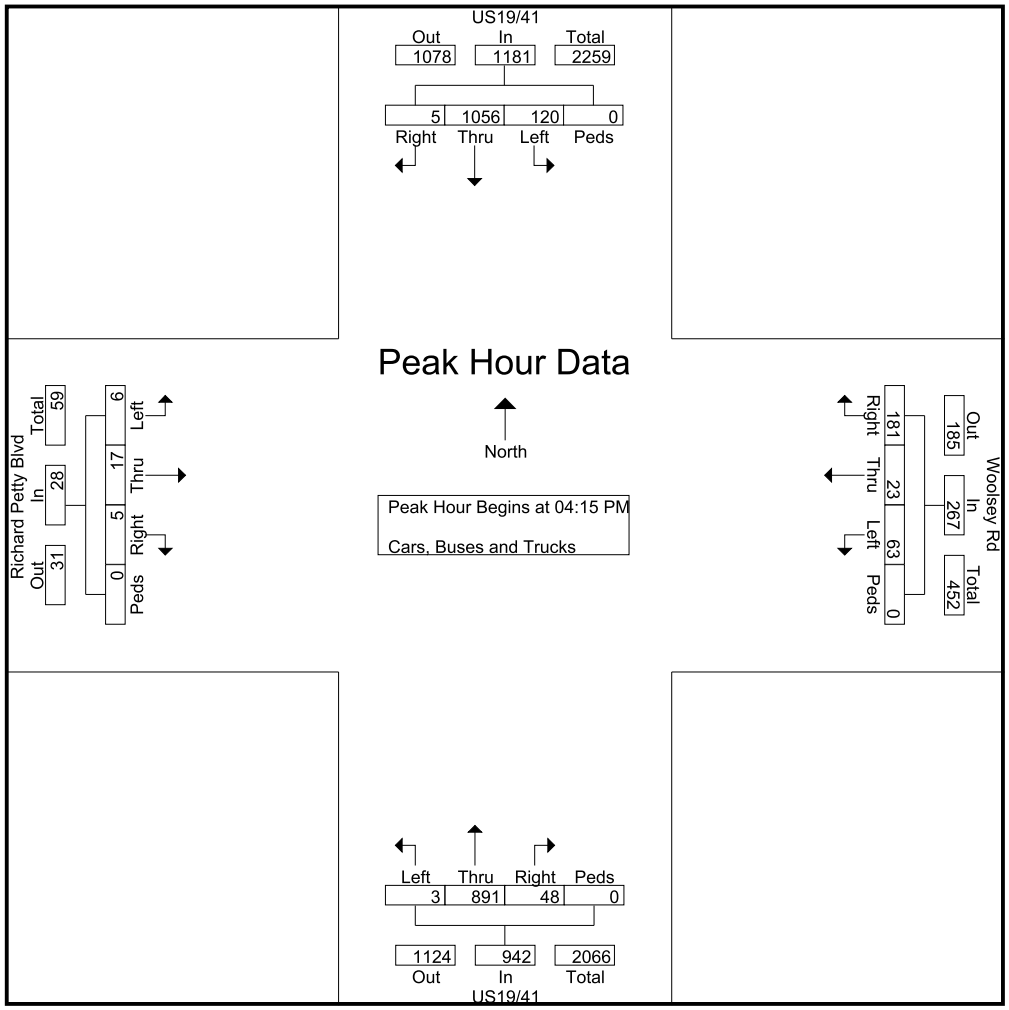
TMC Data
US19/41 @ Woolsey Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500002
Site Code : 45500002
Start Date : 10/28/2021
Page No : 3

	US19/41 Northbound					US19/41 Southbound					Richard Petty Blvd Eastbound					Woolsey Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	213	12	0	225	**33**	262	0	0	295	1	2	**3**	0	6	9	2	**62**	0	**73**	599
04:30 PM	**2**	232	**15**	0	**249**	23	**273**	1	0	297	2	**7**	1	0	**10**	**25**	3	42	0	70	**626**
04:45 PM	1	**234**	13	0	248	33	265	**2**	0	**300**	0	3	0	0	3	15	**13**	41	0	69	620
05:00 PM	0	212	8	0	220	31	256	2	0	289	**3**	5	1	0	9	14	5	36	0	55	573
Total Volume	3	891	48	0	942	120	1056	5	0	1181	6	17	5	0	28	63	23	181	0	267	2418
% App. Total	0.3	94.6	5.1	0		10.2	89.4	0.4	0		21.4	60.7	17.9	0		23.6	8.6	67.8	0		
PHF	.375	.952	.800	.000	.946	.909	.967	.625	.000	.984	.500	.607	.417	.000	.700	.630	.442	.730	.000	.914	.966



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TMC Data
US19/41 @ Lower Woolsey Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500003
Site Code : 45500003
Start Date : 10/28/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	US19/41 Northbound					US19/41 Southbound					Lower Woolsey Rd Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	264	0	0	266	0	126	7	0	133	1	0	41	0	42	0	0	0	0	0	441
07:15 AM	8	269	0	0	277	0	137	10	0	147	3	0	44	0	47	0	0	0	0	0	471
07:30 AM	5	263	0	0	268	0	142	8	0	150	2	0	57	0	59	0	0	0	0	0	477
07:45 AM	7	278	0	0	285	0	146	12	0	158	7	0	47	0	54	0	0	0	0	0	497
Total	22	1074	0	0	1096	0	551	37	0	588	13	0	189	0	202	0	0	0	0	0	1886
08:00 AM	3	224	0	0	227	0	132	14	0	146	3	0	35	0	38	0	0	0	0	0	411
08:15 AM	4	241	0	0	245	0	130	7	0	137	4	0	32	0	36	0	0	0	0	0	418
08:30 AM	3	246	0	0	249	0	127	6	0	133	7	0	47	0	54	0	0	0	0	0	436
08:45 AM	5	178	0	0	183	0	124	4	0	128	3	0	31	0	34	0	0	0	0	0	345
Total	15	889	0	0	904	0	513	31	0	544	17	0	145	0	162	0	0	0	0	0	1610
*** BREAK ***																					
04:00 PM	2	224	0	0	226	0	237	10	0	247	5	0	47	0	52	0	0	0	0	0	525
04:15 PM	6	231	0	0	237	0	241	12	0	253	7	0	51	0	58	0	0	0	0	0	548
04:30 PM	5	248	0	0	253	0	330	15	0	345	9	0	54	0	63	0	0	0	0	0	661
04:45 PM	6	232	0	0	238	0	264	18	0	282	9	0	76	0	85	0	0	0	0	0	605
Total	19	935	0	0	954	0	1072	55	0	1127	30	0	228	0	258	0	0	0	0	0	2339
05:00 PM	13	234	0	0	247	0	271	13	0	284	6	0	57	0	63	0	0	0	0	0	594
05:15 PM	6	229	0	0	235	0	254	10	0	264	7	0	59	0	66	0	0	0	0	0	565
05:30 PM	3	217	0	0	220	0	267	14	0	281	5	0	54	0	59	0	0	0	0	0	560
05:45 PM	5	210	0	0	215	0	264	17	0	281	4	0	62	0	66	0	0	0	0	0	562
Total	27	890	0	0	917	0	1056	54	0	1110	22	0	232	0	254	0	0	0	0	0	2281
Grand Total	83	3788	0	0	3871	0	3192	177	0	3369	82	0	794	0	876	0	0	0	0	0	8116
Apprch %	2.1	97.9	0	0		0	94.7	5.3	0		9.4	0	90.6	0		0	0	0	0		
Total %	1	46.7	0	0	47.7	0	39.3	2.2	0	41.5	1	0	9.8	0	10.8	0	0	0	0	0	

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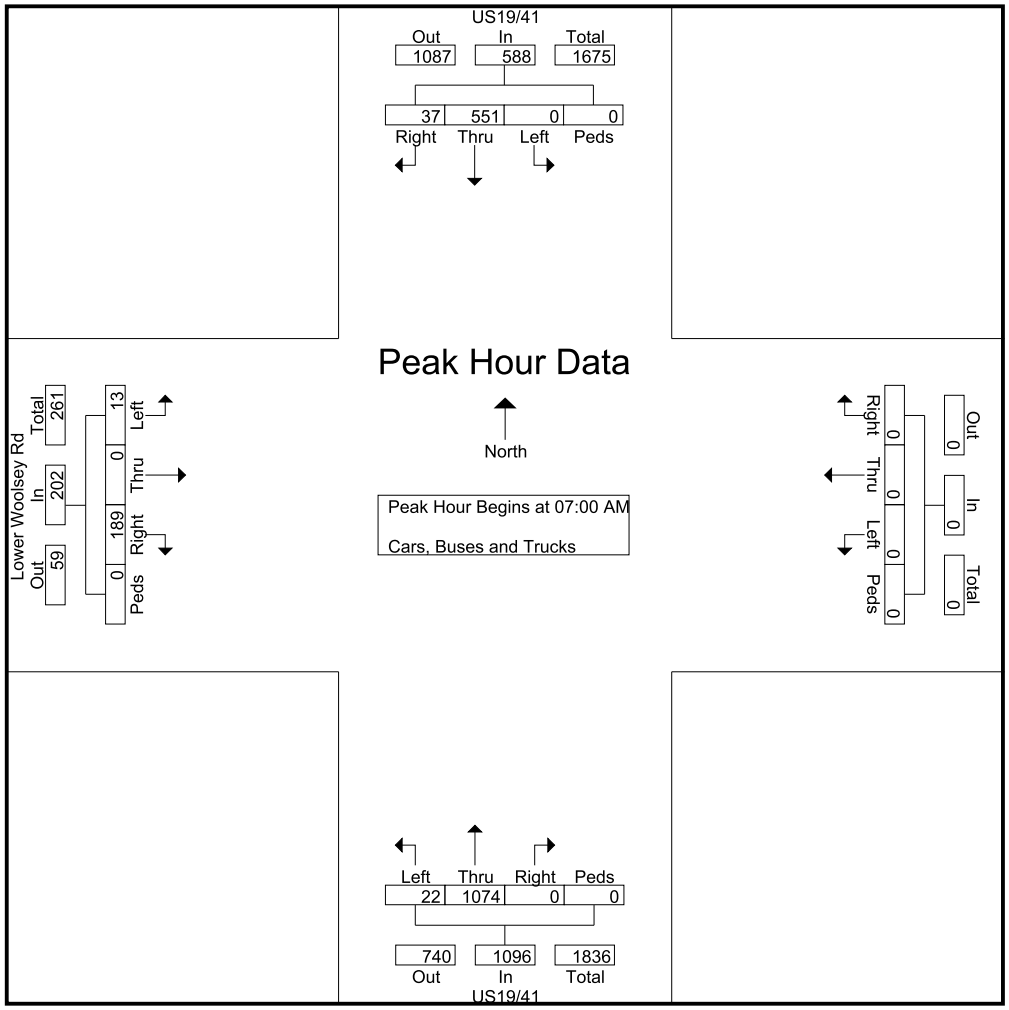
TMC Data
US19/41 @ Lower Woolsey Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500003
Site Code : 45500003
Start Date : 10/28/2021

	US19/41 Northbound					US19/41 Southbound					Lower Woolsey Rd Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	2	264	0	0	266	0	126	7	0	133	1	0	41	0	42	0	0	0	0	0	441
07:15 AM	**8**	269	0	0	277	0	137	10	0	147	3	0	44	0	47	0	0	0	0	0	471
07:30 AM	5	263	0	0	268	0	142	8	0	150	2	0	**57**	0	**59**	0	0	0	0	0	477
07:45 AM	7	**278**	0	0	**285**	0	**146**	**12**	0	**158**	**7**	0	47	0	54	0	0	0	0	0	**497**
Total Volume	22	1074	0	0	1096	0	551	37	0	588	13	0	189	0	202	0	0	0	0	0	1886
% App. Total	2	98	0	0		0	93.7	6.3	0		6.4	0	93.6	0		0	0	0	0		
PHF	.688	.966	.000	.000	.961	.000	.943	.771	.000	.930	.464	.000	.829	.000	.856	.000	.000	.000	.000	.000	.949



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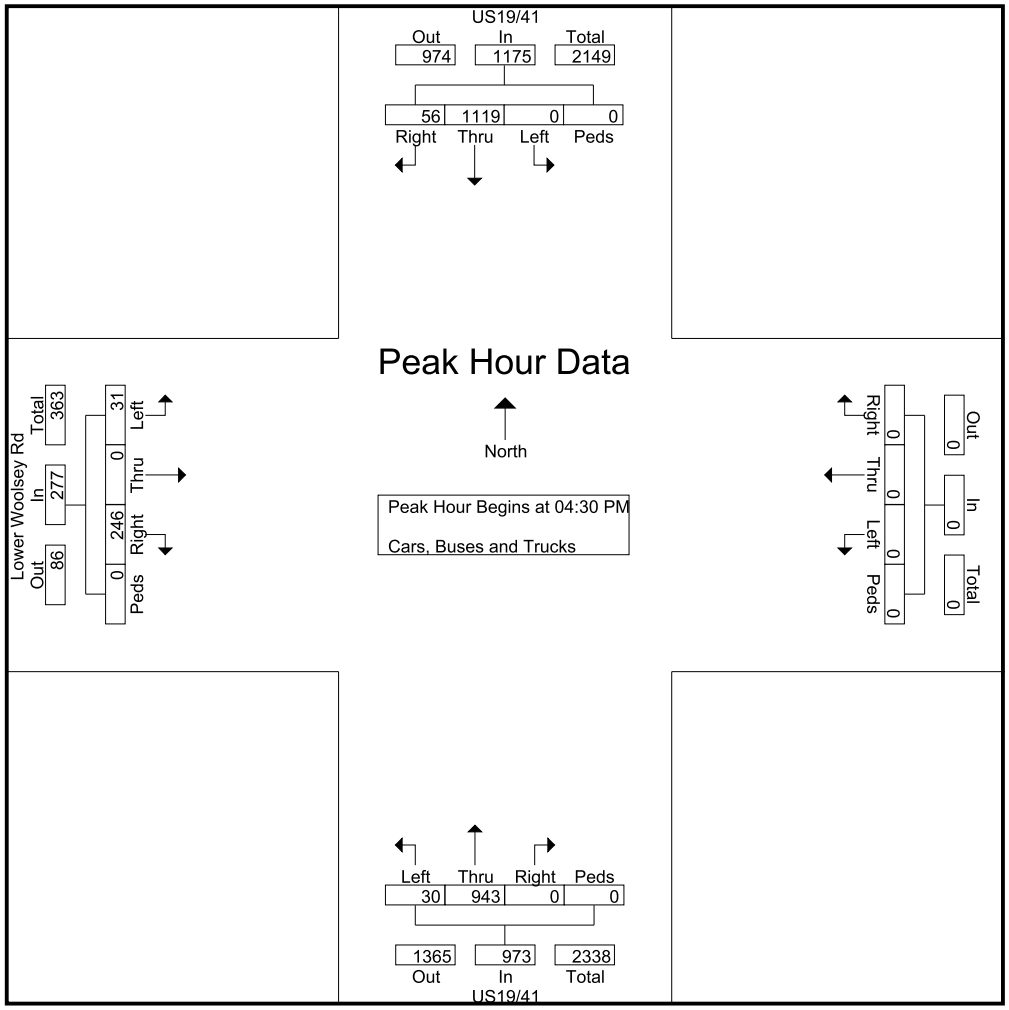
TMC Data
US19/41 @ Lower Woolsey Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500003
Site Code : 45500003
Start Date : 10/28/2021
Page No : 3

	US19/41 Northbound					US19/41 Southbound					Lower Woolsey Rd Eastbound					Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	5	**248**	0	0	**253**	0	**330**	15	0	**345**	**9**	0	54	0	63	0	0	0	0	0	**661**
04:45 PM	6	232	0	0	238	0	264	**18**	0	282	9	0	**76**	0	**85**	0	0	0	0	0	605
05:00 PM	**13**	234	0	0	247	0	271	13	0	284	6	0	57	0	63	0	0	0	0	0	594
05:15 PM	6	229	0	0	235	0	254	10	0	264	7	0	59	0	66	0	0	0	0	0	565
Total Volume	30	943	0	0	973	0	1119	56	0	1175	31	0	246	0	277	0	0	0	0	0	2425
% App. Total	3.1	96.9	0	0		0	95.2	4.8	0		11.2	0	88.8	0		0	0	0	0		
PHF	.577	.951	.000	.000	.961	.000	.848	.778	.000	.851	.861	.000	.809	.000	.815	.000	.000	.000	.000	.000	.917



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TMC Data
US19/41 @ Malier Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500004
Site Code : 45500004
Start Date : 10/28/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

	US19/41 Northbound					US19/41 Southbound					Malier Rd Eastbound					Malier Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	267	9	0	278	5	138	2	0	145	10	2	2	0	14	24	1	21	0	46	483
07:15 AM	2	282	15	0	299	6	174	2	0	182	9	4	3	0	16	33	6	22	0	61	558
07:30 AM	4	267	11	0	282	10	193	1	0	204	10	1	7	0	18	39	4	24	0	67	571
07:45 AM	7	279	9	0	295	10	237	2	0	249	8	3	2	0	13	28	0	30	0	58	615
Total	15	1095	44	0	1154	31	742	7	0	780	37	10	14	0	61	124	11	97	0	232	2227
08:00 AM	2	238	11	0	251	7	156	2	0	165	8	4	2	0	14	16	3	16	0	35	465
08:15 AM	5	256	6	0	267	12	143	3	0	158	5	9	4	0	18	20	5	21	0	46	489
08:30 AM	6	247	6	0	259	14	136	2	0	152	6	2	2	0	10	28	6	17	0	51	472
08:45 AM	2	182	4	0	188	9	148	1	0	158	3	4	3	0	10	39	5	17	0	61	417
Total	15	923	27	0	965	42	583	8	0	633	22	19	11	0	52	103	19	71	0	193	1843
*** BREAK ***																					
04:00 PM	12	203	9	0	224	27	247	12	0	286	9	8	8	0	25	35	8	21	0	64	599
04:15 PM	4	234	13	0	251	23	261	12	0	296	3	6	6	0	15	53	8	26	0	87	649
04:30 PM	9	258	15	0	282	33	324	12	0	369	4	2	9	0	15	32	8	12	0	52	718
04:45 PM	6	246	17	0	269	35	291	13	0	339	8	10	6	0	24	29	3	18	0	50	682
Total	31	941	54	0	1026	118	1123	49	0	1290	24	26	29	0	79	149	27	77	0	253	2648
05:00 PM	12	242	20	0	274	26	297	13	0	336	5	4	4	0	13	25	13	22	0	60	683
05:15 PM	15	235	13	0	263	29	291	13	0	333	10	8	4	0	22	40	14	22	0	76	694
05:30 PM	3	227	14	0	244	25	286	17	0	328	10	13	10	0	33	44	14	18	0	76	681
05:45 PM	8	198	22	0	228	21	280	9	0	310	9	5	4	0	18	35	17	17	0	69	625
Total	38	902	69	0	1009	101	1154	52	0	1307	34	30	22	0	86	144	58	79	0	281	2683
Grand Total	99	3861	194	0	4154	292	3602	116	0	4010	117	85	76	0	278	520	115	324	0	959	9401
Apprch %	2.4	92.9	4.7	0		7.3	89.8	2.9	0		42.1	30.6	27.3	0		54.2	12	33.8	0		
Total %	1.1	41.1	2.1	0	44.2	3.1	38.3	1.2	0	42.7	1.2	0.9	0.8	0	3	5.5	1.2	3.4	0	10.2	

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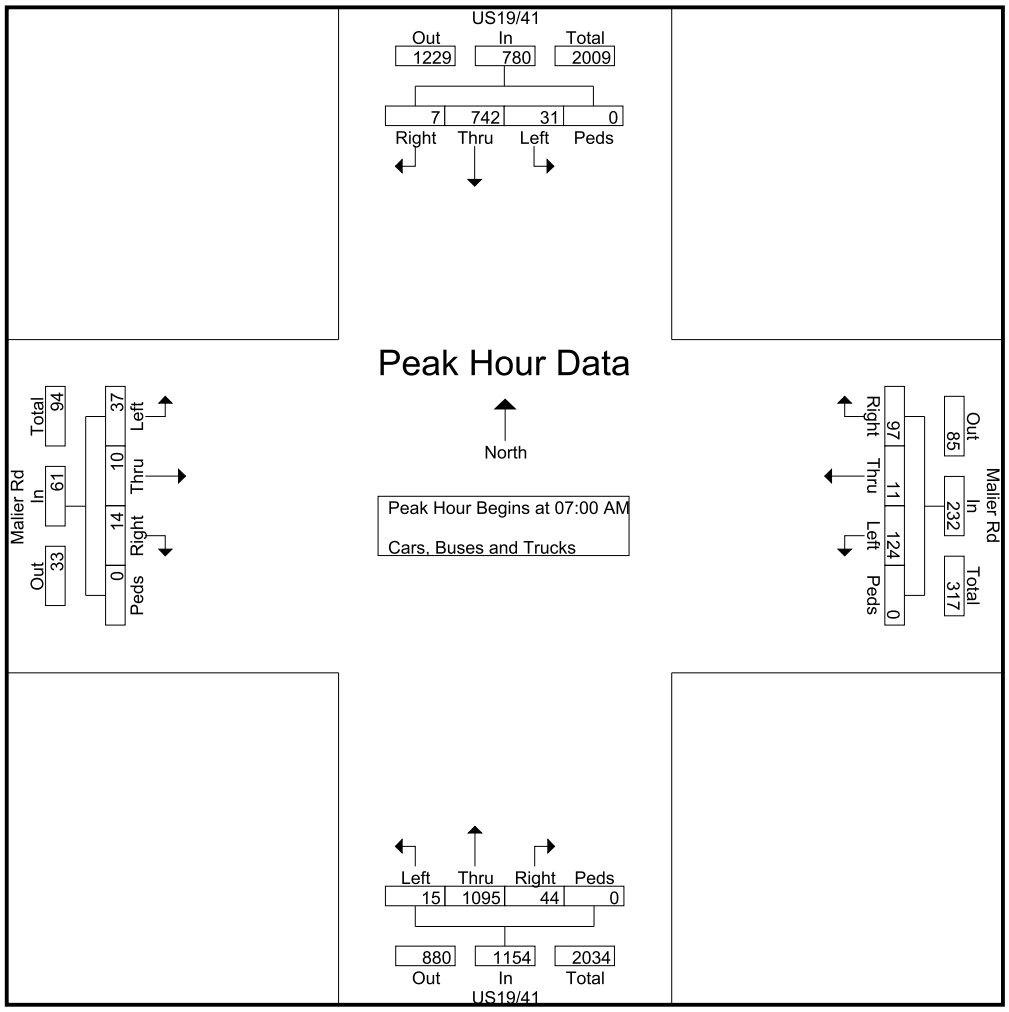
TMC Data
US19/41 @ Malier Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500004
Site Code : 45500004
Start Date : 10/28/2021
Page No : 2

	US19/41 Northbound					US19/41 Southbound					Malier Rd Eastbound					Malier Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	2	267	9	0	278	5	138	**2**	0	145	**10**	2	2	0	14	24	1	21	0	46	483
07:15 AM	2	**282**	**15**	0	**299**	6	174	2	0	182	9	**4**	3	0	16	33	**6**	22	0	61	558
07:30 AM	4	267	11	0	282	**10**	193	1	0	204	10	1	**7**	0	**18**	**39**	4	24	0	**67**	571
07:45 AM	**7**	279	9	0	295	10	**237**	2	0	**249**	8	3	2	0	13	28	0	**30**	0	58	**615**
Total Volume	15	1095	44	0	1154	31	742	7	0	780	37	10	14	0	61	124	11	97	0	232	2227
% App. Total	1.3	94.9	3.8	0		4	95.1	0.9	0		60.7	16.4	23	0		53.4	4.7	41.8	0		
PHF	.536	.971	.733	.000	.965	.775	.783	.875	.000	.783	.925	.625	.500	.000	.847	.795	.458	.808	.000	.866	.905



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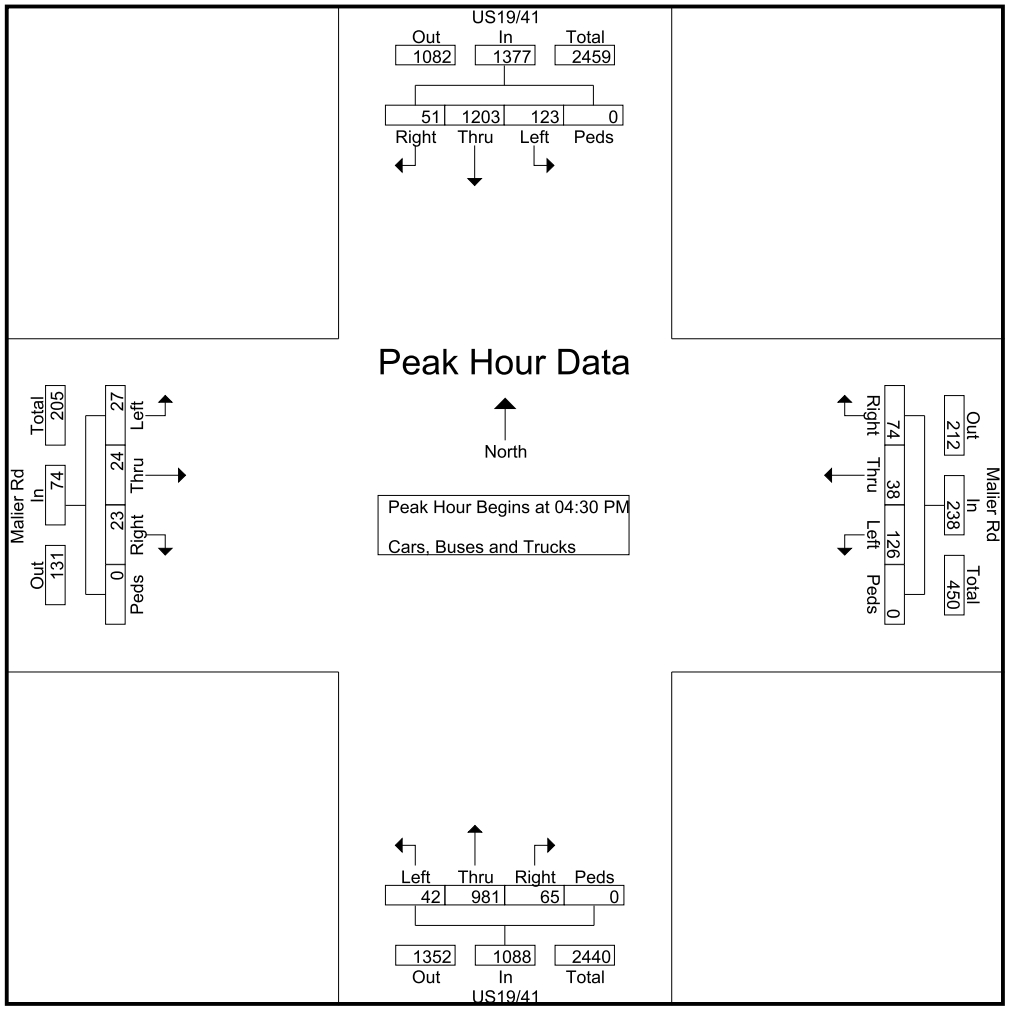
TMC Data
US19/41 @ Malier Rd
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500004
Site Code : 45500004
Start Date : 10/28/2021
Page No : 3

	US19/41 Northbound					US19/41 Southbound					Malier Rd Eastbound					Malier Rd Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	9	**258**	15	0	**282**	33	**324**	12	0	**369**	4	2	**9**	0	15	32	8	12	0	52	**718**
04:45 PM	6	246	17	0	269	**35**	291	**13**	0	339	8	**10**	6	0	**24**	29	3	18	0	50	682
05:00 PM	12	242	**20**	0	274	26	297	13	0	336	5	4	4	0	13	25	13	**22**	0	60	683
05:15 PM	**15**	235	13	0	263	29	291	13	0	333	**10**	8	4	0	22	**40**	**14**	22	0	**76**	694
Total Volume	42	981	65	0	1088	123	1203	51	0	1377	27	24	23	0	74	126	38	74	0	238	2777
% App. Total	3.9	90.2	6	0		8.9	87.4	3.7	0		36.5	32.4	31.1	0		52.9	16	31.1	0		
PHF	.700	.951	.813	.000	.965	.879	.928	.981	.000	.933	.675	.600	.639	.000	.771	.788	.679	.841	.000	.783	.967



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TMC Data
GA 20 @ E Main St / Old Hwy 3
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500005
Site Code : 45500005
Start Date : 10/28/2021
Page No : 1

Groups Printed- Cars, Buses and Trucks

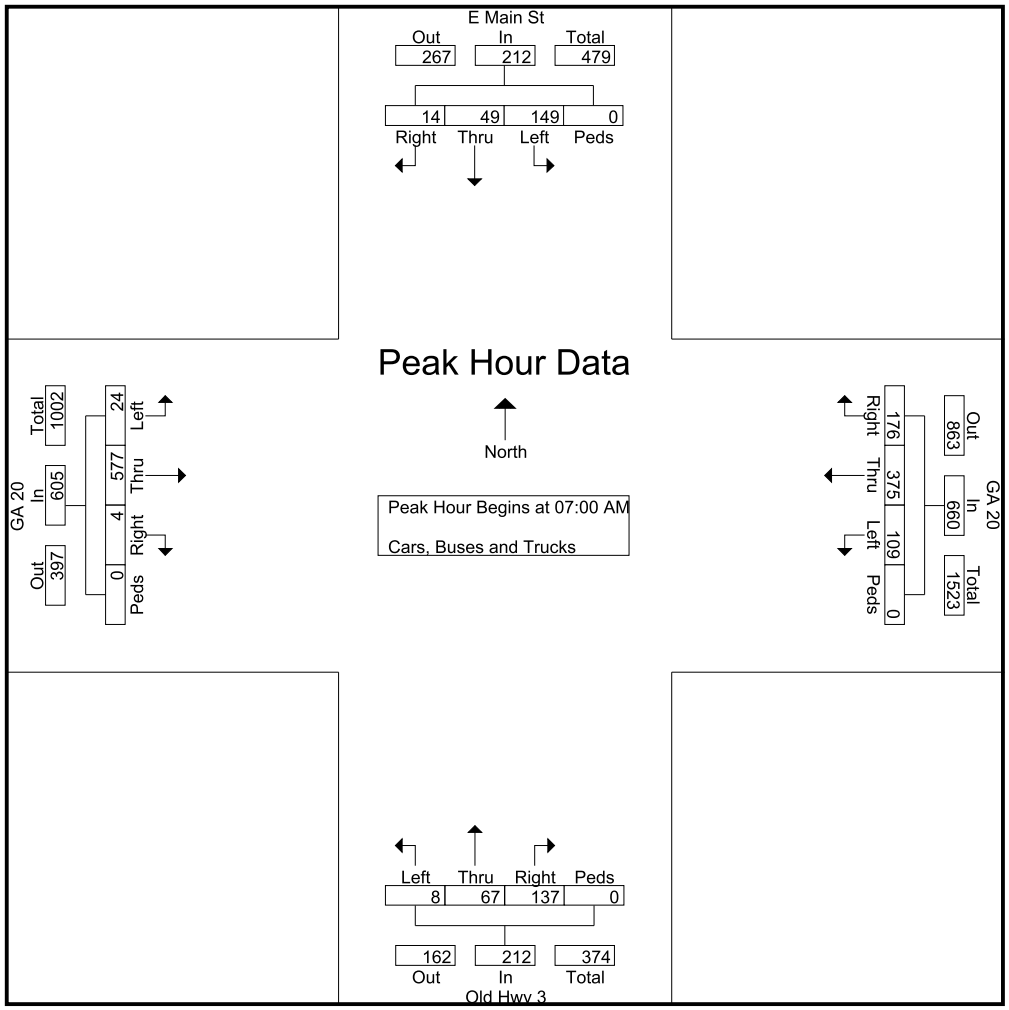
	Old Hwy 3 Northbound					E Main St Southbound					GA 20 Eastbound					GA 20 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	1	19	25	0	45	20	12	4	0	36	4	131	0	0	135	10	87	30	0	127	343
07:15 AM	5	10	44	0	59	35	9	3	0	47	3	160	2	0	165	31	99	42	0	172	443
07:30 AM	1	19	46	0	66	38	20	7	0	65	6	143	0	0	149	38	102	45	0	185	465
07:45 AM	1	19	22	0	42	56	8	0	0	64	11	143	2	0	156	30	87	59	0	176	438
Total	8	67	137	0	212	149	49	14	0	212	24	577	4	0	605	109	375	176	0	660	1689
08:00 AM	2	14	21	0	37	53	7	4	0	64	7	103	0	0	110	19	60	46	0	125	336
08:15 AM	1	11	31	0	43	37	5	6	0	48	7	105	1	0	113	31	86	46	0	163	367
08:30 AM	1	9	20	0	30	31	12	10	0	53	6	106	0	0	112	29	83	35	0	147	342
08:45 AM	1	11	18	0	30	32	18	4	0	54	7	77	2	0	86	27	75	40	0	142	312
Total	5	45	90	0	140	153	42	24	0	219	27	391	3	0	421	106	304	167	0	577	1357
*** BREAK ***																					
04:00 PM	1	18	20	0	39	47	30	3	0	80	6	81	1	0	88	60	97	66	0	223	430
04:15 PM	1	15	19	0	35	30	36	3	0	69	5	76	3	0	84	67	113	72	0	252	440
04:30 PM	0	20	19	0	39	52	45	4	0	101	8	103	4	0	115	47	114	48	0	209	464
04:45 PM	1	21	15	0	37	30	33	4	0	67	8	103	3	0	114	52	132	50	0	234	452
Total	3	74	73	0	150	159	144	14	0	317	27	363	11	0	401	226	456	236	0	918	1786
05:00 PM	2	16	25	0	43	43	38	4	0	85	8	96	5	0	109	62	98	34	0	194	431
05:15 PM	0	21	24	0	45	49	40	6	0	95	12	112	1	0	125	65	160	56	0	281	546
05:30 PM	0	18	35	0	53	38	28	3	0	69	15	101	4	0	120	43	101	42	0	186	428
05:45 PM	1	17	22	0	40	41	34	1	0	76	5	89	7	0	101	51	103	52	0	206	423
Total	3	72	106	0	181	171	140	14	0	325	40	398	17	0	455	221	462	184	0	867	1828
Grand Total	19	258	406	0	683	632	375	66	0	1073	118	1729	35	0	1882	662	1597	763	0	3022	6660
Apprch %	2.8	37.8	59.4	0		58.9	34.9	6.2	0		6.3	91.9	1.9	0		21.9	52.8	25.2	0		
Total %	0.3	3.9	6.1	0	10.3	9.5	5.6	1	0	16.1	1.8	26	0.5	0	28.3	9.9	24	11.5	0	45.4	

Reliable Traffic Data Services
Tel: (770) 578-8158 I Fax: (770) 578-8159
Info@reliabletraffic.org I www.reliabletraffic.org

TMC Data
GA 20 @ E Main St / Old Hwy 3
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500005
Site Code : 45500005
Start Date : 10/28/2021
Page No : 2

	Old Hwy 3 Northbound					E Main St Southbound					GA 20 Eastbound					GA 20 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	**19**	25	0	45	20	12	4	0	36	4	131	0	0	135	10	87	30	0	127	343
07:15 AM	**5**	10	44	0	59	35	9	3	0	47	3	**160**	**2**	0	**165**	31	99	42	0	172	443
07:30 AM	1	19	**46**	0	**66**	38	**20**	**7**	0	**65**	6	143	0	0	149	**38**	**102**	45	0	**185**	**465**
07:45 AM	1	19	22	0	42	**56**	8	0	0	64	**11**	143	2	0	156	30	87	**59**	0	176	438
Total Volume	8	67	137	0	212	149	49	14	0	212	24	577	4	0	605	109	375	176	0	660	1689
% App. Total		31.6	64.6			70.3	23.1					95.4				16.5	56.8	26.7			
PHF	.400	.882	.745	.000	.803	.665	.613	.500	.000	.815	.545	.902	.500	.000	.917	.717	.919	.746	.000	.892	.908



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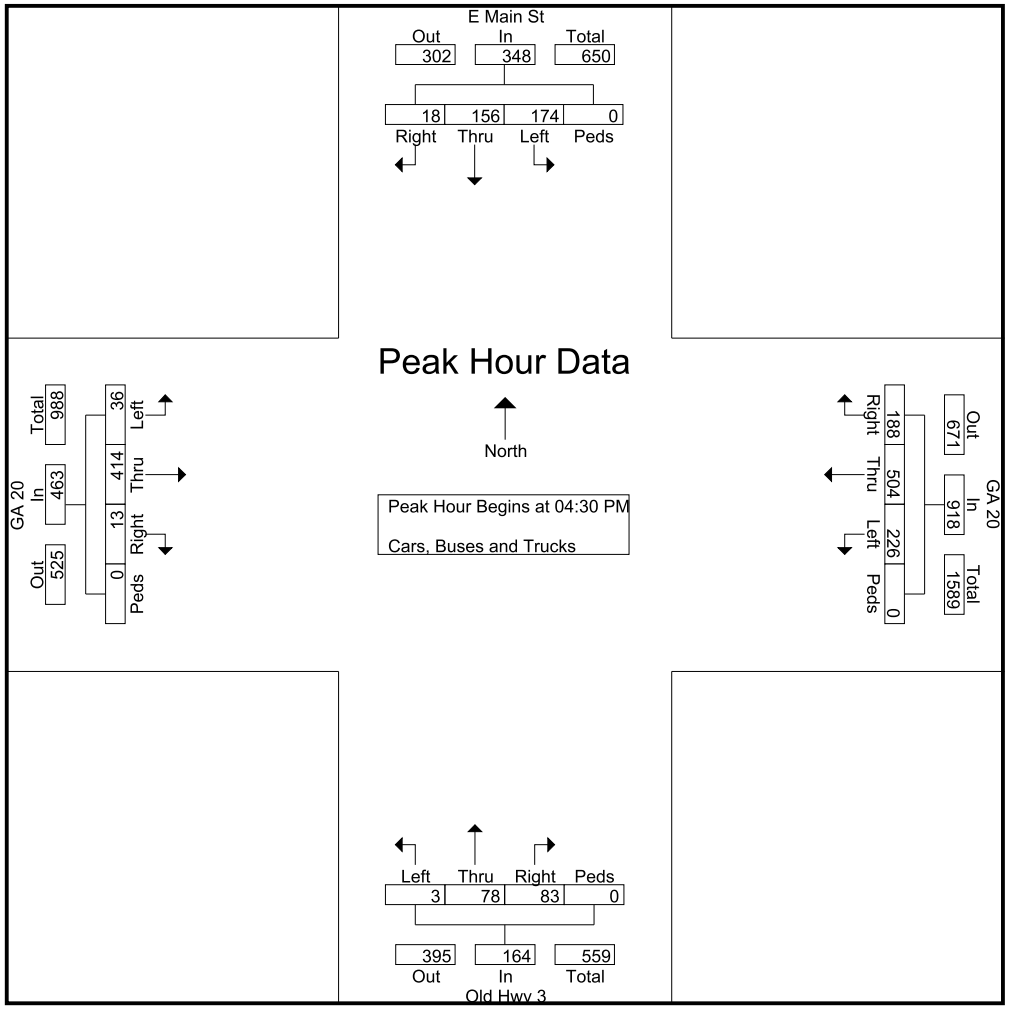
TMC Data
GA 20 @ E Main St / Old Hwy 3
Hampton, GA
7-9 AM | 4-6 PM

File Name : 45500005
Site Code : 45500005
Start Date : 10/28/2021
Page No : 3

	Old Hwy 3 Northbound					E Main St Southbound					GA 20 Eastbound					GA 20 Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	20	19	0	39	**52**	**45**	4	0	**101**	8	103	4	0	115	47	114	48	0	209	464
04:45 PM	1	**21**	15	0	37	30	33	4	0	67	8	103	3	0	114	52	132	50	0	234	452
05:00 PM	**2**	16	**25**	0	43	43	38	4	0	85	8	96	**5**	0	109	62	98	34	0	194	431
05:15 PM	0	21	24	0	**45**	49	40	**6**	0	95	**12**	**112**	1	0	**125**	**65**	**160**	**56**	0	**281**	**546**
Total Volume	3	78	83	0	164	174	156	18	0	348	36	414	13	0	463	226	504	188	0	918	1893
% App. Total		47.6	50.6				44.8					89.4				24.6	54.9	20.5			
PHF	.375	.929	.830	.000	.911	.837	.867	.750	.000	.861	.750	.924	.650	.000	.926	.869	.788	.839	.000	.817	.867



Reliable Traffic Data Services

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ADT Data

Site Code: 45500101
US19/41 north of Minter Dr
Hampton, GA

Start	28-Oct-21	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Thu	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		22	157			38	178				
12:15		18	182			24	177				
12:30		17	182			34	172				
12:45		21	192	78	713	26	202	122	729	200	1442
01:00		16	175			45	196				
01:15		15	177			19	198				
01:30		16	174			21	207				
01:45		15	183	62	709	14	194	99	795	161	1504
02:00		9	189			12	231				
02:15		19	182			9	244				
02:30		16	186			17	255				
02:45		16	205	60	762	21	240	59	970	119	1732
03:00		20	184			13	239				
03:15		35	199			21	254				
03:30		33	220			21	286				
03:45		31	226	119	829	16	275	71	1054	190	1883
04:00		50	239			18	298				
04:15		65	237			21	320				
04:30		92	234			21	353				
04:45		110	230	317	940	23	307	83	1278	400	2218
05:00		167	228			29	267				
05:15		169	243			45	353				
05:30		193	232			50	359				
05:45		229	212	758	915	55	300	179	1279	937	2194
06:00		221	178			64	243				
06:15		272	177			100	224				
06:30		283	177			108	217				
06:45		258	167	1034	699	117	213	389	897	1423	1596
07:00		270	170			146	189				
07:15		278	153			190	201				
07:30		257	143			197	145				
07:45		286	131	1091	597	194	119	727	654	1818	1251
08:00		242	114			170	124				
08:15		237	98			158	131				
08:30		247	106			163	115				
08:45		172	85	898	403	157	111	648	481	1546	884
09:00		157	62			141	91				
09:15		175	64			127	99				
09:30		185	68			148	78				
09:45		176	54	693	248	134	83	550	351	1243	599
10:00		160	57			131	72				
10:15		142	59			151	71				
10:30		164	49			165	63				
10:45		161	42	627	207	152	58	599	264	1226	471
11:00		154	39			160	55				
11:15		181	32			160	51				
11:30		175	20			147	54				
11:45		174	17	684	108	151	36	618	196	1302	304
Total		6421	7130			4144	8948			10565	16078
Percent		47.4%	52.6%			31.7%	68.3%			39.7%	60.3%
Grand Total		6421	7130			4144	8948			10565	16078
Percent		47.4%	52.6%			31.7%	68.3%			39.7%	60.3%
ADT		ADT 26,643		AADT 26,643							

Appendix B

Intersection Analysis Methodology

Intersection Analysis Methodology

The methodology used for evaluating traffic operations at intersections is presented in the Transportation Research Board's *Highway Capacity Manual*, 2016 edition (HCM 6). Synchro 10 software, which emulates the HCM 6 methodology, was used for all analyses. The following is an overview of the methodology employed for the analysis of signalized intersections and roundabouts and stop-sign controlled (unsignalized) intersections. Levels of service (LOS) are assigned letters A through F. LOS A indicates operations with very low control delay while LOS F describes operations with high control delay. LOS F is considered to be unacceptable by most drivers, while LOS E is typically considered to be the limit of acceptable delay.

Signalized Intersections and Roundabouts – Level of service for a signalized intersection and a roundabout is defined in terms of control delay per vehicle. For signalized intersections and roundabouts, a composite intersection level of service is determined. The thresholds for each level of service are higher for signalized intersections and roundabouts than for unsignalized intersections. This is attributable to a variety of factors including expectation and acceptance of higher delays at signals/roundabouts, and the fact that drivers can relax when waiting at a signal as opposed to having to remain attentive as they proceed through the unsignalized intersection. The level of service criteria for signalized intersections and roundabouts are shown in Table A.

Table A – Level of Service Criteria for Signalized Intersections and Roundabouts

Control Delay (s/veh)	LOS
≤ 10	A
> 10 and ≤ 20	B
> 20 and ≤ 35	C
> 35 and ≤ 55	D
> 55 and ≤ 80	E
> 80	F

Source: Highway Capacity Manual 6

Unsignalized Intersections – Level of service for an unsignalized intersection is defined in terms of control delay per vehicle. Control delay is that portion of delay attributable to the control device and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The delays at unsignalized intersections are based on gap acceptance theory, factoring in availability of gaps, usefulness of the gaps, and the priority of right-of-way given to each traffic stream. The level of service criteria for unsignalized intersections are presented in Table B.

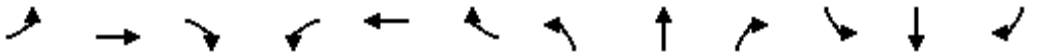
Table B – Level of Service Criteria for Unsignalized Intersections

Control Delay (s/veh)	LOS
0 – 10	A
> 10 and ≤ 15	B
> 15 and ≤ 25	C
> 25 and ≤ 35	D
> 35 and ≤ 50	E
> 50	F

Source: Highway Capacity Manual 6

Appendix C

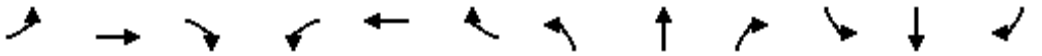
Existing Intersection Operational Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	52	1	64	2	1061	31	47	533	8
Future Volume (veh/h)	1	0	0	52	1	64	2	1061	31	47	533	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	4	0	0	55	1	68	2	1141	33	52	592	9
Peak Hour Factor	0.25	0.25	0.25	0.94	0.94	0.94	0.93	0.93	0.93	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	204	192	0	116	12	86	651	3425	99	446	2512	1186
Arrive On Green	0.10	0.00	0.00	0.10	0.10	0.10	0.00	0.71	0.71	0.04	0.75	0.75
Sat Flow, veh/h	1332	1870	0	580	112	841	1781	4818	139	1781	3357	1585
Grp Volume(v), veh/h	4	0	0	124	0	0	2	761	413	52	592	9
Grp Sat Flow(s),veh/h/ln	1332	1870	0	1534	0	0	1781	1608	1742	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	6.0	0.0	0.0	0.0	8.3	8.3	0.7	5.0	0.1
Cycle Q Clear(g_c), s	0.3	0.0	0.0	7.2	0.0	0.0	0.0	8.3	8.3	0.7	5.0	0.1
Prop In Lane	1.00		0.00	0.44		0.55	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	204	192	0	214	0	0	651	2286	1238	446	2512	1186
V/C Ratio(X)	0.02	0.00	0.00	0.58	0.00	0.00	0.00	0.33	0.33	0.12	0.24	0.01
Avail Cap(c_a), veh/h	494	599	0	542	0	0	811	2286	1238	597	2512	1186
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	0.0	0.0	40.3	0.0	0.0	3.8	5.0	5.0	3.2	3.5	2.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.4	0.7	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	2.8	0.0	0.0	0.0	1.8	2.1	0.1	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	0.0	0.0	42.8	0.0	0.0	3.8	5.4	5.8	3.3	3.8	2.9
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		4			124			1176			653	
Approach Delay, s/veh		37.3			42.8			5.5			3.7	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	70.0		13.9	4.7	73.4		13.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.5	65.5		29.5	8.5	68.5		29.5				
Max Q Clear Time (g_c+I1), s	2.7	10.3		2.3	2.0	7.0		9.2				
Green Ext Time (p_c), s	0.0	8.4		0.0	0.0	3.8		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		7.4	
HCM 6th LOS		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	27	5	28	14	146	4	953	28	73	537	5
Future Volume (veh/h)	5	27	5	28	14	146	4	953	28	73	537	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	6	35	6	30	15	155	4	1025	30	89	655	6
Peak Hour Factor	0.77	0.77	0.77	0.94	0.94	0.94	0.93	0.93	0.93	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	53	206	191	159	69	191	606	2357	1113	457	2491	1176
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.70	0.70	0.05	0.74	0.74
Sat Flow, veh/h	104	1711	1585	836	571	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	41	0	6	45	0	155	4	1025	30	89	655	6
Grp Sat Flow(s),veh/h/ln	1814	0	1585	1407	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.3	1.5	0.0	9.7	0.1	13.3	0.6	1.3	6.4	0.1
Cycle Q Clear(g_c), s	2.0	0.0	0.3	3.6	0.0	9.7	0.1	13.3	0.6	1.3	6.4	0.1
Prop In Lane	0.15		1.00	0.67		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	0	191	228	0	191	606	2357	1113	457	2491	1176
V/C Ratio(X)	0.16	0.00	0.03	0.20	0.00	0.81	0.01	0.43	0.03	0.19	0.26	0.01
Avail Cap(c_a), veh/h	467	0	381	409	0	381	728	2357	1113	560	2491	1176
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	1.00
Uniform Delay (d), s/veh	40.3	0.0	39.6	41.0	0.0	43.7	4.4	6.5	4.6	4.3	4.2	3.4
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.4	0.0	8.1	0.0	0.6	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.1	1.0	0.0	4.2	0.0	3.5	0.1	0.3	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.6	0.0	39.6	41.4	0.0	51.8	4.4	7.1	4.7	4.5	4.5	3.4
LnGrp LOS	D	A	D	D	A	D	A	A	A	A	A	A
Approach Vol, veh/h		47			200			1059			750	
Approach Delay, s/veh		40.5			49.5			7.0			4.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	76.0		16.7	5.0	80.1		16.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	71.5		24.5	7.5	74.5		24.5				
Max Q Clear Time (g_c+I1), s	3.3	15.3		4.0	2.1	8.4		11.7				
Green Ext Time (p_c), s	0.1	7.9		0.1	0.0	4.3		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		11.0	
HCM 6th LOS		B	

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	6	45	155	4	1025	30	89	655	6
v/c Ratio	0.28	0.03	0.38	0.57	0.01	0.42	0.03	0.20	0.24	0.00
Control Delay	48.0	0.4	52.7	15.8	2.0	6.3	0.5	2.8	3.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	0.4	52.7	15.8	2.0	6.3	0.5	2.8	3.1	0.0
Queue Length 50th (ft)	25	0	28	0	0	120	0	7	33	0
Queue Length 95th (ft)	50	0	64	60	2	183	4	17	86	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	427	423	347	499	675	2452	1186	508	2680	1291
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.13	0.31	0.01	0.42	0.03	0.18	0.24	0.00

Intersection Summary

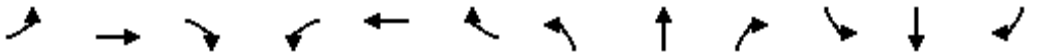
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	189	22	1074	551	37
Future Vol, veh/h	13	189	22	1074	551	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	170	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	96	96	93	93
Heavy Vehicles, %	10	10	10	9	9	10
Mvmt Flow	15	220	23	1119	592	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1198	296	632	0	-	0
Stage 1	592	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Critical Hdwy	7	7.1	4.3	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.6	3.4	2.3	-	-	-
Pot Cap-1 Maneuver	167	677	894	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	677	894	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	481	-	-	-	-	-
Stage 2	486	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	0.2	0
HCM LOS	B		

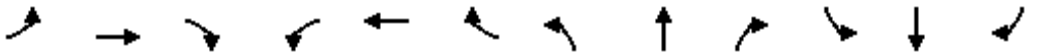
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	894	-	163	677	-	-
HCM Lane V/C Ratio	0.026	-	0.093	0.325	-	-
HCM Control Delay (s)	9.1	-	29.3	12.9	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	1.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	10	14	124	11	97	15	1095	44	31	742	7
Future Volume (veh/h)	37	10	14	124	11	97	15	1095	44	31	742	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	44	12	16	143	13	111	15	1129	45	40	951	9
Peak Hour Factor	0.85	0.85	0.85	0.87	0.87	0.87	0.97	0.97	0.97	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	220	62	61	226	23	131	390	2014	951	340	2076	980
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.60	0.60	0.04	0.62	0.62
Sat Flow, veh/h	743	306	300	788	115	642	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	72	0	0	267	0	0	15	1129	45	40	951	9
Grp Sat Flow(s),veh/h/ln	1349	0	0	1545	0	0	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	10.4	0.0	0.0	0.3	17.1	1.0	0.7	12.7	0.2
Cycle Q Clear(g_c), s	3.4	0.0	0.0	13.8	0.0	0.0	0.3	17.1	1.0	0.7	12.7	0.2
Prop In Lane	0.61		0.22	0.54		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	0	380	0	0	390	2014	951	340	2076	980
V/C Ratio(X)	0.21	0.00	0.00	0.70	0.00	0.00	0.04	0.56	0.05	0.12	0.46	0.01
Avail Cap(c_a), veh/h	567	0	0	615	0	0	475	2014	951	392	2076	980
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	0.0	32.0	0.0	0.0	7.0	10.1	6.9	7.6	8.5	6.2
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.4	0.0	0.0	0.0	1.1	0.1	0.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	5.2	0.0	0.0	0.1	4.8	0.3	0.2	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	0.0	0.0	34.3	0.0	0.0	7.0	11.3	7.0	7.7	9.3	6.2
LnGrp LOS	C	A	A	C	A	A	A	B	A	A	A	A
Approach Vol, veh/h		72			267			1189			1000	
Approach Delay, s/veh		28.2			34.3			11.1			9.2	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	55.0		21.6	6.0	56.6		21.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	50.5		30.5	5.5	50.5		30.5				
Max Q Clear Time (g_c+I1), s	2.7	19.1		5.4	2.3	14.7		15.8				
Green Ext Time (p_c), s	0.0	8.5		0.3	0.0	6.8		1.3				

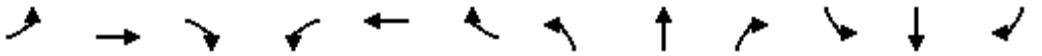
Intersection Summary			
HCM 6th Ctrl Delay		13.3	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	577	4	109	375	176	8	67	137	149	49	14
Future Volume (veh/h)	24	577	4	109	375	176	8	67	137	149	49	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1841	1752	1870	1841	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	26	627	4	122	421	198	10	84	171	182	60	17
Peak Hour Factor	0.92	0.92	0.92	0.89	0.89	0.89	0.80	0.80	0.80	0.82	0.82	0.82
Percent Heavy Veh, %	2	10	4	4	10	2	4	2	4	2	2	2
Cap, veh/h	286	803	376	267	950	452	600	206	419	538	628	178
Arrive On Green	0.03	0.24	0.24	0.07	0.29	0.29	0.01	0.37	0.37	0.09	0.45	0.45
Sat Flow, veh/h	1781	3328	1560	1753	3328	1585	1753	550	1119	1781	1402	397
Grp Volume(v), veh/h	26	627	4	122	421	198	10	0	255	182	0	77
Grp Sat Flow(s),veh/h/ln	1781	1664	1560	1753	1664	1585	1753	0	1669	1781	0	1799
Q Serve(g_s), s	0.9	14.0	0.2	4.0	8.2	8.1	0.3	0.0	8.9	4.6	0.0	2.0
Cycle Q Clear(g_c), s	0.9	14.0	0.2	4.0	8.2	8.1	0.3	0.0	8.9	4.6	0.0	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.22
Lane Grp Cap(c), veh/h	286	803	376	267	950	452	600	0	625	538	0	805
V/C Ratio(X)	0.09	0.78	0.01	0.46	0.44	0.44	0.02	0.00	0.41	0.34	0.00	0.10
Avail Cap(c_a), veh/h	361	1280	600	374	1490	710	700	0	625	689	0	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	28.1	22.9	21.1	23.2	23.1	15.0	0.0	18.3	12.6	0.0	12.6
Incr Delay (d2), s/veh	0.1	1.7	0.0	1.2	0.3	0.7	0.0	0.0	2.0	0.4	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(50%),veh/ln	0.3	5.1	0.1	1.5	2.9	2.7	0.1	0.0	3.6	1.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	29.8	22.9	22.3	23.5	23.8	15.0	0.0	20.3	13.0	0.0	12.9
LnGrp LOS	C	C	C	C	C	C	B	A	C	B	A	B
Approach Vol, veh/h		657			741			265			259	
Approach Delay, s/veh		29.5			23.4			20.1			12.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	34.2	10.2	23.6	5.5	40.0	6.7	27.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.5	27.5	10.5	30.5	5.5	35.5	5.5	35.5
Max Q Clear Time (g_c+I1), s	6.6	10.9	6.0	16.0	2.3	4.0	2.9	10.2
Green Ext Time (p_c), s	0.3	1.3	0.1	3.2	0.0	0.4	0.0	3.0

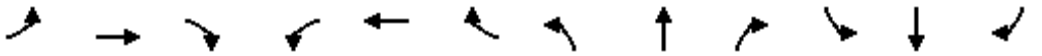
Intersection Summary	
HCM 6th Ctrl Delay	23.6
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2	3	71	0	103	1	1012	51	98	1098	1
Future Volume (veh/h)	3	2	3	71	0	103	1	1012	51	98	1098	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	4	3	4	84	0	121	1	1043	53	100	1120	1
Peak Hour Factor	0.67	0.67	0.67	0.85	0.85	0.85	0.97	0.97	0.97	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	227	116	155	139	12	144	354	3092	157	444	2361	1115
Arrive On Green	0.16	0.16	0.16	0.16	0.00	0.16	0.00	0.66	0.66	0.05	0.70	0.70
Sat Flow, veh/h	1270	727	969	552	73	901	1781	4700	239	1781	3357	1585
Grp Volume(v), veh/h	4	0	7	205	0	0	1	713	383	100	1120	1
Grp Sat Flow(s),veh/h/ln	1270	0	1696	1527	0	0	1781	1608	1724	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.3	11.2	0.0	0.0	0.0	9.7	9.7	1.6	14.8	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.3	12.9	0.0	0.0	0.0	9.7	9.7	1.6	14.8	0.0
Prop In Lane	1.00		0.57	0.41		0.59	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	271	295	0	0	354	2115	1134	444	2361	1115
V/C Ratio(X)	0.02	0.00	0.03	0.70	0.00	0.00	0.00	0.34	0.34	0.23	0.47	0.00
Avail Cap(c_a), veh/h	426	0	536	531	0	0	467	2115	1134	530	2361	1115
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	35.3	40.5	0.0	0.0	6.3	7.5	7.5	4.9	6.6	4.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.4	0.8	0.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	5.0	0.0	0.0	0.0	2.6	2.9	0.4	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	0.0	35.3	43.5	0.0	0.0	6.3	7.9	8.3	5.1	7.3	4.4
LnGrp LOS	D	A	D	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		11			205			1097			1221	
Approach Delay, s/veh		35.3			43.5			8.1			7.1	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	70.0		20.4	4.6	74.5		20.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	65.5		31.5	6.5	68.5		31.5				
Max Q Clear Time (g_c+I1), s	3.6	11.7		2.4	2.0	16.8		14.9				
Green Ext Time (p_c), s	0.1	7.6		0.0	0.0	8.9		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		10.6	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	17	5	63	23	181	3	891	48	120	1056	5
Future Volume (veh/h)	6	17	5	63	23	181	3	891	48	120	1056	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	9	24	7	69	25	199	3	938	51	122	1078	5
Peak Hour Factor	0.70	0.70	0.70	0.91	0.91	0.91	0.95	0.95	0.95	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	40	86	369	55	12	369	319	2034	961	398	2165	1022
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.00	0.61	0.61	0.04	0.65	0.65
Sat Flow, veh/h	0	371	1585	0	51	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	33	0	7	94	0	199	3	938	51	122	1078	5
Grp Sat Flow(s),veh/h/ln	371	0	1585	51	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.4	0.0	0.0	12.6	0.1	17.4	1.5	2.8	19.1	0.1
Cycle Q Clear(g_c), s	26.5	0.0	0.4	26.5	0.0	12.6	0.1	17.4	1.5	2.8	19.1	0.1
Prop In Lane	0.27		1.00	0.73		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	0	369	67	0	369	319	2034	961	398	2165	1022
V/C Ratio(X)	0.26	0.00	0.02	1.41	0.00	0.54	0.01	0.46	0.05	0.31	0.50	0.00
Avail Cap(c_a), veh/h	126	0	369	67	0	369	413	2034	961	532	2165	1022
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	1.00
Uniform Delay (d), s/veh	36.1	0.0	33.7	52.3	0.0	38.4	9.6	12.3	9.1	8.9	10.6	7.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	252.2	0.0	1.6	0.0	0.8	0.1	0.4	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(50%),veh/ln	0.7	0.0	0.2	6.6	0.0	5.0	0.0	5.7	0.5	0.9	6.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	0.0	33.7	304.6	0.0	40.0	9.6	13.0	9.2	9.3	11.4	7.2
LnGrp LOS	D	A	C	F	A	D	A	B	A	A	B	A
Approach Vol, veh/h		40			293			992			1205	
Approach Delay, s/veh		36.6			124.8			12.8			11.2	
Approach LOS		D			F			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	73.6		31.0	5.0	78.0		31.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.5	66.5		26.5	6.5	73.5		26.5				
Max Q Clear Time (g_c+I1), s	4.8	19.4		28.5	2.1	21.1		28.5				
Green Ext Time (p_c), s	0.2	7.0		0.0	0.0	8.4		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			25.4									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	33	7	94	199	3	938	51	122	1078	5
v/c Ratio	0.17	0.03	0.56	0.55	0.01	0.42	0.05	0.26	0.42	0.00
Control Delay	41.6	0.2	55.2	12.1	3.0	8.5	0.3	4.1	5.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.6	0.2	55.2	12.1	3.0	8.5	0.3	4.1	5.3	0.0
Queue Length 50th (ft)	19	0	57	0	0	125	0	13	86	0
Queue Length 95th (ft)	38	0	114	64	2	203	3	32	224	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	453	491	377	567	442	2235	1099	551	2560	1236
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.01	0.25	0.35	0.01	0.42	0.05	0.22	0.42	0.00

Intersection Summary

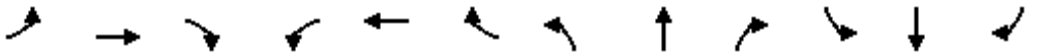
Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	246	30	943	1119	56
Future Vol, veh/h	31	246	30	943	1119	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	170	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	96	96	85	85
Heavy Vehicles, %	10	10	10	9	9	10
Mvmt Flow	38	300	31	982	1316	66

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1869	658	1382	0	-	0
Stage 1	1316	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Critical Hdwy	7	7.1	4.3	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.6	3.4	2.3	-	-	-
Pot Cap-1 Maneuver	58	388	452	-	-	-
Stage 1	201	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	54	388	452	-	-	-
Mov Cap-2 Maneuver	54	-	-	-	-	-
Stage 1	187	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	53.5	0.4	0
HCM LOS	F		

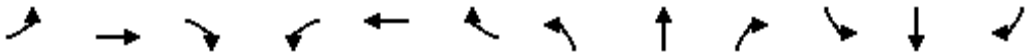
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	452	-	54	388	-	-
HCM Lane V/C Ratio	0.069	-	0.7	0.773	-	-
HCM Control Delay (s)	13.6	-	164.1	39.6	-	-
HCM Lane LOS	B	-	F	E	-	-
HCM 95th %tile Q(veh)	0.2	-	2.9	6.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	24	23	126	38	74	42	981	65	123	1203	51
Future Volume (veh/h)	27	24	23	126	38	74	42	981	65	123	1203	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	35	31	30	162	49	95	43	1011	67	132	1294	55
Peak Hour Factor	0.77	0.77	0.77	0.78	0.78	0.78	0.97	0.97	0.97	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	157	137	108	243	63	109	277	1892	893	376	1952	922
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.56	0.56	0.05	0.58	0.58
Sat Flow, veh/h	444	604	476	790	276	480	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	96	0	0	306	0	0	43	1011	67	132	1294	55
Grp Sat Flow(s),veh/h/ln	1523	0	0	1546	0	0	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	12.5	0.0	0.0	0.9	16.5	1.7	2.7	23.0	1.3
Cycle Q Clear(g_c), s	4.0	0.0	0.0	16.5	0.0	0.0	0.9	16.5	1.7	2.7	23.0	1.3
Prop In Lane	0.36		0.31	0.53		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	0	0	414	0	0	277	1892	893	376	1952	922
V/C Ratio(X)	0.24	0.00	0.00	0.74	0.00	0.00	0.16	0.53	0.07	0.35	0.66	0.06
Avail Cap(c_a), veh/h	585	0	0	593	0	0	315	1892	893	468	1952	922
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	0.0	0.0	32.2	0.0	0.0	10.1	11.9	8.7	9.0	12.5	7.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.9	0.0	0.0	0.3	1.1	0.2	0.6	1.8	0.1
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(50%),veh/ln	1.6	0.0	0.0	6.3	0.0	0.0	0.3	5.0	0.5	0.8	7.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	0.0	35.1	0.0	0.0	10.3	13.0	8.9	9.5	14.3	8.1
LnGrp LOS	C	A	A	D	A	A	B	B	A	A	B	A
Approach Vol, veh/h		96			306			1121			1481	
Approach Delay, s/veh		27.9			35.1			12.7			13.6	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	53.8		24.4	7.7	55.4		24.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.3	46.7		30.5	5.1	50.9		30.5				
Max Q Clear Time (g_c+I1), s	4.7	18.5		6.0	2.9	25.0		18.5				
Green Ext Time (p_c), s	0.1	7.2		0.5	0.0	9.7		1.4				

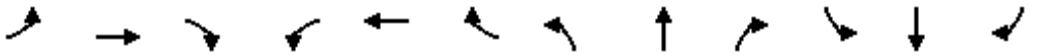
Intersection Summary			
HCM 6th Ctrl Delay		15.9	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	414	13	226	504	188	3	78	83	174	156	18
Future Volume (veh/h)	36	414	13	226	504	188	3	78	83	174	156	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1841	1752	1870	1841	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	39	445	14	276	615	229	3	86	91	202	181	21
Peak Hour Factor	0.93	0.93	0.93	0.82	0.82	0.82	0.91	0.91	0.91	0.86	0.86	0.86
Percent Heavy Veh, %	2	10	4	4	10	2	4	2	4	2	2	2
Cap, veh/h	252	599	281	414	985	469	483	272	287	574	694	81
Arrive On Green	0.04	0.18	0.18	0.15	0.30	0.30	0.00	0.33	0.33	0.10	0.42	0.42
Sat Flow, veh/h	1781	3328	1560	1753	3328	1585	1753	832	880	1781	1645	191
Grp Volume(v), veh/h	39	445	14	276	615	229	3	0	177	202	0	202
Grp Sat Flow(s),veh/h/ln	1781	1664	1560	1753	1664	1585	1753	0	1712	1781	0	1836
Q Serve(g_s), s	1.3	9.5	0.6	8.9	11.9	8.9	0.1	0.0	5.8	5.2	0.0	5.3
Cycle Q Clear(g_c), s	1.3	9.5	0.6	8.9	11.9	8.9	0.1	0.0	5.8	5.2	0.0	5.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.10
Lane Grp Cap(c), veh/h	252	599	281	414	985	469	483	0	559	574	0	774
V/C Ratio(X)	0.16	0.74	0.05	0.67	0.62	0.49	0.01	0.00	0.32	0.35	0.00	0.26
Avail Cap(c_a), veh/h	317	1047	491	650	1760	838	605	0	559	743	0	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	29.0	25.3	19.4	22.7	21.6	16.8	0.0	18.9	13.1	0.0	14.0
Incr Delay (d2), s/veh	0.3	1.9	0.1	1.9	0.7	0.8	0.0	0.0	1.5	0.4	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.5	0.2	3.2	4.1	2.9	0.0	0.0	2.4	1.9	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	30.8	25.4	21.3	23.4	22.4	16.8	0.0	20.4	13.5	0.0	14.8
LnGrp LOS	C	C	C	C	C	C	B	A	C	B	A	B
Approach Vol, veh/h		498			1120			180			404	
Approach Delay, s/veh		30.1			22.6			20.3			14.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	28.9	15.9	17.9	4.8	36.0	7.3	26.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	14.5	22.5	21.5	23.5	5.5	31.5	5.5	39.5
Max Q Clear Time (g_c+I1), s	7.2	7.8	10.9	11.5	2.1	7.3	3.3	13.9
Green Ext Time (p_c), s	0.3	0.8	0.6	2.0	0.0	1.1	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C



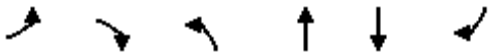
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	27	5	28	14	146	4	953	28	73	537	5
Future Volume (veh/h)	5	27	5	28	14	146	4	953	28	73	537	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	6	35	6	30	15	155	4	1025	30	89	655	6
Peak Hour Factor	0.77	0.77	0.77	0.94	0.94	0.94	0.93	0.93	0.93	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	10	60	60	145	73	191	518	2021	954	391	2164	1022
Arrive On Green	0.04	0.04	0.04	0.12	0.12	0.12	0.01	0.60	0.60	0.05	0.64	0.64
Sat Flow, veh/h	272	1585	1585	1207	603	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	41	0	6	45	0	155	4	1025	30	89	655	6
Grp Sat Flow(s),veh/h/ln	1857	0	1585	1810	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	2.0	0.0	0.3	2.1	0.0	8.9	0.1	16.4	0.7	1.6	8.1	0.1
Cycle Q Clear(g_c), s	2.0	0.0	0.3	2.1	0.0	8.9	0.1	16.4	0.7	1.6	8.1	0.1
Prop In Lane	0.15		1.00	0.67		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	0	60	218	0	191	518	2021	954	391	2164	1022
V/C Ratio(X)	0.59	0.00	0.10	0.21	0.00	0.81	0.01	0.51	0.03	0.23	0.30	0.01
Avail Cap(c_a), veh/h	366	0	312	376	0	329	613	2021	954	447	2164	1022
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	1.00
Uniform Delay (d), s/veh	44.4	0.0	43.6	37.2	0.0	40.2	7.3	10.7	7.6	7.6	7.4	5.9
Incr Delay (d2), s/veh	7.6	0.0	0.7	0.5	0.0	8.0	0.0	0.9	0.1	0.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.1	0.9	0.0	3.8	0.0	5.0	0.2	0.5	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.0	0.0	44.4	37.7	0.0	48.2	7.3	11.6	7.6	7.9	7.7	6.0
LnGrp LOS	D	A	D	D	A	D	A	B	A	A	A	A
Approach Vol, veh/h		47			200			1059			750	
Approach Delay, s/veh		51.1			45.9			11.5			7.7	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	61.0		8.0	5.0	65.0		15.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	56.5		18.5	5.5	58.5		19.5				
Max Q Clear Time (g_c+I1), s	3.6	18.4		4.0	2.1	10.1		10.9				
Green Ext Time (p_c), s	0.1	7.7		0.1	0.0	4.3		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		14.4	
HCM 6th LOS		B	

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	6	45	155	4	1025	30	89	655	6
v/c Ratio	0.28	0.03	0.29	0.56	0.01	0.48	0.03	0.23	0.27	0.01
Control Delay	47.2	0.2	46.9	15.6	5.8	11.9	0.0	6.3	6.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.2	0.2	46.9	15.6	5.8	11.9	0.0	6.3	6.7	0.0
Queue Length 50th (ft)	24	0	27	0	1	185	0	15	67	0
Queue Length 95th (ft)	50	0	63	59	4	284	0	33	136	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	366	389	376	453	577	2130	1051	403	2385	1166
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.02	0.12	0.34	0.01	0.48	0.03	0.22	0.27	0.01

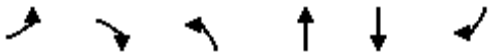
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	189	22	1074	551	37
Future Volume (veh/h)	13	189	22	1074	551	37
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1767	1767	1752
Adj Flow Rate, veh/h	15	220	23	1119	592	40
Peak Hour Factor	0.86	0.86	0.96	0.96	0.93	0.93
Percent Heavy Veh, %	10	10	10	9	9	10
Cap, veh/h	283	252	582	2501	2501	1106
Arrive On Green	0.17	0.17	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1668	1485	744	3445	3445	1485
Grp Volume(v), veh/h	15	220	23	1119	592	40
Grp Sat Flow(s),veh/h/ln	1668	1485	744	1678	1678	1485
Q Serve(g_s), s	0.8	15.2	1.0	13.4	5.7	0.7
Cycle Q Clear(g_c), s	0.8	15.2	6.8	13.4	5.7	0.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	283	252	582	2501	2501	1106
V/C Ratio(X)	0.05	0.87	0.04	0.45	0.24	0.04
Avail Cap(c_a), veh/h	515	458	582	2501	2501	1106
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	36.7	42.7	5.2	5.1	4.2	3.5
Incr Delay (d2), s/veh	0.1	9.3	0.1	0.6	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	6.1	0.1	3.1	1.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.7	51.9	5.3	5.7	4.4	3.6
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	235			1142	632	
Approach Delay, s/veh	50.9			5.7	4.3	
Approach LOS	D			A	A	

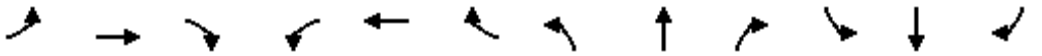
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		83.0		22.4		83.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		78.5		32.5		78.5
Max Q Clear Time (g_c+I1), s		15.4		17.2		7.7
Green Ext Time (p_c), s		9.3		0.6		3.9

Intersection Summary		
HCM 6th Ctrl Delay		10.6
HCM 6th LOS		B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	15	220	23	1119	592	40
v/c Ratio	0.11	0.69	0.04	0.41	0.22	0.03
Control Delay	41.5	17.5	2.2	3.0	2.2	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.5	17.5	2.2	3.0	2.2	0.8
Queue Length 50th (ft)	9	0	2	57	24	0
Queue Length 95th (ft)	27	58	8	130	58	6
Internal Link Dist (ft)	526			4102	2365	
Turn Bay Length (ft)			170			
Base Capacity (vph)	546	635	610	2737	2737	1220
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.35	0.04	0.41	0.22	0.03

Intersection Summary



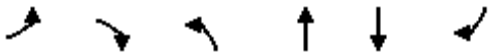
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	17	5	63	23	181	3	891	48	120	1056	5
Future Volume (veh/h)	6	17	5	63	23	181	3	891	48	120	1056	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	9	24	7	69	25	199	3	938	51	122	1078	5
Peak Hour Factor	0.70	0.70	0.70	0.91	0.91	0.91	0.95	0.95	0.95	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	17	46	55	198	72	237	314	1927	910	400	2085	984
Arrive On Green	0.03	0.03	0.03	0.15	0.15	0.15	0.00	0.57	0.57	0.05	0.62	0.62
Sat Flow, veh/h	503	1342	1585	1324	480	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	33	0	7	94	0	199	3	938	51	122	1078	5
Grp Sat Flow(s),veh/h/ln	1845	0	1585	1804	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	1.7	0.0	0.4	4.4	0.0	11.5	0.1	15.6	1.3	2.5	16.9	0.1
Cycle Q Clear(g_c), s	1.7	0.0	0.4	4.4	0.0	11.5	0.1	15.6	1.3	2.5	16.9	0.1
Prop In Lane	0.27		1.00	0.73		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	0	55	270	0	237	314	1927	910	400	2085	984
V/C Ratio(X)	0.52	0.00	0.13	0.35	0.00	0.84	0.01	0.49	0.06	0.31	0.52	0.01
Avail Cap(c_a), veh/h	362	0	311	373	0	328	411	1927	910	508	2085	984
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	1.00
Uniform Delay (d), s/veh	44.7	0.0	44.1	35.9	0.0	39.0	9.2	11.9	8.8	8.4	10.0	6.8
Incr Delay (d2), s/veh	6.4	0.0	1.0	0.8	0.0	13.0	0.0	0.9	0.1	0.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.2	2.0	0.0	5.2	0.0	4.9	0.4	0.7	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	0.0	45.2	36.7	0.0	51.9	9.2	12.7	8.9	8.8	10.9	6.8
LnGrp LOS	D	A	D	D	A	D	A	B	A	A	B	A
Approach Vol, veh/h		40			293			992			1205	
Approach Delay, s/veh		50.1			47.0			12.5			10.7	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	58.6		7.7	4.9	63.0		18.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	53.5		18.5	5.5	58.5		19.5				
Max Q Clear Time (g_c+I1), s	4.5	17.6		3.7	2.1	18.9		13.5				
Green Ext Time (p_c), s	0.1	6.8		0.1	0.0	8.2		0.6				

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

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	33	7	94	199	3	938	51	122	1078	5
v/c Ratio	0.23	0.03	0.47	0.57	0.01	0.49	0.05	0.29	0.47	0.00
Control Delay	47.5	0.2	48.8	12.9	6.7	14.2	0.1	7.5	9.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	0.2	48.8	12.9	6.7	14.2	0.1	7.5	9.4	0.0
Queue Length 50th (ft)	20	0	56	0	1	179	0	23	147	0
Queue Length 95th (ft)	40	0	110	65	4	284	0	51	308	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	370	427	381	492	371	1929	979	459	2306	1131
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.02	0.25	0.40	0.01	0.49	0.05	0.27	0.47	0.00

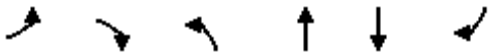
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	31	246	30	943	1119	56
Future Volume (veh/h)	31	246	30	943	1119	56
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1767	1767	1752
Adj Flow Rate, veh/h	38	300	31	982	1316	66
Peak Hour Factor	0.82	0.82	0.96	0.96	0.85	0.85
Percent Heavy Veh, %	10	10	10	9	9	10
Cap, veh/h	376	335	248	2309	2309	1021
Arrive On Green	0.23	0.23	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1668	1485	367	3445	3445	1485
Grp Volume(v), veh/h	38	300	31	982	1316	66
Grp Sat Flow(s),veh/h/ln	1668	1485	367	1678	1678	1485
Q Serve(g_s), s	1.9	20.4	4.9	13.4	20.9	1.5
Cycle Q Clear(g_c), s	1.9	20.4	25.8	13.4	20.9	1.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	376	335	248	2309	2309	1021
V/C Ratio(X)	0.10	0.90	0.13	0.43	0.57	0.06
Avail Cap(c_a), veh/h	634	564	248	2309	2309	1021
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	31.9	39.1	14.9	7.1	8.3	5.3
Incr Delay (d2), s/veh	0.1	10.2	1.0	0.6	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	8.2	0.4	3.6	5.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.0	49.2	16.0	7.7	9.3	5.4
LnGrp LOS	C	D	B	A	A	A
Approach Vol, veh/h	338			1013	1382	
Approach Delay, s/veh	47.3			8.0	9.2	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		76.0		27.9		76.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		71.5		39.5		71.5
Max Q Clear Time (g_c+I1), s		27.8		22.4		22.9
Green Ext Time (p_c), s		8.1		1.0		11.8

Intersection Summary		
HCM 6th Ctrl Delay		13.4
HCM 6th LOS		B

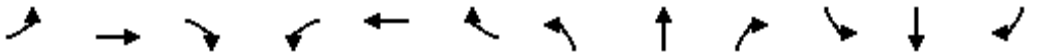


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	38	300	31	982	1316	66
v/c Ratio	0.11	0.82	0.16	0.43	0.57	0.06
Control Delay	31.5	48.8	10.0	8.6	10.5	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.5	48.8	10.0	8.6	10.5	2.1
Queue Length 50th (ft)	20	155	6	131	205	0
Queue Length 95th (ft)	42	219	26	239	333	15
Internal Link Dist (ft)	526			4102	2365	
Turn Bay Length (ft)			170			
Base Capacity (vph)	624	594	196	2296	2296	1038
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.51	0.16	0.43	0.57	0.06

Intersection Summary

Appendix D

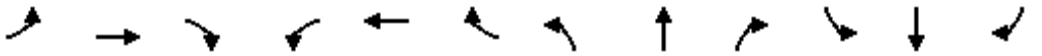
No-Build Intersection Operational Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	75	1	78	2	1420	43	57	891	10
Future Volume (veh/h)	1	0	0	75	1	78	2	1420	43	57	891	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	4	0	0	79	1	82	2	1495	45	63	979	11
Peak Hour Factor	0.25	0.25	0.25	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	218	243	0	140	11	100	430	3331	100	333	2454	1159
Arrive On Green	0.13	0.00	0.00	0.13	0.13	0.13	0.00	0.69	0.69	0.04	0.73	0.73
Sat Flow, veh/h	1315	1870	0	665	85	769	1781	4811	145	1781	3357	1585
Grp Volume(v), veh/h	4	0	0	162	0	0	2	999	541	63	979	11
Grp Sat Flow(s),veh/h/ln	1315	1870	0	1519	0	0	1781	1608	1741	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	9.1	0.0	0.0	0.0	13.7	13.7	0.9	11.0	0.2
Cycle Q Clear(g_c), s	0.3	0.0	0.0	10.2	0.0	0.0	0.0	13.7	13.7	0.9	11.0	0.2
Prop In Lane	1.00		0.00	0.49		0.51	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	218	243	0	251	0	0	430	2226	1205	333	2454	1159
V/C Ratio(X)	0.02	0.00	0.00	0.64	0.00	0.00	0.00	0.45	0.45	0.19	0.40	0.01
Avail Cap(c_a), veh/h	426	539	0	489	0	0	543	2226	1205	430	2454	1159
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	0.0	0.0	41.9	0.0	0.0	4.9	6.8	6.8	4.7	5.0	3.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.7	1.2	0.3	0.5	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(50%),veh/ln	0.1	0.0	0.0	4.0	0.0	0.0	0.0	3.4	3.9	0.2	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.6	0.0	0.0	44.6	0.0	0.0	4.9	7.5	8.0	5.0	5.5	3.6
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		4			162			1542			1053	
Approach Delay, s/veh		37.6			44.6			7.6			5.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	73.0		17.3	4.8	76.8		17.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	68.5		28.5	6.5	71.5		28.5				
Max Q Clear Time (g_c+I1), s	2.9	15.7		2.3	2.0	13.0		12.2				
Green Ext Time (p_c), s	0.0	13.0		0.0	0.0	7.4		0.7				

Intersection Summary												
HCM 6th Ctrl Delay			9.0									
HCM 6th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	33	6	49	17	178	5	1294	40	89	908	6
Future Volume (veh/h)	6	33	6	49	17	178	5	1294	40	89	908	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	8	43	8	52	18	187	5	1362	42	105	1068	7
Peak Hour Factor	0.77	0.77	0.77	0.95	0.95	0.95	0.95	0.95	0.95	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	56	229	218	180	54	218	396	2335	1103	331	2460	1162
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.01	0.70	0.70	0.04	0.73	0.73
Sat Flow, veh/h	130	1663	1585	893	395	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	51	0	8	70	0	187	5	1362	42	105	1068	7
Grp Sat Flow(s),veh/h/ln	1794	0	1585	1287	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.5	4.0	0.0	12.7	0.1	22.8	0.9	1.7	13.7	0.1
Cycle Q Clear(g_c), s	2.7	0.0	0.5	6.6	0.0	12.7	0.1	22.8	0.9	1.7	13.7	0.1
Prop In Lane	0.16		1.00	0.74		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	0	218	234	0	218	396	2335	1103	331	2460	1162
V/C Ratio(X)	0.18	0.00	0.04	0.30	0.00	0.86	0.01	0.58	0.04	0.32	0.43	0.01
Avail Cap(c_a), veh/h	369	0	296	306	0	296	474	2335	1103	439	2460	1162
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	1.00
Uniform Delay (d), s/veh	42.0	0.0	41.0	44.2	0.0	46.3	5.3	8.6	5.2	7.3	5.7	3.9
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.7	0.0	16.5	0.0	1.1	0.1	0.5	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.2	1.8	0.0	5.9	0.0	6.4	0.2	0.5	3.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.3	0.0	41.1	44.9	0.0	62.8	5.3	9.6	5.3	7.8	6.3	3.9
LnGrp LOS	D	A	D	D	A	E	A	A	A	A	A	A
Approach Vol, veh/h		59			257			1409			1180	
Approach Delay, s/veh		42.1			57.9			9.5			6.4	
Approach LOS		D			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	80.9		19.6	5.2	85.0		19.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.5	74.5		20.5	5.5	80.5		20.5				
Max Q Clear Time (g_c+I1), s	3.7	24.8		4.7	2.1	15.7		14.7				
Green Ext Time (p_c), s	0.1	12.4		0.2	0.0	8.4		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		13.2	
HCM 6th LOS		B	

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	51	8	70	187	5	1362	42	105	1068	7
v/c Ratio	0.29	0.03	0.50	0.64	0.01	0.58	0.04	0.33	0.40	0.01
Control Delay	48.6	0.3	58.2	23.4	2.8	9.4	0.1	5.0	4.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	0.3	58.2	23.4	2.8	9.4	0.1	5.0	4.5	0.0
Queue Length 50th (ft)	32	0	45	25	1	208	0	11	77	0
Queue Length 95th (ft)	62	0	95	99	3	331	0	25	190	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	341	382	269	424	440	2347	1149	390	2641	1273
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.02	0.26	0.44	0.01	0.58	0.04	0.27	0.40	0.01

Intersection Summary

Intersection	
Int Delay, s/veh	37.1

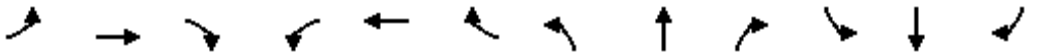
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	87	311	203	1376	792	193
Future Vol, veh/h	87	311	203	1376	792	193
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	170	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	98	98	95	95
Heavy Vehicles, %	10	10	10	9	9	10
Mvmt Flow	97	346	207	1404	834	203

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1950	417	1037	0	-	0
Stage 1	834	-	-	-	-	-
Stage 2	1116	-	-	-	-	-
Critical Hdwy	7	7.1	4.3	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.6	3.4	2.3	-	-	-
Pot Cap-1 Maneuver	~ 51	563	620	-	-	-
Stage 1	367	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 34	563	620	-	-	-
Mov Cap-2 Maneuver	~ 34	-	-	-	-	-
Stage 1	244	-	-	-	-	-
Stage 2	258	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	252.5	1.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	620	-	34	563	-	-
HCM Lane V/C Ratio	0.334	-	2.843	0.614	-	-
HCM Control Delay (s)	13.7	-	$ 1080.1	21	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	1.5	-	11.1	4.1	-	-

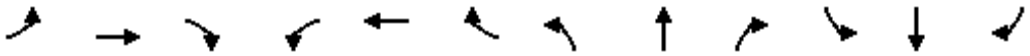
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	12	17	151	13	146	18	1534	54	65	1059	28
Future Volume (veh/h)	61	12	17	151	13	146	18	1534	54	65	1059	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	71	14	20	170	15	164	18	1549	55	80	1307	35
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.99	0.99	0.99	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	249	51	56	238	22	180	244	1886	891	217	1975	932
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.02	0.56	0.56	0.05	0.59	0.59
Sat Flow, veh/h	741	205	223	726	87	721	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	105	0	0	349	0	0	18	1549	55	80	1307	35
Grp Sat Flow(s),veh/h/ln	1169	0	0	1535	0	0	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	14.1	0.0	0.0	0.4	35.7	1.5	1.8	25.0	0.9
Cycle Q Clear(g_c), s	6.8	0.0	0.0	20.9	0.0	0.0	0.4	35.7	1.5	1.8	25.0	0.9
Prop In Lane	0.68		0.19	0.49		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	0	0	440	0	0	244	1886	891	217	1975	932
V/C Ratio(X)	0.30	0.00	0.00	0.79	0.00	0.00	0.07	0.82	0.06	0.37	0.66	0.04
Avail Cap(c_a), veh/h	413	0	0	504	0	0	302	1886	891	230	1975	932
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	0.0	34.3	0.0	0.0	11.2	17.0	9.5	16.6	13.2	8.3
Incr Delay (d2), s/veh	0.5	0.0	0.0	7.5	0.0	0.0	0.1	4.2	0.1	1.0	1.8	0.1
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(50%),veh/ln	2.0	0.0	0.0	8.4	0.0	0.0	0.1	12.0	0.5	0.7	7.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	0.0	41.9	0.0	0.0	11.3	21.1	9.6	17.7	15.0	8.3
LnGrp LOS	C	A	A	D	A	A	B	C	A	B	B	A
Approach Vol, veh/h		105			349			1622			1422	
Approach Delay, s/veh		29.6			41.9			20.6			15.0	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	58.0		28.3	6.4	60.5		28.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	53.5		27.9	5.0	53.6		27.9				
Max Q Clear Time (g_c+I1), s	3.8	37.7		8.8	2.4	27.0		22.9				
Green Ext Time (p_c), s	0.0	9.2		0.5	0.0	9.8		0.9				

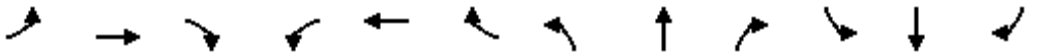
Intersection Summary			
HCM 6th Ctrl Delay		20.7	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	837	11	133	765	215	36	82	167	182	60	51
Future Volume (veh/h)	48	837	11	133	765	215	36	82	167	182	60	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1841	1752	1870	1841	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	51	890	12	146	841	236	44	101	206	219	72	61
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.81	0.81	0.81	0.83	0.83	0.83
Percent Heavy Veh, %	2	10	4	4	10	2	4	2	4	2	2	2
Cap, veh/h	222	1051	493	254	1170	557	520	166	338	422	345	293
Arrive On Green	0.04	0.32	0.32	0.08	0.35	0.35	0.04	0.30	0.30	0.10	0.37	0.37
Sat Flow, veh/h	1781	3328	1560	1753	3328	1585	1753	549	1120	1781	935	792
Grp Volume(v), veh/h	51	890	12	146	841	236	44	0	307	219	0	133
Grp Sat Flow(s),veh/h/ln	1781	1664	1560	1753	1664	1585	1753	0	1669	1781	0	1728
Q Serve(g_s), s	1.7	22.3	0.5	4.9	19.5	10.1	1.5	0.0	14.0	7.1	0.0	4.7
Cycle Q Clear(g_c), s	1.7	22.3	0.5	4.9	19.5	10.1	1.5	0.0	14.0	7.1	0.0	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.46
Lane Grp Cap(c), veh/h	222	1051	493	254	1170	557	520	0	504	422	0	638
V/C Ratio(X)	0.23	0.85	0.02	0.58	0.72	0.42	0.08	0.00	0.61	0.52	0.00	0.21
Avail Cap(c_a), veh/h	260	1288	604	308	1438	685	555	0	504	486	0	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.7	28.5	21.0	21.4	25.1	22.0	19.9	0.0	26.6	18.4	0.0	19.2
Incr Delay (d2), s/veh	0.5	4.6	0.0	2.1	1.4	0.5	0.1	0.0	5.4	1.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	8.5	0.2	1.9	7.0	3.4	0.6	0.0	6.1	2.9	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	33.0	21.0	23.4	26.4	22.5	20.0	0.0	32.0	19.4	0.0	20.0
LnGrp LOS	C	C	C	C	C	C	C	A	C	B	A	B
Approach Vol, veh/h		953			1223			351			352	
Approach Delay, s/veh		32.3			25.3			30.5			19.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	31.4	11.3	32.6	7.8	37.4	8.1	35.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	25.5	9.5	34.5	5.1	32.9	5.5	38.5
Max Q Clear Time (g_c+I1), s	9.1	16.0	6.9	24.3	3.5	6.7	3.7	21.5
Green Ext Time (p_c), s	0.2	1.2	0.1	3.9	0.0	0.7	0.0	5.5

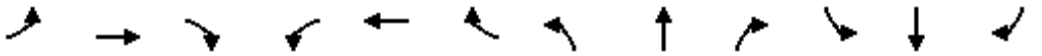
Intersection Summary	
HCM 6th Ctrl Delay	27.5
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	2	4	94	0	126	1	1490	77	119	1521	1
Future Volume (veh/h)	4	2	4	94	0	126	1	1490	77	119	1521	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	6	3	6	108	0	145	1	1505	78	120	1536	1
Peak Hour Factor	0.67	0.67	0.67	0.87	0.87	0.87	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	238	105	210	161	9	164	211	3010	156	299	2299	1086
Arrive On Green	0.19	0.19	0.19	0.19	0.00	0.19	0.00	0.64	0.64	0.05	0.68	0.68
Sat Flow, veh/h	1243	557	1113	599	48	869	1781	4695	243	1781	3357	1585
Grp Volume(v), veh/h	6	0	9	253	0	0	1	1031	552	120	1536	1
Grp Sat Flow(s),veh/h/ln	1243	0	1670	1516	0	0	1781	1608	1723	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.5	16.1	0.0	0.0	0.0	18.3	18.3	2.3	28.7	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.5	17.5	0.0	0.0	0.0	18.3	18.3	2.3	28.7	0.0
Prop In Lane	1.00		0.67	0.43		0.57	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	315	334	0	0	211	2062	1105	299	2299	1086
V/C Ratio(X)	0.03	0.00	0.03	0.76	0.00	0.00	0.00	0.50	0.50	0.40	0.67	0.00
Avail Cap(c_a), veh/h	321	0	426	433	0	0	292	2062	1105	392	2299	1086
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	0.0	35.7	42.5	0.0	0.0	9.6	10.2	10.2	8.1	9.9	5.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.9	1.6	0.9	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	7.0	0.0	0.0	0.0	5.4	6.0	0.7	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.8	0.0	35.7	48.1	0.0	0.0	9.6	11.1	11.8	8.9	11.4	5.4
LnGrp LOS	D	A	D	D	A	A	A	B	B	A	B	A
Approach Vol, veh/h		15			253			1584			1657	
Approach Delay, s/veh		35.8			48.1			11.4			11.3	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	73.7		24.9	4.6	78.4		24.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	68.5		27.5	5.1	73.9		27.5				
Max Q Clear Time (g_c+I1), s	4.3	20.3		2.6	2.0	30.7		19.5				
Green Ext Time (p_c), s	0.1	13.5		0.0	0.0	14.5		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			14.1									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	21	6	85	28	221	4	1357	79	146	1477	6
Future Volume (veh/h)	7	21	6	85	28	221	4	1357	79	146	1477	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	10	30	8	91	30	238	4	1399	81	147	1492	6
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	39	94	310	55	11	310	222	2155	1018	281	2289	1081
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.64	0.64	0.05	0.68	0.68
Sat Flow, veh/h	0	479	1585	0	55	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	40	0	8	121	0	238	4	1399	81	147	1492	6
Grp Sat Flow(s),veh/h/ln	479	0	1585	55	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	16.4	0.1	29.4	2.2	3.1	29.3	0.1
Cycle Q Clear(g_c), s	22.5	0.0	0.5	22.5	0.0	16.4	0.1	29.4	2.2	3.1	29.3	0.1
Prop In Lane	0.25		1.00	0.75		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	0	310	66	0	310	222	2155	1018	281	2289	1081
V/C Ratio(X)	0.30	0.00	0.03	1.85	0.00	0.77	0.02	0.65	0.08	0.52	0.65	0.01
Avail Cap(c_a), veh/h	133	0	310	66	0	310	298	2155	1018	394	2289	1081
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	1.00
Uniform Delay (d), s/veh	39.3	0.0	37.4	53.9	0.0	43.8	9.9	12.6	7.8	12.8	10.5	5.8
Incr Delay (d2), s/veh	1.3	0.0	0.0	433.8	0.0	11.1	0.0	1.5	0.2	1.5	1.5	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(50%),veh/ln	1.0	0.0	0.2	9.8	0.0	7.3	0.0	9.4	0.7	1.3	8.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.5	0.0	37.5	487.7	0.0	54.9	9.9	14.2	7.9	14.3	11.9	5.9
LnGrp LOS	D	A	D	F	A	D	A	B	A	B	B	A
Approach Vol, veh/h		48			359			1484			1645	
Approach Delay, s/veh		40.0			200.8			13.8			12.1	
Approach LOS		D			F			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	78.4		27.0	5.1	83.0		27.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	12.5	71.5		22.5	5.5	78.5		22.5				
Max Q Clear Time (g_c+I1), s	5.1	31.4		24.5	2.1	31.3		24.5				
Green Ext Time (p_c), s	0.2	12.6		0.0	0.0	14.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		32.4	
HCM 6th LOS		C	

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	8	121	238	4	1399	81	147	1492	6
v/c Ratio	0.17	0.03	0.64	0.69	0.01	0.64	0.07	0.48	0.59	0.00
Control Delay	42.8	0.2	59.8	27.5	4.2	13.3	1.6	8.7	8.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	0.2	59.8	27.5	4.2	13.3	1.6	8.7	8.0	0.0
Queue Length 50th (ft)	25	0	80	55	1	262	0	20	174	0
Queue Length 95th (ft)	46	0	147	143	4	454	15	47	430	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	357	405	292	450	274	2199	1082	368	2530	1222
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.02	0.41	0.53	0.01	0.64	0.07	0.40	0.59	0.00

Intersection Summary

Intersection	
Int Delay, s/veh	564

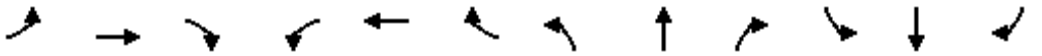
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	200	503	141	1279	1469	161
Future Vol, veh/h	200	503	141	1279	1469	161
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	170	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	98	98	90	90
Heavy Vehicles, %	10	10	10	9	9	10
Mvmt Flow	211	529	144	1305	1632	179

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2573	816	1811	0	-	0
Stage 1	1632	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Critical Hdwy	7	7.1	4.3	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.6	3.4	2.3	-	-	-
Pot Cap-1 Maneuver	~ 19	~ 304	304	-	-	-
Stage 1	~ 134	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 10	~ 304	304	-	-	-
Mov Cap-2 Maneuver	~ 10	-	-	-	-	-
Stage 1	~ 70	-	-	-	-	-
Stage 2	322	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	3043.7	2.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	304	-	10	304	-	-
HCM Lane V/C Ratio	0.473	-	21.053	1.742	-	-
HCM Control Delay (s)	27	-	$ 9752	$ 376.4	-	-
HCM Lane LOS	D	-	F	F	-	-
HCM 95th %tile Q(veh)	2.4	-	27.9	34	-	-

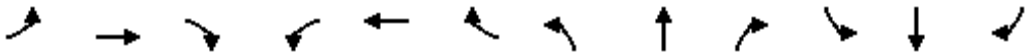
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	29	28	154	46	117	51	1419	79	202	1693	91
Future Volume (veh/h)	49	29	28	154	46	117	51	1419	79	202	1693	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	63	37	36	192	58	146	52	1433	80	213	1782	96
Peak Hour Factor	0.78	0.78	0.78	0.80	0.80	0.80	0.99	0.99	0.99	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	197	115	93	245	61	147	154	1744	823	262	1865	881
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.04	0.52	0.52	0.07	0.56	0.56
Sat Flow, veh/h	535	428	347	708	227	546	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	136	0	0	396	0	0	52	1433	80	213	1782	96
Grp Sat Flow(s),veh/h/ln	1310	0	0	1481	0	0	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	18.7	0.0	0.0	1.3	35.4	2.5	5.3	49.7	2.8
Cycle Q Clear(g_c), s	7.6	0.0	0.0	26.3	0.0	0.0	1.3	35.4	2.5	5.3	49.7	2.8
Prop In Lane	0.46		0.26	0.48		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	406	0	0	453	0	0	154	1744	823	262	1865	881
V/C Ratio(X)	0.33	0.00	0.00	0.87	0.00	0.00	0.34	0.82	0.10	0.81	0.96	0.11
Avail Cap(c_a), veh/h	406	0	0	453	0	0	176	1744	823	289	1865	881
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	0.0	36.0	0.0	0.0	22.6	19.9	12.0	20.6	20.8	10.4
Incr Delay (d2), s/veh	0.5	0.0	0.0	17.1	0.0	0.0	1.3	4.5	0.2	15.0	12.7	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(50%),veh/ln	2.6	0.0	0.0	11.3	0.0	0.0	0.6	12.6	0.8	3.3	18.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	0.0	0.0	53.1	0.0	0.0	23.9	24.4	12.2	35.6	33.5	10.6
LnGrp LOS	C	A	A	D	A	A	C	C	B	D	C	B
Approach Vol, veh/h		136			396			1565			2091	
Approach Delay, s/veh		29.4			53.1			23.8			32.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	55.8		31.1	8.3	59.4		31.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.9	51.0		26.6	5.0	54.9		26.6				
Max Q Clear Time (g_c+I1), s	7.3	37.4		9.6	3.3	51.7		28.3				
Green Ext Time (p_c), s	0.1	7.8		0.6	0.0	2.7		0.0				

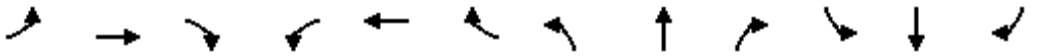
Intersection Summary		
HCM 6th Ctrl Delay		31.1
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	832	42	275	781	229	15	95	101	212	190	45
Future Volume (veh/h)	82	832	42	275	781	229	15	95	101	212	190	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1841	1752	1870	1841	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	86	876	44	324	919	269	16	103	110	238	213	51
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	2	10	4	4	10	2	4	2	4	2	2	2
Cap, veh/h	254	1021	479	375	1346	641	342	183	195	426	472	113
Arrive On Green	0.05	0.31	0.31	0.15	0.40	0.40	0.02	0.22	0.22	0.12	0.32	0.32
Sat Flow, veh/h	1781	3328	1560	1753	3328	1585	1753	828	884	1781	1458	349
Grp Volume(v), veh/h	86	876	44	324	919	269	16	0	213	238	0	264
Grp Sat Flow(s),veh/h/ln	1781	1664	1560	1753	1664	1585	1753	0	1711	1781	0	1808
Q Serve(g_s), s	2.9	21.9	1.8	10.5	20.1	10.7	0.6	0.0	9.8	8.6	0.0	10.2
Cycle Q Clear(g_c), s	2.9	21.9	1.8	10.5	20.1	10.7	0.6	0.0	9.8	8.6	0.0	10.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.52	1.00		0.19
Lane Grp Cap(c), veh/h	254	1021	479	375	1346	641	342	0	378	426	0	585
V/C Ratio(X)	0.34	0.86	0.09	0.86	0.68	0.42	0.05	0.00	0.56	0.56	0.00	0.45
Avail Cap(c_a), veh/h	292	1188	557	504	1686	803	409	0	378	442	0	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	28.8	21.8	19.3	21.6	18.9	25.8	0.0	30.6	21.6	0.0	23.7
Incr Delay (d2), s/veh	0.8	5.7	0.1	11.3	0.8	0.4	0.1	0.0	6.0	1.5	0.0	2.5
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(50%),veh/ln	1.1	8.5	0.6	4.7	6.9	3.5	0.3	0.0	4.5	3.6	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.9	34.5	21.9	30.6	22.4	19.3	25.8	0.0	36.6	23.0	0.0	26.2
LnGrp LOS	C	C	C	C	C	B	C	A	D	C	A	C
Approach Vol, veh/h		1006			1512			229			502	
Approach Delay, s/veh		32.8			23.6			35.8			24.7	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	24.0	17.5	31.6	6.1	33.1	8.9	40.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	19.5	31.5	5.0	26.0	6.3	44.7
Max Q Clear Time (g_c+I1), s	10.6	11.8	12.5	23.9	2.6	12.2	4.9	22.1
Green Ext Time (p_c), s	0.1	0.7	0.5	3.2	0.0	1.2	0.0	6.8

Intersection Summary	
HCM 6th Ctrl Delay	27.5
HCM 6th LOS	C



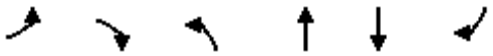
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	33	6	49	17	178	5	1294	40	89	908	6
Future Volume (veh/h)	6	33	6	49	17	178	5	1294	40	89	908	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	8	43	8	52	18	187	5	1362	42	105	1068	7
Peak Hour Factor	0.77	0.77	0.77	0.95	0.95	0.95	0.95	0.95	0.95	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	12	65	66	190	66	225	320	1935	914	275	2080	982
Arrive On Green	0.04	0.04	0.04	0.14	0.14	0.14	0.01	0.58	0.58	0.05	0.62	0.62
Sat Flow, veh/h	291	1565	1585	1340	464	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	51	0	8	70	0	187	5	1362	42	105	1068	7
Grp Sat Flow(s),veh/h/ln	1856	0	1585	1803	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	2.6	0.0	0.5	3.3	0.0	10.9	0.1	27.3	1.1	2.1	16.8	0.2
Cycle Q Clear(g_c), s	2.6	0.0	0.5	3.3	0.0	10.9	0.1	27.3	1.1	2.1	16.8	0.2
Prop In Lane	0.16		1.00	0.74		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	0	66	256	0	225	320	1935	914	275	2080	982
V/C Ratio(X)	0.66	0.00	0.12	0.27	0.00	0.83	0.02	0.70	0.05	0.38	0.51	0.01
Avail Cap(c_a), veh/h	383	0	327	391	0	344	402	1935	914	328	2080	982
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	1.00
Uniform Delay (d), s/veh	44.6	0.0	43.6	36.2	0.0	39.5	9.1	14.3	8.7	12.5	10.0	6.9
Incr Delay (d2), s/veh	9.2	0.0	0.8	0.6	0.0	10.0	0.0	2.2	0.1	0.9	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.2	1.5	0.0	4.7	0.0	8.7	0.3	0.7	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	0.0	44.4	36.8	0.0	49.5	9.1	16.4	8.8	13.4	10.9	6.9
LnGrp LOS	D	A	D	D	A	D	A	B	A	B	B	A
Approach Vol, veh/h		59			257			1409			1180	
Approach Delay, s/veh		52.6			46.0			16.2			11.1	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	59.0		8.4	5.1	63.1		17.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	54.5		19.5	5.0	57.0		20.5				
Max Q Clear Time (g_c+I1), s	4.1	29.3		4.6	2.1	18.8		12.9				
Green Ext Time (p_c), s	0.1	10.2		0.2	0.0	8.0		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		17.5	
HCM 6th LOS		B	

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	51	8	70	187	5	1362	42	105	1068	7
v/c Ratio	0.33	0.04	0.41	0.58	0.01	0.71	0.04	0.40	0.47	0.01
Control Delay	48.3	0.3	49.2	14.4	6.4	18.4	0.1	10.5	9.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.3	0.3	49.2	14.4	6.4	18.4	0.1	10.5	9.7	0.0
Queue Length 50th (ft)	30	0	42	0	1	310	0	19	142	0
Queue Length 95th (ft)	58	0	87	64	5	458	0	42	271	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	383	403	391	491	357	1918	957	271	2261	1110
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.02	0.18	0.38	0.01	0.71	0.04	0.39	0.47	0.01

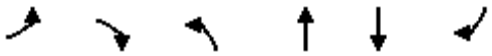
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	87	311	203	1376	792	193
Future Volume (veh/h)	87	311	203	1376	792	193
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1767	1767	1752
Adj Flow Rate, veh/h	97	346	207	1404	834	203
Peak Hour Factor	0.90	0.90	0.98	0.98	0.95	0.95
Percent Heavy Veh, %	10	10	10	9	9	10
Cap, veh/h	244	530	449	2603	2283	1010
Arrive On Green	0.15	0.15	0.06	0.78	0.68	0.68
Sat Flow, veh/h	1668	2613	1668	3445	3445	1485
Grp Volume(v), veh/h	97	346	207	1404	834	203
Grp Sat Flow(s),veh/h/ln	1668	1306	1668	1678	1678	1485
Q Serve(g_s), s	6.1	14.0	4.0	18.6	12.2	5.8
Cycle Q Clear(g_c), s	6.1	14.0	4.0	18.6	12.2	5.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	244	530	449	2603	2283	1010
V/C Ratio(X)	0.40	0.65	0.46	0.54	0.37	0.20
Avail Cap(c_a), veh/h	311	634	709	2603	2283	1010
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	44.6	42.3	5.5	5.0	7.9	6.8
Incr Delay (d2), s/veh	1.0	1.8	0.7	0.8	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	10.1	1.0	4.1	3.6	8.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	45.7	44.1	6.2	5.8	8.3	7.3
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	443			1611	1037	
Approach Delay, s/veh	44.4			5.9	8.1	
Approach LOS	D			A	A	

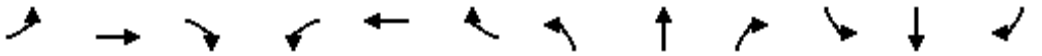
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		94.0		21.4	11.0	83.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		89.5		21.5	24.5	60.5
Max Q Clear Time (g_c+I1), s		20.6		16.0	6.0	14.2
Green Ext Time (p_c), s		13.3		0.9	0.5	6.7

Intersection Summary		
HCM 6th Ctrl Delay		12.1
HCM 6th LOS		B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	97	346	207	1404	834	203
v/c Ratio	0.55	0.46	0.41	0.52	0.36	0.19
Control Delay	58.8	14.8	5.1	4.5	8.2	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	14.8	5.1	4.5	8.2	1.5
Queue Length 50th (ft)	66	43	24	132	113	0
Queue Length 95th (ft)	121	84	52	216	189	27
Internal Link Dist (ft)	526			4102	2365	
Turn Bay Length (ft)			170			
Base Capacity (vph)	319	1091	661	2687	2286	1076
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.32	0.31	0.52	0.36	0.19

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	21	6	85	28	221	4	1357	79	146	1477	6
Future Volume (veh/h)	7	21	6	85	28	221	4	1357	79	146	1477	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	10	30	8	91	30	238	4	1399	81	147	1492	6
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	17	51	59	235	77	274	182	1856	877	253	2020	954
Arrive On Green	0.04	0.04	0.04	0.17	0.17	0.17	0.01	0.55	0.55	0.05	0.60	0.60
Sat Flow, veh/h	462	1385	1585	1356	447	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	40	0	8	121	0	238	4	1399	81	147	1492	6
Grp Sat Flow(s),veh/h/ln	1847	0	1585	1803	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	2.1	0.0	0.5	5.9	0.0	14.4	0.1	31.5	2.4	3.3	31.4	0.1
Cycle Q Clear(g_c), s	2.1	0.0	0.5	5.9	0.0	14.4	0.1	31.5	2.4	3.3	31.4	0.1
Prop In Lane	0.25		1.00	0.75		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	0	59	312	0	274	182	1856	877	253	2020	954
V/C Ratio(X)	0.58	0.00	0.14	0.39	0.00	0.87	0.02	0.75	0.09	0.58	0.74	0.01
Avail Cap(c_a), veh/h	309	0	265	390	0	343	263	1856	877	332	2020	954
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	1.00
Uniform Delay (d), s/veh	46.7	0.0	45.9	36.1	0.0	39.6	13.3	16.9	10.4	17.1	14.1	7.8
Incr Delay (d2), s/veh	7.6	0.0	1.0	0.8	0.0	17.4	0.0	2.9	0.2	2.1	2.5	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(50%),veh/ln	1.1	0.0	0.2	2.6	0.0	6.8	0.0	10.6	0.8	1.5	10.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	0.0	47.0	36.9	0.0	57.0	13.3	19.8	10.6	19.2	16.5	7.8
LnGrp LOS	D	A	D	D	A	E	B	B	B	B	B	A
Approach Vol, veh/h		48			359			1484			1645	
Approach Delay, s/veh		53.1			50.2			19.2			16.7	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	59.0		8.2	5.0	63.8		21.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.7	54.5		16.5	5.0	59.2		21.3				
Max Q Clear Time (g_c+I1), s	5.3	33.5		4.1	2.1	33.4		16.4				
Green Ext Time (p_c), s	0.1	9.9		0.1	0.0	11.5		0.7				

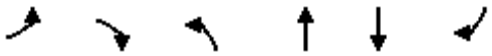
Intersection Summary			
HCM 6th Ctrl Delay		21.7	
HCM 6th LOS		C	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	8	121	238	4	1399	81	147	1492	6
v/c Ratio	0.28	0.03	0.54	0.59	0.02	0.74	0.08	0.54	0.65	0.01
Control Delay	50.2	0.2	50.7	11.9	7.8	21.1	0.6	16.8	13.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.2	0.2	50.7	11.9	7.8	21.1	0.6	16.8	13.4	0.0
Queue Length 50th (ft)	25	0	76	0	1	366	0	30	270	0
Queue Length 95th (ft)	48	0	137	70	5	552	5	90	561	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	317	386	400	537	229	1889	961	293	2280	1119
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.02	0.30	0.44	0.02	0.74	0.08	0.50	0.65	0.01

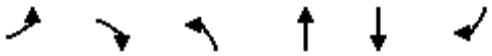
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	200	503	141	1279	1469	161
Future Volume (veh/h)	200	503	141	1279	1469	161
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1767	1767	1752
Adj Flow Rate, veh/h	211	529	144	1305	1632	179
Peak Hour Factor	0.95	0.95	0.98	0.98	0.90	0.90
Percent Heavy Veh, %	10	10	10	9	9	10
Cap, veh/h	341	654	208	2420	2139	946
Arrive On Green	0.20	0.20	0.05	0.72	0.64	0.64
Sat Flow, veh/h	1668	2613	1668	3445	3445	1485
Grp Volume(v), veh/h	211	529	144	1305	1632	179
Grp Sat Flow(s),veh/h/ln	1668	1306	1668	1678	1678	1485
Q Serve(g_s), s	13.8	22.8	3.4	21.3	41.2	6.0
Cycle Q Clear(g_c), s	13.8	22.8	3.4	21.3	41.2	6.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	341	654	208	2420	2139	946
V/C Ratio(X)	0.62	0.81	0.69	0.54	0.76	0.19
Avail Cap(c_a), veh/h	341	654	305	2420	2139	946
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	43.5	42.3	22.8	7.7	15.4	9.0
Incr Delay (d2), s/veh	3.4	7.5	4.1	0.9	2.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	16.1	2.8	5.9	13.7	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.9	49.8	26.9	8.5	18.0	9.4
LnGrp LOS	D	D	C	A	B	A
Approach Vol, veh/h	740			1449	1811	
Approach Delay, s/veh	49.0			10.3	17.2	
Approach LOS	D			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		91.0		29.0	10.0	81.0
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		86.5		24.5	12.5	69.5
Max Q Clear Time (g_c+I1), s		23.3		24.8	5.4	43.2
Green Ext Time (p_c), s		11.6		0.0	0.2	13.9

Intersection Summary		
HCM 6th Ctrl Delay		20.6
HCM 6th LOS		C

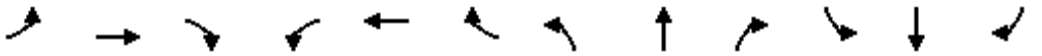


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	211	529	144	1305	1632	179
v/c Ratio	0.77	0.67	0.63	0.52	0.78	0.18
Control Delay	64.4	36.8	27.8	7.1	20.5	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.4	36.8	27.8	7.1	20.5	2.7
Queue Length 50th (ft)	150	178	33	180	447	4
Queue Length 95th (ft)	236	237	108	265	638	36
Internal Link Dist (ft)	526			4102	2365	
Turn Bay Length (ft)			170			
Base Capacity (vph)	350	844	262	2498	2082	983
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.63	0.55	0.52	0.78	0.18

Intersection Summary

Appendix E

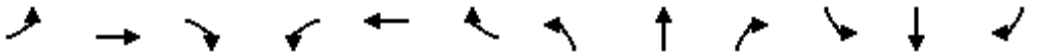
Future Intersection Operational Analysis



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	82	1	78	2	1506	58	57	924	10
Future Volume (veh/h)	1	0	0	82	1	78	2	1506	58	57	924	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	4	0	0	86	1	82	2	1585	61	63	1015	11
Peak Hour Factor	0.25	0.25	0.25	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	224	252	0	149	10	99	412	3279	126	308	2440	1152
Arrive On Green	0.13	0.00	0.00	0.13	0.13	0.13	0.00	0.69	0.69	0.04	0.73	0.73
Sat Flow, veh/h	1315	1870	0	702	77	735	1781	4765	183	1781	3357	1585
Grp Volume(v), veh/h	4	0	0	169	0	0	2	1069	577	63	1015	11
Grp Sat Flow(s),veh/h/ln	1315	1870	0	1514	0	0	1781	1608	1734	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	9.7	0.0	0.0	0.0	15.5	15.5	0.9	11.8	0.2
Cycle Q Clear(g_c), s	0.3	0.0	0.0	10.8	0.0	0.0	0.0	15.5	15.5	0.9	11.8	0.2
Prop In Lane	1.00		0.00	0.51		0.49	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	224	252	0	259	0	0	412	2212	1193	308	2440	1152
V/C Ratio(X)	0.02	0.00	0.00	0.65	0.00	0.00	0.00	0.48	0.48	0.20	0.42	0.01
Avail Cap(c_a), veh/h	423	535	0	485	0	0	523	2212	1193	404	2440	1152
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	0.0	41.9	0.0	0.0	5.1	7.3	7.3	5.2	5.3	3.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.8	1.4	0.3	0.5	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(50%),veh/ln	0.1	0.0	0.0	4.2	0.0	0.0	0.0	3.9	4.5	0.2	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	0.0	0.0	44.6	0.0	0.0	5.1	8.0	8.7	5.5	5.8	3.8
LnGrp LOS	D	A	A	D	A	A	A	A	A	A	A	A
Approach Vol, veh/h		4			169			1648			1089	
Approach Delay, s/veh		37.4			44.6			8.2			5.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	73.0		17.9	4.8	76.9		17.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.5	68.5		28.5	6.5	71.5		28.5				
Max Q Clear Time (g_c+I1), s	2.9	17.5		2.3	2.0	13.8		12.8				
Green Ext Time (p_c), s	0.0	14.5		0.0	0.0	7.7		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	33	6	53	17	178	5	1395	50	89	948	6
Future Volume (veh/h)	6	33	6	53	17	178	5	1395	50	89	948	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	8	43	8	56	18	187	5	1468	53	105	1115	7
Peak Hour Factor	0.77	0.77	0.77	0.95	0.95	0.95	0.95	0.95	0.95	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	55	228	217	181	51	217	379	2342	1106	301	2466	1165
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.01	0.70	0.70	0.04	0.73	0.73
Sat Flow, veh/h	131	1663	1585	904	370	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	51	0	8	74	0	187	5	1468	53	105	1115	7
Grp Sat Flow(s),veh/h/ln	1793	0	1585	1274	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.5	4.4	0.0	12.8	0.1	26.1	1.2	1.7	14.6	0.1
Cycle Q Clear(g_c), s	2.7	0.0	0.5	7.1	0.0	12.8	0.1	26.1	1.2	1.7	14.6	0.1
Prop In Lane	0.16		1.00	0.76		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	283	0	217	232	0	217	379	2342	1106	301	2466	1165
V/C Ratio(X)	0.18	0.00	0.04	0.32	0.00	0.86	0.01	0.63	0.05	0.35	0.45	0.01
Avail Cap(c_a), veh/h	350	0	279	288	0	279	456	2342	1106	392	2466	1165
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	1.00
Uniform Delay (d), s/veh	42.5	0.0	41.5	44.9	0.0	46.8	5.4	9.0	5.2	8.5	5.8	3.9
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.8	0.0	19.0	0.0	1.3	0.1	0.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.2	1.9	0.0	6.1	0.0	7.3	0.3	0.6	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.8	0.0	41.6	45.7	0.0	65.8	5.4	10.3	5.3	9.2	6.4	3.9
LnGrp LOS	D	A	D	D	A	E	A	B	A	A	A	A
Approach Vol, veh/h		59			261			1526			1227	
Approach Delay, s/veh		42.6			60.1			10.1			6.7	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	81.9		19.7	5.2	86.0		19.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.5	76.5		19.5	5.5	81.5		19.5				
Max Q Clear Time (g_c+I1), s	3.7	28.1		4.7	2.1	16.6		14.8				
Green Ext Time (p_c), s	0.1	14.1		0.2	0.0	9.0		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		13.6	
HCM 6th LOS		B	

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	51	8	74	187	5	1468	53	105	1115	7
v/c Ratio	0.28	0.03	0.51	0.68	0.01	0.63	0.05	0.36	0.42	0.01
Control Delay	48.6	0.2	58.9	29.9	3.0	10.4	0.3	5.9	4.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	0.2	58.9	29.9	3.0	10.4	0.3	5.9	4.8	0.0
Queue Length 50th (ft)	33	0	49	41	1	243	0	11	86	0
Queue Length 95th (ft)	62	0	100	117	3	401	3	27	214	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	318	362	249	386	418	2346	1149	343	2636	1271
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.02	0.30	0.48	0.01	0.63	0.05	0.31	0.42	0.01

Intersection Summary

Intersection	
Int Delay, s/veh	44.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	87	342	203	1487	836	193
Future Vol, veh/h	87	342	203	1487	836	193
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	170	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	98	98	95	95
Heavy Vehicles, %	10	10	10	9	9	10
Mvmt Flow	97	380	207	1517	880	203

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2053	440	1083	0	-	0
Stage 1	880	-	-	-	-	-
Stage 2	1173	-	-	-	-	-
Critical Hdwy	7	7.1	4.3	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.6	3.4	2.3	-	-	-
Pot Cap-1 Maneuver	~ 43	543	595	-	-	-
Stage 1	347	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 28	543	595	-	-	-
Mov Cap-2 Maneuver	~ 28	-	-	-	-	-
Stage 1	226	-	-	-	-	-
Stage 2	240	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 303.4	1.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	595	-	28	543	-	-
HCM Lane V/C Ratio	0.348	-	3.452	0.7	-	-
HCM Control Delay (s)	14.2	-	$ 1395.4	25.6	-	-
HCM Lane LOS	B	-	F	D	-	-
HCM 95th %tile Q(veh)	1.6	-	11.7	5.5	-	-

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

Intersection	
Int Delay, s/veh	43.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	24	12	1619	1104	58
Future Vol, veh/h	140	24	12	1619	1104	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	425	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	98	98	95	95
Heavy Vehicles, %	2	2	2	9	9	2
Mvmt Flow	165	28	12	1652	1162	61

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2012	581	1223	0	-	0
Stage 1	1162	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 69	391	305	-	-	-
Stage 1	196	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 66	391	305	-	-	-
Mov Cap-2 Maneuver	~ 66	-	-	-	-	-
Stage 1	188	-	-	-	-	-
Stage 2	369	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 696.9	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	305	-	66	391	-	-
HCM Lane V/C Ratio	0.04	-	2.496	0.072	-	-
HCM Control Delay (s)	17.3	-	$ 813.8	14.9	-	-
HCM Lane LOS	C	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	16.2	0.2	-	-

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

Intersection	
Int Delay, s/veh	7.5

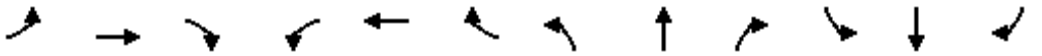
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	49	41	21	1580	1108	21
Future Vol, veh/h	49	41	21	1580	1108	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	420	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	98	98	95	95
Heavy Vehicles, %	2	2	2	9	9	2
Mvmt Flow	61	51	21	1612	1166	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2014	583	1188	0	-	0
Stage 1	1166	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 51	456	583	-	-	-
Stage 1	259	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 49	456	583	-	-	-
Mov Cap-2 Maneuver	~ 49	-	-	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	380	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	194.5	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	583	-	49	456	-	-
HCM Lane V/C Ratio	0.037	-	1.25	0.112	-	-
HCM Control Delay (s)	11.4	-	$ 345.6	13.9	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	5.6	0.4	-	-

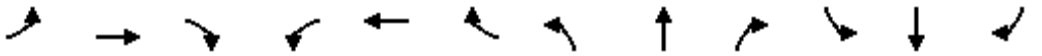
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	12	17	151	13	151	18	1554	54	74	1107	34
Future Volume (veh/h)	64	12	17	151	13	151	18	1554	54	74	1107	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	74	14	20	170	15	170	18	1570	55	91	1367	42
Peak Hour Factor	0.86	0.86	0.86	0.89	0.89	0.89	0.99	0.99	0.99	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	249	49	54	236	22	186	226	1879	887	213	1972	931
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.02	0.56	0.56	0.05	0.59	0.59
Sat Flow, veh/h	738	195	212	714	86	735	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	108	0	0	355	0	0	18	1570	55	91	1367	42
Grp Sat Flow(s),veh/h/ln	1146	0	0	1535	0	0	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	14.3	0.0	0.0	0.4	37.2	1.5	2.0	27.3	1.1
Cycle Q Clear(g_c), s	7.2	0.0	0.0	21.5	0.0	0.0	0.4	37.2	1.5	2.0	27.3	1.1
Prop In Lane	0.69		0.19	0.48		0.48	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	352	0	0	443	0	0	226	1879	887	213	1972	931
V/C Ratio(X)	0.31	0.00	0.00	0.80	0.00	0.00	0.08	0.84	0.06	0.43	0.69	0.05
Avail Cap(c_a), veh/h	396	0	0	492	0	0	283	1879	887	223	1972	931
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	0.0	34.7	0.0	0.0	11.9	17.5	9.7	18.0	13.8	8.4
Incr Delay (d2), s/veh	0.5	0.0	0.0	8.4	0.0	0.0	0.1	4.6	0.1	1.4	2.0	0.1
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(50%),veh/ln	2.1	0.0	0.0	8.8	0.0	0.0	0.1	12.6	0.5	0.9	8.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.9	0.0	0.0	43.1	0.0	0.0	12.0	22.1	9.8	19.4	15.9	8.5
LnGrp LOS	C	A	A	D	A	A	B	C	A	B	B	A
Approach Vol, veh/h		108			355			1643			1500	
Approach Delay, s/veh		29.9			43.1			21.6			15.9	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	58.4		28.8	6.4	61.1		28.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.1	53.9		27.5	5.0	54.0		27.5				
Max Q Clear Time (g_c+I1), s	4.0	39.2		9.2	2.4	29.3		23.5				
Green Ext Time (p_c), s	0.0	8.9		0.5	0.0	10.2		0.8				

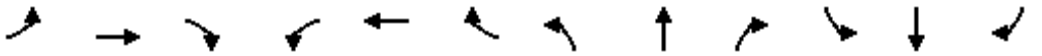
Intersection Summary			
HCM 6th Ctrl Delay		21.6	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	899	11	133	788	215	36	82	167	182	60	59
Future Volume (veh/h)	63	899	11	133	788	215	36	82	167	182	60	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1841	1752	1870	1841	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	67	956	12	146	866	236	44	101	206	219	72	71
Peak Hour Factor	0.94	0.94	0.94	0.91	0.91	0.91	0.81	0.81	0.81	0.83	0.83	0.83
Percent Heavy Veh, %	2	10	4	4	10	2	4	2	4	2	2	2
Cap, veh/h	232	1113	522	249	1211	577	494	157	319	402	306	302
Arrive On Green	0.05	0.33	0.33	0.07	0.36	0.36	0.04	0.29	0.29	0.11	0.35	0.35
Sat Flow, veh/h	1781	3328	1560	1753	3328	1585	1753	549	1120	1781	864	852
Grp Volume(v), veh/h	67	956	12	146	866	236	44	0	307	219	0	143
Grp Sat Flow(s),veh/h/ln	1781	1664	1560	1753	1664	1585	1753	0	1669	1781	0	1717
Q Serve(g_s), s	2.2	24.2	0.5	4.8	20.2	10.0	1.6	0.0	14.5	7.4	0.0	5.3
Cycle Q Clear(g_c), s	2.2	24.2	0.5	4.8	20.2	10.0	1.6	0.0	14.5	7.4	0.0	5.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.50
Lane Grp Cap(c), veh/h	232	1113	522	249	1211	577	494	0	476	402	0	608
V/C Ratio(X)	0.29	0.86	0.02	0.59	0.72	0.41	0.09	0.00	0.65	0.55	0.00	0.24
Avail Cap(c_a), veh/h	268	1312	615	303	1445	688	529	0	476	460	0	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.0	28.0	20.1	21.4	24.6	21.4	21.2	0.0	28.2	19.6	0.0	20.5
Incr Delay (d2), s/veh	0.7	5.2	0.0	2.2	1.4	0.5	0.1	0.0	6.6	1.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	9.3	0.2	1.9	7.2	3.4	0.6	0.0	6.4	3.0	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	33.2	20.1	23.6	26.0	21.9	21.3	0.0	34.8	20.7	0.0	21.4
LnGrp LOS	C	C	C	C	C	C	C	A	C	C	A	C
Approach Vol, veh/h		1035			1248			351			362	
Approach Delay, s/veh		32.3			24.9			33.1			21.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	30.2	11.2	34.6	7.8	36.4	8.6	37.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	24.5	9.5	35.5	5.1	31.9	5.9	39.1
Max Q Clear Time (g_c+I1), s	9.4	16.5	6.8	26.2	3.6	7.3	4.2	22.2
Green Ext Time (p_c), s	0.2	1.1	0.1	4.0	0.0	0.7	0.0	5.6

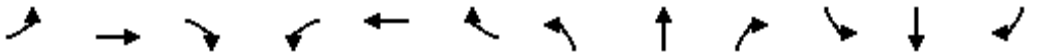
Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	2	4	112	0	126	1	1565	90	119	1626	1
Future Volume (veh/h)	4	2	4	112	0	126	1	1565	90	119	1626	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	6	3	6	129	0	145	1	1581	91	120	1642	1
Peak Hour Factor	0.67	0.67	0.67	0.87	0.87	0.87	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	258	113	226	185	7	161	178	2939	169	275	2259	1067
Arrive On Green	0.20	0.20	0.20	0.20	0.00	0.20	0.00	0.63	0.63	0.04	0.67	0.67
Sat Flow, veh/h	1243	557	1113	675	33	796	1781	4665	268	1781	3357	1585
Grp Volume(v), veh/h	6	0	9	274	0	0	1	1089	583	120	1642	1
Grp Sat Flow(s),veh/h/ln	1243	0	1670	1504	0	0	1781	1608	1718	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.5	18.6	0.0	0.0	0.0	20.8	20.8	2.4	34.4	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.5	19.5	0.0	0.0	0.0	20.8	20.8	2.4	34.4	0.0
Prop In Lane	1.00		0.67	0.47		0.53	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	258	0	338	353	0	0	178	2026	1083	275	2259	1067
V/C Ratio(X)	0.02	0.00	0.03	0.78	0.00	0.00	0.01	0.54	0.54	0.44	0.73	0.00
Avail Cap(c_a), veh/h	318	0	418	425	0	0	258	2026	1083	363	2259	1067
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	35.1	42.6	0.0	0.0	11.5	11.4	11.4	9.6	11.5	5.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	7.3	0.0	0.0	0.0	1.0	1.9	1.1	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(50%),veh/ln	0.1	0.0	0.2	7.8	0.0	0.0	0.0	6.3	7.0	0.8	10.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	0.0	35.1	49.9	0.0	0.0	11.5	12.4	13.3	10.6	13.6	5.9
LnGrp LOS	D	A	D	D	A	A	B	B	B	B	B	A
Approach Vol, veh/h		15			274			1673			1763	
Approach Delay, s/veh		35.1			49.9			12.7			13.4	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	73.7		26.7	4.7	78.4		26.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	10.3	68.7		27.5	5.1	73.9		27.5				
Max Q Clear Time (g_c+I1), s	4.4	22.8		2.6	2.0	36.4		21.5				
Green Ext Time (p_c), s	0.1	14.6		0.0	0.0	15.5		0.8				

Intersection Summary			
HCM 6th Ctrl Delay		15.8	
HCM 6th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	21	6	99	28	221	4	1445	89	146	1600	6
Future Volume (veh/h)	7	21	6	99	28	221	4	1445	89	146	1600	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	10	30	8	106	30	238	4	1490	92	147	1616	6
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	39	93	309	55	9	309	193	2159	1020	259	2293	1083
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.01	0.64	0.64	0.05	0.68	0.68
Sat Flow, veh/h	0	479	1585	0	47	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	40	0	8	136	0	238	4	1490	92	147	1616	6
Grp Sat Flow(s),veh/h/ln	479	0	1585	47	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	16.4	0.1	32.9	2.5	3.1	34.0	0.1
Cycle Q Clear(g_c), s	22.5	0.0	0.5	22.5	0.0	16.4	0.1	32.9	2.5	3.1	34.0	0.1
Prop In Lane	0.25		1.00	0.78		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	132	0	309	65	0	309	193	2159	1020	259	2293	1083
V/C Ratio(X)	0.30	0.00	0.03	2.10	0.00	0.77	0.02	0.69	0.09	0.57	0.70	0.01
Avail Cap(c_a), veh/h	132	0	309	65	0	309	262	2159	1020	376	2293	1083
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	1.00
Uniform Delay (d), s/veh	39.5	0.0	37.6	54.6	0.0	44.1	10.9	13.2	7.8	15.1	11.2	5.8
Incr Delay (d2), s/veh	1.3	0.0	0.0	545.3	0.0	11.3	0.0	1.8	0.2	2.0	1.8	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(50%),veh/ln	1.0	0.0	0.2	11.7	0.0	7.3	0.0	10.5	0.8	1.7	10.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.7	0.0	37.7	599.9	0.0	55.4	11.0	15.0	8.0	17.1	13.0	5.8
LnGrp LOS	D	A	D	F	A	E	B	B	A	B	B	A
Approach Vol, veh/h		48			374			1586			1769	
Approach Delay, s/veh		40.2			253.4			14.6			13.3	
Approach LOS		D			F			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	78.8		27.0	5.1	83.4		27.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	12.8	71.2		22.5	5.1	78.9		22.5				
Max Q Clear Time (g_c+I1), s	5.1	34.9		24.5	2.1	36.0		24.5				
Green Ext Time (p_c), s	0.2	13.6		0.0	0.0	15.8		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			38.0									
HCM 6th LOS			D									

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	8	136	238	4	1490	92	147	1616	6
v/c Ratio	0.16	0.03	0.68	0.67	0.02	0.69	0.09	0.52	0.64	0.00
Control Delay	42.4	0.2	62.3	27.5	4.5	15.1	2.1	12.0	9.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.4	0.2	62.3	27.5	4.5	15.1	2.1	12.0	9.1	0.0
Queue Length 50th (ft)	25	0	91	58	1	307	0	21	216	0
Queue Length 95th (ft)	46	0	163	148	4	517	20	61	494	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	354	402	287	444	234	2167	1068	344	2509	1212
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.02	0.47	0.54	0.02	0.69	0.09	0.43	0.64	0.00

Intersection Summary

Intersection	
Int Delay, s/veh	893.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	200	599	141	1377	1606	161
Future Vol, veh/h	200	599	141	1377	1606	161
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	170	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	98	98	90	90
Heavy Vehicles, %	10	10	10	9	9	10
Mvmt Flow	211	631	144	1405	1784	179

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2775	892	1963	0	-	0
Stage 1	1784	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Critical Hdwy	7	7.1	4.3	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.6	3.4	2.3	-	-	-
Pot Cap-1 Maneuver	~ 13	~ 270	263	-	-	-
Stage 1	~ 110	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 6	~ 270	263	-	-	-
Mov Cap-2 Maneuver	~ 6	-	-	-	-	-
Stage 1	~ 50	-	-	-	-	-
Stage 2	302	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 4621	3.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	263	-	6	270	-	-
HCM Lane V/C Ratio	0.547	-	35.088	2.335	-	-
HCM Control Delay (s)	34.1	$	16539	$ 641.7	-	-
HCM Lane LOS	D	-	F	F	-	-
HCM 95th %tile Q(veh)	3	-	28.4	49.8	-	-

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

Intersection	
Int Delay, s/veh	424.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	127	37	49	1423	1917	192
Future Vol, veh/h	127	37	49	1423	1917	192
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	425	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	98	98	90	90
Heavy Vehicles, %	2	2	2	9	9	2
Mvmt Flow	159	46	50	1452	2130	213

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2956	1065	2343	0	-	0
Stage 1	2130	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Critical Hdwy	6.29	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 18	188	83	-	-	-
Stage 1	~ 47	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 7	188	83	-	-	-
Mov Cap-2 Maneuver	~ 7	-	-	-	-	-
Stage 1	~ 19	-	-	-	-	-
Stage 2	380	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	8359.3	3.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	83	-	7	188	-	-
HCM Lane V/C Ratio	0.602	-	22.679	0.246	-	-
HCM Control Delay (s)	99.5	-	$ 10785.9	30.3	-	-
HCM Lane LOS	F	-	F	D	-	-
HCM 95th %tile Q(veh)	2.7	-	21.7	0.9	-	-

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

Intersection	
Int Delay, s/veh	76.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	58	58	66	1392	1892	66
Future Vol, veh/h	58	58	66	1392	1892	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	420	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	98	98	90	90
Heavy Vehicles, %	2	2	2	9	9	2
Mvmt Flow	73	73	67	1420	2102	73

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2946	1051	2175	0	-	0
Stage 1	2102	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 12	223	241	-	-	-
Stage 1	80	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 9	223	241	-	-	-
Mov Cap-2 Maneuver	~ 9	-	-	-	-	-
Stage 1	~ 58	-	-	-	-	-
Stage 2	382	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $	2006.9	1.2	0
HCM LOS	F		

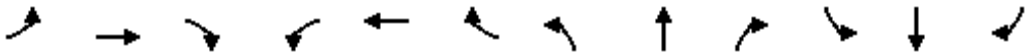
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	241	-	9	223	-	-
HCM Lane V/C Ratio	0.279	-	8.056	0.325	-	-
HCM Control Delay (s)	25.6	-	$ 3985	28.7	-	-
HCM Lane LOS	D	-	F	D	-	-
HCM 95th %tile Q(veh)	1.1	-	10.5	1.3	-	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	29	28	154	46	134	51	1482	79	216	1740	99
Future Volume (veh/h)	57	29	28	154	46	134	51	1482	79	216	1740	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	73	37	36	192	58	168	52	1497	80	227	1832	104
Peak Hour Factor	0.78	0.78	0.78	0.80	0.80	0.80	0.99	0.99	0.99	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	212	107	86	243	62	169	141	1642	775	259	1816	858
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.49	0.49	0.09	0.54	0.54
Sat Flow, veh/h	553	376	304	669	218	596	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	146	0	0	418	0	0	52	1497	80	227	1832	104
Grp Sat Flow(s),veh/h/ln	1232	0	0	1483	0	0	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	0.0	0.0	0.0	19.1	0.0	0.0	1.4	40.8	2.7	6.9	53.7	3.2
Cycle Q Clear(g_c), s	8.8	0.0	0.0	27.9	0.0	0.0	1.4	40.8	2.7	6.9	53.7	3.2
Prop In Lane	0.50		0.25	0.46		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	405	0	0	475	0	0	141	1642	775	259	1816	858
V/C Ratio(X)	0.36	0.00	0.00	0.88	0.00	0.00	0.37	0.91	0.10	0.88	1.01	0.12
Avail Cap(c_a), veh/h	405	0	0	475	0	0	162	1642	775	274	1816	858
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	35.4	0.0	0.0	23.3	23.4	13.6	25.1	22.8	11.2
Incr Delay (d2), s/veh	0.5	0.0	0.0	17.2	0.0	0.0	1.6	9.2	0.3	24.9	23.2	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(50%),veh/ln	2.8	0.0	0.0	11.9	0.0	0.0	0.6	15.7	0.9	4.1	23.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	0.0	0.0	52.6	0.0	0.0	24.9	32.6	13.9	50.1	46.0	11.5
LnGrp LOS	C	A	A	D	A	A	C	C	B	D	F	B
Approach Vol, veh/h		146			418			1629			2163	
Approach Delay, s/veh		28.8			52.6			31.4			44.8	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	53.0		32.7	8.3	58.2		32.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	9.8	48.5		28.2	5.0	53.3		28.2				
Max Q Clear Time (g_c+I1), s	8.9	42.8		10.8	3.4	55.7		29.9				
Green Ext Time (p_c), s	0.1	4.1		0.7	0.0	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			40.0									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	883	42	275	854	229	15	95	101	212	190	68
Future Volume (veh/h)	99	883	42	275	854	229	15	95	101	212	190	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1752	1841	1841	1752	1870	1841	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	104	929	44	324	1005	269	16	103	110	238	213	76
Peak Hour Factor	0.95	0.95	0.95	0.85	0.85	0.85	0.92	0.92	0.92	0.89	0.89	0.89
Percent Heavy Veh, %	2	10	4	4	10	2	4	2	4	2	2	2
Cap, veh/h	248	1071	502	367	1363	649	308	175	187	413	415	148
Arrive On Green	0.06	0.32	0.32	0.14	0.41	0.41	0.02	0.21	0.21	0.12	0.32	0.32
Sat Flow, veh/h	1781	3328	1560	1753	3328	1585	1753	828	884	1781	1316	470
Grp Volume(v), veh/h	104	929	44	324	1005	269	16	0	213	238	0	289
Grp Sat Flow(s),veh/h/ln	1781	1664	1560	1753	1664	1585	1753	0	1711	1781	0	1786
Q Serve(g_s), s	3.5	23.5	1.8	10.4	22.9	10.8	0.6	0.0	10.0	8.9	0.0	11.9
Cycle Q Clear(g_c), s	3.5	23.5	1.8	10.4	22.9	10.8	0.6	0.0	10.0	8.9	0.0	11.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.52	1.00		0.26
Lane Grp Cap(c), veh/h	248	1071	502	367	1363	649	308	0	363	413	0	563
V/C Ratio(X)	0.42	0.87	0.09	0.88	0.74	0.41	0.05	0.00	0.59	0.58	0.00	0.51
Avail Cap(c_a), veh/h	288	1221	572	485	1663	792	374	0	363	417	0	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	28.6	21.2	19.4	22.4	18.8	26.9	0.0	31.8	22.5	0.0	25.1
Incr Delay (d2), s/veh	1.1	6.2	0.1	14.1	1.4	0.4	0.1	0.0	6.8	1.9	0.0	3.3
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(50%),veh/ln	1.3	9.2	0.6	4.9	8.0	3.5	0.3	0.0	4.7	3.8	0.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	34.8	21.3	33.5	23.8	19.3	26.9	0.0	38.6	24.4	0.0	28.4
LnGrp LOS	C	C	C	C	C	B	C	A	D	C	A	C
Approach Vol, veh/h		1077			1598			229			527	
Approach Delay, s/veh		32.9			25.0			37.8			26.6	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	23.5	17.4	33.4	6.1	32.8	9.6	41.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.1	19.0	19.0	32.9	5.0	25.1	7.1	44.8
Max Q Clear Time (g_c+I1), s	10.9	12.0	12.4	25.5	2.6	13.9	5.5	24.9
Green Ext Time (p_c), s	0.0	0.6	0.5	3.3	0.0	1.2	0.0	7.2

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	33	6	53	17	178	5	1395	50	89	948	6
Future Volume (veh/h)	6	33	6	53	17	178	5	1395	50	89	948	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	8	43	8	56	18	187	5	1468	53	105	1115	7
Peak Hour Factor	0.77	0.77	0.77	0.95	0.95	0.95	0.95	0.95	0.95	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	12	65	66	192	62	223	306	1948	920	250	2091	988
Arrive On Green	0.04	0.04	0.04	0.14	0.14	0.14	0.01	0.58	0.58	0.05	0.62	0.62
Sat Flow, veh/h	291	1565	1585	1364	438	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	51	0	8	74	0	187	5	1468	53	105	1115	7
Grp Sat Flow(s),veh/h/ln	1856	0	1585	1802	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	2.6	0.0	0.5	3.5	0.0	11.0	0.1	31.2	1.4	2.1	17.9	0.2
Cycle Q Clear(g_c), s	2.6	0.0	0.5	3.5	0.0	11.0	0.1	31.2	1.4	2.1	17.9	0.2
Prop In Lane	0.16		1.00	0.76		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	77	0	66	254	0	223	306	1948	920	250	2091	988
V/C Ratio(X)	0.66	0.00	0.12	0.29	0.00	0.84	0.02	0.75	0.06	0.42	0.53	0.01
Avail Cap(c_a), veh/h	398	0	340	358	0	315	387	1948	920	293	2091	988
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	1.00
Uniform Delay (d), s/veh	45.2	0.0	44.2	36.8	0.0	40.0	9.2	15.0	8.7	14.5	10.2	6.8
Incr Delay (d2), s/veh	9.4	0.0	0.8	0.6	0.0	12.8	0.0	2.8	0.1	1.1	1.0	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(50%),veh/ln	1.4	0.0	0.2	1.6	0.0	5.0	0.0	10.1	0.4	0.8	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.6	0.0	45.0	37.4	0.0	52.9	9.2	17.7	8.8	15.6	11.2	6.8
LnGrp LOS	D	A	D	D	A	D	A	B	A	B	B	A
Approach Vol, veh/h		59			261			1526			1227	
Approach Delay, s/veh		53.3			48.5			17.4			11.5	
Approach LOS		D			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	60.0		8.5	5.1	64.1		18.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.0	55.5		20.5	5.0	57.5		19.0				
Max Q Clear Time (g_c+I1), s	4.1	33.2		4.6	2.1	19.9		13.0				
Green Ext Time (p_c), s	0.1	10.7		0.2	0.0	8.5		0.5				

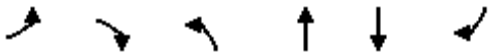
Intersection Summary			
HCM 6th Ctrl Delay		18.4	
HCM 6th LOS		B	

Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	51	8	74	187	5	1468	53	105	1115	7
v/c Ratio	0.33	0.04	0.42	0.58	0.01	0.76	0.06	0.45	0.49	0.01
Control Delay	48.9	0.3	49.8	14.2	6.6	19.9	0.7	13.7	10.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.9	0.3	49.8	14.2	6.6	19.9	0.7	13.7	10.1	0.0
Queue Length 50th (ft)	31	0	44	0	1	352	0	19	153	0
Queue Length 95th (ft)	59	0	91	63	5	521	5	45	290	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	397	415	358	465	339	1930	962	237	2261	1110
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.02	0.21	0.40	0.01	0.76	0.06	0.44	0.49	0.01

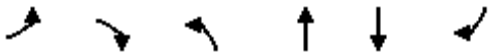
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	87	342	203	1487	836	193
Future Volume (veh/h)	87	342	203	1487	836	193
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1767	1767	1752
Adj Flow Rate, veh/h	97	380	207	1517	880	203
Peak Hour Factor	0.90	0.90	0.98	0.98	0.95	0.95
Percent Heavy Veh, %	10	10	10	9	9	10
Cap, veh/h	280	439	421	2529	2200	973
Arrive On Green	0.17	0.17	0.06	0.75	0.66	0.66
Sat Flow, veh/h	1668	2613	1668	3445	3445	1485
Grp Volume(v), veh/h	97	380	207	1517	880	203
Grp Sat Flow(s),veh/h/ln	1668	1306	1668	1678	1678	1485
Q Serve(g_s), s	5.9	16.3	4.4	23.3	14.1	6.3
Cycle Q Clear(g_c), s	5.9	16.3	4.4	23.3	14.1	6.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	280	439	421	2529	2200	973
V/C Ratio(X)	0.35	0.87	0.49	0.60	0.40	0.21
Avail Cap(c_a), veh/h	356	558	606	2529	2200	973
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	42.2	46.5	6.7	6.4	9.2	7.9
Incr Delay (d2), s/veh	0.7	11.2	0.9	1.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	11.8	1.2	5.7	4.3	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.9	57.7	7.6	7.4	9.8	8.4
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	477			1724	1083	
Approach Delay, s/veh	54.7			7.4	9.5	
Approach LOS	D			A	A	

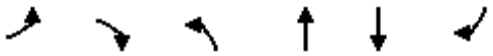
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		91.0		23.8	11.3	79.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		86.5		24.5	19.5	62.5
Max Q Clear Time (g_c+I1), s		25.3		18.3	6.4	16.1
Green Ext Time (p_c), s		15.2		1.0	0.4	7.1

Intersection Summary		
HCM 6th Ctrl Delay		15.0
HCM 6th LOS		B



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	97	380	207	1517	880	203
v/c Ratio	0.54	0.61	0.43	0.57	0.39	0.19
Control Delay	56.8	9.1	5.5	5.0	8.4	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.8	9.1	5.5	5.0	8.4	1.5
Queue Length 50th (ft)	64	0	24	150	121	0
Queue Length 95th (ft)	118	46	51	246	196	26
Internal Link Dist (ft)	526			4102	2365	
Turn Bay Length (ft)			170			
Base Capacity (vph)	375	884	595	2674	2268	1069
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.43	0.35	0.57	0.39	0.19

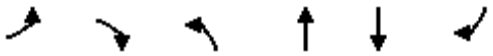
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	140	24	12	1619	1104	58
Future Volume (veh/h)	140	24	12	1619	1104	58
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1767	1767	1870
Adj Flow Rate, veh/h	165	28	12	1652	1162	61
Peak Hour Factor	0.85	0.85	0.98	0.98	0.95	0.95
Percent Heavy Veh, %	2	2	2	9	9	2
Cap, veh/h	200	178	405	2702	3882	1276
Arrive On Green	0.11	0.11	0.80	0.80	0.80	0.80
Sat Flow, veh/h	1781	1585	456	3445	4982	1585
Grp Volume(v), veh/h	165	28	12	1652	1162	61
Grp Sat Flow(s),veh/h/ln	1781	1585	456	1678	1608	1585
Q Serve(g_s), s	9.9	1.7	0.8	20.6	6.7	0.8
Cycle Q Clear(g_c), s	9.9	1.7	7.5	20.6	6.7	0.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	200	178	405	2702	3882	1276
V/C Ratio(X)	0.82	0.16	0.03	0.61	0.30	0.05
Avail Cap(c_a), veh/h	385	343	405	2702	3882	1276
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	47.2	43.6	3.7	4.1	2.7	2.2
Incr Delay (d2), s/veh	8.3	0.4	0.1	1.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.7	0.1	3.5	1.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	55.5	44.0	3.8	5.1	2.9	2.2
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	193			1664	1223	
Approach Delay, s/veh	53.8			5.1	2.9	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		92.0		16.7		92.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		87.5		23.5		87.5
Max Q Clear Time (g_c+I1), s		22.6		11.9		8.7
Green Ext Time (p_c), s		18.6		0.4		9.6

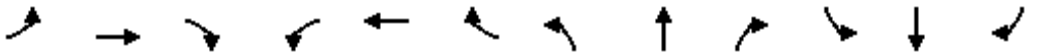
Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	49	41	21	1580	1108	21
Future Volume (veh/h)	49	41	21	1580	1108	21
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1767	1767	1870
Adj Flow Rate, veh/h	61	51	21	1612	1166	22
Peak Hour Factor	0.80	0.80	0.98	0.98	0.95	0.95
Percent Heavy Veh, %	2	2	2	9	9	2
Cap, veh/h	95	84	440	2885	2885	1362
Arrive On Green	0.05	0.05	0.86	0.86	0.86	0.86
Sat Flow, veh/h	1781	1585	472	3445	3445	1585
Grp Volume(v), veh/h	61	51	21	1612	1166	22
Grp Sat Flow(s),veh/h/ln	1781	1585	472	1678	1678	1585
Q Serve(g_s), s	3.5	3.2	1.0	13.4	7.7	0.2
Cycle Q Clear(g_c), s	3.5	3.2	8.7	13.4	7.7	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	95	84	440	2885	2885	1362
V/C Ratio(X)	0.65	0.61	0.05	0.56	0.40	0.02
Avail Cap(c_a), veh/h	389	346	440	2885	2885	1362
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	47.8	47.7	2.5	2.0	1.6	1.0
Incr Delay (d2), s/veh	7.2	6.8	0.2	0.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.4	0.1	0.3	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	55.0	54.5	2.7	2.7	2.0	1.1
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	112			1633	1188	
Approach Delay, s/veh	54.8			2.7	2.0	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		93.0		10.0		93.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		88.5		22.5		88.5
Max Q Clear Time (g_c+I1), s		15.4		5.5		9.7
Green Ext Time (p_c), s		18.3		0.2		9.8

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	21	6	99	28	221	4	1445	89	146	1600	6
Future Volume (veh/h)	7	21	6	99	28	221	4	1445	89	146	1600	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1767	1870	1870	1767	1870
Adj Flow Rate, veh/h	10	30	8	106	30	238	4	1490	92	147	1616	6
Peak Hour Factor	0.71	0.71	0.71	0.93	0.93	0.93	0.97	0.97	0.97	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	9	2	2	9	2
Cap, veh/h	17	51	58	242	68	273	156	1880	888	233	2039	963
Arrive On Green	0.04	0.04	0.04	0.17	0.17	0.17	0.01	0.56	0.56	0.05	0.61	0.61
Sat Flow, veh/h	462	1385	1585	1403	397	1585	1781	3357	1585	1781	3357	1585
Grp Volume(v), veh/h	40	0	8	136	0	238	4	1490	92	147	1616	6
Grp Sat Flow(s),veh/h/ln	1847	0	1585	1800	0	1585	1781	1678	1585	1781	1678	1585
Q Serve(g_s), s	2.2	0.0	0.5	6.8	0.0	14.8	0.1	35.4	2.7	3.3	36.8	0.2
Cycle Q Clear(g_c), s	2.2	0.0	0.5	6.8	0.0	14.8	0.1	35.4	2.7	3.3	36.8	0.2
Prop In Lane	0.25		1.00	0.78		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	0	58	310	0	273	156	1880	888	233	2039	963
V/C Ratio(X)	0.59	0.00	0.14	0.44	0.00	0.87	0.03	0.79	0.10	0.63	0.79	0.01
Avail Cap(c_a), veh/h	320	0	275	373	0	328	235	1880	888	264	2039	963
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	1.00
Uniform Delay (d), s/veh	47.8	0.0	47.0	37.4	0.0	40.7	14.7	17.5	10.4	19.5	15.0	7.8
Incr Delay (d2), s/veh	7.9	0.0	1.1	1.0	0.0	19.2	0.1	3.5	0.2	3.9	3.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.2	3.0	0.0	7.1	0.0	12.1	0.9	2.0	11.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	0.0	48.1	38.4	0.0	59.8	14.8	21.1	10.6	23.5	18.2	7.8
LnGrp LOS	E	A	D	D	A	E	B	C	B	C	B	A
Approach Vol, veh/h		48			374			1586			1769	
Approach Delay, s/veh		54.5			52.0			20.4			18.6	
Approach LOS		D			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	61.0		8.2	5.0	65.8		21.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.1	56.5		17.5	5.0	58.6		20.9				
Max Q Clear Time (g_c+I1), s	5.3	37.4		4.2	2.1	38.8		16.8				
Green Ext Time (p_c), s	0.1	10.1		0.1	0.0	11.1		0.6				

Intersection Summary			
HCM 6th Ctrl Delay		23.2	
HCM 6th LOS		C	

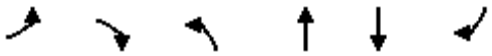
Notes

User approved pedestrian interval to be less than phase max green.

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	8	136	238	4	1490	92	147	1616	6
v/c Ratio	0.28	0.04	0.58	0.57	0.02	0.77	0.10	0.64	0.71	0.01
Control Delay	50.6	0.3	51.4	11.3	8.0	21.6	3.0	26.8	15.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	0.3	51.4	11.3	8.0	21.6	3.0	26.8	15.4	0.0
Queue Length 50th (ft)	25	0	85	0	1	393	0	31	324	0
Queue Length 95th (ft)	48	0	151	68	6	602	25	#139	#727	0
Internal Link Dist (ft)	531		522			1912			3513	
Turn Bay Length (ft)		220		420	230		200	310		400
Base Capacity (vph)	331	362	385	527	197	1924	959	228	2263	1111
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.02	0.35	0.45	0.02	0.77	0.10	0.64	0.71	0.01

Intersection Summary

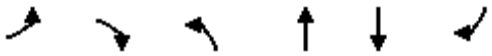
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	200	599	141	1377	1606	161
Future Volume (veh/h)	200	599	141	1377	1606	161
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1767	1767	1752
Adj Flow Rate, veh/h	211	631	144	1405	1784	179
Peak Hour Factor	0.95	0.95	0.98	0.98	0.90	0.90
Percent Heavy Veh, %	10	10	10	9	9	10
Cap, veh/h	368	702	179	2364	2077	918
Arrive On Green	0.22	0.22	0.05	0.70	0.62	0.62
Sat Flow, veh/h	1668	2613	1668	3445	3445	1485
Grp Volume(v), veh/h	211	631	144	1405	1784	179
Grp Sat Flow(s),veh/h/ln	1668	1306	1668	1678	1678	1485
Q Serve(g_s), s	13.5	26.5	3.6	25.6	51.9	6.3
Cycle Q Clear(g_c), s	13.5	26.5	3.6	25.6	51.9	6.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	368	702	179	2364	2077	918
V/C Ratio(X)	0.57	0.90	0.80	0.59	0.86	0.19
Avail Cap(c_a), veh/h	368	702	306	2364	2077	918
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	41.7	42.3	27.8	9.0	18.6	9.9
Incr Delay (d2), s/veh	2.1	14.5	8.2	1.1	4.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	19.6	2.9	7.4	18.0	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.8	56.8	36.0	10.1	23.5	10.4
LnGrp LOS	D	E	D	B	C	B
Approach Vol, veh/h	842			1549	1963	
Approach Delay, s/veh	53.5			12.5	22.3	
Approach LOS	D			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		89.0		31.0	10.3	78.7
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		84.5		26.5	14.9	65.1
Max Q Clear Time (g_c+I1), s		27.6		28.5	5.6	53.9
Green Ext Time (p_c), s		13.1		0.0	0.2	8.4

Intersection Summary	
HCM 6th Ctrl Delay	24.9
HCM 6th LOS	C



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	211	631	144	1405	1784	179
v/c Ratio	0.75	0.73	0.57	0.57	0.91	0.19
Control Delay	61.3	37.7	30.7	7.9	29.8	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.3	37.7	30.7	7.9	29.8	4.1
Queue Length 50th (ft)	147	222	50	201	568	12
Queue Length 95th (ft)	230	286	127	321	#891	49
Internal Link Dist (ft)	526			4102	2365	
Turn Bay Length (ft)			170			
Base Capacity (vph)	385	900	276	2480	1962	926
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.70	0.52	0.57	0.91	0.19

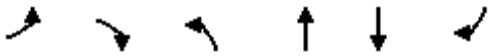
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	127	37	49	1423	1917	192
Future Volume (veh/h)	127	37	49	1423	1917	192
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1767	1767	1870
Adj Flow Rate, veh/h	159	46	50	1452	2130	213
Peak Hour Factor	0.80	0.80	0.98	0.98	0.90	0.90
Percent Heavy Veh, %	2	2	2	9	9	2
Cap, veh/h	193	172	166	2722	3911	1285
Arrive On Green	0.11	0.11	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1781	1585	153	3445	4982	1585
Grp Volume(v), veh/h	159	46	50	1452	2130	213
Grp Sat Flow(s),veh/h/ln	1781	1585	153	1678	1608	1585
Q Serve(g_s), s	9.8	3.0	18.3	16.1	16.7	3.3
Cycle Q Clear(g_c), s	9.8	3.0	34.9	16.1	16.7	3.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	193	172	166	2722	3911	1285
V/C Ratio(X)	0.82	0.27	0.30	0.53	0.54	0.17
Avail Cap(c_a), veh/h	327	291	166	2722	3911	1285
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	48.7	45.7	9.5	3.5	3.6	2.3
Incr Delay (d2), s/veh	8.5	0.8	4.6	0.8	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	1.2	0.7	2.7	2.5	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	57.2	46.5	14.1	4.3	4.1	2.6
LnGrp LOS	E	D	B	A	A	A
Approach Vol, veh/h	205			1502	2343	
Approach Delay, s/veh	54.8			4.6	4.0	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		95.0		16.6		95.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		90.5		20.5		90.5
Max Q Clear Time (g_c+I1), s		36.9		11.8		18.7
Green Ext Time (p_c), s		18.8		0.4		31.0

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	58	58	66	1392	1892	66
Future Volume (veh/h)	58	58	66	1392	1892	66
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1767	1767	1870
Adj Flow Rate, veh/h	72	72	67	1420	2102	73
Peak Hour Factor	0.80	0.80	0.98	0.98	0.90	0.90
Percent Heavy Veh, %	2	2	2	9	9	2
Cap, veh/h	117	104	176	2850	2850	1346
Arrive On Green	0.07	0.07	0.85	0.85	0.85	0.85
Sat Flow, veh/h	1781	1585	181	3445	3445	1585
Grp Volume(v), veh/h	72	72	67	1420	2102	73
Grp Sat Flow(s),veh/h/ln	1781	1585	181	1678	1678	1585
Q Serve(g_s), s	4.1	4.7	24.9	11.7	26.6	0.8
Cycle Q Clear(g_c), s	4.1	4.7	51.6	11.7	26.6	0.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	117	104	176	2850	2850	1346
V/C Ratio(X)	0.62	0.69	0.38	0.50	0.74	0.05
Avail Cap(c_a), veh/h	363	323	176	2850	2850	1346
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	48.0	48.2	13.6	2.1	3.2	1.3
Incr Delay (d2), s/veh	5.2	8.0	6.1	0.6	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.1	1.1	0.8	1.9	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	53.2	56.3	19.7	2.7	5.0	1.3
LnGrp LOS	D	E	B	A	A	A
Approach Vol, veh/h	144			1487	2175	
Approach Delay, s/veh	54.7			3.5	4.8	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		94.0		11.4		94.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		89.5		21.5		89.5
Max Q Clear Time (g_c+I1), s		53.6		6.7		28.6
Green Ext Time (p_c), s		16.4		0.3		30.1

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A