Traffic Impact Study

Emory Adventist Hospital

City of Smyrna, Georgia

Report Prepared:

February 2019

Prepared for:

Emory University Hospital

Prepared by:

Kimley-Horn and Associates, Inc.
817 West Peachtree Street NW, Suite 601
Atlanta, GA 30308
February 2019
013160002

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Kimley»Horn

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1.0 INTRODUCTION

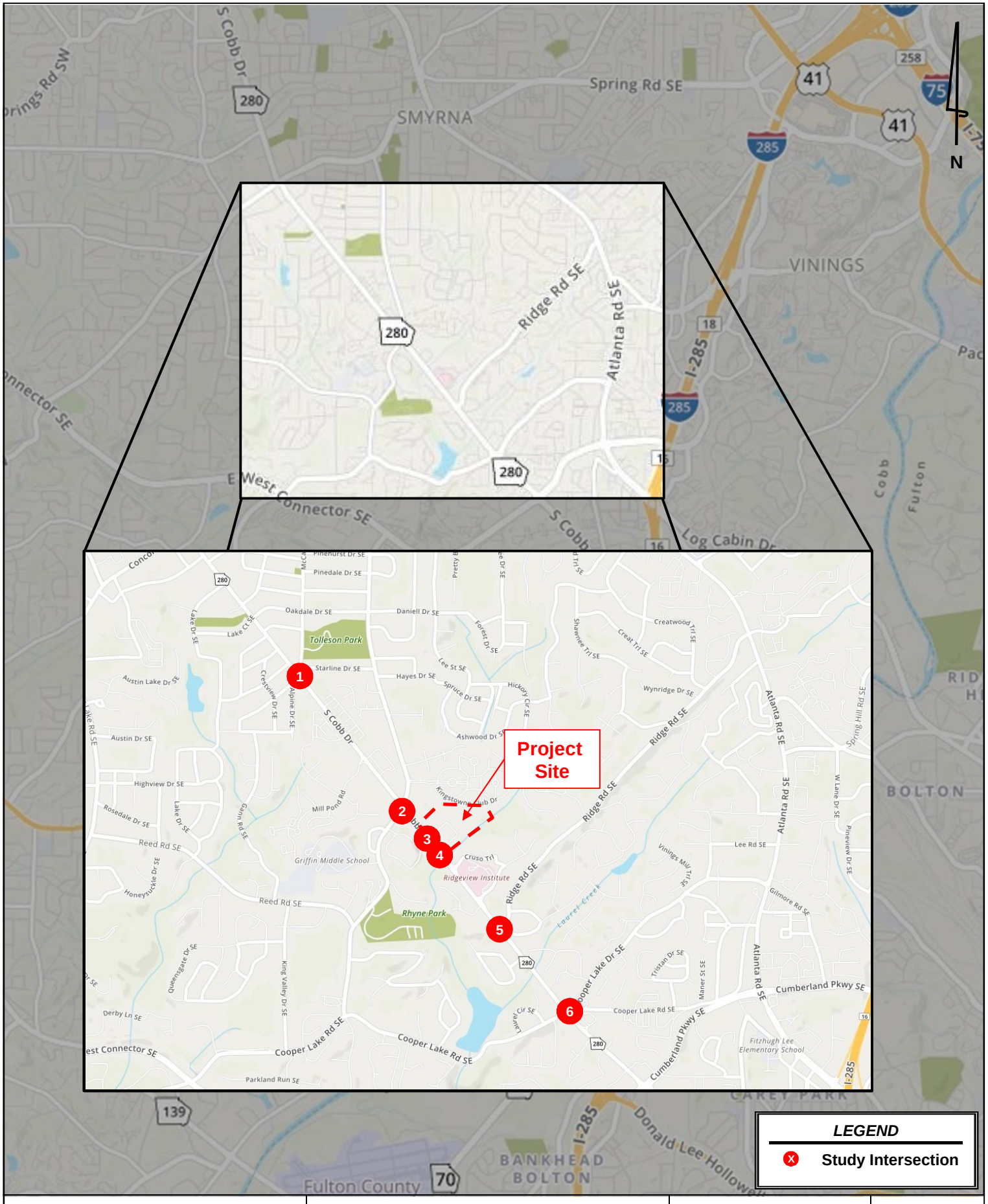
This report presents the analysis of the anticipated traffic impacts associated with the proposed *Emory Adventist Hospital* development, which is expected to be completed in three (3) phases: Phase 1, renovating an existing hospital with 57 beds plus renovating 38,000 SF of existing medical office building to be fully operational and adding 120,000 SF of new medical office building completed in 2020; Phase 2, a hospital with 150 beds and an additional 60,000 SF of new medical office building to be fully operational in 2025. This study evaluates the impact of developing approximately a net of 207 hospital beds and 218,000 SF in medical office building.

The site is located approximately 0.2 miles south of King Springs Road SE at South Cobb Drive (SR 280) along South Cobb Drive (SR 280) in the City of Smyrna, Georgia. The existing site consists of a non-fully operational medical office building and non-operational hospital on approximately 14 acres.

This report will summarize the analyses of the following five (5) scenarios:

1. Existing 2018 Traffic Conditions
2. Projected 2020 No-Build Traffic Conditions (Existing 2018 Traffic Conditions, plus two (2) year background traffic growth).
3. Projected 2020 Build Traffic Conditions (Projected 2020 No-Build Traffic Conditions, plus traffic associated with the proposed *Emory Adventist Hospital Phase 1* development).
4. Projected 2025 No-Build Traffic Conditions (Existing 2018 Traffic Conditions, plus seven (7) year background traffic growth, plus Phase 1 project trips).
5. Projected 2025 Build Traffic Conditions (Projected 2025 No-Build Traffic Conditions, plus traffic associated with the proposed *Emory Adventist Hospital Phase 2* development).

Figure 1 provides a location map of the project site. **Figure 2** and **Figure 3** provide aerial imageries of the project site. Additionally, a copy of the proposed site plan is provided in Appendix A.



Kimley»Horn	*Emory Adventist Hospital* **Traffic Impact Study**	**Site Location Map**	**Figure 1** **Page 2**

Kimley»Horn	*Emory Adventist Hospital* Traffic Impact Study	Site Aerial (Zoomed Out)	Figure 2
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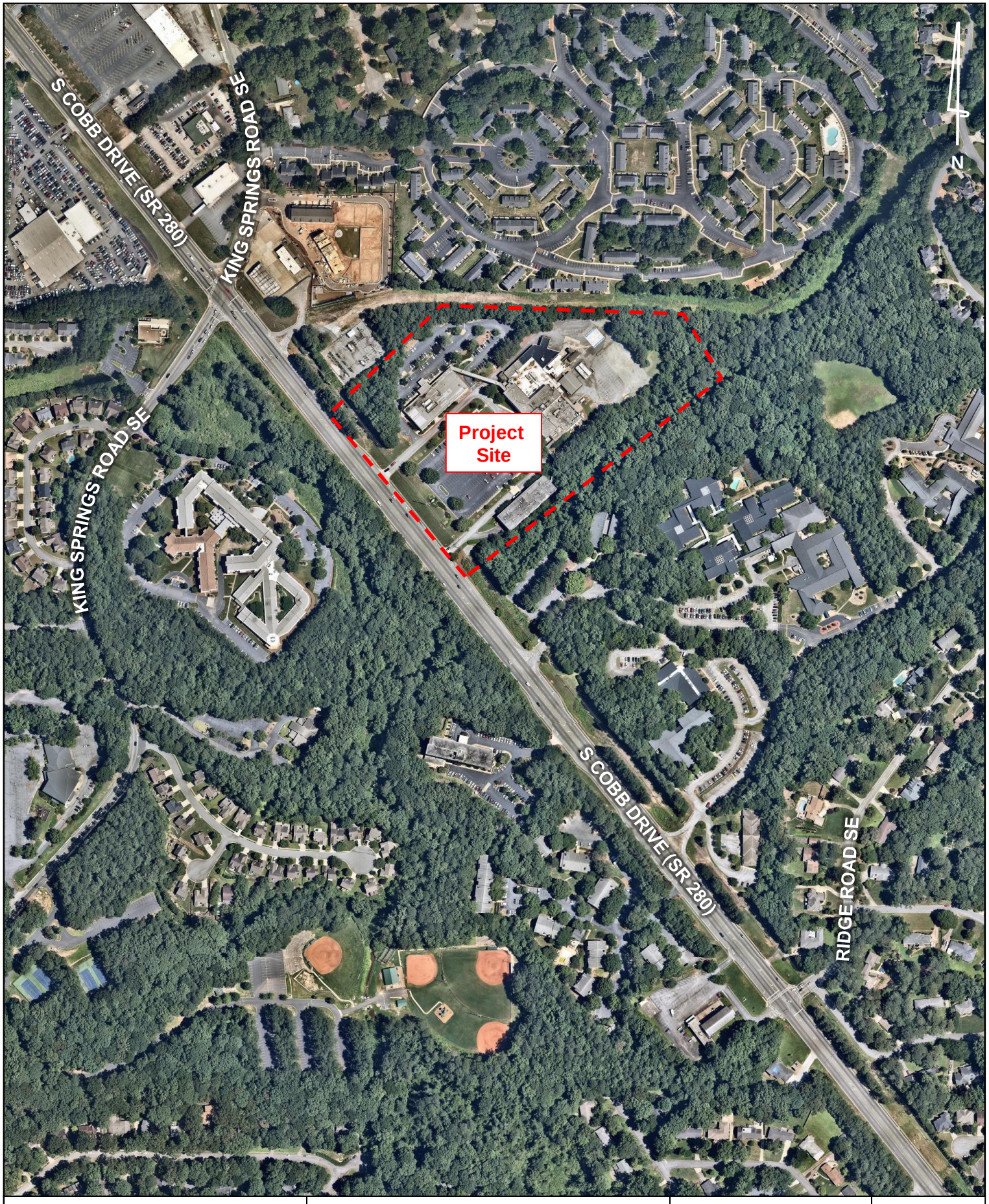


Kimley»Horn	*Emory Adventist Hospital* Traffic Impact Study	Site Aerial (Zoomed In)	Figure 3 Page 4

2.0 STUDY AREA DETERMINATION

The study area consists of the following six (6) intersections:

1. South Cobb Drive (SR 280) at Wisteria Lane/McCauley Road (signalized)
2. South Cobb Drive (SR 280) at King Springs Road SE (signalized)
3. South Cobb Drive (SR 280) at Emory Adventist Driveway #1 (unsignalized)
4. South Cobb Drive (SR 280) at Emory Adventist Driveway #2 (unsignalized)
5. South Cobb Drive (SR 280) at Ridge Road SE/Vinings First Baptist Church Driveway (signalized)
6. South Cobb Drive (SR 280) at Cooper Lake Road SE (signalized)

This analysis considers South Cobb Drive (SR 280) as having north-south orientation and all minor street approaches having an east-west orientation.

3.0 EXISTING TRAFFIC CONDITIONS

The roadways within the study network have the following characteristics:

South Cobb Drive (SR 280) is a five-lane, minor arterial (two (2) lanes in each direction with a center two-way left-turn-lane) with a posted speed limit of 45 MPH. GDOT counts taken south of Ridge Road indicated an AADT of 31,900 vehicles per day in 2016. Other GDOT counts taken north of Wisteria Lane indicated an AADT of 22,600 vehicles per day in 2016.

Wisteria Lane is a two-lane, undivided driveway with a posted speed limit of 25 MPH. There are no GDOT count stations along Wisteria Lane.

McCauley Road SE is a two-lane, undivided driveway with a posted speed limit of 35 MPH. There are no GDOT count stations along McCauley Road SE.

King Springs Road SE is a two-lane, undivided driveway with a posted speed limit of 35 MPH. There are no GDOT count stations along King Springs Road SE.

Ridge Road SE is a two-lane, undivided driveway with a posted speed limit of 35 MPH. There are no GDOT count stations along Ridge Road SE.

Cooper Lake Road SE is a two-lane, undivided driveway with a posted speed limit of 35 MPH. GDOT counts taken south of Ridge Road indicated an AADT of 5,730 vehicles per day in 2016.

Vehicle peak hour turning movement counts were performed at the following existing study intersections:

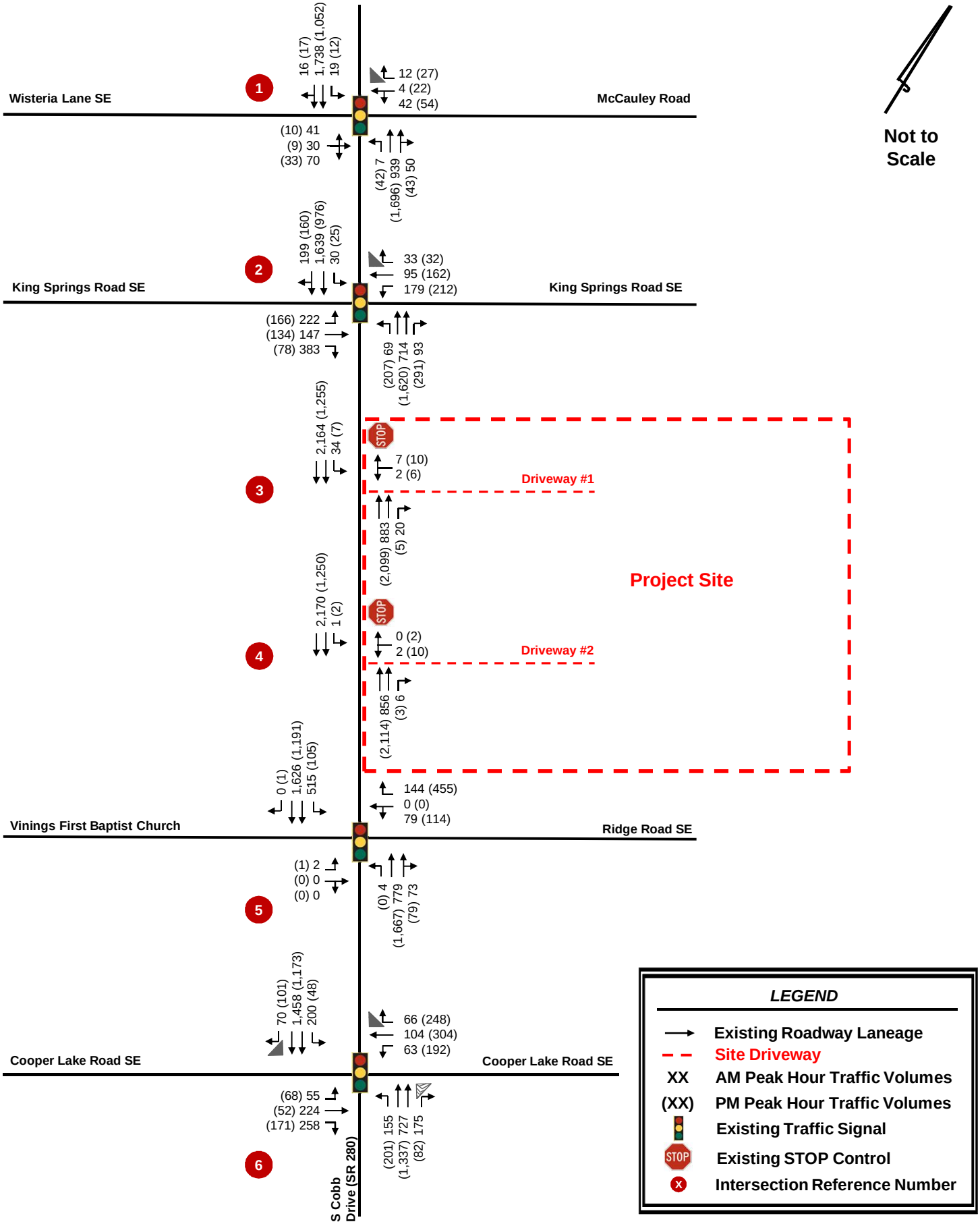
1. South Cobb Drive (SR 280) at Wisteria Lane/McCauley Road (signalized)
2. South Cobb Drive (SR 280) at King Springs Road SE (unsignalized)
3. South Cobb Drive (SR 280) at Emory Adventist Driveway #1 (unsignalized)
4. South Cobb Drive (SR 280) at Emory Adventist Driveway #2 (unsignalized)
5. South Cobb Drive (SR 280) at Ridge Road SE/Vinings First Baptist Church Driveway (signalized)
6. South Cobb Drive (SR 280) at Cooper Lake Road SE (signalized)

The vehicle peak hour turning movement counts for the study intersection were collected on Thursday, August 16, 2018. The counts were performed during the AM period (7:00 AM to 9:00 AM) and the PM period (4:00 PM to 6:00 PM). The peak hours for each intersection are listed in **Table 1**.

Table 1: Peak Hour Summary

Intersection	AM Peak Hour	PM Peak Hour
1. South Cobb Drive (SR 280) at Wisteria Lane/McCauley Road	7:30 AM – 8:30 AM	4:45 PM – 5:45 PM
2. South Cobb Drive (SR 280) at King Springs Road SE	7:30 AM – 8:30 AM	5:00 PM – 6:00 PM
3. South Cobb Drive (SR 280) at Emory Adventist Driveway #1	7:30 AM – 8:30 AM	4:45 PM – 5:45 PM
4. South Cobb Drive (SR 280) at Emory Adventist Driveway #2	7:15 AM – 8:15 AM	5:00 PM – 6:00 PM
5. South Cobb Drive (SR 280) at Ridge Road SE/Vinings First Baptist Church Driveway	7:30 AM – 8:30 AM	5:00 PM – 6:00 PM
6. South Cobb Drive (SR 280) at Cooper Lake Road SE	7:15 AM – 8:15 AM	5:00 PM – 6:00 PM

Figure 4 illustrates the Existing 2018 traffic conditions for the AM and PM peak hours.



Kimley»Horn	*Emory Adventist Hospital* Traffic Impact Study	Existing 2018 Traffic Conditions	Figure 4
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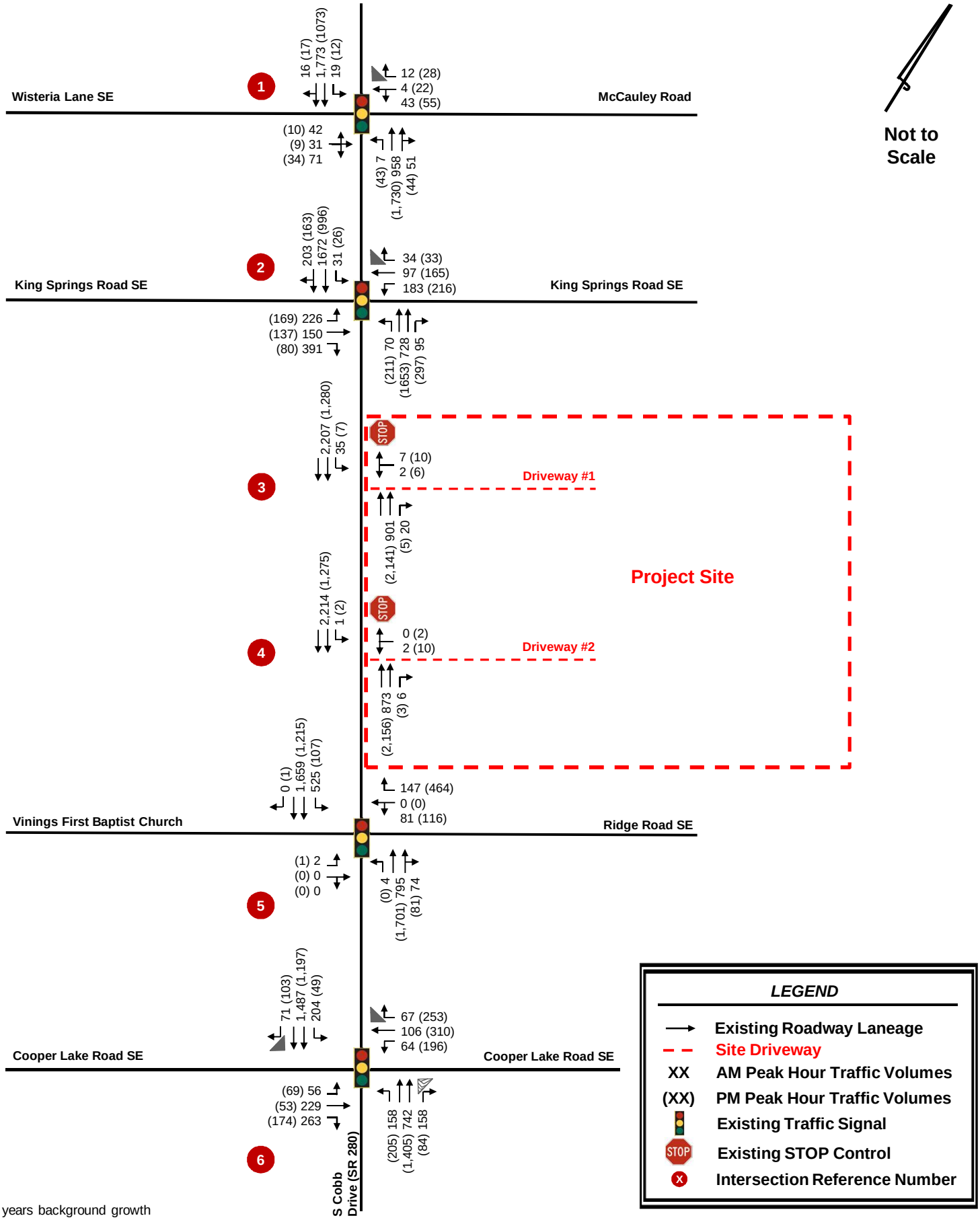
4.0 PROJECTED BACKGROUND (NON-PROJECT) TRAFFIC

Projected background (non-project) traffic is defined as the expected traffic on the roadway network in the future year(s) absent the construction and opening of the proposed *Emory Adventist Hospital* development. The Existing 2018 peak hour traffic volumes were increased by 1.0% per year for two (2) years for Phase 1 (2020) and for seven (7) years for Phase 2 (2025) to account for the expected background growth to each project phase. Phase 2 background traffic also includes Phase 1 project trips.

Figure 5 illustrates the Projected Phase 1 2020 No-Build traffic conditions for the AM and PM peak hours. **Figure 6** illustrates the Projected Phase 2 2025 No-Build traffic conditions for the AM and PM peak hours.

4.1 FUTURE ROADWAY/INTERSECTION PROJECTS

The Atlanta Regional Commission's *Atlanta Region's Plan* was researched for programmed transportation projects within the vicinity of the proposed development. No projects were identified in the study area.



*2 years background growth

Kimley»Horn	*Emory Adventist Hospital* Traffic Impact Study	Projected Phase 1 2020 No-Build Traffic Conditions	Figure 5
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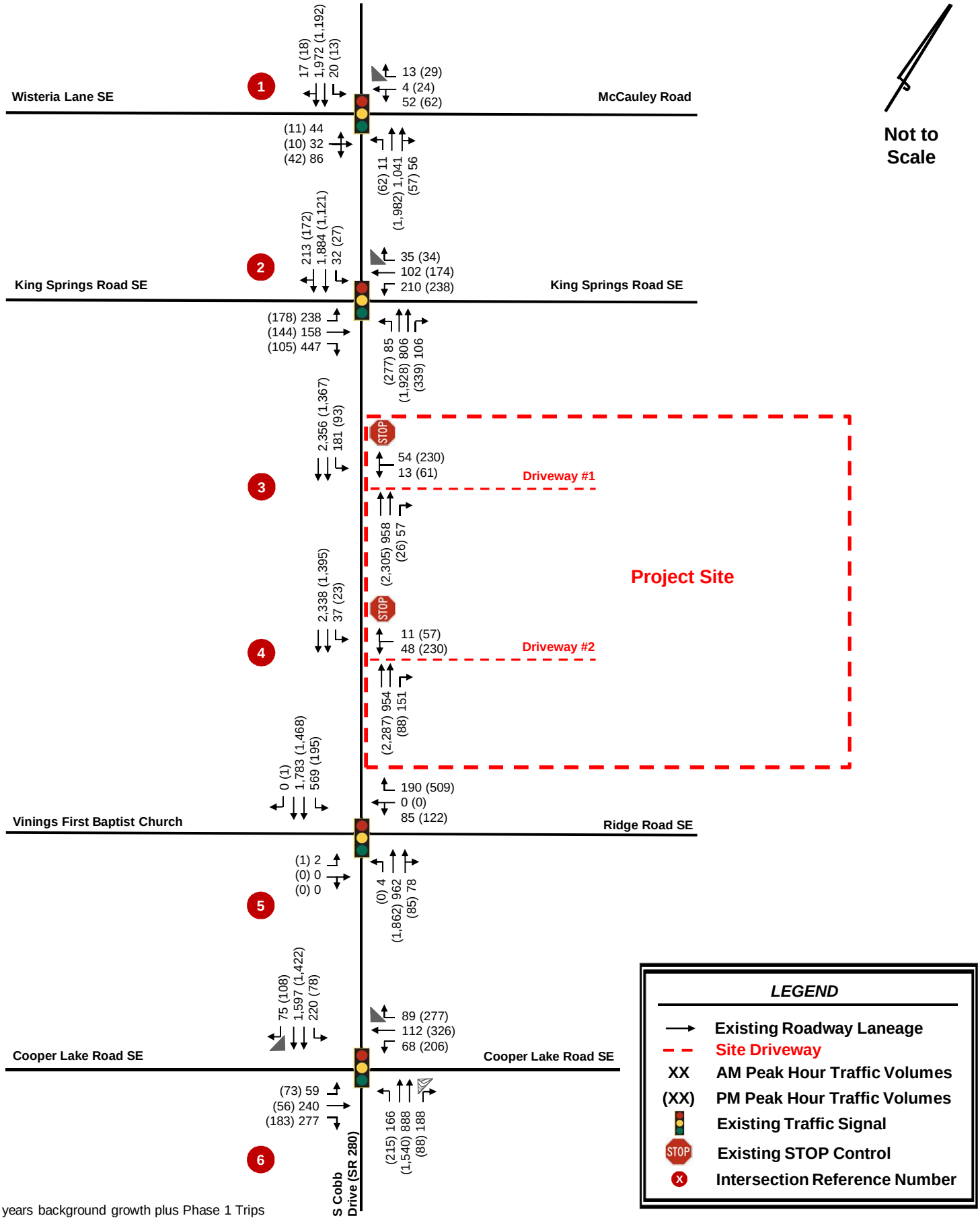

*7 years background growth plus Phase 1 Trips

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Traffic Impact Study

Projected Phase 2 2025 No-Build Traffic Conditions

Figure 6

5.0 PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the proposed *Emory Adventist Hospital* development, and the distribution and assignment of that traffic through the study roadway network. This traffic impact study evaluated the impacts of developing three (3) phases: Phase 1, a hospital with 57 beds plus 38,000 SF existing medical office building to be fully operational and 120,000 SF of new medical office building completed in 2020; Phase 2, a hospital with 150 beds and an additional 60,000 SF of new medical office building to be fully operational in 2025. This study evaluates the impact of developing approximately a net of 207 hospital beds and 218,000 SF in medical office building.

5.1 PROJECT SITE ACCESS

Access to the *Emory Adventist Hospital* development is provided at two existing locations.

1. Emory Adventist Driveway #1 allows ingress and egress access to the site and creates a side-street stop-controlled intersection with South Cobb Drive (SR 280).
2. Emory Adventist Driveway #2 allows ingress and egress access to the site and creates a side-street stop-controlled intersection with South Cobb Drive (SR 280).

See the referenced site plans in **Appendix A** for a visual representation of vehicular access and circulation throughout the site.

5.2 TRIP GENERATION

Traffic for the proposed development was calculated using equations contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, Tenth Edition, 2017. The trip generation was calculated assuming Hospital (Land Use 610) and Medical Office (Land Use 720). **Table 2** summarizes the trip generation for the proposed development under Phase 1 (year 2020) and Phase 2 (year 2025).

Table 2: Trip Generation											
Land Use	**Density**	**ITE Code**	**Daily Traffic**			**AM Peak Hour**			**PM Peak Hour**		
			Total	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**
Phase 1 – 2020											
Hospital	*57 Beds*	610	3,798	1,899	1,899	138	99	39	223	62	161
Medical Office	*158,000 SF**	720	5,982	2,991	2,991	336	262	74	538	151	387
Phase 2 – 2025											
Hospital	*150 Beds*	720	4,942	2,471	2,471	302	217	85	416	116	300
Medical Office	*60,000 SF*	610	2,218	1,109	1,109	142	111	31	205	57	148
Total			**16,940**	**8,470**	**8,470**	**918**	**689**	**229**	**1,382**	**386**	**996**

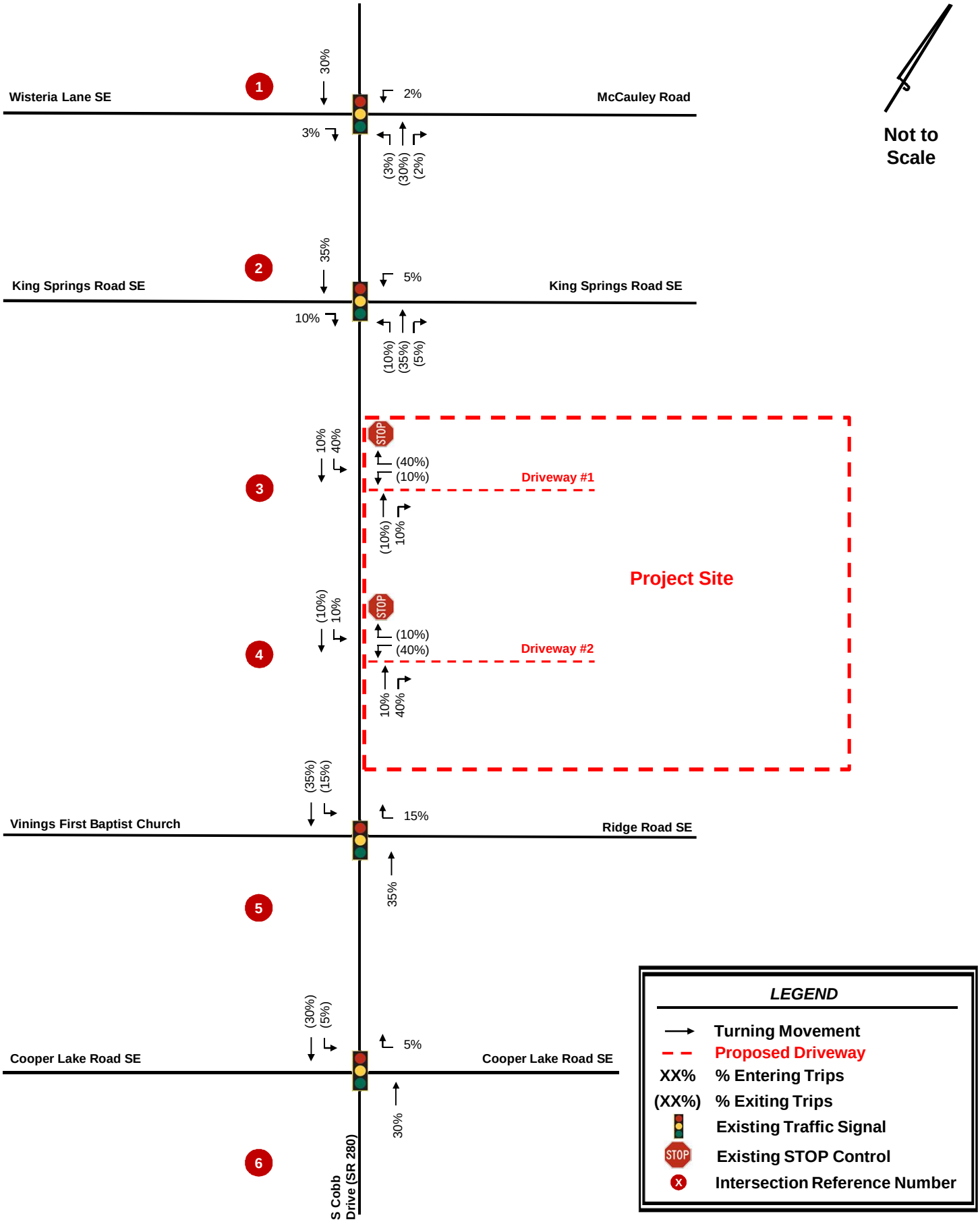
**120,000 new plus 38,000 SF existing becoming fully operational*

Due to the size, nature, and location of the proposed development, mixed-use, pass-by and alternative mode reductions were assumed to be zero.

5.3 TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution and assignment of new project trips was based on a review of land uses and population densities in the area; and the existing peak hour turning movement counts. Detailed trip distributions are illustrated in **Figure 7**.

Based on the trip generation from **Table 2** and the anticipated trip distribution (shown on **Figure 7**), net new project trips were assigned to the study roadway network and added to the No-Build Conditions to create Projected Build Conditions for each respective Phase. The project trips and Build Conditions are illustrated for Phase 1 in **Figure 8** and **Figure 9** and for Phase 2 in **Figure 10** and **Figure 11**,.



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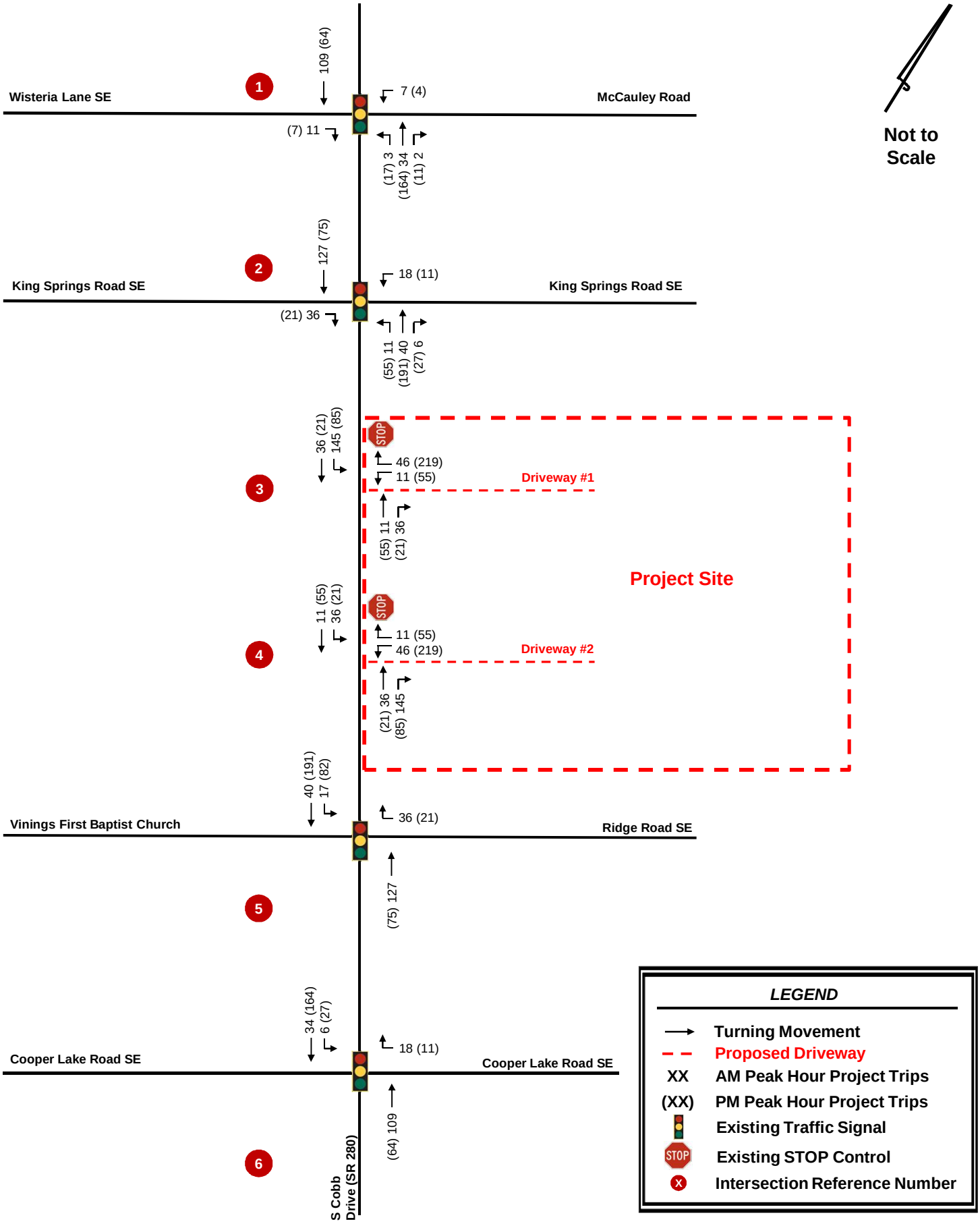
Traffic Impact Study

Trip Distribution and Assignment

Figure 7



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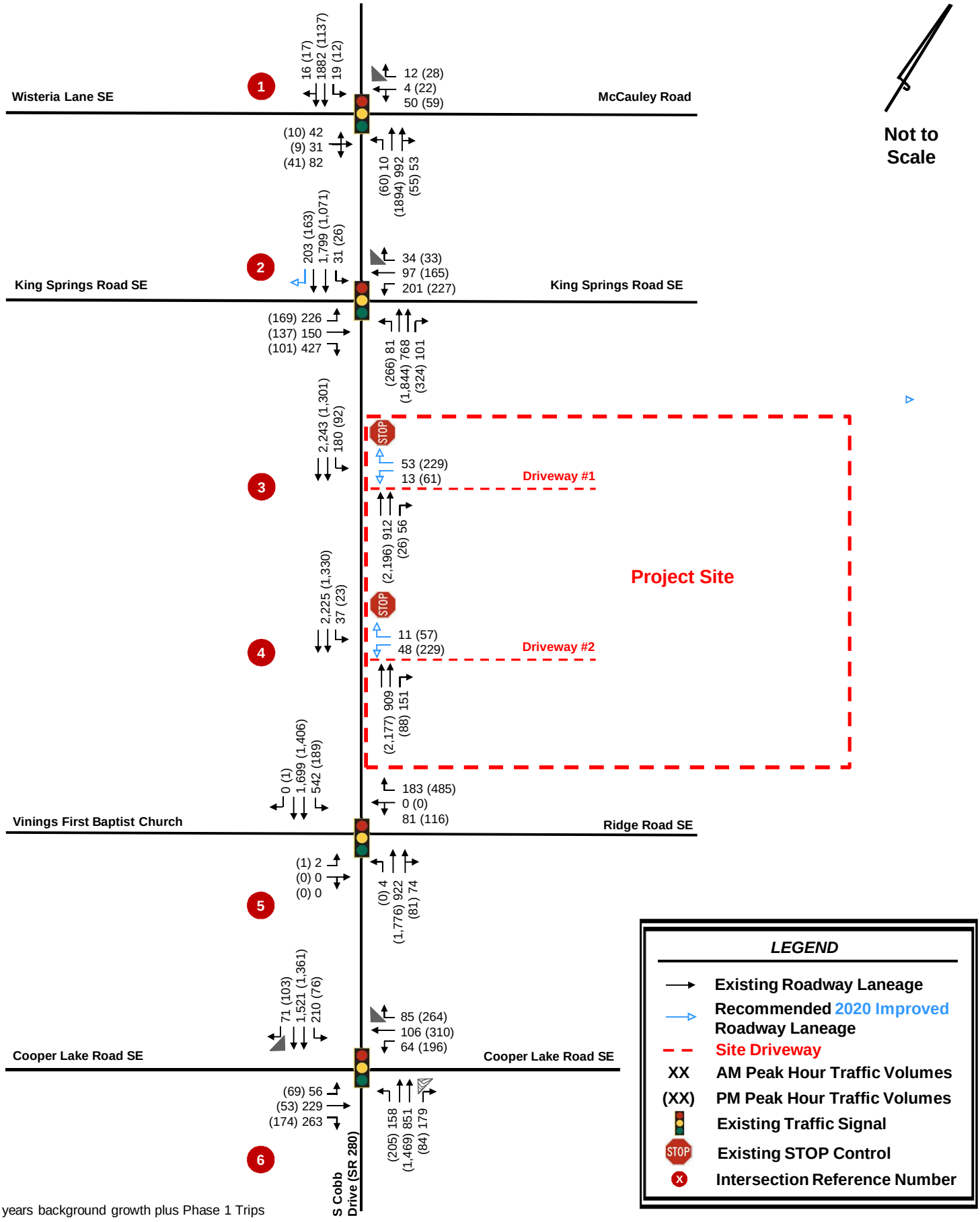
Phase 1
2020 Project Trips

Figure 8



*2 years background growth plus Phase 1 Trips

Kimley»Horn	*Emory Adventist Hospital* Traffic Impact Study	Projected Phase 1 2020 Build Traffic Conditions	Figure 9
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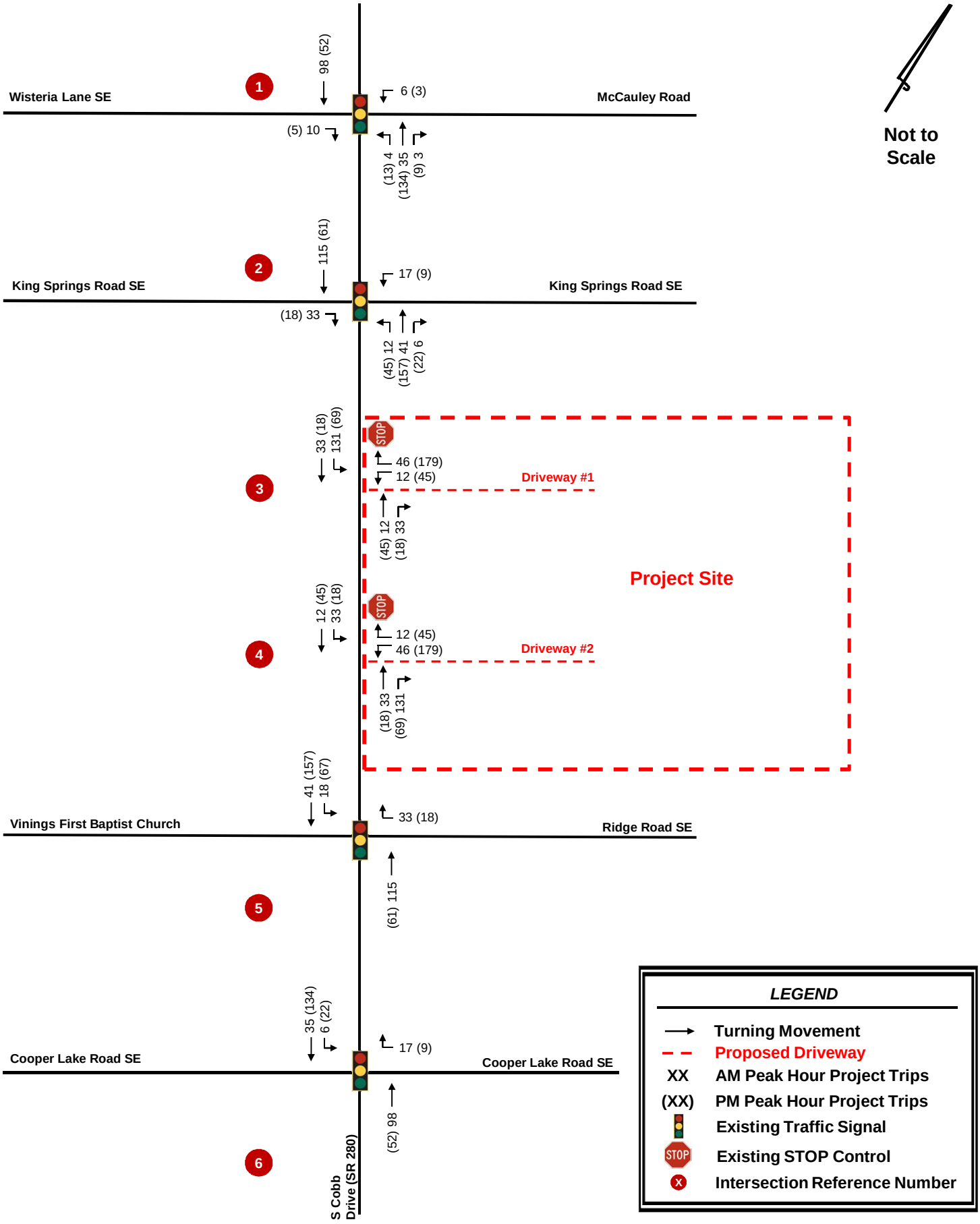

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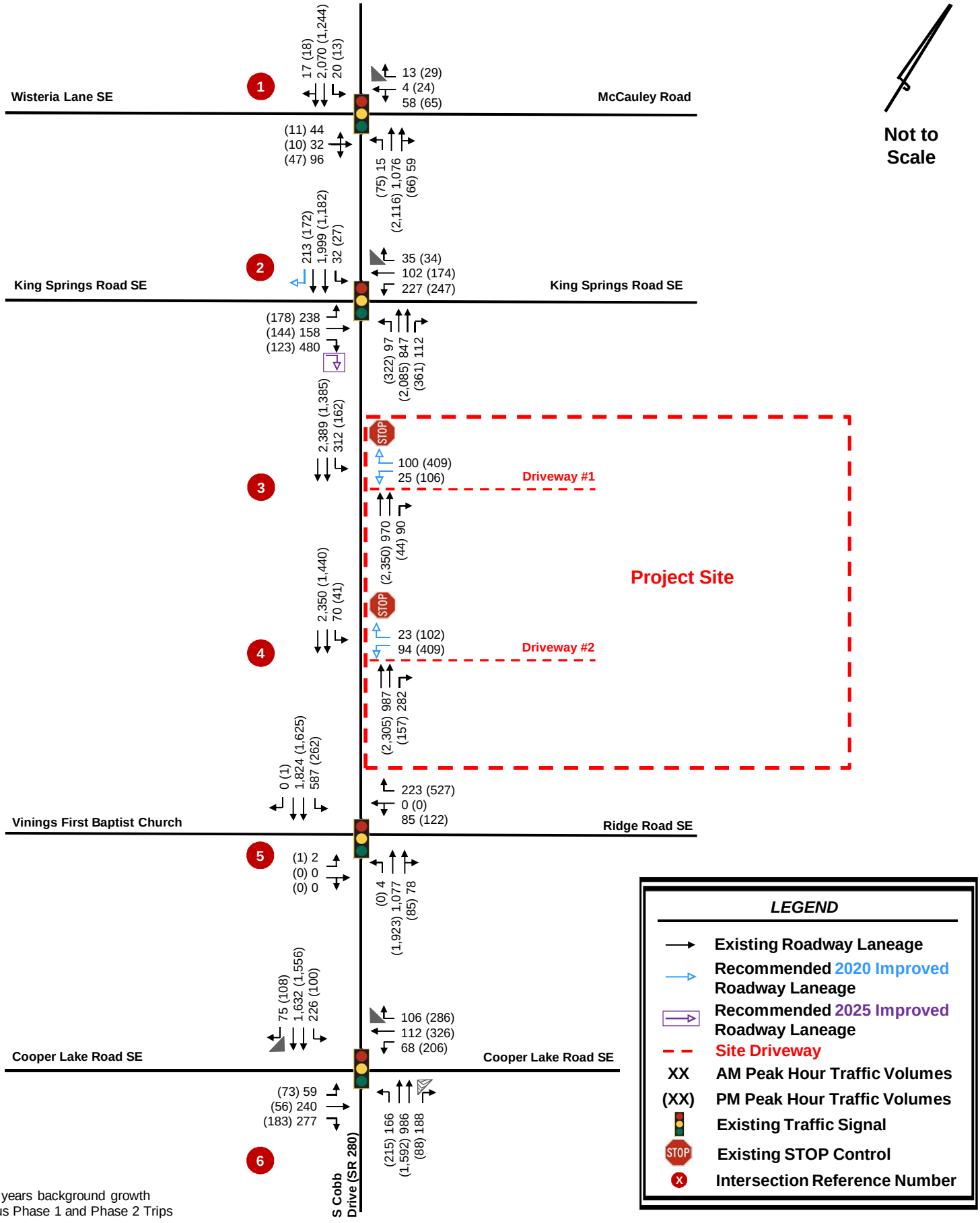
Phase 2
2025 Project Trips

Figure 10



*7 years background growth plus Phase 1 and Phase 2 Trips

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Traffic Impact Study

Projected Phase 2 2025 Build Traffic Conditions

Figure 11

6.0 LEVEL-OF-SERVICE ANALYSIS

Level-of-service (LOS) determinations were made for the weekday AM and PM peak hours for the existing study network intersections and proposed access intersections using *Synchro Professional, Version 10.0*. The program uses methodologies contained in the *2010 Highway Capacity Manual and 2000 Highway Capacity Manual* to determine the operating characteristics of an intersection. Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a specified period under prevailing roadway, traffic, and control conditions.

LOS is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions of a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS A through LOS F, with A being the best and F the worst.

LOS for unsignalized intersections, with stop control on the minor street(s) only, are reported for the side street approaches.

LOS for signalized intersections are reported for the intersection as a whole. One or more movements at an intersection may experience a low level-of-service, while the intersection as a whole may operate acceptably.

In addition to the Existing 2018 traffic conditions, an analysis was performed for the AM and PM peak hours for the Projected 2020 and Projected 2025, No-Build and Build traffic conditions. The results of the LOS analysis for the Existing 2018 and the Projected 2020 traffic conditions are summarized in **Table 3**.The results of the LOS analysis for the Existing 2018 and the Projected 2025 traffic conditions are summarized in **Table 4**. A detailed set of analyses from *Synchro* is available in **Appendix C**.

Table 3: Phase 1 2020 Level-of-Service Summary
LOS (Delay, in seconds)
57 Hospital Beds plus 38,000 SF fully operational and 120,000 SF new Medical Office Building

Intersection	Approach / Movement	Existing 2018		Projected 2020 No-Build		Projected 2020 Build	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1. South Cobb Drive (SR 280) at Wisteria Lane/McCauley Road (signalized)	Overall	B (14.0)	A (9.8)	B (14.5)	B (10.2)	B (17.4)	B (11.7)
2. South Cobb Drive (SR 280) at King Springs Road SE (signalized)	Overall	E (72.7)	C (33.6)	E (77.2)	C (34.4)	F (97.8)	D (35.9)
3. South Cobb Drive (SR 280) at Emory Adventist Driveway #1 (unsignalized)*	Westbound	B (13.3)	E (41.2)	B (13.5)	E (43.4)	C (15.7)	F (528.3)
	Southbound Lefts	B (10.3)	C (21.3)	B (10.4)	C (22.0)	B (12.5)	D (30.5)
4. South Cobb Drive (SR 280) at Emory Adventist Driveway #2 (unsignalized)	Westbound	D (28.6)	F (70.5)	D (29.3)	F (74.3)	F (51.0)	F (1725.2)
	Southbound Lefts	A (9.9)	C (20.1)	A (10.0)	C (20.7)	B (11.3)	C (23.1)
5. South Cobb Drive (SR 280) at Ridge Road SE/Vinings First Baptist Church Driveway (signalized)	Overall	B (12.4)	D (36.7)	B (13.8)	D (38.8)	C (20.5)	D (43.0)
6. South Cobb Drive (SR 280) at Cooper Lake Road SE (signalized)	Overall	D (35.4)	D (40.9)	D (36.4)	D (42.1)	D (36.9)	D (44.8)

**Analysis was executed in HCM 2000 for intersection #3*
^It is not uncommon for side-street approaches on two-way-stop-controlled intersections to experience long delays

As shown in **Table 3**, intersection #3 and intersection #4 westbound approaches operate at LOS F in the 2018 PM Existing, 2020 PM No-Build, and 2020 PM Build scenarios. It should be noted that it is not uncommon for side-street approaches of two-way-stop-controlled intersections to have a high delay and failing LOS. Intersection #2 is the only signalized intersection to operate with a LOS E under the 2018 AM Existing and Phase 1 2020 AM No-Build conditions and failing LOS under the Phase 1 2020 AM Build condition. All other signalized intersections operate at an acceptable LOS.

Table 4: Phase 2 2025 Level-of-Service Summary *LOS (Delay, in seconds)* *150 Hospital Beds and 60,000 SF new Medical Office Building*							
Intersection	**Approach / Movement**	**Existing 2018**		**Projected 2025 No-Build**		**Projected 2025 Build**	
		AM Peak	**PM Peak**	**AM Peak**	**PM Peak**	**AM Peak**	**PM Peak**
1. South Cobb Drive (SR 280) at Wisteria Lane/McCauley Road (signalized)	Overall	B (14.0)	A (9.8)	B (19.1)	B (12.8)	C (23.5)	B (13.5)
2. South Cobb Drive (SR 280) at King Springs Road SE (signalized)	Overall	E (72.7)	C (33.6)	F (112.7)	D (41.4)	F (140.1)	D (49.2)
3. South Cobb Drive (SR 280) at Emory Adventist Driveway #1 (unsignalized)*	Westbound	B (13.3)	E (41.2)	C (16.3)	F (887.1)	D (28.8)	F (1110.7^)
	Southbound Lefts	B (10.3)	C (21.3)	B (13.0)	E (45.8)	C (17.6)	F (123.3)
4. South Cobb Drive (SR 280) at Emory Adventist Driveway #2 (unsignalized)	Westbound	D (28.6)	F (70.5)	F (58.0)	F (2373.4)	F (276.7)	F (5376.6)
	Southbound Lefts	A (9.9)	C (20.1)	B (11.6)	D (26.9)	B (13.5)	D (32.4)
5. South Cobb Drive (SR 280) at Ridge Road SE/Vinings First Baptist Church Driveway (signalized)	Overall	B (12.4)	D (36.7)	C (26.1)	E (56.0)	D (36.3)	E (67.2)
6. South Cobb Drive (SR 280) at Cooper Lake Road SE (signalized)	Overall	D (35.4)	D (40.9)	D (41.8)	D (47.8)	D (43.6)	D (51.3)

**Analysis was executed in HCM 2000 for intersection #3*

^It is not uncommon for side-street approaches on two-way-stop-controlled intersections to experience long delays

As shown in **Table 4**, intersection #3 westbound and southbound left approaches operate at LOS E/F during the 2025 PM No-Build and 2025 PM Build scenarios. Intersection #4 westbound approach operates at LOS F during the 2018 PM Existing, 2025 AM and PM No-Build, and 2025 AM and PM Build scenarios. It should be noted that it is not uncommon for side-street approaches of two-way-stop-controlled intersections to have a high delay and failing LOS. Intersection #2 operates at a failing LOS under the Phase 2 2025 AM No-Build and AM Build scenarios. Intersection #5 operates at LOS E under the Phase 2 2025 PM No-Build and PM Build conditions. All other signalized intersections operate at an acceptable LOS.

7.0 CONCLUSION

This report presents the analysis of the anticipated traffic impacts associated with the proposed *Emory Adventist Hospital* development, which is expected to be completed in three (3) phases: Phase 1, renovating an existing hospital with 57 beds plus renovating 38,000 SF of existing medical office building to be fully operational and adding 120,000 SF of new medical office building completed in 2020; Phase 2, a hospital with 150 beds and an additional 60,000 SF of new medical office building to be fully operational in 2025. This study evaluates the impact of developing approximately a net of 207 hospital beds and 218,000 SF in medical office building.

The site is located approximately 0.2 miles south of King Springs Road SE at South Cobb Drive (SR 280) in the City of Smyrna, Georgia.

This report summarizes the analyses of the following five (5) scenarios:

1. Existing 2018 Traffic Conditions
2. Projected 2020 No-Build Traffic Conditions (Existing 2018 Traffic Conditions, plus background traffic growth).
3. Projected 2020 Build Traffic Conditions (Projected 2020 No-Build Traffic Conditions, plus traffic associated with the proposed *Emory Adventist Hospital Phase 1* development).
4. Projected 2025 No-Build Traffic Conditions (Existing 2018 Traffic Conditions, plus background traffic growth, plus Phase 1 project trips).
5. Projected 2025 Build Traffic Conditions (Projected 2025 No-Build Traffic Conditions, plus traffic associated with the proposed *Emory Adventist Hospital Phase 2* development).

Based on the results of this traffic impact study, intersection #2, intersection #3, and intersection #4 operate at a failing LOS under the projected 2018, 2020, and 2025 No-Build and Build traffic conditions. Intersection #5 operates at a failing LOS under the projected 2025 and 2025 PM No-Build and Build traffic conditions. All other intersections operate at an acceptable LOS under all projected conditions.

Kimley-Horn and Associates, Inc. recommends system improvements and site improvements based on the results of this study. System improvements, or “No-Build” recommendations, are needed to serve the background road network traffic, without taking into account traffic associated with the *Emory Adventist Hospital* development. Site improvements, or “Build” recommendations, are also needed to serve the background road network traffic plus the *Emory Adventist Hospital* development traffic.

7.1 SYSTEM IMPROVEMENT RECOMMENDATIONS

Based on the results of this study, Kimley-Horn and Associates, Inc. offers the following needed improvements based on the Projected 2020 and Projected 2025 No-Build Conditions (note: this represents

the conditions associated with existing traffic plus background traffic growth but does NOT include the traffic associated with *Emory Adventist Hospital* development).

PHASE 1: 2020

Intersection #2: South Cobb Drive (SR 280) at King Springs Road SE

- Construct one (1) southbound right-turn lane along South Cobb Drive (SR 280).

PHASE 2: 2025

In addition to the Phase 1 recommendations, the following is recommended for Phase 2:

Intersection #2: South Cobb Drive (SR 280) at King Springs Road SE

- Construct one (1) additional eastbound right-turn lane along King Springs Road.

Intersection #5: South Cobb Drive (SR 280) at Ridge Road SE/Vinings First Baptist Church Driveway

- Optimize signal timing at intersection #5.

Table 5: System Improvement Level-of-Service Summary
LOS (Delay, in seconds)

Intersection	Approach / Movement	Projected 2020 Improved		Projected 2025 Improved	
		AM Peak	PM Peak	AM Peak	PM Peak
2. South Cobb Drive (SR 280) at King Springs Road SE (signalized)	Overall	D (44.0)	D (33.4)	E (65.2)	D (41.6)
5. South Cobb Drive (SR 280) at Ridge Road SE/Vinings First Baptist Church Driveway (signalized)	Overall	-	-	C (30.0)	D (44.4)

7.2 SITE-ACCESS IMPROVEMENT RECOMMENDATIONS

Based on the results of this study, Kimley-Horn and Associates, Inc. recommends the following site-access improvements to serve the Projected 2020 Build traffic conditions (note: this would be the improvements needed to serve the traffic associated with the *Emory Adventist Hospital* development).

PHASE 1: 2020

Intersection #3: South Cobb Drive (SR 280) at Emory Adventist Driveway #1

- On site, construct one (1) additional egress lane on Driveway # 1, dedicate one lane as right-turn only and one lane as left turn only.

Intersection #4: South Cobb Drive (SR 280) at Emory Adventist Driveway #2

- On site, construct one (1) additional egress lane on Driveway # 1, dedicate one lane as right-turn only and one lane as left turn only.

Table 6: Site Access Improved Level-of-Service Summary *LOS (Delay, in seconds)*					
Intersection	**Approach / Movement**	**Projected 2020 Improved**		**Projected 2025 Improved**	
		AM Peak	**PM Peak**	**AM Peak**	**PM Peak**
3. South Cobb Drive (SR 280) at Emory Adventist Driveway #2 (unsignalized)*	Westbound	B (13.8)	F (57.7)	C (15.0)	F (804.5^)
	Southbound Lefts	B (12.2)	C (16.8)	C (17.5)	F (123.5)
4. South Cobb Drive (SR 280) at Emory Adventist Driveway #2 (unsignalized)	Westbound	E (48.3)	F (1296.8)	F (227.4)	F (4162.9)
	Southbound Lefts	B (11.3)	C (23.1)	B (13.5)	D (32.4)

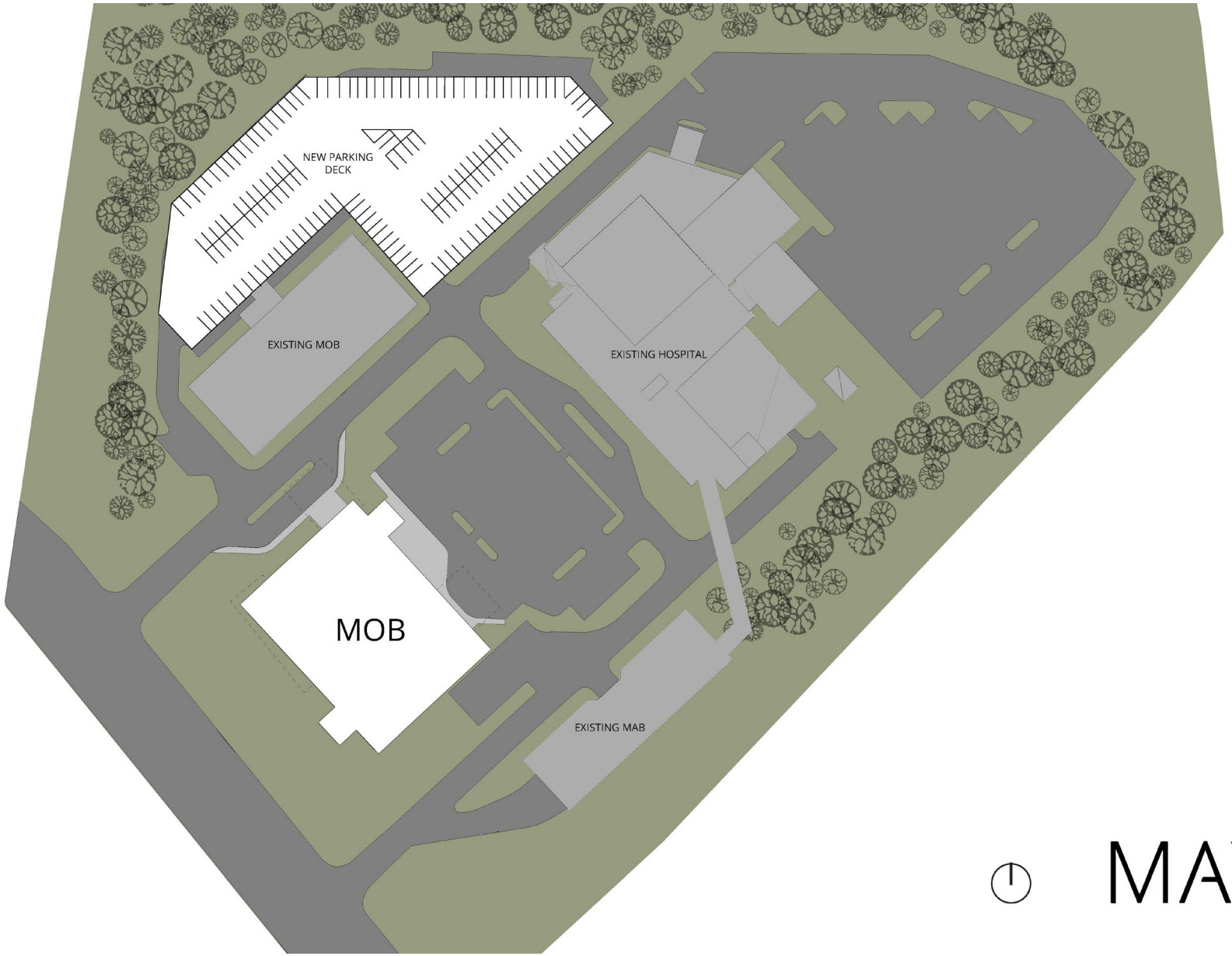
**Analysis performed in HCM 2000*

Shown in **Table 6** intersection #3 and intersection #4 (both site driveways) are projected to operate at a failing level-of-service in both phases. Conditions and traffic volumes at these intersections should be monitored as the development is completed to determine if a traffic signal is warranted, according to Georgia Department of Transportation. Intersection #4 is recommended to be warranted for a traffic signal instead of intersection #3 to alleviate the delay at intersection #3, which would remain side-street stop controlled.

APPENDIX A

Site Plan

PROPOSED MOB MASTER PLAN – UPDATED PHASE I



MAY

PROPOSED MOB MASTER PLAN – UPDATED PHASE II

MAY

APPENDIX B

Intersection Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

Intersection #1: S Cobb Drive (SR 280) @ Wisteria Lane SE / McCauley Road
AM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			Wisteria Lane SE			McCauley Road		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	7	939	50	19	1,738	16	41	30	70	42	4	12
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	12	0	0	13	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.93			0.93			0.93			0.93	
Adjustment												
Adjusted 2018 Volumes	7	939	50	19	1738	16	41	30	70	42	4	12
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	7	958	51	19	1,773	16	42	31	71	43	4	12
Phase 1 Project Trips												
Trip Distribution IN					30%				3%	2%		
Trip Distribution OUT	3%	30%	2%									
Office Trips	2	22	1	0	79	0	0	0	8	5	0	0
Trip Distribution IN					30%				3%	2%		
Trip Distribution OUT	3%	30%	2%									
Hospital Trips	1	12	1	0	30	0	0	0	3	2	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	3	34	2	0	109	0	0	0	11	7	0	0
2020 Buildout Total	10	992	53	19	1,882	16	42	31	82	50	4	12
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	11	1,041	56	20	1,972	17	44	32	86	52	4	13
Phase 2 Project Trips												
Trip Distribution IN					30%				3%	2%		
Trip Distribution OUT	3%	30%	2%									
Hospital Trips	3	26	2	0	65	0	0	0	7	4	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	4	35	3	0	98	0	0	0	10	6	0	0
2025 Buildout Total	15	1,076	59	20	2,070	17	44	32	96	58	4	13

INTERSECTION VOLUME DEVELOPMENT

Intersection #1: S Cobb Drive (SR 280) @ Wisteria Lane SE / McCauley Road

PM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			Wisteria Lane SE			McCauley Road		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	42	1,696	43	12	1,052	17	10	9	33	54	22	27
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	10	0	0	9	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment												
Adjusted 2018 Volumes	42	1696	43	12	1052	17	10	9	33	54	22	27
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	43	1,730	44	12	1,073	17	10	9	34	55	22	28
Phase 1 Project Trips												
Trip Distribution IN					30%				3%	2%		
Trip Distribution OUT	3%	30%	2%									
Office Trips	12	116	8	0	45	0	0	0	5	3	0	0
Trip Distribution IN					30%				3%	2%		
Trip Distribution OUT	3%	30%	2%									
Hospital Trips	5	48	3	0	19	0	0	0	2	1	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	17	164	11	0	64	0	0	0	7	4	0	0
2020 Buildout Total	60	1,894	55	12	1,137	17	10	9	41	59	22	28
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	62	1,982	57	13	1,192	18	11	10	42	62	24	29
Phase 2 Project Trips												
Trip Distribution IN					30%				3%	2%		
Trip Distribution OUT	3%	30%	2%									
Hospital Trips	9	90	6	0	35	0	0	0	3	2	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	13	134	9	0	52	0	0	0	5	3	0	0
2025 Buildout Total	75	2,116	66	13	1,244	18	11	10	47	65	24	29

INTERSECTION VOLUME DEVELOPMENT

Intersection #2: S Cobb Drive (SR 280) @ King Springs Road SE
AM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			King Springs Road SE			King Springs Road SE		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	69	714	93	30	1,639	199	222	147	383	179	95	33
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	13	0	0	13	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.93			0.93			0.93			0.93	
Adjustment												
Adjusted 2018 Volumes	69	714	93	30	1639	199	222	147	383	179	95	33
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	70	728	95	31	1,672	203	226	150	391	183	97	34
Phase 1 Project Trips												
Trip Distribution IN					35%				10%	5%		
Trip Distribution OUT	10%	35%	5%									
Office Trips	7	26	4	0	92	0	0	0	26	13	0	0
Trip Distribution IN					35%				10%	5%		
Trip Distribution OUT	10%	35%	5%									
Hospital Trips	4	14	2	0	35	0	0	0	10	5	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	11	40	6	0	127	0	0	0	36	18	0	0
2020 Buildout Total	81	768	101	31	1,799	203	226	150	427	201	97	34
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	85	806	106	32	1,884	213	238	158	447	210	102	35
Phase 2 Project Trips												
Trip Distribution IN					35%				10%	5%		
Trip Distribution OUT	10%	35%	5%									
Hospital Trips	9	30	4	0	76	0	0	0	22	11	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	12	41	6	0	115	0	0	0	33	17	0	0
2025 Buildout Total	97	847	112	32	1,999	213	238	158	480	227	102	35

INTERSECTION VOLUME DEVELOPMENT

Intersection #2: S Cobb Drive (SR 280) @ King Springs Road SE

PM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			King Springs Road SE			King Springs Road SE		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	207	1,620	291	25	976	160	166	134	78	212	162	32
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	7	0	0	8	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment												
Adjusted 2018 Volumes	207	1620	291	25	976	160	166	134	78	212	162	32
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	211	1,653	297	26	996	163	169	137	80	216	165	33
Phase 1 Project Trips												
Trip Distribution IN					35%				10%	5%		
Trip Distribution OUT	10%	35%	5%									
Office Trips	39	135	19	0	53	0	0	0	15	8	0	0
Trip Distribution IN					35%				10%	5%		
Trip Distribution OUT	10%	35%	5%									
Hospital Trips	16	56	8	0	22	0	0	0	6	3	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	55	191	27	0	75	0	0	0	21	11	0	0
2020 Buildout Total	266	1,844	324	26	1,071	163	169	137	101	227	165	33
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	277	1,928	339	27	1,121	172	178	144	105	238	174	34
Phase 2 Project Trips												
Trip Distribution IN					35%				10%	5%		
Trip Distribution OUT	10%	35%	5%									
Hospital Trips	30	105	15	0	41	0	0	0	12	6	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	45	157	22	0	61	0	0	0	18	9	0	0
2025 Buildout Total	322	2,085	361	27	1,182	172	178	144	123	247	174	34

INTERSECTION VOLUME DEVELOPMENT

Intersection #3: S Cobb Drive (SR 280) @ Emory Adventist Driveway #1
AM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)						Emory Adventist Driveway #1		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	0	883	20	34	2,164	0	0	0	0	2	0	7
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	12	0	0	13	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	2%	2%	2%	0%	0%	0%	0%	2%	0%	2%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment												
Adjusted 2018 Volumes	0	883	20	34	2164	0	0	0	0	2	0	7
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	0	901	20	35	2,207	0	0	0	0	2	0	7
Phase 1 Project Trips												
Trip Distribution IN			10%	40%	10%							
Trip Distribution OUT		10%								10%		40%
Office Trips	0	7	26	105	26	0	0	0	0	7	0	30
Trip Distribution IN			10%	40%	10%							
Trip Distribution OUT		10%								10%		40%
Hospital Trips	0	4	10	40	10	0	0	0	0	4	0	16
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	11	36	145	36	0	0	0	0	11	0	46
2020 Buildout Total	0	912	56	180	2,243	0	0	0	0	13	0	53
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	0	958	57	181	2,356	0	0	0	0	13	0	54
Phase 2 Project Trips												
Trip Distribution IN			10%	40%	10%							
Trip Distribution OUT		10%								10%		40%
Hospital Trips	0	9	22	87	22	0	0	0	0	9	0	34
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	12	33	131	33	0	0	0	0	12	0	46
2025 Buildout Total	0	970	90	312	2,389	0	0	0	0	25	0	100

INTERSECTION VOLUME DEVELOPMENT

Intersection #3: S Cobb Drive (SR 280) @ Emory Adventist Driveway #1

PM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			0			Emory Adventist Driveway #1		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	0	2,099	5	7	1,255	0	0	0	0	6	0	10
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	7	0	0	8	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	2%	2%	2%	0%	0%	0%	0%	2%	0%	2%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment												
Adjusted 2018 Volumes	0	2099	5	7	1255	0	0	0	0	6	0	10
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	-	2,141	5	7	1,280	-	-	-	-	6	-	10
Phase 1 Project Trips												
Trip Distribution IN			10%	40%	10%							
Trip Distribution OUT		10%								10%		40%
Office Trips	0	39	15	60	15	0	0	0	0	39	0	155
Trip Distribution IN			10%	40%	10%							
Trip Distribution OUT		10%								10%		40%
Hospital Trips	0	16	6	25	6	0	0	0	0	16	0	64
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	55	21	85	21	0	0	0	0	55	0	219
2020 Buildout Total	0	2,196	26	92	1,301	0	0	0	0	61	0	229
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	0	2,305	26	93	1,367	0	0	0	0	61	0	230
Phase 2 Project Trips												
Trip Distribution IN			10%	40%	10%							
Trip Distribution OUT		10%								10%		40%
Hospital Trips	0	30	12	46	12	0	0	0	0	30	0	120
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	45	18	69	18	0	0	0	0	45	0	179
2025 Buildout Total	0	2,350	44	162	1,385	0	0	0	0	106	0	409

INTERSECTION VOLUME DEVELOPMENT

Intersection #4: S Cobb Drive (SR 280) @ Emory Adventist Driveway #2
AM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)						Emory Adventist Driveway #2		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	0	856	6	1	2,170	0	0	0	0	2	0	0
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	14	0	0	12	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	2%	2%	2%	0%	0%	0%	0%	2%	0%	0%
Peak Hour Factor		0.93			0.93			0.93			0.93	
Adjustment												
Adjusted 2018 Volumes	0	856	6	1	2170	0	0	0	0	2	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	0	873	6	1	2,214	0	0	0	0	2	0	0
Phase 1 Project Trips												
Trip Distribution IN		10%	40%	10%								
Trip Distribution OUT					10%					40%		10%
Office Trips	0	26	105	26	7	0	0	0	0	30	0	7
Trip Distribution IN		10%	40%	10%								
Trip Distribution OUT					10%					40%		10%
Hospital Trips	0	10	40	10	4	0	0	0	0	16	0	4
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	36	145	36	11	0	0	0	0	46	0	11
2020 Buildout Total	0	909	151	37	2,225	0	0	0	0	48	0	11
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	0	954	151	37	2,338	0	0	0	0	48	0	11
Phase 2 Project Trips												
Trip Distribution IN		10%	40%	10%								
Trip Distribution OUT					10%					40%		10%
Hospital Trips	0	22	87	22	9	0	0	0	0	34	0	9
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	33	131	33	12	0	0	0	0	46	0	12
2025 Buildout Total	0	987	282	70	2,350	0	0	0	0	94	0	23

INTERSECTION VOLUME DEVELOPMENT

Intersection #4: S Cobb Drive (SR 280) @ Emory Adventist Driveway #2

PM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			0			Emory Adventist Driveway #2		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	0	2,114	3	2	1,250	0	0	0	0	10	0	2
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	7	0	0	8	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	2%	2%	2%	0%	0%	0%	0%	2%	0%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment												
Adjusted 2018 Volumes	0	2114	3	2	1250	0	0	0	0	10	0	2
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	-	2,156	3	2	1,275	-	-	-	-	10	-	2
Phase 1 Project Trips												
Trip Distribution IN		10%	40%	10%								
Trip Distribution OUT					10%					40%		10%
Office Trips	0	15	60	15	39	0	0	0	0	155	0	39
Trip Distribution IN		10%	40%	10%								
Trip Distribution OUT					10%					40%		10%
Hospital Trips	0	6	25	6	16	0	0	0	0	64	0	16
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	21	85	21	55	0	0	0	0	219	0	55
2020 Buildout Total	0	2,177	88	23	1,330	0	0	0	0	229	0	57
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	0	2,287	88	23	1,395	0	0	0	0	230	0	57
Phase 2 Project Trips												
Trip Distribution IN		10%	40%	10%								
Trip Distribution OUT					10%					40%		10%
Hospital Trips	0	12	46	12	30	0	0	0	0	120	0	30
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	18	69	18	45	0	0	0	0	179	0	45
2025 Buildout Total	0	2,305	157	41	1,440	0	0	0	0	409	0	102

INTERSECTION VOLUME DEVELOPMENT

Intersection #5: S Cobb Drive (SR 280) @ Ridge Road SE / Vinings First Baptist Church
AM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			Vinings First Baptist Church			Ridge Road SE		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	4	779	73	515	1,626	0	2	0	0	79	0	144
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	12	0	0	13	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	0%	2%	0%	0%	2%	0%	2%
Peak Hour Factor		0.93			0.93			0.93			0.93	
Adjustment												
Adjusted 2018 Volumes	4	779	73	515	1626	0	2	0	0	79	0	144
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	4	795	74	525	1,659	0	2	0	0	81	0	147
Phase 1 Project Trips												
Trip Distribution IN		35%										10%
Trip Distribution OUT				15%	35%							
Office Trips	0	92	0	11	26	0	0	0	0	0	0	26
Trip Distribution IN		35%										10%
Trip Distribution OUT				15%	35%							
Hospital Trips	0	35	0	6	14	0	0	0	0	0	0	10
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	127	0	17	40	0	0	0	0	0	0	36
2020 Buildout Total	4	922	74	542	1,699	0	2	0	0	81	0	183
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	4	962	78	569	1,783	0	2	0	0	85	0	190
Phase 2 Project Trips												
Trip Distribution IN		35%										10%
Trip Distribution OUT				15%	35%							
Hospital Trips	0	76	0	13	30	0	0	0	0	0	0	22
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	115	0	18	41	0	0	0	0	0	0	33
2025 Buildout Total	4	1,077	78	587	1,824	0	2	0	0	85	0	223

INTERSECTION VOLUME DEVELOPMENT

Intersection #5: S Cobb Drive (SR 280) @ Ridge Road SE / Vinings First Baptist Church

PM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			Vinings First Baptist Church			Ridge Road SE		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	0	1,667	79	105	1,191	1	1	0	0	114	0	455
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	9	0	0	8	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	2%	2%	2%	2%	2%	0%	0%	2%	0%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment												
Adjusted 2018 Volumes	0	1667	79	105	1191	1	1	0	0	114	0	455
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	-	1,701	81	107	1,215	1	1	-	-	116	-	464
Phase 1 Project Trips												
Trip Distribution IN		35%										10%
Trip Distribution OUT				15%	35%							
Office Trips	0	53	0	58	135	0	0	0	0	0	0	15
Trip Distribution IN		35%										10%
Trip Distribution OUT				15%	35%							
Hospital Trips	0	22	0	24	56	0	0	0	0	0	0	6
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	75	0	82	191	0	0	0	0	0	0	21
2020 Buildout Total	0	1,776	81	189	1,406	1	1	0	0	116	0	485
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	0	1,862	85	195	1,468	1	1	0	0	122	0	509
Phase 2 Project Trips												
Trip Distribution IN		35%										10%
Trip Distribution OUT				15%	35%							
Hospital Trips	0	41	0	45	105	0	0	0	0	0	0	12
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	61	0	67	157	0	0	0	0	0	0	18
2025 Buildout Total	0	1,923	85	262	1,625	1	1	0	0	122	0	527

INTERSECTION VOLUME DEVELOPMENT

Intersection #6: S Cobb Drive (SR 280) @ Cooper Lake Road SE
AM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			Cooper Lake Road SE			Cooper Lake Road SE		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	155	727	175	200	1,458	70	55	224	258	63	104	66
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	13	0	0	12	1	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment												
Adjusted 2018 Volumes	155	727	175	200	1458	70	55	224	258	63	104	66
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	158	742	179	204	1,487	71	56	229	263	64	106	67
Phase 1 Project Trips												
Trip Distribution IN		30%										5%
Trip Distribution OUT				5%	30%							
Office Trips	0	79	0	4	22	0	0	0	0	0	0	13
Trip Distribution IN		30%										5%
Trip Distribution OUT				5%	30%							
Hospital Trips	0	30	0	2	12	0	0	0	0	0	0	5
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	109	0	6	34	0	0	0	0	0	0	18
2020 Buildout Total	158	851	179	210	1,521	71	56	229	263	64	106	85
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	166	888	188	220	1,597	75	59	240	277	68	112	89
Phase 2 Project Trips												
Trip Distribution IN		30%										5%
Trip Distribution OUT				5%	30%							
Hospital Trips	0	65	0	4	26	0	0	0	0	0	0	11
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	98	0	6	35	0	0	0	0	0	0	17
2025 Buildout Total	166	986	188	226	1,632	75	59	240	277	68	112	106

INTERSECTION VOLUME DEVELOPMENT

Intersection #6: S Cobb Drive (SR 280) @ Cooper Lake Road SE

PM PEAK HOUR

	S Cobb Drive (SR 280)			S Cobb Drive (SR 280)			Cooper Lake Road SE			Cooper Lake Road SE		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2018 Traffic Volumes	201	1,377	82	48	1,173	101	68	52	171	192	304	248
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	1	6	1	0	8	0	0	0	0	2	0	0
Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.96			0.96			0.96			0.96	
Adjustment												
Adjusted 2018 Volumes	201	1377	82	48	1173	101	68	52	171	192	304	248
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
2020 Background Traffic	205	1,405	84	49	1,197	103	69	53	174	196	310	253
Phase 1 Project Trips												
Trip Distribution IN		30%										5%
Trip Distribution OUT				5%	30%							
Office Trips	0	45	0	19	116	0	0	0	0	0	0	8
Trip Distribution IN		30%										5%
Trip Distribution OUT				5%	30%							
Hospital Trips	0	19	0	8	48	0	0	0	0	0	0	3
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 1 Project Trips	0	64	0	27	164	0	0	0	0	0	0	11
2020 Buildout Total	205	1,469	84	76	1,361	103	69	53	174	196	310	264
Growth Factor	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072	1.072
2025 Background Traffic	215	1,540	88	78	1,422	108	73	56	183	206	326	277
Phase 2 Project Trips												
Trip Distribution IN		30%										5%
Trip Distribution OUT				5%	30%							
Hospital Trips	0	35	0	15	90	0	0	0	0	0	0	6
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Phase 2 Project Trips	0	52	0	22	134	0	0	0	0	0	0	9
2025 Buildout Total	215	1,592	88	100	1,556	108	73	56	183	206	326	286

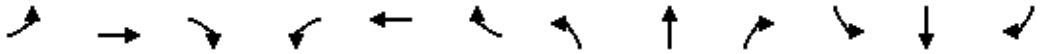
Trip Generation Analysis (10th Ed. with *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Emory Adventist Hospital
City of Smyrna, Georgia

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Phase 1 Proposed Site Traffic								
610 Hospital	57 beds	3,798	138	99	39	223	62	161
720 Medical-Dental Office Building	158,000 s.f.	5,982	336	262	74	538	151	387
Phase 2 Proposed Site Traffic								
610 Hospital	150 beds	4,942	302	217	85	416	116	300
720 Medical-Dental Office Building	60,000 s.f.	2,218	142	111	31	205	57	148
Gross Trips		**16,940**	**918**	**689**	**229**	**1,382**	**386**	**996**
Office Trips		13,142	780	590	190	1,159	324	835
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Office Trips		13,142	780	590	190	1,159	324	835
Medical Trips		3,798	138	99	39	223	62	161
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Other Non-Residential Trips		3,798	138	99	39	223	62	161
Mixed-Use Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		**16,940**	**918**	**689**	**229**	**1,382**	**386**	**996**
Driveway Volumes		**16,940**	**918**	**689**	**229**	**1,382**	**386**	**996**

\\kimley-horn.com\se_atl\amt_structures\000_parking\013160002_emory adventist deck\parking and traffic\tia\analysis\[2019-02-07_emory adventist analysis sheet.xls]trip generation

APPENDIX C

Synchro Analysis Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	30	70	42	4	12	7	939	50	19	1738	16
Future Volume (veh/h)	41	30	70	42	4	12	7	939	50	19	1738	16
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	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	44	32	75	45	4	13	8	1010	54	20	1869	17
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	49	84	136	10	233	173	2672	143	407	2810	26
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	248	332	573	647	71	1583	240	3417	183	528	3594	33
Grp Volume(v), veh/h	151	0	0	49	0	13	8	523	541	20	919	967
Grp Sat Flow(s),veh/h/ln	1153	0	0	718	0	1583	240	1770	1831	528	1770	1857
Q Serve(g_s), s	11.3	0.0	0.0	0.0	0.0	1.2	2.7	15.5	15.6	2.1	40.0	40.3
Cycle Q Clear(g_c), s	22.8	0.0	0.0	11.5	0.0	1.2	42.9	15.5	15.6	17.6	40.0	40.3
Prop In Lane	0.29		0.50	0.92		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	197	0	0	146	0	233	173	1384	1431	407	1384	1452
V/C Ratio(X)	0.77	0.00	0.00	0.33	0.00	0.06	0.05	0.38	0.38	0.05	0.66	0.67
Avail Cap(c_a), veh/h	234	0	0	177	0	270	173	1384	1431	407	1384	1452
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	1.00	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.8	0.0	0.0	66.5	0.0	62.3	18.2	5.7	5.7	8.5	8.4	8.4
Incr Delay (d2), s/veh	11.9	0.0	0.0	1.3	0.0	0.1	0.5	0.7	0.7	0.2	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	0.0	0.0	2.2	0.0	0.5	0.2	7.8	8.1	0.3	20.4	21.4
LnGrp Delay(d),s/veh	84.7	0.0	0.0	67.9	0.0	62.4	18.7	6.4	6.4	8.7	10.9	10.9
LnGrp LOS	F			E		E	B	A	A	A	B	B
Approach Vol, veh/h		151			62			1072			1906	
Approach Delay, s/veh		84.7			66.7			6.5			10.9	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		138.9		31.1		138.9		31.1
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		129.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s		44.9		24.8		42.3		13.5
Green Ext Time (p_c), s		8.2		0.3		26.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	14.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	147	383	179	95	33	69	714	93	30	1639	199
Future Volume (veh/h)	222	147	383	179	95	33	69	714	93	30	1639	199
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	239	158	279	192	102	0	74	768	60	32	1762	209
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	175	149	245	170	145	126	2240	1001	433	2004	233
Arrive On Green	0.11	0.09	0.09	0.11	0.09	0.00	0.03	0.63	0.63	0.02	0.63	0.63
Sat Flow, veh/h	1774	1863	1578	1774	1863	1583	1774	3539	1582	1774	3195	372
Grp Volume(v), veh/h	239	158	279	192	102	0	74	768	60	32	960	1011
Grp Sat Flow(s),veh/h/ln	1774	1863	1578	1774	1863	1583	1774	1770	1582	1774	1770	1797
Q Serve(g_s), s	19.0	14.3	16.0	16.5	8.9	0.0	2.5	17.3	2.5	1.1	75.2	81.5
Cycle Q Clear(g_c), s	19.0	14.3	16.0	16.5	8.9	0.0	2.5	17.3	2.5	1.1	75.2	81.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	290	175	149	245	170	145	126	2240	1001	433	1110	1127
V/C Ratio(X)	0.82	0.90	1.88	0.78	0.60	0.00	0.59	0.34	0.06	0.07	0.87	0.90
Avail Cap(c_a), veh/h	290	175	149	250	175	149	200	2240	1001	518	1110	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	63.6	76.2	77.0	61.6	74.3	0.0	38.4	14.6	11.9	11.4	25.8	27.0
Incr Delay (d2), s/veh	17.2	41.1	419.6	14.6	5.3	0.0	4.3	0.4	0.1	0.1	6.6	8.3
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	11.5	9.4	24.3	9.0	4.9	0.0	2.3	8.6	1.1	0.5	38.6	42.8
LnGrp Delay(d),s/veh	80.8	117.3	496.6	76.2	79.6	0.0	42.8	15.1	12.0	11.5	32.5	35.3
LnGrp LOS	F	F	F	E	E		D	B	B	B	C	D
Approach Vol, veh/h		676			294			902			2003	
Approach Delay, s/veh		260.9			77.4			17.1			33.6	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	113.6	24.5	22.0	10.8	112.6	25.0	21.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	13.0	99.0	19.0	16.0	12.0	99.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	3.1	19.3	18.5	18.0	4.5	83.5	21.0	10.9
Green Ext Time (p_c), s	0.0	5.9	0.0	0.0	0.1	11.6	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	72.7
HCM 2010 LOS	E

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	7	883	20	34	2164
Future Volume (Veh/h)	2	7	883	20	34	2164
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	2	7	939	21	36	2302
Pedestrians	1		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	0		0			0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.47					
vC, conflicting volume	2164	472			961	
vC1, stage 1 conf vol	940					
vC2, stage 2 conf vol	1224					
vCu, unblocked vol	1218	472			961	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			95	
cM capacity (veh/h)	275	538			711	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	9	470	470	21	36	1151	1151
Volume Left	2	0	0	0	36	0	0
Volume Right	7	0	0	21	0	0	0
cSH	444	1700	1700	1700	711	1700	1700
Volume to Capacity	0.02	0.28	0.28	0.01	0.05	0.68	0.68
Queue Length 95th (ft)	2	0	0	0	4	0	0
Control Delay (s)	13.3	0.0	0.0	0.0	10.3	0.0	0.0
Lane LOS	B				B		
Approach Delay (s)	13.3	0.0			0.2		
Approach LOS	B						

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

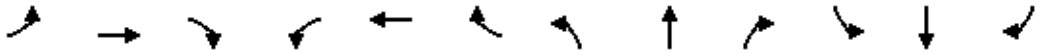
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	856	6	1	2170
Future Vol, veh/h	2	0	856	6	1	2170
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	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	2	2	2	2
Mvmt Flow	2	0	920	6	1	2333

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2089	460	0	0	926	0
Stage 1	920	-	-	-	-	-
Stage 2	1169	-	-	-	-	-
Critical Hdwy	6.84	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	45	554	-	-	734	-
Stage 1	349	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	45	554	-	-	734	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	349	-	-	-	-	-
Stage 2	258	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	155	734	-
HCM Lane V/C Ratio	-	-	0.014	0.001	-
HCM Control Delay (s)	-	-	28.6	9.9	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	79	0	144	4	779	73	515	1626	0
Future Volume (veh/h)	2	0	0	79	0	144	4	779	73	515	1626	0
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	2	0	0	85	0	32	4	838	52	554	1748	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	61	140	0	146	0	116	239	2465	153	604	3029	1382
Arrive On Green	0.07	0.00	0.00	0.07	0.00	0.07	0.73	0.73	0.73	0.09	0.86	0.00
Sat Flow, veh/h	1372	1900	0	1406	0	1583	274	3385	210	1774	3539	1615
Grp Volume(v), veh/h	2	0	0	85	0	32	4	438	452	554	1748	0
Grp Sat Flow(s),veh/h/ln	1372	1900	0	1406	0	1583	274	1770	1826	1774	1770	1615
Q Serve(g_s), s	0.2	0.0	0.0	10.1	0.0	3.2	0.7	15.2	15.2	12.9	23.9	0.0
Cycle Q Clear(g_c), s	10.4	0.0	0.0	10.1	0.0	3.2	2.9	15.2	15.2	12.9	23.9	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	61	140	0	146	0	116	239	1289	1329	604	3029	1382
V/C Ratio(X)	0.03	0.00	0.00	0.58	0.00	0.28	0.02	0.34	0.34	0.92	0.58	0.00
Avail Cap(c_a), veh/h	195	324	0	282	0	270	239	1289	1329	638	3029	1382
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	82.8	0.0	0.0	77.7	0.0	74.5	7.0	8.3	8.3	11.1	3.5	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	3.7	0.0	1.3	0.1	0.7	0.7	17.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	4.1	0.0	1.5	0.1	7.7	7.9	22.2	11.8	0.0
LnGrp Delay(d),s/veh	83.0	0.0	0.0	81.3	0.0	75.7	7.1	9.1	9.0	28.8	4.3	0.0
LnGrp LOS	F			F		E	A	A	A	C	A	
Approach Vol, veh/h		2			117			894			2302	
Approach Delay, s/veh		83.0			79.8			9.0			10.2	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	21.7	129.8		18.5		151.5		18.5
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	19.0	104.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	14.9	17.2		12.4		25.9		12.1
Green Ext Time (p_c), s	0.8	6.1		0.0		23.8		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	224	258	63	104	66	155	727	175	200	1458	70
Future Volume (veh/h)	55	224	258	63	104	66	155	727	175	200	1458	70
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	59	238	274	67	111	70	165	773	186	213	1551	74
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	360	306	180	373	317	211	1984	887	413	2025	906
Arrive On Green	0.04	0.19	0.19	0.04	0.20	0.20	0.05	0.56	0.56	0.06	0.57	0.57
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	59	238	274	67	111	70	165	773	186	213	1551	74
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	4.5	20.1	28.7	5.1	8.6	6.3	6.7	20.9	9.9	8.7	56.8	3.6
Cycle Q Clear(g_c), s	4.5	20.1	28.7	5.1	8.6	6.3	6.7	20.9	9.9	8.7	56.8	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	360	306	180	373	317	211	1984	887	413	2025	906
V/C Ratio(X)	0.21	0.66	0.90	0.37	0.30	0.22	0.78	0.39	0.21	0.52	0.77	0.08
Avail Cap(c_a), veh/h	321	537	456	203	537	456	366	1984	887	496	2025	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	63.4	66.9	53.2	57.8	56.9	31.6	21.0	18.6	15.6	27.7	16.3
Incr Delay (d2), s/veh	0.4	2.1	14.4	1.3	0.4	0.3	6.3	0.6	0.5	1.0	2.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	10.6	13.8	2.6	4.5	2.8	4.7	10.4	4.5	4.3	28.4	1.6
LnGrp Delay(d),s/veh	52.8	65.5	81.3	54.5	58.2	57.2	37.9	21.6	19.1	16.6	30.5	16.5
LnGrp LOS	D	E	F	D	E	E	D	C	B	B	C	B
Approach Vol, veh/h		571			248			1124			1838	
Approach Delay, s/veh		71.8			56.9			23.6			28.4	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	101.3	12.8	38.8	15.1	103.3	11.6	40.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	11.0	69.0	9.0	49.0	24.0	64.0	9.5	49.0
Max Q Clear Time (g_c+I1), s	10.7	22.9	7.1	30.7	8.7	58.8	6.5	10.6
Green Ext Time (p_c), s	0.3	6.4	0.0	2.1	0.3	4.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	9	33	54	22	27	42	1696	43	12	1052	17
Future Volume (veh/h)	10	9	33	54	22	27	42	1696	43	12	1052	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	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	9	34	56	23	28	43	1748	44	12	1085	18
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	30	62	99	35	186	414	2866	72	207	2894	48
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	36	259	528	534	296	1583	509	3528	89	263	3563	59
Grp Volume(v), veh/h	53	0	0	79	0	28	43	874	918	12	539	564
Grp Sat Flow(s),veh/h/ln	824	0	0	830	0	1583	509	1770	1847	263	1770	1852
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	2.7	4.2	31.2	31.5	3.0	14.0	14.0
Cycle Q Clear(g_c), s	17.8	0.0	0.0	17.5	0.0	2.7	18.2	31.2	31.5	34.6	14.0	14.0
Prop In Lane	0.19		0.64	0.71		1.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	122	0	0	133	0	186	414	1437	1500	207	1437	1505
V/C Ratio(X)	0.44	0.00	0.00	0.59	0.00	0.15	0.10	0.61	0.61	0.06	0.37	0.37
Avail Cap(c_a), veh/h	159	0	0	169	0	224	414	1437	1500	207	1437	1505
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	1.00	0.62	0.62	0.62	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.7	0.0	0.0	73.4	0.0	67.4	6.8	5.9	6.0	12.4	4.3	4.3
Incr Delay (d2), s/veh	2.4	0.0	0.0	4.1	0.0	0.4	0.3	1.2	1.2	0.5	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	3.8	0.0	1.2	0.6	15.5	16.3	0.3	7.0	7.4
LnGrp Delay(d),s/veh	71.2	0.0	0.0	77.5	0.0	67.8	7.1	7.1	7.1	13.0	5.1	5.0
LnGrp LOS	E			E		E	A	A	A	B	A	A
Approach Vol, veh/h		53			107			1835			1115	
Approach Delay, s/veh		71.2			75.0			7.1			5.1	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		144.1		25.9		144.1		25.9
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		134.0		24.0		134.0		24.0
Max Q Clear Time (g_c+I1), s		33.5		19.8		36.6		19.5
Green Ext Time (p_c), s		24.8		0.1		8.8		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	134	78	212	162	32	207	1620	291	25	976	160
Future Volume (veh/h)	166	134	78	212	162	32	207	1620	291	25	976	160
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	171	138	80	219	167	33	213	1670	300	26	1006	165
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	195	166	237	195	166	343	2283	1021	152	1849	303
Arrive On Green	0.09	0.10	0.10	0.09	0.10	0.10	0.06	0.64	0.64	0.02	0.61	0.61
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3045	499
Grp Volume(v), veh/h	171	138	80	219	167	33	213	1670	300	26	584	587
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1775
Q Serve(g_s), s	14.6	12.2	8.1	15.0	15.0	3.2	7.5	53.9	14.1	0.9	32.9	33.0
Cycle Q Clear(g_c), s	14.6	12.2	8.1	15.0	15.0	3.2	7.5	53.9	14.1	0.9	32.9	33.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	219	195	166	237	195	166	343	2283	1021	152	1075	1078
V/C Ratio(X)	0.78	0.71	0.48	0.92	0.86	0.20	0.62	0.73	0.29	0.17	0.54	0.54
Avail Cap(c_a), veh/h	219	373	317	237	373	317	490	2283	1021	198	1075	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	62.0	73.6	71.7	66.4	74.8	69.6	16.6	20.3	13.2	19.5	19.6	19.6
Incr Delay (d2), s/veh	16.7	4.6	2.2	38.0	10.2	0.6	1.8	2.1	0.7	0.5	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	6.5	3.7	5.4	8.3	1.4	3.8	26.9	6.3	0.5	16.6	16.7
LnGrp Delay(d),s/veh	78.7	78.2	73.9	104.4	85.0	70.1	18.4	22.4	14.0	20.0	21.4	21.4
LnGrp LOS	E	E	E	F	F	E	B	C	B	B	C	C
Approach Vol, veh/h		389			419			2183			1197	
Approach Delay, s/veh		77.5			94.0			20.8			21.4	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	115.6	21.0	23.8	16.0	109.2	21.0	23.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	89.0	15.0	34.0	24.0	73.0	15.0	34.0
Max Q Clear Time (g_c+I1), s	2.9	55.9	17.0	14.2	9.5	35.0	16.6	17.0
Green Ext Time (p_c), s	0.0	17.7	0.0	0.9	0.5	8.8	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	10	2099	5	7	1255
Future Volume (Veh/h)	6	10	2099	5	7	1255
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	6	11	2233	5	7	1335
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.78					
vC, conflicting volume	2914	1116			2238	
vC1, stage 1 conf vol	2233					
vC2, stage 2 conf vol	682					
vCu, unblocked vol	2891	1116			2238	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	95			97	
cM capacity (veh/h)	65	202			228	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	17	1116	1116	5	7	668	668
Volume Left	6	0	0	0	7	0	0
Volume Right	11	0	0	5	0	0	0
cSH	116	1700	1700	1700	228	1700	1700
Volume to Capacity	0.15	0.66	0.66	0.00	0.03	0.39	0.39
Queue Length 95th (ft)	12	0	0	0	2	0	0
Control Delay (s)	41.2	0.0	0.0	0.0	21.3	0.0	0.0
Lane LOS	E				C		
Approach Delay (s)	41.2	0.0			0.1		
Approach LOS	E						

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

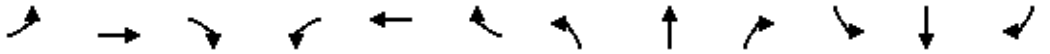
Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	2	2114	3	2	1250
Future Vol, veh/h	10	2	2114	3	2	1250
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	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	0	2	2	2	2
Mvmt Flow	10	2	2179	3	2	1289

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2828	1090	0	0	2182	0
Stage 1	2179	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Critical Hdwy	6.84	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	14	214	-	-	240	-
Stage 1	72	-	-	-	-	-
Stage 2	482	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	14	214	-	-	240	-
Mov Cap-2 Maneuver	59	-	-	-	-	-
Stage 1	71	-	-	-	-	-
Stage 2	482	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	70.5	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	67	240	-
HCM Lane V/C Ratio	-	-	0.185	0.009	-
HCM Control Delay (s)	-	-	70.5	20.1	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	0.6	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	114	0	455	0	1667	79	105	1191	1
Future Volume (veh/h)	1	0	0	114	0	455	0	1667	79	105	1191	1
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	1	0	0	118	0	346	0	1719	81	108	1228	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	140	324	0	282	0	270	42	2389	112	195	2686	1226
Arrive On Green	0.17	0.00	0.00	0.17	0.00	0.17	0.00	0.69	0.69	0.03	0.76	0.00
Sat Flow, veh/h	1031	1900	0	1406	0	1583	452	3443	161	1774	3539	1615
Grp Volume(v), veh/h	1	0	0	118	0	346	0	879	921	108	1228	0
Grp Sat Flow(s),veh/h/ln	1031	1900	0	1406	0	1583	452	1770	1834	1774	1770	1615
Q Serve(g_s), s	0.1	0.0	0.0	12.9	0.0	29.0	0.0	51.3	52.5	2.9	21.8	0.0
Cycle Q Clear(g_c), s	13.1	0.0	0.0	12.9	0.0	29.0	0.0	51.3	52.5	2.9	21.8	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	140	324	0	282	0	270	42	1228	1273	195	2686	1226
V/C Ratio(X)	0.01	0.00	0.00	0.42	0.00	1.28	0.00	0.72	0.72	0.55	0.46	0.00
Avail Cap(c_a), veh/h	140	324	0	282	0	270	42	1228	1273	289	2686	1226
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	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	69.7	0.0	0.0	63.8	0.0	70.5	0.0	15.8	16.0	21.2	7.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	151.8	0.0	3.6	3.6	2.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.1	0.0	24.1	0.0	26.1	27.6	2.9	10.8	0.0
LnGrp Delay(d),s/veh	69.8	0.0	0.0	64.8	0.0	222.3	0.0	19.4	19.6	23.7	8.1	0.0
LnGrp LOS	E			E		F		B	B	C	A	
Approach Vol, veh/h		1			464			1800			1336	
Approach Delay, s/veh		69.8			182.2			19.5			9.4	
Approach LOS		E			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	11.0	124.0		35.0		135.0		35.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	14.0	109.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	4.9	54.5		15.1		23.8		31.0
Green Ext Time (p_c), s	0.1	20.9		0.0		11.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	52	171	192	304	248	201	1377	82	48	1173	101
Future Volume (veh/h)	68	52	171	192	304	248	201	1377	82	48	1173	101
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	71	54	178	200	317	258	209	1434	85	50	1222	105
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	274	233	297	318	270	301	2195	982	213	2076	929
Arrive On Green	0.04	0.15	0.15	0.06	0.17	0.17	0.06	0.62	0.62	0.03	0.59	0.59
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	71	54	178	200	317	258	209	1434	85	50	1222	105
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.7	4.3	18.4	11.0	28.9	27.4	7.8	44.0	3.7	1.9	37.1	5.0
Cycle Q Clear(g_c), s	5.7	4.3	18.4	11.0	28.9	27.4	7.8	44.0	3.7	1.9	37.1	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	274	233	297	318	270	301	2195	982	213	2076	929
V/C Ratio(X)	0.58	0.20	0.76	0.67	1.00	0.96	0.69	0.65	0.09	0.23	0.59	0.11
Avail Cap(c_a), veh/h	246	405	345	297	318	270	444	2195	982	260	2076	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.7	63.6	69.6	61.6	70.5	69.9	20.3	20.6	13.0	18.1	22.2	15.6
Incr Delay (d2), s/veh	4.4	0.3	5.7	5.9	49.8	42.5	2.9	1.5	0.2	0.6	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.3	8.4	4.0	19.3	15.2	4.7	21.8	1.6	1.0	18.3	2.2
LnGrp Delay(d),s/veh	64.1	64.0	75.3	67.5	120.3	112.4	23.2	22.2	13.1	18.7	23.4	15.8
LnGrp LOS	E	E	E	E	F	F	C	C	B	B	C	B
Approach Vol, veh/h		303			775			1728			1377	
Approach Delay, s/veh		70.7			104.0			21.8			22.7	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	111.4	17.0	31.1	16.2	105.7	13.1	35.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	4.0	89.0	11.0	37.0	24.0	74.0	19.5	29.0
Max Q Clear Time (g_c+I1), s	3.9	46.0	13.0	20.4	9.8	39.1	7.7	30.9
Green Ext Time (p_c), s	0.0	14.4	0.0	0.7	0.5	10.7	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	31	71	43	4	12	7	958	51	19	1773	16
Future Volume (veh/h)	42	31	71	43	4	12	7	958	51	19	1773	16
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	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	45	33	76	46	4	13	8	1030	55	20	1906	17
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	50	85	138	10	239	164	2661	142	396	2799	25
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	248	332	565	643	69	1583	231	3418	182	518	3595	32
Grp Volume(v), veh/h	154	0	0	50	0	13	8	533	552	20	937	986
Grp Sat Flow(s),veh/h/ln	1145	0	0	711	0	1583	231	1770	1831	518	1770	1857
Q Serve(g_s), s	11.6	0.0	0.0	0.0	0.0	1.2	2.9	16.2	16.2	2.2	42.3	42.6
Cycle Q Clear(g_c), s	23.4	0.0	0.0	11.8	0.0	1.2	45.5	16.2	16.2	18.4	42.3	42.6
Prop In Lane	0.29		0.49	0.92		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	200	0	0	148	0	239	164	1378	1425	396	1378	1446
V/C Ratio(X)	0.77	0.00	0.00	0.34	0.00	0.05	0.05	0.39	0.39	0.05	0.68	0.68
Avail Cap(c_a), veh/h	231	0	0	174	0	270	164	1378	1425	396	1378	1446
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	1.00	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.6	0.0	0.0	66.2	0.0	61.8	19.6	6.0	6.0	8.9	8.9	8.9
Incr Delay (d2), s/veh	12.8	0.0	0.0	1.3	0.0	0.1	0.5	0.7	0.7	0.2	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	0.0	2.2	0.0	0.5	0.2	8.1	8.4	0.3	21.3	22.7
LnGrp Delay(d),s/veh	85.3	0.0	0.0	67.5	0.0	61.9	20.1	6.7	6.7	9.1	11.6	11.5
LnGrp LOS	F			E		E	C	A	A	A	B	B
Approach Vol, veh/h		154			63			1093			1943	
Approach Delay, s/veh		85.3			66.3			6.8			11.5	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		138.4		31.6		138.4		31.6
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		129.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s		47.5		25.4		44.6		13.8
Green Ext Time (p_c), s		8.5		0.2		28.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

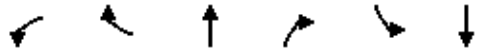
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	150	391	183	97	34	70	728	95	31	1672	203
Future Volume (veh/h)	226	150	391	183	97	34	70	728	95	31	1672	203
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	243	161	290	197	104	0	75	783	62	33	1798	213
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	175	149	247	174	148	118	2231	997	424	1997	232
Arrive On Green	0.11	0.09	0.09	0.11	0.09	0.00	0.03	0.63	0.63	0.02	0.63	0.63
Sat Flow, veh/h	1774	1863	1578	1774	1863	1583	1774	3539	1582	1774	3195	371
Grp Volume(v), veh/h	243	161	290	197	104	0	75	783	62	33	980	1031
Grp Sat Flow(s),veh/h/ln	1774	1863	1578	1774	1863	1583	1774	1770	1582	1774	1770	1797
Q Serve(g_s), s	19.0	14.6	16.0	16.9	9.1	0.0	2.6	17.9	2.6	1.1	79.1	85.9
Cycle Q Clear(g_c), s	19.0	14.6	16.0	16.9	9.1	0.0	2.6	17.9	2.6	1.1	79.1	85.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	292	175	149	247	174	148	118	2231	997	424	1106	1123
V/C Ratio(X)	0.83	0.92	1.95	0.80	0.60	0.00	0.63	0.35	0.06	0.08	0.89	0.92
Avail Cap(c_a), veh/h	292	175	149	248	175	149	193	2231	997	508	1106	1123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.69	0.69	0.69
Uniform Delay (d), s/veh	63.6	76.4	77.0	61.2	74.0	0.0	40.4	14.9	12.1	11.6	26.8	28.1
Incr Delay (d2), s/veh	18.2	45.2	452.1	16.3	5.4	0.0	5.5	0.4	0.1	0.1	7.6	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	9.7	25.6	9.4	5.0	0.0	2.4	8.8	1.1	0.6	40.7	45.5
LnGrp Delay(d),s/veh	81.8	121.5	529.1	77.5	79.4	0.0	45.9	15.4	12.2	11.7	34.4	37.9
LnGrp LOS	F	F	F	E	E		D	B	B	B	C	D
Approach Vol, veh/h		694			301			920			2044	
Approach Delay, s/veh		277.9			78.1			17.6			35.8	
Approach LOS		F			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	113.2	24.9	22.0	10.9	112.3	25.0	21.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	13.0	99.0	19.0	16.0	12.0	99.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	3.1	19.9	18.9	18.0	4.6	87.9	21.0	11.1
Green Ext Time (p_c), s	0.0	6.0	0.0	0.0	0.1	9.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	77.2
HCM 2010 LOS	E

Notes

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



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	2	7	901	20	35	2207
Future Volume (Veh/h)	2	7	901	20	35	2207
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	2	7	959	21	37	2348
Pedestrians	1		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	0		0			0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.44					
vC, conflicting volume	2209	482			981	
vC1, stage 1 conf vol	960					
vC2, stage 2 conf vol	1249					
vCu, unblocked vol	1207	482			981	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	99			95	
cM capacity (veh/h)	264	530			699	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	9	480	480	21	37	1174	1174
Volume Left	2	0	0	0	37	0	0
Volume Right	7	0	0	21	0	0	0
cSH	433	1700	1700	1700	699	1700	1700
Volume to Capacity	0.02	0.28	0.28	0.01	0.05	0.69	0.69
Queue Length 95th (ft)	2	0	0	0	4	0	0
Control Delay (s)	13.5	0.0	0.0	0.0	10.4	0.0	0.0
Lane LOS	B				B		
Approach Delay (s)	13.5	0.0			0.2		
Approach LOS	B						

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

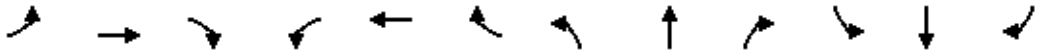
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	0	873	6	1	2214
Future Vol, veh/h	2	0	873	6	1	2214
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	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	2	2	2	2
Mvmt Flow	2	0	939	6	1	2381

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2132	470	0	0	945	0
Stage 1	939	-	-	-	-	-
Stage 2	1193	-	-	-	-	-
Critical Hdwy	6.84	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	42	545	-	-	722	-
Stage 1	341	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	42	545	-	-	722	-
Mov Cap-2 Maneuver	150	-	-	-	-	-
Stage 1	341	-	-	-	-	-
Stage 2	250	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.3	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	150	722	-
HCM Lane V/C Ratio	-	-	0.014	0.001	-
HCM Control Delay (s)	-	-	29.3	10	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	81	0	147	4	795	74	525	1659	0
Future Volume (veh/h)	2	0	0	81	0	147	4	795	74	525	1659	0
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	2	0	0	87	0	32	4	855	54	565	1784	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	61	142	0	148	0	119	229	2449	155	596	3024	1380
Arrive On Green	0.07	0.00	0.00	0.07	0.00	0.07	0.72	0.72	0.72	0.10	0.85	0.00
Sat Flow, veh/h	1372	1900	0	1406	0	1583	265	3381	214	1774	3539	1615
Grp Volume(v), veh/h	2	0	0	87	0	32	4	447	462	565	1784	0
Grp Sat Flow(s),veh/h/ln	1372	1900	0	1406	0	1583	265	1770	1825	1774	1770	1615
Q Serve(g_s), s	0.2	0.0	0.0	10.4	0.0	3.2	0.8	15.9	15.9	13.4	25.1	0.0
Cycle Q Clear(g_c), s	10.6	0.0	0.0	10.4	0.0	3.2	3.8	15.9	15.9	13.4	25.1	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	61	142	0	148	0	119	229	1281	1322	596	3024	1380
V/C Ratio(X)	0.03	0.00	0.00	0.59	0.00	0.27	0.02	0.35	0.35	0.95	0.59	0.00
Avail Cap(c_a), veh/h	193	324	0	282	0	270	229	1281	1322	626	3024	1380
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	82.8	0.0	0.0	77.5	0.0	74.2	7.4	8.7	8.7	13.0	3.6	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	3.7	0.0	1.2	0.1	0.8	0.7	23.2	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	4.2	0.0	1.5	0.1	8.0	8.2	23.5	12.3	0.0
LnGrp Delay(d),s/veh	83.0	0.0	0.0	81.2	0.0	75.4	7.6	9.4	9.4	36.2	4.5	0.0
LnGrp LOS	F			F		E	A	A	A	D	A	
Approach Vol, veh/h		2			119			913			2349	
Approach Delay, s/veh		83.0			79.7			9.4			12.1	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	22.2	129.1		18.7		151.3		18.7
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	19.0	104.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	15.4	17.9		12.6		27.1		12.4
Green Ext Time (p_c), s	0.7	6.3		0.0		25.0		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	229	263	64	106	67	158	742	179	204	1487	71
Future Volume (veh/h)	56	229	263	64	106	67	158	742	179	204	1487	71
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	60	244	280	68	113	71	168	789	190	217	1582	76
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	367	312	181	380	323	204	1963	878	405	2005	897
Arrive On Green	0.04	0.20	0.20	0.04	0.20	0.20	0.05	0.55	0.55	0.07	0.57	0.57
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	60	244	280	68	113	71	168	789	190	217	1582	76
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	4.6	20.6	29.3	5.2	8.7	6.4	6.9	21.7	10.3	9.0	59.6	3.7
Cycle Q Clear(g_c), s	4.6	20.6	29.3	5.2	8.7	6.4	6.9	21.7	10.3	9.0	59.6	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	367	312	181	380	323	204	1963	878	405	2005	897
V/C Ratio(X)	0.21	0.66	0.90	0.38	0.30	0.22	0.82	0.40	0.22	0.54	0.79	0.08
Avail Cap(c_a), veh/h	324	537	456	203	537	456	357	1963	878	485	2005	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	63.1	66.6	52.7	57.3	56.4	33.4	21.7	19.2	16.1	28.9	16.8
Incr Delay (d2), s/veh	0.4	2.1	15.0	1.3	0.4	0.3	8.1	0.6	0.6	1.1	3.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	10.8	14.2	2.6	4.6	2.8	4.8	10.8	4.7	4.5	29.9	1.7
LnGrp Delay(d),s/veh	52.2	65.1	81.6	54.0	57.8	56.7	41.5	22.3	19.7	17.2	32.1	17.0
LnGrp LOS	D	E	F	D	E	E	D	C	B	B	C	B
Approach Vol, veh/h		584			252			1147			1875	
Approach Delay, s/veh		71.7			56.4			24.7			29.8	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	100.3	12.9	39.5	15.3	102.3	11.7	40.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	13.0	69.0	9.0	49.0	24.0	64.0	9.5	49.0
Max Q Clear Time (g_c+I1), s	11.0	23.7	7.2	31.3	8.9	61.6	6.6	10.7
Green Ext Time (p_c), s	0.4	6.6	0.0	2.2	0.4	2.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	36.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	9	34	55	22	28	43	1730	44	12	1073	17
Future Volume (veh/h)	10	9	34	55	22	28	43	1730	44	12	1073	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	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	9	35	57	23	29	44	1784	45	12	1106	18
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	31	64	100	35	194	401	2846	72	196	2875	47
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	34	250	523	519	282	1583	499	3528	89	253	3564	58
Grp Volume(v), veh/h	54	0	0	80	0	29	44	892	937	12	549	575
Grp Sat Flow(s),veh/h/ln	807	0	0	801	0	1583	499	1770	1847	253	1770	1853
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	2.8	4.6	33.4	33.8	3.3	14.8	14.8
Cycle Q Clear(g_c), s	18.8	0.0	0.0	18.4	0.0	2.8	19.4	33.4	33.8	37.2	14.8	14.8
Prop In Lane	0.19		0.65	0.71		1.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	124	0	0	134	0	194	401	1428	1490	196	1428	1495
V/C Ratio(X)	0.44	0.00	0.00	0.59	0.00	0.15	0.11	0.62	0.63	0.06	0.38	0.38
Avail Cap(c_a), veh/h	153	0	0	162	0	224	401	1428	1490	196	1428	1495
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	1.00	0.59	0.59	0.59	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.0	0.0	0.0	72.9	0.0	66.6	7.3	6.4	6.4	13.7	4.6	4.6
Incr Delay (d2), s/veh	2.4	0.0	0.0	4.2	0.0	0.4	0.3	1.2	1.2	0.6	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.0	3.9	0.0	1.2	0.7	16.6	17.4	0.3	7.5	7.8
LnGrp Delay(d),s/veh	70.4	0.0	0.0	77.0	0.0	67.0	7.7	7.6	7.6	14.3	5.4	5.4
LnGrp LOS	E			E		E	A	A	A	B	A	A
Approach Vol, veh/h		54			109			1873			1136	
Approach Delay, s/veh		70.4			74.4			7.6			5.5	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		143.2		26.8		143.2		26.8
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		134.0		24.0		134.0		24.0
Max Q Clear Time (g_c+I1), s		35.8		20.8		39.2		20.4
Green Ext Time (p_c), s		26.2		0.0		9.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	137	80	216	165	33	211	1653	297	26	996	163
Future Volume (veh/h)	169	137	80	216	165	33	211	1653	297	26	996	163
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	174	141	82	223	170	34	218	1704	306	27	1027	168
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	198	169	237	198	169	336	2275	1018	146	1841	301
Arrive On Green	0.09	0.11	0.11	0.09	0.11	0.11	0.06	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3047	498
Grp Volume(v), veh/h	174	141	82	223	170	34	218	1704	306	27	596	599
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1775
Q Serve(g_s), s	14.9	12.4	8.3	15.0	15.3	3.3	7.7	56.4	14.5	1.0	34.2	34.3
Cycle Q Clear(g_c), s	14.9	12.4	8.3	15.0	15.3	3.3	7.7	56.4	14.5	1.0	34.2	34.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	219	198	169	237	198	169	336	2275	1018	146	1069	1072
V/C Ratio(X)	0.80	0.71	0.49	0.94	0.86	0.20	0.65	0.75	0.30	0.18	0.56	0.56
Avail Cap(c_a), veh/h	219	373	317	237	373	317	480	2275	1018	192	1069	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	61.9	73.4	71.6	66.5	74.7	69.3	17.5	20.9	13.4	20.5	20.1	20.1
Incr Delay (d2), s/veh	18.3	4.7	2.2	42.0	10.1	0.6	2.1	2.3	0.8	0.6	2.0	2.0
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	8.4	6.7	3.7	5.9	8.4	1.5	4.3	28.2	6.6	0.5	17.3	17.4
LnGrp Delay(d),s/veh	80.2	78.1	73.7	108.5	84.8	69.9	19.6	23.2	14.2	21.0	22.0	22.1
LnGrp LOS	F	E	E	F	F	E	B	C	B	C	C	C
Approach Vol, veh/h		397			427			2228			1222	
Approach Delay, s/veh		78.1			96.0			21.6			22.0	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	115.3	21.0	24.1	16.2	108.7	21.0	24.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	3.0	89.0	15.0	34.0	24.0	73.0	15.0	34.0
Max Q Clear Time (g_c+I1), s	3.0	58.4	17.0	14.4	9.7	36.3	16.9	17.3
Green Ext Time (p_c), s	0.0	17.5	0.0	0.9	0.5	9.0	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	34.4
HCM 2010 LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	10	2141	5	7	1280
Future Volume (Veh/h)	6	10	2141	5	7	1280
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	6	11	2278	5	7	1362
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.77					
vC, conflicting volume	2973	1139			2283	
vC1, stage 1 conf vol	2278					
vC2, stage 2 conf vol	695					
vCu, unblocked vol	2965	1139			2283	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	94			97	
cM capacity (veh/h)	62	195			219	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	17	1139	1139	5	7	681	681
Volume Left	6	0	0	0	7	0	0
Volume Right	11	0	0	5	0	0	0
cSH	111	1700	1700	1700	219	1700	1700
Volume to Capacity	0.15	0.67	0.67	0.00	0.03	0.40	0.40
Queue Length 95th (ft)	13	0	0	0	2	0	0
Control Delay (s)	43.4	0.0	0.0	0.0	22.0	0.0	0.0
Lane LOS	E				C		
Approach Delay (s)	43.4	0.0			0.1		
Approach LOS	E						

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	2	2156	3	2	1275
Future Vol, veh/h	10	2	2156	3	2	1275
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	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	0	2	2	2	2
Mvmt Flow	10	2	2223	3	2	1314

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2884	1112	0	0	2226	0
Stage 1	2223	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Critical Hdwy	6.84	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	13	206	-	-	231	-
Stage 1	68	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	13	206	-	-	231	-
Mov Cap-2 Maneuver	56	-	-	-	-	-
Stage 1	67	-	-	-	-	-
Stage 2	475	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	74.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	64	231	-
HCM Lane V/C Ratio	-	-	0.193	0.009	-
HCM Control Delay (s)	-	-	74.3	20.7	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	0.7	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	116	0	464	0	1701	81	107	1215	1
Future Volume (veh/h)	1	0	0	116	0	464	0	1701	81	107	1215	1
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	1	0	0	120	0	356	0	1754	84	110	1253	1
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	138	324	0	282	0	270	42	2386	114	189	2686	1225
Arrive On Green	0.17	0.00	0.00	0.17	0.00	0.17	0.00	0.69	0.69	0.03	0.76	0.76
Sat Flow, veh/h	1021	1900	0	1406	0	1583	441	3440	164	1774	3539	1615
Grp Volume(v), veh/h	1	0	0	120	0	356	0	897	941	110	1253	1
Grp Sat Flow(s),veh/h/ln	1021	1900	0	1406	0	1583	441	1770	1834	1774	1770	1615
Q Serve(g_s), s	0.2	0.0	0.0	13.2	0.0	29.0	0.0	53.5	54.9	3.0	22.5	0.0
Cycle Q Clear(g_c), s	13.3	0.0	0.0	13.2	0.0	29.0	0.0	53.5	54.9	3.0	22.5	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	138	324	0	282	0	270	42	1227	1272	189	2686	1225
V/C Ratio(X)	0.01	0.00	0.00	0.43	0.00	1.32	0.00	0.73	0.74	0.58	0.47	0.00
Avail Cap(c_a), veh/h	138	324	0	282	0	270	42	1227	1272	282	2686	1225
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.0	0.0	0.0	63.9	0.0	70.5	0.0	16.2	16.4	23.3	7.7	4.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	166.8	0.0	3.9	3.9	2.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.2	0.0	25.2	0.0	27.2	28.8	3.2	11.0	0.0
LnGrp Delay(d),s/veh	70.0	0.0	0.0	64.9	0.0	237.3	0.0	20.0	20.3	26.1	8.2	4.9
LnGrp LOS	E			E		F		C	C	C	A	A
Approach Vol, veh/h		1			476			1838			1364	
Approach Delay, s/veh		70.0			193.9			20.2			9.7	
Approach LOS		E			F			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	11.1	123.9		35.0		135.0		35.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	14.0	109.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	5.0	56.9		15.3		24.5		31.0
Green Ext Time (p_c), s	0.1	21.5		0.0		11.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	53	174	196	310	253	205	1405	84	49	1197	103
Future Volume (veh/h)	69	53	174	196	310	253	205	1405	84	49	1197	103
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	72	55	181	204	323	212	214	1464	88	51	1247	107
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	275	234	296	318	270	295	2192	981	206	2070	926
Arrive On Green	0.04	0.15	0.15	0.06	0.17	0.17	0.06	0.62	0.62	0.03	0.58	0.58
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	72	55	181	204	323	212	214	1464	88	51	1247	107
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.8	4.4	18.7	11.0	29.0	21.8	8.0	45.6	3.8	2.0	38.4	5.1
Cycle Q Clear(g_c), s	5.8	4.4	18.7	11.0	29.0	21.8	8.0	45.6	3.8	2.0	38.4	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	275	234	296	318	270	295	2192	981	206	2070	926
V/C Ratio(X)	0.59	0.20	0.77	0.69	1.02	0.78	0.72	0.67	0.09	0.25	0.60	0.12
Avail Cap(c_a), veh/h	246	405	345	296	318	270	437	2192	981	253	2070	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	63.6	69.7	61.8	70.5	67.5	21.6	21.0	13.0	18.7	22.6	15.7
Incr Delay (d2), s/veh	4.5	0.4	6.3	6.6	54.7	14.1	3.4	1.6	0.2	0.6	1.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	2.3	8.6	4.2	19.7	10.6	5.3	22.7	1.7	1.0	19.1	2.3
LnGrp Delay(d),s/veh	64.1	63.9	76.0	68.4	125.3	81.6	25.0	22.6	13.2	19.3	23.9	16.0
LnGrp LOS	E	E	E	E	F	F	C	C	B	B	C	B
Approach Vol, veh/h		308			739			1766			1405	
Approach Delay, s/veh		71.1			97.1			22.4			23.2	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	111.3	17.0	31.1	16.5	105.4	13.1	35.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	4.0	89.0	11.0	37.0	24.0	74.0	19.5	29.0
Max Q Clear Time (g_c+I1), s	4.0	47.6	13.0	20.7	10.0	40.4	7.8	31.0
Green Ext Time (p_c), s	0.0	14.7	0.0	0.7	0.5	11.0	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	31	82	50	4	12	10	992	53	19	1882	16
Future Volume (veh/h)	42	31	82	50	4	12	10	992	53	19	1882	16
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	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	45	33	88	54	4	13	11	1067	57	20	2024	17
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	50	96	140	9	270	135	2593	139	366	2729	23
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	203	295	562	583	53	1583	206	3418	183	499	3597	30
Grp Volume(v), veh/h	166	0	0	58	0	13	11	552	572	20	994	1047
Grp Sat Flow(s),veh/h/ln	1060	0	0	635	0	1583	206	1770	1831	499	1770	1857
Q Serve(g_s), s	12.0	0.0	0.0	0.0	0.0	1.2	5.3	18.6	18.6	2.5	52.6	52.9
Cycle Q Clear(g_c), s	27.2	0.0	0.0	15.2	0.0	1.2	58.2	18.6	18.6	21.1	52.6	52.9
Prop In Lane	0.27		0.53	0.93		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	208	0	0	149	0	270	135	1343	1389	366	1343	1409
V/C Ratio(X)	0.80	0.00	0.00	0.39	0.00	0.05	0.08	0.41	0.41	0.05	0.74	0.74
Avail Cap(c_a), veh/h	208	0	0	149	0	270	135	1343	1389	366	1343	1409
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	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.3	0.0	0.0	64.6	0.0	59.0	27.4	7.2	7.2	10.9	11.3	11.3
Incr Delay (d2), s/veh	19.4	0.0	0.0	1.6	0.0	0.1	1.0	0.8	0.8	0.3	3.7	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.0	2.6	0.0	0.5	0.3	9.4	9.7	0.4	26.8	28.1
LnGrp Delay(d),s/veh	90.8	0.0	0.0	66.3	0.0	59.0	28.5	8.0	8.0	11.2	15.0	14.9
LnGrp LOS	F			E		E	C	A	A	B	B	B
Approach Vol, veh/h		166			71			1135			2061	
Approach Delay, s/veh		90.8			64.9			8.2			14.9	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		135.0		35.0		135.0		35.0
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		129.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s		60.2		29.2		54.9		17.2
Green Ext Time (p_c), s		9.2		0.0		31.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	150	427	201	97	34	81	768	101	31	1799	203
Future Volume (veh/h)	226	150	427	201	97	34	81	768	101	31	1799	203
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	243	161	337	216	104	0	87	826	69	33	1934	213
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	175	149	248	175	149	107	2229	996	404	1993	216
Arrive On Green	0.11	0.09	0.09	0.11	0.09	0.00	0.03	0.63	0.63	0.02	0.62	0.62
Sat Flow, veh/h	1774	1863	1578	1774	1863	1583	1774	3539	1582	1774	3222	348
Grp Volume(v), veh/h	243	161	337	216	104	0	87	826	69	33	1046	1101
Grp Sat Flow(s),veh/h/ln	1774	1863	1578	1774	1863	1583	1774	1770	1582	1774	1770	1801
Q Serve(g_s), s	19.0	14.6	16.0	18.7	9.1	0.0	3.8	19.2	2.9	1.2	93.7	102.0
Cycle Q Clear(g_c), s	19.0	14.6	16.0	18.7	9.1	0.0	3.8	19.2	2.9	1.2	93.7	102.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	293	175	149	248	175	149	107	2229	996	404	1095	1114
V/C Ratio(X)	0.83	0.92	2.27	0.87	0.59	0.00	0.82	0.37	0.07	0.08	0.96	0.99
Avail Cap(c_a), veh/h	293	175	149	248	175	149	171	2229	996	488	1095	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.63	0.63	0.63
Uniform Delay (d), s/veh	63.5	76.4	77.0	61.8	73.9	0.0	49.0	15.2	12.2	12.0	30.2	31.8
Incr Delay (d2), s/veh	17.9	45.2	591.8	26.6	5.3	0.0	14.6	0.5	0.1	0.1	13.3	18.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	9.7	31.4	11.0	5.0	0.0	4.5	9.4	1.3	0.6	49.7	56.3
LnGrp Delay(d),s/veh	81.4	121.5	668.8	88.4	79.1	0.0	63.6	15.7	12.3	12.1	43.6	50.6
LnGrp LOS	F	F	F	F	E		E	B	B	B	D	D
Approach Vol, veh/h		741			320			982			2180	
Approach Delay, s/veh		357.3			85.4			19.7			46.6	
Approach LOS		F			F			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	113.1	25.0	22.0	11.8	111.2	25.0	22.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	13.0	99.0	19.0	16.0	12.0	99.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	3.2	21.2	20.7	18.0	5.8	104.0	21.0	11.1
Green Ext Time (p_c), s	0.0	6.5	0.0	0.0	0.1	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	97.8
HCM 2010 LOS	F

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	53	912	56	180	2243
Future Volume (Veh/h)	13	53	912	56	180	2243
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	14	56	970	60	191	2386
Pedestrians	1		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	0		0			0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.42					
vC, conflicting volume	2547	487			1031	
vC1, stage 1 conf vol	971					
vC2, stage 2 conf vol	1576					
vCu, unblocked vol	1915	487			1031	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	89			71	
cM capacity (veh/h)	211	525			669	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	70	485	485	60	191	1193	1193
Volume Left	14	0	0	0	191	0	0
Volume Right	56	0	0	60	0	0	0
cSH	405	1700	1700	1700	669	1700	1700
Volume to Capacity	0.17	0.29	0.29	0.04	0.29	0.70	0.70
Queue Length 95th (ft)	15	0	0	0	29	0	0
Control Delay (s)	15.7	0.0	0.0	0.0	12.5	0.0	0.0
Lane LOS	C				B		
Approach Delay (s)	15.7	0.0			0.9		
Approach LOS	C						

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1

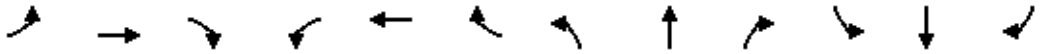
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	11	909	151	37	2225
Future Vol, veh/h	48	11	909	151	37	2225
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	2	2	2	2
Mvmt Flow	52	12	977	162	40	2392

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2253	489	0	0	1139	0
Stage 1	977	-	-	-	-	-
Stage 2	1276	-	-	-	-	-
Critical Hdwy	6.84	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	~ 35	530	-	-	609	-
Stage 1	325	-	-	-	-	-
Stage 2	226	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 33	530	-	-	609	-
Mov Cap-2 Maneuver	119	-	-	-	-	-
Stage 1	304	-	-	-	-	-
Stage 2	226	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	51	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	139	609	-
HCM Lane V/C Ratio	-	-	0.456	0.065	-
HCM Control Delay (s)	-	-	51	11.3	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	2.1	0.2	-

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	81	0	183	4	922	74	542	1699	0
Future Volume (veh/h)	2	0	0	81	0	183	4	922	74	542	1699	0
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	2	0	0	87	0	41	4	991	54	583	1827	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	62	143	0	148	0	119	220	2414	132	556	3023	1380
Arrive On Green	0.08	0.00	0.00	0.08	0.00	0.08	0.71	0.71	0.71	0.11	0.85	0.00
Sat Flow, veh/h	1360	1900	0	1406	0	1583	254	3414	186	1774	3539	1615
Grp Volume(v), veh/h	2	0	0	87	0	41	4	514	531	583	1827	0
Grp Sat Flow(s),veh/h/ln	1360	1900	0	1406	0	1583	254	1770	1830	1774	1770	1615
Q Serve(g_s), s	0.2	0.0	0.0	10.4	0.0	4.2	0.8	20.4	20.4	19.0	26.4	0.0
Cycle Q Clear(g_c), s	10.6	0.0	0.0	10.4	0.0	4.2	2.3	20.4	20.4	19.0	26.4	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	62	143	0	148	0	119	220	1251	1294	556	3023	1380
V/C Ratio(X)	0.03	0.00	0.00	0.59	0.00	0.34	0.02	0.41	0.41	1.05	0.60	0.00
Avail Cap(c_a), veh/h	191	324	0	282	0	270	220	1251	1294	556	3023	1380
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	82.7	0.0	0.0	77.5	0.0	74.6	7.8	10.3	10.3	22.5	3.7	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	3.7	0.0	1.7	0.2	1.0	1.0	51.2	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	4.2	0.0	1.9	0.1	10.2	10.5	34.0	13.1	0.0
LnGrp Delay(d),s/veh	82.9	0.0	0.0	81.2	0.0	76.3	8.0	11.3	11.2	73.7	4.6	0.0
LnGrp LOS	F			F		E	A	B	B	F	A	
Approach Vol, veh/h		2			128			1049			2410	
Approach Delay, s/veh		82.9			79.6			11.2			21.4	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	25.0	126.2		18.8		151.2		18.8
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	19.0	104.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	21.0	22.4		12.6		28.4		12.4
Green Ext Time (p_c), s	0.0	7.8		0.0		26.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	20.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	229	263	64	106	85	158	851	179	210	1521	71
Future Volume (veh/h)	56	229	263	64	106	85	158	851	179	210	1521	71
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	60	244	280	68	113	90	168	905	190	223	1618	76
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	367	312	181	380	323	198	1957	875	368	2004	897
Arrive On Green	0.04	0.20	0.20	0.04	0.20	0.20	0.05	0.55	0.55	0.07	0.57	0.57
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	60	244	280	68	113	90	168	905	190	223	1618	76
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	4.6	20.6	29.3	5.2	8.7	8.2	7.0	26.1	10.4	9.3	62.1	3.7
Cycle Q Clear(g_c), s	4.6	20.6	29.3	5.2	8.7	8.2	7.0	26.1	10.4	9.3	62.1	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	367	312	181	380	323	198	1957	875	368	2004	897
V/C Ratio(X)	0.21	0.66	0.90	0.38	0.30	0.28	0.85	0.46	0.22	0.61	0.81	0.08
Avail Cap(c_a), veh/h	321	537	456	203	537	456	351	1957	875	445	2004	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.9	63.1	66.6	52.7	57.3	57.1	34.5	22.8	19.3	17.5	29.4	16.8
Incr Delay (d2), s/veh	0.4	2.1	15.0	1.3	0.4	0.5	9.7	0.8	0.6	1.6	3.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	10.8	14.2	2.6	4.6	3.6	4.9	12.9	4.7	4.6	31.3	1.7
LnGrp Delay(d),s/veh	52.2	65.1	81.6	54.0	57.8	57.6	44.2	23.6	19.9	19.1	33.1	17.0
LnGrp LOS	D	E	F	D	E	E	D	C	B	B	C	B
Approach Vol, veh/h		584			271			1263			1917	
Approach Delay, s/veh		71.7			56.7			25.8			30.8	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	100.0	12.9	39.5	15.3	102.3	11.7	40.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	11.0	69.0	9.0	49.0	24.0	64.0	9.5	49.0
Max Q Clear Time (g_c+I1), s	11.3	28.1	7.2	31.3	9.0	64.1	6.6	10.7
Green Ext Time (p_c), s	0.4	7.7	0.0	2.2	0.4	0.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	9	41	59	22	28	60	1894	55	12	1137	17
Future Volume (veh/h)	10	9	41	59	22	28	60	1894	55	12	1137	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	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	10	9	41	59	22	28	60	1894	55	12	1137	17
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	29	31	75	103	33	222	377	2773	80	164	2818	42
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	28	221	537	472	234	1583	485	3513	102	225	3570	53
Grp Volume(v), veh/h	60	0	0	81	0	28	60	950	999	12	564	590
Grp Sat Flow(s),veh/h/ln	786	0	0	706	0	1583	485	1770	1845	225	1770	1853
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	2.6	7.4	41.5	42.3	4.4	16.7	16.7
Cycle Q Clear(g_c), s	21.8	0.0	0.0	21.2	0.0	2.6	24.2	41.5	42.3	46.8	16.7	16.7
Prop In Lane	0.17		0.68	0.73		1.00	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	135	0	0	136	0	222	377	1397	1456	164	1397	1463
V/C Ratio(X)	0.45	0.00	0.00	0.60	0.00	0.13	0.16	0.68	0.69	0.07	0.40	0.40
Avail Cap(c_a), veh/h	137	0	0	137	0	224	377	1397	1456	164	1397	1463
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	1.00	0.51	0.51	0.51	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.7	0.0	0.0	71.3	0.0	64.0	9.3	8.1	8.2	19.0	5.5	5.5
Incr Delay (d2), s/veh	2.3	0.0	0.0	6.8	0.0	0.3	0.5	1.4	1.4	0.9	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	0.0	4.0	0.0	1.2	1.0	20.6	21.9	0.3	8.5	8.9
LnGrp Delay(d),s/veh	68.0	0.0	0.0	78.1	0.0	64.2	9.7	9.5	9.6	19.9	6.4	6.4
LnGrp LOS	E			E		E	A	A	A	B	A	A
Approach Vol, veh/h		60			109			2009			1166	
Approach Delay, s/veh		68.0			74.5			9.6			6.5	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		140.2		29.8		140.2		29.8
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		134.0		24.0		134.0		24.0
Max Q Clear Time (g_c+I1), s		44.3		23.8		48.8		23.2
Green Ext Time (p_c), s		31.6		0.0		9.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	137	101	227	165	33	266	1844	324	26	1071	163
Future Volume (veh/h)	169	137	101	227	165	33	266	1844	324	26	1071	163
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	169	137	101	227	165	33	266	1844	324	26	1071	163
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	161	137	277	226	192	350	2224	995	120	2031	909
Arrive On Green	0.09	0.09	0.09	0.12	0.12	0.12	0.08	0.63	0.63	0.02	0.57	0.57
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	169	137	101	227	165	33	266	1844	324	26	1071	163
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	14.8	12.3	10.6	19.4	14.5	3.2	10.2	68.7	16.3	1.0	31.4	8.3
Cycle Q Clear(g_c), s	14.8	12.3	10.6	19.4	14.5	3.2	10.2	68.7	16.3	1.0	31.4	8.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	161	137	277	226	192	350	2224	995	120	2031	909
V/C Ratio(X)	0.70	0.85	0.74	0.82	0.73	0.17	0.76	0.83	0.33	0.22	0.53	0.18
Avail Cap(c_a), veh/h	242	197	168	277	263	224	478	2224	995	135	2031	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	64.3	76.6	75.8	59.8	72.0	67.0	19.6	24.5	14.8	26.3	22.1	17.2
Incr Delay (d2), s/veh	8.6	24.6	12.7	17.4	8.3	0.4	4.7	3.8	0.9	0.8	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	7.5	5.1	10.9	8.0	1.4	6.4	34.5	7.4	0.5	15.6	3.7
LnGrp Delay(d),s/veh	72.9	101.2	88.5	77.2	80.3	67.4	24.3	28.3	15.6	27.2	23.0	17.6
LnGrp LOS	E	F	F	E	F	E	C	C	B	C	C	B
Approach Vol, veh/h		407			425			2434			1260	
Approach Delay, s/veh		86.3			77.6			26.2			22.4	
Approach LOS		F			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	112.8	27.0	20.7	18.8	103.6	21.0	26.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	102.0	21.0	18.0	25.0	82.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	3.0	70.7	21.4	14.3	12.2	33.4	16.8	16.5
Green Ext Time (p_c), s	0.0	19.6	0.0	0.3	0.6	9.7	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	61	229	2196	26	92	1301
Future Volume (Veh/h)	61	229	2196	26	92	1301
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	61	229	2196	26	92	1301
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.81					
vC, conflicting volume	3030	1098			2222	
vC1, stage 1 conf vol	2196					
vC2, stage 2 conf vol	834					
vCu, unblocked vol	3038	1098			2222	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	9	0			60	
cM capacity (veh/h)	67	208			231	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	290	1098	1098	26	92	650	650
Volume Left	61	0	0	0	92	0	0
Volume Right	229	0	0	26	0	0	0
cSH	144	1700	1700	1700	231	1700	1700
Volume to Capacity	2.01	0.65	0.65	0.02	0.40	0.38	0.38
Queue Length 95th (ft)	575	0	0	0	45	0	0
Control Delay (s)	531.4	0.0	0.0	0.0	30.5	0.0	0.0
Lane LOS	F				D		
Approach Delay (s)	531.4	0.0			2.0		
Approach LOS	F						

Intersection Summary			
Average Delay	40.2		
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	126.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	229	57	2177	88	23	1330
Future Vol, veh/h	229	57	2177	88	23	1330
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	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	229	57	2177	88	23	1330

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2888	1089	0	0	2265	0
Stage 1	2177	-	-	-	-	-
Stage 2	711	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 13	211	-	-	222	-
Stage 1	~ 72	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 12	211	-	-	222	-
Mov Cap-2 Maneuver	~ 54	-	-	-	-	-
Stage 1	~ 65	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1725.2	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	63	222	-
HCM Lane V/C Ratio	-	-	4.54	0.104	-
HCM Control Delay (s)	-	-	$ 1725.2	23.1	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	31.3	0.3	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	116	0	485	0	1776	81	189	1406	1
Future Volume (veh/h)	1	0	0	116	0	485	0	1776	81	189	1406	1
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	1900	1900	1900	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	1	0	0	116	0	368	0	1776	81	189	1406	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	0	0	0	0	2	0	2	2	2	2	2
Cap, veh/h	139	324	0	282	0	270	42	2325	105	210	2686	1201
Arrive On Green	0.17	0.00	0.00	0.17	0.00	0.17	0.00	0.67	0.67	0.05	0.76	0.00
Sat Flow, veh/h	1010	1900	0	1406	0	1583	389	3448	156	1774	3539	1583
Grp Volume(v), veh/h	1	0	0	116	0	368	0	906	951	189	1406	0
Grp Sat Flow(s),veh/h/ln	1010	1900	0	1406	0	1583	389	1770	1835	1774	1770	1583
Q Serve(g_s), s	0.2	0.0	0.0	12.7	0.0	29.0	0.0	58.1	59.6	6.2	27.0	0.0
Cycle Q Clear(g_c), s	12.8	0.0	0.0	12.7	0.0	29.0	0.0	58.1	59.6	6.2	27.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	139	324	0	282	0	270	42	1193	1237	210	2686	1201
V/C Ratio(X)	0.01	0.00	0.00	0.41	0.00	1.36	0.00	0.76	0.77	0.90	0.52	0.00
Avail Cap(c_a), veh/h	139	324	0	282	0	270	42	1193	1237	268	2686	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	69.5	0.0	0.0	63.7	0.0	70.5	0.0	18.5	18.7	37.1	8.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	185.2	0.0	4.6	4.6	26.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.0	0.0	26.6	0.0	29.7	31.7	10.3	13.4	0.0
LnGrp Delay(d),s/veh	69.6	0.0	0.0	64.7	0.0	255.7	0.0	23.1	23.4	63.4	8.9	0.0
LnGrp LOS	E			E		F		C	C	E	A	
Approach Vol, veh/h		1			484			1857			1595	
Approach Delay, s/veh		69.5			209.9			23.2			15.4	
Approach LOS		E			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	14.4	120.6		35.0		135.0		35.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	14.0	109.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	8.2	61.6		14.8		29.0		31.0
Green Ext Time (p_c), s	0.2	21.2		0.0		14.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.0
HCM 2010 LOS	D

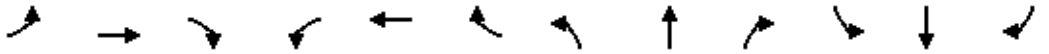
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	53	174	196	310	264	205	1469	84	76	1361	103
Future Volume (veh/h)	69	53	174	196	310	264	205	1469	84	76	1361	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	69	53	174	196	310	264	205	1469	84	76	1361	103
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	231	196	281	286	243	275	2249	1006	218	2147	960
Arrive On Green	0.04	0.12	0.12	0.07	0.15	0.15	0.06	0.64	0.64	0.03	0.61	0.61
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	69	53	174	196	310	264	205	1469	84	76	1361	103
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	5.7	4.4	18.4	12.0	26.1	26.1	7.3	44.0	3.5	2.8	41.8	4.7
Cycle Q Clear(g_c), s	5.7	4.4	18.4	12.0	26.1	26.1	7.3	44.0	3.5	2.8	41.8	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	231	196	281	286	243	275	2249	1006	218	2147	960
V/C Ratio(X)	0.57	0.23	0.89	0.70	1.09	1.09	0.75	0.65	0.08	0.35	0.63	0.11
Avail Cap(c_a), veh/h	298	405	345	281	286	243	423	2249	1006	292	2147	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.5	67.1	73.3	63.1	72.0	72.0	22.9	19.3	11.9	17.6	21.4	14.1
Incr Delay (d2), s/veh	4.2	0.5	12.7	7.4	78.0	83.1	4.0	1.5	0.2	1.0	1.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.3	8.8	3.5	19.6	17.0	5.8	21.9	1.6	1.4	20.8	2.1
LnGrp Delay(d),s/veh	66.6	67.6	86.0	70.5	150.0	155.1	26.9	20.8	12.1	18.6	22.8	14.3
LnGrp LOS	E	E	F	E	F	F	C	C	B	B	C	B
Approach Vol, veh/h		296			770			1758			1540	
Approach Delay, s/veh		78.2			131.5			21.1			22.0	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	114.0	18.0	27.1	15.8	109.1	13.0	32.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	13.0	85.0	12.0	37.0	24.0	73.0	24.5	25.0
Max Q Clear Time (g_c+I1), s	4.8	46.0	14.0	20.4	9.3	43.8	7.7	28.1
Green Ext Time (p_c), s	0.1	14.5	0.0	0.7	0.5	11.8	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.8
HCM 2010 LOS	D

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	32	86	52	4	13	11	1041	56	20	1972	17
Future Volume (veh/h)	44	32	86	52	4	13	11	1041	56	20	1972	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	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	47	34	92	56	4	14	12	1119	60	22	2120	18
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	47	90	132	8	270	119	2593	139	346	2729	23
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	191	276	530	535	47	1583	187	3417	183	474	3596	30
Grp Volume(v), veh/h	173	0	0	60	0	14	12	579	600	22	1042	1096
Grp Sat Flow(s),veh/h/ln	997	0	0	583	0	1583	187	1770	1830	474	1770	1857
Q Serve(g_s), s	13.0	0.0	0.0	0.0	0.0	1.3	6.9	20.0	20.0	3.0	58.7	59.1
Cycle Q Clear(g_c), s	29.0	0.0	0.0	16.0	0.0	1.3	65.9	20.0	20.0	22.9	58.7	59.1
Prop In Lane	0.27		0.53	0.93		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	197	0	0	140	0	270	119	1343	1389	346	1343	1409
V/C Ratio(X)	0.88	0.00	0.00	0.43	0.00	0.05	0.10	0.43	0.43	0.06	0.78	0.78
Avail Cap(c_a), veh/h	197	0	0	140	0	270	119	1343	1389	346	1343	1409
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	1.00	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.8	0.0	0.0	65.0	0.0	59.0	31.5	7.4	7.4	11.5	12.0	12.1
Incr Delay (d2), s/veh	33.3	0.0	0.0	2.1	0.0	0.1	1.4	0.9	0.8	0.4	4.4	4.3
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	9.9	0.0	0.0	2.7	0.0	0.6	0.4	10.0	10.3	0.4	30.0	31.5
LnGrp Delay(d),s/veh	106.1	0.0	0.0	67.0	0.0	59.1	32.9	8.2	8.2	11.8	16.5	16.4
LnGrp LOS	F			E		E	C	A	A	B	B	B
Approach Vol, veh/h		173			74			1191			2160	
Approach Delay, s/veh		106.1			65.5			8.5			16.4	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		135.0		35.0		135.0		35.0
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		129.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s		67.9		31.0		61.1		18.0
Green Ext Time (p_c), s		10.0		0.0		34.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	158	447	210	102	35	85	806	106	32	1884	213
Future Volume (veh/h)	238	158	447	210	102	35	85	806	106	32	1884	213
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	256	170	359	226	110	0	91	867	74	34	2026	224
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	175	149	243	175	149	111	2228	996	386	1979	215
Arrive On Green	0.11	0.09	0.09	0.11	0.09	0.00	0.04	0.63	0.63	0.02	0.61	0.61
Sat Flow, veh/h	1774	1863	1578	1774	1863	1583	1774	3539	1582	1774	3221	350
Grp Volume(v), veh/h	256	170	359	226	110	0	91	867	74	34	1096	1154
Grp Sat Flow(s),veh/h/ln	1774	1863	1578	1774	1863	1583	1774	1770	1582	1774	1770	1801
Q Serve(g_s), s	19.0	15.5	16.0	19.0	9.7	0.0	4.6	20.4	3.1	1.2	104.5	104.5
Cycle Q Clear(g_c), s	19.0	15.5	16.0	19.0	9.7	0.0	4.6	20.4	3.1	1.2	104.5	104.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	288	175	149	243	175	149	111	2228	996	386	1087	1106
V/C Ratio(X)	0.89	0.97	2.42	0.93	0.63	0.00	0.82	0.39	0.07	0.09	1.01	1.04
Avail Cap(c_a), veh/h	288	175	149	243	175	149	168	2228	996	470	1087	1106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.57	0.57	0.57
Uniform Delay (d), s/veh	64.7	76.8	77.0	62.6	74.1	0.0	52.3	15.5	12.2	12.4	32.8	32.8
Incr Delay (d2), s/veh	26.8	58.9	657.6	38.7	6.9	0.0	17.5	0.5	0.1	0.1	22.7	32.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	10.8	34.1	3.9	5.3	0.0	4.8	10.2	1.4	0.6	57.6	61.7
LnGrp Delay(d),s/veh	91.4	135.6	734.6	101.4	81.0	0.0	69.8	16.0	12.4	12.4	55.4	65.5
LnGrp LOS	F	F	F	F	F		E	B	B	B	F	F
Approach Vol, veh/h		785			336			1032			2284	
Approach Delay, s/veh		395.1			94.7			20.5			59.9	
Approach LOS		F			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	113.0	25.0	22.0	12.5	110.5	25.0	22.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	13.0	99.0	19.0	16.0	12.0	99.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	3.2	22.4	21.0	18.0	6.6	106.5	21.0	11.7
Green Ext Time (p_c), s	0.0	7.0	0.0	0.0	0.1	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	112.7
HCM 2010 LOS	F

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	54	958	57	181	2356
Future Volume (Veh/h)	13	54	958	57	181	2356
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	14	57	1019	61	193	2506
Pedestrians	1		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	0		0			0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.42					
vC, conflicting volume	2660	512			1081	
vC1, stage 1 conf vol	1020					
vC2, stage 2 conf vol	1640					
vCu, unblocked vol	2182	512			1081	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	89			70	
cM capacity (veh/h)	201	506			640	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	71	510	510	61	193	1253	1253
Volume Left	14	0	0	0	193	0	0
Volume Right	57	0	0	61	0	0	0
cSH	389	1700	1700	1700	640	1700	1700
Volume to Capacity	0.18	0.30	0.30	0.04	0.30	0.74	0.74
Queue Length 95th (ft)	16	0	0	0	32	0	0
Control Delay (s)	16.3	0.0	0.0	0.0	13.0	0.0	0.0
Lane LOS	C				B		
Approach Delay (s)	16.3	0.0			0.9		
Approach LOS	C						

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	11	954	151	37	2338
Future Vol, veh/h	48	11	954	151	37	2338
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	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	2	2	2	2
Mvmt Flow	52	12	1026	162	40	2514

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2363	513	0	0	1188	0
Stage 1	1026	-	-	-	-	-
Stage 2	1337	-	-	-	-	-
Critical Hdwy	6.84	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	~ 29	512	-	-	583	-
Stage 1	307	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 27	512	-	-	583	-
Mov Cap-2 Maneuver	109	-	-	-	-	-
Stage 1	286	-	-	-	-	-
Stage 2	210	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	58	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	128	583	-
HCM Lane V/C Ratio	-	-	0.496	0.068	-
HCM Control Delay (s)	-	-	58	11.6	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	2.3	0.2	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	85	0	190	4	962	78	569	1783	0
Future Volume (veh/h)	2	0	0	85	0	190	4	962	78	569	1783	0
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	2	0	0	91	0	23	4	1034	57	612	1917	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	61	147	0	151	0	123	200	2404	133	537	3015	1376
Arrive On Green	0.08	0.00	0.00	0.08	0.00	0.08	0.70	0.70	0.70	0.11	0.85	0.00
Sat Flow, veh/h	1383	1900	0	1406	0	1583	233	3411	188	1774	3539	1615
Grp Volume(v), veh/h	2	0	0	91	0	23	4	536	555	612	1917	0
Grp Sat Flow(s),veh/h/ln	1383	1900	0	1406	0	1583	233	1770	1830	1774	1770	1615
Q Serve(g_s), s	0.2	0.0	0.0	10.9	0.0	2.3	1.0	21.8	21.8	19.0	29.8	0.0
Cycle Q Clear(g_c), s	11.1	0.0	0.0	10.9	0.0	2.3	5.7	21.8	21.8	19.0	29.8	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	61	147	0	151	0	123	200	1247	1289	537	3015	1376
V/C Ratio(X)	0.03	0.00	0.00	0.60	0.00	0.19	0.02	0.43	0.43	1.14	0.64	0.00
Avail Cap(c_a), veh/h	190	324	0	282	0	270	200	1247	1289	537	3015	1376
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	82.8	0.0	0.0	77.3	0.0	73.4	9.0	10.6	10.6	24.0	4.1	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	3.8	0.0	0.7	0.2	1.1	1.0	83.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	4.4	0.0	1.0	0.1	11.0	11.3	37.6	14.5	0.0
LnGrp Delay(d),s/veh	83.0	0.0	0.0	81.1	0.0	74.1	9.2	11.7	11.7	107.2	5.1	0.0
LnGrp LOS	F			F		E	A	B	B	F	A	
Approach Vol, veh/h		2			114			1095			2529	
Approach Delay, s/veh		83.0			79.7			11.7			29.8	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	25.0	125.8		19.2		150.8		19.2
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	19.0	104.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	21.0	23.8		13.1		31.8		12.9
Green Ext Time (p_c), s	0.0	8.3		0.0		29.7		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	240	277	68	112	89	166	888	188	220	1597	75
Future Volume (veh/h)	59	240	277	68	112	89	166	888	188	220	1597	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	63	255	295	72	119	95	177	945	200	234	1699	80
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	385	327	186	399	339	199	1900	850	352	1907	853
Arrive On Green	0.04	0.21	0.21	0.04	0.21	0.21	0.07	0.54	0.54	0.07	0.54	0.54
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	63	255	295	72	119	95	177	945	200	234	1699	80
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	4.7	21.4	30.9	5.4	9.1	8.5	9.8	28.7	11.4	10.1	72.4	4.2
Cycle Q Clear(g_c), s	4.7	21.4	30.9	5.4	9.1	8.5	9.8	28.7	11.4	10.1	72.4	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	296	385	327	186	399	339	199	1900	850	352	1907	853
V/C Ratio(X)	0.21	0.66	0.90	0.39	0.30	0.28	0.89	0.50	0.24	0.66	0.89	0.09
Avail Cap(c_a), veh/h	328	537	456	205	537	456	323	1900	850	421	1907	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	62.0	65.8	51.5	56.1	55.9	47.0	24.9	20.9	19.5	34.8	19.1
Incr Delay (d2), s/veh	0.4	2.0	16.4	1.3	0.4	0.4	16.1	0.9	0.7	3.0	6.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	11.3	15.0	2.7	4.7	3.8	9.1	14.3	5.1	5.2	37.2	1.9
LnGrp Delay(d),s/veh	50.9	64.0	82.2	52.8	56.5	56.3	63.1	25.8	21.5	22.5	41.6	19.3
LnGrp LOS	D	E	F	D	E	E	E	C	C	C	D	B
Approach Vol, veh/h		613			286			1322			2013	
Approach Delay, s/veh		71.4			55.5			30.1			38.5	
Approach LOS		E			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	97.3	13.2	41.1	18.1	97.6	11.9	42.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	13.0	69.0	9.0	49.0	24.0	64.0	9.5	49.0
Max Q Clear Time (g_c+I1), s	12.1	30.7	7.4	32.9	11.8	74.4	6.7	11.1
Green Ext Time (p_c), s	0.4	8.1	0.0	2.2	0.3	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	10	42	62	24	29	62	1982	57	13	1192	18
Future Volume (veh/h)	11	10	42	62	24	29	62	1982	57	13	1192	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	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	10	43	64	25	30	64	2043	59	13	1229	19
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	28	57	93	31	224	343	2770	80	138	2812	43
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	0	197	403	402	218	1583	444	3514	101	194	3567	55
Grp Volume(v), veh/h	64	0	0	89	0	30	64	1024	1078	13	610	638
Grp Sat Flow(s),veh/h/ln	599	0	0	619	0	1583	444	1770	1845	194	1770	1853
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	2.8	9.3	49.4	50.6	6.2	18.9	18.9
Cycle Q Clear(g_c), s	24.0	0.0	0.0	24.0	0.0	2.8	28.2	49.4	50.6	56.8	18.9	18.9
Prop In Lane	0.17		0.67	0.72		1.00	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	109	0	0	124	0	224	343	1395	1454	138	1395	1461
V/C Ratio(X)	0.59	0.00	0.00	0.72	0.00	0.13	0.19	0.73	0.74	0.09	0.44	0.44
Avail Cap(c_a), veh/h	109	0	0	124	0	224	343	1395	1454	138	1395	1461
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	1.00	0.38	0.38	0.38	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.9	0.0	0.0	72.4	0.0	63.9	10.4	9.0	9.2	23.6	5.8	5.8
Incr Delay (d2), s/veh	7.8	0.0	0.0	18.1	0.0	0.3	0.5	1.3	1.3	1.4	1.0	1.0
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	2.9	0.0	0.0	4.8	0.0	1.3	1.2	24.4	26.0	0.4	9.5	10.0
LnGrp Delay(d),s/veh	73.7	0.0	0.0	90.6	0.0	64.2	10.8	10.4	10.5	25.0	6.8	6.8
LnGrp LOS	E			F		E	B	B	B	C	A	A
Approach Vol, veh/h		64			119			2166			1261	
Approach Delay, s/veh		73.7			83.9			10.5			7.0	
Approach LOS		E			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		140.0		30.0		140.0		30.0
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		134.0		24.0		134.0		24.0
Max Q Clear Time (g_c+I1), s		52.6		26.0		58.8		26.0
Green Ext Time (p_c), s		37.9		0.0		11.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	144	105	238	174	34	277	1928	339	27	1121	172
Future Volume (veh/h)	178	144	105	238	174	34	277	1928	339	27	1121	172
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	184	148	108	245	179	35	286	1988	349	28	1156	177
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	208	176	238	208	176	316	2257	1010	107	1788	273
Arrive On Green	0.09	0.11	0.11	0.09	0.11	0.11	0.08	0.64	0.64	0.02	0.58	0.58
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3080	470
Grp Volume(v), veh/h	184	148	108	245	179	35	286	1988	349	28	663	670
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1780
Q Serve(g_s), s	15.0	13.0	11.1	15.0	16.1	3.4	10.8	79.0	17.4	1.1	42.7	43.1
Cycle Q Clear(g_c), s	15.0	13.0	11.1	15.0	16.1	3.4	10.8	79.0	17.4	1.1	42.7	43.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	219	208	176	238	208	176	316	2257	1010	107	1027	1033
V/C Ratio(X)	0.84	0.71	0.61	1.03	0.86	0.20	0.91	0.88	0.35	0.26	0.64	0.65
Avail Cap(c_a), veh/h	219	373	317	238	373	317	427	2257	1010	152	1027	1033
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	62.4	72.9	72.0	67.1	74.2	68.6	27.8	25.5	14.3	30.9	23.9	24.0
Incr Delay (d2), s/veh	24.5	4.5	3.4	66.5	10.1	0.5	18.5	5.4	0.9	1.2	2.8	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	7.0	5.0	4.4	8.9	1.5	9.6	40.1	7.9	0.7	21.6	21.9
LnGrp Delay(d),s/veh	86.8	77.4	75.4	133.7	84.3	69.2	46.3	30.8	15.3	32.1	26.7	26.9
LnGrp LOS	F	E	E	F	F	E	D	C	B	C	C	C
Approach Vol, veh/h		440			459			2623			1361	
Approach Delay, s/veh		80.9			109.5			30.5			26.9	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	114.4	21.0	24.9	19.4	104.7	21.0	24.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	8.0	89.0	15.0	34.0	24.0	73.0	15.0	34.0
Max Q Clear Time (g_c+I1), s	3.1	81.0	17.0	15.0	12.8	45.1	17.0	18.1
Green Ext Time (p_c), s	0.0	7.0	0.0	1.0	0.6	9.9	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	41.4
HCM 2010 LOS	D

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	61	230	2305	26	93	1367
Future Volume (Veh/h)	61	230	2305	26	93	1367
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	65	245	2452	28	99	1454
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.68					
vC, conflicting volume	3377	1226			2480	
vC1, stage 1 conf vol	2452					
vC2, stage 2 conf vol	925					
vCu, unblocked vol	3552	1226			2480	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	0			46	
cM capacity (veh/h)	48	170			183	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	310	1226	1226	28	99	727	727
Volume Left	65	0	0	0	99	0	0
Volume Right	245	0	0	28	0	0	0
cSH	111	1700	1700	1700	183	1700	1700
Volume to Capacity	2.78	0.72	0.72	0.02	0.54	0.43	0.43
Queue Length 95th (ft)	721	0	0	0	70	0	0
Control Delay (s)	887.1	0.0	0.0	0.0	45.8	0.0	0.0
Lane LOS	F				E		
Approach Delay (s)	887.1	0.0			2.9		
Approach LOS	F						

Intersection Summary			
Average Delay	64.4		
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	167.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	230	57	2287	88	23	1395
Future Vol, veh/h	230	57	2287	88	23	1395
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	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	237	59	2358	91	24	1438

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3125	1179	0	0	2449	0
Stage 1	2358	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 9	183	-	-	188	-
Stage 1	~ 57	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 8	183	-	-	188	-
Mov Cap-2 Maneuver	~ 42	-	-	-	-	-
Stage 1	~ 50	-	-	-	-	-
Stage 2	419	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 2373.4	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	50	188	-
HCM Lane V/C Ratio	-	-	5.918	0.126	-
HCM Control Delay (s)	-	-	$ 2373.4	26.9	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q(veh)	-	-	34	0.4	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	122	0	509	0	1862	85	195	1468	1
Future Volume (veh/h)	1	0	0	122	0	509	0	1862	85	195	1468	1
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	1900	1900	1900	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	1	0	0	126	0	411	0	1920	88	201	1513	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	0	0	0	2	0	2	2	2	2	2
Cap, veh/h	129	324	0	282	0	270	42	2230	101	220	2686	1201
Arrive On Green	0.17	0.00	0.00	0.17	0.00	0.17	0.00	0.65	0.65	0.08	0.76	0.00
Sat Flow, veh/h	971	1900	0	1406	0	1583	351	3448	157	1774	3539	1583
Grp Volume(v), veh/h	1	0	0	126	0	411	0	978	1030	201	1513	0
Grp Sat Flow(s),veh/h/ln	971	1900	0	1406	0	1583	351	1770	1835	1774	1770	1583
Q Serve(g_s), s	0.2	0.0	0.0	13.9	0.0	29.0	0.0	74.2	76.8	11.0	30.6	0.0
Cycle Q Clear(g_c), s	14.0	0.0	0.0	13.9	0.0	29.0	0.0	74.2	76.8	11.0	30.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	129	324	0	282	0	270	42	1145	1187	220	2686	1201
V/C Ratio(X)	0.01	0.00	0.00	0.45	0.00	1.52	0.00	0.85	0.87	0.91	0.56	0.00
Avail Cap(c_a), veh/h	129	324	0	282	0	270	42	1145	1187	230	2686	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.6	0.0	0.0	64.2	0.0	70.5	0.0	23.7	24.2	53.0	8.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	252.8	0.0	8.2	8.7	36.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	5.5	0.0	31.6	0.0	38.8	41.5	11.5	15.0	0.0
LnGrp Delay(d),s/veh	70.7	0.0	0.0	65.3	0.0	323.3	0.0	31.9	32.8	89.1	9.5	0.0
LnGrp LOS	E			E		F		C	C	F	A	
Approach Vol, veh/h		1			537			2008			1714	
Approach Delay, s/veh		70.6			262.8			32.4			18.8	
Approach LOS		E			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	19.0	116.0		35.0		135.0		35.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	14.0	109.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	13.0	78.8		16.0		32.6		31.0
Green Ext Time (p_c), s	0.1	19.2		0.0		17.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	56.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	56	183	206	326	277	215	1540	88	78	1422	108
Future Volume (veh/h)	73	56	183	206	326	277	215	1540	88	78	1422	108
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	76	58	191	215	340	289	224	1604	92	81	1481	112
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	279	237	295	318	270	247	2173	972	181	2047	916
Arrive On Green	0.05	0.15	0.15	0.06	0.17	0.17	0.07	0.61	0.61	0.03	0.58	0.58
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	76	58	191	215	340	289	224	1604	92	81	1481	112
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	6.1	4.6	19.8	11.0	29.0	29.0	8.7	54.4	4.0	3.2	51.6	5.5
Cycle Q Clear(g_c), s	6.1	4.6	19.8	11.0	29.0	29.0	8.7	54.4	4.0	3.2	51.6	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	279	237	295	318	270	247	2173	972	181	2047	916
V/C Ratio(X)	0.60	0.21	0.80	0.73	1.07	1.07	0.91	0.74	0.09	0.45	0.72	0.12
Avail Cap(c_a), veh/h	246	405	345	295	318	270	380	2173	972	221	2047	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	63.4	69.8	62.4	70.5	70.5	32.6	23.1	13.4	23.2	26.0	16.3
Incr Delay (d2), s/veh	4.6	0.4	8.6	8.8	70.3	74.5	17.9	2.3	0.2	1.7	2.3	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	3.2	2.4	9.2	5.0	21.1	18.3	11.6	27.2	1.8	1.6	25.7	2.5
LnGrp Delay(d),s/veh	63.8	63.8	78.4	71.1	140.8	145.0	50.5	25.4	13.6	24.9	28.2	16.5
LnGrp LOS	E	E	E	E	F	F	D	C	B	C	C	B
Approach Vol, veh/h		325			844			1920			1674	
Approach Delay, s/veh		72.4			124.5			27.8			27.3	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	110.4	17.0	31.5	17.2	104.3	13.5	35.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	5.0	89.0	11.0	37.0	24.0	74.0	19.5	29.0
Max Q Clear Time (g_c+I1), s	5.2	56.4	13.0	21.8	10.7	53.6	8.1	31.0
Green Ext Time (p_c), s	0.0	15.5	0.0	0.8	0.5	11.0	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	32	96	58	4	13	15	1076	59	20	2070	17
Future Volume (veh/h)	44	32	96	58	4	13	15	1076	59	20	2070	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	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	47	34	103	62	4	14	16	1157	63	22	2226	18
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	39	80	129	7	270	104	2590	141	332	2730	22
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	140	230	470	513	41	1583	169	3414	186	456	3598	29
Grp Volume(v), veh/h	184	0	0	66	0	14	16	599	621	22	1093	1151
Grp Sat Flow(s),veh/h/ln	839	0	0	555	0	1583	169	1770	1830	456	1770	1858
Q Serve(g_s), s	10.1	0.0	0.0	0.0	0.0	1.3	11.3	21.0	21.0	3.1	66.3	66.7
Cycle Q Clear(g_c), s	29.0	0.0	0.0	18.9	0.0	1.3	78.0	21.0	21.0	24.2	66.3	66.7
Prop In Lane	0.26		0.56	0.94		1.00	1.00		0.10	1.00		0.02
Lane Grp Cap(c), veh/h	170	0	0	136	0	270	104	1343	1389	332	1343	1410
V/C Ratio(X)	1.08	0.00	0.00	0.49	0.00	0.05	0.15	0.45	0.45	0.07	0.81	0.82
Avail Cap(c_a), veh/h	170	0	0	136	0	270	104	1343	1389	332	1343	1410
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	1.00	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.4	0.0	0.0	66.2	0.0	59.0	37.7	7.5	7.5	11.9	12.9	13.0
Incr Delay (d2), s/veh	93.3	0.0	0.0	2.7	0.0	0.1	2.7	0.9	0.9	0.4	5.5	5.3
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	12.4	0.0	0.0	3.0	0.0	0.6	0.6	10.5	10.9	0.4	33.9	36.0
LnGrp Delay(d),s/veh	167.7	0.0	0.0	68.9	0.0	59.1	40.4	8.4	8.4	12.3	18.4	18.3
LnGrp LOS	F			E		E	D	A	A	B	B	B
Approach Vol, veh/h		184			80			1236			2266	
Approach Delay, s/veh		167.7			67.1			8.8			18.3	
Approach LOS		F			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		135.0		35.0		135.0		35.0
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		129.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s		80.0		31.0		68.7		20.9
Green Ext Time (p_c), s		10.8		0.0		36.2		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	158	480	227	102	35	97	847	112	32	1999	213
Future Volume (veh/h)	238	158	480	227	102	35	97	847	112	32	1999	213
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	256	170	402	244	110	0	104	911	80	34	2149	224
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	288	175	149	243	175	149	124	2228	996	368	1968	202
Arrive On Green	0.11	0.09	0.09	0.11	0.09	0.00	0.05	0.63	0.63	0.02	0.61	0.61
Sat Flow, veh/h	1774	1863	1578	1774	1863	1583	1774	3539	1582	1774	3241	332
Grp Volume(v), veh/h	256	170	402	244	110	0	104	911	80	34	1156	1217
Grp Sat Flow(s),veh/h/ln	1774	1863	1578	1774	1863	1583	1774	1770	1582	1774	1770	1804
Q Serve(g_s), s	19.0	15.5	16.0	19.0	9.7	0.0	5.8	21.8	3.4	1.2	103.2	103.2
Cycle Q Clear(g_c), s	19.0	15.5	16.0	19.0	9.7	0.0	5.8	21.8	3.4	1.2	103.2	103.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	288	175	149	243	175	149	124	2228	996	368	1074	1095
V/C Ratio(X)	0.89	0.97	2.71	1.00	0.63	0.00	0.84	0.41	0.08	0.09	1.08	1.11
Avail Cap(c_a), veh/h	288	175	149	243	175	149	168	2228	996	451	1074	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.50	0.50	0.50
Uniform Delay (d), s/veh	64.7	76.8	77.0	64.2	74.1	0.0	54.9	15.7	12.3	12.8	33.4	33.4
Incr Delay (d2), s/veh	26.8	58.9	786.6	58.5	6.9	0.0	23.4	0.6	0.2	0.1	43.6	57.3
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	13.0	10.8	39.4	4.0	5.3	0.0	5.6	10.8	1.5	0.6	63.1	68.5
LnGrp Delay(d),s/veh	91.4	135.6	863.6	122.7	81.0	0.0	78.3	16.3	12.5	12.9	77.0	90.7
LnGrp LOS	F	F	F	F	F		E	B	B	B	F	F
Approach Vol, veh/h		828			354			1095			2407	
Approach Delay, s/veh		475.4			109.8			21.9			83.0	
Approach LOS		F			F			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	113.0	25.0	22.0	13.8	109.2	25.0	22.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	12.0	99.0	19.0	16.0	12.0	99.0	19.0	16.0
Max Q Clear Time (g_c+I1), s	3.2	23.8	21.0	18.0	7.8	105.2	21.0	11.7
Green Ext Time (p_c), s	0.0	7.5	0.0	0.0	0.1	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	140.1
HCM 2010 LOS	F

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	25	100	970	90	312	2389
Future Volume (Veh/h)	25	100	970	90	312	2389
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	27	106	1032	96	332	2541
Pedestrians	1		1			1
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	3.5		3.5			3.5
Percent Blockage	0		0			0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.42					
vC, conflicting volume	2968	518			1129	
vC1, stage 1 conf vol	1033					
vC2, stage 2 conf vol	1936					
vCu, unblocked vol	2925	518			1129	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	74	79			46	
cM capacity (veh/h)	103	501			614	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	133	516	516	96	332	1270	1270
Volume Left	27	0	0	0	332	0	0
Volume Right	106	0	0	96	0	0	0
cSH	281	1700	1700	1700	614	1700	1700
Volume to Capacity	0.47	0.30	0.30	0.06	0.54	0.75	0.75
Queue Length 95th (ft)	60	0	0	0	81	0	0
Control Delay (s)	28.8	0.0	0.0	0.0	17.6	0.0	0.0
Lane LOS	D				C		
Approach Delay (s)	28.8	0.0			2.0		
Approach LOS	D						

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	94	23	987	282	70	2350
Future Volume (Veh/h)	94	23	987	282	70	2350
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	101	25	1061	303	75	2527
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						1135
pX, platoon unblocked	0.42					
vC, conflicting volume	2474	530			1364	
vC1, stage 1 conf vol	1061					
vC2, stage 2 conf vol	1414					
vCu, unblocked vol	1761	530			1364	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	54	95			85	
cM capacity (veh/h)	221	498			500	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	126	530	530	303	75	1264	1264
Volume Left	101	0	0	0	75	0	0
Volume Right	25	0	0	303	0	0	0
cSH	248	1700	1700	1700	500	1700	1700
Volume to Capacity	0.51	0.31	0.31	0.18	0.15	0.74	0.74
Queue Length 95th (ft)	66	0	0	0	13	0	0
Control Delay (s)	33.6	0.0	0.0	0.0	13.5	0.0	0.0
Lane LOS	D				B		
Approach Delay (s)	33.6	0.0			0.4		
Approach LOS	D						

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	85	0	223	4	1077	78	587	1824	0
Future Volume (veh/h)	2	0	0	85	0	223	4	1077	78	587	1824	0
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	2	0	0	91	0	59	4	1158	57	631	1961	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	62	149	0	153	0	124	191	2417	119	494	3012	1374
Arrive On Green	0.08	0.00	0.00	0.08	0.00	0.08	0.70	0.70	0.70	0.11	0.85	0.00
Sat Flow, veh/h	1338	1900	0	1406	0	1583	223	3434	169	1774	3539	1615
Grp Volume(v), veh/h	2	0	0	91	0	59	4	597	618	631	1961	0
Grp Sat Flow(s),veh/h/ln	1338	1900	0	1406	0	1583	223	1770	1833	1774	1770	1615
Q Serve(g_s), s	0.3	0.0	0.0	10.8	0.0	6.1	1.0	25.6	25.6	19.0	31.5	0.0
Cycle Q Clear(g_c), s	11.1	0.0	0.0	10.8	0.0	6.1	7.5	25.6	25.6	19.0	31.5	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	62	149	0	153	0	124	191	1246	1290	494	3012	1374
V/C Ratio(X)	0.03	0.00	0.00	0.60	0.00	0.47	0.02	0.48	0.48	1.28	0.65	0.00
Avail Cap(c_a), veh/h	185	324	0	282	0	270	191	1246	1290	494	3012	1374
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	82.6	0.0	0.0	77.2	0.0	75.0	9.7	11.2	11.2	28.2	4.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	3.7	0.0	2.8	0.2	1.3	1.3	140.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	4.4	0.0	2.8	0.1	12.9	13.3	42.4	15.4	0.0
LnGrp Delay(d),s/veh	82.9	0.0	0.0	80.9	0.0	77.8	9.9	12.6	12.5	168.2	5.3	0.0
LnGrp LOS	F			F		E	A	B	B	F	A	
Approach Vol, veh/h		2			150			1219			2592	
Approach Delay, s/veh		82.9			79.7			12.5			45.0	
Approach LOS		F			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	25.0	125.7		19.3		150.7		19.3
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	19.0	104.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	21.0	27.6		13.1		33.5		12.8
Green Ext Time (p_c), s	0.0	10.0		0.0		31.3		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	36.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	240	277	68	112	106	166	986	188	226	1632	75
Future Volume (veh/h)	59	240	277	68	112	106	166	986	188	226	1632	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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	63	255	295	72	119	113	177	1049	200	240	1736	80
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	385	327	186	399	339	199	1894	847	326	1891	846
Arrive On Green	0.04	0.21	0.21	0.04	0.21	0.21	0.08	0.54	0.54	0.07	0.53	0.53
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	63	255	295	72	119	113	177	1049	200	240	1736	80
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	4.7	21.4	30.9	5.4	9.1	10.3	10.6	33.3	11.4	10.4	76.2	4.2
Cycle Q Clear(g_c), s	4.7	21.4	30.9	5.4	9.1	10.3	10.6	33.3	11.4	10.4	76.2	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	385	327	186	399	339	199	1894	847	326	1891	846
V/C Ratio(X)	0.22	0.66	0.90	0.39	0.30	0.33	0.89	0.55	0.24	0.74	0.92	0.09
Avail Cap(c_a), veh/h	325	537	456	205	537	456	315	1894	847	391	1891	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	62.0	65.8	51.5	56.1	56.5	50.5	26.1	21.0	22.1	36.2	19.4
Incr Delay (d2), s/veh	0.4	2.0	16.4	1.3	0.4	0.6	17.1	1.2	0.7	5.8	8.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	11.3	15.0	2.7	4.7	4.6	9.2	16.5	5.2	5.6	39.4	1.9
LnGrp Delay(d),s/veh	50.9	64.0	82.2	52.8	56.5	57.1	67.6	27.3	21.7	27.9	44.8	19.6
LnGrp LOS	D	E	F	D	E	E	E	C	C	C	D	B
Approach Vol, veh/h		613			304			1426			2056	
Approach Delay, s/veh		71.4			55.9			31.5			41.9	
Approach LOS		E			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	97.0	13.2	41.1	18.9	96.8	11.9	42.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	19.0	69.0	9.0	49.0	24.0	64.0	9.5	49.0
Max Q Clear Time (g_c+I1), s	12.4	35.3	7.4	32.9	12.6	78.2	6.7	12.3
Green Ext Time (p_c), s	0.4	9.1	0.0	2.2	0.3	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	10	47	65	24	29	75	2116	66	13	1244	18
Future Volume (veh/h)	11	10	47	65	24	29	75	2116	66	13	1244	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	1900	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	10	48	67	25	30	77	2181	68	13	1282	19
Adj No. of Lanes	0	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	27	63	92	29	224	325	2762	86	115	2814	42
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	0	194	444	392	204	1583	422	3504	109	168	3570	53
Grp Volume(v), veh/h	69	0	0	92	0	30	77	1096	1153	13	635	666
Grp Sat Flow(s),veh/h/ln	638	0	0	596	0	1583	422	1770	1844	168	1770	1853
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	2.8	12.5	58.5	60.2	8.1	20.2	20.2
Cycle Q Clear(g_c), s	24.0	0.0	0.0	24.0	0.0	2.8	32.7	58.5	60.2	68.2	20.2	20.2
Prop In Lane	0.16		0.70	0.73		1.00	1.00		0.06	1.00		0.03
Lane Grp Cap(c), veh/h	115	0	0	121	0	224	325	1395	1453	115	1395	1461
V/C Ratio(X)	0.60	0.00	0.00	0.76	0.00	0.13	0.24	0.79	0.79	0.11	0.46	0.46
Avail Cap(c_a), veh/h	115	0	0	121	0	224	325	1395	1453	115	1395	1461
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	1.00	0.25	0.25	0.25	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.1	0.0	0.0	73.3	0.0	63.9	11.4	10.0	10.2	29.5	5.9	5.9
Incr Delay (d2), s/veh	8.5	0.0	0.0	24.3	0.0	0.3	0.4	1.2	1.2	2.0	1.1	1.0
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	3.2	0.0	0.0	5.1	0.0	1.3	1.5	28.4	30.6	0.4	10.1	10.6
LnGrp Delay(d),s/veh	74.6	0.0	0.0	97.6	0.0	64.2	11.8	11.2	11.3	31.5	7.0	7.0
LnGrp LOS	E			F		E	B	B	B	C	A	A
Approach Vol, veh/h		69			122			2326			1314	
Approach Delay, s/veh		74.6			89.4			11.3			7.2	
Approach LOS		E			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		140.0		30.0		140.0		30.0
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		134.0		24.0		134.0		24.0
Max Q Clear Time (g_c+I1), s		62.2		26.0		70.2		26.0
Green Ext Time (p_c), s		42.8		0.0		12.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	144	123	247	174	34	322	2085	361	27	1182	172
Future Volume (veh/h)	178	144	123	247	174	34	322	2085	361	27	1182	172
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	184	148	127	255	179	35	332	2149	372	28	1219	177
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	208	176	237	208	176	352	2257	1010	91	1662	240
Arrive On Green	0.09	0.11	0.11	0.09	0.11	0.11	0.12	0.64	0.64	0.02	0.54	0.54
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3104	449
Grp Volume(v), veh/h	184	148	127	255	179	35	332	2149	372	28	692	704
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1784
Q Serve(g_s), s	15.0	13.0	13.2	15.0	16.1	3.4	18.7	95.2	18.9	1.2	50.8	51.5
Cycle Q Clear(g_c), s	15.0	13.0	13.2	15.0	16.1	3.4	18.7	95.2	18.9	1.2	50.8	51.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	219	208	176	237	208	176	352	2257	1010	91	947	955
V/C Ratio(X)	0.84	0.71	0.72	1.08	0.86	0.20	0.94	0.95	0.37	0.31	0.73	0.74
Avail Cap(c_a), veh/h	219	373	317	237	373	317	382	2257	1010	136	947	955
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	62.4	72.9	73.0	67.1	74.2	68.6	42.2	28.4	14.6	39.0	30.2	30.3
Incr Delay (d2), s/veh	24.5	4.5	5.4	80.0	10.1	0.5	30.8	10.6	1.0	1.7	4.5	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	7.0	6.1	5.3	8.9	1.5	18.4	49.6	8.5	0.8	26.0	26.4
LnGrp Delay(d),s/veh	86.8	77.4	78.4	147.0	84.3	69.2	73.0	39.1	15.6	40.7	34.6	34.9
LnGrp LOS	F	E	E	F	F	E	E	D	B	D	C	C
Approach Vol, veh/h		459			469			2853			1424	
Approach Delay, s/veh		81.5			117.3			40.0			34.9	
Approach LOS		F			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	114.4	21.0	24.9	27.1	97.0	21.0	24.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	8.0	89.0	15.0	34.0	24.0	73.0	15.0	34.0
Max Q Clear Time (g_c+I1), s	3.2	97.2	17.0	15.2	20.7	53.5	17.0	18.1
Green Ext Time (p_c), s	0.0	0.0	0.0	1.1	0.3	9.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	49.2
HCM 2010 LOS	D

Notes

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	106	409	2350	44	162	1385
Future Volume (Veh/h)	106	409	2350	44	162	1385
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	113	435	2500	47	172	1473
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						810
pX, platoon unblocked	0.63					
vC, conflicting volume	3580	1250			2547	
vC1, stage 1 conf vol	2500					
vC2, stage 2 conf vol	1080					
vCu, unblocked vol	3918	1250			2547	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	0	0			0	
cM capacity (veh/h)	0	164			172	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	548	1250	1250	47	172	736	736
Volume Left	113	0	0	0	172	0	0
Volume Right	435	0	0	47	0	0	0
cSH	0	1700	1700	1700	172	1700	1700
Volume to Capacity	Err	0.74	0.74	0.03	1.00	0.43	0.43
Queue Length 95th (ft)	Err	0	0	0	201	0	0
Control Delay (s)	Err	0.0	0.0	0.0	123.3	0.0	0.0
Lane LOS	F				F		
Approach Delay (s)	Err	0.0			12.9		
Approach LOS	F						

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	617.1

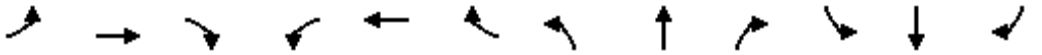
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	409	102	2305	157	41	1440
Future Vol, veh/h	409	102	2305	157	41	1440
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	422	105	2376	162	42	1485

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3203	1188	0	0	2538	0
Stage 1	2376	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 8	181	-	-	173	-
Stage 1	~ 56	-	-	-	-	-
Stage 2	~ 390	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	181	-	-	173	-
Mov Cap-2 Maneuver	~ 35	-	-	-	-	-
Stage 1	~ 42	-	-	-	-	-
Stage 2	~ 390	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay,$	5376.6	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	42	173	-
HCM Lane V/C Ratio	-	-	12.543	0.244	-
HCM Control Delay (s)	-	-	$ 5376.6	32.4	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q(veh)	-	-	63.7	0.9	-

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	122	0	527	0	1923	85	262	1625	1
Future Volume (veh/h)	1	0	0	122	0	527	0	1923	85	262	1625	1
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	1900	1900	1900	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	1	0	0	126	0	430	0	1982	88	270	1675	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	0	0	0	2	0	2	2	2	2	2
Cap, veh/h	127	324	0	282	0	270	42	2214	98	218	2686	1201
Arrive On Green	0.17	0.00	0.00	0.17	0.00	0.17	0.00	0.64	0.64	0.08	0.76	0.00
Sat Flow, veh/h	954	1900	0	1406	0	1583	300	3453	152	1774	3539	1583
Grp Volume(v), veh/h	1	0	0	126	0	430	0	1008	1062	270	1675	0
Grp Sat Flow(s),veh/h/ln	954	1900	0	1406	0	1583	300	1770	1836	1774	1770	1583
Q Serve(g_s), s	0.2	0.0	0.0	13.9	0.0	29.0	0.0	80.8	83.6	14.0	36.8	0.0
Cycle Q Clear(g_c), s	14.0	0.0	0.0	13.9	0.0	29.0	0.0	80.8	83.6	14.0	36.8	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	127	324	0	282	0	270	42	1135	1177	218	2686	1201
V/C Ratio(X)	0.01	0.00	0.00	0.45	0.00	1.59	0.00	0.89	0.90	1.24	0.62	0.00
Avail Cap(c_a), veh/h	127	324	0	282	0	270	42	1135	1177	218	2686	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.6	0.0	0.0	64.2	0.0	70.5	0.0	25.4	25.9	59.1	9.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.1	0.0	283.3	0.0	10.5	11.2	139.4	1.1	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	0.0	0.0	0.0	5.5	0.0	33.9	0.0	42.5	45.8	18.7	18.1	0.0
LnGrp Delay(d),s/veh	70.7	0.0	0.0	65.3	0.0	353.8	0.0	35.9	37.2	198.5	10.5	0.0
LnGrp LOS	E			E		F		D	D	F	B	
Approach Vol, veh/h		1			556			2070			1945	
Approach Delay, s/veh		70.6			288.4			36.6			36.6	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	20.0	115.0		35.0		135.0		35.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	14.0	109.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	16.0	85.6		16.0		38.8		31.0
Green Ext Time (p_c), s	0.0	16.7		0.0		21.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	56	183	206	326	286	215	1592	88	100	1556	108
Future Volume (veh/h)	73	56	183	206	326	286	215	1592	88	100	1556	108
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	76	58	191	215	340	298	224	1658	92	104	1621	112
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	279	237	295	318	270	246	2149	961	179	1977	884
Arrive On Green	0.05	0.15	0.15	0.06	0.17	0.17	0.09	0.61	0.61	0.04	0.56	0.56
Sat Flow, veh/h	1774	1863	1583	1774	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	76	58	191	215	340	298	224	1658	92	104	1621	112
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1774	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	6.1	4.6	19.8	11.0	29.0	29.0	12.2	58.9	4.1	4.3	63.4	5.7
Cycle Q Clear(g_c), s	6.1	4.6	19.8	11.0	29.0	29.0	12.2	58.9	4.1	4.3	63.4	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	279	237	295	318	270	246	2149	961	179	1977	884
V/C Ratio(X)	0.60	0.21	0.80	0.73	1.07	1.10	0.91	0.77	0.10	0.58	0.82	0.13
Avail Cap(c_a), veh/h	246	405	345	295	318	270	344	2149	961	208	1977	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	63.4	69.8	62.4	70.5	70.5	45.9	24.7	13.9	26.9	30.6	17.8
Incr Delay (d2), s/veh	4.6	0.4	8.6	8.8	70.3	85.3	21.8	2.8	0.2	3.0	4.0	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	3.2	2.4	9.2	5.0	21.1	19.1	11.9	29.4	1.9	2.5	31.9	2.6
LnGrp Delay(d),s/veh	63.8	63.8	78.4	71.1	140.8	155.8	67.7	27.4	14.1	29.9	34.5	18.1
LnGrp LOS	E	E	E	E	F	F	E	C	B	C	C	B
Approach Vol, veh/h		325			853			1974			1837	
Approach Delay, s/veh		72.4			128.5			31.4			33.3	
Approach LOS		E			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	109.2	17.0	31.5	20.6	100.9	13.5	35.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	5.5	6.0
Max Green Setting (Gmax), s	9.0	89.0	11.0	37.0	24.0	74.0	19.5	29.0
Max Q Clear Time (g_c+I1), s	8.1	60.9	13.0	21.8	14.2	65.4	8.1	31.0
Green Ext Time (p_c), s	0.0	15.0	0.0	0.8	0.4	6.4	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	51.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	158	480	227	102	35	97	847	112	32	1999	213
Future Volume (veh/h)	238	158	480	227	102	35	97	847	112	32	1999	213
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	256	170	516	244	110	38	104	911	120	34	2149	229
Adj No. of Lanes	1	1	2	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	351	523	198	179	152	124	2124	949	335	2044	914
Arrive On Green	0.14	0.19	0.19	0.05	0.10	0.10	0.05	0.60	0.60	0.02	0.58	0.58
Sat Flow, veh/h	1774	1863	2779	1774	1863	1578	1774	3539	1582	1774	3539	1582
Grp Volume(v), veh/h	256	170	516	244	110	38	104	911	120	34	2149	229
Grp Sat Flow(s),veh/h/ln	1774	1863	1390	1774	1863	1578	1774	1770	1582	1774	1770	1582
Q Serve(g_s), s	21.6	13.9	31.5	8.0	9.6	3.8	5.8	23.6	5.6	1.3	98.2	12.2
Cycle Q Clear(g_c), s	21.6	13.9	31.5	8.0	9.6	3.8	5.8	23.6	5.6	1.3	98.2	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	338	351	523	198	179	152	124	2124	949	335	2044	914
V/C Ratio(X)	0.76	0.48	0.99	1.23	0.61	0.25	0.84	0.43	0.13	0.10	1.05	0.25
Avail Cap(c_a), veh/h	342	351	523	198	179	152	168	2124	949	409	2044	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50
Uniform Delay (d), s/veh	56.8	61.6	68.8	73.4	73.8	71.1	52.9	18.3	14.7	15.0	35.9	17.7
Incr Delay (d2), s/veh	9.3	1.0	35.7	139.7	6.0	0.8	23.4	0.6	0.3	0.1	30.0	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	11.4	7.2	14.7	13.1	5.3	1.7	5.6	11.7	2.5	0.6	56.2	5.4
LnGrp Delay(d),s/veh	66.1	62.7	104.5	213.1	79.8	72.0	76.3	18.9	15.0	15.1	65.9	18.1
LnGrp LOS	E	E	F	F	E	E	E	B	B	B	F	B
Approach Vol, veh/h		942			392			1135			2412	
Approach Delay, s/veh		86.5			162.0			23.8			60.7	
Approach LOS		F			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	108.0	14.0	38.0	13.8	104.2	29.6	22.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	4.0	95.0	8.0	32.0	12.0	94.0	24.0	16.0
Max Q Clear Time (g_c+I1), s	3.3	25.6	10.0	33.5	7.8	100.2	23.6	11.6
Green Ext Time (p_c), s	0.0	7.7	0.0	0.0	0.1	0.0	0.0	0.2

Intersection Summary	
HCM 2010 Ctrl Delay	65.2
HCM 2010 LOS	E

Notes

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	100	970	90	312	2389
Future Vol, veh/h	25	100	970	90	312	2389
Conflicting Peds, #/hr	1	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	106	1032	96	332	2541

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2969	518	0	0	1129	0
Stage 1	1033	-	-	-	-	-
Stage 2	1936	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 11	502	-	-	615	-
Stage 1	304	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 5	501	-	-	614	-
Mov Cap-2 Maneuver	289	-	-	-	-	-
Stage 1	140	-	-	-	-	-
Stage 2	99	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	289	501	614	-
HCM Lane V/C Ratio	-	-	0.092	0.212	0.541	-
HCM Control Delay (s)	-	-	18.7	14.1	17.5	-
HCM Lane LOS	-	-	C	B	C	-
HCM 95th %tile Q(veh)	-	-	0.3	0.8	3.2	-

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

Intersection	
Int Delay, s/veh	7.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	94	23	987	282	70	2350
Future Vol, veh/h	94	23	987	282	70	2350
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	0	2	2	2	2
Mvmt Flow	101	25	1061	303	75	2527

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2475	531	0	0	1364	0
Stage 1	1061	-	-	-	-	-
Stage 2	1414	-	-	-	-	-
Critical Hdwy	6.84	6.9	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.3	-	-	2.22	-
Pot Cap-1 Maneuver	~ 25	498	-	-	500	-
Stage 1	294	-	-	-	-	-
Stage 2	190	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 21	498	-	-	500	-
Mov Cap-2 Maneuver	~ 80	-	-	-	-	-
Stage 1	250	-	-	-	-	-
Stage 2	190	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	227.4	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	80	498	500	-
HCM Lane V/C Ratio	-	-	1.263	0.05	0.151	-
HCM Control Delay (s)	-	-	279.9	12.6	13.5	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	7.6	0.2	0.5	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	0	85	0	223	4	1077	78	587	1824	0
Future Volume (veh/h)	2	0	0	85	0	223	4	1077	78	587	1824	0
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	1900	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	2	0	0	91	0	240	4	1158	84	631	1961	0
Adj No. of Lanes	1	1	0	0	1	2	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	0	0	0	0	2	2	2	2	2	2	0
Cap, veh/h	89	196	0	187	0	287	155	1696	123	657	2925	1335
Arrive On Green	0.10	0.00	0.00	0.10	0.00	0.10	0.51	0.51	0.51	0.28	0.83	0.00
Sat Flow, veh/h	1135	1900	0	1406	0	2787	223	3347	243	1774	3539	1615
Grp Volume(v), veh/h	2	0	0	91	0	240	4	612	630	631	1961	0
Grp Sat Flow(s),veh/h/ln	1135	1900	0	1406	0	1393	223	1770	1820	1774	1770	1615
Q Serve(g_s), s	0.3	0.0	0.0	10.6	0.0	14.4	1.5	44.3	44.4	44.6	36.6	0.0
Cycle Q Clear(g_c), s	10.8	0.0	0.0	10.6	0.0	14.4	1.5	44.3	44.4	44.6	36.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	89	196	0	187	0	287	155	896	922	657	2925	1335
V/C Ratio(X)	0.02	0.00	0.00	0.49	0.00	0.84	0.03	0.68	0.68	0.96	0.67	0.00
Avail Cap(c_a), veh/h	166	324	0	282	0	475	155	896	922	778	2925	1335
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	78.3	0.0	0.0	73.1	0.0	74.9	21.1	31.6	31.7	42.4	5.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.0	0.0	6.6	0.3	4.2	4.1	21.4	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	4.2	0.0	5.8	0.1	22.6	23.3	32.8	17.9	0.0
LnGrp Delay(d),s/veh	78.4	0.0	0.0	75.1	0.0	81.5	21.4	35.8	35.8	63.8	7.0	0.0
LnGrp LOS	E			E		F	C	D	D	E	A	
Approach Vol, veh/h		2			331			1246			2592	
Approach Delay, s/veh		78.4			79.7			35.7			20.8	
Approach LOS		E			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	54.4	92.1		23.5		146.5		23.5
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	60.0	63.0		29.0		129.0		29.0
Max Q Clear Time (g_c+I1), s	46.6	46.4		12.8		38.6		16.4
Green Ext Time (p_c), s	1.8	7.2		0.0		30.9		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	144	123	247	174	34	322	2085	361	27	1182	172
Future Volume (veh/h)	178	144	123	247	174	34	322	2085	361	27	1182	172
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	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	184	148	127	255	179	35	332	2149	372	28	1219	177
Adj No. of Lanes	1	1	2	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	276	413	406	200	170	356	2272	1016	92	1971	882
Arrive On Green	0.09	0.15	0.15	0.05	0.11	0.11	0.11	0.64	0.64	0.02	0.56	0.56
Sat Flow, veh/h	1774	1863	2787	3442	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	184	148	127	255	179	35	332	2149	372	28	1219	177
Grp Sat Flow(s),veh/h/ln	1774	1863	1393	1721	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	15.0	12.5	6.9	8.0	16.1	3.4	15.3	94.1	18.7	1.1	39.6	9.5
Cycle Q Clear(g_c), s	15.0	12.5	6.9	8.0	16.1	3.4	15.3	94.1	18.7	1.1	39.6	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	276	413	406	200	170	356	2272	1016	92	1971	882
V/C Ratio(X)	0.86	0.54	0.31	0.63	0.90	0.21	0.93	0.95	0.37	0.30	0.62	0.20
Avail Cap(c_a), veh/h	213	285	426	406	208	177	501	2272	1016	106	1971	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90
Uniform Delay (d), s/veh	61.3	67.0	64.6	67.7	75.0	69.3	32.7	27.8	14.3	38.7	25.4	18.8
Incr Delay (d2), s/veh	28.6	1.8	0.4	3.0	34.9	0.6	19.9	9.9	1.0	1.7	1.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	6.6	2.7	2.1	10.2	1.5	17.4	48.8	8.4	0.8	19.7	4.3
LnGrp Delay(d),s/veh	89.9	68.8	65.0	70.7	109.8	69.9	52.6	37.6	15.3	40.3	26.8	19.2
LnGrp LOS	F	E	E	E	F	E	D	D	B	D	C	B
Approach Vol, veh/h		459			469			2853			1424	
Approach Delay, s/veh		76.2			85.6			36.5			26.1	
Approach LOS		E			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	115.1	14.0	31.2	24.1	100.7	21.0	24.2
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	107.0	8.0	26.0	32.0	80.0	15.0	19.0
Max Q Clear Time (g_c+I1), s	3.1	96.1	10.0	14.5	17.3	41.6	17.0	18.1
Green Ext Time (p_c), s	0.0	9.6	0.0	0.9	0.8	11.4	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Notes

Intersection	
Int Delay, s/veh	4.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	106	409	2350	44	162	1385
Future Vol, veh/h	106	409	2350	44	162	1385
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	150	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	113	435	2500	47	172	1473

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3581	1250	0	0	2547	0
Stage 1	2500	-	-	-	-	-
Stage 2	1081	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 4	~ 164	-	-	~ 172	-
Stage 1	~ 47	-	-	-	-	-
Stage 2	287	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 164	-	-	~ 172	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	287	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		0	12.9
HCM LOS	-		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	164	~ 172	-
HCM Lane V/C Ratio	-	-	-	2.653	1.002	-
HCM Control Delay (s)	-	-	-$	804.5	123.5	-
HCM Lane LOS	-	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	-	38.2	8.1	-

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

Intersection	
Int Delay, s/veh	477.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	409	102	2305	157	41	1440
Future Vol, veh/h	409	102	2305	157	41	1440
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	1	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	422	105	2376	162	42	1485

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3203	1188	0	0	2538	0
Stage 1	2376	-	-	-	-	-
Stage 2	827	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 8	181	-	-	173	-
Stage 1	~ 56	-	-	-	-	-
Stage 2	~ 390	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	181	-	-	173	-
Mov Cap-2 Maneuver	~ 35	-	-	-	-	-
Stage 1	~ 42	-	-	-	-	-
Stage 2	~ 390	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay,$	4162.9	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	35	181	173	-
HCM Lane V/C Ratio	-	-	12.047	0.581	0.244	-
HCM Control Delay (s)	-	-	$ 5188.8	49.3	32.4	-
HCM Lane LOS	-	-	F	E	D	-
HCM 95th %tile Q(veh)	-	-	51.4	3.1	0.9	-

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	122	0	527	0	1923	85	262	1625	1
Future Volume (veh/h)	1	0	0	122	0	527	0	1923	85	262	1625	1
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	1900	1900	1900	1863	1863	1900	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1	0	0	126	0	430	0	1982	88	270	1675	0
Adj No. of Lanes	1	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	0	0	0	2	0	2	2	2	2	2
Cap, veh/h	175	394	0	343	0	520	51	1921	860	267	2503	1120
Arrive On Green	0.21	0.00	0.00	0.21	0.00	0.21	0.00	0.54	0.54	0.12	0.71	0.00
Sat Flow, veh/h	954	1900	0	1406	0	1583	300	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	1	0	0	126	0	430	0	1982	88	270	1675	0
Grp Sat Flow(s),veh/h/ln	954	1900	0	1406	0	1583	300	1770	1583	1774	1770	1583
Q Serve(g_s), s	0.1	0.0	0.0	10.9	0.0	29.0	0.0	76.0	3.8	17.0	36.8	0.0
Cycle Q Clear(g_c), s	11.1	0.0	0.0	10.9	0.0	29.0	0.0	76.0	3.8	17.0	36.8	0.0
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	175	394	0	343	0	520	51	1921	860	267	2503	1120
V/C Ratio(X)	0.01	0.00	0.00	0.37	0.00	0.83	0.00	1.03	0.10	1.01	0.67	0.00
Avail Cap(c_a), veh/h	175	394	0	343	0	520	51	1921	860	267	2503	1120
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.2	0.0	0.0	48.3	0.0	43.3	0.0	32.0	15.5	51.2	11.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	10.6	0.0	29.1	0.2	58.1	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.3	0.0	16.8	0.0	44.6	1.7	14.6	18.2	0.0
LnGrp Delay(d),s/veh	53.2	0.0	0.0	49.0	0.0	53.9	0.0	61.1	15.7	109.4	12.8	0.0
LnGrp LOS	D			D		D		F	B	F	B	
Approach Vol, veh/h		1			556			2070			1945	
Approach Delay, s/veh		53.2			52.8			59.2			26.2	
Approach LOS		D			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	23.0	82.0		35.0		105.0		35.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	17.0	76.0		29.0		99.0		29.0
Max Q Clear Time (g_c+I1), s	19.0	78.0		13.1		38.8		31.0
Green Ext Time (p_c), s	0.0	0.0		0.0		19.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.4
HCM 2010 LOS	D

APPENDIX D

Raw Traffic Counts

Prepared by National Data & Surveying Services

S Cobb Dr & Wisteria Ln

Peak Hour Turning Movement Count

ID: 18-09212-001
City: Smyrna

Day: Thursday
Date: 04/26/2018

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

S Cobb Dr — SOUTHBOUND

AM	16	1738	19	0	992	AM
NOON	0	0	0	0	0	NOON
PM	17	1052	12	0	1733	PM

EASTBOUND — Wisteria Ln

AM	NOON	PM		
27	0	81		
0	0	0	0	
41	0	10	0	
30	0	9	1	
70	0	33	0	

WESTBOUND — Wisteria Ln

PM	NOON	AM	
27	0	12	0.5
22	0	4	0.5
54	0	42	0
0	0	0	0
64	0	99	

NORTHBOUND — S Cobb Dr

PM	1139	0	42	1696	43	PM
NOON	0	0	0	0	0	NOON
AM	1850	0	7	939	50	AM

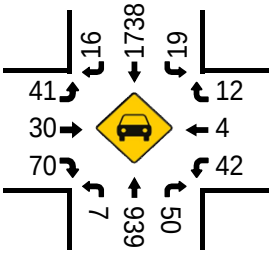
	0	2	1	0
	0	1	2	0

CONTROL

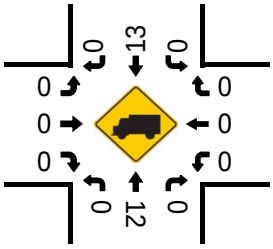
Signalized

TEV	2968 AM	0 NOON	3017 PM
PHF	0.86		0.95

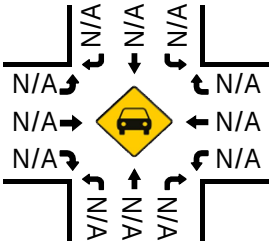
Total Vehicles (AM)



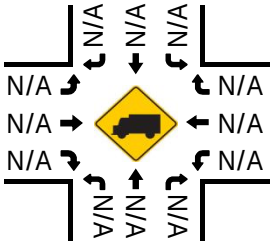
HT (AM)



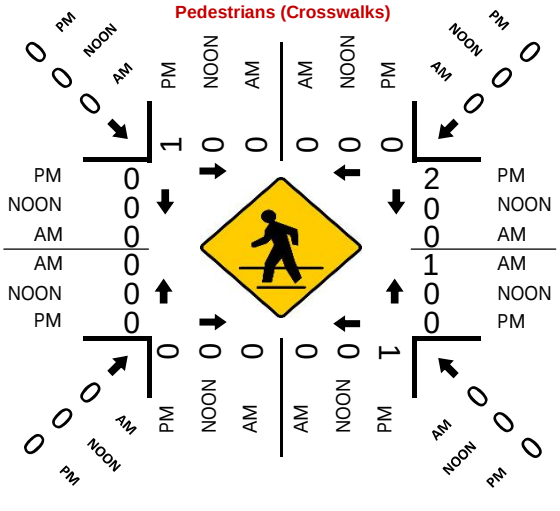
Total Vehicles (Noon)



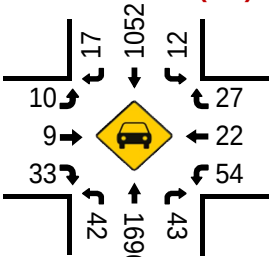
HT (NOON)



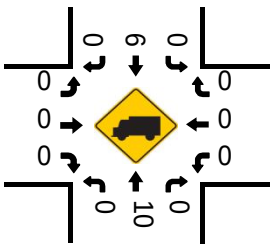
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



Prepared by National Data & Surveying Services

S Cobb Dr & King Springs Rd

Peak Hour Turning Movement Count

ID: 18-09212-002
City: Smyrna

Day: Thursday
Date: 04/26/2018

PEAK HOURS

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

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

S Cobb Dr — SOUTHBOUND

AM	199	1639	30	0	969	AM
NOON	0	0	0	0	0	NOON
PM	160	976	25	0	1818	PM

EASTBOUND (King Springs Rd)

AM	NOON	PM		
363	0	529		
0	0	0	0	
222	0	166	1	
147	0	134	1	
383	0	78	1	
AM	NOON	PM		

WESTBOUND (King Springs Rd)

PM	NOON	AM	
32	0	33	0.5
162	0	95	0.5
212	0	179	1
0	0	0	0
450	0	270	
PM	NOON	AM	

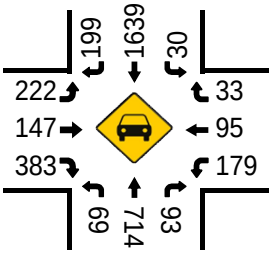
NORTHBOUND — S Cobb Dr

PM	1266	0	207	1620	291	PM
NOON	0	0	0	0	0	NOON
AM	2201	0	69	714	93	AM

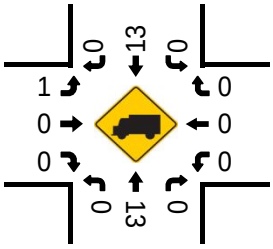
CONTROL: Signalized

TEV	3803 AM	0 NOON	4063 PM
PHF	0.93		0.97

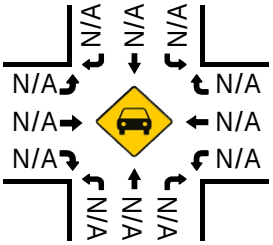
Total Vehicles (AM)



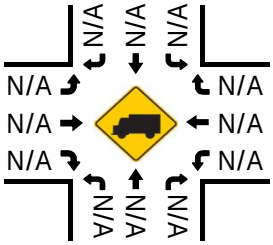
HT (AM)



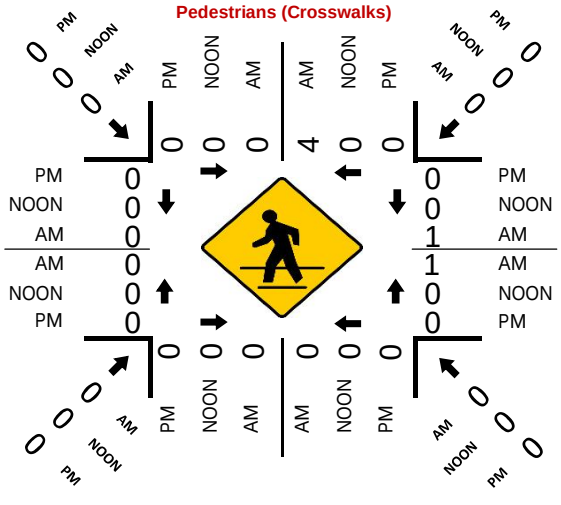
Total Vehicles (Noon)



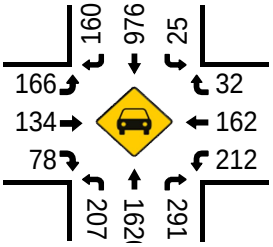
HT (NOON)



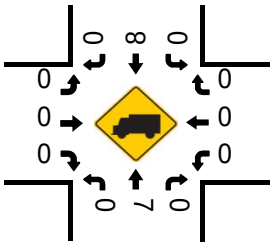
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



Prepared by National Data & Surveying Services

S Cobb Dr & Georgia Behavioral Health Professionals Driveway

Peak Hour Turning Movement Count

ID: 18-09212-003
City: Smyrna

Day: Thursday
Date: 04/26/2018

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

S Cobb Dr — SOUTHBOUND

	U-Turn	Left	Thru	Right	Exit
AM	0	2164	34	1	891
NOON	0	0	0	0	0
PM	0	1255	7	0	2109
HT	0	2	0	0	

Georgia Behavioral Health Profes — EASTBOUND

	AM	NOON	PM
Exit	0	0	0
U-Turn (HT 0)	0	0	0
Left (HT 0)	0	0	0
Thru (HT 0)	0	0	0
Right (HT 0)	0	0	0

Georgia Behavioral Health Profes — WESTBOUND

	PM	NOON	AM
Left (HT 0)	10	0	7
Thru (HT 1)	0	0	0
Right (HT 0)	6	0	2
U-Turn (HT 0)	0	0	0
Exit	12	0	54

S Cobb Dr — NORTHBOUND

	Exit	U-Turn	Left	Thru	Right
HT		0	0	2	1
PM	1261	0	0	2099	5
NOON	0	0	0	0	0
AM	2166	0	0	883	20

CONTROL

1-Way Stop(WB)

	AM	NOON	PM
TEV	3111	0	3382
PHF	0.93		0.97

Total Vehicles (AM)

SB: 0, 2164, 34 | WB: 7, 0, 2 | EB: 0, 0, 0 | NB: 0, 883, 20

HT (AM)

SB: 0, 13, 0 | WB: 0, 0, 0 | EB: 0, 0, 0 | NB: 0, 12, 0

Total Vehicles (Noon)

SB: N/A, N/A, N/A | WB: N/A, N/A, N/A | EB: N/A, N/A, N/A | NB: N/A, N/A, N/A

HT (NOON)

SB: N/A, N/A, N/A | WB: N/A, N/A, N/A | EB: N/A, N/A, N/A | NB: N/A, N/A, N/A

Total Vehicles (PM)

SB: 0, 1255, 7 | WB: 10, 0, 6 | EB: 0, 0, 0 | NB: 0, 2099, 5

HT (PM)

SB: 0, 8, 0 | WB: 0, 0, 0 | EB: 0, 0, 0 | NB: 0, 7, 0

Pedestrians (Crosswalks)

	PM	NOON	AM
Top left (diagonal)	0	0	0
Top right (diagonal)	0	0	0
Bottom left (diagonal)	0	0	0
Bottom right (diagonal)	0	0	0
North crosswalk, left	0	0	0
North crosswalk, right	0	0	0
South crosswalk, left	0	0	0
South crosswalk, right	0	0	0
West crosswalk, upper	0	0	0
West crosswalk, lower	0	0	0
East crosswalk, upper	0	0	1
East crosswalk, lower	0	0	1

Prepared by National Data & Surveying Services

S Cobb Dr & Georgia Behavioral Health Professionals Driveway

Peak Hour Turning Movement Count

ID: 18-09212-004
City: Smyrna

Day: Thursday
Date: 04/26/2018

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

S Cobb Dr — SOUTHBOUND

AM	0	2170	1	0	856	AM
NOON	0	0	0	0	0	NOON
PM	0	1250	2	0	2116	PM

Georgia Behavioral Health Profes — EASTBOUND

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

CONTROL

1-Way Stop(WB)

TEV	3035 AM	0 NOON	3381 PM
PHF	0.94		0.94

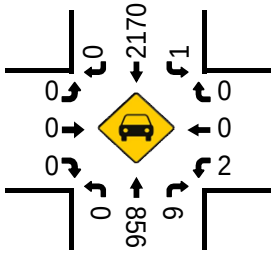
WESTBOUND — Georgia Behavioral Health Profes

	PM	NOON	AM
0	2	0	0
1	0	0	0
0	10	0	2
0	0	0	0
	5	0	7
	PM	NOON	AM

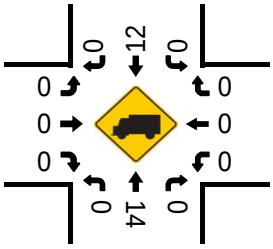
NORTHBOUND — S Cobb Dr

PM	1260	0	0	2114	3	PM
NOON	0	0	0	0	0	NOON
AM	2172	0	0	856	6	AM

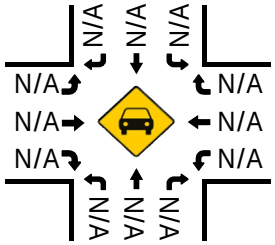
Total Vehicles (AM)



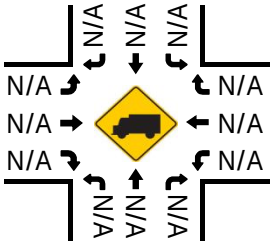
HT (AM)



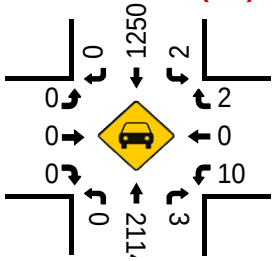
Total Vehicles (Noon)



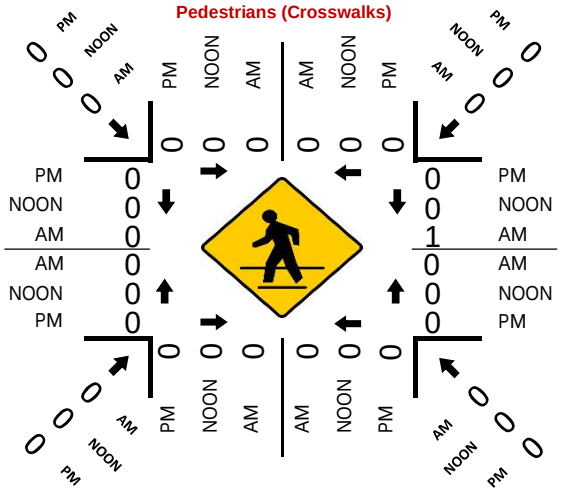
HT (NOON)



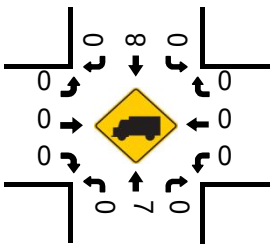
Total Vehicles (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

S Cobb Dr & Ridge Rd SE

Peak Hour Turning Movement Count

ID: 18-09212-005
City: Smyrna

Day: Thursday
Date: 04/26/2018

PEAK HOURS

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

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

S Cobb Dr — SOUTHBOUND

AM	0	1626	515	0	925	AM
NOON	0	0	0	0	0	NOON
PM	1	1191	105	1	2124	PM

Ridge Rd SE — EASTBOUND

	AM	NOON	PM
	4	0	1
0	0	0	0
1	2	0	1
0.5	0	0	0
0.5	0	0	0
	AM	NOON	PM

CONTROL

Signalized

TEV	3222 AM	0 NOON	3614 PM
PHF	0.93		0.97

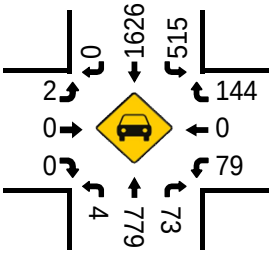
WESTBOUND — Ridge Rd SE

	PM	NOON	AM
1	455	0	144
0.5	0	0	0
0.5	114	0	79
0	0	0	0
	184	0	588
	PM	NOON	AM

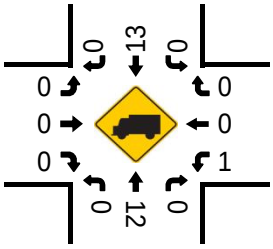
NORTHBOUND — S Cobb Dr

PM	1305	0	0	1667	79	PM
NOON	0	0	0	0	0	NOON
AM	1705	0	4	779	73	AM

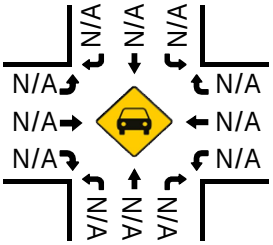
Total Vehicles (AM)



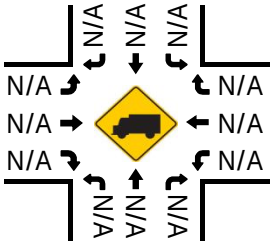
HT (AM)



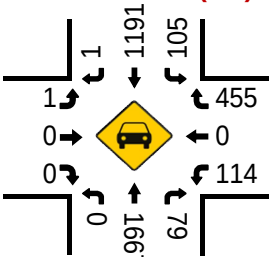
Total Vehicles (Noon)



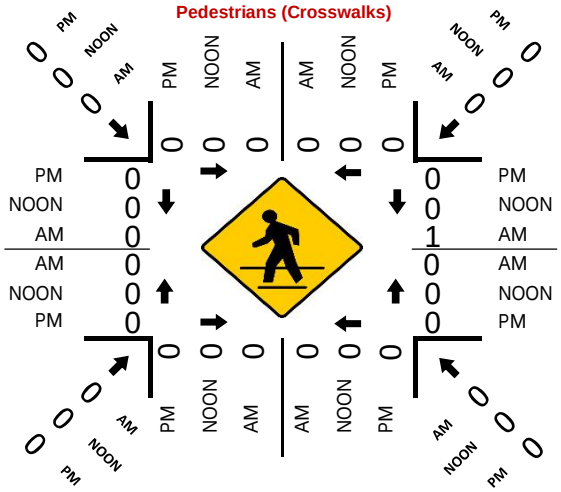
HT (NOON)



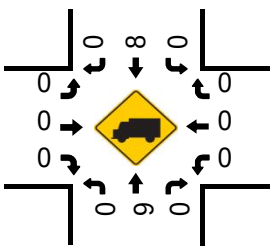
Total Vehicles (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

S Cobb Dr & Cooper Lake Rd SE

Peak Hour Turning Movement Count

ID: 18-09212-006
City: Smyrna

Day: Thursday
Date: 04/26/2018

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

S Cobb Dr — SOUTHBOUND

AM	70	1458	200	0	848	AM
NOON	0	0	0	0	0	NOON
PM	101	1173	48	0	1693	PM

EASTBOUND — Cooper Lake Rd SE

AM	NOON	PM		
329	0	606	⇦	
0	0	0	↶	0
55	0	68	↱	1
224	0	52	→	1
258	0	171	↴	1
AM	NOON	PM		

WESTBOUND — Cooper Lake Rd SE

PM	NOON	AM		
248	0	66	↰	1
304	0	104	←	1
192	0	63	↲	1
0	0	0	↷	0
182	0	599	⇨	
PM	NOON	AM		

NORTHBOUND — S Cobb Dr

PM	1537	1	201	1377	82	PM
NOON	0	0	0	0	0	NOON
AM	1780	1	155	727	175	AM

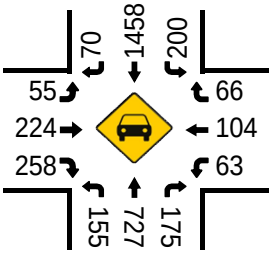
	1	2	1	0
	0	1	2	1

CONTROL

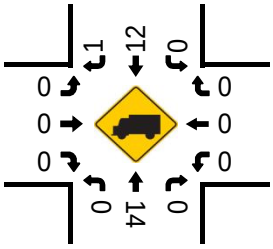
Signalized

TEV	3556 AM	0 NOON	4018 PM
PHF	0.94		0.96

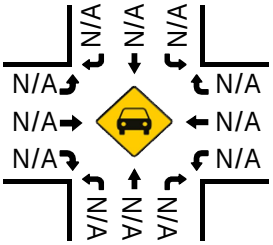
Total Vehicles (AM)



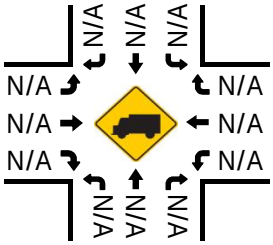
HT (AM)



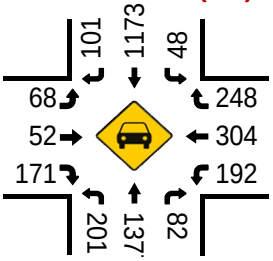
Total Vehicles (Noon)



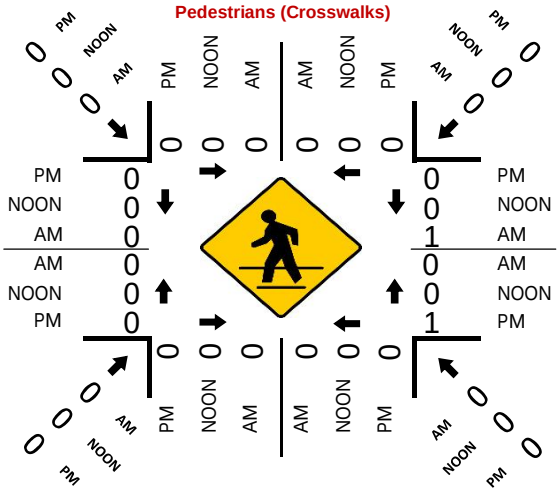
HT (NOON)



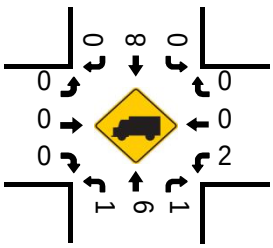
Total Vehicles (PM)



Pedestrians (Crosswalks)



HT (PM)



APPENDIX E

Site Photos

Kimley»Horn
11720 Amber park Drive
Suite 600
Alpharetta, GA 30009

Emory University Hospital
Photograph Sheet

KHA Job No.: 013160002
KHA Rep.: TAK
Date: January 3, 2019
Page: 1 of 3

Site Name: Emory Adventist Hospital

Photo No. 1

Comments:
Looking north from Existing Site Driveway # 1

Photo No. 2

Comments:
Looking south from Existing Site Driveway #1

Kimley»Horn
11720 Amber park Drive
Suite 600
Alpharetta, GA 30009

Emory University Hospital
Photograph Sheet

KHA Job No.: 013160002
KHA Rep.: TAK
Date: January 3, 2019

Site Name: Emory Adventist Hospital

Photo No. 2

Comments:
Looking west from Existing Site Driveway # 1

Photo No. 3

Comments:
Looking south from Existing Site Driveway # 2

Kimley»Horn
11720 Amber park Drive
Suite 600
Alpharetta, GA 30009

Emory University Hospital
Photograph Sheet

KHA Job No.: 013160002
KHA Rep.: TAK
Date: January 3, 2019
Page: 3 of 3

Site Name: Emory Adventist Hospital

Photo No. 4

Comments:
Looking south from Existing Site Driveway # 2

Photo No. 5

Comments:
Looking south from Existing Site Driveway # 2