Transportation Analysis

Lower Woolsey Henry 780

DRI #2808

Henry County, GA

Report Prepared:
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Prepared for:
Falcon Design Consultants, LLC
235 Corporate Center Drive, Suite 200
Stockbridge, GA 30281

Prepared by:
VHB
1355 Peachtree Street NE, Suite 100
Atlanta, GA 30309

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Executive Summary

The proposed Lower Woolsey Road Industrial Development by Lower Woolsey Henry 780, LLC in Henry County, GA has been designated a development of regional impact (DRI) necessitating an analysis of the impact the proposed development will have on the surrounding roadway network. The proposed development is expected to generate 8,862 trips per day of which 506 will occur during the AM peak hour and 633 will occur during the PM peak hour. The following scenarios were analyzed to determine the impact of the proposed development:

- 2018 Existing Conditions
- 2023 No-Build Conditions
- 2023 Build Conditions

All roadway segments operate at or above the standard LOS for all conditions. It is recommended that Wilkins Road, currently partially a gravel road, be paved from the northern site access point to the existing pavement for safety and comfort of drivers.

Three intersections were identified that need improvements to bring the intersections into compliance with LOS standards:

- US 19/41 at Speedway Boulevard/Revolutionary Drive
- US 19/41 at Lower Woolsey Road
- SR 92 at Hampton Road

These intersections operate at LOS F during at least one peak hour in both the future no-build and future build conditions. The recommended improvements bring the intersections into compliance with LOS standards in the future no-build conditions and were tested in the build conditions to determine additional improvements needed to accommodate project traffic. The intersections operate at an acceptable LOS in the future build conditions with identified improvements; no additional improvements are needed to accommodate project traffic.

A site access analysis was also performed to determine improvements needed at the new intersections created by the driveways to the proposed development.

Table 1 presents projects that have been identified to improve the LOS of the transportation network to accommodate projected background traffic volumes.

TABLE 1: RECOMMENDED IMPROVEMENT PROJECTS TO ACCOMMODATE BACKGROUND TRAFFIC

Location	Improvement Description	Estimated Cost	Sponsor/ Funding Source	Timing
US 19/41 at Speedway Blvd/ Revolutionary Dr	Upgrade TWSC to signalized control	$750,000	Henry County	Perform signal warrant analysis after development build-out
US 19/41 at Lower Woolsey Rd	Upgrade TWSC to signalized control	$750,000	Henry County	Perform signal warrant analysis after development build-out
SR 92 at Hampton Rd	Construct 200' right-turn lane on WB approach	$225,000	Fayette County	Short-term

Table 2 lists additional projects that the developer of the proposed DRI will be responsible for implementing to maintain an acceptable LOS on the roadway network upon construction of the proposed development.

TABLE 2: RECOMMENDED IMPROVEMENT PROJECTS TO ACCOMMODATE PROJECT TRAFFIC

Location	Improvement Description	Estimated Cost	Sponsor/ Funding Source	Timing
Northern Site Access	TWSC on NB approach	unknown	Developer	At build-out
Southern Site Access	-TWSC on SB approach. -200' right-turn lane on SB approach. -Construct 350' right-turn lane on WB approach.	unknown	Developer	At build-out
Wilkins Rd	Pave road from existing pavement to northern site access	$800,000	Developer	At build-out

Introduction

This traffic report documents the impacts of the proposed Lower Woolsey Road Industrial Development by Lower Woolsey Henry 780, LLC in Henry County, GA. This site has been designated a Development of Regional Impact (DRI) due to a rezoning request and because the proposed size of the industrial development exceeds the DRI threshold of 500,000 gross square feet as mandated in the Rules of Georgia Department of Community Affairs, Chapter 110-12-7-.05. Per state law (OCGA §50-32-14), Georgia Regional Transportation Authority (GRTA) is required to review all DRIs within its 13-county metro Atlanta jurisdiction for their impacts on surrounding transportation infrastructure. This traffic analysis follows guidelines set forth in the GRTA DRI Review Package Technical Guidelines adopted on January 9, 2013 and methodology agreed upon during a methodology meeting on June 15, 2018 documented in a letter of understanding sent by GRTA on July 2, 2018 included in **Appendix A**.

Background Information

Project Description

The proposed Lower Woolsey Road Industrial Development is a 684-acre site located north of Lower Woolsey Road, south of Wilkins Road and west of the Henry County Airport in Henry County, GA. A small portion, about 33 acres, of the proposed development is in Clayton County. A location map is provided in **Figure 1**.

Local Plan Summary

The *Henry Joint County/Cities Comprehensive Transportation Plan* (JCTP) was adopted in June 2016. The plan analyzed exiting conditions, assessed current and projected transportation needs, and recommended projects throughout Henry County to meet existing and future transportation needs. The plan discusses expected increases in industrial development near McDonough, Stockbridge, and Hampton and notes that should expansion plans come to fruition the roadway network may need to accommodate significant increases in truck traffic. While the county recognizes the need for improvements to the roadway network to accommodate increased truck traffic, there are no transportation improvement projects in the short-term work program within the vicinity of the proposed development.

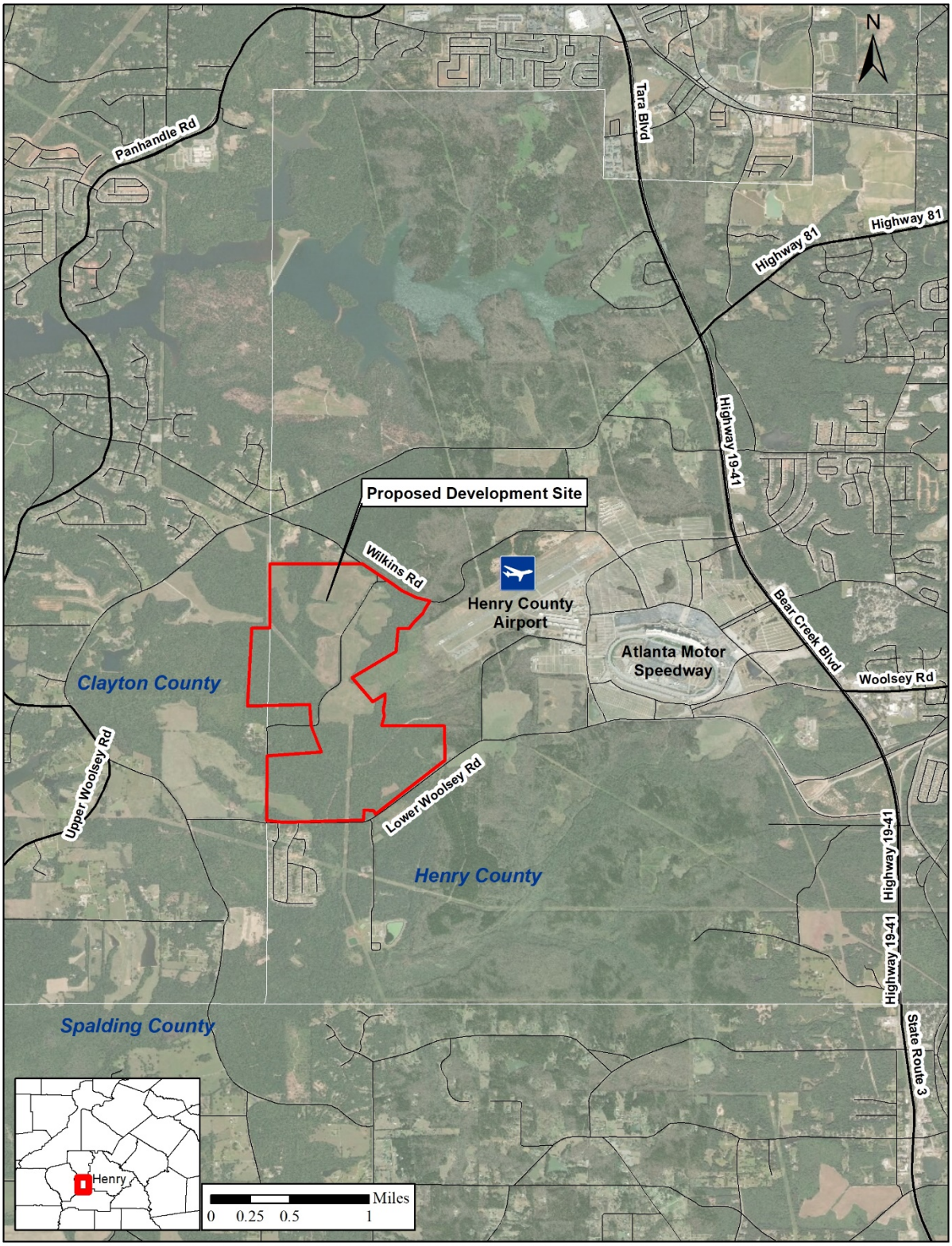


FIGURE 1: LOCATION MAP

Site Plan

The property is currently zoned as residential agricultural and the proposed land use is M-1 Industrial. When built out, the site will contain seven buildings, each ranging from 665,000 square feet to 1,000,000 square feet, totaling 6,330,000 square feet of building space. Projected build-out of the development will take place in one phase and is expected to be completed by 2023. The property will be accessible from Lower Woolsey Road from the south and Wilkins Road from the north. A detailed site plan is included in **Appendix B**.

Bicycle and Pedestrian Facilities

There are no existing bicycle or pedestrian facilities that provide access to the proposed development. The *Henry Joint County/Cities Transportation Plan,* adopted in May 2016, and *Clayton County Greenway Master Plan,* adopted in February 2015, were reviewed for planned pedestrian and multi-use trail projects. No pedestrian or bicycle projects were identified in these plans within the vicinity of the proposed development. Furthermore, there are no plans to construct additional bicycle or pedestrian facilities due to the rural location of the proposed development.

Transit Facilities

There are no existing transit routes within the vicinity of the proposed development. The *Henry Joint County/Cities Transportation Plan,* adopted in May 2016, was reviewed for planned transit projects near the proposed development. There are no transit projects near the proposed development site with funding identified. One illustrative transit project proposes a route that would include service on US 19/41 near the proposed development, but there is no timeline or funding specified for the project. There are no plans to provide transit facilities at the proposed development.

Trip Generation

The *ITE Trip Generation Manual, 10th Edition* was used to estimate the number of gross trip ends generated by the proposed development. The proposed development fits the description for High-Cube Transload and Short-Term Storage Warehouse (Land Use Code 154) from the trip generation manual. **Table 3** presents the daily and peak hour trips generated by the proposed development for this land use type. Relevant sheets from the trip generation manual are included in **Appendix C**.

TABLE 3: GROSS TRIP ENDS GENERATED BY PROPOSED DEVELOPMENT

ITE Land Use Code	Description	Qty	Unit	AM Peak Hour			PM Peak Hour			Daily		
				In	Out	Total	In	Out	Total	In	Out	Total
154	High-Cube Transload and Short-Term Storage Warehouse	6,330	1,000 SF	390	116	506	177	456	633	4,431	4,431	8,862

This analysis assumes no reduction in trips due to internal capture or alternate transportation modes. Furthermore, all trips generated by the proposed development are new trips being added to the network, i.e. no pass-by trips.

A high proportion of trips generated by this development will be heavy vehicle trips. The report *High-Cube Warehouse Vehicle Trip Generation Analysis* published by the Institute of Transportation Engineers (ITE) in October 2016 analyzed 100 sites and found a significant correlation between the number of cars and the total number of vehicles that enter and exit a high-cube warehouse site. The proportion of passenger cars to total vehicles is presented in **Table 4**. These proportions were used to calculate the number of passenger car and truck trips entering and exiting the proposed development.

TABLE 4: WEIGHTED AVERAGES FOR PERCENTAGE OF TOTAL DAILY VEHICLES THAT ARE CARS

Type of High-Cube Warehouse		Percent Vehicles		
		Daily	AM Peak Hour	PM Peak Hour
Short-Term Storage, Transload & Cold Storage	Passenger Cars	67.8%	69.2%	78.3%
	Trucks	32.2%	30.8%	21.7%

Source: *High-Cube Warehouse Vehicle Trip Generation Analysis,* Table 4

Trip Distribution

Passenger car and truck trips were distributed throughout the roadway network following existing travel patterns. Turning movement counts were collected at 10 intersections early in the study process because schools were close to releasing for summer vacation. Turning proportions observed at each intersection were used as the basis for distributing project passenger car trips. Truck trips were distributed following a similar procedure with a few key assumptions:

- No trucks will be allowed on Wilkins Road between Upper Woolsey Road and the northern site access point;
- 5% of trucks are expected to travel westbound on Lower Woolsey Road, all other truck traffic is expected to travel eastbound from the proposed development;
- Truck trips will stay primarily on high capacity routes like US 19/41 and SR 20.

Passenger car and truck distributions were presented to GRTA during and immediately following the June 15th methodology meeting. Distribution of project traffic for passenger cars and trucks is presented in **Appendix D**.

Study Network

Per Section 4-110 of the GRTA DRI Review Technical Guidelines, any segment where the gross trips generated by the proposed DRI exceed 7% of the two-way service volume should be included in the study area. The trip generation and trip distribution values discussed in the previous sections were used to calculate the number of daily trips on each segment. Table 5 from the *GRTA DRI Review Technical Guidelines* document was used to determine the service volume on each segment. **Table 5** shows the results of this analysis. **Figure 2** illustrates the final study network.

The following intersections are included in the final study network based on the results of the study network determination and approved in GRTA's July 2nd letter of understanding.

1. US 19/41 at Upper Woolsey Road/SR 81
2. US 19/41 at Speedway Boulevard/Revolutionary Drive
3. Lower Woolsey Road/Richard Petty Boulevard at Speedway Boulevard
4. US 19/41 at Lower Woolsey Road
5. Lower Woolsey Road at SR 20 WB Ramps
6. Lower Woolsey Road at SR 20 EB Ramps
7. SR 20 at Old Highway 3/E. Main Street
8. Wilkins Road/Hampton Road at Woolsey Road/Upper Woolsey Road
9. Fortson Road at Wildwood Road
10. SR 20 at Hampton Locust Grove Road
11. SR 92 at Hampton Road
12. Wilkins Road at North Site Access
13. Lower Woolsey Road at South Site Access

The intersections can be seen in the study network illustration in **Figure 2**.

TABLE 5: STUDY NETWORK DETERMINATION

Road	From	To	Lanes	Functional Classification	LOS Standard	Service Volume	% Daily Site Traffic (PC)	Daily Traffic (PC)	% Daily Site Traffic (T)	Daily Traffic (T)	Daily Traffic (Total)	% Service Volume
Lower Woolsey Road/Fortson Road	**Wildwood Road**	**Development Access Point**	**2**	**Major Collector**	**D**	**11,680**	**25.0%**	**1,507**	**5.0%**	**142**	**1,649**	**14.1%**
Lower Woolsey Road	**Development Access Point**	**Speedway Boulevard**	**2**	**Major Collector**	**D**	**11,680**	**55.0%**	**3,314**	**75.0%**	**2,127**	**5,441**	**46.6%**
Lower Woolsey Road	**Speedway Boulevard**	**SR 20 Interchange**	**4**	**Major Collector**	**D**	**11,680**	**49.5%**	**2,983**	**67.5%**	**1,914**	**4,897**	**41.9%**
Lower Woolsey Road	**SR 20 Interchange**	**US 19/41**	**4**	**Minor Arterial**	**D**	**11,680**	**27.5%**	**1,656**	**13.9%**	**394**	**2,050**	**17.6%**
Hampton Road	Panhandle Road	Upper Woolsey Road	2	Local Road	D	8,720	3.0%	179	0.0%	-	179	2.1%
Wilkins Road	*Upper Woolsey Road*	*Development Access Point*	*2*	*Local Road*	*D*	*8,720*	*5.0%*	*301*	*0.0%*	-	*301*	*3.5%*
Wilkins Road	**Development Access Point**	**Speedway Boulevard**	**2**	**Local Road**	**D**	**8,720**	**15.0%**	**904**	**20.0%**	**567**	**1,471**	**16.9%**
Speedway Boulevard	*Lower Woolsey Road*	*Wilkins Road*	*4*	*Minor Collector*	*D*	*31,700*	*5.5%*	*331*	*7.5%*	*213*	*544*	*1.7%*
Speedway Boulevard	*Wilkins Road*	*US 19/41*	*4*	*Minor Collector*	*D*	*31,700*	*20.5%*	*1,235*	*27.5%*	*780*	*2,015*	*6.4%*
SR 20	**Lower Woolsey Road**	**E. Main St**	**4**	**Principal Arterial**	**D**	**35,000**	**22.5%**	**1,358**	**54.4%**	**1,543**	**2,901**	**8.3%**
SR 20	**E. Main St**	**Hampton Locust Grove Road**	**4**	**Principal Arterial**	**D**	**35,000**	**20.7%**	**1,249**	**54.4%**	**1,543**	**2,792**	**8.0%**
SR 20	Hampton Locust Grove Road	Westridge Parkway	4	Principal Arterial	D	35,000	13.5%	812	49.0%	1,389	2,201	6.3%
US 19/41	**Henry C/L**	**Lower Woolsey Road**	**4**	**Principal Arterial**	**D**	**35,000**	**31.4%**	**1,893**	**22.8%**	**645**	**2,538**	**7.3%**
US 19/41	*Lower Woolsey Road*	*Speedway Boulevard*	*4*	*Principal Arterial*	*D*	*35,000*	*9.9%*	*596*	*12.4%*	*350*	*946*	*2.7%*
US 19/41	*Speedway Boulevard*	*SR 81*	*4*	*Principal Arterial*	*D*	*35,000*	*15.0%*	*905*	*17.9%*	*506*	*1,411*	*4.0%*
US 19/41	SR 81	Clayton C/L	4	Principal Arterial	D	35,000	17.9%	1,076	17.0%	483	1,559	4.5%
SR 81	US 19/41	Hastings Bridge Road	2	Minor Arterial	D	16,600	3.3%	197	0.6%	17	214	1.3%
SR 92	Fayette C/L	Hampton Road	2	Minor Arterial	D	13,280	0.9%	54	0.3%	7	61	0.5%
SR 92	**Hampton Road**	**Goza Road/Inman Road**	**2**	**Minor Arterial**	**D**	**13,280**	**17.1%**	**1,030**	**4.8%**	**135**	**1,165**	**8.8%**
Wildwood Road	Henry C/L	Lower Woolsey Road/Fortson Road	2	Minor Collector	D	8,720	2.5%	151	0.0%	-	151	1.7%
Wildwood Road	**Lower Woolsey Road/Fortson Road**	**Woolsey Road**	**2**	**Major Collector**	**D**	**8,720**	**22.5%**	**1,356**	**5.0%**	**142**	**1,498**	**17.2%**
Hampton Road/Woolsey Road	**SR 92**	**Wildwood Road**	**2**	**Major Collector**	**D**	**8,720**	**18.3%**	**1,100**	**5.0%**	**142**	**1,242**	**14.2%**
Woolsey Road	*Wildwood Road*	*Wilkins Road/ Hampton Road*	*2*	*Major Collector*	*D*	*8,720*	*4.8%*	*286*	*0.0%*	-	*286*	*3.3%*
Upper Woolsey Road	Wilkins Road/Hampton Road	US 19/41	2	Major Collector	D	8,720	6.3%	378	0.0%	-	378	4.3%
Old Highway 3	S/O SR 20		2	Major Collector	D	8,720	0.5%	27	0.0%	-	27	0.3%
E. Main Street	N/O SR 20		2	Major Collector	D	8,720	1.4%	81	0.0%	-	81	0.9%
Hampton Locust Grove Road	W/O SR 20		2	Major Collector	D	8,720	0.0%	-	0.0%	-	-	0.0%
Hampton Locust Grove Road	E/O SR 20		2	Major Collector	D	10,900	7.3%	437	5.4%	154	591	5.4%

Note 1: PC = Passenger Cars, T= Trucks

Note 2: Rows that are **bolded** are included in the study network per the 7% rule while rows that are *italicized* are included in the study network due to proximity to the project site and location within the roadway network relative to other study links

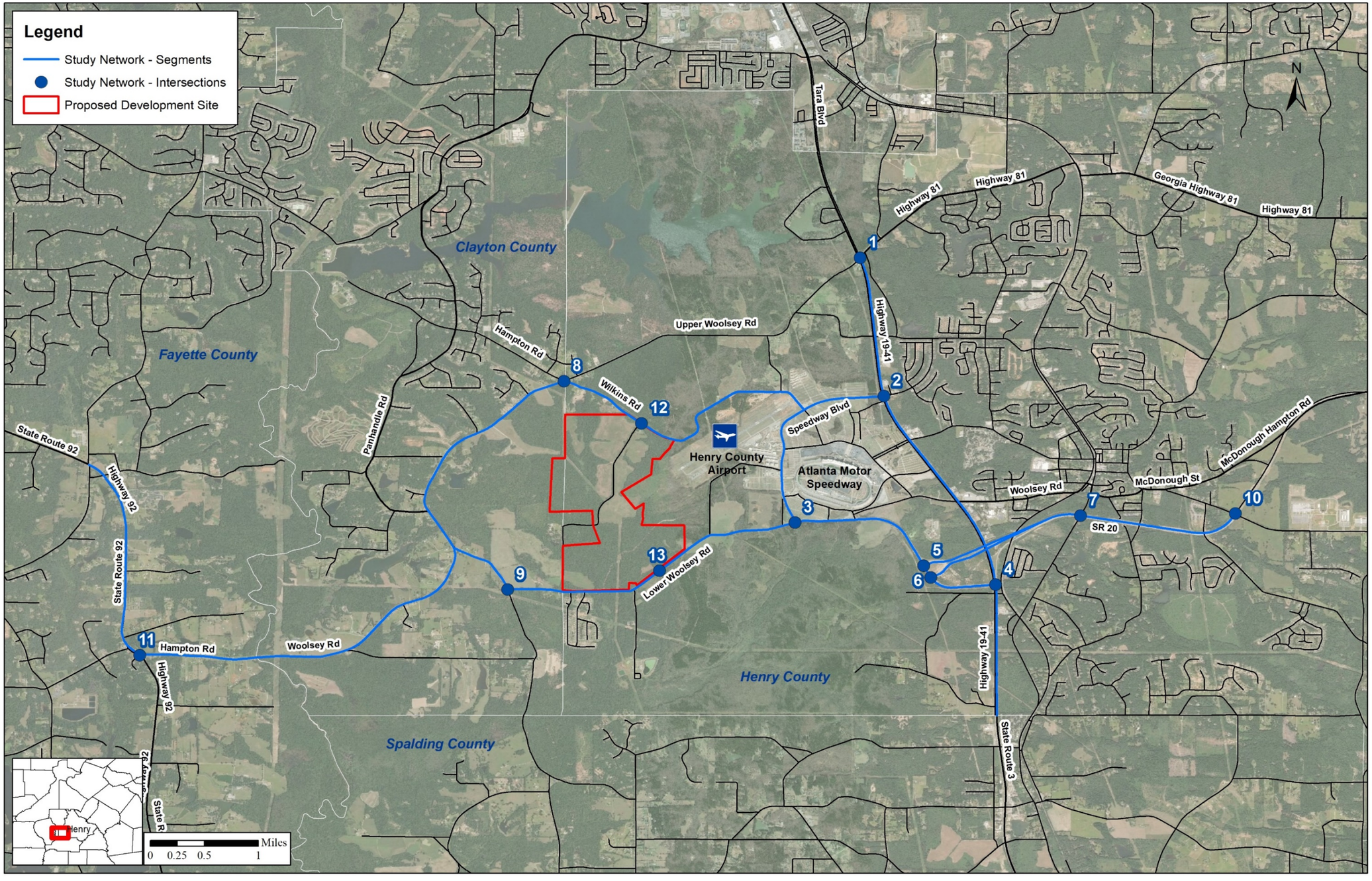


FIGURE 2: STUDY NETWORK

Existing Conditions Analysis

Roadway Network

The study roadway network is illustrated in **Figure 2**. The functional classification, number of lanes, and service volume for each study segment is included in **Table 5**. Existing lane configurations at each study intersection are illustrated in **Appendix E**. Existing conditions volumes for segments and intersections are discussed in the following section.

One feature of note not included in the tables is that Wilkins Road is an unpaved road for about 1 mile starting at Woolsey Road/Upper Woolsey Road heading east.

Data Collection and Volume Development

Peak period turning movement counts were collected at intersections 1-10 on Tuesday, May 22, 2018. 24-hour classification counts were collected on Lower Woolsey Road west of S. Lee Road on the same day. Following the June 5th methodology meeting, intersection 11, SR 92 at Hampton Road, was added to the study network. Peak period turning movement counts were collected at intersection 11 on Tuesday, June 26, 2018. Peak period turning movement counts were also collected at intersection 9, Fortson Road at Wildwood Road, to serve as a control for the variance in traffic patterns when school is not in session. May and June peak hour turning movement counts at intersection 9 were compared with each other to calculate an adjustment factor to apply to intersection 11 for the AM and PM peak hours, shown in **Table 6**. Based on this analysis, AM peak hour volumes at intersection 11 were increased by 15% to account for reduced traffic in the summer caused by lack of school traffic. No adjustment was made to PM peak hour volumes.

TABLE 6: MAY VS JUNE VOLUME COMPARISON AT FORTSON RD AND WILDWOOD RD

Time	Total Peak Hour Entering Volume		Adjustment Factor
	May 22	June 26	
AM Peak Hour	473	409	15.6%
PM Peak Hour	460	489	-5.9%

The level of service analysis for this report used the balanced raw peak hour volumes at each intersection. Raw data collected in the field is included in **Appendix E**. Existing conditions AM and PM peak hour intersection volumes are shown in **Appendix F**. Peak hour intersection volumes were used to calculate segment volumes. Peak hour segment volumes are listed in the following section, Segment Level of Service.

Segment Level of Service

The existing level of service (LOS) on study roadway segments was determined using peak hour bi-directional volumes and the most recent FDOT Generalized Level of Service Table 6, Generalized Peak Hour Two-Way Volumes for Rural Undeveloped Areas. A copy of the FDOT table is included in **Appendix G**. The segment volumes used for this analysis and the resulting segment LOS are shown in **Table 7**. All segments operate at an acceptable LOS in existing conditions.

TABLE 7: EXISTING CONDITIONS SEGMENT VOLUMES AND LEVEL OF SERVICE

Study Segment	From	To	AM Peak Hour		PM Peak Hour	
			Volume	LOS	Volume	LOS
Lower Woolsey Rd/Fortson Rd	Wildwood Rd	Development Access Point	514	B	504	B
Lower Woolsey Rd/Richard Petty Blvd	Development Access Point	Speedway Blvd	514	B	504	B
Lower Woolsey Rd	Speedway Blvd	SR 20 Interchange (WB Ramp)	493	A	469	A
Lower Woolsey Rd	SR 20 Interchange (WB Ramp)	SR 20 Interchange (EB Ramp)	435	A	487	A
Lower Woolsey Rd	SR 20 Interchange (EB Ramp)	US 19/41	291	A	362	A
Wilkins Rd	Upper Woolsey Rd	Development Access Point	8	A	15	A
Wilkins Rd	Development Access Point	Speedway Blvd	8	A	15	A
Speedway Blvd	Lower Woolsey Rd	Wilkins Rd	83	A	81	A
Speedway Blvd	Wilkins Rd	SR 3	77	A	89	A
SR 20	Lower Woolsey Rd	E. Main St	876	A	837	A
SR 20	E. Main St	Hampton Locust Grove Rd	1,695	B	1,566	B
US 19/41	Henry C/L	Lower Woolsey Rd	2,314	B	2,374	B
US 19/41	Lower Woolsey Rd	Speedway Blvd	1,937	B	2,010	B
US 19/41	Speedway Blvd	SR 81	1,947	B	2,126	B
SR 92	Woolsey Rd	Goza Rd/Inman Rd	1,391	B	1,509	B
Wildwood Rd	Lower Woolsey Rd/Fortson Rd	Woolsey Rd	435	A	408	A
Hampton Rd/Woolsey Rd	SR 92	Wildwood Rd	561	B	628	B
Woolsey Rd	Wildwood Rd	Wilkins Rd/ Hampton Rd	237	A	205	A

Intersection Level of Service

Intersection LOS was analyzed using balanced peak hour turning movement counts and Synchro version 9.2.914.6 to calculate delay following procedures in the Highway Capacity Manual (HCM). The results of this analysis are presented in **Table 8**. Synchro generated reports for each intersection are included in **Appendix H**. Delay shown for signalized intersections is the overall intersection delay while delay shown for two-way stop-controlled (TWSC) intersections is the highest delay on a stop-controlled approach. Delay and LOS was not calculated for intersection 6, Lower Woolsey Road at SR 20 EB ramps because there is no stop sign or signalization at the intersection.

TABLE 8: EXISTING CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
1	US 19/41 at Upper Woolsey Rd/SR 81	Signalized	9.6	A	10.2	B
2	US 19/41 at Speedway Blvd/Revolutionary Dr	TWSC	**63.7**	**F**	**65.1**	**F**
3	Lower Woolsey Road/Richard Petty Blvd at Speedway Blvd	TWSC	13.7	B	13.1	B
4	US 19/41 at Lower Woolsey Rd	TWSC	**60.9**	**F**	**59.5**	**F**
5	Lower Woolsey Rd at SR 20 WB Ramps	TWSC	10.0	B	10.7	B
6	Lower Woolsey Rd at SR 20 EB Ramps	none	-	-	-	-
7	SR 20 at Old Hwy 5/E. Main St	Signalized	16.6	B	16.0	B
8	Wilkins Road/Hampton Rd at Woolsey Rd/Upper Woolsey Rd	TWSC	11.8	B	10.7	B
9	Fortson Rd at Wildwood Rd	TWSC	10.3	B	11.2	B
10	SR 20 at Hampton Locust Grove Rd	Signalized	20.0	B	12.7	B
11	SR 92 at Hampton Rd	TWSC	**38.6**	**E**	26.7	D

In the existing conditions two intersections operate below the standard LOS of D during both the AM and PM peak hour:

- US 19/41 at Speedway Boulevard/Revolutionary Drive
- US 19/41 at Lower Woolsey road

According to guidance from GRTA in the July 2nd letter of understanding the LOS standard for these intersections for the future no-build and future build conditions will be LOS E. Improvements required to achieve this standard will be provided in the recommendations.

One additional intersection operates below the standard LOS of D only during the AM peak hour:

- SR 92 at Hampton Road

This intersection operates at LOS E during the AM peak hour, therefore the LOS standard during only the AM peak hour in the future no-build and future build conditions will be LOS E. The LOS standard for the PM peak hour will remain LOS D.

Planned and Programmed Improvements in the Study Network

Comprehensive transportation plans (CTPs) for Henry County (2016), Clayton County (2018), and Fayette County (2010) were reviewed for transportation and capital improvements within the vicinity of the proposed development. The Clayton County comprehensive transportation plan had not been adopted at the time of this submittal, however the draft plan was reviewed and did not contain projects relevant to this study. **Table 9** lists transportation projects near the proposed development identified in these reports.

TABLE 9: CTP PROJECT LIST

County	ID	Timeframe	Location	Description	Cost
Henry	R-19(B)	Unconstrained	Hampton Locust Grove Rd	Widen from 2 to 4 lanes	n/a
Fayette	IR-018	Tier II (2015-2020)	Hampton Rd at SR 92	Consolidate offset intersection and/or extend Hampton Rd across SR 92	$1,898,000 ($379,600 local share)

While the project to improve Hampton Road at SR 92 is listed as a Tier II project and recommended for implementation by 2020 there are currently no funds allocated for this project in the TIP and the project is not included in the 2017 Fayette County SPLOST.

ARC's Regional Transportation Plan (RTP) includes long-range plans for transportation projects in the Atlanta area. **Table 10** lists projects included in the RTP near the proposed development.

TABLE 10: RTP PROJECT LIST

County	ID	Timeframe	Location	Description	Cost
Henry	HE-126A1	2031-2040	Hampton Locust Grove Rd	Widen from 2 to 4 lanes	$18,000,000 (locally funded)

The projects listed in **Table 10** is the same as project R-19(B) from **Table 9**. The project is currently funded in the long-range plan and thus will not be considered in this study.

The Atlanta Regional Commission's (ARC's) Transportation Improvement Program (TIP), lists projects with funding allocated within the next six years and was most recently updated in July 2018. No projects near the proposed development were included in the TIP. Henry County's short-term work program, adopted in August 2017, was also reviewed and no projects near the proposed development are included in the program.

Future Background (No-Build) Conditions Analysis

Growth Rate

Historical traffic volumes are available at GDOT's GeoCounts website[1]. Historical data from count stations in the vicinity of the project area were analyzed to calculate an average 15, 10, and 5-year growth rate. Rates were calculated using "actual" counts and "estimated" counts were not used in the analysis. Growth rates were only calculated if at least two years of "actual" counts were collected during the timeframe. The results of these calculations are shown in **Table 11**. The 15 and 10-year growth rates were both negative at -1.2% and -1.9%, respectively, while the average 5-year growth rate was 0.8%. The growth rate calculations and data from each count location included in the analysis are presented in **Appendix I**.

TABLE 11: GROWTH RATES BASED ON HISTORICAL TRAFFIC DATA

GDOT Count Location	Location Description	Growth Rate (15-Year)	Growth Rate (10-Year)	Growth Rate (5-Year)
0630213	Fortson Rd E/O Wildwood Rd	4.6%	1.7%	-
1510185	Upper Woolsey Rd E/O Wilkins Rd	1.5%	2.8%	-
0630214	Woolsey Rd S/O Lower Woolsey Rd	-1.4%	-2.3%	-
0630212	Wildwood Rd S/O Lower Woolsey Rd	-5.9%	-9.9%	-
1510145	US 19/41 S/O Speedway Blvd	-1.8%	-1.7%	-4.0%
1510143	US 19/41 N/O Lower Woolsey Rd	-1.9%	-3.5%	0.8%
1510141	US 19/41 S/O Lower Woolsey Rd	-0.2%	-1.3%	0.9%
1510163	SR 20 W/O Dorsey Rd	4.4%	2.8%	4.1%
	Average Growth Rate	**-0.1%**	**-1.4%**	**0.4%**

[1] http://geocounts.com/gdot/

A growth rate was also calculated based on projected future traffic volumes. ARC's regional travel demand model was used to collect existing conditions (2015) and future (2024) volumes on all links within the study area. The link volumes and resulting average growth rate is presented in **Table 12**. Based on the model data, traffic around the proposed development is projected to grow at an average rate of 1.6%.

TABLE 12: GROWTH RATE BASED ON PROJECTED TRAFFIC VOLUMES

Model Link	2015	2024	Growth Rate
US 19/41 north of Upper Woolsey	30,789	34,907	1.4%
Upper Woolsey, west of US 19/41	6,878	8,250	2.0%
SR 81, east of US 19/41	8,705	11,023	2.7%
US 19/41 south of Speedway Blvd	28,972	31,538	0.9%
Woolsey Rd, west of Wildwood Rd	8,779	10,585	2.1%
Fortson Rd, east of Wildwood Rd	6,431	7,985	2.4%
Wildwood Rd, south of Fortson	2,183	2,980	3.5%
Lower Woolsey Rd, west of Speedway	6,329	7,830	2.4%
SR 20, east of US 19/41	6,154	7,825	2.7%
US 19/41, south of Lower Woolsey	25,476	28,322	1.2%
	Average Growth Rate		**1.6%**

ARC's population projections for Henry County and the subarea of southern Henry County are presented in **Table 13**. The 5, 15, and 25-year growth rates calculated from this data are shown in **Table 14**. Based on these projections the population in Henry County is expected to grow at an average rate of 2.2%.

TABLE 13: HENRY COUNTY POPULATION PROJECTIONS

Location	2015	2020	2030	2040
Henry County	218,364	250,746	306,381	351,691
S. Henry County	99,691	111,993	137,853	159,860

TABLE 14: GROWTH RATE BASED ON POPULATION PROJECTIONS

Location	Growth 2020	Growth 2030	Growth 2040	Average
Henry County	2.8%	2.3%	1.9%	2.3%
S. Henry County	2.4%	2.2%	1.9%	2.1%
Average	**2.6%**	**2.2%**	**1.9%**	**2.2%**

Long-term employment projections for the Atlanta Region, which includes Henry County, were obtained from the Georgia Department of Labor (DOL) website. The data includes an assessment of existing conditions (2014) jobs and the projected number of jobs in the future

(2024). The total number of jobs in Henry County for each year and the resulting growth rate are shown in **Table 15**. Employment in Henry County is expected to grow at an average rate of 1.5%.

TABLE 15: GROWTH RATE BASED ON EMPLOYMENT PROJECTIONS

Location	2014	2024	Growth Rate
Atlanta Regional	697,840	810,590	**1.5%**

Based on the results of this analysis and feedback from local representatives during and immediately following the June 15th methodology meeting **a growth rate of 1.0% is recommended for all roadways for the future background no-build conditions**. This growth rate was approved in GRTA's July 2nd letter of understanding.

Volume Development

The future year used for this analysis is 2023. The approved 1.0% growth rate was applied to the balanced existing turning movement counts to calculate future background (no-build) volumes. AM and PM peak hour volume diagrams for each intersection are included in **Appendix J**. Peak hour intersection volumes were used to calculate segment volumes. Peak hour segment volumes are listed in the following section.

Segment Level of Service.

The future background level of service (LOS) on study roadway segments was determined following the same methodology used for the existing conditions analysis. The segment volumes used for this analysis and the resulting segment LOS are shown in **Table 16**. All segments operate at an acceptable LOS in future background conditions.

TABLE 16: NO-BUILD CONDITIONS SEGMENT VOLUMES AND LEVEL OF SERVICE

Study Segment	From	To	AM Peak Hour		PM Peak Hour	
			Volume	LOS	Volume	LOS
Lower Woolsey Rd/Fortson Rd	Wildwood Rd	Development Access Point	541	B	529	B
Lower Woolsey Rd/Richard Petty Blvd	Development Access Point	Speedway Blvd	541	B	530	B
Lower Woolsey Rd	Speedway Blvd	SR 20 Interchange (WB Ramp)	519	A	493	A
Lower Woolsey Rd	SR 20 Interchange (WB Ramp)	SR 20 Interchange (EB Ramp)	457	A	512	A
Lower Woolsey Rd	SR 20 Interchange (EB Ramp)	US 19/41	306	A	381	A
Wilkins Rd	Upper Woolsey Rd	Development Access Point	8	A	15	A
Wilkins Rd	Development Access Point	Speedway Blvd	8	A	16	A
Speedway Blvd	Lower Woolsey Rd	Wilkins Rd	88	A	85	A
Speedway Blvd	Wilkins Rd	SR 3	80	A	94	A
SR 20	Lower Woolsey Rd	E. Main St	920	B	880	B
SR 20	E. Main St	Hampton Locust Grove Rd	1,781	B	1,646	B
US 19/41	Henry C/L	Lower Woolsey Rd	2,432	B	2,496	B
US 19/41	Lower Woolsey Rd	Speedway Blvd	2,036	B	2,112	B
US 19/41	Speedway Blvd	SR 81	2,047	B	2,234	B
SR 92	Woolsey Rd	Goza Rd/Inman Rd	1,461	B	1,585	B
Wildwood Rd	Lower Woolsey Rd/Fortson Rd	Woolsey Rd	457	A	429	A
Hampton Rd/Woolsey Rd	SR 92	Wildwood Rd	589	B	659	B
Woolsey Rd	Wildwood Rd	Wilkins Rd/ Hampton Rd	249	A	215	A

Intersection Level of Service

Intersection LOS was analyzed following the same methodology used for the existing conditions analysis. The results of this analysis are presented in **Table 17**. Synchro generated reports for each intersection are included in **Appendix K**.

TABLE 17: NO-BUILD CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
1	US 19/41 at Upper Woolsey Rd/SR 81	Signalized	10.1	B	10.7	B
2	US 19/41 at Speedway Blvd/Revolutionary Dr	TWSC	**104.5**	**F**	**81.0**	**F**
3	Lower Woolsey Road/Richard Petty Blvd at Speedway Blvd	TWSC	14.2	B	13.5	B
4	US 19/41 at Lower Woolsey Rd	TWSC	**73.3**	**F**	**71.4**	**F**
5	Lower Woolsey Rd at SR 20 WB Ramps	TWSC	10.1	B	10.9	B
6	Lower Woolsey Rd at SR 20 EB Ramps	none	-	-	-	-
7	SR 20 at Old Hwy 5/E. Main St	Signalized	17.3	B	16.7	B
8	Wilkins Road/Hampton Rd at Woolsey Rd/Upper Woolsey Rd	TWSC	12.1	B	10.9	B
9	Fortson Rd at Wildwood Rd	TWSC	10.5	B	11.4	B
10	SR 20 at Hampton Locust Grove Rd	Signalized	21.6	C	13.0	B
11	SR 92 at Hampton Rd	TWSC	**51.0**	**F**	34.9	D

In the future no-build conditions two intersections operate below the standard LOS of D during both the AM and PM peak hour:

- US 19/41 at Speedway Boulevard/Revolutionary Drive
- US 19/41 at Lower Woolsey road

These intersections also operated at LOS F during the AM and PM peak hour during existing conditions.

One additional intersection operates below the standard LOS of D only during the AM peak hour:

- SR 92 at Hampton Road

This intersection operates at LOS F during the AM peak hour, one letter grade lower than during the AM peak hour in existing conditions.

Future Build Conditions Analysis

Volume Development

The project traffic distributions presented in **Appendix D** were calculated by assigning passenger cars and trucks to different travel paths to and from the proposed development site based on turning movement proportions observed during data collection. Peak hour project traffic from **Table 3** was proportionally assigned to each path to calculate turning movements at

each study intersection. The project traffic, broken down into passenger cars and trucks, is presented in **Appendix L**. Project traffic was added directly to the future background no-build traffic volumes to calculate future build conditions volumes. These volumes are shown, along with the no-build traffic volumes, in **Appendix J**.

Segment Level of Service.

The future build level of service (LOS) on study roadway segments was determined following the same methodology used for the existing and no-build conditions analysis. The segment volumes used for this analysis and the resulting segment LOS are shown in **Table 18**. All segments operate at an acceptable LOS in future build conditions.

TABLE 18: BUILD CONDITIONS SEGMENT VOLUMES AND LEVEL OF SERVICE

Study Segment	From	To	AM Peak Hour		PM Peak Hour	
			Volume	LOS	Volume	LOS
Lower Woolsey Rd/Fortson Rd	Wildwood Rd	Development Access Point	637	B	660	B
Lower Woolsey Rd/Richard Petty Blvd	Development Access Point	Speedway Blvd	851	B	904	D
Lower Woolsey Rd	Speedway Blvd	SR 20 Interchange (WB Ramp)	798	A	832	A
Lower Woolsey Rd	SR 20 Interchange (WB Ramp)	SR 20 Interchange (EB Ramp)	736	A	851	A
Lower Woolsey Rd	SR 20 Interchange (EB Ramp)	US 19/41	422	A	535	A
Wilkins Rd	Upper Woolsey Rd	Development Access Point	26	A	40	A
Wilkins Rd	Development Access Point	Speedway Blvd	92	A	119	A
Speedway Blvd	Lower Woolsey Rd	Wilkins Rd	95	A	120	A
Speedway Blvd	Wilkins Rd	SR 3	127	A	222	A
SR 20	Lower Woolsey Rd	E. Main St	1,079	B	1,068	B
SR 20	E. Main St	Hampton Locust Grove Rd	1,940	B	1,823	B
US 19/41	Henry C/L	Lower Woolsey Rd	2,499	B	2,679	B
US 19/41	Lower Woolsey Rd	Speedway Blvd	2,081	B	2,181	B
US 19/41	Speedway Blvd	SR 81	2,141	B	2,332	B
SR 92	Woolsey Rd	Goza Rd/Inman Rd	1,529	B	1,667	B
Wildwood Rd	Lower Woolsey Rd/Fortson Rd	Woolsey Rd	477	A	545	B
Hampton Rd/Woolsey Rd	SR 92	Wildwood Rd	606	B	754	B
Woolsey Rd	Wildwood Rd	Wilkins Rd	265	A	238	A

Intersection Level of Service

Intersection LOS was analyzed following the same methodology used for the existing and no-build conditions analysis. The results of this analysis are presented in **Table 19**. Synchro generated reports for each intersection are included in **Appendix M**.

TABLE 19: BUILD CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE

No.	Intersection	Control Type	AM Peak Hour		PM Peak Hour	
			Delay (s)	LOS	Delay (s)	LOS
1	US 19/41 at Upper Woolsey Rd/SR 81	Signalized	10.4	B	11.3	B
2	US 19/41 at Speedway Blvd/Revolutionary Dr	TWSC	**196.3**	**F**	**478.4**	**F**
3	Lower Woolsey Road/Richard Petty Blvd at Speedway Blvd	TWSC	20.8	C	22.8	C
4	US 19/41 at Lower Woolsey Rd	TWSC	**164.9**	**F**	**144.4**	**F**
5	Lower Woolsey Rd at SR 20 WB Ramps	TWSC	12.8	B	14.5	B
6	Lower Woolsey Rd at SR 20 EB Ramps	none	-	-	-	-
7	SR 20 at Old Hwy 5/E. Main St	Signalized	18.3	B	18.6	B
8	Wilkins Road/Hampton Rd at Woolsey Rd/Upper Woolsey Rd	TWSC	12.9	B	11.7	B
9	Fortson Rd at Wildwood Rd	TWSC	11.1	B	13.9	B
10	SR 20 at Hampton Locust Grove Rd	Signalized	24.5	C	13.4	B
11	SR 92 at Hampton Rd	TWSC	**70.1**	**F**	**86.3**	**F**

In the future build conditions three intersections operate below the standard LOS of D during both the AM and PM peak hour:

- US 19/41 at Speedway Boulevard/Revolutionary Drive
- US 19/41 at Lower Woolsey Road
- SR 92 at Hampton Road

Of these three intersections, only SR 92 at Hampton Road operated at an acceptable LOS during the build conditions analysis and only during the PM peak hour.

Facility Needs Analysis

US 19/41 at Speedway Boulevard/Revolutionary Drive

The standard LOS at this intersection is LOS E because the intersection operates at LOS F in the existing conditions during both the AM and PM peak hour. For the intersection to operate at LOS E, both minor street approaches should operate at LOS E. **Table 20** breaks down the LOS on each approach for the no-build and build conditions.

TABLE 20: NO-BUILD AND BUILD LOS ON MINOR STREET APPROACHES, US 19/41 AT SPEEDWAY BLVD

	AM Peak Hour		PM Peak Hour	
	No-Build	Build	No-Build	Build
Eastbound Approach	E	**F**	**F**	**F**
Westbound Approach	**F**	**F**	E	**F**

In the no-build conditions, the westbound approach operates at LOS F during the AM peak hour while the eastbound approach operates at LOS F during the PM peak hour. The failing eastbound approach in the no-build PM peak hour conditions could not be mitigated though geometric improvements while maintaining existing turning movement counts at the intersection.

One common mitigation strategy at two-way stop-controlled intersections where a minor street intersects with a principal arterial is to implement restricted crossing U-turn (RCUT) control which forces left and through movement traffic on the minor streets to turn right at the intersection followed by a U-turn downstream. While this strategy would significantly reduce delay at the intersection in the no-build and build conditions it is not recommended for this location because Speedway Boulevard is a major access point for Atlanta Motor Speedway and RCUTs would significantly impact the intersection's ability to process traffic on event days. Furthermore, RCUT is not a suitable mitigation strategy for the build conditions due to the high volume of trucks.

The recommended mitigation strategy at this intersection is to upgrade to a signalized intersection. No geometric improvements are needed at the intersection. The resulting LOS at the intersection in the no-build and build conditions is shown in **Table 21**.

TABLE 21: US 19/14 AT SPEEDWAY BLVD/REVOLUTIONARY DR DELAY AND LOS WITH IMPROVEMENTS

	No-Build		Build	
	Delay (s)	LOS	Delay (s)	LOS
AM Peak Hour	6.0	A	6.5	A
PM Peak Hour	5.8	A	7.6	A

A lane configuration diagram of the recommended improvements at this intersection is included in **Appendix N** and the synchro generated reports are included in **Appendix O**. It is recommended that signalization not be implemented until after complete build-out of the proposed development to ensure accurate volume data is collected to perform a signal warrant analysis.

US 19/41 at Lower Woolsey Road

The standard LOS at this intersection is LOS E because the intersection operates at LOS F in the existing conditions during both the AM and PM peak hour. The eastbound approach is the only stop-controlled approach at this intersection and it operates at LOS F in the no-build and build conditions during both the AM and PM peak hour. The eastbound left-turn movement is the critical movement at this intersection and already has a dedicated left-turn lane. As previously discussed, RCUT control is not a viable mitigation strategy at this intersection due to high traffic during events at Atlanta Motor Speedway and the high truck volumes from the proposed development.

The recommended mitigation strategy at this intersection is to upgrade to a signalized intersection. No geometric improvements are needed at the intersection. The resulting LOS at the intersection in the no-build and build conditions is shown in **Table 22**.

TABLE 22: US 19/14 AT LOWER WOOLSEY ROAD DELAY AND LOS WITH IMPROVEMENTS

	No-Build		Build	
	Delay (s)	LOS	Delay (s)	LOS
AM Peak Hour	4.0	A	4.5	A
PM Peak Hour	4.0	A	4.7	A

A lane configuration diagram of the recommended improvements at this intersection is included in **Appendix N** and the synchro generated reports are included in **Appendix O**. It is recommended that signalization not be implemented until after complete build-out of the proposed development to ensure accurate volume data is collected to perform a signal warrant analysis.

SR 92 at Hampton Road

The standard LOS at this intersection is LOS E during the AM peak hour and LOS D during the PM peak hour, as discussed in the intersection level of service section of the existing conditions analysis. The westbound approach is the only stop-controlled approach at this intersection. In no-build conditions the westbound approach operates at LOS F during the AM peak hour and LOS D during the PM peak hour.

The addition of a 200-foot right turn lane on the westbound approach to accommodate the AM peak hour 95th percent queue decreases delay enough to bring the approach LOS up to the standard LOS E in the no-build conditions. This improvement was modeled in the build conditions AM and PM peak hour analysis and resulted in enough improvement to meet LOS standards at the intersection. The results of the LOS analysis are presented in **Table 23**.

TABLE 23: SR 92 AT HAMPTON ROAD DELAY AND LOS WITH IMPROVEMENTS

	No-Build		Build	
	Delay (s)	LOS	Delay (s)	LOS
AM Peak Hour	40.0	E	45.2	E
PM Peak Hour	19.7	C	24.9	C

A lane configuration diagram of the recommended improvements at this intersection is included in **Appendix N** and the synchro generated reports are included in **Appendix O**. It is important to note that while a right-turn lane improves the LOS at this intersection, it does not solve the other issues at this intersection identified in the Fayette County CTP, that Hampton Road is an offset intersection and may need to be consolidated in the future to improve traffic flow on SR 92.

Site Access Analysis

The standard LOS at each site access point is LOS D. The northern site access point on Wilkins Road operates at an acceptable LOS with a two-lane stop-controlled approach and no geometric changes to Wilkins Road. Wilkins Road is currently an unpaved gravel road at the proposed northern access point. It is recommended that Wilkins Road be paved from the existing pavement to the northern access point to facilitate comfortable access to the site.

The southern site access point is expected to process a majority of the traffic entering and exiting the proposed development. To attain the standard LOS D during the AM and PM peak hour in the build conditions it is recommended the southbound approach be designed with dedicated left and right-turn lanes at the intersection while the westbound approach should be improved with a right-turn lane. The southbound right-turn bay should be at least 200 feet long to allow right-turn vehicles to bypass the queue of southbound left-turning vehicles. The westbound right-turn bay should be designed to allow right-turn vehicles to fully decelerate in the auxiliary lane due to the high speeds on Lower Woolsey Road. The *AASHTO Greenbook* states the desirable deceleration length of an auxiliary lane on a 45-mph road is 350 feet.

The results of the LOS analysis on each site access point are shown in **Table 24**.

TABLE 24: SITE ACCESS DELAY AND LOS

	AM Peak Hour		PM Peak Hour	
	Delay (s)	LOS	Delay (s)	LOS
North Site Access	8.9	A	9.1	A
South Site Access	18.2	C	32.8	D

Project passenger car and truck volume, future build conditions volumes, graphics of the recommended lane configuration, and reports generated by Synchro at the site access points are included in **Appendix P**.

Conclusion

The following projects, presented in **Table 25**, have been identified to improve the LOS of the transportation network within the influence area of the DRI to accommodate projected background traffic volumes. It should be noted that these recommended projects are due to background growth only, and are independent of the proposed development traffic.

TABLE 25: RECOMMENDED IMPROVEMENT PROJECTS TO ACCOMMODATE BACKGROUND TRAFFIC

Location	Improvement Description	Estimated Cost	Sponsor/ Funding Source	Timing
US 19/41 at Speedway Blvd/ Revolutionary Dr	Upgrade TWSC to signalized control	$750,000	Henry County	Perform signal warrant analysis after development build-out
US 19/41 at Lower Woolsey Rd	Upgrade TWSC to signalized control	$750,000	Henry County	Perform signal warrant analysis after development build-out
SR 92 at Hampton Rd	Construct 200' right-turn lane on WB approach	$225,000	Fayette County	Short-term

Table 26 lists additional projects that the developer of the proposed DRI will be responsible for implementing to maintain an acceptable LOS on the roadway network upon construction of the proposed development.

TABLE 26: RECOMMENDED IMPROVEMENT PROJECTS TO ACCOMMODATE PROJECT TRAFFIC

Location	Improvement Description	Estimated Cost	Sponsor/ Funding Source	Timing
Northern Site Access	TWSC on NB approach	unknown	Developer	At build-out
Southern Site Access	-TWSC on SB approach. -200' right-turn lane on SB approach. -Construct 350' right-turn lane on WB approach.	unknown	Developer	At build-out
Wilkins Rd	Pave road from existing pavement to northern site access	$800,000	Developer	At build-out

All intersection improvements are based on the LOS analysis performed at each intersection. The recommendation to pave Wilkins Road is not based on LOS analysis but is a common-sense improvement to facilitate access to the development site.

APPENDIX A

LETTER OF UNDERSTANDING

LETTER OF UNDERSTANDING

July 2, 2018

Dale Hall
Falcon Design Consultants, LLC
235 Corporate Center Drive, Suite 200
Stockbridge, GA 30281

RE: **DRI 2808 Lower Woolsey Henry 780**

Dear Mr. Hall:

The purpose of this letter is to document the discussions during the Pre-Review and Methodology Meeting held at ARC's office on May 14, 2018 and GRTA's office on June 15, 2018 regarding **DRI 2808 Lower Woolsey Henry 780.** Some of the following items were discussed in this meeting and should assist you and your consultant team in preparing the DRI Review Package.

PROJECT OVERVIEW

- This proposed development is in southwest Henry County, with a small portion in Clayton County. The site is primarily north of Lower Woolsey Road, east of the Henry/Clayton County line (the southern end of Fortson Road follows this boundary), south of Wilkins Road, and immediately west of the Atlanta Speedway Airport.
- The DRI trigger for this development is a rezoning.
- The project is planned as warehouse facility with seven buildings totaling 6,330,000 SF.
- The vehicular trip generation is estimated to be 8,862 gross daily trips based on the *ITE Trip Generation Manual 10th edition* and Land Use Code 154 High Cube Transload and Short-Term Storage Warehouse.
- The development site proposes three two driveways. There is one driveway along Wilkins Road and one driveway along Lower Woolsey Road.
- The projected build-out is one phase, to be completed by 2023.
- The applicant is applying for approval under GRTA's non-expedited review process.

STUDY NETWORK

1. US 19/41 at Upper Woolsey Road/SR 81
2. US 91/41 at Speedway Boulevard
3. Richard Petty Boulevard at Speedway Boulevard
4. US 19/41 at Lower Woolsey Road
5. Lower Woolsey Road at SR 20 WB Ramps
6. Lower Woolsey Road at SR 20 EB Ramps
7. SR 20 at Old Highway 3/E Main St
8. Woolsey Road at Hampton Road
9. Fortson Road at Wildwood Road
10. SR 20 at Hampton Locust Grove Road
11. SR 92 at Hampton Road

12. North Site Access
13. South Site Access

METHODOLOGY

- All intersections identified as within the study network shall be analyzed during the AM and PM peak hours for (1) existing conditions, (2) future "no-build" conditions [may not be applicable for the site driveways, and (3) future "build" conditions. This DRI shall be reviewed in one phase to be completed by 2023.

- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the date of the actual DRI submittal to GRTA. As appropriate, pedestrian counts and heavy vehicle counts shall be collected with vehicle counts and considered within the capacity analysis. Turning movement counts shall be collected while local schools are in session and ordinarily not between the week of Thanksgiving and the second week of January or any week of a major holiday.

- A 1.0% annual background traffic growth rate shall be used for all roadways. Trip generation information for any other major developments currently underway in the study area shall be taken into consideration.

- The Level of Service (LOS) standard for all analyses shall be LOS D.

- No alternate mode trip reductions will be taken for this development.

- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account.

- The applicant shall research TIP, STIP, RTP, and GDOT's construction work program, as well as any local government plans (SPLOST, CIP, etc.), to determine the open-to-traffic date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. This information shall be included within the traffic analysis.

ADDITIONAL INFORMATION

Every roadway segment and intersection listed above will be analyzed for "required improvements." If the existing LOS for the segment or intersection is below the applicable level of service for a particular time period (e.g., A.M. peak period, P.M. peak period, etc.), then the measured LOS service for that segment and time periods is the standard by which the "base" and "future" traffic conditions will be designed. For example, if the County's LOS standard is LOS D, but an intersection or segment currently operates at LOS E for a certain peak period, then the LOS standard for that intersection or segment for "base" and "future" conditions becomes LOS E (only for that intersection and only for that peak period). The "base" is the phase year traffic without the development traffic (also called future "no-build" conditions) and the "future" is the phase year with the development traffic (also called future "build" conditions). As required in the technical guidelines, specific "required improvements" will be identified to bring the "base" LOS and "future" LOS for every roadway segment and intersection up to the applicable LOS standard. If the existing LOS for the segment or intersection is LOS F, then the future "no-build' and future "build" LOS standard will be LOS E. The improvements required to achieve the desired LOS standard will be provided in a table and graphic within the study. The traffic study should indicate the existing roadway laneage at each studied intersection as well as the laneage required (to meet the LOS standard) for future "no-build" and future "build" conditions. The improvements may include both programmed improvements and improvements identified in the study.

The planned and programmed improvement should indicate the project sponsor, the anticipated funding by source (federal, state, city/county, developer, CID, etc.), the year open-to-traffic, and estimate of the total project cost. All other required improvements identified in the study should, to the extent known, identify the cost, sponsor, funding, and timing. If any of these elements are not known, please state as "unknown."

The future "no-build" and the future "build" analyses should NOT automatically include/assume the additional lanes/capacity associated with planned and programmed improvement projects unless those roadway projects are currently under construction. Instead, the traffic consultant should recommend the additional laneage required to satisfy the level of service standard.

DRI REVIEW PACKAGE CHECKLIST

Please use the DRI Review Package Checklist to help you prepare your GRTA DRI Review Package for expedited review of your application. The Checklist reflects the understandings set forth in this letter, and is incorporated into this letter by reference.

The site plan shall be prepared in accordance with Section 4-104 of the DRI Review Package Technical Guidelines and it shall be dated, and shall be at a scale of 1"= 200' or larger (showing more detail). The site plan shall be consistent with GRTA's Site Plan Information Guidelines, which represents the minimum required information on site plans.

The applicant shall indicate on the site plans all adjacent land uses, current zoning, and future land use as indicated on the future land use map. Additionally, all existing and proposed sidewalks, existing and proposed pedestrian trails, and existing and proposed roadway laneage should be indicated on the site plan.

DRI REVIEW PACKAGE SUBMITTAL

At the time you are ready to submit your DRI Review Package to GRTA, please note the following:

- Provide one (1) paper copy of all materials:
  - Transportation analysis
  - Site Plan
- Provide one (1) CD-ROM with electronic versions of all submittal documents:
  - Provide a PDF of each document
  - Provide the native format for each document
    - .dwg is the preferred CAD format (AutoCAD)
    - .doc is the preferred word processing format (Word)
    - .xls is the preferred spreadsheet format (Excel)
    - .sy8, .sy9 or .sy10 is the preferred capacity analysis format (Synchro)

As part of the completeness certification process, please have your consultant forward one copy of the completed GRTA DRI Review Package (traffic analysis, site plan, CD) to the GDOT District Office, Regional Commission and local government Planning & Development and Transportation group (contact information provided below). GRTA shall be copied on each of the transmittal letters.

GRTA	ATLANTA REGIONAL COMMISSION	HENRY COUNTY DOT	HENRY COUNTY	GDOT DISTRICT 3	CLAYTON COUNTY
Emily Estes 245 Peachtree Center Ave. Suite 2200 Atlanta, GA 30303	Andrew Smith International Tower 229 Peachtree Street NE Suite 100 Atlanta, GA 30303	David Simmons 533 Hampton Road McDonough, GA 30253	Stacey Jordan 140 Henry Parkway McDonough, GA 30253	Dan Woods 115 Transportation Boulevard Thomaston, GA 30286	Lee Kelley 7960 North McDonough Street Jonesboro, GA 30236

If you have any questions, please feel free to contact me directly at 404-893-6171 or eestes@srta.ga.gov.

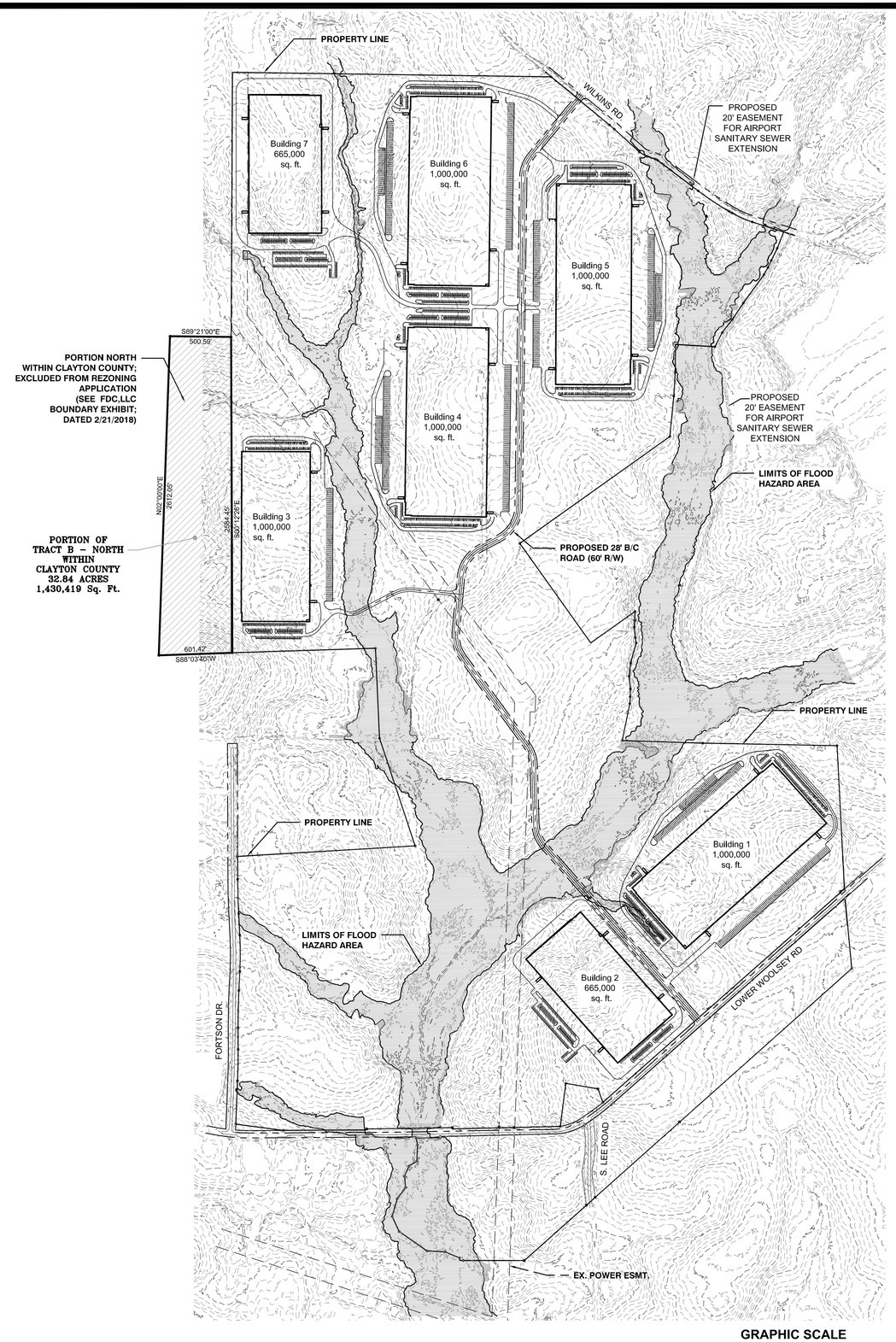
Sincerely,
Emily Estes
Planner

cc:

Jon West, DCA
Andrew Smith, ARC
Annie Gillespie, GRTA
Dan Woods, GDOT District 3
Tyler Peek, GDOT District 3
Chance Baxley, GDOT District 3
Stacey Jordan-Rudeseal, Henry County
David Simmons, Henry County
Joseph Robison, Fayette County
Dale Hall, FDC
David Pickworth, VHB
Melissa Gende, VHB

APPENDIX B

SITE PLAN

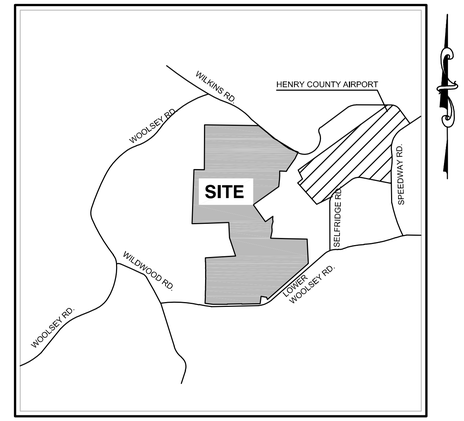


GRAPHIC SCALE

500 0 250 500 1000

(IN FEET)
1 inch = 500 ft.

MAGNETIC NORTH



VICINITY MAP

NOT TO SCALE

LAND USE SUMMARY

TOTAL SITE AREA : 683.66 ACRES

EXISTING ZONING CLASSIFICATION:
RESIDENTIAL AGRICULTURAL

PROPOSED LAND USE:
M2 HEAVY INDUSTRIAL

M2 DEVELOPMENTAL STANDARDS:

MIN. LOT AREA : 43,560 SQ. FT.
MIN. LOT WIDTH : 150 FT.
MIN. FRONT SB : 70 FT. (FROM R/W)
MIN. SIDE SB : NONE, 30 FT. ON CORNER LOTS
MIN. REAR SB : 40 FT.

BUILDINGS ON SITE

BUILDING 1 : 1,000,000 sq. ft.
BUILDING 2 : 665,000 sq. ft
BUILDING 3 : 1,000,000 sq. ft.
BUILDING 4 : 1,000,000 sq. ft
BUILDING 5 : 1,000,000 sq. ft
BUILDING 6 : 1,000,000 sq. ft
BUILDING 7 : 665,000 sq. ft.

TOTAL AREA : 6,330,000 sq. ft.

PRELIMINARY (NOT FOR CONSTRUCTION)

LAND PLANNING
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CONCEPT PLAN
FOR
LOWER WOOLSEY HENRY 780, LLC

LOCATED IN:
HENRY COUNTY, GEORGIA

REVISIONS
1.
2.
3.
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811
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SCALE:	1"=500'
FILE NUMBER:	MP20
DRAWN BY:	BL

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SHEET NUMBER

1.0

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APPENDIX C

TRIP GENERATION SHEETS

Land Use: 154
High-Cube Transload and Short-Term Storage Warehouse

Description

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. The HCWs included in this land use include transload and short-term facilities. Transload facilities have a primary function of consolidation and distribution of pallet loads (or larger) for manufacturers, wholesalers, or retailers. They typically have little storage duration, high throughput, and are high-efficiency facilities. Short-term HCWs are high-efficiency distribution facilities often with custom/special features built into structure for movement of large volumes of freight with only short-term storage of products. Warehousing (Land Use 150), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related land uses.

Additional Data

The High-Cube Warehouse/Distribution Center-related land uses underwent specialized consideration through a commissioned study titled *High-Cube Warehouse Vehicle Trip Generation Analysis*, published in October 2016. The results of this study have been incorporated into the 10th Edition *Trip Generation Manual* and are published on the ITE website at http://library.ite.org/pub/a3e6679a-e3a8-bf38-7f29-2961becdd498 where the study is posted.

Time-of-day distribution data for this land use are presented in Appendix A. For the three general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 9:00 and 10:00 a.m. and 3:00 and 4:00 p.m., respectively.

The sites were surveyed in the 1980s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Michigan, New Jersey, Texas, and Washington.

Source Numbers

331, 605, 619, 642, 645, 649, 739, 750, 752, 903, 904, 941, 942, 943, 969

High-Cube Transload and Short-Term Storage Warehouse
(154)

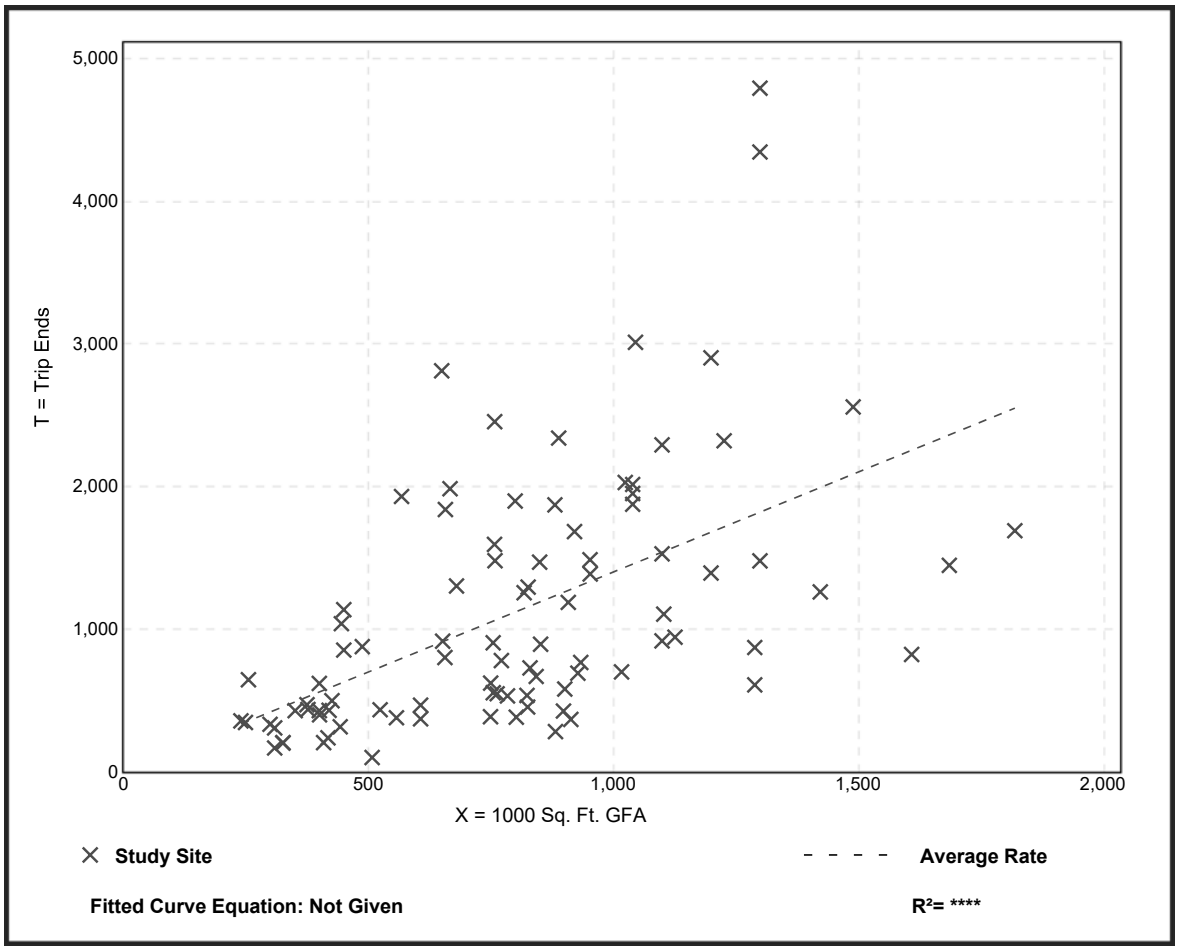
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 91
Avg. 1000 Sq. Ft. GFA: 798
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.40	0.20 - 4.32	0.86

Data Plot and Equation



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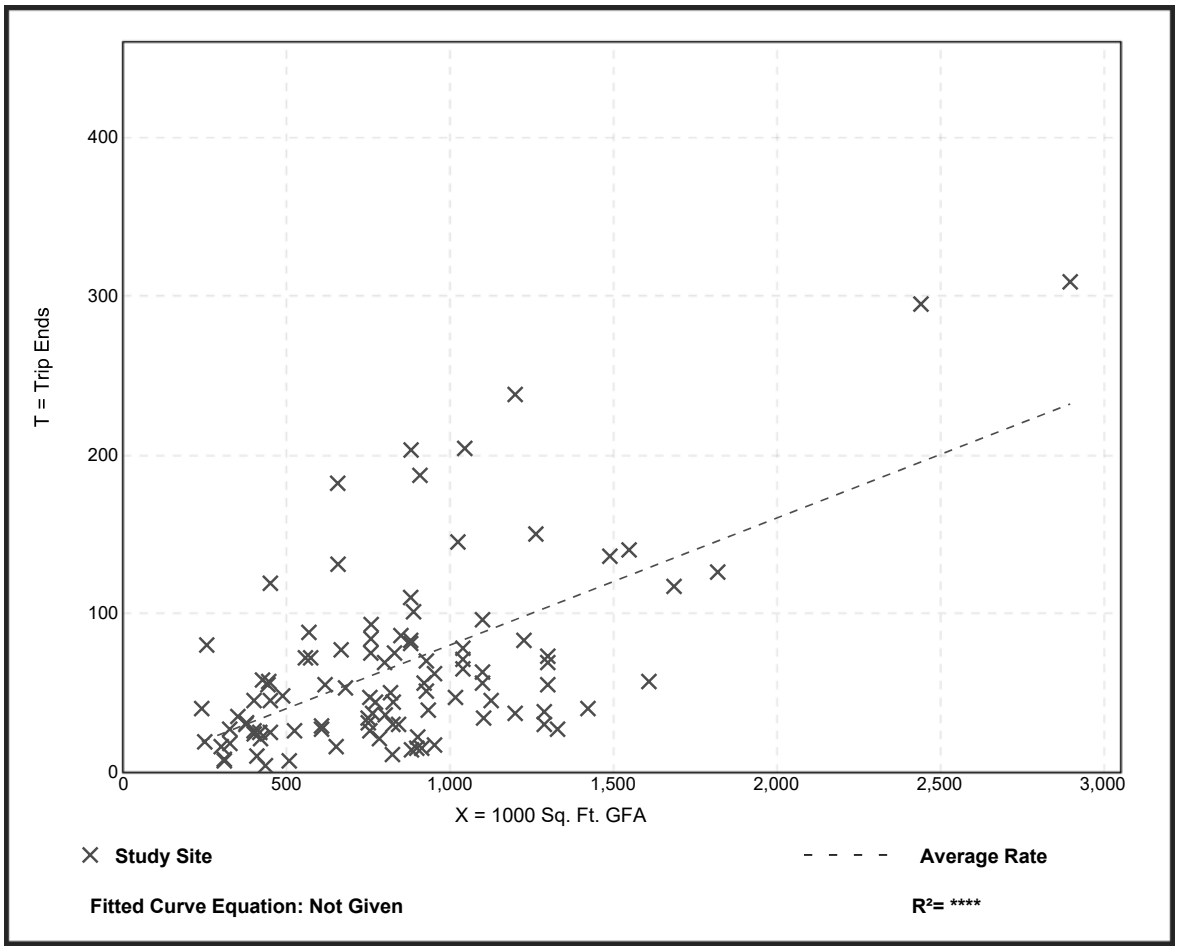
High-Cube Transload and Short-Term Storage Warehouse
(154)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 102
Avg. 1000 Sq. Ft. GFA: 846
Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.08	0.01 - 0.31	0.05

Data Plot and Equation



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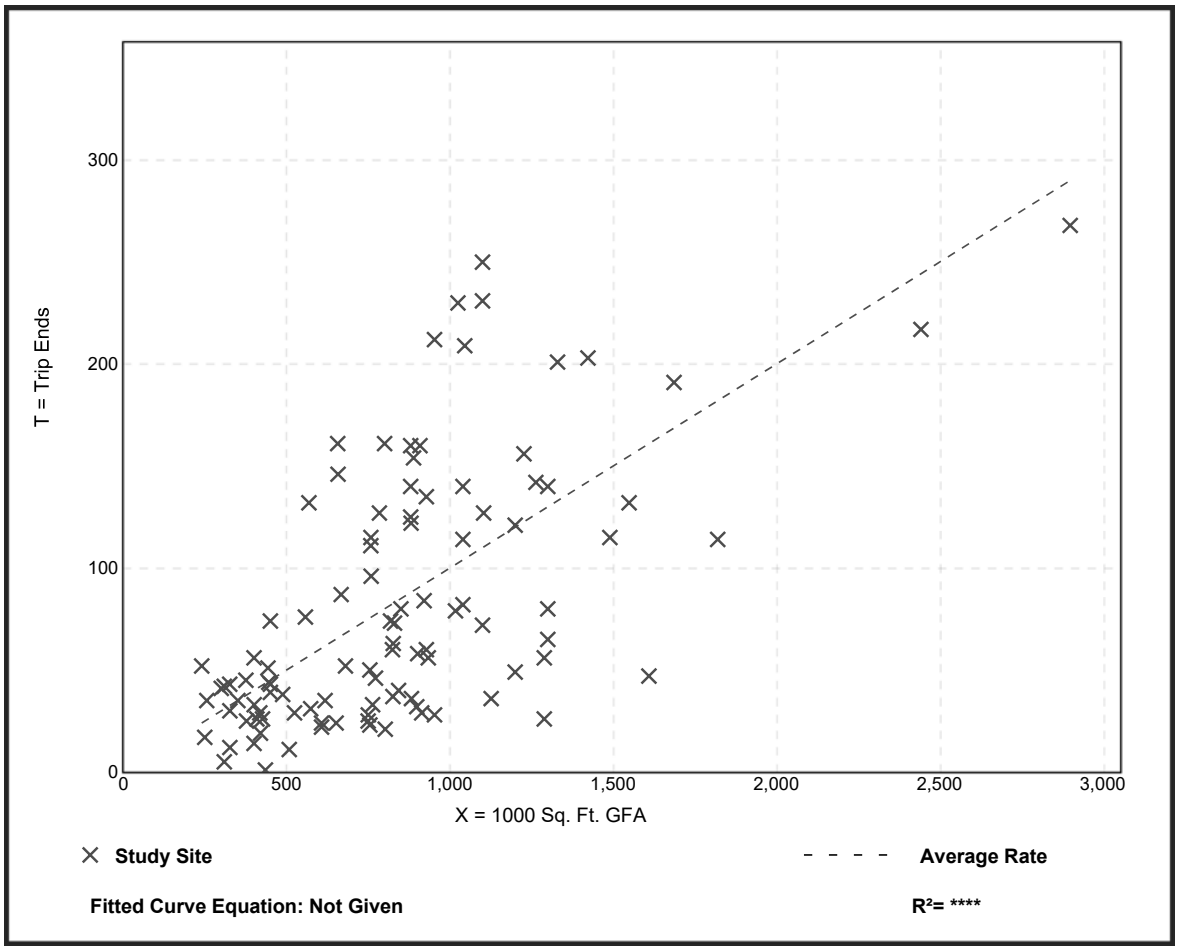
High-Cube Transload and Short-Term Storage Warehouse
(154)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 103
Avg. 1000 Sq. Ft. GFA: 840
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.10	0.00 - 0.25	0.06

Data Plot and Equation



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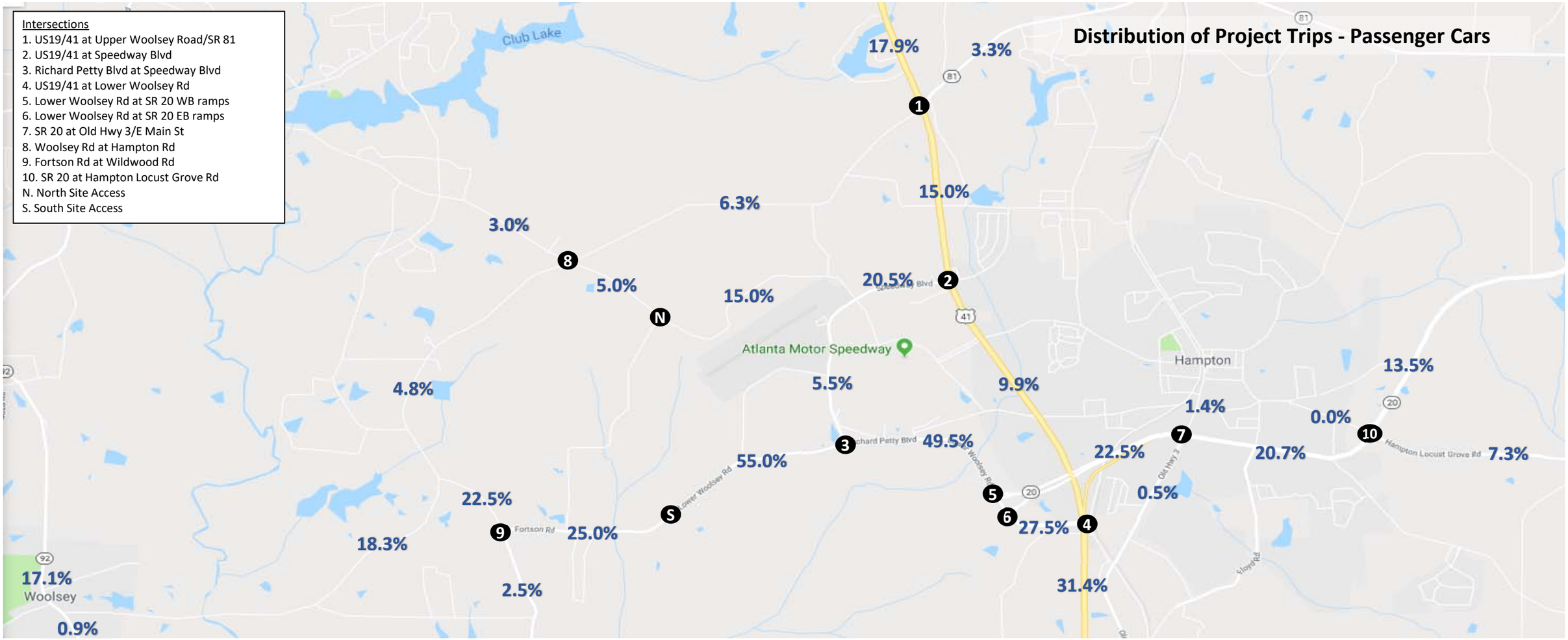
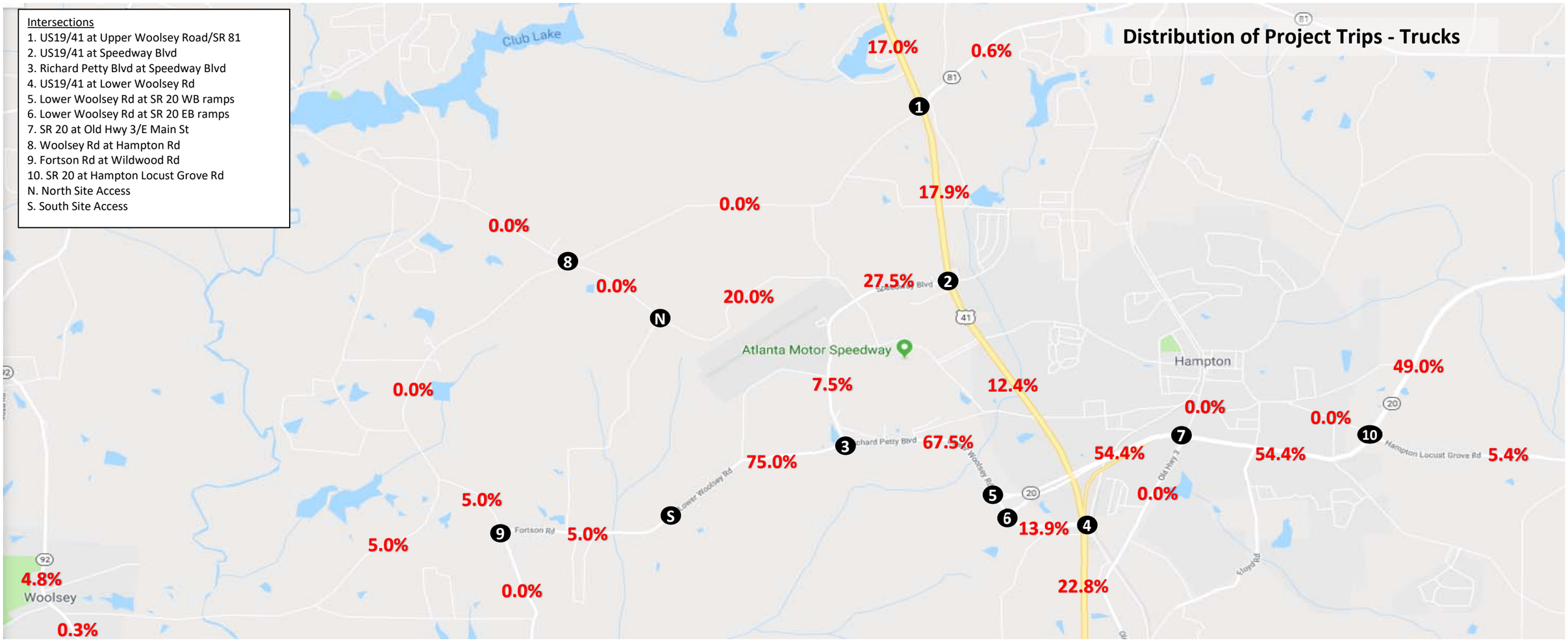
APPENDIX D

PROJECT TRAFFIC DISTRIBUTION


Intersections
1. US19/41 at Upper Woolsey Road/SR 81
2. US19/41 at Speedway Blvd
3. Richard Petty Blvd at Speedway Blvd
4. US19/41 at Lower Woolsey Rd
5. Lower Woolsey Rd at SR 20 WB ramps
6. Lower Woolsey Rd at SR 20 EB ramps
7. SR 20 at Old Hwy 3/E Main St
8. Woolsey Rd at Hampton Rd
9. Fortson Rd at Wildwood Rd
10. SR 20 at Hampton Locust Grove Rd
N. North Site Access
S. South Site Access
Distribution of Project Trips - Passenger Cars
Club Lake
17.9%
3.3%
1
15.0%
6.3%
3.0%
8
5.0%
15.0%
20.5%
2
N
Atlanta Motor Speedway
5.5%
9.9%
Hampton
13.5%
1.4%
0.0%
7
10
4.8%
3
49.5%
55.0%
22.5%
20.7%
7.3%
Richard Petty Blvd
Lower Woolsey Rd
Hampton Locust Grove Rd
22.5%
0.5%
5
6
S
9
Fortson Rd
25.0%
27.5%
4
18.3%
17.1%
Woolsey
2.5%
31.4%
0.9%
Floyd Rd


Intersections
1. US19/41 at Upper Woolsey Road/SR 81
2. US19/41 at Speedway Blvd
3. Richard Petty Blvd at Speedway Blvd
4. US19/41 at Lower Woolsey Rd
5. Lower Woolsey Rd at SR 20 WB ramps
6. Lower Woolsey Rd at SR 20 EB ramps
7. SR 20 at Old Hwy 3/E Main St
8. Woolsey Rd at Hampton Rd
9. Fortson Rd at Wildwood Rd
10. SR 20 at Hampton Locust Grove Rd
N. North Site Access
S. South Site Access
Distribution of Project Trips - Trucks
Club Lake
17.0%
0.6%
1
17.9%
0.0%
0.0%
8
0.0%
N
20.0%
27.5%
2
Atlanta Motor Speedway
7.5%
12.4%
0.0%
Hampton
49.0%
0.0%
10
7
3
67.5%
75.0%
54.4%
54.4%
5.4%
Richard Petty Blvd
Lower Woolsey Rd
W Woolsey Rd
Old Hwy 3
Hampton Locust Grove Rd
0.0%
5
20
5.0%
S
6
13.9%
4
5.0%
9
Fortson Rd
5.0%
4.8%
Woolsey
0.0%
22.8%
Floyd Rd
0.3%
92
81
41

APPENDIX E

RAW DATA

All Traffic Data Services, Inc

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Site Code: A
Station ID: A
LOWER WOOLSEY ROAD WEST OF S LEE ROAD

Latitude: 0' 0.0000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/22/18	0	4	1	0	0	0	0	0	0	0	0	0	0	5
00:15	0	1	0	0	0	0	0	0	1	0	0	0	0	2
00:30	0	2	0	0	1	0	0	0	0	0	0	0	0	3
00:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	9	1	0	1	0	0	0	1	0	0	0	0	12
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
04:15	0	1	1	0	0	0	0	0	0	0	0	0	0	2
04:30	0	2	3	0	1	0	0	0	0	0	0	0	0	6
04:45	0	7	0	0	0	0	0	0	0	0	0	0	0	7
	0	11	5	0	1	0	0	0	0	0	0	0	0	17
05:00	0	3	1	0	1	0	0	0	0	0	0	0	0	5
05:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
05:30	0	10	3	0	0	0	0	0	0	0	0	0	0	13
05:45	0	12	10	0	2	0	0	0	0	0	0	0	0	24
	0	33	15	0	3	0	0	0	0	0	0	0	0	51
06:00	0	8	7	0	0	0	0	0	0	0	0	0	0	15
06:15	0	26	7	0	0	0	0	0	0	0	0	0	0	33
06:30	0	27	8	0	2	2	0	0	0	0	0	0	0	39
06:45	0	37	7	0	0	0	0	0	0	0	0	0	0	44
	0	98	29	0	2	2	0	0	0	0	0	0	0	131
07:00	0	46	13	0	1	0	0	0	0	0	0	0	0	60
07:15	0	44	10	0	3	0	0	0	0	0	0	0	0	57
07:30	0	31	9	0	1	0	0	0	1	0	0	0	0	42
07:45	0	42	13	0	0	0	0	0	0	0	0	0	0	55
	0	163	45	0	5	0	0	0	1	0	0	0	0	214
08:00	2	16	4	0	0	0	0	0	0	0	0	0	0	22
08:15	0	27	8	0	0	0	0	0	0	0	0	0	0	35
08:30	0	34	7	0	1	0	0	0	0	0	0	0	0	42
08:45	0	16	4	0	0	0	0	0	0	0	0	0	0	20
	2	93	23	0	1	0	0	0	0	0	0	0	0	119
09:00	0	12	3	0	0	0	0	1	0	0	0	0	0	16
09:15	0	15	8	0	1	1	0	0	0	0	0	0	0	25
09:30	0	11	1	0	2	0	0	0	0	0	0	0	0	14
09:45	0	5	5	0	0	1	0	1	0	0	0	0	0	12
	0	43	17	0	3	2	0	2	0	0	0	0	0	67
10:00	0	13	3	0	3	0	0	0	1	0	0	0	0	20
10:15	0	8	4	0	2	0	0	0	0	0	0	0	0	14
10:30	0	9	2	0	2	0	0	0	0	0	0	0	0	13
10:45	1	14	8	0	0	0	0	1	0	0	0	0	0	24
	1	44	17	0	7	0	0	1	1	0	0	0	0	71
11:00	1	6	4	0	1	1	0	0	0	0	0	0	0	13
11:15	0	3	4	0	1	0	0	0	1	0	0	0	0	9
11:30	0	12	9	0	2	0	0	1	0	0	0	0	0	24
11:45	0	10	9	0	1	0	0	0	0	0	0	0	0	20
	1	31	26	0	5	1	0	1	1	0	0	0	0	66
Total	4	532	178	0	28	5	0	4	4	0	0	0	0	755
Percent	0.5%	70.5%	23.6%	0.0%	3.7%	0.7%	0.0%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

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Site Code: A
Station ID: A
LOWER WOOLSEY ROAD WEST OF S LEE ROAD

Latitude: 0' 0.0000 Undefined

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	10	2	0	1	0	0	0	1	0	0	0	0	14
12:15	0	22	5	0	1	0	0	2	0	0	0	0	0	30
12:30	0	12	4	0	0	0	0	0	0	0	0	0	0	16
12:45	0	18	5	0	1	0	0	0	0	0	0	0	0	24
	0	62	16	0	3	0	0	2	1	0	0	0	0	84
13:00	0	10	2	0	1	0	0	0	0	0	0	0	0	13
13:15	0	19	5	0	0	0	0	1	0	0	0	0	0	25
13:30	0	14	5	1	2	0	0	0	0	0	0	0	0	22
13:45	0	19	9	0	2	0	0	0	0	0	0	0	0	30
	0	62	21	1	5	0	0	1	0	0	0	0	0	90
14:00	0	20	5	0	1	2	0	2	0	0	0	0	0	30
14:15	0	17	8	0	0	1	0	0	0	0	0	0	0	26
14:30	0	21	7	1	3	1	0	0	0	0	0	0	0	33
14:45	0	12	4	0	0	0	0	0	0	0	0	0	0	16
	0	70	24	1	4	4	0	2	0	0	0	0	0	105
15:00	0	17	7	0	1	0	0	0	0	0	0	0	0	25
15:15	1	24	6	0	2	1	0	0	0	0	0	0	0	34
15:30	0	24	9	0	0	0	0	1	0	0	0	0	0	34
15:45	1	20	10	0	3	0	0	0	0	0	0	0	0	34
	2	85	32	0	6	1	0	1	0	0	0	0	0	127
16:00	0	39	10	0	1	0	0	1	0	0	0	0	0	51
16:15	0	33	15	0	2	0	0	0	0	0	0	0	0	50
16:30	0	35	14	0	2	0	0	0	0	0	0	0	0	51
16:45	0	24	6	0	2	0	0	1	0	0	0	0	0	33
	0	131	45	0	7	0	0	2	0	0	0	0	0	185
17:00	0	37	9	0	4	0	0	0	0	0	0	0	0	50
17:15	0	30	8	0	1	0	0	0	0	0	0	0	0	39
17:30	0	63	12	0	1	0	0	0	0	0	0	0	0	76
17:45	0	45	10	0	2	1	0	3	0	0	0	0	0	61
	0	175	39	0	8	1	0	3	0	0	0	0	0	226
18:00	0	43	12	0	2	0	0	0	0	0	0	0	0	57
18:15	1	20	9	0	1	0	0	0	0	0	0	0	0	31
18:30	0	24	8	0	2	1	0	1	0	0	0	0	0	36
18:45	0	19	3	0	1	0	0	1	0	0	0	0	0	24
	1	106	32	0	6	1	0	2	0	0	0	0	0	148
19:00	0	16	6	0	1	0	0	0	0	0	0	0	0	23
19:15	0	16	3	0	1	0	0	0	0	0	0	0	0	20
19:30	0	8	5	0	1	0	0	0	0	0	0	0	0	14
19:45	0	19	2	0	0	0	0	0	0	0	0	0	0	21
	0	59	16	0	3	0	0	0	0	0	0	0	0	78
20:00	0	9	4	0	0	0	0	0	0	0	0	0	0	13
20:15	0	7	4	0	2	0	0	0	0	0	0	0	0	13
20:30	0	10	2	0	0	0	0	0	0	0	0	0	0	12
20:45	0	15	4	0	0	0	0	0	0	0	0	0	0	19
	0	41	14	0	2	0	0	0	0	0	0	0	0	57
21:00	0	6	3	0	0	0	0	0	0	0	0	0	0	9
21:15	0	13	3	0	0	0	0	0	0	0	0	0	0	16
21:30	0	9	0	0	0	0	0	0	0	0	0	0	0	9
21:45	0	6	1	0	0	0	0	0	0	0	0	0	0	7
	0	34	7	0	0	0	0	0	0	0	0	0	0	41
22:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
22:15	0	6	1	0	0	0	0	0	0	0	0	0	0	7
22:30	0	7	2	0	0	0	0	0	0	0	0	0	0	9
22:45	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	0	25	5	0	1	0	0	0	0	0	0	0	0	31
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
23:15	0	4	0	0	1	0	0	0	0	0	0	0	0	5
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	0	11	1	0	1	0	0	0	0	0	0	0	0	13
Total	3	861	252	2	46	7	0	13	1	0	0	0	0	1185
Percent	0.3%	72.7%	21.3%	0.2%	3.9%	0.6%	0.0%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
Grand Total	7	1393	430	2	74	12	0	17	5	0	0	0	0	1940
Percent	0.4%	71.8%	22.2%	0.1%	3.8%	0.6%	0.0%	0.9%	0.3%	0.0%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

alltrafficdata.net

Site Code: A
Station ID: A
LOWER WOOLSEY ROAD WEST OF S LEE ROAD

Latitude: 0' 0.0000 Undefined

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
05/22/18	0	2	0	0	0	0	0	0	0	0	0	0	0	2
00:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	3	0	0	0	0	0	0	0	0	0	0	0	3
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	3	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:15	0	2	1	0	1	0	0	0	0	0	0	0	0	4
04:30	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:45	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	0	14	2	0	1	0	0	0	0	0	0	0	0	17
05:00	0	3	2	0	0	1	0	0	0	0	0	0	0	6
05:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6
05:30	0	14	0	0	0	0	0	0	0	0	0	0	0	14
05:45	0	10	3	0	1	0	0	1	0	0	0	0	0	15
	0	32	6	0	1	1	0	1	0	0	0	0	0	41
06:00	0	13	2	0	0	0	0	0	0	0	0	0	0	15
06:15	0	18	4	0	1	0	0	0	0	0	0	0	0	23
06:30	0	29	6	0	0	0	0	0	0	0	0	0	0	35
06:45	0	29	12	0	0	1	0	0	0	0	0	0	0	42
	0	89	24	0	1	1	0	0	0	0	0	0	0	115
07:00	0	35	5	0	0	0	0	0	0	0	0	0	0	40
07:15	0	61	11	0	1	0	0	0	0	0	0	0	0	73
07:30	0	53	8	0	0	1	0	0	0	0	0	0	0	62
07:45	0	39	11	0	1	0	0	0	0	0	0	0	0	51
	0	188	35	0	2	1	0	0	0	0	0	0	0	226
08:00	0	23	10	0	1	0	0	0	0	0	0	0	0	34
08:15	0	26	10	0	1	0	0	0	0	0	0	0	0	37
08:30	0	25	9	0	1	0	0	0	0	0	0	0	0	35
08:45	0	21	5	0	0	0	0	1	0	0	0	0	0	27
	0	95	34	0	3	0	0	1	0	0	0	0	0	133
09:00	0	12	5	0	1	0	1	0	0	0	0	0	0	19
09:15	0	17	8	0	2	0	0	0	0	0	0	0	0	27
09:30	0	18	10	0	0	0	0	0	0	0	0	0	0	28
09:45	0	11	7	0	1	0	0	0	0	0	0	0	0	19
	0	58	30	0	4	0	1	0	0	0	0	0	0	93
10:00	0	8	6	0	0	0	0	0	0	0	0	0	0	14
10:15	0	12	2	0	1	0	0	1	1	0	0	0	0	17
10:30	0	16	2	0	0	1	0	0	0	0	0	0	0	19
10:45	0	6	5	0	2	0	0	0	0	0	0	0	0	13
	0	42	15	0	3	1	0	1	1	0	0	0	0	63
11:00	0	11	6	0	1	0	0	0	0	0	0	0	0	18
11:15	0	14	3	0	1	0	0	1	0	0	0	0	0	19
11:30	0	13	2	0	0	0	0	0	0	0	0	0	0	15
11:45	0	12	3	0	4	0	0	0	1	0	0	0	0	20
	0	50	14	0	6	0	0	1	1	0	0	0	0	72
Total	0	581	160	0	21	4	1	4	2	0	0	0	0	773
Percent	0.0%	75.2%	20.7%	0.0%	2.7%	0.5%	0.1%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	

All Traffic Data Services, Inc

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Site Code: A
Station ID: A
LOWER WOOLSEY ROAD WEST OF S LEE ROAD

Latitude: 0' 0.0000 Undefined

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
12 PM	0	19	10	0	0	0	0	0	0	0	0	0	0	29
12:15	0	15	6	0	1	0	0	0	0	0	0	0	0	22
12:30	0	13	7	0	1	0	0	0	1	0	0	0	0	22
12:45	0	13	6	0	1	0	0	0	0	0	0	0	0	20
	0	60	29	0	3	0	0	0	1	0	0	0	0	93
13:00	0	16	6	0	0	0	0	0	0	0	0	0	0	22
13:15	0	15	5	1	0	0	0	0	0	0	0	0	0	21
13:30	0	16	9	0	0	0	0	0	0	0	0	0	0	25
13:45	0	16	8	0	2	0	0	0	0	0	0	0	0	26
	0	63	28	1	2	0	0	0	0	0	0	0	0	94
14:00	0	25	6	0	0	0	0	0	0	0	0	0	0	31
14:15	0	28	11	0	0	0	0	1	0	0	0	0	0	40
14:30	0	28	6	0	0	0	0	0	0	0	0	0	0	34
14:45	0	19	3	0	1	0	0	0	0	0	0	0	0	23
	0	100	26	0	1	0	0	1	0	0	0	0	0	128
15:00	0	25	8	0	1	0	0	0	0	0	1	0	0	35
15:15	1	19	8	0	1	0	0	0	0	0	0	0	0	29
15:30	0	26	7	0	1	0	0	0	0	0	0	0	0	34
15:45	0	43	9	0	0	2	0	0	0	0	0	0	0	54
	1	113	32	0	3	2	0	0	0	0	1	0	0	152
16:00	1	38	15	0	1	0	0	0	0	0	0	0	0	55
16:15	0	36	7	0	0	0	0	1	0	0	0	0	0	44
16:30	0	37	12	0	0	0	0	0	0	0	0	0	0	49
16:45	1	47	18	0	0	1	0	0	0	0	0	0	0	67
	2	158	52	0	1	1	0	1	0	0	0	0	0	215
17:00	0	40	7	0	0	0	0	0	0	0	0	0	0	47
17:15	0	60	14	0	3	1	0	0	0	0	0	0	0	78
17:30	1	42	8	0	1	0	0	0	0	0	0	0	0	52
17:45	0	27	4	0	0	1	0	0	0	0	0	0	0	32
	1	169	33	0	4	2	0	0	0	0	0	0	0	209
18:00	0	36	8	0	1	0	0	0	0	0	0	0	0	45
18:15	1	41	10	0	1	0	0	1	0	0	0	0	0	54
18:30	0	24	4	0	0	0	0	0	0	0	0	0	0	28
18:45	0	17	1	0	1	0	0	0	0	0	0	0	0	19
	1	118	23	0	3	0	0	1	0	0	0	0	0	146
19:00	0	15	2	0	0	0	0	0	0	0	0	0	0	17
19:15	0	14	1	0	0	0	0	0	0	0	0	0	0	15
19:30	0	14	5	0	0	0	0	0	0	0	0	0	0	19
19:45	0	18	2	0	0	0	0	0	0	0	0	0	0	20
	0	61	10	0	0	0	0	0	0	0	0	0	0	71
20:00	0	16	2	1	0	0	0	0	0	0	0	0	0	19
20:15	0	7	2	0	0	0	0	0	0	0	0	0	0	9
20:30	0	12	3	0	0	0	0	0	0	0	0	0	0	15
20:45	0	9	4	0	1	0	0	0	0	0	0	0	0	14
	0	44	11	1	1	0	0	0	0	0	0	0	0	57
21:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
21:15	0	8	1	0	0	0	0	0	0	0	0	0	0	9
21:30	0	10	1	0	1	0	0	0	0	0	0	0	0	12
21:45	0	8	2	0	0	0	0	0	0	0	0	0	0	10
	0	33	4	0	1	0	0	0	0	0	0	0	0	38
22:00	0	6	3	0	0	0	0	0	0	0	0	0	0	9
22:15	0	5	1	0	0	0	0	0	0	0	0	0	0	6
22:30	0	8	1	0	0	1	0	0	0	0	0	0	0	10
22:45	0	1	2	0	0	0	0	0	0	0	0	0	0	3
	0	20	7	0	0	1	0	0	0	0	0	0	0	28
23:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
23:15	0	8	0	0	1	0	0	0	0	0	0	0	0	9
23:30	0	7	0	0	0	0	0	0	0	0	0	0	0	7
23:45	0	3	2	0	0	0	0	0	0	0	0	0	0	5
	0	26	2	0	1	0	0	0	0	0	0	0	0	29
Total	5	965	257	2	20	6	0	3	1	0	1	0	0	1260
Percent	0.4%	76.6%	20.4%	0.2%	1.6%	0.5%	0.0%	0.2%	0.1%	0.0%	0.1%	0.0%	0.0%	
Grand Total	5	1546	417	2	41	10	1	7	3	0	1	0	0	2033
Percent	0.2%	76.0%	20.5%	0.1%	2.0%	0.5%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	

All Traffic Data Services Inc.
(303) 216-2439
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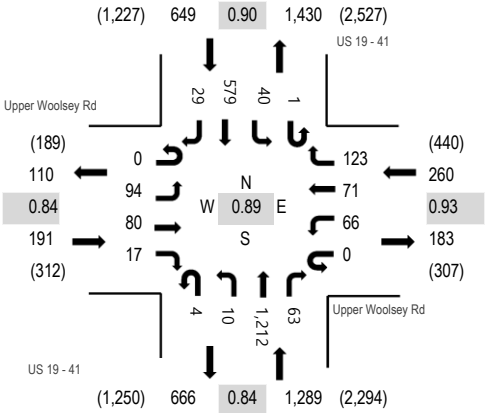
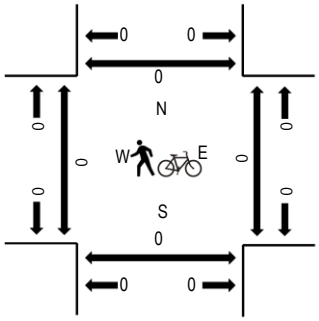
Location: 1 US 19 - 41 & Upper Woolsey Rd AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Upper Woolsey Rd Eastbound				Upper Woolsey Rd Westbound				US 19 - 41 Northbound				US 19 - 41 Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	29	17	4	0	18	17	27	3	2	278	15	1	8	106	1	526	2,389	0	0	0	0
7:15 AM	0	22	19	4	0	13	25	24	0	1	360	22	0	11	165	8	674	2,346	0	0	0	0
7:30 AM	0	24	27	6	0	16	16	38	1	3	281	15	0	11	143	12	593	2,159	0	0	0	0
7:45 AM	0	19	17	3	0	19	13	34	0	4	293	11	0	10	165	8	596	2,033	0	0	0	0
8:00 AM	0	21	15	6	0	18	14	18	0	2	244	16	0	14	113	2	483	1,884	0	0	0	0
8:15 AM	0	13	6	7	0	12	14	26	1	3	265	10	0	9	110	11	487		0	0	0	0
8:30 AM	0	19	8	5	0	14	9	18	1	2	227	6	2	14	137	5	467		0	0	0	0
8:45 AM	0	9	10	2	0	5	13	19	3	0	216	9	0	7	150	4	447		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	0	0	0	0	0	0	0	0	17	1	0	2	11	0	33
Lights	0	89	79	17	0	64	69	119	4	10	1,157	60	1	37	555	29	2,290
Mediums	0	3	1	0	0	2	2	4	0	0	38	2	0	1	13	0	66
Total	0	94	80	17	0	66	71	123	4	10	1,212	63	1	40	579	29	2,389

All Traffic Data Services Inc.
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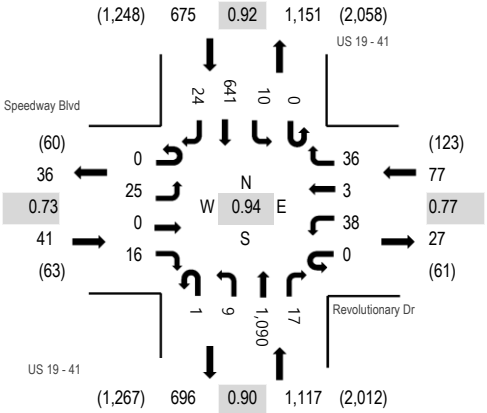
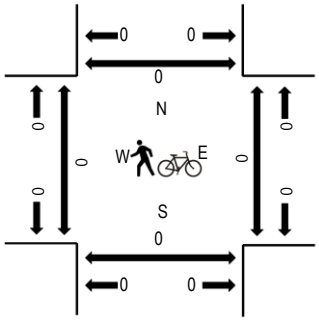
Location: 2 US 19 - 41 & Revolutionary Dr AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Speedway Blvd Eastbound				Revolutionary Dr Westbound				US 19 - 41 Northbound				US 19 - 41 Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	9	0	2	0	8	2	15	1	4	246	5	0	4	125	4	425	1,910	0	0	0	0
7:15 AM	0	3	0	1	0	7	1	10	0	3	305	3	0	0	169	8	510	1,888	0	0	0	0
7:30 AM	0	6	0	6	0	15	0	7	0	1	270	5	0	2	178	5	495	1,751	0	0	0	0
7:45 AM	0	7	0	7	0	8	0	4	0	1	269	4	0	4	169	7	480	1,655	0	0	0	0
8:00 AM	0	5	0	1	0	5	1	4	0	3	243	5	1	3	130	2	403	1,536	0	0	0	0
8:15 AM	0	3	0	1	0	4	0	9	2	2	230	5	0	4	111	2	373		0	0	0	0
8:30 AM	0	5	0	3	0	4	0	5	1	1	206	4	0	3	163	4	399		0	0	0	0
8:45 AM	0	2	0	2	0	3	1	10	2	1	183	7	1	3	139	7	361		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	19	0	0	0	13	0	32
Lights	0	24	0	16	0	38	3	36	1	7	1,019	14	0	10	617	21	1,806
Mediums	0	1	0	0	0	0	0	0	0	2	52	3	0	0	11	3	72
Total	0	25	0	16	0	38	3	36	1	9	1,090	17	0	10	641	24	1,910

All Traffic Data Services Inc.

(303) 216-2439
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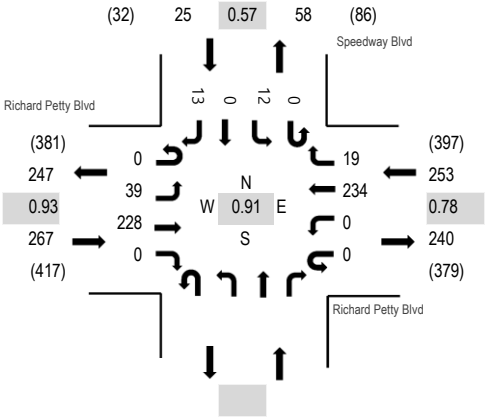
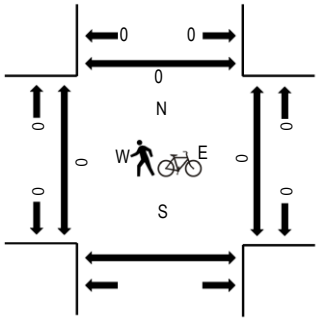
Location: 3 Speedway Blvd & Richard Petty Blvd AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Richard Petty Blvd Eastbound				Richard Petty Blvd Westbound				Northbound				Speedway Blvd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	11	61	0	0	0	47	3					0	1	0	1	124	545	0	0		0
7:15 AM	0	10	54	0	0	0	74	7					0	2	0	3	150	493	0	0		0
7:30 AM	0	10	52	0	0	0	61	3					0	7	0	4	137	436	0	0		0
7:45 AM	0	8	61	0	0	0	52	6					0	2	0	5	134	381	0	0		0
8:00 AM	0	3	34	0	0	0	29	4					0	2	0	0	72	301	0	0		0
8:15 AM	1	5	39	0	0	0	45	2					0	1	0	0	93		0	0		0
8:30 AM	0	7	39	0	0	0	31	2					0	3	0	0	82		0	0		0
8:45 AM	0	2	20	0	0	0	28	3					0	1	0	0	54		0	0		0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	1	0					0	0	0	0	2
Lights	0	38	221	0	0	0	230	19					0	12	0	13	533
Mediums	0	1	6	0	0	0	3	0					0	0	0	0	10
Total	0	39	228	0	0	0	234	19					0	12	0	13	545

All Traffic Data Services Inc.

(303) 216-2439
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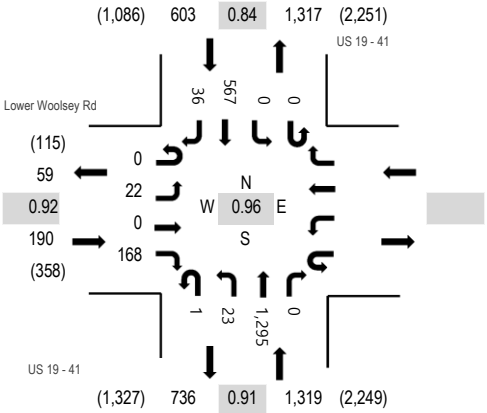
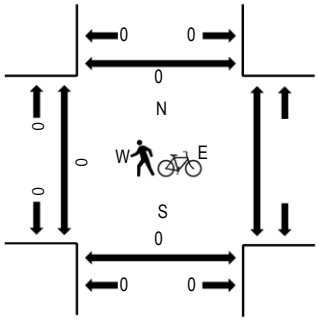
Location: 4 US 19 - 41 & Lower Woolsey Rd AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Lower Woolsey Rd Eastbound				Westbound				US 19 - 41 Northbound				US 19 - 41 Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	4	0	32					0	3	337	0	0	0	110	8	494	2,112	0		0	0
7:15 AM	0	5	0	36					1	13	347	0	0	0	142	7	551	2,052	0		0	0
7:30 AM	0	4	0	55					0	4	303	0	0	0	170	11	547	1,894	0		0	0
7:45 AM	0	9	0	45					0	3	308	0	0	0	145	10	520	1,742	0		0	0
8:00 AM	0	7	0	49					2	3	252	0	0	0	113	8	434	1,581	0		0	0
8:15 AM	0	9	0	39					0	7	234	0	1	0	91	12	393		0		0	0
8:30 AM	0	6	0	24					3	6	219	0	2	0	126	9	395		0		0	0
8:45 AM	0	4	0	30					3	2	199	0	1	0	111	9	359		0		0	0

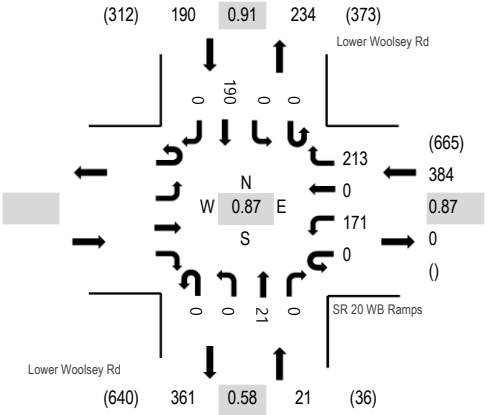
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	0	5					0	0	25	0	0	0	10	3	45
Lights	0	18	0	154					1	22	1,232	0	0	0	545	33	2,005
Mediums	0	2	0	9					0	1	38	0	0	0	12	0	62
Total	0	22	0	168					1	23	1,295	0	0	0	567	36	2,112

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

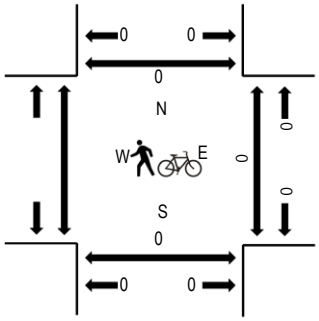
Location: 5 Lower Woolsey Rd & SR 20 WB Ramps AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				SR 20 WB Ramps Westbound				Lower Woolsey Rd Northbound				Lower Woolsey Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM					0	31	0	45	0	0	2	0	0	0	43	0	121	595		0	0	0
7:15 AM					0	38	0	59	0	0	9	0	0	0	51	0	157	592		0	0	0
7:30 AM					0	52	0	60	0	0	7	0	0	0	52	0	171	563		0	0	0
7:45 AM					0	50	0	49	0	0	3	0	0	0	44	0	146	484		0	0	0
8:00 AM					0	53	0	29	0	0	2	0	0	0	34	0	118	418		0	0	0
8:15 AM					0	45	0	44	0	0	5	0	0	0	34	0	128			0	0	0
8:30 AM					0	26	0	24	0	0	6	0	0	0	36	0	92			0	0	0
8:45 AM					0	33	0	27	0	0	2	0	0	0	18	0	80			0	0	0

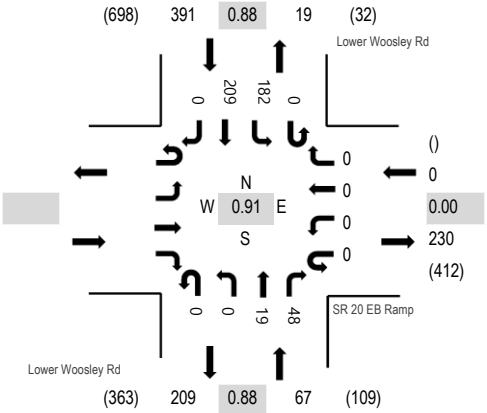
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	6	0	0	0	0	0	0	0	0	1	0	7
Lights					0	154	0	211	0	0	21	0	0	0	183	0	569
Mediums					0	11	0	2	0	0	0	0	0	0	6	0	19
Total					0	171	0	213	0	0	21	0	0	0	190	0	595

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

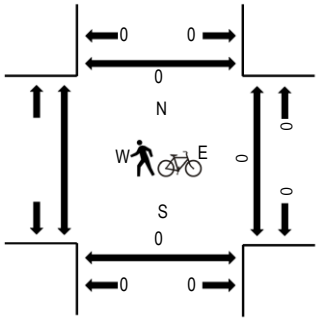
Location: 6 Lower Woosley Rd & SR 20 EB Ramp AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				SR 20 EB Ramp Westbound				Lower Woosley Rd Northbound				Lower Woosley Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM					0	0	0	0	0	0	4	7	0	51	35	0	97	434		0	0	0
7:15 AM					0	0	0	0	0	0	6	8	0	44	37	0	95	441		0	0	0
7:30 AM					0	0	0	0	0	0	7	8	0	50	61	0	126	458		0	0	0
7:45 AM					0	0	0	0	0	0	3	16	0	47	50	0	116	421		0	0	0
8:00 AM					0	0	0	0	0	0	3	11	0	44	46	0	104	373		0	0	0
8:15 AM					0	0	0	0	0	0	6	13	0	41	52	0	112			0	0	0
8:30 AM					0	0	0	0	0	0	2	10	0	33	44	0	89			0	0	0
8:45 AM					0	0	0	0	0	0	1	4	0	25	38	0	68			0	0	0

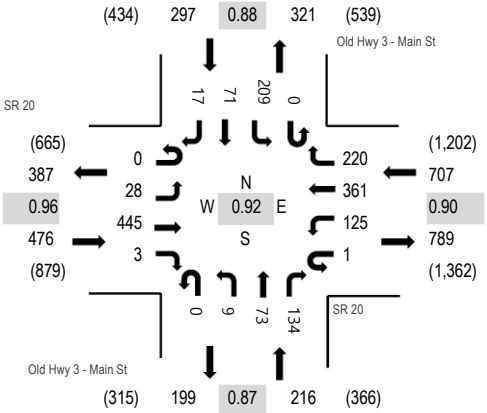
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	0	0	0	0	4	0	4
Lights					0	0	0	0	0	0	19	45	0	180	195	0	439
Mediums					0	0	0	0	0	0	0	3	0	2	10	0	15
Total					0	0	0	0	0	0	19	48	0	182	209	0	458

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

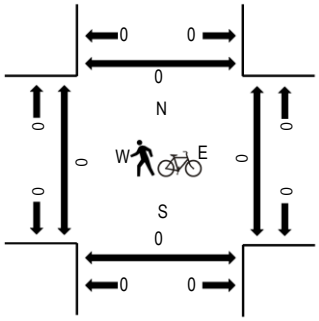
Location: 7 Old Hwy 3 - Main St & SR 20 AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SR 20 Eastbound				SR 20 Westbound				Old Hwy 3 - Main St Northbound				Old Hwy 3 - Main St Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	5	110	1	0	24	75	37	0	2	10	21	0	28	10	5	328	1,633	0	0	0	0
7:15 AM	0	6	111	1	0	26	93	46	0	5	13	35	0	45	19	3	403	1,696	0	0	0	0
7:30 AM	0	9	117	1	0	25	104	67	0	1	18	37	0	57	22	5	463	1,629	0	0	0	0
7:45 AM	0	7	120	1	1	40	84	46	0	3	22	37	0	60	12	6	439	1,437	0	0	0	0
8:00 AM	0	6	97	0	0	34	80	61	0	0	20	25	0	47	18	3	391	1,248	0	0	0	0
8:15 AM	0	4	100	0	0	22	79	39	0	3	16	32	0	31	8	2	336		0	0	0	0
8:30 AM	0	1	98	0	0	22	50	37	0	2	9	25	0	20	7	0	271		0	0	0	0
8:45 AM	0	9	73	2	0	16	58	36	0	0	15	15	0	20	4	2	250		0	0	0	0

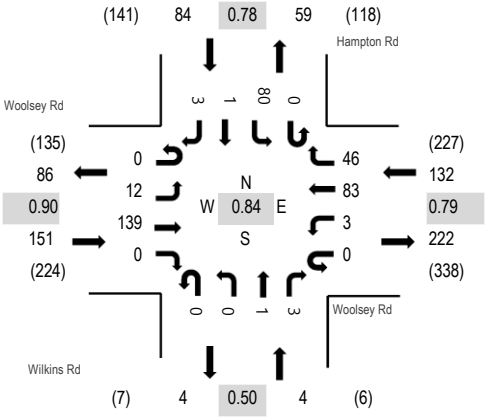
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	10	0	0	0	3	0	0	0	1	0	0	0	1	1	17
Lights	0	25	422	3	1	122	344	214	0	9	72	131	0	202	69	14	1,628
Mediums	0	2	13	0	0	3	14	6	0	0	0	3	0	7	1	2	51
Total	0	28	445	3	1	125	361	220	0	9	73	134	0	209	71	17	1,696

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

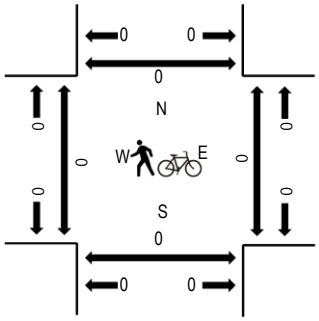
Location: 8 Wilkins Rd & Woolsey Rd AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Woolsey Rd Eastbound				Woolsey Rd Westbound				Wilkins Rd Northbound				Hampton Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	5	35	0	0	0	18	9	0	0	0	0	0	15	0	0	82	371	0	0	0	0
7:15 AM	0	4	38	0	0	1	24	17	0	0	0	1	0	23	0	2	110	345	0	0	0	0
7:30 AM	0	2	33	0	0	0	19	15	0	0	0	2	0	27	0	1	99	307	0	0	0	0
7:45 AM	0	1	33	0	0	2	22	5	0	0	1	0	0	15	1	0	80	256	0	0	0	0
8:00 AM	1	1	14	0	0	1	10	11	0	0	0	0	0	15	1	2	56	227	0	0	0	0
8:15 AM	0	4	21	0	0	0	13	19	0	0	0	0	0	13	0	2	72		0	0	0	0
8:30 AM	0	0	13	0	0	0	10	9	0	0	0	0	0	16	0	0	48		0	0	0	0
8:45 AM	0	2	16	1	0	0	10	12	0	0	1	1	0	7	0	1	51		0	0	0	0

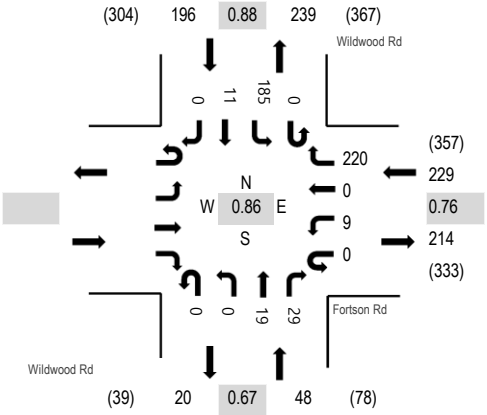
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lights	0	12	129	0	0	2	83	45	0	0	1	3	0	79	1	3	358
Mediums	0	0	9	0	0	1	0	1	0	0	0	0	0	1	0	0	12
Total	0	12	139	0	0	3	83	46	0	0	1	3	0	80	1	3	371

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

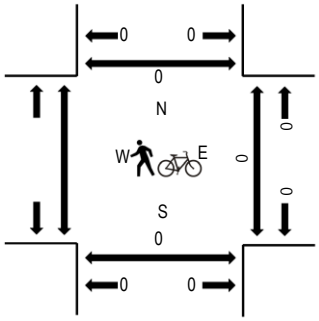
Location: 9 Wildwood Rd & Fortson Rd AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:15 AM - 07:30 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Fortson Rd Westbound				Wildwood Rd Northbound				Wildwood Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM					0	1	0	41	0	0	7	11	0	50	2	0	112	473	0	0	0	0
7:15 AM					0	1	0	74	0	0	4	2	0	53	3	0	137	420	0	0	0	0
7:30 AM					0	4	0	56	0	0	1	9	0	34	4	0	108	362	0	0	0	0
7:45 AM					0	3	0	49	0	0	7	7	0	48	2	0	116	336	0	0	0	0
8:00 AM					0	2	0	26	0	0	4	4	0	19	4	0	59	266	0	0	0	0
8:15 AM					0	3	0	35	0	0	5	5	0	30	1	0	79		0	0	0	0
8:30 AM					0	6	0	31	0	0	1	5	0	38	1	0	82		0	0	0	0
8:45 AM					0	0	0	25	0	0	1	5	0	13	2	0	46		0	0	0	0

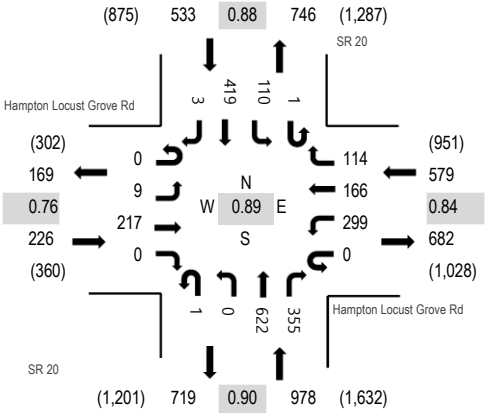
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	1	1	0	0	0	0	2
Lights					0	9	0	219	0	0	16	27	0	181	11	0	463
Mediums					0	0	0	1	0	0	2	1	0	4	0	0	8
Total					0	9	0	220	0	0	19	29	0	185	11	0	473

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

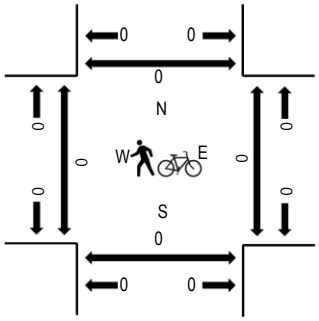
Location: 10 SR 20 & Hampton Locust Grove Rd AM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Hampton Locust Grove Rd Eastbound				Hampton Locust Grove Rd Westbound				SR 20 Northbound				SR 20 Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	2	35	1	0	42	29	8	0	0	133	50	0	8	84	1	393	2,185	0	0	0	0
7:15 AM	0	1	43	0	0	71	32	15	1	0	177	77	1	22	110	1	551	2,316	0	0	0	0
7:30 AM	0	5	69	0	0	82	45	28	0	0	166	107	0	30	120	2	654	2,192	0	0	0	0
7:45 AM	0	1	48	0	0	84	50	39	0	0	151	83	0	29	102	0	587	1,932	0	0	0	0
8:00 AM	0	2	57	0	0	62	39	32	0	0	128	88	0	29	87	0	524	1,633	0	0	0	0
8:15 AM	0	4	32	1	0	51	32	21	0	0	133	46	0	13	92	2	427		0	0	0	0
8:30 AM	0	3	40	1	0	49	35	21	0	2	116	58	0	12	55	2	394		0	0	0	0
8:45 AM	0	2	13	0	0	43	28	13	0	0	85	31	0	8	63	2	288		0	0	0	0

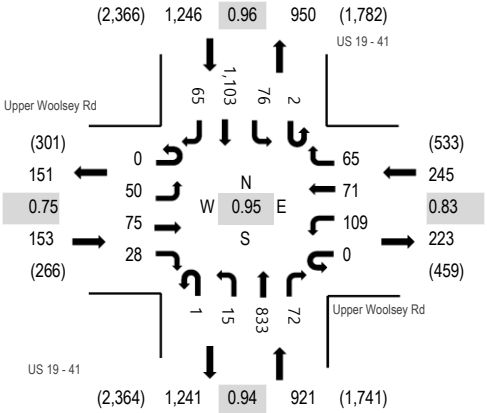
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	10	0	0	0	4	0	14
Lights	0	9	211	0	0	286	159	109	1	0	602	343	1	109	405	3	2,238
Mediums	0	0	6	0	0	13	7	5	0	0	10	12	0	1	10	0	64
Total	0	9	217	0	0	299	166	114	1	0	622	355	1	110	419	3	2,316

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

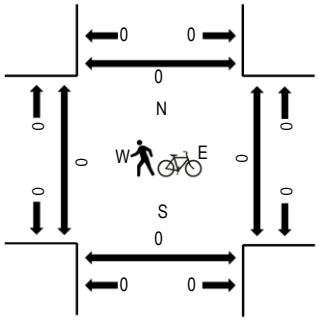
Location: 1 US 19 - 41 & Upper Woolsey Rd PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Upper Woolsey Rd Eastbound				Upper Woolsey Rd Westbound				US 19 - 41 Northbound				US 19 - 41 Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	8	18	7	0	22	14	20	2	2	198	17	0	22	239	14	583	2,393	0	0	0	0
4:15 PM	0	3	14	9	0	29	23	26	0	5	150	25	2	24	226	11	547	2,488	0	0	0	0
4:30 PM	0	14	23	14	0	31	14	14	0	1	219	12	0	23	280	21	666	2,565	0	0	0	0
4:45 PM	0	13	9	7	0	26	22	16	0	5	184	22	0	17	265	11	597	2,540	0	0	0	0
5:00 PM	0	13	24	5	0	32	18	16	1	6	215	23	2	22	287	14	678	2,513	0	0	0	0
5:15 PM	0	10	19	2	0	20	17	19	0	3	215	15	0	14	271	19	624		0	0	0	0
5:30 PM	0	8	18	4	0	40	24	19	0	4	203	21	0	17	268	15	641		0	0	0	0
5:45 PM	0	6	13	5	0	30	24	17	0	2	171	20	1	27	242	12	570		0	0	0	0

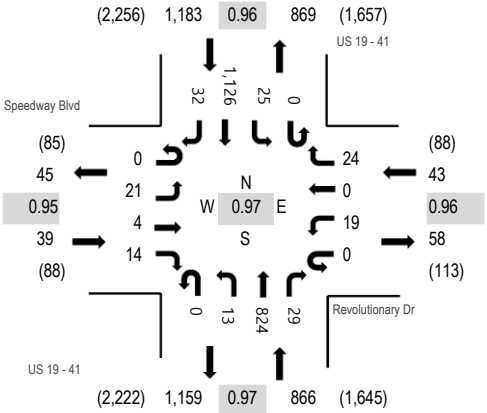
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	0	0	0	1	1	4	0	0	16	0	0	0	15	0	38
Lights	0	49	74	28	0	107	69	61	1	15	794	71	2	75	1,073	64	2,483
Mediums	0	0	1	0	0	1	1	0	0	0	23	1	0	1	15	1	44
Total	0	50	75	28	0	109	71	65	1	15	833	72	2	76	1,103	65	2,565

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

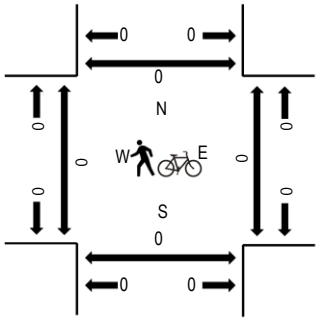
Location: 2 US 19 - 41 & Revolutionary Dr PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Speedway Blvd Eastbound				Revolutionary Dr Westbound				US 19 - 41 Northbound				US 19 - 41 Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	11	0	3	0	5	1	5	4	3	187	9	2	1	241	3	475	1,994	0	0	0	0
4:15 PM	0	4	0	10	0	6	0	5	0	5	166	7	1	6	250	7	467	2,070	0	0	0	0
4:30 PM	0	10	2	2	0	4	0	8	1	1	199	6	2	5	280	9	529	2,127	0	0	0	0
4:45 PM	0	5	1	5	0	6	0	5	0	3	195	10	0	10	275	8	523	2,131	0	0	0	0
5:00 PM	0	6	1	3	0	5	0	7	0	4	211	4	0	1	298	11	551	2,083	0	0	0	0
5:15 PM	0	4	1	1	0	2	0	5	0	2	214	8	0	5	277	5	524		0	0	0	0
5:30 PM	0	6	1	5	0	6	0	7	0	4	204	7	0	9	276	8	533		0	0	0	0
5:45 PM	0	2	2	3	0	5	1	5	0	3	181	7	0	10	249	7	475		0	0	0	0

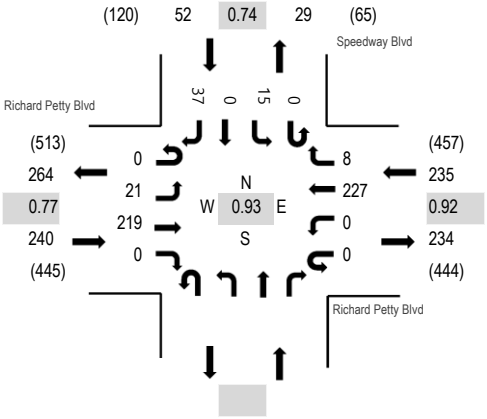
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	13	0	0	0	9	1	23
Lights	0	20	4	13	0	19	0	24	0	13	790	29	0	25	1,104	30	2,071
Mediums	0	1	0	1	0	0	0	0	0	0	21	0	0	0	13	1	37
Total	0	21	4	14	0	19	0	24	0	13	824	29	0	25	1,126	32	2,131

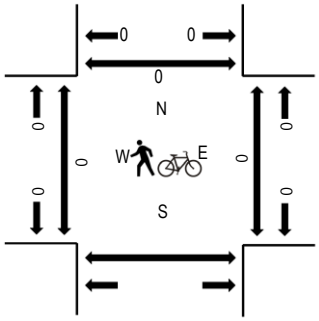
All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

Location: 3 Speedway Blvd & Richard Petty Blvd PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Richard Petty Blvd Eastbound				Richard Petty Blvd Westbound				Northbound				Speedway Blvd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	4	51	0	0	0	47	4					0	9	0	9	124	495	0	0		0
4:15 PM	0	5	49	0	0	0	48	2					0	6	0	8	118	497	0	0		0
4:30 PM	0	5	56	0	0	0	49	2					0	5	0	18	135	499	0	0		0
4:45 PM	0	5	30	0	0	0	61	9					0	4	0	9	118	503	0	0		0
5:00 PM	0	5	40	0	0	0	63	1					0	3	0	14	126	527	0	0		0
5:15 PM	0	6	46	0	0	0	60	1					0	4	0	3	120		0	0		0
5:30 PM	0	5	60	0	0	0	61	1					0	2	0	10	139		0	0		0
5:45 PM	0	5	73	0	0	0	43	5					0	6	0	10	142		0	0		0

Peak Rolling Hour Flow Rates

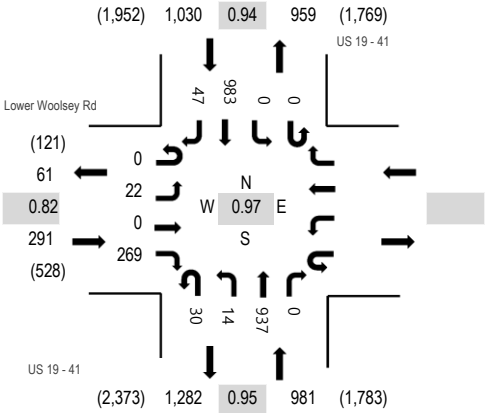
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0					0	0	0	0	1
Lights	0	20	216	0	0	0	225	7					0	15	0	37	520
Mediums	0	1	2	0	0	0	2	1					0	0	0	0	6
Total	0	21	219	0	0	0	227	8					0	15	0	37	527

All Traffic Data Services Inc.

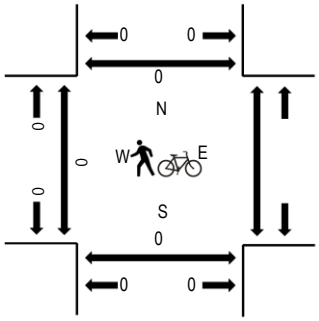
(303) 216-2439
www.alltrafficdata.net

Location: 4 US 19 - 41 & Lower Woolsey Rd PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Lower Woolsey Rd Eastbound				Westbound				US 19 - 41 Northbound				US 19 - 41 Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	10	0	56					5	1	203	0	2	0	183	15	475	2,151	0		0	0
4:15 PM	0	6	0	60					2	5	196	0	0	0	245	10	524	2,250	0		0	0
4:30 PM	0	8	0	81					12	4	227	0	0	0	248	15	595	2,302	0		0	0
4:45 PM	0	3	0	63					3	5	238	0	0	0	235	10	557	2,208	0		0	0
5:00 PM	0	4	0	62					10	1	222	0	0	0	261	14	574	2,112	0		0	0
5:15 PM	0	7	0	63					5	4	250	0	0	0	239	8	576		0		0	0
5:30 PM	0	8	0	40					0	4	207	0	0	0	233	9	501		0		0	0
5:45 PM	0	4	0	53					1	4	174	0	0	0	213	12	461		0		0	0

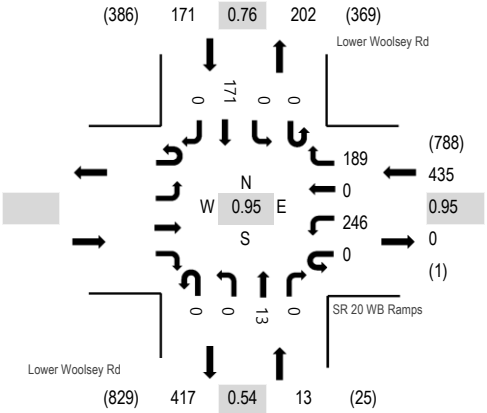
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	2					1	0	24	0	0	0	13	0	40
Lights	0	20	0	259					29	13	890	0	0	0	960	45	2,216
Mediums	0	2	0	8					0	1	23	0	0	0	10	2	46
Total	0	22	0	269					30	14	937	0	0	0	983	47	2,302

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

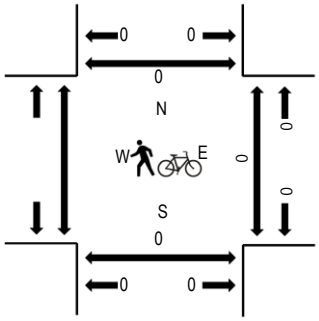
Location: 5 Lower Woolsey Rd & SR 20 WB Ramps PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				SR 20 WB Ramps Westbound				Lower Woolsey Rd Northbound				Lower Woolsey Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM					0	54	0	44	0	0	1	0	0	0	45	0	144	587		0	0	0
4:15 PM					0	53	0	35	0	0	4	1	0	0	50	0	143	599		0	0	0
4:30 PM					0	61	0	38	0	0	2	0	0	0	57	0	158	619		0	0	0
4:45 PM					0	59	0	50	0	0	7	0	0	0	26	0	142	598		0	0	0
5:00 PM					0	65	0	47	0	0	1	0	0	0	43	0	156	612		0	0	0
5:15 PM					0	61	0	54	0	0	3	0	0	0	45	0	163			0	0	0
5:30 PM					0	40	0	42	0	0	3	0	0	0	52	0	137			0	0	0
5:45 PM					0	50	0	35	0	0	3	0	0	0	68	0	156			0	0	0

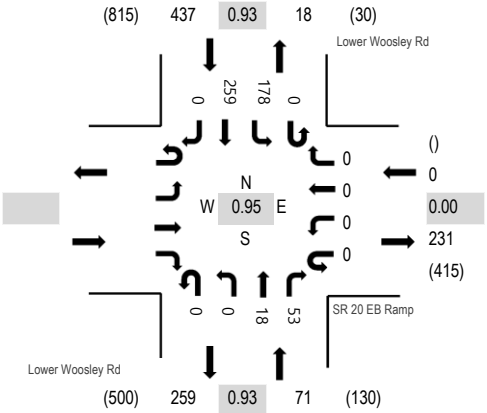
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	4	0	1	0	0	0	0	0	0	0	0	5
Lights					0	236	0	185	0	0	12	0	0	0	170	0	603
Mediums					0	6	0	3	0	0	1	0	0	0	1	0	11
Total					0	246	0	189	0	0	13	0	0	0	171	0	619

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

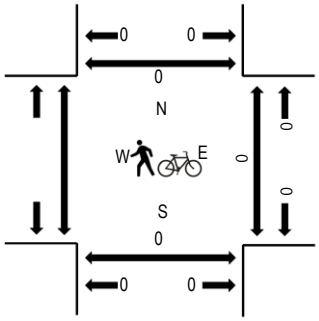
Location: 6 Lower Woosley Rd & SR 20 EB Ramp PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				SR 20 EB Ramp Westbound				Lower Woosley Rd Northbound				Lower Woosley Rd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM					0	0	0	0	0	0	6	15	0	30	65	0	116	437		0	0	0
4:15 PM					0	0	0	0	0	0	2	6	0	34	60	0	102	447		0	0	0
4:30 PM					0	0	0	0	0	0	3	14	0	45	57	0	119	478		0	0	0
4:45 PM					0	0	0	0	0	0	1	12	0	28	59	0	100	484		0	0	0
5:00 PM					0	0	0	0	0	0	6	13	0	34	73	0	126	508		0	0	0
5:15 PM					0	0	0	0	0	0	2	13	0	45	73	0	133			0	0	0
5:30 PM					0	0	0	0	0	0	4	14	0	54	53	0	125			0	0	0
5:45 PM					0	0	0	0	0	0	6	13	0	45	60	0	124			0	0	0

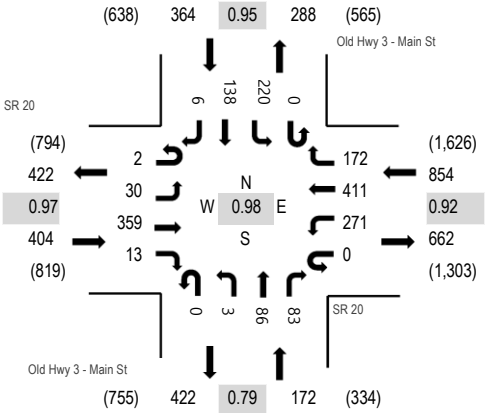
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	0	1	0	0	5	0	6
Lights					0	0	0	0	0	0	18	52	0	176	247	0	493
Mediums					0	0	0	0	0	0	0	0	0	2	7	0	9
Total					0	0	0	0	0	0	18	53	0	178	259	0	508

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

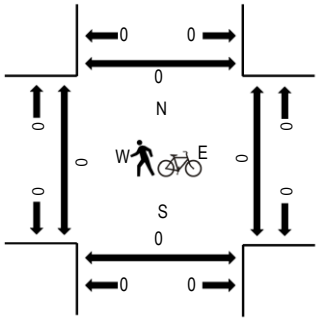
Location: 7 Old Hwy 3 - Main St & SR 20 PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 04:30 PM - 04:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	SR 20 Eastbound				SR 20 Westbound				Old Hwy 3 - Main St Northbound				Old Hwy 3 - Main St Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	1	5	89	1	0	53	93	62	0	3	12	23	0	46	19	2	409	1,733	0	0	0	0
4:15 PM	1	10	95	1	0	53	98	41	0	0	26	23	0	44	22	1	415	1,771	0	0	0	0
4:30 PM	1	4	99	4	0	73	90	33	0	0	34	25	0	55	41	0	459	1,794	0	0	0	0
4:45 PM	1	14	83	2	0	65	103	46	0	1	20	19	0	59	33	4	450	1,735	0	0	0	0
5:00 PM	0	6	92	7	0	64	114	33	0	1	13	24	0	63	29	1	447	1,684	0	0	0	0
5:15 PM	0	6	85	0	0	69	104	60	0	1	19	15	0	43	35	1	438		0	0	0	0
5:30 PM	0	7	101	1	0	73	88	33	0	0	13	17	0	33	32	2	400		0	0	0	0
5:45 PM	0	5	95	3	0	51	81	46	0	1	17	27	0	48	24	1	399		0	0	0	0

Peak Rolling Hour Flow Rates

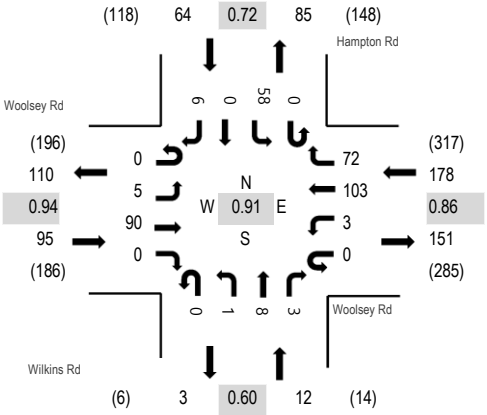
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	7	0	0	1	3	1	0	0	0	0	0	2	0	0	16
Lights	2	26	338	13	0	268	398	164	0	3	85	82	0	211	136	6	1,732
Mediums	0	2	14	0	0	2	10	7	0	0	1	1	0	7	2	0	46
Total	2	30	359	13	0	271	411	172	0	3	86	83	0	220	138	6	1,794

All Traffic Data Services Inc.

(303) 216-2439
www.alltrafficdata.net

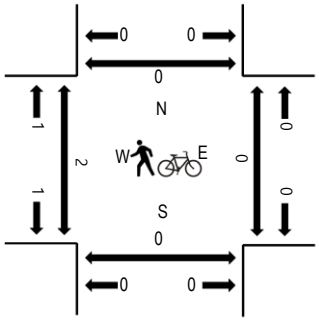
Location: 8 Wilkins Rd & Woolsey Rd PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Woolsey Rd Eastbound				Woolsey Rd Westbound				Wilkins Rd Northbound				Hampton Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	17	0	0	0	14	17	0	0	0	0	0	9	1	1	59	286	0	0	0	0
4:15 PM	0	0	24	0	0	1	28	10	0	0	0	1	0	8	0	0	72	309	2	0	0	0
4:30 PM	0	2	22	0	0	0	15	17	0	0	0	0	0	20	0	3	79	328	0	0	0	0
4:45 PM	0	2	24	0	0	0	23	14	0	0	1	0	0	9	1	2	76	329	0	0	0	0
5:00 PM	0	3	24	0	0	2	19	21	0	0	1	0	0	12	0	0	82	349	0	0	0	0
5:15 PM	0	2	23	0	0	0	26	16	0	1	3	1	0	19	0	0	91		2	0	0	0
5:30 PM	0	0	22	0	0	1	26	15	0	0	1	1	0	11	0	3	80		0	0	0	0
5:45 PM	0	0	21	0	0	0	32	20	0	0	3	1	0	16	0	3	96		0	0	0	0

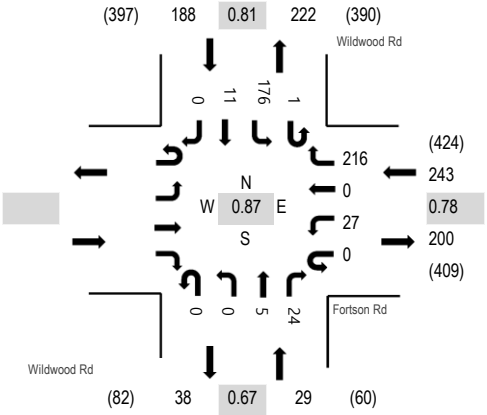
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	5	87	0	0	3	103	70	0	1	8	3	0	58	0	6	344
Mediums	0	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	5
Total	0	5	90	0	0	3	103	72	0	1	8	3	0	58	0	6	349

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

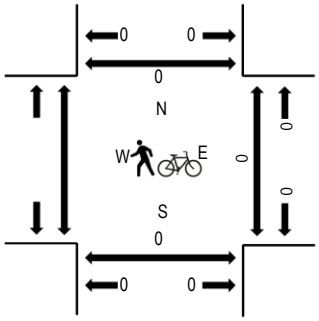
Location: 9 Wildwood Rd & Fortson Rd PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Fortson Rd Westbound				Wildwood Rd Northbound				Wildwood Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM					0	11	0	46	0	0	3	5	0	44	3	0	112	423		0	0	0
4:15 PM					0	2	0	39	0	0	6	6	0	42	10	0	105	410		0	0	0
4:30 PM					0	4	0	47	0	0	0	6	0	42	2	0	101	429		0	0	0
4:45 PM					0	8	0	58	0	0	0	6	0	28	5	0	105	460		0	0	0
5:00 PM					0	4	0	43	0	0	0	6	1	43	2	0	99	458		0	0	0
5:15 PM					0	9	0	69	0	0	2	3	0	38	3	0	124			0	0	0
5:30 PM					0	6	0	46	0	0	3	9	0	67	1	0	132			0	0	0
5:45 PM					0	6	0	26	0	0	1	4	0	60	6	0	103			0	0	0

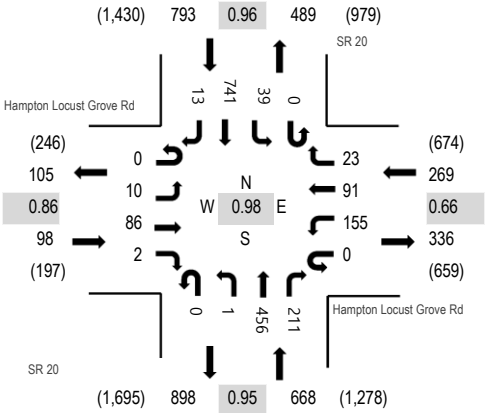
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total
Articulated Trucks					0	0	0	0	0	0	0	0	0	0	0	0	0
Lights					0	26	0	214	0	0	5	24	1	174	11	0	455
Mediums					0	1	0	2	0	0	0	0	0	2	0	0	5
Total					0	27	0	216	0	0	5	24	1	176	11	0	460

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

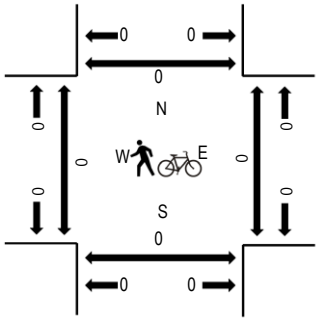
Location: 10 SR 20 & Hampton Locust Grove Rd PM
Date and Start Time: Tuesday, May 22, 2018
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Hampton Locust Grove Rd Eastbound				Hampton Locust Grove Rd Westbound				SR 20 Northbound				SR 20 Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	2	29	0	0	78	41	31	0	0	106	50	0	7	137	2	483	1,825	0	0	0	0
4:15 PM	0	5	22	1	0	62	31	25	0	0	102	51	0	8	136	2	445	1,808	0	0	0	0
4:30 PM	0	4	18	0	0	30	27	7	0	0	119	57	0	13	180	0	455	1,828	0	0	0	0
4:45 PM	0	4	22	0	0	41	16	4	0	0	117	48	0	8	178	4	442	1,768	0	0	0	0
5:00 PM	0	0	20	1	0	38	28	7	0	1	110	54	0	10	193	4	466	1,754	0	0	0	0
5:15 PM	0	2	26	1	0	46	20	5	0	0	110	52	0	8	190	5	465		0	0	0	0
5:30 PM	0	0	18	0	0	33	28	8	0	0	94	48	0	7	154	5	395		0	0	0	0
5:45 PM	0	1	21	0	0	30	28	10	0	0	106	53	0	9	166	4	428		0	0	0	0

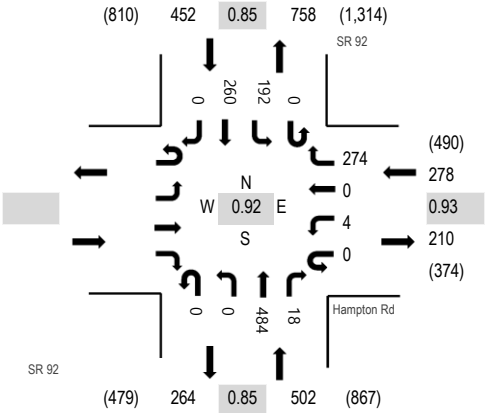
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	0	0	0	0	9	1	0	0	5	0	16
Lights	0	9	81	2	0	151	91	22	0	1	435	202	0	38	724	13	1,769
Mediums	0	1	4	0	0	4	0	1	0	0	12	8	0	1	12	0	43
Total	0	10	86	2	0	155	91	23	0	1	456	211	0	39	741	13	1,828

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

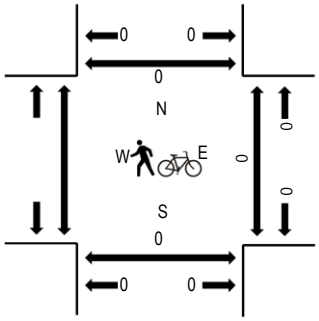
Location: 1 SR 92 & Hampton Rd AM
Date and Start Time: Tuesday, June 26, 2018
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Hampton Rd Westbound				SR 92 Northbound				SR 92 Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM					0	1	0	57	0	0	104	2	0	45	61	0	270	1,229	0	0	0	0
7:15 AM					0	0	0	72	0	0	142	6	0	52	54	0	326	1,232	0	0	0	0
7:30 AM					0	1	0	68	0	0	125	6	0	55	79	0	334	1,171	0	0	0	0
7:45 AM					0	3	0	72	0	0	115	1	0	45	63	0	299	1,032	0	0	0	0
8:00 AM					0	0	0	62	0	0	102	5	0	40	64	0	273	938	0	0	0	0
8:15 AM					0	4	0	62	0	0	107	2	0	46	44	0	265		0	0	0	0
8:30 AM					0	3	0	42	0	0	68	2	0	29	51	0	195		0	0	0	0
8:45 AM					0	2	0	41	0	0	75	5	0	33	49	0	205		0	0	0	0

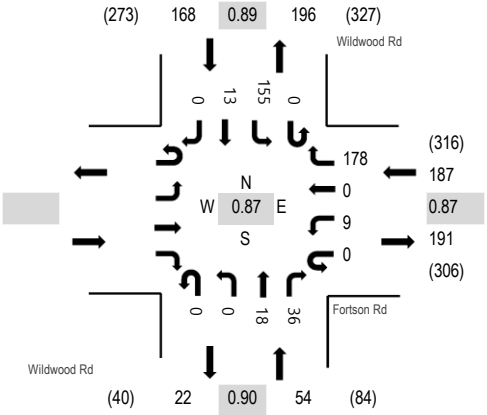
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	1	0	6	0	0	2	2	0	0	4	0	15
Lights					0	3	0	258	0	0	475	15	0	192	253	0	1,196
Mediums					0	0	0	10	0	0	7	1	0	0	3	0	21
Total					0	4	0	274	0	0	484	18	0	192	260	0	1,232

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

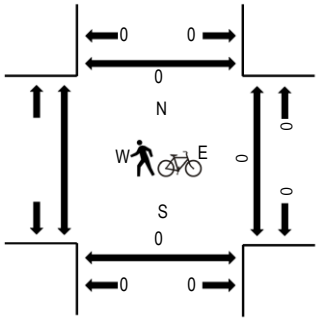
Location: 2 Wildwood Rd & Fortson Rd AM
Date and Start Time: Tuesday, June 26, 2018
Peak Hour: 07:00 AM - 08:00 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Fortson Rd Westbound				Wildwood Rd Northbound				Wildwood Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM					0	1	0	35	0	0	5	8	0	31	5	0	85	409		0	0	0
7:15 AM					0	2	0	48	0	0	2	9	0	39	3	0	103	400		0	0	0
7:30 AM					0	1	0	54	0	0	7	8	0	42	5	0	117	364		0	0	0
7:45 AM					0	5	0	41	0	0	4	11	0	43	0	0	104	307		0	0	0
8:00 AM					0	3	0	37	0	0	1	7	1	27	0	0	76	264		0	0	0
8:15 AM					0	2	0	32	0	0	3	3	0	22	5	0	67			0	0	0
8:30 AM					0	2	0	22	0	0	1	5	0	26	4	0	60			0	0	0
8:45 AM					0	2	0	29	0	0	5	5	0	20	0	0	61			0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	1	0	0	0	0	0	0	0	0	1
Lights					0	9	0	174	0	0	15	34	0	154	13	0	399
Mediums					0	0	0	3	0	0	3	2	0	1	0	0	9
Total					0	9	0	178	0	0	18	36	0	155	13	0	409

All Traffic Data Services Inc.
(303) 216-2439
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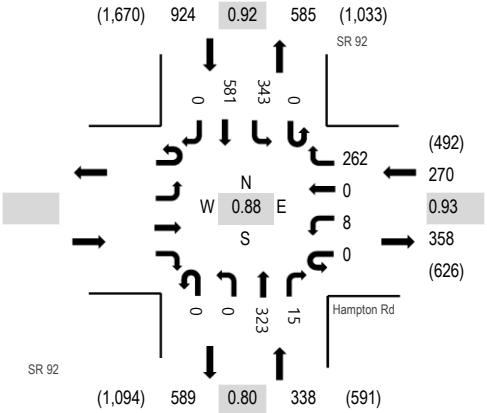
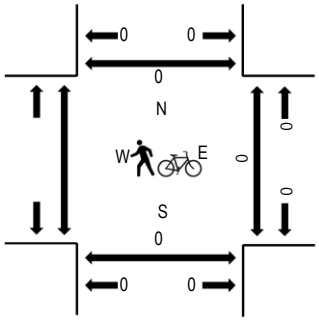
Location: 1 SR 92 & Hampton Rd PM
Date and Start Time: Tuesday, June 26, 2018
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:30 PM - 05:45 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Hampton Rd Westbound				SR 92 Northbound				SR 92 Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM					0	2	0	41	0	0	60	3	0	55	100	0	261	1,222		0	0	0
4:15 PM					0	2	0	47	0	0	59	1	0	63	120	0	292	1,314		0	0	0
4:30 PM					0	4	0	51	0	0	60	4	0	66	138	0	323	1,422		0	0	0
4:45 PM					0	1	0	54	0	0	73	4	0	79	135	0	346	1,532		0	0	0
5:00 PM					0	4	0	56	0	0	69	4	0	87	133	0	353	1,531		0	0	0
5:15 PM					0	2	0	75	0	0	81	2	0	83	157	0	400			0	0	0
5:30 PM					0	1	0	77	0	0	100	5	0	94	156	0	433			0	0	0
5:45 PM					0	4	0	71	0	0	59	7	0	69	135	0	345			0	0	0

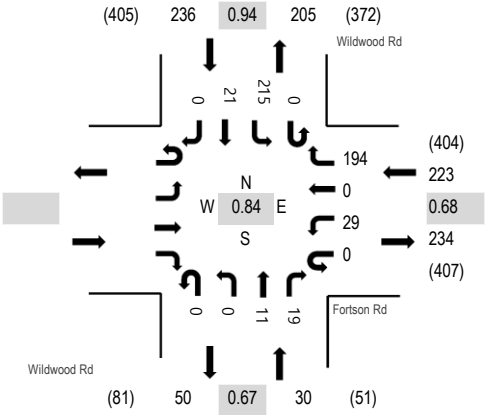
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	2	0	0	2	4	0	8
Lights					0	8	0	260	0	0	315	14	0	337	570	0	1,504
Mediums					0	0	0	2	0	0	6	1	0	4	7	0	20
Total					0	8	0	262	0	0	323	15	0	343	581	0	1,532

All Traffic Data Services Inc.
(303) 216-2439
www.alltrafficdata.net

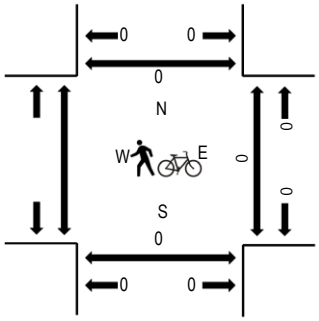
Location: 2 Wildwood Rd & Fortson Rd PM
Date and Start Time: Tuesday, June 26, 2018
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Fortson Rd Westbound				Wildwood Rd Northbound				Wildwood Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM					0	8	0	28	0	0	3	3	0	40	0	0	82	371	0	0	0	0
4:15 PM					0	3	0	37	0	0	0	1	0	43	3	0	87	385	0	0	0	0
4:30 PM					0	7	0	45	0	0	2	5	0	31	3	0	93	443	0	0	0	0
4:45 PM					0	5	0	48	0	0	4	3	0	47	2	0	109	488	0	0	0	0
5:00 PM					0	4	0	26	0	0	3	5	0	56	2	0	96	489	0	0	0	0
5:15 PM					0	11	0	73	0	0	2	3	0	50	6	0	145		0	0	0	0
5:30 PM					0	6	0	57	0	0	3	9	0	58	5	0	138		0	0	0	0
5:45 PM					0	8	0	38	0	0	3	2	0	51	8	0	110		0	0	0	0

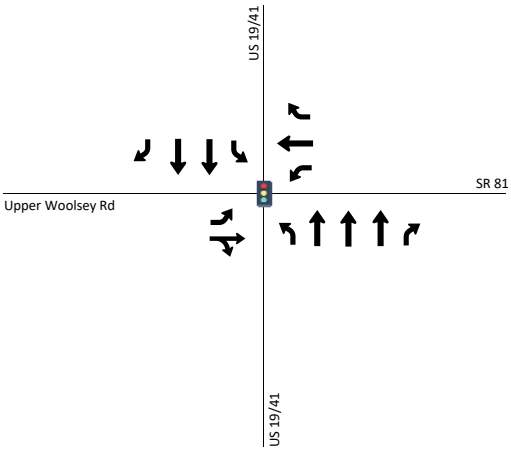
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	0	0	0	1	0	0	1
Lights					0	29	0	192	0	0	11	19	0	211	21	0	483
Mediums					0	0	0	2	0	0	0	0	0	3	0	0	5
Total					0	29	0	194	0	0	11	19	0	215	21	0	489

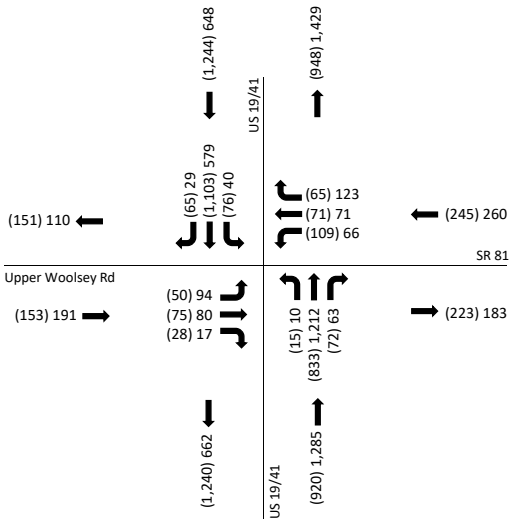
APPENDIX F

EXISTING CONDITIONS – LANE CONFIGURATIONS AND VOLUMES

1: US 19/41 at Upper Woolsey Rd/SR 81

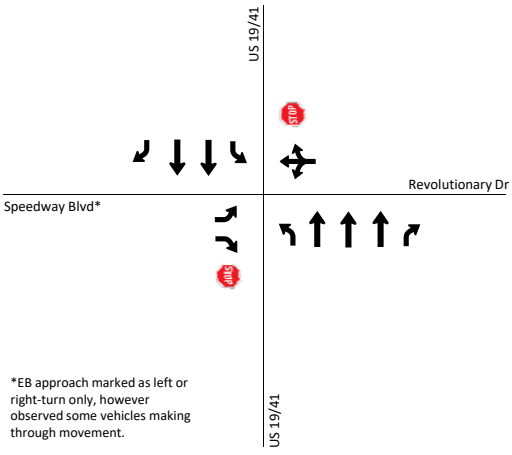


Existing Lane Configuration



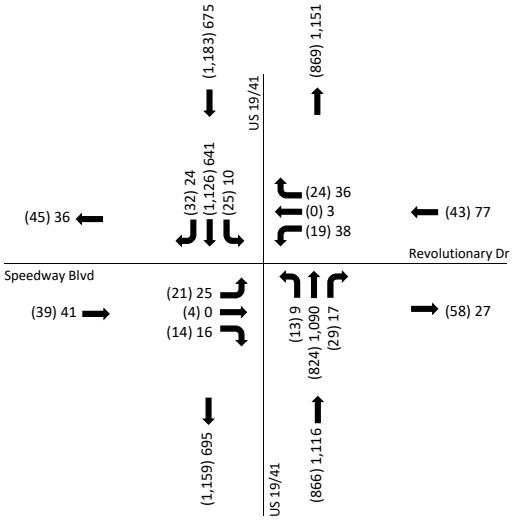
Existing (2018) TMC – (PM)/AM

2: US 19/41 at Speedway Blvd



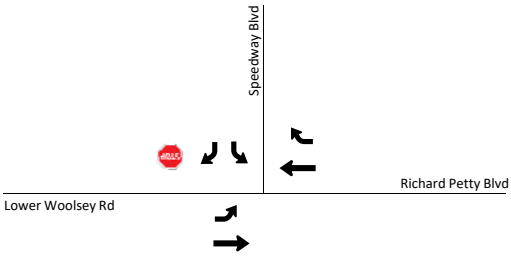
*EB approach marked as left or right-turn only, however observed some vehicles making through movement.

Existing Lane Configuration

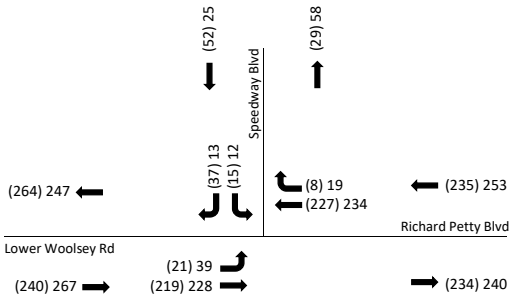


Existing (2018) TMC – (PM)/AM

3: Richard Petty Blvd at Speedway Blvd

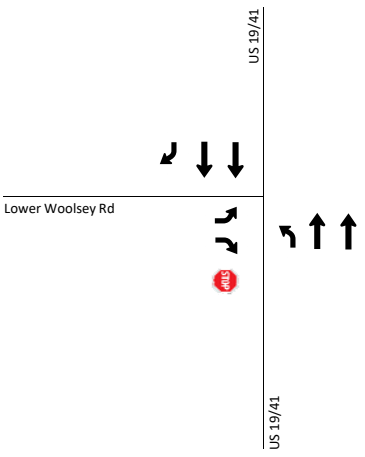


Existing Lane Configuration

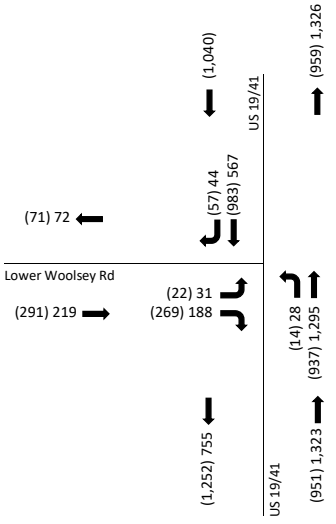


Existing (2018) TMC – (PM)/AM

4: US 19/41 at Lower Woolsey Rd

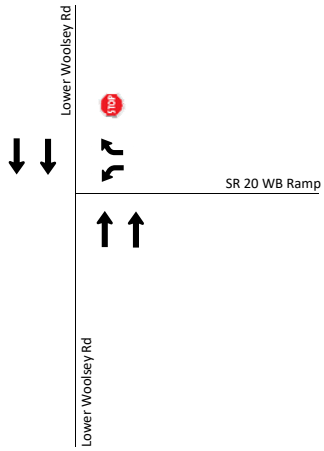


Existing Lane Configuration

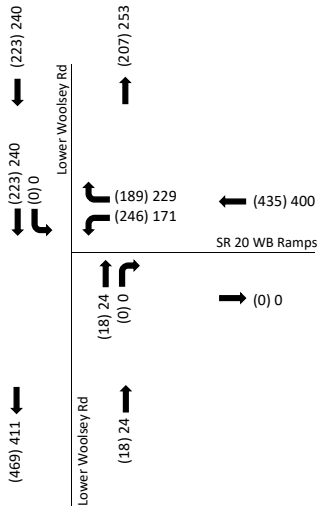


Existing (2018) TMC – (PM)/AM

5: Lower Woolsey Rd at SR 20 WB Ramps

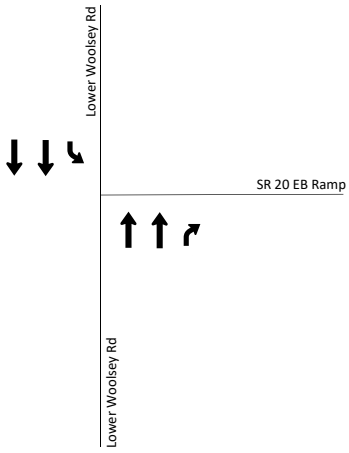


Existing Lane Configuration

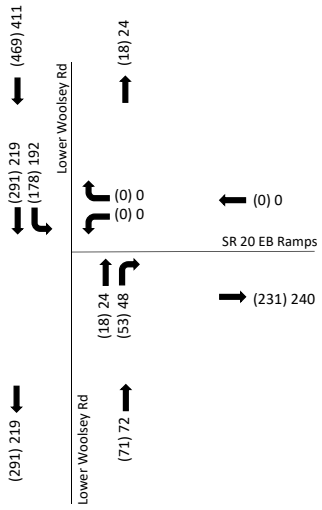


Existing (2018) TMC – (PM)/AM

6: Lower Woolsey Rd at SR 20 EB Ramps

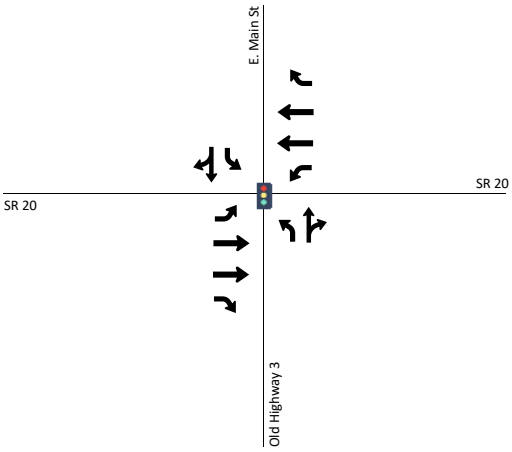


Existing Lane Configuration

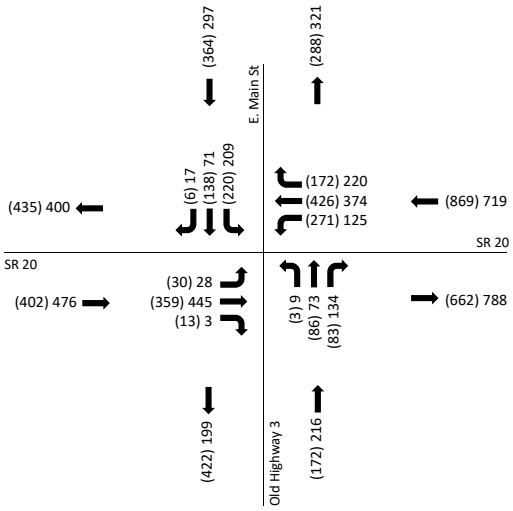


Existing (2018) TMC – (PM)/AM

7: SR 20 at Old Highway 3/E. Main St



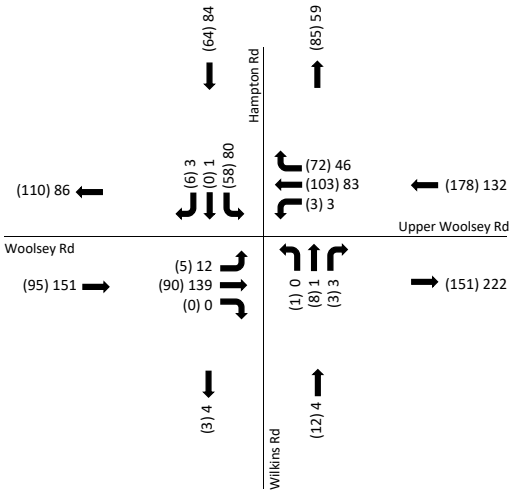
Existing Lane Configuration



Existing (2018) TMC – (PM)/AM

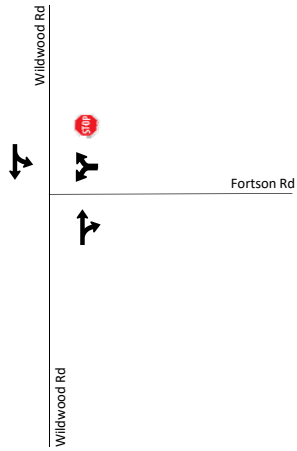
8: Woolsey Rd at Hampton Rd

Existing Lane Configuration

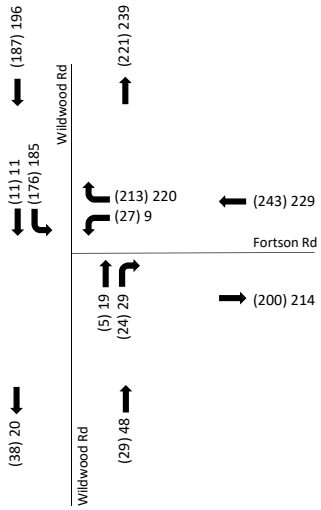


Existing (2018) TMC – (PM)/AM

9: Fortson Rd at Wildwood Rd

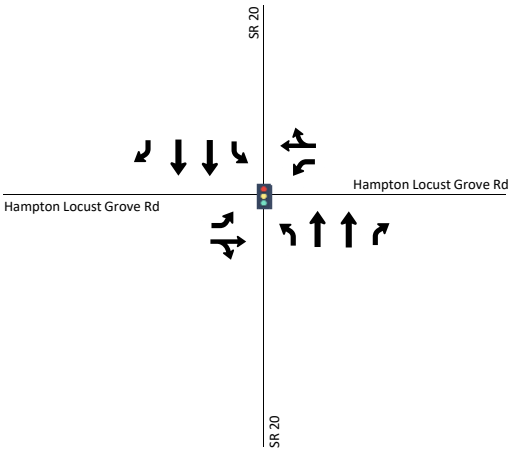


Existing Lane Configuration

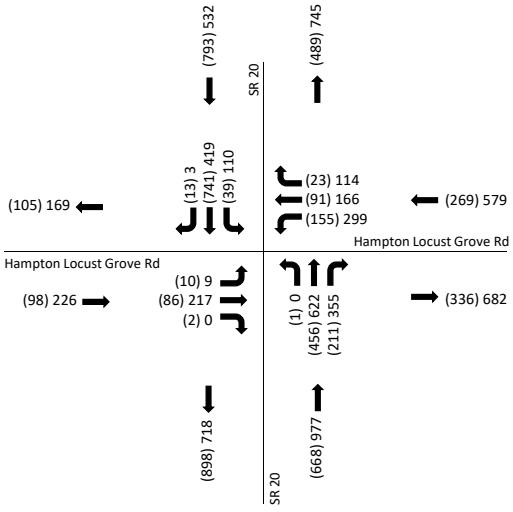


Existing (2018) TMC – (PM)/AM

10: SR 20 at Hampton Locust Grove Rd

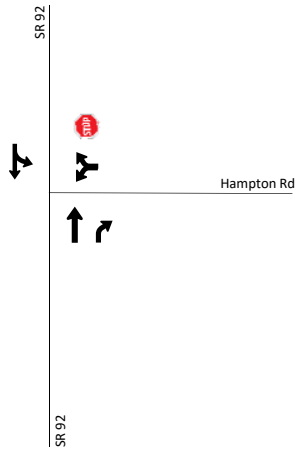


Existing Lane Configuration

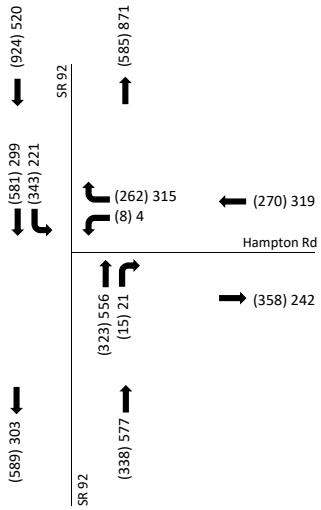


Existing (2018) TMC – (PM)/AM

11: SR 92 at Hampton Rd



Existing Lane Configuration



Existing (2018) TMC – (PM)/AM

APPENDIX G

FDOT GENERALIZED LOS TABLE 6

TABLE 6

Generalized **Peak Hour Two-Way** Volumes for Florida's **Rural Undeveloped Areas** OR **Developed Areas Less Than 5,000 Population**[1]

03/14/2018

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Lanes	Median	B	C	D	E
2	Undivided	1,640	1,670	**	**
4	Divided	*	2,530	3,350	**
6	Divided	*	4,150	5,070	**

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Rural Undeveloped

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	120	190	300
50-84%	100	200	310	>1,010
85-100%	250	370	1,760	>1,760

Rural Developed

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	220	460	1,480
50-84%	170	430	1,270	1,760
85-100%	560	1,760	>1,760	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	220	840
50-84%	*	120	780	1,390
85-100%	320	940	1,560	>1,820

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	3,820	5,160	6,000	6,360
6	5,290	7,420	8,780	9,530
8	6,780	9,690	11,490	12,710

Freeway Adjustments

Auxiliary Lanes Present in Both Directions + 1,800

UNINTERRUPTED FLOW HIGHWAYS

Rural Undeveloped

Lanes	Median	B	C	D	E
2	Undivided	490	890	1,530	3,070

Rural Developed

Lanes	Median	B	C	D	E
2	Undivided	1,110	1,690	2,290	3,070
4	Divided	3,220	4,650	5,600	6,000
6	Divided	4,840	7,000	8,400	9,000

Passing Lane Adjustments

Alter LOS B-D volumes in proportion to the passing lane length to the highway segment length

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

DRAFT

APPENDIX H

EXISTING CONDITIONS SYNCHRO REPORTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	80	17	66	71	123	10	1212	63	40	579	29
Future Volume (veh/h)	94	80	17	66	71	123	10	1212	63	40	579	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1884	1900	1845	1845	1845	1900	1810	1810	1759	1827	1900
Adj Flow Rate, veh/h	112	95	0	71	76	0	12	1443	75	45	658	33
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.84	0.84	0.84	0.88	0.88	0.88
Percent Heavy Veh, %	5	1	1	3	3	3	0	5	5	8	4	0
Cap, veh/h	351	344	0	340	337	286	481	2301	716	322	1730	805
Arrive On Green	0.18	0.18	0.00	0.18	0.18	0.00	0.02	0.47	0.47	0.05	0.50	0.50
Sat Flow, veh/h	1280	1884	0	1283	1845	1568	1810	4940	1538	1675	3471	1615
Grp Volume(v), veh/h	112	95	0	71	76	0	12	1443	75	45	658	33
Grp Sat Flow(s),veh/h/ln	1280	1884	0	1283	1845	1568	1810	1647	1538	1675	1736	1615
Q Serve(g_s), s	3.6	1.9	0.0	2.2	1.6	0.0	0.2	9.8	1.2	0.6	5.2	0.5
Cycle Q Clear(g_c), s	5.2	1.9	0.0	4.2	1.6	0.0	0.2	9.8	1.2	0.6	5.2	0.5
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	351	344	0	340	337	286	481	2301	716	322	1730	805
V/C Ratio(X)	0.32	0.28	0.00	0.21	0.23	0.00	0.02	0.63	0.10	0.14	0.38	0.04
Avail Cap(c_a), veh/h	636	763	0	626	747	635	657	2612	813	430	1836	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	15.6	0.0	17.4	15.5	0.0	6.2	9.0	6.7	6.7	6.9	5.7
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.3	0.3	0.0	0.0	0.4	0.1	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.0	0.0	0.8	0.8	0.0	0.1	4.5	0.5	0.3	2.5	0.2
LnGrp Delay(d),s/veh	18.2	16.1	0.0	17.7	15.8	0.0	6.2	9.3	6.7	6.8	7.0	5.7
LnGrp LOS	B	B		B	B		A	A	A	A	A	A
Approach Vol, veh/h		207			147			1530			736	
Approach Delay, s/veh		17.2			16.7			9.2			7.0	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	25.2		12.6	5.2	26.6		12.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	2.6	11.8		7.2	2.2	7.2		6.2
Green Ext Time (p_c), s	0.0	8.9		1.0	0.0	11.5		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	16	38	3	36	9	1090	17	10	641	24
Future Vol, veh/h	25	0	16	38	3	36	9	1090	17	10	641	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	-	800	-	350	450	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	77	77	77	90	90	90	91	91	91
Heavy Vehicles, %	4	0	0	0	0	0	22	7	18	0	4	13
Mvmt Flow	34	0	22	49	4	47	10	1211	19	11	704	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1232	1957	352	1605	1957	606	704	0	0	1211	0	0
Stage 1	726	726	-	1231	1231	-	-	-	-	-	-	-
Stage 2	506	1231	-	374	726	-	-	-	-	-	-	-
Critical Hdwy	7.03	6.5	6.9	6.95	6.5	7.1	4.54	-	-	5.3	-	-
Critical Hdwy Stg 1	6.58	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.69	4	3.3	3.65	4	3.9	2.42	-	-	3.1	-	-
Pot Cap-1 Maneuver	155	64	650	90	64	381	768	-	-	314	-	-
Stage 1	367	433	-	142	252	-	-	-	-	-	-	-
Stage 2	482	252	-	603	433	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	125	61	650	84	61	381	768	-	-	314	-	-
Mov Cap-2 Maneuver	125	61	-	84	61	-	-	-	-	-	-	-
Stage 1	362	418	-	140	249	-	-	-	-	-	-	-
Stage 2	411	249	-	562	418	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	31.2	63.7	0.1	0.3
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	768	-	-	125	650	154	314	-	-
HCM Lane V/C Ratio	0.013	-	-	0.274	0.034	0.649	0.035	-	-
HCM Control Delay (s)	9.7	-	-	44.3	10.7	63.7	16.9	-	-
HCM Lane LOS	A	-	-	E	B	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.1	3.6	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	228	234	19	12	13
Future Vol, veh/h	39	228	234	19	12	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Free
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	78	78	57	57
Heavy Vehicles, %	3	3	2	0	0	0
Mvmt Flow	42	245	300	24	21	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	300	0	-	0	629	-
Stage 1	-	-	-	-	300	-
Stage 2	-	-	-	-	329	-
Critical Hdwy	4.13	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.227	-	-	-	3.5	-
Pot Cap-1 Maneuver	1255	-	-	-	449	0
Stage 1	-	-	-	-	756	0
Stage 2	-	-	-	-	734	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1255	-	-	-	434	-
Mov Cap-2 Maneuver	-	-	-	-	434	-
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	709	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	13.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1255	-	-	-	434	-
HCM Lane V/C Ratio	0.033	-	-	-	0.049	-
HCM Control Delay (s)	8	-	-	-	13.7	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	188	28	1295	567	44
Future Vol, veh/h	31	188	28	1295	567	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	92	92	83	83
Heavy Vehicles, %	18	8	4	5	4	8
Mvmt Flow	38	232	30	1408	683	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1448	-	683	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Critical Hdwy	7.16	-	4.18	-	-	-
Critical Hdwy Stg 1	6.16	-	-	-	-	-
Critical Hdwy Stg 2	6.16	-	-	-	-	-
Follow-up Hdwy	3.68	-	2.24	-	-	-
Pot Cap-1 Maneuver	105	0	893	-	-	0
Stage 1	422	0	-	-	-	0
Stage 2	381	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	101	-	893	-	-	-
Mov Cap-2 Maneuver	101	-	-	-	-	-
Stage 1	422	-	-	-	-	-
Stage 2	368	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	60.9	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	893	-	101	-	-
HCM Lane V/C Ratio	0.034	-	0.379	-	-
HCM Control Delay (s)	9.2	-	60.9	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.5	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	171	229	24	0	0	240
Future Vol, veh/h	171	229	24	0	0	240
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	0	0	0	6	1	7
Mvmt Flow	186	249	27	0	0	273

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	163	14	0	-	-	-
Stage 1	27	-	-	-	-	-
Stage 2	136	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	817	1069	-	0	0	-
Stage 1	998	-	-	0	0	-
Stage 2	882	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	817	1069	-	-	-	-
Mov Cap-2 Maneuver	817	-	-	-	-	-
Stage 1	998	-	-	-	-	-
Stage 2	882	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	817	1069	-
HCM Lane V/C Ratio	-	0.228	0.233	-
HCM Control Delay (s)	-	10.7	9.4	-
HCM Lane LOS	-	B	A	-
HCM 95th %tile Q(veh)	-	0.9	0.9	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	445	3	125	374	220	9	73	134	209	71	17
Future Volume (veh/h)	28	445	3	125	374	220	9	73	134	209	71	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1810	1900	1863	1810	1845	1900	1869	1900	1845	1795	1900
Adj Flow Rate, veh/h	30	478	0	139	416	0	10	84	154	238	81	19
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	11	5	0	2	5	3	0	1	1	3	3	3
Cap, veh/h	359	799	375	389	971	443	422	116	213	451	449	105
Arrive On Green	0.03	0.23	0.00	0.08	0.28	0.00	0.01	0.20	0.20	0.14	0.32	0.32
Sat Flow, veh/h	1630	3438	1615	1774	3438	1568	1810	592	1086	1757	1407	330
Grp Volume(v), veh/h	30	478	0	139	416	0	10	0	238	238	0	100
Grp Sat Flow(s),veh/h/ln	1630	1719	1615	1774	1719	1568	1810	0	1678	1757	0	1737
Q Serve(g_s), s	0.7	6.4	0.0	3.0	5.1	0.0	0.2	0.0	6.8	5.0	0.0	2.1
Cycle Q Clear(g_c), s	0.7	6.4	0.0	3.0	5.1	0.0	0.2	0.0	6.8	5.0	0.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.65	1.00		0.19
Lane Grp Cap(c), veh/h	359	799	375	389	971	443	422	0	329	451	0	554
V/C Ratio(X)	0.08	0.60	0.00	0.36	0.43	0.00	0.02	0.00	0.72	0.53	0.00	0.18
Avail Cap(c_a), veh/h	463	1208	567	430	1242	566	575	0	622	538	0	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.1	17.5	0.0	13.4	15.0	0.0	16.1	0.0	19.3	12.7	0.0	12.6
Incr Delay (d2), s/veh	0.1	0.7	0.0	0.6	0.3	0.0	0.0	0.0	3.0	1.0	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	3.1	0.0	1.5	2.4	0.0	0.1	0.0	3.4	2.5	0.0	1.0
LnGrp Delay(d),s/veh	14.2	18.3	0.0	14.0	15.3	0.0	16.1	0.0	22.3	13.6	0.0	12.8
LnGrp LOS	B	B		B	B		B		C	B		B
Approach Vol, veh/h		508			555			248			338	
Approach Delay, s/veh		18.0			15.0			22.1			13.4	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	14.5	8.8	16.4	5.2	20.9	6.2	19.0
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	9.5	19.0	5.5	18.0	5.0	23.5	5.0	18.5
Max Q Clear Time (g_c+I1), s	7.0	8.8	5.0	8.4	2.2	4.1	2.7	7.1
Green Ext Time (p_c), s	0.2	1.3	0.0	3.6	0.0	1.8	0.0	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	139	0	3	83	46	0	1	3	80	1	3
Future Vol, veh/h	12	139	0	3	83	46	0	1	3	80	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	79	79	79	50	50	50	75	75	75
Heavy Vehicles, %	0	7	0	33	0	2	0	0	0	1	0	0
Mvmt Flow	13	154	0	4	105	58	0	2	6	107	1	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	163	0	0	154	0	0	323	352	154	327	323	134
Stage 1	-	-	-	-	-	-	181	181	-	142	142	-
Stage 2	-	-	-	-	-	-	142	171	-	185	181	-
Critical Hdwy	4.1	-	-	4.43	-	-	7.1	6.5	6.2	7.11	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Follow-up Hdwy	2.2	-	-	2.497	-	-	3.5	4	3.3	3.509	4	3.3
Pot Cap-1 Maneuver	1428	-	-	1258	-	-	634	576	897	628	598	920
Stage 1	-	-	-	-	-	-	825	754	-	863	783	-
Stage 2	-	-	-	-	-	-	866	761	-	819	754	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1428	-	-	1258	-	-	623	568	897	616	590	920
Mov Cap-2 Maneuver	-	-	-	-	-	-	623	568	-	616	590	-
Stage 1	-	-	-	-	-	-	817	746	-	854	780	-
Stage 2	-	-	-	-	-	-	857	758	-	803	746	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	9.6	11.8
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	784	1428	-	-	1258	-	-	638
HCM Lane V/C Ratio	0.01	0.009	-	-	0.003	-	-	0.176
HCM Control Delay (s)	9.6	7.5	0	-	7.9	0	-	11.8
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	220	19	29	185	11
Future Vol, veh/h	9	220	19	29	185	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	67	67	88	88
Heavy Vehicles, %	0	0	16	7	2	0
Mvmt Flow	12	289	28	43	210	13

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	483	50	0	0	72	0
Stage 1	50	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.218	-
Pot Cap-1 Maneuver	546	1024	-	-	1528	-
Stage 1	978	-	-	-	-	-
Stage 2	658	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	471	1024	-	-	1528	-
Mov Cap-2 Maneuver	471	-	-	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	567	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	7.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	979	1528	-
HCM Lane V/C Ratio	-	-	0.308	0.138	-
HCM Control Delay (s)	-	-	10.3	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	217	0	299	166	114	0	622	355	110	419	3
Future Volume (veh/h)	9	217	0	299	166	114	0	622	355	110	419	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1827	1827	1900	1900	1845	1845	1881	1845	1900
Adj Flow Rate, veh/h	12	286	0	356	198	0	0	699	0	125	476	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.76	0.76	0.76	0.84	0.84	0.84	0.89	0.89	0.89	0.88	0.88	0.88
Percent Heavy Veh, %	0	3	3	4	4	4	0	3	3	1	3	0
Cap, veh/h	392	376	0	485	664	0	356	875	391	297	1392	642
Arrive On Green	0.02	0.20	0.00	0.17	0.36	0.00	0.00	0.25	0.00	0.07	0.40	0.00
Sat Flow, veh/h	1810	1845	0	1740	1827	0	1810	3505	1568	1792	3505	1615
Grp Volume(v), veh/h	12	286	0	356	198	0	0	699	0	125	476	0
Grp Sat Flow(s),veh/h/ln	1810	1845	0	1740	1827	0	1810	1752	1568	1792	1752	1615
Q Serve(g_s), s	0.3	8.8	0.0	9.1	4.7	0.0	0.0	11.2	0.0	2.9	5.7	0.0
Cycle Q Clear(g_c), s	0.3	8.8	0.0	9.1	4.7	0.0	0.0	11.2	0.0	2.9	5.7	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	376	0	485	664	0	356	875	391	297	1392	642
V/C Ratio(X)	0.03	0.76	0.00	0.73	0.30	0.00	0.00	0.80	0.00	0.42	0.34	0.00
Avail Cap(c_a), veh/h	515	552	0	485	713	0	503	1077	482	316	1392	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.5	22.6	0.0	14.5	13.7	0.0	0.0	21.2	0.0	15.2	12.7	0.0
Incr Delay (d2), s/veh	0.0	3.6	0.0	5.7	0.2	0.0	0.0	3.5	0.0	0.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.8	0.0	5.0	2.4	0.0	0.0	5.9	0.0	1.5	2.7	0.0
LnGrp Delay(d),s/veh	18.5	26.2	0.0	20.2	13.9	0.0	0.0	24.7	0.0	16.1	12.8	0.0
LnGrp LOS	B	C		C	B			C		B	B	
Approach Vol, veh/h		298			554			699			601	
Approach Delay, s/veh		25.9			17.9			24.7			13.5	
Approach LOS		C			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	19.5	15.0	16.8	0.0	28.4	5.4	26.4
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	5.0	18.5	10.5	18.0	5.0	18.5	5.0	23.5
Max Q Clear Time (g_c+I1), s	4.9	13.2	11.1	10.8	0.0	7.7	2.3	6.7
Green Ext Time (p_c), s	0.0	1.8	0.0	1.5	0.0	5.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	9.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	315	556	21	221	299
Future Vol, veh/h	4	315	556	21	221	299
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	85	85	84	84
Heavy Vehicles, %	25	6	2	17	0	3
Mvmt Flow	4	339	654	25	263	356

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1536	654	0	0	654	0
Stage 1	654	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Critical Hdwy	6.65	6.26	-	-	4.1	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.354	-	-	2.2	-
Pot Cap-1 Maneuver	113	460	-	-	943	-
Stage 1	477	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	74	460	-	-	943	-
Mov Cap-2 Maneuver	74	-	-	-	-	-
Stage 1	477	-	-	-	-	-
Stage 2	241	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	38.6	0	4.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	432	943	-
HCM Lane V/C Ratio	-	-	0.794	0.279	-
HCM Control Delay (s)	-	-	38.6	10.3	0
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	7.1	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	75	28	109	71	65	15	833	72	76	1103	65
Future Volume (veh/h)	50	75	28	109	71	65	15	833	72	76	1103	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1886	1900	1863	1845	1792	1900	1810	1881	1881	1845	1863
Adj Flow Rate, veh/h	67	100	0	117	76	0	16	886	77	79	1149	68
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	2	1
Peak Hour Factor	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94	0.96	0.96	0.96
Percent Heavy Veh, %	2	1	1	2	3	6	0	5	1	1	3	2
Cap, veh/h	375	369	0	357	360	298	304	2117	685	467	1677	758
Arrive On Green	0.20	0.20	0.00	0.20	0.20	0.00	0.02	0.43	0.43	0.07	0.48	0.48
Sat Flow, veh/h	1318	1886	0	1290	1845	1524	1810	4940	1599	1792	3505	1583
Grp Volume(v), veh/h	67	100	0	117	76	0	16	886	77	79	1149	68
Grp Sat Flow(s),veh/h/ln	1318	1886	0	1290	1845	1524	1810	1647	1599	1792	1752	1583
Q Serve(g_s), s	2.0	2.0	0.0	3.7	1.5	0.0	0.2	5.5	1.3	1.0	11.2	1.0
Cycle Q Clear(g_c), s	3.5	2.0	0.0	5.7	1.5	0.0	0.2	5.5	1.3	1.0	11.2	1.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	375	369	0	357	360	298	304	2117	685	467	1677	758
V/C Ratio(X)	0.18	0.27	0.00	0.33	0.21	0.00	0.05	0.42	0.11	0.17	0.69	0.09
Avail Cap(c_a), veh/h	655	769	0	631	752	621	473	2574	833	564	1866	843
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	15.1	0.0	17.5	14.9	0.0	7.7	8.8	7.6	6.2	8.9	6.3
Incr Delay (d2), s/veh	0.2	0.4	0.0	0.5	0.3	0.0	0.1	0.1	0.1	0.2	0.9	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	0.7	1.1	0.0	1.4	0.8	0.0	0.1	2.5	0.6	0.5	5.5	0.5
LnGrp Delay(d),s/veh	16.6	15.5	0.0	18.1	15.2	0.0	7.8	8.9	7.6	6.4	9.8	6.3
LnGrp LOS	B	B		B	B		A	A	A	A	A	A
Approach Vol, veh/h		167			193			979			1296	
Approach Delay, s/veh		15.9			16.9			8.8			9.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	23.4		13.1	5.4	25.6		13.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.5	23.0		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	3.0	7.5		5.5	2.2	13.2		7.7
Green Ext Time (p_c), s	0.0	10.9		1.1	0.0	7.9		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	4	14	19	0	24	13	824	29	25	1126	32
Future Vol, veh/h	21	4	14	19	0	24	13	824	29	25	1126	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	-	800	-	350	450	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	83	83	83	97	97	97	95	95	95
Heavy Vehicles, %	5	0	7	0	0	0	0	4	0	0	2	6
Mvmt Flow	26	5	17	23	0	29	13	849	30	26	1185	34

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1605	2114	593	1524	2114	425	1185	0	0	849	0	0
Stage 1	1238	1238	-	876	876	-	-	-	-	-	-	-
Stage 2	367	876	-	648	1238	-	-	-	-	-	-	-
Critical Hdwy	7.05	6.5	7.04	6.95	6.5	7.1	4.1	-	-	5.3	-	-
Critical Hdwy Stg 1	6.6	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.7	4	3.37	3.65	4	3.9	2.2	-	-	3.1	-	-
Pot Cap-1 Maneuver	86	51	437	102	51	498	596	-	-	469	-	-
Stage 1	178	250	-	252	369	-	-	-	-	-	-	-
Stage 2	584	369	-	418	250	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	76	47	437	85	47	498	596	-	-	469	-	-
Mov Cap-2 Maneuver	76	47	-	85	47	-	-	-	-	-	-	-
Stage 1	174	236	-	247	361	-	-	-	-	-	-	-
Stage 2	538	361	-	371	236	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	65.1	30.5	0.2	0.3
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	596	-	-	69	437	192	469	-	-
HCM Lane V/C Ratio	0.022	-	-	0.447	0.04	0.27	0.056	-	-
HCM Control Delay (s)	11.2	-	-	94	13.6	30.5	13.1	-	-
HCM Lane LOS	B	-	-	F	B	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8	0.1	1	0.2	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	219	227	8	15	37
Future Vol, veh/h	21	219	227	8	15	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Free
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	92	92	76	76
Heavy Vehicles, %	5	1	1	13	0	0
Mvmt Flow	27	284	247	9	20	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	247	0	-	0	586	-
Stage 1	-	-	-	-	247	-
Stage 2	-	-	-	-	339	-
Critical Hdwy	4.15	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.245	-	-	-	3.5	-
Pot Cap-1 Maneuver	1302	-	-	-	476	0
Stage 1	-	-	-	-	799	0
Stage 2	-	-	-	-	726	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1302	-	-	-	466	-
Mov Cap-2 Maneuver	-	-	-	-	466	-
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	711	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	13.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1302	-	-	-	466	-
HCM Lane V/C Ratio	0.021	-	-	-	0.042	-
HCM Control Delay (s)	7.8	-	-	-	13.1	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	269	14	937	983	57
Future Vol, veh/h	22	269	14	937	983	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	94	94	94	94
Heavy Vehicles, %	9	4	7	5	2	4
Mvmt Flow	27	328	15	997	1046	61

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1574	-	1046	0	-	0
Stage 1	1046	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.98	-	4.24	-	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	-	2.27	-	-	-
Pot Cap-1 Maneuver	94	0	632	-	-	0
Stage 1	284	0	-	-	-	0
Stage 2	537	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	92	-	632	-	-	-
Mov Cap-2 Maneuver	92	-	-	-	-	-
Stage 1	284	-	-	-	-	-
Stage 2	524	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	59.5	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	632	-	92	-	-
HCM Lane V/C Ratio	0.024	-	0.292	-	-
HCM Control Delay (s)	10.8	-	59.5	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-

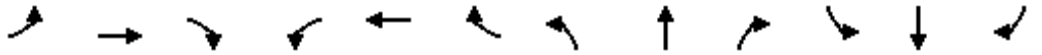
Intersection	
Int Delay, s/veh	6.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	246	189	18	0	0	223
Future Vol, veh/h	246	189	18	0	0	223
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	46	46	75	75
Heavy Vehicles, %	4	2	8	0	0	1
Mvmt Flow	259	199	39	0	0	297

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	188	20	0	-	-	-
Stage 1	39	-	-	-	-	-
Stage 2	149	-	-	-	-	-
Critical Hdwy	6.88	6.94	-	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	-	-	-	-
Pot Cap-1 Maneuver	778	1053	-	0	0	-
Stage 1	973	-	-	0	0	-
Stage 2	857	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	778	1053	-	-	-	-
Mov Cap-2 Maneuver	778	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	857	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	778	1053	-
HCM Lane V/C Ratio	-	0.333	0.189	-
HCM Control Delay (s)	-	11.9	9.2	-
HCM Lane LOS	-	B	A	-
HCM 95th %tile Q(veh)	-	1.5	0.7	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	359	13	271	426	172	3	86	83	220	138	6
Future Volume (veh/h)	30	359	13	271	426	172	3	86	83	220	138	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1792	1900	1881	1845	1810	1900	1881	1900	1827	1882	1900
Adj Flow Rate, veh/h	32	382	0	295	463	0	4	118	114	232	145	6
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.73	0.73	0.73	0.95	0.95	0.95
Percent Heavy Veh, %	13	6	0	1	3	5	0	1	1	4	1	1
Cap, veh/h	362	735	349	470	1028	451	404	172	167	408	527	22
Arrive On Green	0.04	0.22	0.00	0.11	0.29	0.00	0.01	0.20	0.20	0.10	0.29	0.29
Sat Flow, veh/h	1601	3406	1615	1792	3505	1538	1810	880	851	1740	1795	74
Grp Volume(v), veh/h	32	382	0	295	463	0	4	0	232	232	0	151
Grp Sat Flow(s),veh/h/ln	1601	1703	1615	1792	1752	1538	1810	0	1731	1740	0	1869
Q Serve(g_s), s	0.7	4.8	0.0	5.5	5.2	0.0	0.1	0.0	6.0	4.9	0.0	3.0
Cycle Q Clear(g_c), s	0.7	4.8	0.0	5.5	5.2	0.0	0.1	0.0	6.0	4.9	0.0	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		0.04
Lane Grp Cap(c), veh/h	362	735	349	470	1028	451	404	0	339	408	0	549
V/C Ratio(X)	0.09	0.52	0.00	0.63	0.45	0.00	0.01	0.00	0.68	0.57	0.00	0.28
Avail Cap(c_a), veh/h	469	1265	600	470	1338	587	581	0	661	408	0	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	16.8	0.0	13.2	13.9	0.0	15.5	0.0	18.1	13.0	0.0	13.1
Incr Delay (d2), s/veh	0.1	0.6	0.0	2.7	0.3	0.0	0.0	0.0	2.4	1.9	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.3	0.0	1.4	2.6	0.0	0.0	0.0	3.1	2.5	0.0	1.6
LnGrp Delay(d),s/veh	14.0	17.3	0.0	15.9	14.2	0.0	15.5	0.0	20.5	14.9	0.0	13.4
LnGrp LOS	B	B		B	B		B		C	B		B
Approach Vol, veh/h		414			758			236			383	
Approach Delay, s/veh		17.1			14.9			20.4			14.3	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	14.0	10.0	15.0	4.8	18.7	6.2	18.7
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	5.0	18.5	5.5	18.0	5.0	18.5	5.0	18.5
Max Q Clear Time (g_c+I1), s	6.9	8.0	7.5	6.8	2.1	5.0	2.7	7.2
Green Ext Time (p_c), s	0.0	1.5	0.0	3.7	0.0	1.7	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	90	0	3	103	72	1	8	3	58	0	6
Future Vol, veh/h	5	90	0	3	103	72	1	8	3	58	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	86	86	86	60	60	60	84	84	84
Heavy Vehicles, %	0	3	0	0	0	3	0	0	0	0	0	0
Mvmt Flow	6	102	0	3	120	84	2	13	5	69	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	203	0	0	102	0	0	283	324	102	292	283	162
Stage 1	-	-	-	-	-	-	114	114	-	169	169	-
Stage 2	-	-	-	-	-	-	169	210	-	123	114	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1381	-	-	1503	-	-	673	597	959	664	629	888
Stage 1	-	-	-	-	-	-	896	805	-	838	763	-
Stage 2	-	-	-	-	-	-	838	732	-	886	805	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1381	-	-	1503	-	-	664	593	959	646	625	888
Mov Cap-2 Maneuver	-	-	-	-	-	-	664	593	-	646	625	-
Stage 1	-	-	-	-	-	-	892	801	-	834	761	-
Stage 2	-	-	-	-	-	-	830	731	-	862	801	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	10.6	10.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	662	1381	-	-	1503	-	-	713
HCM Lane V/C Ratio	0.03	0.004	-	-	0.002	-	-	0.107
HCM Control Delay (s)	10.6	7.6	0	-	7.4	0	-	10.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	8.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	27	216	5	24	176	11
Future Vol, veh/h	27	216	5	24	176	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	60	60	69	69
Heavy Vehicles, %	4	1	0	0	1	0
Mvmt Flow	35	277	8	40	255	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	554	28	0	0	48	0
Stage 1	28	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Critical Hdwy	6.44	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	490	1050	-	-	1566	-
Stage 1	989	-	-	-	-	-
Stage 2	589	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	410	1050	-	-	1566	-
Mov Cap-2 Maneuver	410	-	-	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	7.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	895	1566	-
HCM Lane V/C Ratio	-	-	0.348	0.163	-
HCM Control Delay (s)	-	-	11.2	7.7	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	86	2	155	91	23	1	456	211	39	741	13
Future Volume (veh/h)	10	86	2	155	91	23	1	456	211	39	741	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1727	1794	1900	1845	1885	1900	1900	1810	1827	1845	1863	1900
Adj Flow Rate, veh/h	12	102	0	168	99	0	1	480	0	41	772	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	10	6	6	3	0	0	0	5	4	3	2	0
Cap, veh/h	331	197	0	436	383	0	294	1040	470	424	1227	560
Arrive On Green	0.02	0.11	0.00	0.11	0.20	0.00	0.00	0.30	0.00	0.05	0.35	0.00
Sat Flow, veh/h	1645	1794	0	1757	1885	0	1810	3438	1553	1757	3539	1615
Grp Volume(v), veh/h	12	102	0	168	99	0	1	480	0	41	772	0
Grp Sat Flow(s),veh/h/ln	1645	1794	0	1757	1885	0	1810	1719	1553	1757	1770	1615
Q Serve(g_s), s	0.3	2.2	0.0	3.3	1.8	0.0	0.0	4.7	0.0	0.6	7.6	0.0
Cycle Q Clear(g_c), s	0.3	2.2	0.0	3.3	1.8	0.0	0.0	4.7	0.0	0.6	7.6	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	197	0	436	383	0	294	1040	470	424	1227	560
V/C Ratio(X)	0.04	0.52	0.00	0.38	0.26	0.00	0.00	0.46	0.00	0.10	0.63	0.00
Avail Cap(c_a), veh/h	503	777	0	461	821	0	507	1564	706	556	1610	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	17.5	0.0	13.0	13.9	0.0	10.5	11.7	0.0	9.3	11.3	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.6	0.4	0.0	0.0	0.3	0.0	0.1	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	1.2	0.0	1.6	1.0	0.0	0.0	2.2	0.0	0.3	3.7	0.0
LnGrp Delay(d),s/veh	16.0	19.5	0.0	13.6	14.3	0.0	10.5	12.1	0.0	9.4	11.9	0.0
LnGrp LOS	B	B		B	B		B	B		A	B	
Approach Vol, veh/h		114			267			481			813	
Approach Delay, s/veh		19.2			13.8			12.1			11.8	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	17.1	9.0	9.1	4.6	18.9	5.1	13.0
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	5.0	18.9	5.1	18.0	5.0	18.9	5.0	18.1
Max Q Clear Time (g_c+I1), s	2.6	6.7	5.3	4.2	2.0	9.6	2.3	3.8
Green Ext Time (p_c), s	0.0	5.7	0.0	0.7	0.0	4.8	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	262	323	15	343	581
Future Vol, veh/h	8	262	323	15	343	581
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	0	1	2	7	2	2
Mvmt Flow	9	301	404	19	373	632

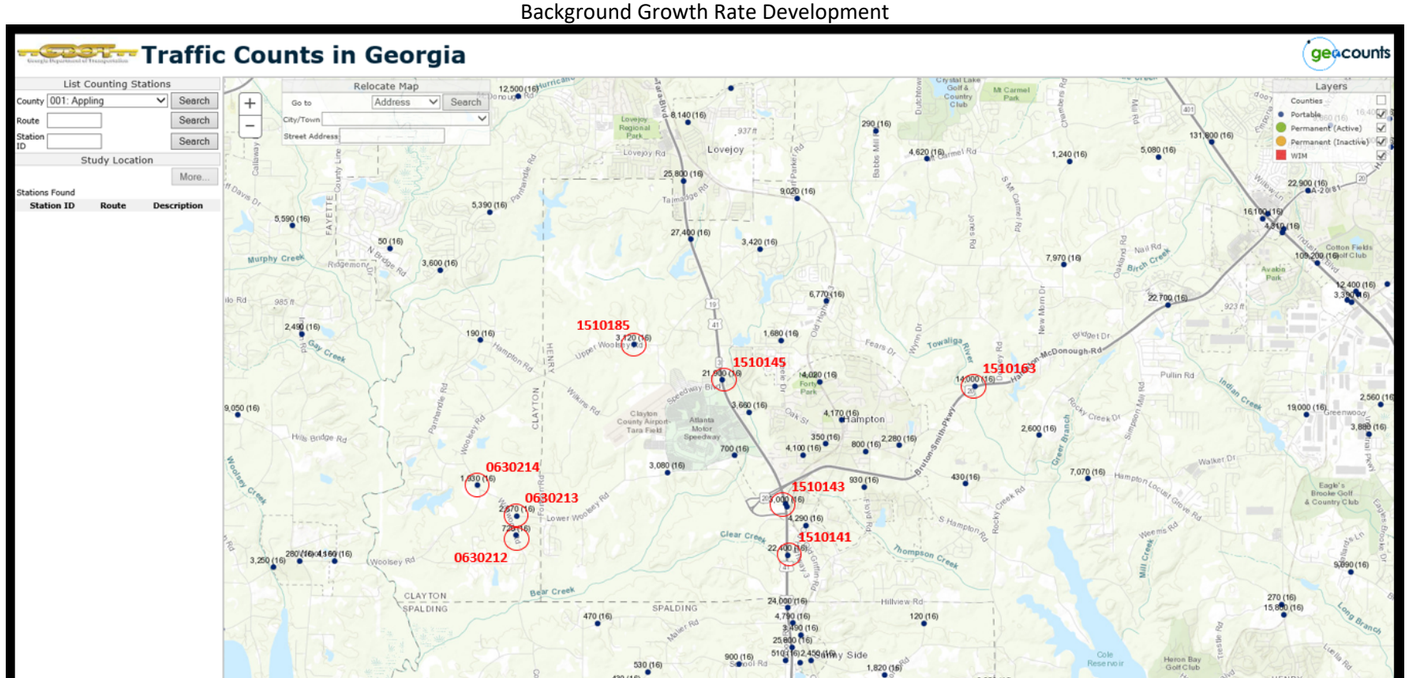
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1781	404	0	0	404	0
Stage 1	404	-	-	-	-	-
Stage 2	1377	-	-	-	-	-
Critical Hdwy	6.4	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	91	649	-	-	1155	-
Stage 1	679	-	-	-	-	-
Stage 2	237	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	46	649	-	-	1155	-
Mov Cap-2 Maneuver	46	-	-	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	119	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.7	0	3.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	467	1155	-
HCM Lane V/C Ratio	-	-	0.665	0.323	-
HCM Control Delay (s)	-	-	26.7	9.6	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	4.8	1.4	-

APPENDIX I

HISTORICAL GROWTH RATE



TC# 0630213 (Fortson Rd E/O Wildwood Rd)		TC# 1510185 (Upper Woolsey Rd E/O Wilkins Rd)		TC# 0630214 (Woolsey Rd N/O Lower Woolsey Rd)		TC# 0630212 (Wildwood Rd S/O Lower Woolsey Rd)		TC# 1510145 (US 19/41 N/O Speedway Blvd)		TC# 1510143 (US 19/41 N/O Lower Woolsey Rd)		TC# 1510141 (US 19/41 S/O Lower Woolsey Rd)		TC# 1510163 (SR 20 W/O Dorsey Rd)		
Year	AADT	Year	AADT	Year	AADT	Year	AADT	Year	AADT	Year	AADT	Year	AADT	Year	AADT	
2001	1300	2002	2296	2001	2300	2002	1331	2001	26200	2002	22864	2002	22759	2003	8260	
2002	1540	2003	2490	2002	2001	2003	1390	2003	25520	2003	22000	2003	22660	2004	8430	
2003	1630	2004	2510	2003	2310	2004	1590	2004	24860	2004	23740	2004	22330	2005	7400	
2004	1970	2005	2580	2004	2340	2006	1960	2005	21640	2005	22400	2005	21820	2006	9680	
2005	1790	2010	2610	2005	2910	2010	840	2006	24800	2007	24780	2006	23480	2007	11790	
2006	2220	2014	2930	2006	2620	2016	720	2008	21120	2011	18670	2007	25240	2013	12520	
2007	2340			2009	1760			2010	21890	2013	18220	2008	21550	2015	13600	
2008	2230			2016	1930			2012	22160	2015	19300	2010	24330			
2015	2610							2014	20500			2012	22660			
												2014	21000			
2001	1538	2001	2358	2001	2402	2001	1721	2001	25642	2001	24166	2001	23064	2001	7452	
2016	3118	2016	2980	2016	1939	2016	728	2016	19753	2016	18199	2016	22302	2016	14588	
2006	2227	2006	2325	2006	2288	2006	1643	2006	23564	2006	24230	2006	24080	2006	10454	
2016	2645	2016	3104	2016	1821	2016	640	2016	19952	2016	17224	2016	21109	2016	13919	
2011	-	2011	-	2011	-	2011	-	2011	23040	2011	18417	2011	23539	2011	11526	
2016	-	2016	-	2016	-	2016	-	2016	18964	2016	19197	2016	24604	2016	14174	
																AVERAGE
15-yr	01-16	4.6%	01-16	1.5%	01-16	-1.4%	01-16	-5.9%	01-16	-1.8%	01-16	-1.9%	01-16	-0.2%	01-16	4.4%	-0.1%
10-yr	06-16	1.7%	06-16	2.8%	06-16	-2.3%	06-16	-9.9%	06-16	-1.7%	06-16	-3.5%	06-16	-1.3%	06-16	2.8%	-1.4%
5-yr	11-16	-	11-16	-	11-16	-	11-16	-	11-16	-4.0%	11-16	0.8%	11-16	0.9%	11-16	4.1%	0.4%

Short Term Station **0630213**
In **Clayton** County
Located on **133000**
LRS ID: **0632133000**

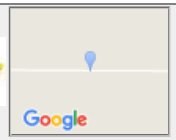
GEOCOUNTS Traffic
0630213
Search Again

Referencing | Annual Statistics | Surveys

Volume			Trucks
2017	-		
2016	2670	Est. from last year	
2015	2610	1 - 6 days	
2014	50	Est. from last year	
2013	50	Est. from last year	
2012	50	Est. from last year	
2011	50	1 - 6 days	
2010	2200	Est. from last year	
2009	2230	Est. from last year	
2008	2230	1 - 6 days	
2007	2340	1 - 6 days	
2006	2220	1 - 6 days	
2005	1790	1 - 6 days	
2004	1970	1 - 6 days	
2003	1630	1 - 6 days	
2002	1540	1 - 6 days	
2001	1300	1 - 6 days	
2000	1000	Est. from last year	
1999	900	Est. from last year	
1998	900	1 - 6 days	
1997	900	1 - 6 days	
1996	800	1 - 6 days	
1995	700	1 - 6 days	
1994	700	1 - 6 days	
1993	400	1 - 6 days	
1992	512	1 - 6 days	
1991	489	1 - 6 days	

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		1.87					
2016	2670				12.57	50.00	
2015	2610				12.57	50.00	
2014	50						
2013	50						
2012	50						
2011	50						
2010	2200						
2009	2230						
2008	2230						
2007	2340						



Short Term Station **1510185**
In **Henry** County
Located on **065300**
LRS ID: **1512065300**
Upper Woolsey Rd/CR653 W of US19,41

GEOCOUNTS Traffic
1510185
Search Again

Referencing | Annual Statistics | Surveys

Volume			Trucks
2017	-		
2016	3120	Est. from previous years	
2015	3050	Est. from last year	
2014	2930	1 - 6 days	
2013	2540	Est. from last year	
2012	2480	Est. from last year	
2011	2520	Est. from last year	
2010	2610	1 - 6 days	
2009	2430	Est. from last year	
2008	2430	Est. from last year	
2007	2550	Est. from last year	
2006	2550	Est. from last year	
2005	2580	1 - 6 days	
2004	2510	1 - 6 days	
2003	2490	1 - 6 days	
2002	2296	1 - 6 days	
2001	1800	Est. from last year	
2000	1800	Est. from last year	
1999	2000	1 - 6 days	
1998	1800	1 - 6 days	
1997	1500	1 - 6 days	
1996	1900	1 - 6 days	
1995	1600	1 - 6 days	
1994	1400	1 - 6 days	
1993	2300	1 - 6 days	
1992	1228	1 - 6 days	
1991	1388	1 - 6 days	
1990	1303	1 - 6 days	

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		1.92					
2016	3120				10.57	50.00	
2015	3050				10.57	50.00	
2014	2930				10.57	50.00	
2013	2540						
2012	2480						
2011	2520						
2010	2610						
2009	2430						
2008	2430						
2007	2550						

Short Term Station **0630214**
In **Clayton** County
Located on **133100**
LRS ID: **0632133100**

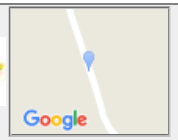
GEOCOUNTS Traffic
0630214
Search Again

Referencing | Annual Statistics | Surveys

Volume			Trucks
2017	-		
2016	1930	1 - 6 days	
2015	1760	Est. from previous years	
2014	1690	Est. from last year	
2013	1690	Est. from last year	
2012	1650	Est. from last year	
2011	1680	Est. from last year	
2010	1740	Est. from last year	
2009	1760	1 - 6 days	
2008	2520	Est. from last year	
2007	2650	Est. from last year	
2006	2620	1 - 6 days	
2005	2910	1 - 6 days	
2004	2340	1 - 6 days	
2003	2310	1 - 6 days	
2002	2001	1 - 6 days	
2001	2300	1 - 6 days	
2000	1500	Est. from last year	
1999	1500	Est. from last year	
1998	1400	1 - 6 days	
1997	1100	1 - 6 days	
1996	1300	1 - 6 days	
1995	1100	1 - 6 days	
1994	1000	1 - 6 days	
1993	900	1 - 6 days	
1992	733	1 - 6 days	
1991	786	1 - 6 days	
1990	874	1 - 6 days	

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		2.07					
2016	1930				13.77	50.00	
2015	1760						
2014	1690						
2013	1690						
2012	1650						
2011	1680						
2010	1740						
2009	1760						
2008	2520						
2007	2650						



Short Term Station **0630212**
In **Clayton** County
Located on **132900**
LRS ID: **0632132900**

GEOCOUNTS Traffic
0630212
Search Again

Referencing | Annual Statistics | Surveys

Volume			Trucks
2017	-		
2016	720	1 - 6 days	
2015	850	Est. from previous years	
2014	820	Est. from last year	
2013	820	Est. from last year	
2012	800	Est. from last year	
2011	810	Est. from last year	
2010	840	1 - 6 days	
2009	1410	Est. from last year	
2008	1410	Est. from last year	
2007	1480	Est. from last year	
2006	1960	1 - 6 days	
2005	860	1 - 6 days	
2004	1590	1 - 6 days	
2003	1390	1 - 6 days	
2002	1331	1 - 6 days	
2001	1300	Est. from last year	
2000	1200	Est. from last year	
1999	1000	1 - 6 days	
1998	1200	1 - 6 days	
1997	900	1 - 6 days	
1996	1000	1 - 6 days	
1995	800	1 - 6 days	
1994	700	1 - 6 days	
1993	500	1 - 6 days	
1992	796	1 - 6 days	
1991	602	1 - 6 days	
1990	692	1 - 6 days	

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		1.39					
2016	720				11.94	50.00	
2015	850						
2014	820						
2013	820						
2012	800						
2011	810						
2010	840						
2009	1410						
2008	1410						
2007	1480						

Short Term Station **1510145**
In **Henry** County
Located on **00000003**
LRS ID: **1511000300**
US-19,41/SR3 N of SR20 @Speedway Blvd, Hampton (**Hampton**)

GEOCOUNTS Traffic
1510145
Search Again

Referencing | Annual Statistics | Surveys

Volume

2017	-	
2016	21900	Est. from previous years
2015	21200	Est. from last year
2014	20500	1 - 6 days
2013	22080	Est. from last year
2012	22160	1 - 6 days
2011	21580	Est. from last year
2010	21890	1 - 6 days
2009	21490	Est. from last year
2008	21120	1 - 6 days
2007	24010	Est. from last year
2006	24800	1 - 6 days
2005	21640	1 - 6 days
2004	24860	1 - 6 days
2003	25520	1 - 6 days
2002	481	1 - 6 days
2001	26200	1 - 6 days
2000	23100	Est. from last year
1999	600	1 - 6 days
1998	22100	1 - 6 days
1997	22100	1 - 6 days
1996	19800	1 - 6 days
1995	20100	1 - 6 days
1994	500	1 - 6 days
1993	28900	1 - 6 days
1992	18781	1 - 6 days
1991	18725	1 - 6 days
1990	15891	1 - 6 days

Trucks

2017	-	
2016	1316	Est. from previous years
2015	1274	Est. from previous years
2014	1231	Est. from last year
2013	1066	Est. from last year
2012	1070	1 - 6 days
2011	1685	Est. from previous years
2010	1710	1 - 6 days

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		5.94					
2016	21900		1316	6.01	9.48	61.66	
2015	21200		1274	6.01	9.48	61.66	
2014	20500		1231	6.01	9.48	61.66	
2013	22080		1066	4.83			
2012	22160		1070	4.83			
2011	21580		1685	7.81			
2010	21890		1710	7.81			
2009	21490						
2008	21120						
2007	24010						

Short Term Station **1510143**
In **Henry** County
Located on **00000003**
LRS ID: **1511000300**
US-19,41/SR3 S of SR20, Hampton (**Hampton**)

GEOCOUNTS Traffic
1510143
Search Again

Referencing | Annual Statistics | Surveys

Volume

2017	-	
2016	19900	Est. from last year
2015	19300	1 - 6 days
2014	18200	Est. from last year
2013	18220	1 - 6 days
2012	18430	Est. from last year
2011	18670	1 - 6 days
2010	21640	Est. from last year
2009	-	
2008	24400	Est. from last year
2007	24780	1 - 6 days
2006	920	1 - 6 days
2005	22400	1 - 6 days
2004	23740	1 - 6 days
2003	22000	1 - 6 days
2002	22864	1 - 6 days
2001	20500	Est. from last year
2000	20400	Est. from last year
1999	20600	1 - 6 days
1998	20300	1 - 6 days
1997	20200	1 - 6 days
1996	19200	1 - 6 days
1995	19500	1 - 6 days
1994	18300	1 - 6 days
1993	20900	1 - 6 days
1992	18478	1 - 6 days
1991	17918	1 - 6 days
1990	16203	1 - 6 days

Trucks

2017	-	
2016	1297	Est. from previous years
2015	1256	Est. from last year
2014	1008	Est. from previous years
2013	1008	1 - 6 days

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		6.03					
2016	19900		1297	6.52	9.17	63.21	
2015	19300		1256	6.51	9.17	63.21	
2014	18200		1008	5.54	9.00	63.00	
2013	18220		1008	5.53	9.00	63.00	
2012	18430						
2011	18670						
2010	21640						
2009							
2008	24400						
2007	24780						

Short Term Station **1510141**
In **Henry** County
Located on **00000003**
LRS ID: **1511000300**
US-19,41/SR3 S of SR20 & Bridges Dr, Hampton (**Hampton**)

GEOCOUNTS Traffic
1510141
Search Again

Referencing | Annual Statistics | Surveys

Volume

2017	-	
2016	22400	Est. from previous years
2015	21700	Est. from last year
2014	21000	1 - 6 days
2013	22580	Est. from last year
2012	22660	1 - 6 days
2011	23910	Est. from last year
2010	24330	1 - 6 days
2009	21720	Est. from last year
2008	21550	1 - 6 days
2007	25240	1 - 6 days
2006	23480	1 - 6 days
2005	21820	1 - 6 days
2004	22330	1 - 6 days
2003	22660	1 - 6 days
2002	22759	1 - 6 days
2001	21500	Est. from last year
2000	21100	Est. from last year
1999	21900	1 - 6 days
1998	19200	1 - 6 days
1997	20000	1 - 6 days
1996	17700	1 - 6 days
1995	21600	1 - 6 days
1994	18400	1 - 6 days
1993	18300	1 - 6 days
1992	19171	1 - 6 days
1991	18393	1 - 6 days
1990	16256	1 - 6 days

Trucks

2017	-	
2016	1490	Est. from previous years
2015	1442	Est. from previous years
2014	1394	Est. from last year
2013	1416	Est. from last year
2012	1421	1 - 6 days
2011	1798	Est. from previous years
2010	1830	1 - 6 days

Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		5.80					
2016	22400		1490	6.65	9.23	59.48	
2015	21700		1442	6.65	9.23	59.48	
2014	21000		1394	6.64	9.23	59.48	
2013	22580		1416	6.27			
2012	22660		1421	6.27			
2011	23910		1798	7.52			
2010	24330		1830	7.52			
2009	21720						
2008	21550						
2007	25240						

Short Term Station **1510163**
In **Henry** County
Located on **002000**
LRS ID: **1511002000**

GEOCOUNTS Traffic
1510163
Search Again

Referencing | Annual Statistics | Surveys

Volume

2017	-	
2016	14000	Est. from last year
2015	13600	1 - 6 days
2014	12500	Est. from last year
2013	12520	1 - 6 days
2012	10950	Est. from last year
2011	11140	Est. from last year
2010	11410	Est. from last year
2009	11510	Est. from last year
2008	11490	Est. from last year
2007	11790	1 - 6 days
2006	9680	1 - 6 days
2005	7400	1 - 6 days
2004	8430	1 - 6 days
2003	8260	1 - 6 days
2002	184	1 - 6 days
2001	5600	Est. from last year
2000	6100	1 - 6 days
1999	6000	Est. from last year
1998	5600	1 - 6 days
1997	5000	1 - 6 days
1996	6000	1 - 6 days
1995	5900	1 - 6 days
1994	5000	1 - 6 days
1993	6300	1 - 6 days
1992	4772	1 - 6 days
1991	4565	1 - 6 days
1990	4883	1 - 6 days

Trucks

2017	-	
2016	658	Est. from previous years
2015	637	Est. from last year
2014	627	Est. from previous years
2013	627	1 - 6 days

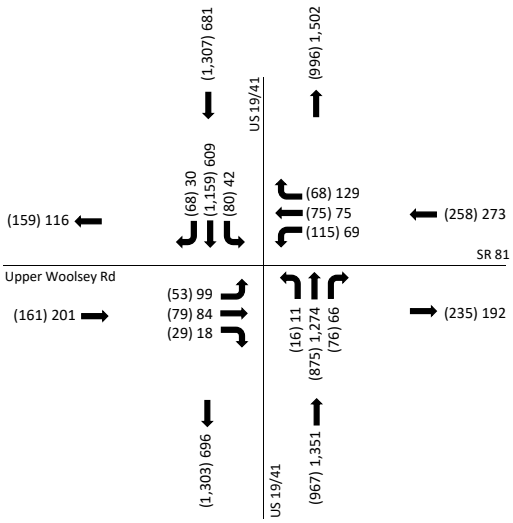
Key Annual Trends

Year	Annual Average Daily Traffic	% APR Change	Annual Average Daily Truck Traffic	% Trucks	K Factor	D Factor	85th Pctl Speed
2017		5.71					
2016	14000		658	4.70	8.84	56.34	
2015	13600		637	4.69	8.84	56.34	
2014	12500		627	5.02	8.00	54.00	
2013	12520		627	5.01	8.00	54.00	
2012	10950						
2011	11140						
2010	11410						
2009	11510						
2008	11490						
2007	11790						

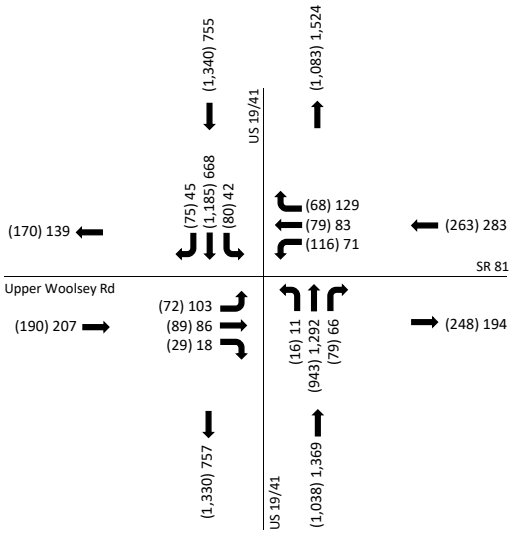
APPENDIX J

FUTURE NO-BUILD AND BUILD VOLUMES

1: US 19/41 at Upper Woolsey Rd/SR 81

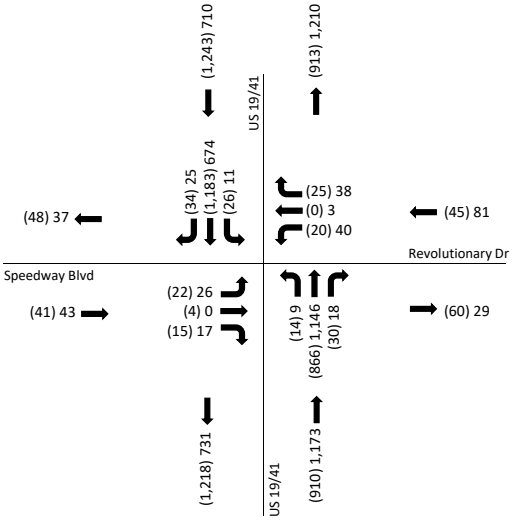


Background Future (2023) TMC – (PM)/AM

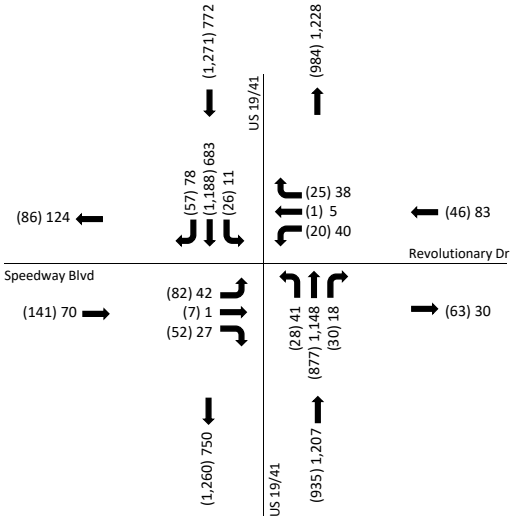


Total Future (2023) TMC – (PM)/AM

2: US 19/41 at Speedway Blvd

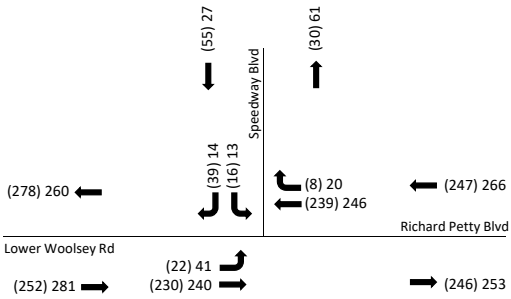


Background Future (2023) TMC – (PM)/AM

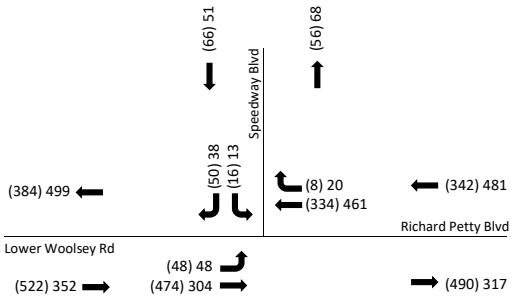


Total Future (2023) TMC – (PM)/AM

3: Richard Petty Blvd at Speedway Blvd

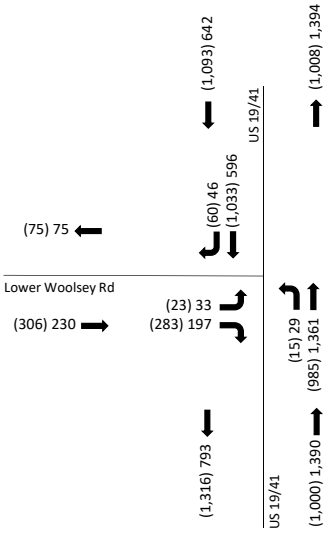


Background Future (2023) TMC – (PM)/AM



Total Future (2023) TMC – (PM)/AM

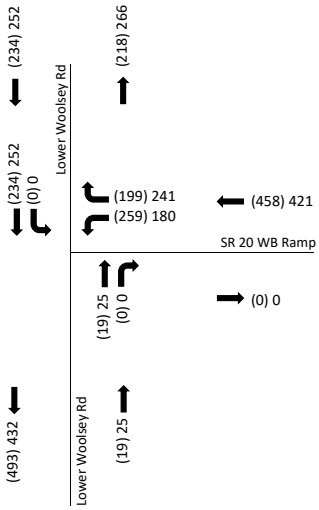
4: US 19/41 at Lower Woolsey Rd



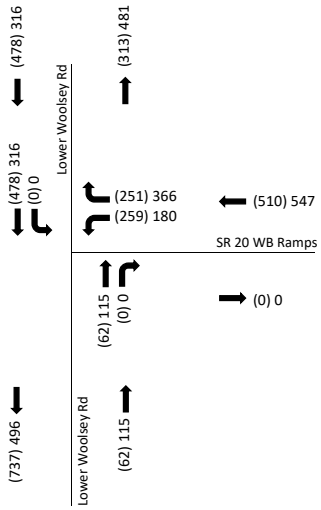
Background Future (2023) TMC – (PM)/AM

Total Future (2023) TMC – (PM)/AM

5: Lower Woolsey Rd at SR 20 WB Ramps

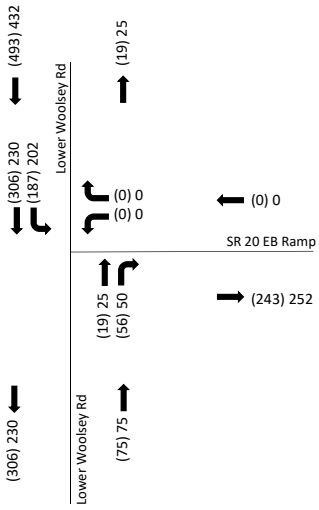


Background Future (2023) TMC – (PM)/AM

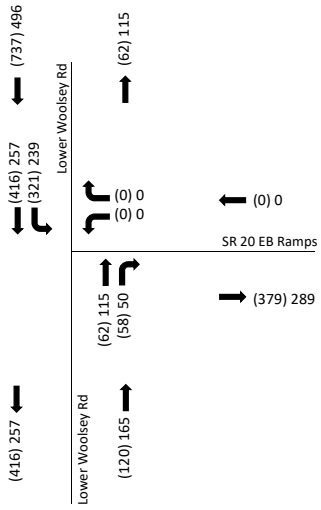


Total Future (2023) TMC – (PM)/AM

6: Lower Woolsey Rd at SR 20 EB Ramps

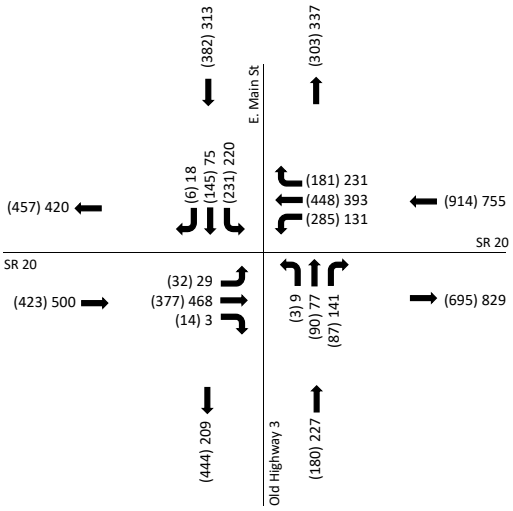


Background Future (2023) TMC – (PM)/AM

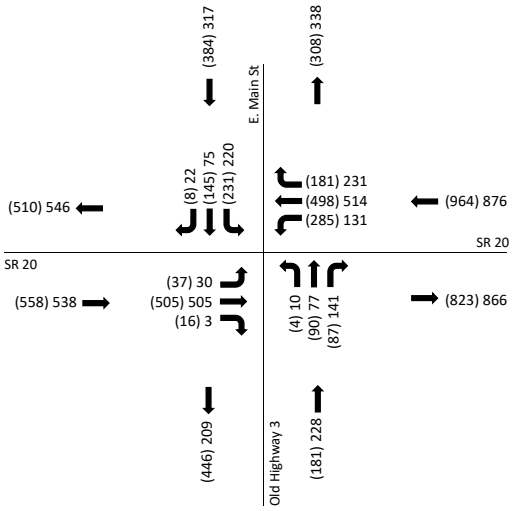


Total Future (2023) TMC – (PM)/AM

7: SR 20 at Old Highway 3/E. Main St

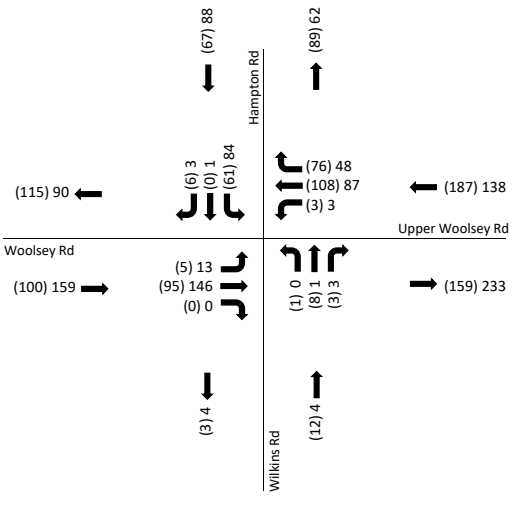


Background Future (2023) TMC – (PM)/AM

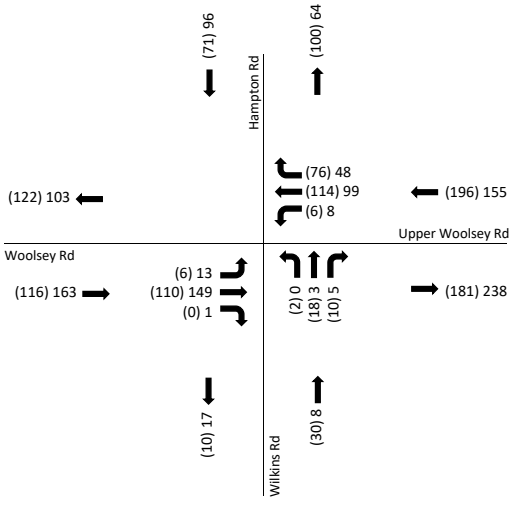


Total Future (2023) TMC – (PM)/AM

8: Woolsey Rd at Hampton Rd

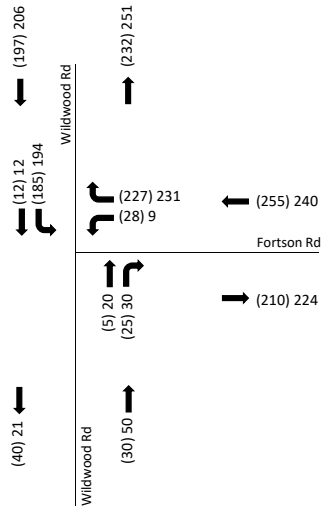


Background Future (2023) TMC – (PM)/AM

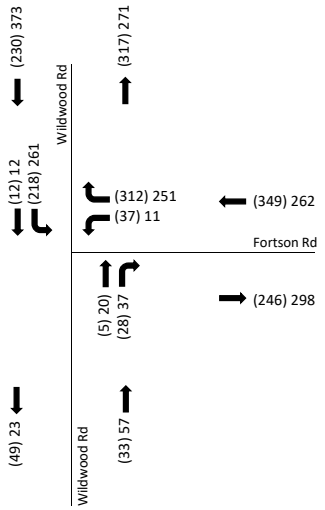


Total Future (2023) TMC – (PM)/AM

9: Fortson Rd at Wildwood Rd

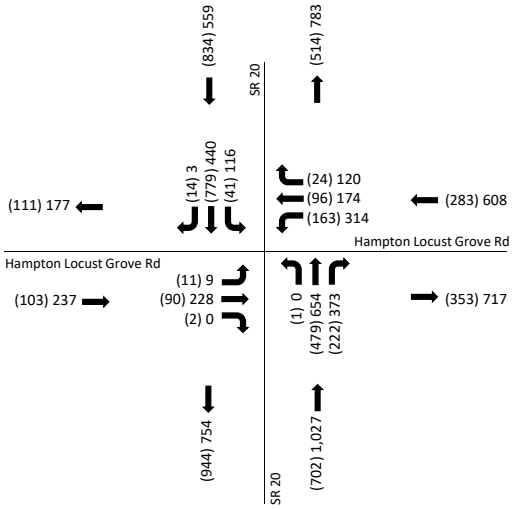


Background Future (2023) TMC – (PM)/AM

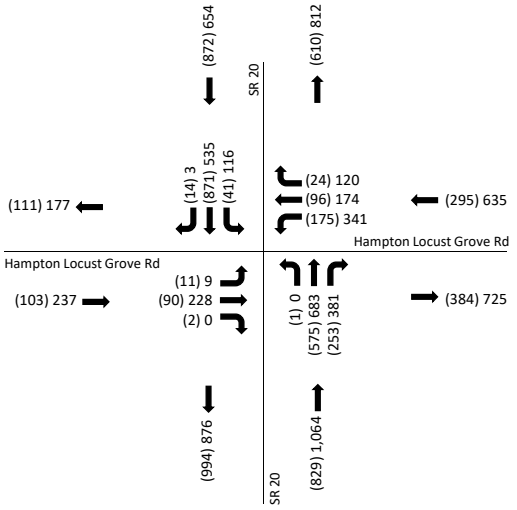


Total Future (2023) TMC – (PM)/AM

10: SR 20 at Hampton Locust Grove Rd

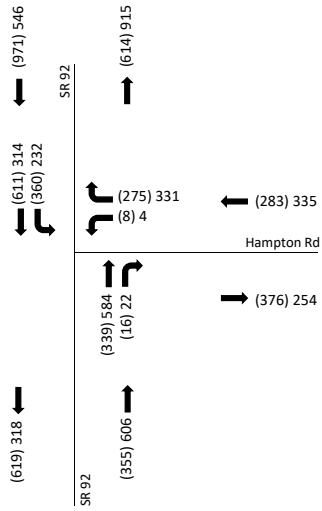


Background Future (2023) TMC – (PM)/AM

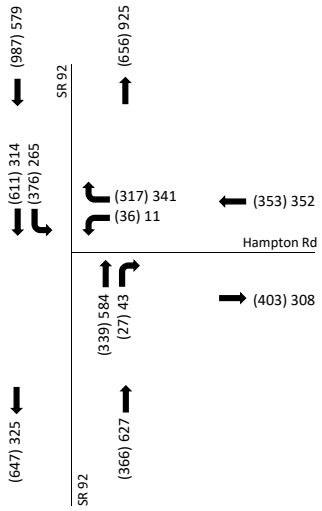


Total Future (2023) TMC – (PM)/AM

11: SR 92 at Hampton Rd



Background Future (2023) TMC – (PM)/AM



Total Future (2023) TMC – (PM)/AM

APPENDIX K

FUTURE NO-BUILD CONDITIONS SYNCHRO REPORTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	84	18	69	75	129	11	1274	66	42	609	30
Future Volume (veh/h)	99	84	18	69	75	129	11	1274	66	42	609	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1884	1900	1845	1845	1845	1900	1810	1810	1759	1827	1900
Adj Flow Rate, veh/h	118	100	0	74	81	0	13	1517	79	48	692	34
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.84	0.84	0.84	0.88	0.88	0.88
Percent Heavy Veh, %	5	1	1	3	3	3	0	5	5	8	4	0
Cap, veh/h	351	356	0	341	349	296	465	2303	717	310	1734	807
Arrive On Green	0.19	0.19	0.00	0.19	0.19	0.00	0.02	0.47	0.47	0.05	0.50	0.50
Sat Flow, veh/h	1275	1884	0	1277	1845	1568	1810	4940	1538	1675	3471	1615
Grp Volume(v), veh/h	118	100	0	74	81	0	13	1517	79	48	692	34
Grp Sat Flow(s),veh/h/ln	1275	1884	0	1277	1845	1568	1810	1647	1538	1675	1736	1615
Q Serve(g_s), s	4.0	2.1	0.0	2.4	1.7	0.0	0.2	10.8	1.3	0.7	5.7	0.5
Cycle Q Clear(g_c), s	5.7	2.1	0.0	4.5	1.7	0.0	0.2	10.8	1.3	0.7	5.7	0.5
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	351	356	0	341	349	296	465	2303	717	310	1734	807
V/C Ratio(X)	0.34	0.28	0.00	0.22	0.23	0.00	0.03	0.66	0.11	0.15	0.40	0.04
Avail Cap(c_a), veh/h	611	741	0	601	725	616	632	2536	790	409	1782	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	15.9	0.0	17.8	15.7	0.0	6.4	9.4	6.9	7.0	7.2	5.9
Incr Delay (d2), s/veh	0.6	0.4	0.0	0.3	0.3	0.0	0.0	0.6	0.1	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.1	0.0	0.9	0.9	0.0	0.1	4.9	0.6	0.3	2.7	0.2
LnGrp Delay(d),s/veh	18.7	16.3	0.0	18.1	16.1	0.0	6.4	10.0	6.9	7.3	7.3	5.9
LnGrp LOS	B	B		B	B		A	A	A	A	A	A
Approach Vol, veh/h		218			155			1609			774	
Approach Delay, s/veh		17.6			17.1			9.8			7.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	25.8		13.2	5.3	27.4		13.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	2.7	12.8		7.7	2.2	7.7		6.5
Green Ext Time (p_c), s	0.0	8.5		1.1	0.0	11.7		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	17	40	3	38	9	1146	18	11	674	25
Future Vol, veh/h	26	0	17	40	3	38	9	1146	18	11	674	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	-	800	-	350	450	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	77	77	77	90	90	90	91	91	91
Heavy Vehicles, %	4	0	0	0	0	0	22	7	18	0	4	13
Mvmt Flow	36	0	23	52	4	49	10	1273	20	12	741	27

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1296	2058	370	1688	2058	637	741	0	0	1273	0	0
Stage 1	765	765	-	1293	1293	-	-	-	-	-	-	-
Stage 2	531	1293	-	395	765	-	-	-	-	-	-	-
Critical Hdwy	7.03	6.5	6.9	6.95	6.5	7.1	4.54	-	-	5.3	-	-
Critical Hdwy Stg 1	6.58	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.69	4	3.3	3.65	4	3.9	2.42	-	-	3.1	-	-
Pot Cap-1 Maneuver	140	56	633	79	56	364	742	-	-	293	-	-
Stage 1	348	415	-	129	235	-	-	-	-	-	-	-
Stage 2	465	235	-	587	415	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	110	53	633	73	53	364	742	-	-	293	-	-
Mov Cap-2 Maneuver	110	53	-	73	53	-	-	-	-	-	-	-
Stage 1	343	398	-	127	232	-	-	-	-	-	-	-
Stage 2	390	232	-	542	398	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36.2	104.5	0.1	0.3
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	742	-	-	110	633	127	293	-	-
HCM Lane V/C Ratio	0.013	-	-	0.324	0.037	0.828	0.041	-	-
HCM Control Delay (s)	9.9	-	-	52.7	10.9	104.5	17.8	-	-
HCM Lane LOS	A	-	-	F	B	F	C	-	-
HCM 95th %tile Q(veh)	0	-	-	1.3	0.1	5.1	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	41	240	246	20	13	14
Future Vol, veh/h	41	240	246	20	13	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Free
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	78	78	57	57
Heavy Vehicles, %	3	3	2	0	0	0
Mvmt Flow	44	258	315	26	23	25

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	315	0	-	0	661	-
Stage 1	-	-	-	-	315	-
Stage 2	-	-	-	-	346	-
Critical Hdwy	4.13	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.227	-	-	-	3.5	-
Pot Cap-1 Maneuver	1240	-	-	-	431	0
Stage 1	-	-	-	-	744	0
Stage 2	-	-	-	-	721	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1240	-	-	-	416	-
Mov Cap-2 Maneuver	-	-	-	-	416	-
Stage 1	-	-	-	-	744	-
Stage 2	-	-	-	-	695	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1240	-	-	-	416	-
HCM Lane V/C Ratio	0.036	-	-	-	0.055	-
HCM Control Delay (s)	8	-	-	-	14.2	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	198	29	1361	596	46
Future Vol, veh/h	33	198	29	1361	596	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	92	92	83	83
Heavy Vehicles, %	18	8	4	5	4	8
Mvmt Flow	41	244	32	1479	718	55

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1521	-	718	0	-	0
Stage 1	718	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Critical Hdwy	7.16	-	4.18	-	-	-
Critical Hdwy Stg 1	6.16	-	-	-	-	-
Critical Hdwy Stg 2	6.16	-	-	-	-	-
Follow-up Hdwy	3.68	-	2.24	-	-	-
Pot Cap-1 Maneuver	94	0	866	-	-	0
Stage 1	404	0	-	-	-	0
Stage 2	363	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	91	-	866	-	-	-
Mov Cap-2 Maneuver	91	-	-	-	-	-
Stage 1	404	-	-	-	-	-
Stage 2	350	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	73.3	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	866	-	91	-	-
HCM Lane V/C Ratio	0.036	-	0.448	-	-
HCM Control Delay (s)	9.3	-	73.3	0	-
HCM Lane LOS	A	-	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.9	-	-

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	180	241	25	0	0	252
Future Vol, veh/h	180	241	25	0	0	252
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	88	88	88	88
Heavy Vehicles, %	0	0	0	6	1	7
Mvmt Flow	196	262	28	0	0	286

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	171	14	0	-	-	-
Stage 1	28	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	808	1069	-	0	0	-
Stage 1	997	-	-	0	0	-
Stage 2	875	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	808	1069	-	-	-	-
Mov Cap-2 Maneuver	808	-	-	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	875	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	808	1069	-
HCM Lane V/C Ratio	-	0.242	0.245	-
HCM Control Delay (s)	-	10.9	9.5	-
HCM Lane LOS	-	B	A	-
HCM 95th %tile Q(veh)	-	0.9	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	468	3	131	393	231	9	77	141	220	75	18
Future Volume (veh/h)	29	468	3	131	393	231	9	77	141	220	75	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1810	1900	1863	1810	1845	1900	1869	1900	1845	1795	1900
Adj Flow Rate, veh/h	31	503	0	146	437	0	10	89	162	250	85	20
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	11	5	0	2	5	3	0	1	1	3	3	3
Cap, veh/h	351	809	380	381	988	451	422	120	219	448	462	109
Arrive On Green	0.03	0.24	0.00	0.09	0.29	0.00	0.01	0.20	0.20	0.14	0.33	0.33
Sat Flow, veh/h	1630	3438	1615	1774	3438	1568	1810	595	1083	1757	1406	331
Grp Volume(v), veh/h	31	503	0	146	437	0	10	0	251	250	0	105
Grp Sat Flow(s),veh/h/ln	1630	1719	1615	1774	1719	1568	1810	0	1678	1757	0	1737
Q Serve(g_s), s	0.8	7.0	0.0	3.2	5.6	0.0	0.2	0.0	7.5	5.5	0.0	2.3
Cycle Q Clear(g_c), s	0.8	7.0	0.0	3.2	5.6	0.0	0.2	0.0	7.5	5.5	0.0	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.65	1.00		0.19
Lane Grp Cap(c), veh/h	351	809	380	381	988	451	422	0	339	448	0	571
V/C Ratio(X)	0.09	0.62	0.00	0.38	0.44	0.00	0.02	0.00	0.74	0.56	0.00	0.18
Avail Cap(c_a), veh/h	447	1157	543	410	1189	542	568	0	596	515	0	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.6	18.3	0.0	13.8	15.6	0.0	16.6	0.0	20.0	13.1	0.0	12.8
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.6	0.3	0.0	0.0	0.0	3.2	1.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.4	0.0	1.6	2.7	0.0	0.1	0.0	3.8	2.8	0.0	1.1
LnGrp Delay(d),s/veh	14.7	19.1	0.0	14.4	15.9	0.0	16.6	0.0	23.2	14.2	0.0	13.0
LnGrp LOS	B	B		B	B		B		C	B		B
Approach Vol, veh/h		534			583			261			355	
Approach Delay, s/veh		18.9			15.5			23.0			13.8	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	15.3	9.1	17.1	5.2	22.1	6.3	19.9
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	9.5	19.0	5.5	18.0	5.0	23.5	5.0	18.5
Max Q Clear Time (g_c+I1), s	7.5	9.5	5.2	9.0	2.2	4.3	2.8	7.6
Green Ext Time (p_c), s	0.1	1.3	0.0	3.6	0.0	1.9	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	13	146	0	3	87	48	0	1	3	84	1	3
Future Vol, veh/h	13	146	0	3	87	48	0	1	3	84	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	79	79	79	50	50	50	75	75	75
Heavy Vehicles, %	0	7	0	33	0	2	0	0	0	1	0	0
Mvmt Flow	14	162	0	4	110	61	0	2	6	112	1	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	171	0	0	162	0	0	340	369	162	343	339	141
Stage 1	-	-	-	-	-	-	191	191	-	148	148	-
Stage 2	-	-	-	-	-	-	149	178	-	195	191	-
Critical Hdwy	4.1	-	-	4.43	-	-	7.1	6.5	6.2	7.11	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Follow-up Hdwy	2.2	-	-	2.497	-	-	3.5	4	3.3	3.509	4	3.3
Pot Cap-1 Maneuver	1418	-	-	1249	-	-	618	563	888	613	586	912
Stage 1	-	-	-	-	-	-	815	746	-	857	779	-
Stage 2	-	-	-	-	-	-	858	756	-	809	746	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1418	-	-	1249	-	-	607	555	888	600	577	912
Mov Cap-2 Maneuver	-	-	-	-	-	-	607	555	-	600	577	-
Stage 1	-	-	-	-	-	-	806	738	-	848	776	-
Stage 2	-	-	-	-	-	-	849	753	-	793	738	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.2	9.7	12.1
HCM LOS			A	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	772	1418	-	-	1249	-	-	621
HCM Lane V/C Ratio	0.01	0.01	-	-	0.003	-	-	0.189
HCM Control Delay (s)	9.7	7.6	0	-	7.9	0	-	12.1
HCM Lane LOS	A	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.7

Intersection	
Int Delay, s/veh	8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	231	20	30	194	12
Future Vol, veh/h	9	231	20	30	194	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	67	67	88	88
Heavy Vehicles, %	0	0	16	7	2	0
Mvmt Flow	12	304	30	45	220	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	507	52	0	0	75	0
Stage 1	52	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.218	-
Pot Cap-1 Maneuver	529	1021	-	-	1524	-
Stage 1	976	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	452	1021	-	-	1524	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	550	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	7.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	975	1524	-
HCM Lane V/C Ratio	-	-	0.324	0.145	-
HCM Control Delay (s)	-	-	10.5	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	228	0	314	174	120	0	654	373	116	440	3
Future Volume (veh/h)	9	228	0	314	174	120	0	654	373	116	440	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1827	1827	1900	1900	1845	1845	1881	1845	1900
Adj Flow Rate, veh/h	12	300	0	374	207	0	0	735	0	132	500	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.76	0.76	0.76	0.84	0.84	0.84	0.89	0.89	0.89	0.88	0.88	0.88
Percent Heavy Veh, %	0	3	3	4	4	4	0	3	3	1	3	0
Cap, veh/h	394	387	0	471	665	0	352	895	400	292	1411	650
Arrive On Green	0.02	0.21	0.00	0.17	0.36	0.00	0.00	0.26	0.00	0.07	0.40	0.00
Sat Flow, veh/h	1810	1845	0	1740	1827	0	1810	3505	1568	1792	3505	1615
Grp Volume(v), veh/h	12	300	0	374	207	0	0	735	0	132	500	0
Grp Sat Flow(s),veh/h/ln	1810	1845	0	1740	1827	0	1810	1752	1568	1792	1752	1615
Q Serve(g_s), s	0.3	9.5	0.0	10.0	5.0	0.0	0.0	12.2	0.0	3.1	6.2	0.0
Cycle Q Clear(g_c), s	0.3	9.5	0.0	10.0	5.0	0.0	0.0	12.2	0.0	3.1	6.2	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	394	387	0	471	665	0	352	895	400	292	1411	650
V/C Ratio(X)	0.03	0.78	0.00	0.79	0.31	0.00	0.00	0.82	0.00	0.45	0.35	0.00
Avail Cap(c_a), veh/h	513	537	0	471	694	0	496	1048	469	303	1411	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.7	23.1	0.0	15.2	14.1	0.0	0.0	21.7	0.0	15.6	12.9	0.0
Incr Delay (d2), s/veh	0.0	4.8	0.0	9.1	0.3	0.0	0.0	4.7	0.0	1.1	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	0.2	5.3	0.0	5.8	2.6	0.0	0.0	6.5	0.0	1.6	2.9	0.0
LnGrp Delay(d),s/veh	18.8	27.8	0.0	24.3	14.4	0.0	0.0	26.4	0.0	16.7	13.0	0.0
LnGrp LOS	B	C		C	B			C		B	B	
Approach Vol, veh/h		312			581			735			632	
Approach Delay, s/veh		27.5			20.7			26.4			13.8	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	20.3	15.0	17.5	0.0	29.4	5.4	27.0
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	5.0	18.5	10.5	18.0	5.0	18.5	5.0	23.5
Max Q Clear Time (g_c+I1), s	5.1	14.2	12.0	11.5	0.0	8.2	2.3	7.0
Green Ext Time (p_c), s	0.0	1.6	0.0	1.5	0.0	5.1	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	21.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	12.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	331	584	22	232	314
Future Vol, veh/h	4	331	584	22	232	314
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	85	85	84	84
Heavy Vehicles, %	25	6	2	17	0	3
Mvmt Flow	4	356	687	26	276	374

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1613	687	0	0	687	0
Stage 1	687	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Critical Hdwy	6.65	6.26	-	-	4.1	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.354	-	-	2.2	-
Pot Cap-1 Maneuver	101	440	-	-	916	-
Stage 1	459	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	63	440	-	-	916	-
Mov Cap-2 Maneuver	63	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	218	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	51	0	4.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	411	916	-
HCM Lane V/C Ratio	-	-	0.876	0.302	-
HCM Control Delay (s)	-	-	51	10.6	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	8.9	1.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	79	29	115	75	68	16	875	76	80	1159	68
Future Volume (veh/h)	53	79	29	115	75	68	16	875	76	80	1159	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1886	1900	1863	1845	1792	1900	1810	1881	1881	1845	1863
Adj Flow Rate, veh/h	71	105	0	124	81	0	17	931	81	83	1207	71
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	2	1
Peak Hour Factor	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94	0.96	0.96	0.96
Percent Heavy Veh, %	2	1	1	2	3	6	0	5	1	1	3	2
Cap, veh/h	376	382	0	358	374	309	287	2118	686	452	1679	758
Arrive On Green	0.20	0.20	0.00	0.20	0.20	0.00	0.02	0.43	0.43	0.07	0.48	0.48
Sat Flow, veh/h	1312	1886	0	1284	1845	1524	1810	4940	1599	1792	3505	1583
Grp Volume(v), veh/h	71	105	0	124	81	0	17	931	81	83	1207	71
Grp Sat Flow(s),veh/h/ln	1312	1886	0	1284	1845	1524	1810	1647	1599	1792	1752	1583
Q Serve(g_s), s	2.2	2.1	0.0	4.1	1.7	0.0	0.2	6.0	1.4	1.1	12.4	1.1
Cycle Q Clear(g_c), s	3.8	2.1	0.0	6.2	1.7	0.0	0.2	6.0	1.4	1.1	12.4	1.1
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	376	382	0	358	374	309	287	2118	686	452	1679	758
V/C Ratio(X)	0.19	0.27	0.00	0.35	0.22	0.00	0.06	0.44	0.12	0.18	0.72	0.09
Avail Cap(c_a), veh/h	630	747	0	607	731	604	448	2490	806	545	1813	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	15.3	0.0	17.9	15.1	0.0	8.1	9.1	7.8	6.4	9.4	6.5
Incr Delay (d2), s/veh	0.2	0.4	0.0	0.6	0.3	0.0	0.1	0.1	0.1	0.2	1.3	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	0.8	1.1	0.0	1.5	0.9	0.0	0.1	2.7	0.6	0.6	6.2	0.5
LnGrp Delay(d),s/veh	16.9	15.7	0.0	18.5	15.4	0.0	8.2	9.3	7.9	6.6	10.7	6.5
LnGrp LOS	B	B		B	B		A	A	A	A	B	A
Approach Vol, veh/h		176			205			1029			1361	
Approach Delay, s/veh		16.2			17.3			9.2			10.2	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	24.0		13.7	5.5	26.3		13.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.6	22.9		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	3.1	8.0		5.8	2.2	14.4		8.2
Green Ext Time (p_c), s	0.0	11.0		1.2	0.0	7.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	4	15	20	0	25	14	866	30	26	1183	34
Future Vol, veh/h	22	4	15	20	0	25	14	866	30	26	1183	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	-	800	-	350	450	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	83	83	83	97	97	97	95	95	95
Heavy Vehicles, %	5	0	7	0	0	0	0	4	0	0	2	6
Mvmt Flow	27	5	19	24	0	30	14	893	31	27	1245	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1686	2222	623	1602	2222	446	1245	0	0	893	0	0
Stage 1	1300	1300	-	922	922	-	-	-	-	-	-	-
Stage 2	386	922	-	680	1300	-	-	-	-	-	-	-
Critical Hdwy	7.05	6.5	7.04	6.95	6.5	7.1	4.1	-	-	5.3	-	-
Critical Hdwy Stg 1	6.6	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.8	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.7	4	3.37	3.65	4	3.9	2.2	-	-	3.1	-	-
Pot Cap-1 Maneuver	75	44	417	91	44	483	566	-	-	447	-	-
Stage 1	163	233	-	234	352	-	-	-	-	-	-	-
Stage 2	569	352	-	400	233	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	66	40	417	74	40	483	566	-	-	447	-	-
Mov Cap-2 Maneuver	66	40	-	74	40	-	-	-	-	-	-	-
Stage 1	159	219	-	228	343	-	-	-	-	-	-	-
Stage 2	520	343	-	351	219	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	81	36.6	0.2	0.3
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	566	-	-	60	417	167	447	-	-
HCM Lane V/C Ratio	0.025	-	-	0.535	0.044	0.325	0.061	-	-
HCM Control Delay (s)	11.5	-	-	119.7	14	36.6	13.6	-	-
HCM Lane LOS	B	-	-	F	B	E	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.1	0.1	1.3	0.2	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	230	239	8	16	39
Future Vol, veh/h	22	230	239	8	16	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Free
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	92	92	76	76
Heavy Vehicles, %	5	1	1	13	0	0
Mvmt Flow	29	299	260	9	21	51

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	260	0	-	0	616	-
Stage 1	-	-	-	-	260	-
Stage 2	-	-	-	-	356	-
Critical Hdwy	4.15	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.245	-	-	-	3.5	-
Pot Cap-1 Maneuver	1287	-	-	-	457	0
Stage 1	-	-	-	-	788	0
Stage 2	-	-	-	-	713	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1287	-	-	-	447	-
Mov Cap-2 Maneuver	-	-	-	-	447	-
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	697	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1287	-	-	-	447	-
HCM Lane V/C Ratio	0.022	-	-	-	0.047	-
HCM Control Delay (s)	7.9	-	-	-	13.5	0
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	283	15	985	1033	60
Future Vol, veh/h	23	283	15	985	1033	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	94	94	94	94
Heavy Vehicles, %	9	4	7	5	2	4
Mvmt Flow	28	345	16	1048	1099	64

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1655	-	1099	0	-	0
Stage 1	1099	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Critical Hdwy	6.98	-	4.24	-	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	-	2.27	-	-	-
Pot Cap-1 Maneuver	83	0	603	-	-	0
Stage 1	266	0	-	-	-	0
Stage 2	519	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	81	-	603	-	-	-
Mov Cap-2 Maneuver	81	-	-	-	-	-
Stage 1	266	-	-	-	-	-
Stage 2	505	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	71.4	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	603	-	81	-	-
HCM Lane V/C Ratio	0.026	-	0.346	-	-
HCM Control Delay (s)	11.1	-	71.4	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	259	199	19	0	0	234
Future Vol, veh/h	259	199	19	0	0	234
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	46	46	75	75
Heavy Vehicles, %	4	2	8	0	0	1
Mvmt Flow	273	209	41	0	0	312

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	197	21	0	-	-	-
Stage 1	41	-	-	-	-	-
Stage 2	156	-	-	-	-	-
Critical Hdwy	6.88	6.94	-	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	-	-	-	-
Pot Cap-1 Maneuver	768	1051	-	0	0	-
Stage 1	970	-	-	0	0	-
Stage 2	850	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	768	1051	-	-	-	-
Mov Cap-2 Maneuver	768	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	850	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	768	1051	-
HCM Lane V/C Ratio	-	0.355	0.199	-
HCM Control Delay (s)	-	12.2	9.3	-
HCM Lane LOS	-	B	A	-
HCM 95th %tile Q(veh)	-	1.6	0.7	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	377	14	285	448	181	3	90	87	231	145	6
Future Volume (veh/h)	32	377	14	285	448	181	3	90	87	231	145	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	1792	1900	1881	1845	1810	1900	1881	1900	1827	1882	1900
Adj Flow Rate, veh/h	34	401	0	310	487	0	4	123	119	243	153	6
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.73	0.73	0.73	0.95	0.95	0.95
Percent Heavy Veh, %	13	6	0	1	3	5	0	1	1	4	1	1
Cap, veh/h	354	753	357	462	1034	454	407	177	171	402	535	21
Arrive On Green	0.04	0.22	0.00	0.11	0.29	0.00	0.01	0.20	0.20	0.10	0.30	0.30
Sat Flow, veh/h	1601	3406	1615	1792	3505	1538	1810	880	851	1740	1799	71
Grp Volume(v), veh/h	34	401	0	310	487	0	4	0	242	243	0	159
Grp Sat Flow(s),veh/h/ln	1601	1703	1615	1792	1752	1538	1810	0	1731	1740	0	1869
Q Serve(g_s), s	0.8	5.1	0.0	5.5	5.6	0.0	0.1	0.0	6.4	5.0	0.0	3.2
Cycle Q Clear(g_c), s	0.8	5.1	0.0	5.5	5.6	0.0	0.1	0.0	6.4	5.0	0.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		0.04
Lane Grp Cap(c), veh/h	354	753	357	462	1034	454	407	0	348	402	0	556
V/C Ratio(X)	0.10	0.53	0.00	0.67	0.47	0.00	0.01	0.00	0.69	0.61	0.00	0.29
Avail Cap(c_a), veh/h	456	1242	589	462	1314	577	580	0	649	402	0	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	17.0	0.0	14.1	14.2	0.0	15.6	0.0	18.3	13.6	0.0	13.3
Incr Delay (d2), s/veh	0.1	0.6	0.0	3.8	0.3	0.0	0.0	0.0	2.5	2.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.5	0.0	1.9	2.8	0.0	0.0	0.0	3.3	1.1	0.0	1.7
LnGrp Delay(d),s/veh	14.0	17.5	0.0	17.8	14.6	0.0	15.6	0.0	20.8	16.2	0.0	13.6
LnGrp LOS	B	B		B	B		B		C	B		B
Approach Vol, veh/h		435			797			246			402	
Approach Delay, s/veh		17.3			15.8			20.7			15.2	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	14.4	10.0	15.4	4.8	19.2	6.4	19.1
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	5.0	18.5	5.5	18.0	5.0	18.5	5.0	18.5
Max Q Clear Time (g_c+I1), s	7.0	8.4	7.5	7.1	2.1	5.2	2.8	7.6
Green Ext Time (p_c), s	0.0	1.6	0.0	3.8	0.0	1.8	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	95	0	3	108	76	1	8	3	61	0	6
Future Vol, veh/h	5	95	0	3	108	76	1	8	3	61	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	86	86	86	60	60	60	84	84	84
Heavy Vehicles, %	0	3	0	0	0	3	0	0	0	0	0	0
Mvmt Flow	6	108	0	3	126	88	2	13	5	73	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	214	0	0	108	0	0	296	340	108	305	296	170
Stage 1	-	-	-	-	-	-	119	119	-	177	177	-
Stage 2	-	-	-	-	-	-	177	221	-	128	119	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1368	-	-	1495	-	-	660	585	951	651	619	879
Stage 1	-	-	-	-	-	-	890	801	-	829	756	-
Stage 2	-	-	-	-	-	-	829	724	-	881	801	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1368	-	-	1495	-	-	651	581	951	633	615	879
Mov Cap-2 Maneuver	-	-	-	-	-	-	651	581	-	633	615	-
Stage 1	-	-	-	-	-	-	886	797	-	825	754	-
Stage 2	-	-	-	-	-	-	821	723	-	857	797	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.1	10.7	10.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	650	1368	-	-	1495	-	-	695
HCM Lane V/C Ratio	0.031	0.004	-	-	0.002	-	-	0.115
HCM Control Delay (s)	10.7	7.6	0	-	7.4	0	-	10.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	8.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	227	5	25	185	12
Future Vol, veh/h	28	227	5	25	185	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	60	60	69	69
Heavy Vehicles, %	4	1	0	0	1	0
Mvmt Flow	36	291	8	42	268	17

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	583	29	0	0	50	0
Stage 1	29	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Critical Hdwy	6.44	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	471	1049	-	-	1563	-
Stage 1	988	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	390	1049	-	-	1563	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	473	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	7.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	885	1563	-
HCM Lane V/C Ratio	-	-	0.369	0.172	-
HCM Control Delay (s)	-	-	11.4	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.7	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	90	2	163	96	24	1	479	222	41	779	14
Future Volume (veh/h)	11	90	2	163	96	24	1	479	222	41	779	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1727	1794	1900	1845	1885	1900	1900	1810	1827	1845	1863	1900
Adj Flow Rate, veh/h	13	107	0	177	104	0	1	504	0	43	811	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	10	6	6	3	0	0	0	5	4	3	2	0
Cap, veh/h	330	202	0	439	395	0	281	1052	475	415	1244	568
Arrive On Green	0.02	0.11	0.00	0.11	0.21	0.00	0.00	0.31	0.00	0.05	0.35	0.00
Sat Flow, veh/h	1645	1794	0	1757	1885	0	1810	3438	1553	1757	3539	1615
Grp Volume(v), veh/h	13	107	0	177	104	0	1	504	0	43	811	0
Grp Sat Flow(s),veh/h/ln	1645	1794	0	1757	1885	0	1810	1719	1553	1757	1770	1615
Q Serve(g_s), s	0.3	2.4	0.0	3.5	2.0	0.0	0.0	5.1	0.0	0.7	8.2	0.0
Cycle Q Clear(g_c), s	0.3	2.4	0.0	3.5	2.0	0.0	0.0	5.1	0.0	0.7	8.2	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	202	0	439	395	0	281	1052	475	415	1244	568
V/C Ratio(X)	0.04	0.53	0.00	0.40	0.26	0.00	0.00	0.48	0.00	0.10	0.65	0.00
Avail Cap(c_a), veh/h	495	755	0	450	798	0	488	1519	686	539	1564	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.3	17.9	0.0	13.1	14.1	0.0	10.7	12.1	0.0	9.5	11.7	0.0
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.6	0.4	0.0	0.0	0.3	0.0	0.1	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	1.3	0.0	1.7	1.0	0.0	0.0	2.4	0.0	0.3	4.1	0.0
LnGrp Delay(d),s/veh	16.4	20.0	0.0	13.7	14.5	0.0	10.7	12.4	0.0	9.6	12.3	0.0
LnGrp LOS	B	C		B	B		B	B		A	B	
Approach Vol, veh/h		120			281			505			854	
Approach Delay, s/veh		19.6			14.0			12.4			12.2	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	17.6	9.3	9.3	4.6	19.5	5.2	13.5
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	5.0	18.9	5.1	18.0	5.0	18.9	5.0	18.1
Max Q Clear Time (g_c+I1), s	2.7	7.1	5.5	4.4	2.0	10.2	2.3	4.0
Green Ext Time (p_c), s	0.0	5.9	0.0	0.8	0.0	4.8	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	8.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	275	339	16	360	611
Future Vol, veh/h	8	275	339	16	360	611
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	0	1	2	7	2	2
Mvmt Flow	9	316	424	20	391	664

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1871	424	0	0	424	0
Stage 1	424	-	-	-	-	-
Stage 2	1447	-	-	-	-	-
Critical Hdwy	6.4	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	80	632	-	-	1135	-
Stage 1	664	-	-	-	-	-
Stage 2	219	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	36	632	-	-	1135	-
Mov Cap-2 Maneuver	36	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	99	-	-	-	-	-

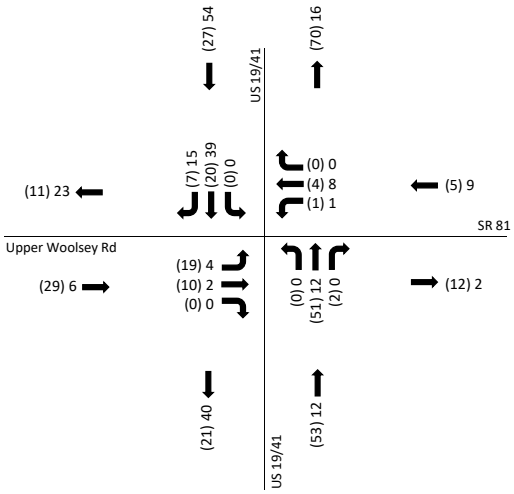
Approach	WB	NB	SB
HCM Control Delay, s	34.9	0	3.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	431	1135	-
HCM Lane V/C Ratio	-	-	0.755	0.345	-
HCM Control Delay (s)	-	-	34.9	9.8	0
HCM Lane LOS	-	-	D	A	A
HCM 95th %tile Q(veh)	-	-	6.3	1.6	-

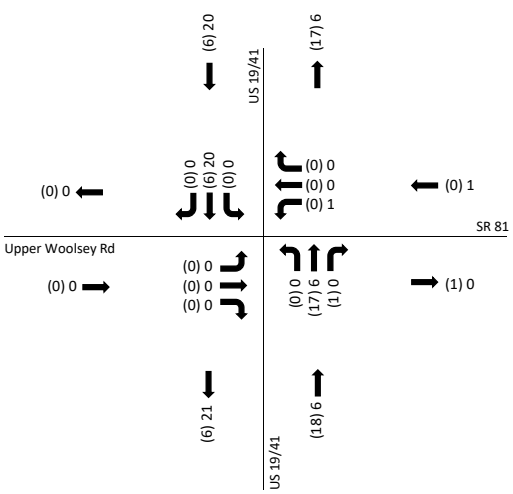
APPENDIX L

PROJECT TRAFFIC VOLUMES

1: US 19/41 at Upper Woolsey Rd/SR 81

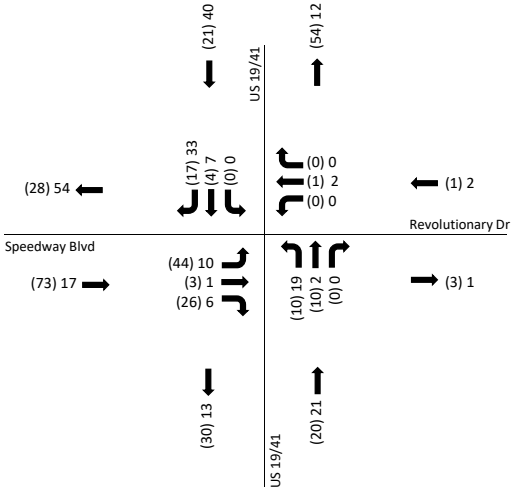


Project Traffic (Passenger Cars) – (PM)/AM

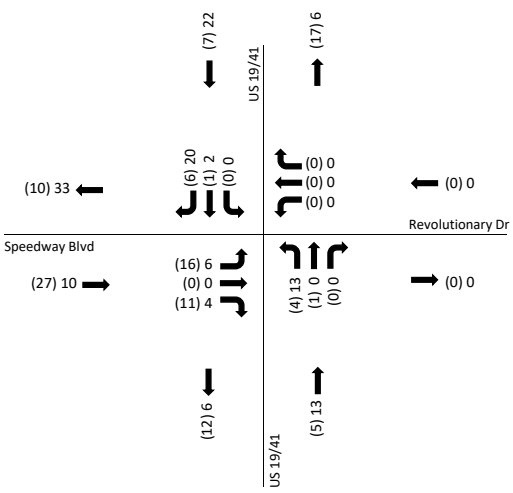


Project Traffic (Trucks) – (PM)/AM

2: US 19/41 at Speedway Blvd

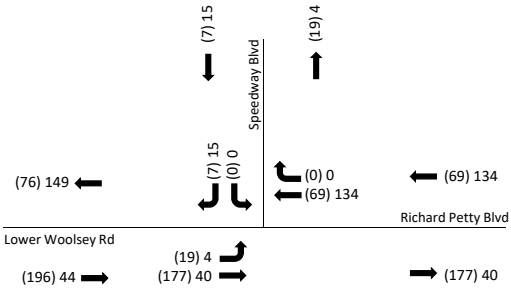


Project Traffic (Passenger Cars) – (PM)/AM

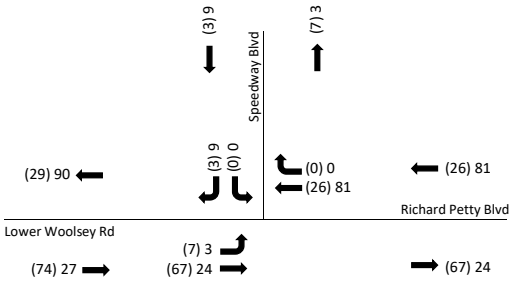


Project Traffic (Trucks) – (PM)/AM

3: Richard Petty Blvd at Speedway Blvd

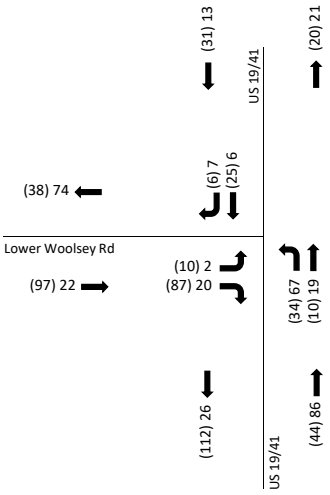


Project Traffic (Passenger Cars) – (PM)/AM

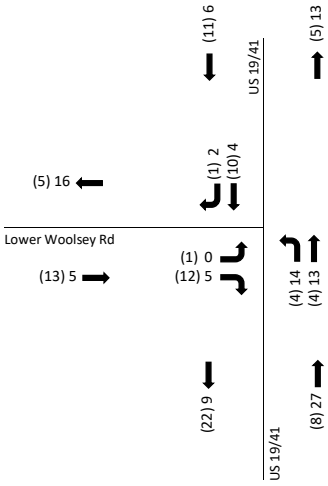


Project Traffic (Trucks) – (PM)/AM

4: US 19/41 at Lower Woolsey Rd

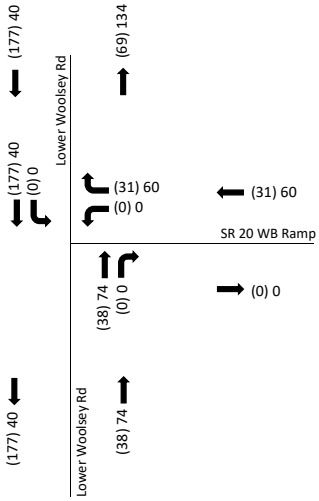


Project Traffic (Passenger Cars) – (PM)/AM

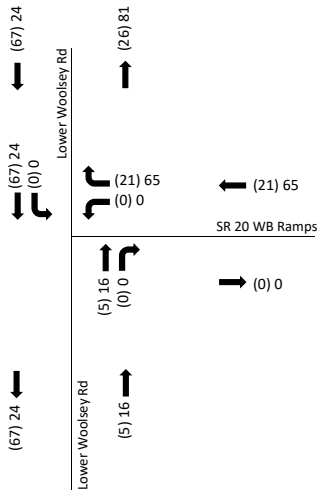


Project Traffic (Trucks) – (PM)/AM

5: Lower Woolsey Rd at SR 20 WB Ramps

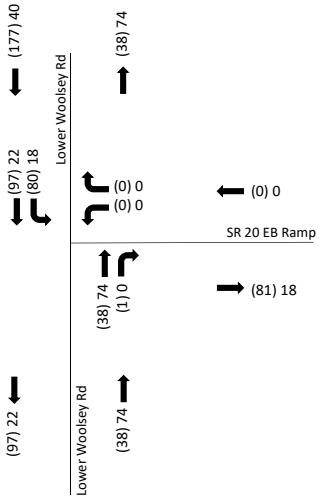


Project Traffic (Passenger Cars) – (PM)/AM

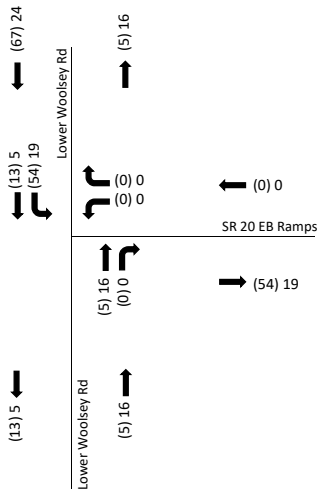


Project Traffic (Trucks) – (PM)/AM

6: Lower Woolsey Rd at SR 20 EB Ramps

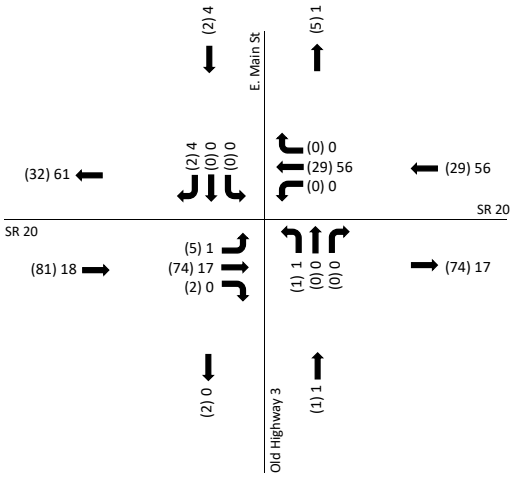


Project Traffic (Passenger Cars) – (PM)/AM

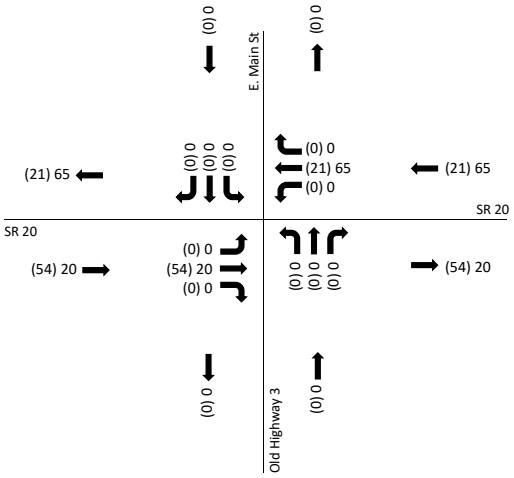


Project Traffic (Trucks) – (PM)/AM

7: SR 20 at Old Highway 3/E. Main St

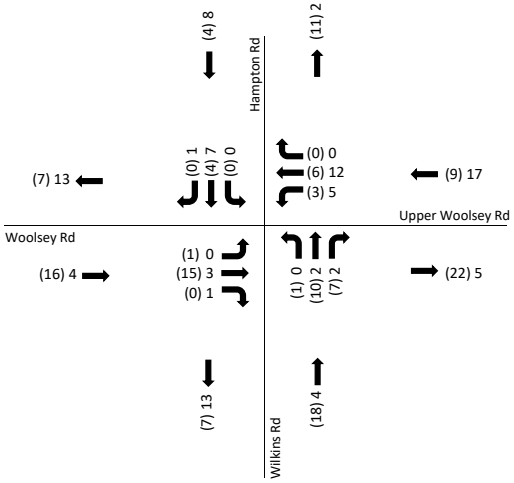


Project Traffic (Passenger Cars) – (PM)/AM

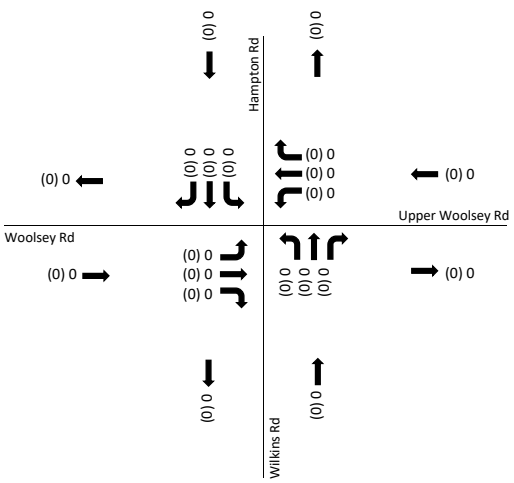


Project Traffic (Trucks) – (PM)/AM

8: Woolsey Rd at Hampton Rd

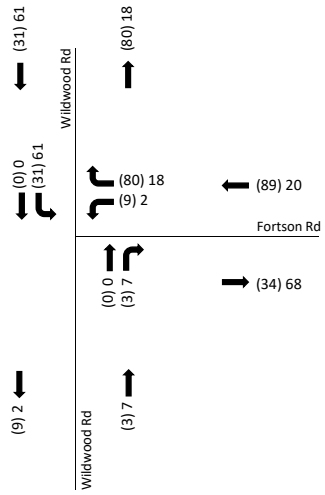


Project Traffic (Passenger Cars) – (PM)/AM

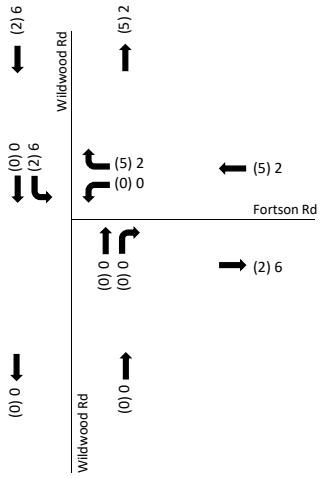


Project Traffic (Trucks) – (PM)/AM

9: Fortson Rd at Wildwood Rd

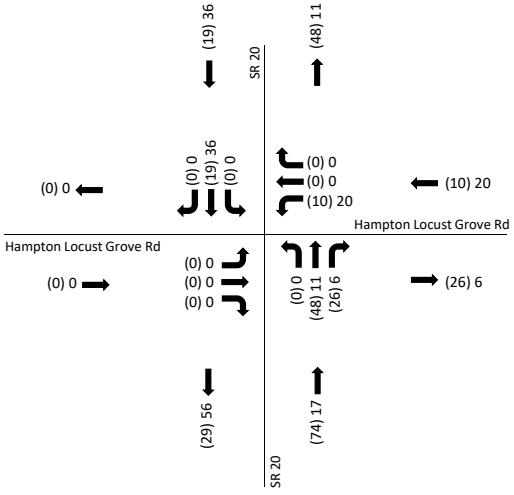


Project Traffic (Passenger Cars) – (PM)/AM

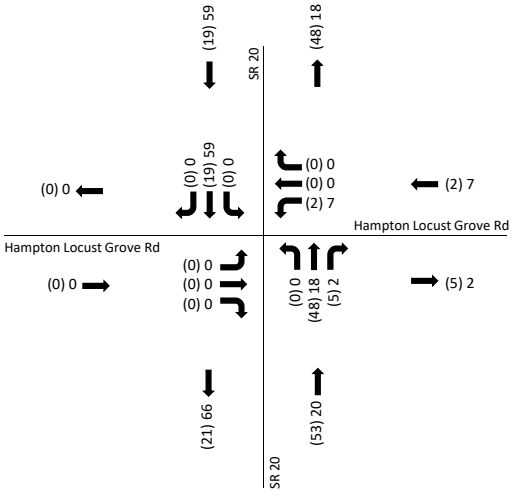


Project Traffic (Trucks) – (PM)/AM

10: SR 20 at Hampton Locust Grove Rd

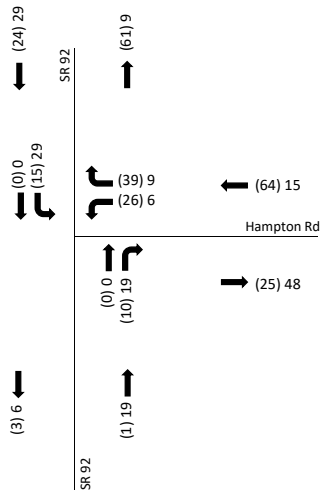


Project Traffic (Passenger Cars) – (PM)/AM

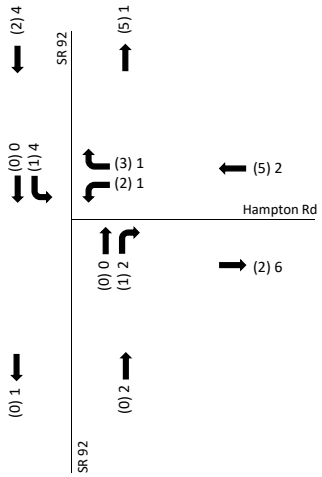


Project Traffic (Trucks) – (PM)/AM

11: SR 92 at Hampton Rd



Project Traffic (Passenger Cars) – (PM)/AM



Project Traffic (Trucks) – (PM)/AM

APPENDIX M

FUTURE BUILD CONDITIONS SYNCHRO REPORTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	86	18	71	83	129	11	1292	66	42	668	45
Future Volume (veh/h)	103	86	18	71	83	129	11	1292	66	42	668	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1884	1900	1827	1863	1845	1900	1810	1810	1776	1776	1900
Adj Flow Rate, veh/h	123	102	0	76	89	0	13	1538	79	48	759	51
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.93	0.93	0.93	0.84	0.84	0.84	0.88	0.88	0.88
Percent Heavy Veh, %	5	1	1	4	2	3	0	5	5	7	7	0
Cap, veh/h	352	370	0	344	366	308	425	2296	715	304	1679	804
Arrive On Green	0.20	0.20	0.00	0.20	0.20	0.00	0.02	0.46	0.46	0.05	0.50	0.50
Sat Flow, veh/h	1265	1884	0	1263	1863	1568	1810	4940	1538	1691	3374	1615
Grp Volume(v), veh/h	123	102	0	76	89	0	13	1538	79	48	759	51
Grp Sat Flow(s),veh/h/ln	1265	1884	0	1263	1863	1568	1810	1647	1538	1691	1687	1615
Q Serve(g_s), s	4.2	2.1	0.0	2.5	1.9	0.0	0.2	11.3	1.4	0.7	6.8	0.8
Cycle Q Clear(g_c), s	6.1	2.1	0.0	4.7	1.9	0.0	0.2	11.3	1.4	0.7	6.8	0.8
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	352	370	0	344	366	308	425	2296	715	304	1679	804
V/C Ratio(X)	0.35	0.28	0.00	0.22	0.24	0.00	0.03	0.67	0.11	0.16	0.45	0.06
Avail Cap(c_a), veh/h	591	727	0	583	719	605	589	2488	775	402	1699	813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	15.9	0.0	17.9	15.8	0.0	6.6	9.7	7.0	7.3	7.6	6.1
Incr Delay (d2), s/veh	0.6	0.4	0.0	0.3	0.3	0.0	0.0	0.6	0.1	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.1	0.0	0.9	1.0	0.0	0.1	5.1	0.6	0.3	3.2	0.3
LnGrp Delay(d),s/veh	19.0	16.3	0.0	18.2	16.2	0.0	6.7	10.3	7.1	7.5	7.8	6.1
LnGrp LOS	B	B		B	B		A	B	A	A	A	A
Approach Vol, veh/h		225			165			1630			858	
Approach Delay, s/veh		17.8			17.1			10.2			7.7	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	26.2		13.7	5.3	27.7		13.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	2.7	13.3		8.1	2.2	8.8		6.7
Green Ext Time (p_c), s	0.0	8.4		1.1	0.0	11.4		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	12.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	42	1	27	40	5	38	41	1148	18	11	683	78
Future Vol, veh/h	42	1	27	40	5	38	41	1148	18	11	683	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	-	800	-	350	450	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	77	77	77	90	90	90	91	91	91
Heavy Vehicles, %	17	0	15	0	0	0	37	7	17	0	4	29
Mvmt Flow	58	1	37	52	6	49	46	1276	20	12	751	86

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1380	2142	375	1767	2142	638	751	0	0	1276	0	0
Stage 1	775	775	-	1367	1367	-	-	-	-	-	-	-
Stage 2	605	1367	-	400	775	-	-	-	-	-	-	-
Critical Hdwy	7.29	6.5	7.2	6.95	6.5	7.1	4.84	-	-	5.3	-	-
Critical Hdwy Stg 1	6.84	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.04	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4	3.45	3.65	4	3.9	2.57	-	-	3.1	-	-
Pot Cap-1 Maneuver	110	49	587	70	49	363	659	-	-	292	-	-
Stage 1	317	411	-	114	217	-	-	-	-	-	-	-
Stage 2	391	217	-	583	411	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	77	44	587	59	44	363	659	-	-	292	-	-
Mov Cap-2 Maneuver	77	44	-	59	44	-	-	-	-	-	-	-
Stage 1	295	394	-	106	202	-	-	-	-	-	-	-
Stage 2	304	202	-	522	394	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	90.4	196.3	0.4	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	659	-	-	76	587	99	292	-	-
HCM Lane V/C Ratio	0.069	-	-	0.775	0.063	1.089	0.041	-	-
HCM Control Delay (s)	10.9	-	-	139.9	11.5	196.3	17.9	-	-
HCM Lane LOS	B	-	-	F	B	F	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-	3.8	0.2	6.9	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	48	304	461	20	13	38
Future Vol, veh/h	48	304	461	20	13	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Free
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	78	78	57	57
Heavy Vehicles, %	8	10	19	0	0	24
Mvmt Flow	52	327	591	26	23	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	591	0	-	0	1021	-
Stage 1	-	-	-	-	591	-
Stage 2	-	-	-	-	430	-
Critical Hdwy	4.18	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.272	-	-	-	3.5	-
Pot Cap-1 Maneuver	956	-	-	-	264	0
Stage 1	-	-	-	-	557	0
Stage 2	-	-	-	-	660	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	956	-	-	-	250	-
Mov Cap-2 Maneuver	-	-	-	-	250	-
Stage 1	-	-	-	-	557	-
Stage 2	-	-	-	-	624	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	20.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	956	-	-	-	250	-
HCM Lane V/C Ratio	0.054	-	-	-	0.091	-
HCM Control Delay (s)	9	-	-	-	20.8	0
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	222	110	1393	606	55
Future Vol, veh/h	35	222	110	1393	606	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	92	92	83	83
Heavy Vehicles, %	17	9	15	6	5	11
Mvmt Flow	43	274	120	1514	730	66

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1726	-	730	0	-	0
Stage 1	730	-	-	-	-	-
Stage 2	996	-	-	-	-	-
Critical Hdwy	7.14	-	4.4	-	-	-
Critical Hdwy Stg 1	6.14	-	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-	-
Follow-up Hdwy	3.67	-	2.35	-	-	-
Pot Cap-1 Maneuver	68	0	789	-	-	0
Stage 1	400	0	-	-	-	0
Stage 2	286	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	58	-	789	-	-	-
Mov Cap-2 Maneuver	58	-	-	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	243	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	164.9	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	789	-	58	-	-
HCM Lane V/C Ratio	0.152	-	0.745	-	-
HCM Control Delay (s)	10.4	-	164.9	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	0.5	-	3.2	-	-

Intersection	
Int Delay, s/veh	6.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	180	366	115	0	0	316
Future Vol, veh/h	180	366	115	0	0	316
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	58	58	91	91
Heavy Vehicles, %	10	1	34	0	0	11
Mvmt Flow	209	426	198	0	0	347

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	372	99	0	-	-	-
Stage 1	198	-	-	-	-	-
Stage 2	174	-	-	-	-	-
Critical Hdwy	7	6.92	-	-	-	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.6	3.31	-	-	-	-
Pot Cap-1 Maneuver	581	941	-	0	0	-
Stage 1	792	-	-	0	0	-
Stage 2	815	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	581	941	-	-	-	-
Mov Cap-2 Maneuver	581	-	-	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	815	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	581	941	-
HCM Lane V/C Ratio	-	0.36	0.452	-
HCM Control Delay (s)	-	14.6	11.9	-
HCM Lane LOS	-	B	B	-
HCM 95th %tile Q(veh)	-	1.6	2.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	505	3	131	514	231	10	77	141	220	75	22
Future Volume (veh/h)	30	505	3	131	514	231	10	77	141	220	75	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1727	1743	1900	1863	1624	1845	1900	1869	1900	1845	1801	1900
Adj Flow Rate, veh/h	32	543	0	146	571	0	11	89	162	250	85	25
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.87	0.87	0.87	0.88	0.88	0.88
Percent Heavy Veh, %	10	9	0	2	17	3	0	1	1	3	3	3
Cap, veh/h	303	860	419	376	958	487	410	118	215	439	436	128
Arrive On Green	0.03	0.26	0.00	0.09	0.31	0.00	0.01	0.20	0.20	0.14	0.33	0.33
Sat Flow, veh/h	1645	3312	1615	1774	3085	1568	1810	595	1083	1757	1338	394
Grp Volume(v), veh/h	32	543	0	146	571	0	11	0	251	250	0	110
Grp Sat Flow(s),veh/h/ln	1645	1656	1615	1774	1543	1568	1810	0	1678	1757	0	1732
Q Serve(g_s), s	0.8	8.3	0.0	3.3	9.0	0.0	0.3	0.0	8.1	5.9	0.0	2.6
Cycle Q Clear(g_c), s	0.8	8.3	0.0	3.3	9.0	0.0	0.3	0.0	8.1	5.9	0.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.65	1.00		0.23
Lane Grp Cap(c), veh/h	303	860	419	376	958	487	410	0	333	439	0	564
V/C Ratio(X)	0.11	0.63	0.00	0.39	0.60	0.00	0.03	0.00	0.75	0.57	0.00	0.19
Avail Cap(c_a), veh/h	389	1175	573	519	1337	680	542	0	554	598	0	823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	18.8	0.0	13.9	16.7	0.0	17.9	0.0	21.6	14.2	0.0	13.9
Incr Delay (d2), s/veh	0.2	0.8	0.0	0.7	0.6	0.0	0.0	0.0	3.5	1.2	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	0.4	3.9	0.0	1.6	3.9	0.0	0.1	0.0	4.0	2.9	0.0	1.3
LnGrp Delay(d),s/veh	15.0	19.5	0.0	14.5	17.3	0.0	17.9	0.0	25.1	15.3	0.0	14.0
LnGrp LOS	B	B		B	B		B		C	B		B
Approach Vol, veh/h		575			717			262			360	
Approach Delay, s/veh		19.3			16.7			24.8			14.9	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	15.8	9.4	19.4	5.3	23.2	6.5	22.3
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	13.3	18.9	9.5	20.3	5.0	27.2	5.0	24.8
Max Q Clear Time (g_c+I1), s	7.9	10.1	5.3	10.3	2.3	4.6	2.8	11.0
Green Ext Time (p_c), s	0.3	1.3	0.1	4.5	0.0	2.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	149	1	8	99	48	0	3	5	84	8	4
Future Vol, veh/h	13	149	1	8	99	48	0	3	5	84	8	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	79	79	79	50	50	50	75	75	75
Heavy Vehicles, %	0	7	0	13	0	2	0	0	0	1	0	0
Mvmt Flow	14	166	1	10	125	61	0	6	10	112	11	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	186	0	0	167	0	0	376	401	166	379	372	156
Stage 1	-	-	-	-	-	-	195	195	-	176	176	-
Stage 2	-	-	-	-	-	-	181	206	-	203	196	-
Critical Hdwy	4.1	-	-	4.23	-	-	7.1	6.5	6.2	7.11	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.11	5.5	-
Follow-up Hdwy	2.2	-	-	2.317	-	-	3.5	4	3.3	3.509	4	3.3
Pot Cap-1 Maneuver	1401	-	-	1347	-	-	585	541	884	580	561	895
Stage 1	-	-	-	-	-	-	811	743	-	828	757	-
Stage 2	-	-	-	-	-	-	825	735	-	801	742	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1401	-	-	1347	-	-	565	531	884	560	550	895
Mov Cap-2 Maneuver	-	-	-	-	-	-	565	531	-	560	550	-
Stage 1	-	-	-	-	-	-	802	735	-	819	751	-
Stage 2	-	-	-	-	-	-	802	729	-	777	734	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.4	10.2	12.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	708	1401	-	-	1347	-	-	583
HCM Lane V/C Ratio	0.023	0.01	-	-	0.008	-	-	0.22
HCM Control Delay (s)	10.2	7.6	0	-	7.7	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.8

Intersection	
Int Delay, s/veh	8.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	251	20	37	261	12
Future Vol, veh/h	11	251	20	37	261	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	67	67	88	88
Heavy Vehicles, %	0	1	15	5	4	0
Mvmt Flow	14	330	30	55	297	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	664	57	0	0	85	0
Stage 1	57	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.4	6.21	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.309	-	-	2.236	-
Pot Cap-1 Maneuver	429	1012	-	-	1499	-
Stage 1	971	-	-	-	-	-
Stage 2	548	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	343	1012	-	-	1499	-
Mov Cap-2 Maneuver	343	-	-	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	438	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	7.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	935	1499	-
HCM Lane V/C Ratio	-	-	0.369	0.198	-
HCM Control Delay (s)	-	-	11.1	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.7	0.7	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	228	0	341	174	120	0	683	381	116	535	3
Future Volume (veh/h)	9	228	0	341	174	120	0	683	381	116	535	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1792	1827	1900	1900	1792	1845	1881	1681	1900
Adj Flow Rate, veh/h	12	300	0	406	207	0	0	767	0	132	608	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.76	0.76	0.76	0.84	0.84	0.84	0.89	0.89	0.89	0.88	0.88	0.88
Percent Heavy Veh, %	0	3	3	6	4	4	0	6	3	1	13	0
Cap, veh/h	367	369	0	500	716	0	322	916	422	270	1292	653
Arrive On Green	0.01	0.20	0.00	0.21	0.39	0.00	0.00	0.27	0.00	0.07	0.40	0.00
Sat Flow, veh/h	1810	1845	0	1707	1827	0	1810	3406	1568	1792	3195	1615
Grp Volume(v), veh/h	12	300	0	406	207	0	0	767	0	132	608	0
Grp Sat Flow(s),veh/h/ln	1810	1845	0	1707	1827	0	1810	1703	1568	1792	1597	1615
Q Serve(g_s), s	0.4	11.1	0.0	12.6	5.6	0.0	0.0	15.2	0.0	3.6	10.0	0.0
Cycle Q Clear(g_c), s	0.4	11.1	0.0	12.6	5.6	0.0	0.0	15.2	0.0	3.6	10.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	367	369	0	500	716	0	322	916	422	270	1292	653
V/C Ratio(X)	0.03	0.81	0.00	0.81	0.29	0.00	0.00	0.84	0.00	0.49	0.47	0.00
Avail Cap(c_a), veh/h	467	467	0	518	732	0	446	1092	503	279	1292	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.1	27.3	0.0	16.7	14.9	0.0	0.0	24.6	0.0	17.9	15.6	0.0
Incr Delay (d2), s/veh	0.0	8.4	0.0	9.3	0.2	0.0	0.0	5.1	0.0	1.4	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	0.2	6.5	0.0	7.0	2.8	0.0	0.0	7.8	0.0	1.8	4.4	0.0
LnGrp Delay(d),s/veh	22.2	35.7	0.0	26.0	15.1	0.0	0.0	29.7	0.0	19.2	15.9	0.0
LnGrp LOS	C	D		C	B			C		B	B	
Approach Vol, veh/h		312			613			767			740	
Approach Delay, s/veh		35.1			22.3			29.7			16.5	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	23.7	19.2	18.8	0.0	33.4	5.6	32.5
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	5.5	22.9	15.5	18.1	5.0	23.4	5.0	28.6
Max Q Clear Time (g_c+I1), s	5.6	17.2	14.6	13.1	0.0	12.0	2.4	7.6
Green Ext Time (p_c), s	0.0	2.0	0.1	1.2	0.0	6.0	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	24.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	16.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	347	584	24	284	314
Future Vol, veh/h	5	347	584	24	284	314
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	85	85	84	84
Heavy Vehicles, %	20	6	2	17	2	3
Mvmt Flow	5	373	687	28	338	374

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1737	687	0	0	687	0
Stage 1	687	-	-	-	-	-
Stage 2	1050	-	-	-	-	-
Critical Hdwy	6.6	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	87	440	-	-	907	-
Stage 1	468	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	46	440	-	-	907	-
Mov Cap-2 Maneuver	46	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	165	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	70.1	0	5.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	392	907	-
HCM Lane V/C Ratio	-	-	0.966	0.373	-
HCM Control Delay (s)	-	-	70.1	11.3	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	11.1	1.7	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	89	29	116	79	68	16	943	79	80	1185	75
Future Volume (veh/h)	72	89	29	116	79	68	16	943	79	80	1185	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1872	1900	1845	1845	1776	1900	1792	1845	1881	1845	1900
Adj Flow Rate, veh/h	96	119	0	125	85	0	17	1003	84	83	1234	78
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	2	1
Peak Hour Factor	0.75	0.75	0.75	0.93	0.93	0.93	0.94	0.94	0.94	0.96	0.96	0.96
Percent Heavy Veh, %	1	2	2	3	3	7	0	6	3	1	3	0
Cap, veh/h	386	399	0	355	393	322	274	2086	668	426	1667	768
Arrive On Green	0.21	0.21	0.00	0.21	0.21	0.00	0.02	0.43	0.43	0.07	0.48	0.48
Sat Flow, veh/h	1320	1872	0	1255	1845	1509	1810	4893	1568	1792	3505	1615
Grp Volume(v), veh/h	96	119	0	125	85	0	17	1003	84	83	1234	78
Grp Sat Flow(s),veh/h/ln	1320	1872	0	1255	1845	1509	1810	1631	1568	1792	1752	1615
Q Serve(g_s), s	3.0	2.5	0.0	4.3	1.8	0.0	0.2	6.9	1.5	1.1	13.3	1.2
Cycle Q Clear(g_c), s	4.8	2.5	0.0	6.8	1.8	0.0	0.2	6.9	1.5	1.1	13.3	1.2
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	386	399	0	355	393	322	274	2086	668	426	1667	768
V/C Ratio(X)	0.25	0.30	0.00	0.35	0.22	0.00	0.06	0.48	0.13	0.19	0.74	0.10
Avail Cap(c_a), veh/h	615	723	0	573	713	583	430	2395	768	519	1768	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	15.4	0.0	18.3	15.1	0.0	8.5	9.6	8.1	6.8	9.9	6.7
Incr Delay (d2), s/veh	0.3	0.4	0.0	0.6	0.3	0.0	0.1	0.2	0.1	0.2	1.6	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	1.1	1.3	0.0	1.6	0.9	0.0	0.1	3.1	0.7	0.6	6.7	0.6
LnGrp Delay(d),s/veh	17.4	15.8	0.0	18.9	15.4	0.0	8.6	9.8	8.2	7.0	11.5	6.8
LnGrp LOS	B	B		B	B		A	A	A	A	B	A
Approach Vol, veh/h		215			210			1104			1395	
Approach Delay, s/veh		16.5			17.4			9.7			10.9	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	24.4		14.4	5.5	26.7		14.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.7	22.8		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	3.1	8.9		6.8	2.2	15.3		8.8
Green Ext Time (p_c), s	0.0	10.8		1.3	0.0	6.9		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	34.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	82	7	52	20	1	25	28	877	30	26	1188	57
Future Vol, veh/h	82	7	52	20	1	25	28	877	30	26	1188	57
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Yield	-	-	Yield	-	-	Yield	-	-	Yield
Storage Length	-	-	0	-	-	-	800	-	350	450	-	450
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	83	83	83	97	97	97	95	95	95
Heavy Vehicles, %	19	0	27	0	0	0	14	4	0	0	2	26
Mvmt Flow	101	9	64	24	1	30	29	904	31	27	1251	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1725	2267	625	1646	2267	452	1251	0	0	904	0	0
Stage 1	1305	1305	-	962	962	-	-	-	-	-	-	-
Stage 2	420	962	-	684	1305	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.5	7.44	6.95	6.5	7.1	4.38	-	-	5.3	-	-
Critical Hdwy Stg 1	6.88	5.5	-	7.3	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.08	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.84	4	3.57	3.65	4	3.9	2.34	-	-	3.1	-	-
Pot Cap-1 Maneuver	~ 61	41	372	85	41	479	491	-	-	442	-	-
Stage 1	143	232	-	220	337	-	-	-	-	-	-	-
Stage 2	509	337	-	398	232	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 51	36	372	52	36	479	491	-	-	442	-	-
Mov Cap-2 Maneuver	~ 51	36	-	52	36	-	-	-	-	-	-	-
Stage 1	135	218	-	207	317	-	-	-	-	-	-	-
Stage 2	447	317	-	297	218	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	$ 478.4	65.2	0.4	0.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	491	-	-	49	372	112	442	-	-
HCM Lane V/C Ratio	0.059	-	-	2.242	0.173	0.495	0.062	-	-
HCM Control Delay (s)	12.8	-	-	$ 748.2	16.7	65.2	13.7	-	-
HCM Lane LOS	B	-	-	F	C	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	11.3	0.6	2.2	0.2	-	-

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

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	48	474	334	8	16	50
Future Vol, veh/h	48	474	334	8	16	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Free
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	77	77	92	92	76	76
Heavy Vehicles, %	16	15	8	13	0	6
Mvmt Flow	62	616	363	9	21	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	363	0	-	0	1103	-
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	740	-
Critical Hdwy	4.26	-	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.344	-	-	-	3.5	-
Pot Cap-1 Maneuver	1122	-	-	-	236	0
Stage 1	-	-	-	-	708	0
Stage 2	-	-	-	-	475	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1122	-	-	-	223	-
Mov Cap-2 Maneuver	-	-	-	-	223	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	449	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	22.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1122	-	-	-	223	-
HCM Lane V/C Ratio	0.056	-	-	-	0.094	-
HCM Control Delay (s)	8.4	-	-	-	22.8	0
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.3	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	382	53	999	1068	67
Future Vol, veh/h	34	382	53	999	1068	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	None	-	Free
Storage Length	0	0	150	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	82	94	94	94	94
Heavy Vehicles, %	9	6	11	5	3	5
Mvmt Flow	41	466	56	1063	1136	71

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1780	-	1136	0	-	0
Stage 1	1136	-	-	-	-	-
Stage 2	644	-	-	-	-	-
Critical Hdwy	6.98	-	4.32	-	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	-	2.31	-	-	-
Pot Cap-1 Maneuver	68	0	562	-	-	0
Stage 1	254	0	-	-	-	0
Stage 2	466	0	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	61	-	562	-	-	-
Mov Cap-2 Maneuver	61	-	-	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	420	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	144.4	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	562	-	61	-	-
HCM Lane V/C Ratio	0.1	-	0.68	-	-
HCM Control Delay (s)	12.1	-	144.4	0	-
HCM Lane LOS	B	-	F	A	-
HCM 95th %tile Q(veh)	0.3	-	2.9	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	259	251	62	0	0	478
Future Vol, veh/h	259	251	62	0	0	478
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	46	46	75	75
Heavy Vehicles, %	4	2	25	0	0	14
Mvmt Flow	273	264	135	0	0	637

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	454	67	0	-	-	-
Stage 1	135	-	-	-	-	-
Stage 2	319	-	-	-	-	-
Critical Hdwy	6.88	6.94	-	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.32	-	-	-	-
Pot Cap-1 Maneuver	529	983	-	0	0	-
Stage 1	871	-	-	0	0	-
Stage 2	704	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	529	983	-	-	-	-
Mov Cap-2 Maneuver	529	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	704	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	WBLn1	WBLn2	SBT
Capacity (veh/h)	-	529	983	-
HCM Lane V/C Ratio	-	0.515	0.269	-
HCM Control Delay (s)	-	18.8	10	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	2.9	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	505	16	285	498	181	4	90	87	231	145	8
Future Volume (veh/h)	37	505	16	285	498	181	4	90	87	231	145	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1652	1900	1881	1776	1810	1900	1881	1900	1827	1882	1900
Adj Flow Rate, veh/h	39	537	0	310	541	0	5	123	119	243	153	8
Adj No. of Lanes	1	2	1	1	2	1	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.73	0.73	0.73	0.95	0.95	0.95
Percent Heavy Veh, %	11	15	0	1	7	5	0	1	1	4	1	1
Cap, veh/h	377	785	404	473	1206	550	378	170	165	361	501	26
Arrive On Green	0.04	0.25	0.00	0.15	0.36	0.00	0.01	0.19	0.19	0.10	0.28	0.28
Sat Flow, veh/h	1630	3139	1615	1792	3374	1538	1810	880	851	1740	1773	93
Grp Volume(v), veh/h	39	537	0	310	541	0	5	0	242	243	0	161
Grp Sat Flow(s),veh/h/ln	1630	1570	1615	1792	1687	1538	1810	0	1731	1740	0	1866
Q Serve(g_s), s	1.0	8.9	0.0	6.8	7.1	0.0	0.1	0.0	7.5	5.5	0.0	3.9
Cycle Q Clear(g_c), s	1.0	8.9	0.0	6.8	7.1	0.0	0.1	0.0	7.5	5.5	0.0	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		0.05
Lane Grp Cap(c), veh/h	377	785	404	473	1206	550	378	0	335	361	0	527
V/C Ratio(X)	0.10	0.68	0.00	0.66	0.45	0.00	0.01	0.00	0.72	0.67	0.00	0.31
Avail Cap(c_a), veh/h	453	983	505	473	1261	575	523	0	602	361	0	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.8	19.5	0.0	12.8	14.1	0.0	18.4	0.0	21.7	17.4	0.0	16.2
Incr Delay (d2), s/veh	0.1	1.4	0.0	3.3	0.3	0.0	0.0	0.0	3.0	4.8	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	4.0	0.0	3.7	3.3	0.0	0.1	0.0	3.8	1.7	0.0	2.1
LnGrp Delay(d),s/veh	15.0	20.9	0.0	16.0	14.4	0.0	18.5	0.0	24.7	22.2	0.0	16.5
LnGrp LOS	B	C		B	B		B		C	C		B
Approach Vol, veh/h		576			851			247			404	
Approach Delay, s/veh		20.5			15.0			24.6			20.0	
Approach LOS		C			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	15.6	13.0	18.9	4.9	20.7	6.8	25.1
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	5.5	20.0	8.5	18.0	5.0	20.5	5.0	21.5
Max Q Clear Time (g_c+I1), s	7.5	9.5	8.8	10.9	2.1	5.9	3.0	9.1
Green Ext Time (p_c), s	0.0	1.6	0.0	3.5	0.0	1.9	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	110	0	6	114	76	2	18	10	61	4	6
Future Vol, veh/h	6	110	0	6	114	76	2	18	10	61	4	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	86	86	86	60	60	60	84	84	84
Heavy Vehicles, %	0	3	0	0	0	3	0	0	0	0	0	0
Mvmt Flow	7	125	0	7	133	88	3	30	17	73	5	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	221	0	0	125	0	0	332	374	125	353	330	177
Stage 1	-	-	-	-	-	-	139	139	-	191	191	-
Stage 2	-	-	-	-	-	-	193	235	-	162	139	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1360	-	-	1474	-	-	625	560	931	606	592	871
Stage 1	-	-	-	-	-	-	869	785	-	815	746	-
Stage 2	-	-	-	-	-	-	813	714	-	845	785	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1360	-	-	1474	-	-	611	554	931	566	586	871
Mov Cap-2 Maneuver	-	-	-	-	-	-	611	554	-	566	586	-
Stage 1	-	-	-	-	-	-	864	780	-	810	742	-
Stage 2	-	-	-	-	-	-	797	710	-	793	780	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.2	11.1	11.7
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	645	1360	-	-	1474	-	-	620
HCM Lane V/C Ratio	0.078	0.005	-	-	0.005	-	-	0.136
HCM Control Delay (s)	11.1	7.7	0	-	7.5	0	-	11.7
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	10.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	37	312	5	28	218	12
Future Vol, veh/h	37	312	5	28	218	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	78	78	60	60	69	69
Heavy Vehicles, %	3	2	0	0	2	0
Mvmt Flow	47	400	8	47	316	17

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	681	32	0	0	55	0
Stage 1	32	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Critical Hdwy	6.43	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	414	1042	-	-	1550	-
Stage 1	988	-	-	-	-	-
Stage 2	518	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	329	1042	-	-	1550	-
Mov Cap-2 Maneuver	329	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	411	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	7.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	847	1550	-
HCM Lane V/C Ratio	-	-	0.528	0.204	-
HCM Control Delay (s)	-	-	13.9	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	3.2	0.8	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	90	2	175	96	24	1	575	253	41	817	14
Future Volume (veh/h)	11	90	2	175	96	24	1	575	253	41	817	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1794	1900	1827	1885	1900	1900	1681	1792	1863	1827	1900
Adj Flow Rate, veh/h	13	107	0	190	104	0	1	605	0	43	851	0
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.92	0.92	0.92	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	9	6	6	4	0	0	0	13	6	2	4	0
Cap, veh/h	310	196	0	420	393	0	285	1117	533	393	1367	636
Arrive On Green	0.02	0.11	0.00	0.12	0.21	0.00	0.00	0.35	0.00	0.05	0.39	0.00
Sat Flow, veh/h	1660	1794	0	1740	1885	0	1810	3195	1524	1774	3471	1615
Grp Volume(v), veh/h	13	107	0	190	104	0	1	605	0	43	851	0
Grp Sat Flow(s),veh/h/ln	1660	1794	0	1740	1885	0	1810	1597	1524	1774	1736	1615
Q Serve(g_s), s	0.3	2.7	0.0	4.3	2.2	0.0	0.0	7.2	0.0	0.7	9.3	0.0
Cycle Q Clear(g_c), s	0.3	2.7	0.0	4.3	2.2	0.0	0.0	7.2	0.0	0.7	9.3	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	310	196	0	420	393	0	285	1117	533	393	1367	636
V/C Ratio(X)	0.04	0.55	0.00	0.45	0.26	0.00	0.00	0.54	0.00	0.11	0.62	0.00
Avail Cap(c_a), veh/h	458	681	0	420	736	0	472	1584	755	500	1721	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.3	20.0	0.0	14.6	15.7	0.0	10.5	12.4	0.0	9.5	11.5	0.0
Incr Delay (d2), s/veh	0.1	2.4	0.0	0.8	0.4	0.0	0.0	0.4	0.0	0.1	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	1.4	0.0	2.1	1.2	0.0	0.0	3.2	0.0	0.3	4.5	0.0
LnGrp Delay(d),s/veh	18.3	22.4	0.0	15.3	16.1	0.0	10.5	12.8	0.0	9.6	12.0	0.0
LnGrp LOS	B	C		B	B		B	B		A	B	
Approach Vol, veh/h		120			294			606			894	
Approach Delay, s/veh		21.9			15.6			12.8			11.9	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	21.1	10.0	9.7	4.6	23.2	5.3	14.4
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	5.0	23.5	5.5	18.0	5.0	23.5	5.0	18.5
Max Q Clear Time (g_c+I1), s	2.7	9.2	6.3	4.7	2.0	11.3	2.3	4.2
Green Ext Time (p_c), s	0.0	7.4	0.0	0.8	0.0	6.7	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	13.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	20.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	341	339	17	386	611
Future Vol, veh/h	11	341	339	17	386	611
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	-	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	0	2	2	6	2	2
Mvmt Flow	13	392	424	21	420	664

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1927	424	0	0	424	0
Stage 1	424	-	-	-	-	-
Stage 2	1503	-	-	-	-	-
Critical Hdwy	6.4	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	74	630	-	-	1135	-
Stage 1	664	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	31	630	-	-	1135	-
Mov Cap-2 Maneuver	31	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	85	-	-	-	-	-

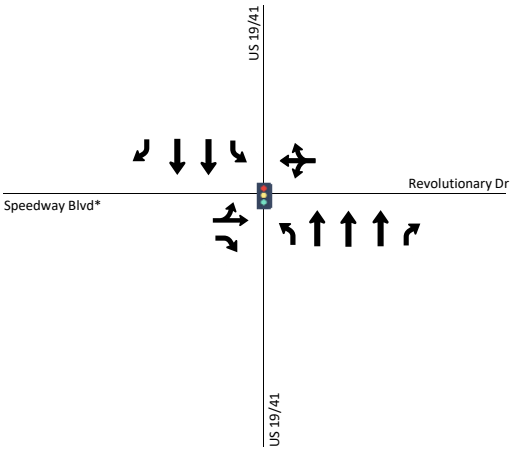
Approach	WB	NB	SB
HCM Control Delay, s	86.3	0	3.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	393	1135	-
HCM Lane V/C Ratio	-	-	1.03	0.37	-
HCM Control Delay (s)	-	-	86.3	10	0
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	13.1	1.7	-

APPENDIX N

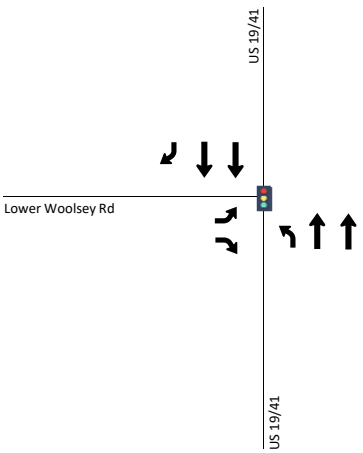
RECOMMENDED LANE CONFIGURATIONS

2: US 19/41 at Speedway Blvd



Recommended Lane Configuration

4: US 19/41 at Lower Woolsey Rd

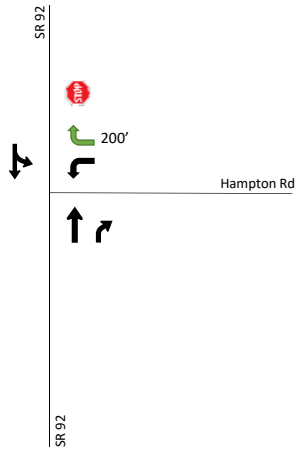


Recommended Lane Configuration

11: SR 92 at Hampton Rd

NOT TO SCALE

= Recommended Improvement



Recommended Lane Configuration

APPENDIX O

FUTURE BUILD CONDITIONS WITH IMPROVEMENTS SYNCHRO REPORTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	0	17	40	3	38	9	1146	18	11	674	25
Future Volume (veh/h)	26	0	17	40	3	38	9	1146	18	11	674	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1900	1900	1900	1900	1557	1776	1610	1900	1827	1681
Adj Flow Rate, veh/h	36	0	0	52	4	0	10	1273	0	12	741	0
Adj No. of Lanes	0	1	1	0	1	0	1	3	1	1	2	1
Peak Hour Factor	0.73	0.73	0.73	0.77	0.77	0.77	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	22	7	18	0	4	13
Cap, veh/h	330	0	136	316	9	0	458	2524	713	386	1816	748
Arrive On Green	0.08	0.00	0.00	0.08	0.08	0.00	0.01	0.52	0.00	0.02	0.52	0.00
Sat Flow, veh/h	1515	0	1615	1436	110	0	1483	4848	1369	1810	3471	1429
Grp Volume(v), veh/h	36	0	0	56	0	0	10	1273	0	12	741	0
Grp Sat Flow(s),veh/h/ln	1515	0	1615	1546	0	0	1483	1616	1369	1810	1736	1429
Q Serve(g_s), s	0.0	0.0	0.0	0.4	0.0	0.0	0.1	6.1	0.0	0.1	4.6	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	1.1	0.0	0.0	0.1	6.1	0.0	0.1	4.6	0.0
Prop In Lane	1.00		1.00	0.93		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	0	136	325	0	0	458	2524	713	386	1816	748
V/C Ratio(X)	0.11	0.00	0.00	0.17	0.00	0.00	0.02	0.50	0.00	0.03	0.41	0.00
Avail Cap(c_a), veh/h	912	0	818	944	0	0	647	3204	905	612	2294	945
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.2	0.0	0.0	15.4	0.0	0.0	4.2	5.5	0.0	4.4	5.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.5	0.0	0.0	0.0	2.6	0.0	0.1	2.2	0.0
LnGrp Delay(d),s/veh	15.4	0.0	0.0	15.7	0.0	0.0	4.2	5.7	0.0	4.4	5.3	0.0
LnGrp LOS	B			B			A	A		A	A	
Approach Vol, veh/h		36			56			1283			753	
Approach Delay, s/veh		15.4			15.7			5.7			5.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	23.0		7.5	5.0	23.1		7.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	2.1	8.1		2.7	2.1	6.6		3.1
Green Ext Time (p_c), s	0.0	10.4		0.3	0.0	11.1		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	6.0
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	33	198	29	1361	596	46
Future Volume (veh/h)	33	198	29	1361	596	46
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1610	1759	1827	1810	1827	1759
Adj Flow Rate, veh/h	41	0	32	1479	718	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.81	0.81	0.92	0.92	0.83	0.83
Percent Heavy Veh, %	18	8	4	5	4	8
Cap, veh/h	72	70	568	2419	1878	809
Arrive On Green	0.05	0.00	0.04	0.70	0.54	0.00
Sat Flow, veh/h	1533	1495	1740	3529	3563	1495
Grp Volume(v), veh/h	41	0	32	1479	718	0
Grp Sat Flow(s),veh/h/ln	1533	1495	1740	1719	1736	1495
Q Serve(g_s), s	0.9	0.0	0.2	8.1	4.3	0.0
Cycle Q Clear(g_c), s	0.9	0.0	0.2	8.1	4.3	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	72	70	568	2419	1878	809
V/C Ratio(X)	0.57	0.00	0.06	0.61	0.38	0.00
Avail Cap(c_a), veh/h	765	746	743	3146	2262	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.8	0.0	3.0	2.8	4.8	0.0
Incr Delay (d2), s/veh	7.0	0.0	0.0	0.3	0.1	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	0.5	0.0	0.1	3.8	2.0	0.0
LnGrp Delay(d),s/veh	23.9	0.0	3.1	3.0	4.9	0.0
LnGrp LOS	C		A	A	A	
Approach Vol, veh/h	41			1511	718	
Approach Delay, s/veh	23.9			3.0	4.9	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		29.9		6.2	5.9	24.0		
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s		33.0		18.0	5.0	23.5		
Max Q Clear Time (g_c+I1), s		10.1		2.9	2.2	6.3		
Green Ext Time (p_c), s		15.3		0.0	0.0	12.4		

Intersection Summary	
HCM 2010 Ctrl Delay	4.0
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	10.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	331	584	22	232	314
Future Vol, veh/h	4	331	584	22	232	314
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	200	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	85	85	84	84
Heavy Vehicles, %	25	6	2	17	0	3
Mvmt Flow	4	356	687	26	276	374

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1613	687	0	0	687	0
Stage 1	687	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Critical Hdwy	6.65	6.26	-	-	4.1	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.354	-	-	2.2	-
Pot Cap-1 Maneuver	101	440	-	-	916	-
Stage 1	459	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	63	440	-	-	916	-
Mov Cap-2 Maneuver	63	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	218	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	40	0	4.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	63	440	916	-
HCM Lane V/C Ratio	-	-	0.068	0.809	0.302	-
HCM Control Delay (s)	-	-	66.3	39.7	10.6	0
HCM Lane LOS	-	-	F	E	B	A
HCM 95th %tile Q(veh)	-	-	0.2	7.4	1.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	4	15	20	0	25	14	866	30	26	1183	34
Future Volume (veh/h)	22	4	15	20	0	25	14	866	30	26	1183	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1823	1776	1900	1900	1900	1900	1827	1900	1900	1863	1792
Adj Flow Rate, veh/h	27	5	0	24	0	0	14	893	0	27	1245	0
Adj No. of Lanes	0	1	1	0	1	0	1	3	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.83	0.83	0.83	0.97	0.97	0.97	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	7	0	0	0	0	4	0	0	2	6
Cap, veh/h	256	14	89	289	0	0	371	2691	871	534	1961	844
Arrive On Green	0.06	0.06	0.00	0.06	0.00	0.00	0.02	0.54	0.00	0.03	0.55	0.00
Sat Flow, veh/h	1268	235	1509	1552	0	0	1810	4988	1615	1810	3539	1524
Grp Volume(v), veh/h	32	0	0	24	0	0	14	893	0	27	1245	0
Grp Sat Flow(s),veh/h/ln	1503	0	1509	1552	0	0	1810	1663	1615	1810	1770	1524
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	0.0	0.1	3.7	0.0	0.2	8.9	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.5	0.0	0.0	0.1	3.7	0.0	0.2	8.9	0.0
Prop In Lane	0.84		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	0	89	289	0	0	371	2691	871	534	1961	844
V/C Ratio(X)	0.12	0.00	0.00	0.08	0.00	0.00	0.04	0.33	0.00	0.05	0.63	0.00
Avail Cap(c_a), veh/h	891	0	742	908	0	0	585	3199	1036	721	2270	977
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.5	0.0	0.0	16.4	0.0	0.0	4.6	4.7	0.0	3.6	5.6	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	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	0.3	0.0	0.0	0.2	0.0	0.0	0.1	1.7	0.0	0.1	4.3	0.0
LnGrp Delay(d),s/veh	16.7	0.0	0.0	16.6	0.0	0.0	4.6	4.8	0.0	3.6	6.1	0.0
LnGrp LOS	B			B			A	A		A	A	
Approach Vol, veh/h		32			24			907			1272	
Approach Delay, s/veh		16.7			16.6			4.8			6.0	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	24.3		6.7	5.2	24.8		6.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	2.2	5.7		2.7	2.1	10.9		2.5
Green Ext Time (p_c), s	0.0	12.3		0.1	0.0	9.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	23	283	15	985	1033	60
Future Volume (veh/h)	23	283	15	985	1033	60
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1827	1776	1810	1863	1827
Adj Flow Rate, veh/h	28	0	16	1048	1099	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.82	0.82	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	9	4	7	5	2	4
Cap, veh/h	57	53	416	2435	1978	868
Arrive On Green	0.03	0.00	0.02	0.71	0.56	0.00
Sat Flow, veh/h	1660	1553	1691	3529	3632	1553
Grp Volume(v), veh/h	28	0	16	1048	1099	0
Grp Sat Flow(s),veh/h/ln	1660	1553	1691	1719	1770	1553
Q Serve(g_s), s	0.6	0.0	0.1	4.5	6.9	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.1	4.5	6.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	57	53	416	2435	1978	868
V/C Ratio(X)	0.50	0.00	0.04	0.43	0.56	0.00
Avail Cap(c_a), veh/h	856	800	624	3249	2382	1045
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.6	0.0	3.5	2.1	4.9	0.0
Incr Delay (d2), s/veh	6.6	0.0	0.0	0.1	0.2	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	0.4	0.0	0.1	2.1	3.4	0.0
LnGrp Delay(d),s/veh	23.1	0.0	3.5	2.3	5.2	0.0
LnGrp LOS	C		A	A	A	
Approach Vol, veh/h	28			1064	1099	
Approach Delay, s/veh	23.1			2.3	5.2	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		29.2		5.7	5.2	24.0		
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s		33.0		18.0	5.0	23.5		
Max Q Clear Time (g_c+I1), s		6.5		2.6	2.1	8.9		
Green Ext Time (p_c), s		16.1		0.0	0.0	10.6		

Intersection Summary	
HCM 2010 Ctrl Delay	4.0
HCM 2010 LOS	A

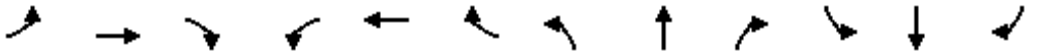
Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	275	339	16	360	611
Future Vol, veh/h	8	275	339	16	360	611
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	200	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	0	1	2	7	2	2
Mvmt Flow	9	316	424	20	391	664

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1871	424	0	0	424	0
Stage 1	424	-	-	-	-	-
Stage 2	1447	-	-	-	-	-
Critical Hdwy	6.4	6.21	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	80	632	-	-	1135	-
Stage 1	664	-	-	-	-	-
Stage 2	219	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	36	632	-	-	1135	-
Mov Cap-2 Maneuver	36	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	99	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.7	0	3.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	36	632	1135	-
HCM Lane V/C Ratio	-	-	0.255	0.5	0.345	-
HCM Control Delay (s)	-	-	136.4	16.3	9.8	0
HCM Lane LOS	-	-	F	C	A	A
HCM 95th %tile Q(veh)	-	-	0.8	2.8	1.6	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	1	27	40	5	38	41	1148	18	11	683	78
Future Volume (veh/h)	42	1	27	40	5	38	41	1148	18	11	683	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1628	1652	1900	1900	1900	1387	1776	1624	1900	1827	1473
Adj Flow Rate, veh/h	58	1	0	52	6	0	46	1276	0	12	751	0
Adj No. of Lanes	0	1	1	0	1	0	1	3	1	1	2	1
Peak Hour Factor	0.73	0.73	0.73	0.77	0.77	0.77	0.90	0.90	0.90	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	15	0	0	0	37	7	17	0	4	29
Cap, veh/h	317	2	133	321	16	0	446	2545	725	379	1700	613
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.00	0.05	0.53	0.00	0.02	0.49	0.00
Sat Flow, veh/h	1310	23	1404	1445	167	0	1321	4848	1380	1810	3471	1252
Grp Volume(v), veh/h	59	0	0	58	0	0	46	1276	0	12	751	0
Grp Sat Flow(s),veh/h/ln	1333	0	1404	1611	0	0	1321	1616	1380	1810	1736	1252
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	0.0	0.6	6.3	0.0	0.1	5.2	0.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	1.1	0.0	0.0	0.6	6.3	0.0	0.1	5.2	0.0
Prop In Lane	0.98		1.00	0.90		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	0	133	337	0	0	446	2545	725	379	1700	613
V/C Ratio(X)	0.19	0.00	0.00	0.17	0.00	0.00	0.10	0.50	0.00	0.03	0.44	0.00
Avail Cap(c_a), veh/h	802	0	683	915	0	0	557	3078	876	596	2204	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	15.7	0.0	0.0	4.4	5.7	0.0	4.9	6.1	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.0	0.0	0.1	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.6	0.0	0.0	0.2	2.8	0.0	0.1	2.4	0.0
LnGrp Delay(d),s/veh	16.1	0.0	0.0	15.9	0.0	0.0	4.5	5.8	0.0	4.9	6.3	0.0
LnGrp LOS	B			B			A	A		A	A	
Approach Vol, veh/h		59			58			1322			763	
Approach Delay, s/veh		16.1			15.9			5.8			6.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	23.9		8.0	6.4	22.6		8.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	2.1	8.3		3.4	2.6	7.2		3.1
Green Ext Time (p_c), s	0.0	10.4		0.4	0.0	10.9		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	222	110	1393	606	55
Future Volume (veh/h)	35	222	110	1393	606	55
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1624	1743	1652	1792	1810	1712
Adj Flow Rate, veh/h	43	0	120	1514	730	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.81	0.81	0.92	0.92	0.83	0.83
Percent Heavy Veh, %	17	9	15	6	5	11
Cap, veh/h	75	72	572	2409	1682	712
Arrive On Green	0.05	0.00	0.10	0.71	0.49	0.00
Sat Flow, veh/h	1547	1482	1573	3495	3529	1455
Grp Volume(v), veh/h	43	0	120	1514	730	0
Grp Sat Flow(s),veh/h/ln	1547	1482	1573	1703	1719	1455
Q Serve(g_s), s	1.0	0.0	1.1	8.6	5.1	0.0
Cycle Q Clear(g_c), s	1.0	0.0	1.1	8.6	5.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	75	72	572	2409	1682	712
V/C Ratio(X)	0.58	0.00	0.21	0.63	0.43	0.00
Avail Cap(c_a), veh/h	756	724	724	3051	1997	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	3.4	2.8	6.1	0.0
Incr Delay (d2), s/veh	6.8	0.0	0.2	0.3	0.2	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	0.6	0.0	0.5	3.9	2.4	0.0
LnGrp Delay(d),s/veh	24.0	0.0	3.6	3.1	6.3	0.0
LnGrp LOS	C		A	A	A	
Approach Vol, veh/h	43			1634	730	
Approach Delay, s/veh	24.0			3.1	6.3	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		30.6		6.3	8.0	22.5		
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s		33.0		18.0	7.1	21.4		
Max Q Clear Time (g_c+I1), s		10.6		3.0	3.1	7.1		
Green Ext Time (p_c), s		15.4		0.1	0.1	11.0		

Intersection Summary	
HCM 2010 Ctrl Delay	4.5
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	11.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	347	584	24	284	314
Future Vol, veh/h	5	347	584	24	284	314
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	200	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	85	85	84	84
Heavy Vehicles, %	20	6	2	17	2	3
Mvmt Flow	5	373	687	28	338	374

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1737	687	0	0	687	0
Stage 1	687	-	-	-	-	-
Stage 2	1050	-	-	-	-	-
Critical Hdwy	6.6	6.26	-	-	4.12	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.68	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	87	440	-	-	907	-
Stage 1	468	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	46	440	-	-	907	-
Mov Cap-2 Maneuver	46	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	165	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	45.2	0	5.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	46	440	907	-
HCM Lane V/C Ratio	-	-	0.117	0.848	0.373	-
HCM Control Delay (s)	-	-	93.4	44.5	11.3	0
HCM Lane LOS	-	-	F	E	B	A
HCM 95th %tile Q(veh)	-	-	0.4	8.4	1.7	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	7	52	20	1	25	28	877	30	26	1188	57
Future Volume (veh/h)	82	7	52	20	1	25	28	877	30	26	1188	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1618	1496	1900	1900	1900	1667	1827	1900	1900	1863	1508
Adj Flow Rate, veh/h	101	9	0	24	1	0	29	904	0	27	1251	0
Adj No. of Lanes	0	1	1	0	1	0	1	3	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.83	0.83	0.83	0.97	0.97	0.97	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	27	0	0	0	14	4	0	0	2	26
Cap, veh/h	302	12	142	355	11	0	335	2604	843	498	1841	667
Arrive On Green	0.11	0.11	0.00	0.11	0.11	0.00	0.03	0.52	0.00	0.03	0.52	0.00
Sat Flow, veh/h	1178	105	1272	1616	103	0	1587	4988	1615	1810	3539	1282
Grp Volume(v), veh/h	110	0	0	25	0	0	29	904	0	27	1251	0
Grp Sat Flow(s),veh/h/ln	1283	0	1272	1719	0	0	1587	1663	1615	1810	1770	1282
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	0.0	0.3	4.3	0.0	0.3	10.6	0.0
Cycle Q Clear(g_c), s	3.3	0.0	0.0	0.5	0.0	0.0	0.3	4.3	0.0	0.3	10.6	0.0
Prop In Lane	0.92		1.00	0.96		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	0	142	366	0	0	335	2604	843	498	1841	667
V/C Ratio(X)	0.35	0.00	0.00	0.07	0.00	0.00	0.09	0.35	0.00	0.05	0.68	0.00
Avail Cap(c_a), veh/h	731	0	567	848	0	0	477	2901	939	663	2059	746
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.4	0.0	0.0	16.2	0.0	0.0	5.6	5.6	0.0	4.3	7.2	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	0.3	0.0	0.0	0.1	1.9	0.0	0.1	5.2	0.0
LnGrp Delay(d),s/veh	18.1	0.0	0.0	16.2	0.0	0.0	5.7	5.7	0.0	4.4	8.0	0.0
LnGrp LOS	B			B			A	A		A	A	
Approach Vol, veh/h		110			25			933			1278	
Approach Delay, s/veh		18.1			16.2			5.7			7.9	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	25.6		9.0	5.9	25.5		9.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	5.0	23.5		18.0	5.0	23.5		18.0
Max Q Clear Time (g_c+I1), s	2.3	6.3		5.3	2.3	12.6		2.5
Green Ext Time (p_c), s	0.0	12.1		0.4	0.0	8.4		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	7.6
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	382	53	999	1068	67
Future Volume (veh/h)	34	382	53	999	1068	67
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1792	1712	1810	1845	1810
Adj Flow Rate, veh/h	41	0	56	1063	1136	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.82	0.82	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	9	6	11	5	3	5
Cap, veh/h	77	71	429	2457	1879	825
Arrive On Green	0.05	0.00	0.06	0.71	0.54	0.00
Sat Flow, veh/h	1660	1524	1630	3529	3597	1538
Grp Volume(v), veh/h	41	0	56	1063	1136	0
Grp Sat Flow(s),veh/h/ln	1660	1524	1630	1719	1752	1538
Q Serve(g_s), s	0.9	0.0	0.5	4.8	8.4	0.0
Cycle Q Clear(g_c), s	0.9	0.0	0.5	4.8	8.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	77	71	429	2457	1879	825
V/C Ratio(X)	0.53	0.00	0.13	0.43	0.60	0.00
Avail Cap(c_a), veh/h	803	737	550	2996	2170	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.5	0.0	4.0	2.2	6.0	0.0
Incr Delay (d2), s/veh	5.6	0.0	0.1	0.1	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	0.5	0.0	0.2	2.3	4.0	0.0
LnGrp Delay(d),s/veh	23.2	0.0	4.2	2.3	6.4	0.0
LnGrp LOS	C		A	A	A	
Approach Vol, veh/h	41			1119	1136	
Approach Delay, s/veh	23.2			2.4	6.4	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		31.4		6.2	6.7	24.7		
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s		32.8		18.2	5.0	23.3		
Max Q Clear Time (g_c+I1), s		6.8		2.9	2.5	10.4		
Green Ext Time (p_c), s		16.4		0.0	0.0	9.8		

Intersection Summary	
HCM 2010 Ctrl Delay	4.7
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	7.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	341	339	17	386	611
Future Vol, veh/h	11	341	339	17	386	611
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	200	-	150	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	80	80	92	92
Heavy Vehicles, %	0	2	2	6	2	2
Mvmt Flow	13	392	424	21	420	664

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1927	424	0	0	424	0
Stage 1	424	-	-	-	-	-
Stage 2	1503	-	-	-	-	-
Critical Hdwy	6.4	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	74	630	-	-	1135	-
Stage 1	664	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	31	630	-	-	1135	-
Mov Cap-2 Maneuver	31	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	85	-	-	-	-	-

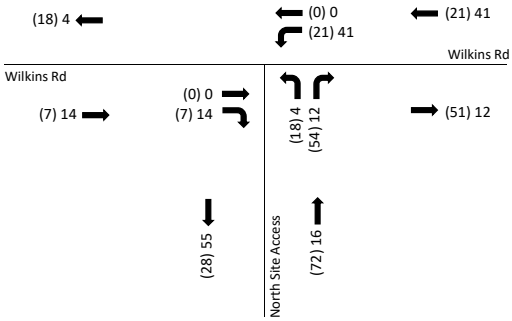
Approach	WB	NB	SB
HCM Control Delay, s	24.9	0	3.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	31	630	1135	-
HCM Lane V/C Ratio	-	-	0.408	0.622	0.37	-
HCM Control Delay (s)	-	-	185.5	19.7	10	0
HCM Lane LOS	-	-	F	C	B	A
HCM 95th %tile Q(veh)	-	-	1.3	4.3	1.7	-

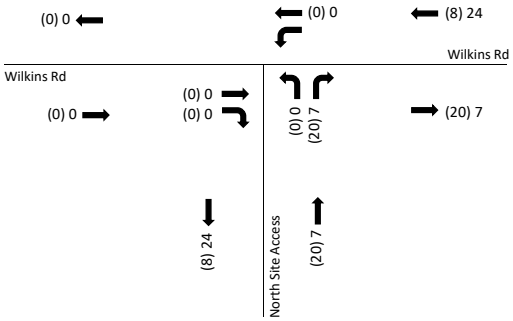
APPENDIX P

SITE ACCESS ANALYSIS DOCUMENTS

12: Wilkins Rd at North Site Access

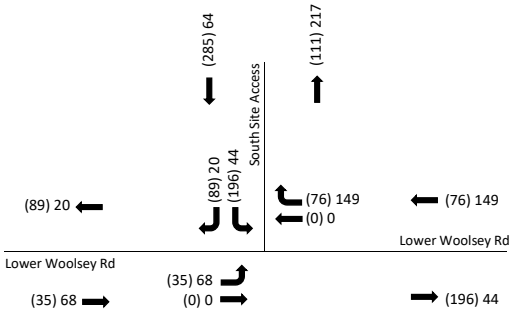


Project Traffic (Passenger Cars) – (PM)/AM

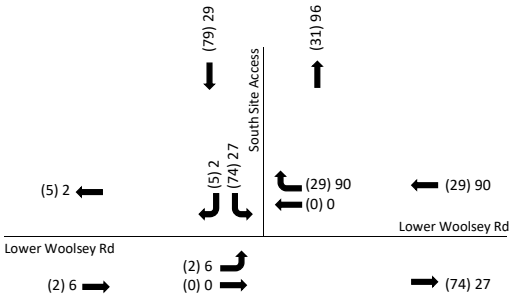


Project Traffic (Trucks) – (PM)/AM

13: Lower Woolsey Rd at South Site Access

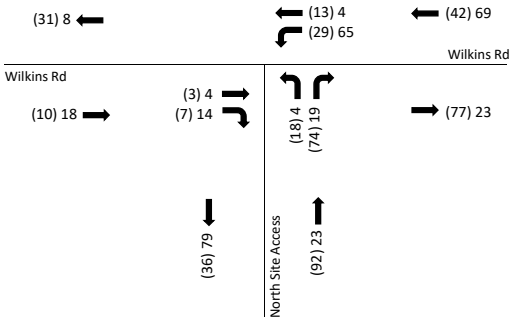


Project Traffic (Passenger Cars) – (PM)/AM

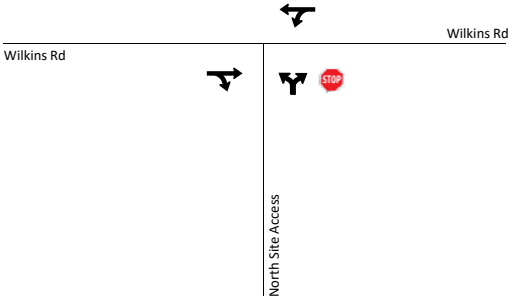


Project Traffic (Trucks) – (PM)/AM

12: Wilkins Rd at North Site Access

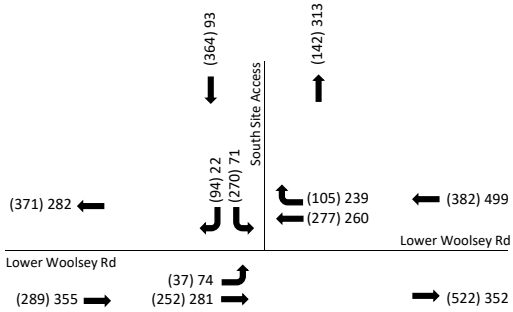


Total Future (2023) TMC – (PM)/AM



Build Lane Configuration

13: Lower Woolsey Rd at South Site Access



Total Future (2023) TMC – (PM)/AM

Build Lane Configuration

Intersection	
Int Delay, s/veh	6.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	4	14	65	4	4	19
Future Vol, veh/h	4	14	65	4	4	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	37	0	0	37
Mvmt Flow	4	15	71	4	4	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	20	0	158	12
Stage 1	-	-	-	-	12	-
Stage 2	-	-	-	-	146	-
Critical Hdwy	-	-	4.47	-	6.4	6.57
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.533	-	3.5	3.633
Pot Cap-1 Maneuver	-	-	1396	-	838	975
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	886	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1396	-	795	975
Mov Cap-2 Maneuver	-	-	-	-	795	-
Stage 1	-	-	-	-	1016	-
Stage 2	-	-	-	-	841	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.3	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	938	-	-	1396	-
HCM Lane V/C Ratio	0.027	-	-	0.051	-
HCM Control Delay (s)	8.9	-	-	7.7	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	74	281	260	239	71	22
Future Vol, veh/h	74	281	260	239	71	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	8	0	0	38	38	9
Mvmt Flow	80	305	283	260	77	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	283	0	-	0	749	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	4.18	-	-	-	6.78	6.29
Critical Hdwy Stg 1	-	-	-	-	5.78	-
Critical Hdwy Stg 2	-	-	-	-	5.78	-
Follow-up Hdwy	2.272	-	-	-	3.842	3.381
Pot Cap-1 Maneuver	1246	-	-	-	332	740
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	563	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1246	-	-	-	306	740
Mov Cap-2 Maneuver	-	-	-	-	306	-
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	520	-

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	18.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1246	-	-	-	306	740
HCM Lane V/C Ratio	0.065	-	-	-	0.252	0.032
HCM Control Delay (s)	8.1	0	-	-	20.7	10
HCM Lane LOS	A	A	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1	0.1

Intersection	
Int Delay, s/veh	7.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	3	7	29	13	18	74
Future Vol, veh/h	3	7	29	13	18	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	28	0	0	27
Mvmt Flow	3	8	32	14	20	80

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	11	0	84	7
Stage 1	-	-	-	-	7	-
Stage 2	-	-	-	-	77	-
Critical Hdwy	-	-	4.38	-	6.4	6.47
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.452	-	3.5	3.543
Pot Cap-1 Maneuver	-	-	1454	-	923	1007
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	951	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1454	-	903	1007
Mov Cap-2 Maneuver	-	-	-	-	903	-
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	930	-

Approach	EB	WB	NB
HCM Control Delay, s	0	5.2	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	985	-	-	1454	-
HCM Lane V/C Ratio	0.102	-	-	0.022	-
HCM Control Delay (s)	9.1	-	-	7.5	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	252	277	105	270	94
Future Vol, veh/h	37	252	277	105	270	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	0	200
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	0	0	28	27	5
Mvmt Flow	40	274	301	114	293	102

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	301	0	-	0	655	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	354	-
Critical Hdwy	4.15	-	-	-	6.67	6.25
Critical Hdwy Stg 1	-	-	-	-	5.67	-
Critical Hdwy Stg 2	-	-	-	-	5.67	-
Follow-up Hdwy	2.245	-	-	-	3.743	3.345
Pot Cap-1 Maneuver	1243	-	-	-	394	732
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	658	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1243	-	-	-	379	732
Mov Cap-2 Maneuver	-	-	-	-	379	-
Stage 1	-	-	-	-	697	-
Stage 2	-	-	-	-	633	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	32.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1243	-	-	-	379	732
HCM Lane V/C Ratio	0.032	-	-	-	0.774	0.14
HCM Control Delay (s)	8	0	-	-	40.5	10.7
HCM Lane LOS	A	A	-	-	E	B
HCM 95th %tile Q(veh)	0.1	-	-	-	6.4	0.5