

TRAFFIC STUDY

PROPOSED TRUCK PARKING FACILITY

WHITE LANE & UNION AVENUE

CITY OF BAKERSFIELD

Prepared for:

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June 2023

Prepared by:



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A handwritten signature in blue ink, appearing to read "Ian J. Parks", is written over a horizontal line.

Ian J. Parks, RCE 58155



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INTRODUCTION

The purpose of this study is to evaluate the potential traffic impacts of a proposed truck parking facility located on south and east of the Union Avenue and White Lane intersection in the City of Bakersfield, California. A vicinity map is presented in Figure 1 and a location map is presented in Figure 2.

The scope of the study includes eight intersections (all signalized) and was developed in coordination with staff from the City of Bakersfield Traffic Department. The proposed project will expand the current facility to 1,202 truck parking spaces and provide long-term and short-term parking for trucks and trailers.

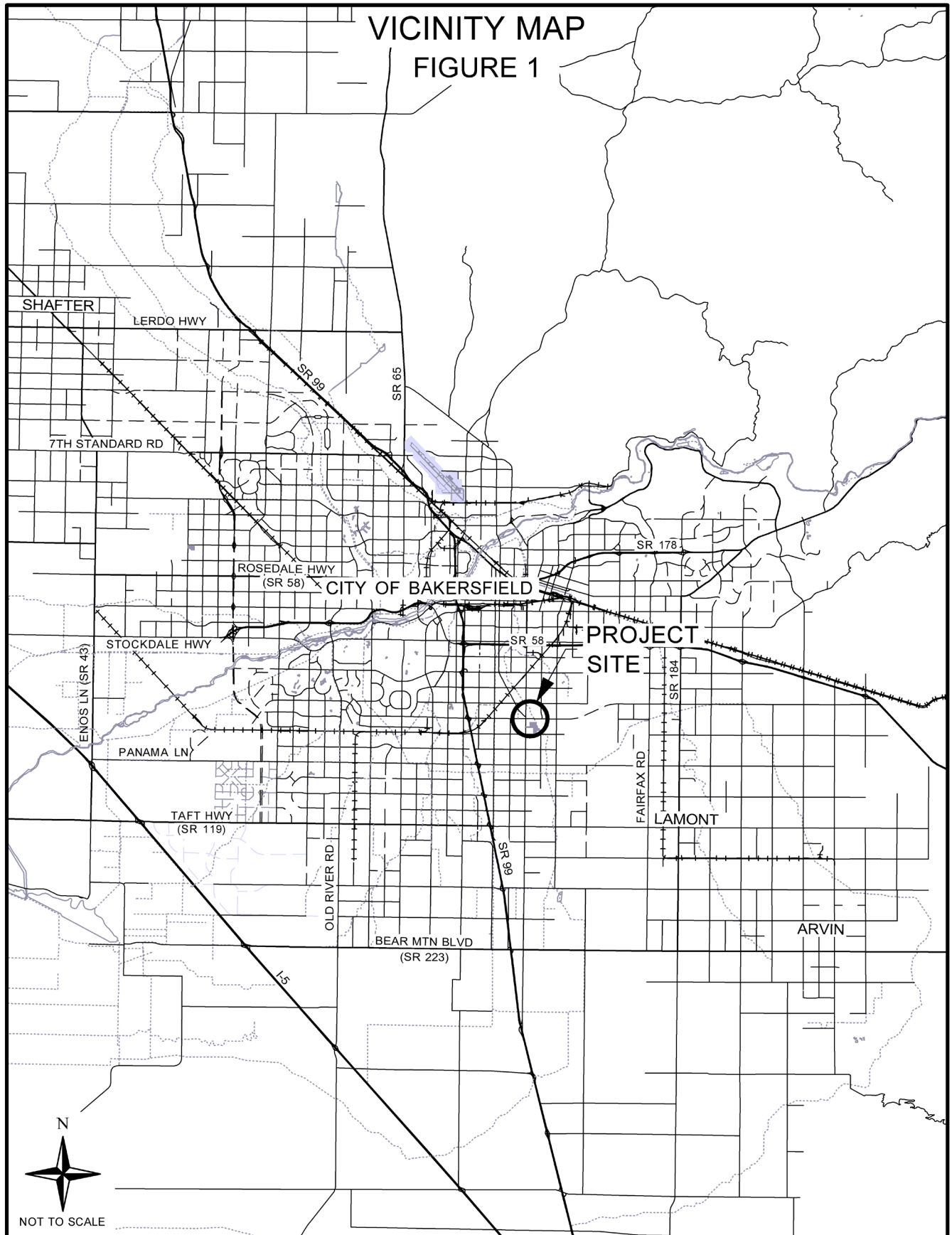
A. Project Land Use and Site Access

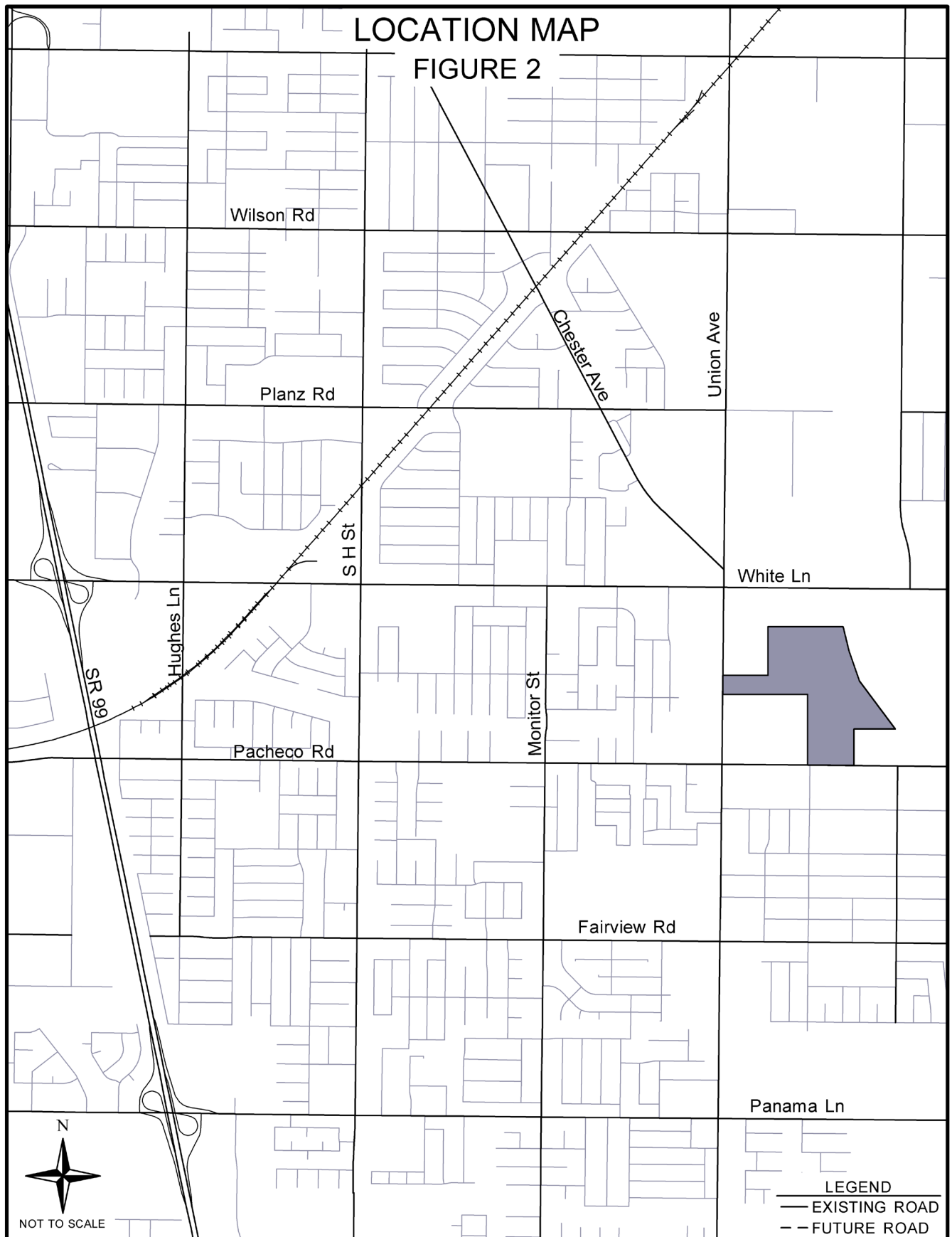
The project site is situated on approximately 69 acres of undeveloped vacant land. The property is currently zoned M-3. A site plan is provided in Figure 3.

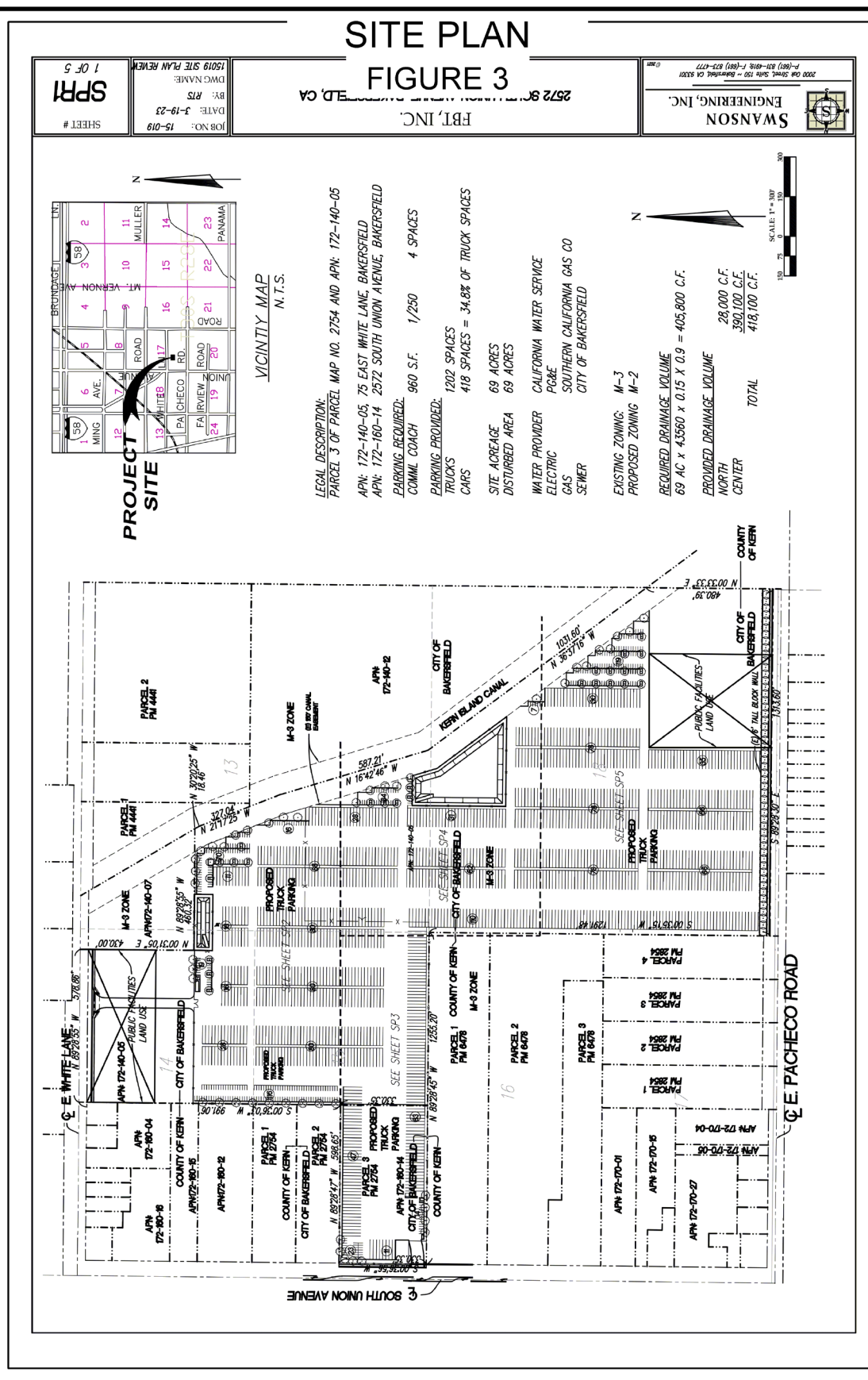
Access to the project site is proposed along White Lane and Union Avenue.

B. Existing Land Uses in Project Vicinity

Industrial land uses are located immediately to the south and east of the project site. Residential and commercial developments are located to the north and west. South High School is located approximately one mile to the northwest and Prosperity Elementary School lies approximately one-half mile to the northwest.







D. Roadway Descriptions

Hughes Lane is a north-south roadway located midway between Wible Road and South H Street. It is designated as a collector and currently exists as an improved two-lane roadway. Hughes Lane provides access to residential and commercial land uses within the study area.

Monitor Street is a four-lane north-south collector that extends from Hosking Avenue to Merrimac Avenue. In the vicinity of the project it provides access to residential and educational land uses.

Pacheco Road is an east-west collector that extends from Stine Road to east of Dr. Martin Luther King Jr. Boulevard. In the vicinity of the project it exists as a two-lane roadway with curb and gutter and provides access to residential and commercial land uses.

Planz Road is an east-west collector. It extends east from Wilson Road in Southwest Bakersfield to the Bakersfield Municipal Airport just east of Union Avenue. It continues east from Madison Avenue as a local roadway. It provides access from residential and commercial areas to north-south arterials.

South H Street is a north-south arterial which extends from Taft Highway to Brundage Lane and continues northward through downtown Bakersfield as H Street. It exists as a two-lane roadway, with some areas improved to three or four lanes, south of Panama Lane and as a four-lane roadway north of Panama Lane.

South Union Avenue is designated as an arterial. Formerly a segment of State Route 99, South Union Avenue extends from State Route 99 to Brundage Lane and continues north to Columbus Street as Union Avenue. (The segment of Union Avenue between Brundage Lane and Golden State Highway is part of State Route 204.) Within the project vicinity, South Union Avenue operates with four lanes and has a raised median and graded shoulders. It provides access to residential, commercial and industrial areas.

State Route 99 is a major north-south route through the central valley of California, extending from Interstate 5 south of Bakersfield to Sacramento. State Route 99 operates as an eight lane freeway from Wilson Road to Airport Drive with six lanes elsewhere in Kern County.

White Lane is an arterial which extends east from Allen Road to Dr. Martin Luther King Jr. Boulevard. In the vicinity of the project it exists as a six-lane roadway with curb and gutter. White Lane provides access to residential and commercial land uses across central areas of Metropolitan Bakersfield.

PROJECT TRIP GENERATION

A search of the ITE land use codes did not produce a similar type of use as the proposed project. Therefore, driveway counts were taken at the existing driveways on Union Avenue and on White Lane to determine the current trip generation of the project. From the count data, the average rates for Daily Traffic (ADT) as well as AM and PM peak hour traffic were calculated based on the number of existing truck parking spaces. Table 1 shows the project trips that will be generated from the proposed additional truck parking spaces.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
-	Truck Parking Facility	1202 Truck Parking Spaces	1.75	2106	0.094	64% 72	36% 41	0.123	57% 85	43% 63
Total				2,106		72	41		85	63

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of project peak hour trips is shown in Table 2 and represents the movement of traffic accessing the project site by direction. The project trip distribution was developed based on site location and travel patterns anticipated for the proposed land uses.

Table 2
Project Trip Distribution

Direction	Percent
North	35
East	10
South	20
West	35

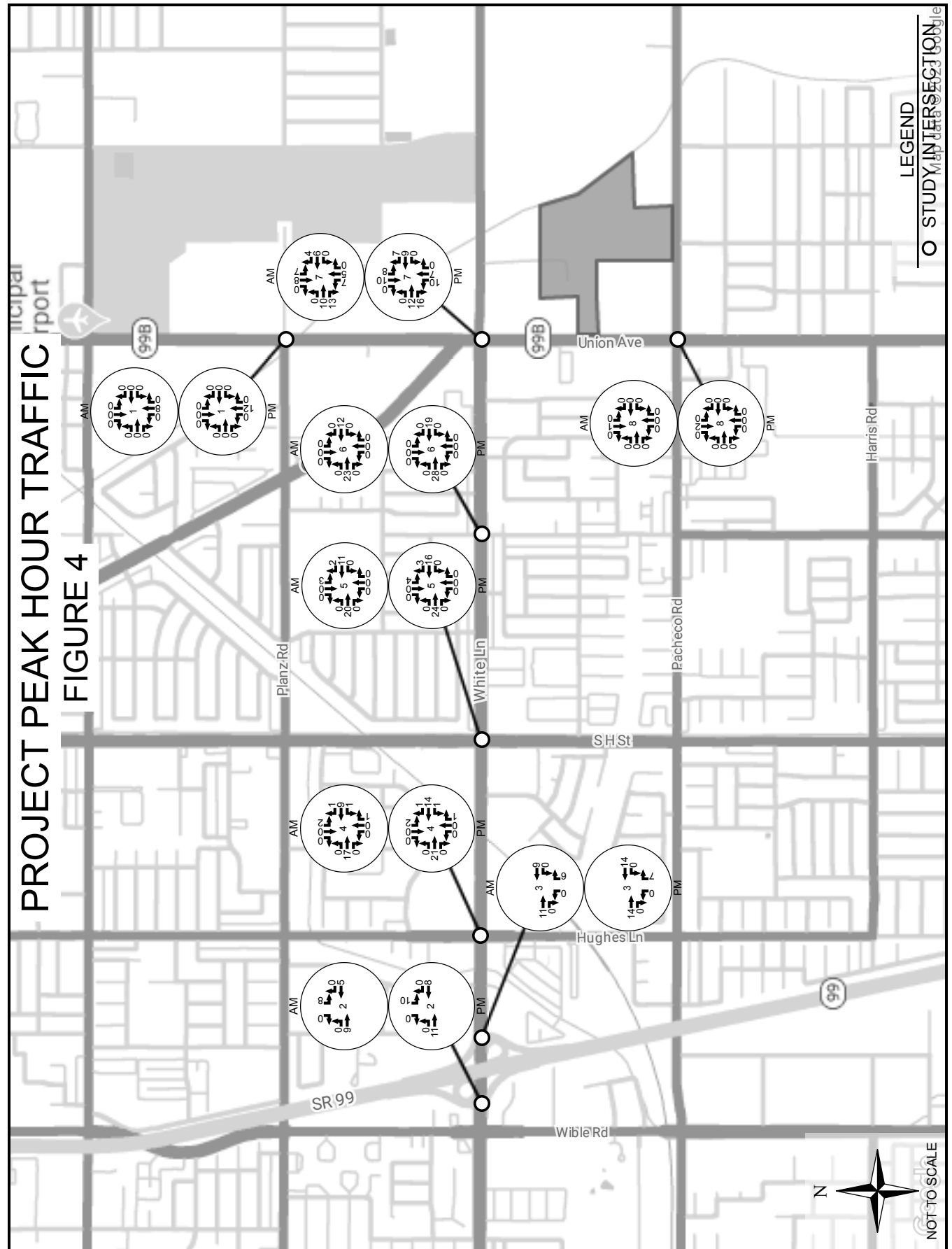
Project peak hour trips were assigned to the study intersections as shown in Figure 4. Project trip assignment was developed based on trip generation, trip distribution and likely travel routes for traffic accessing the project site.

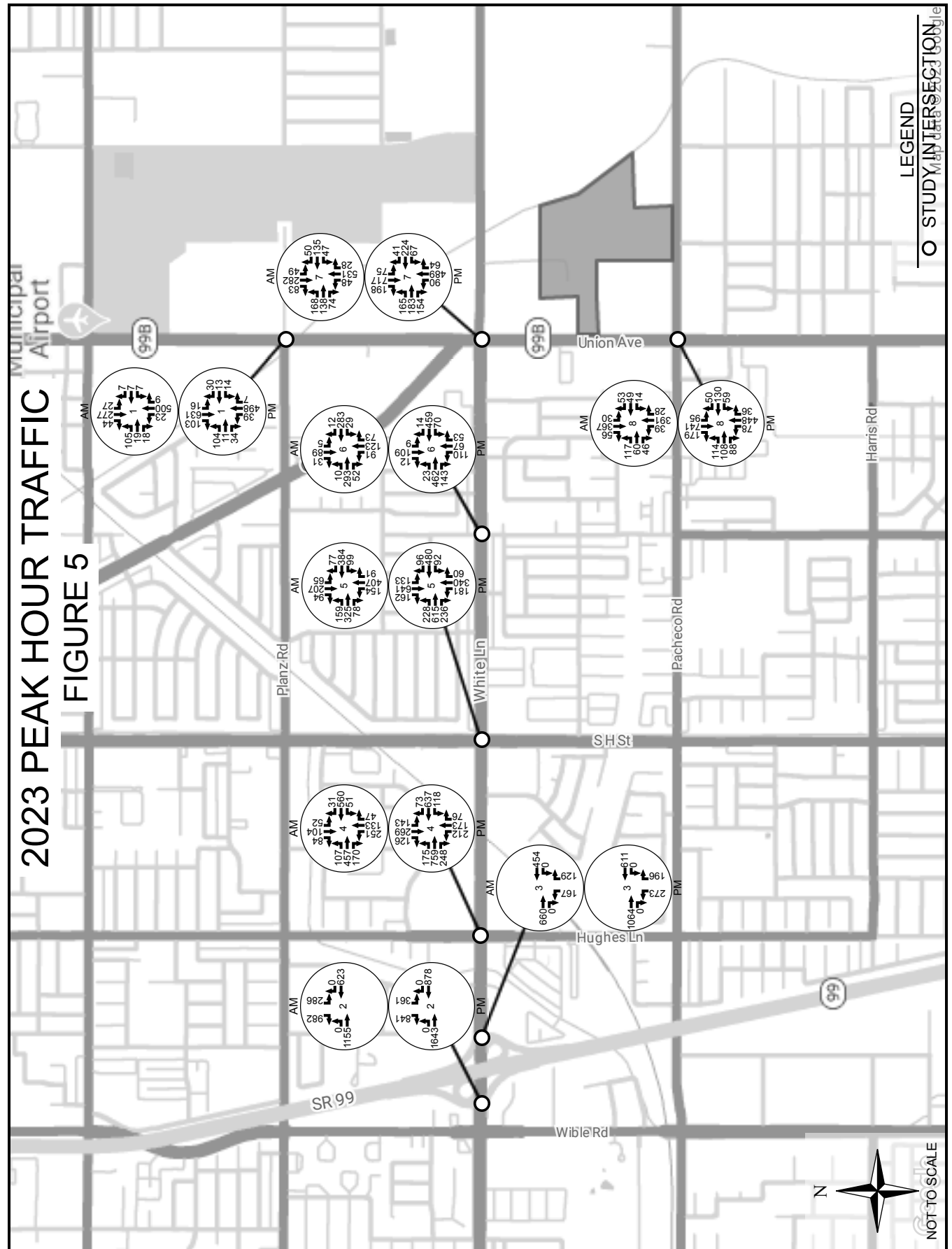
EXISTING AND FUTURE TRAFFIC

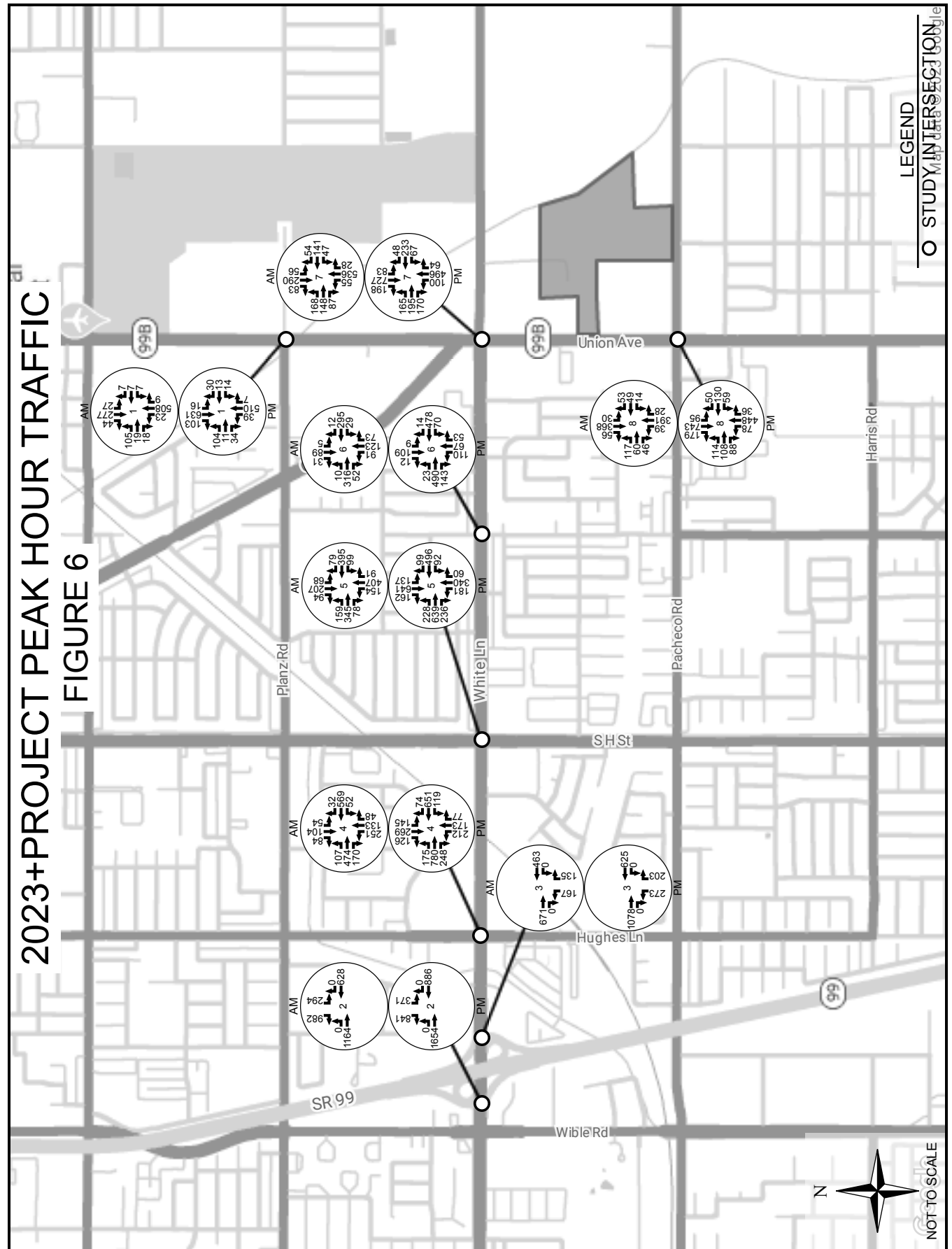
Existing peak hour turning movement counts were field collected in June 2023. The intersection of Union Avenue & Pacheco Road was collected in July 2021 and grown out to 2023 for the use of this study. Peak hour turning movement counts are shown in the appendix.

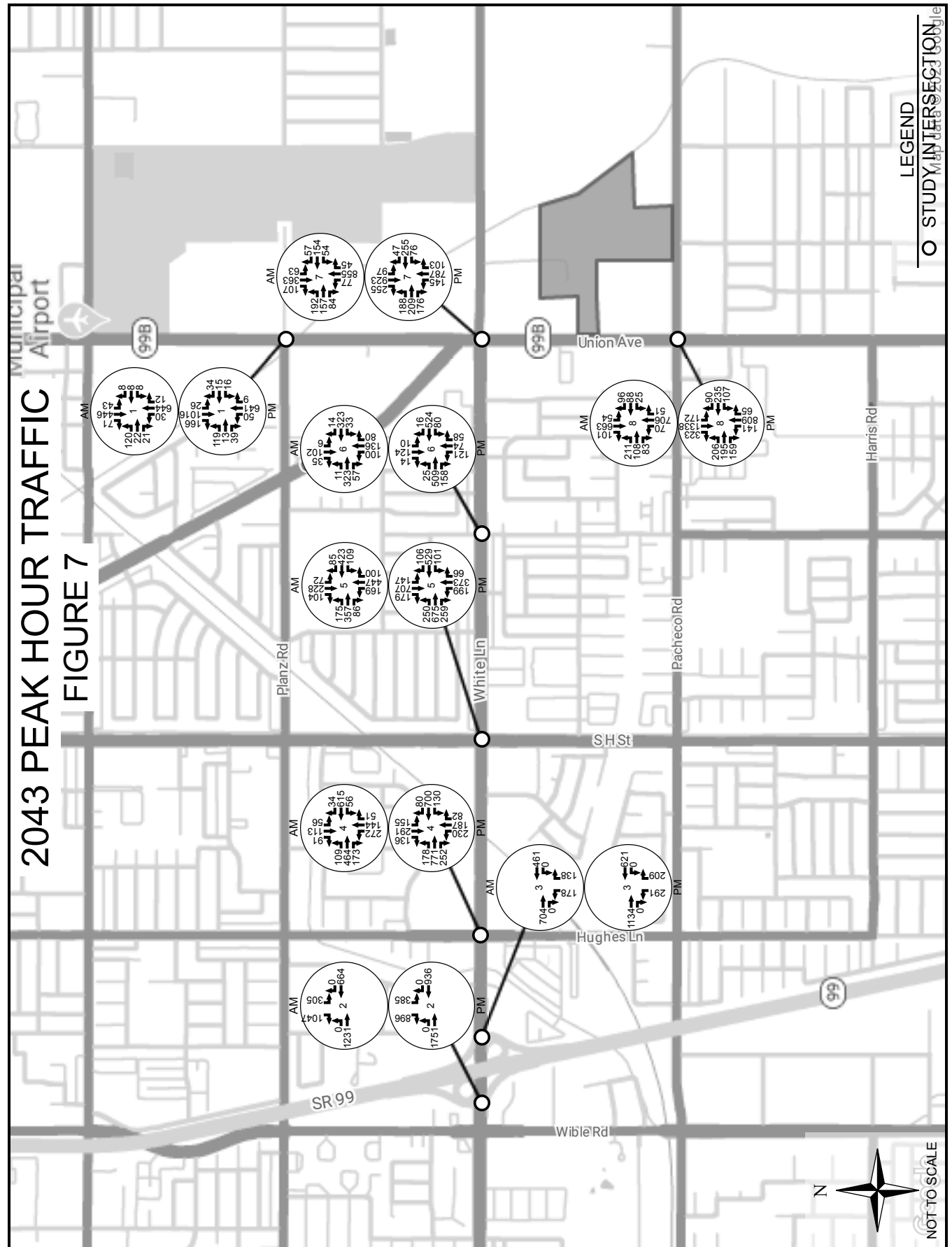
Average annual growth rates ranging between 0.08 and 2.41 percent were applied to the 2023 peak hour volumes to estimate peak hour volumes for the year 2043. These growth rates were developed based on a review of historical count data and output from KCOG's regional travel demand model.

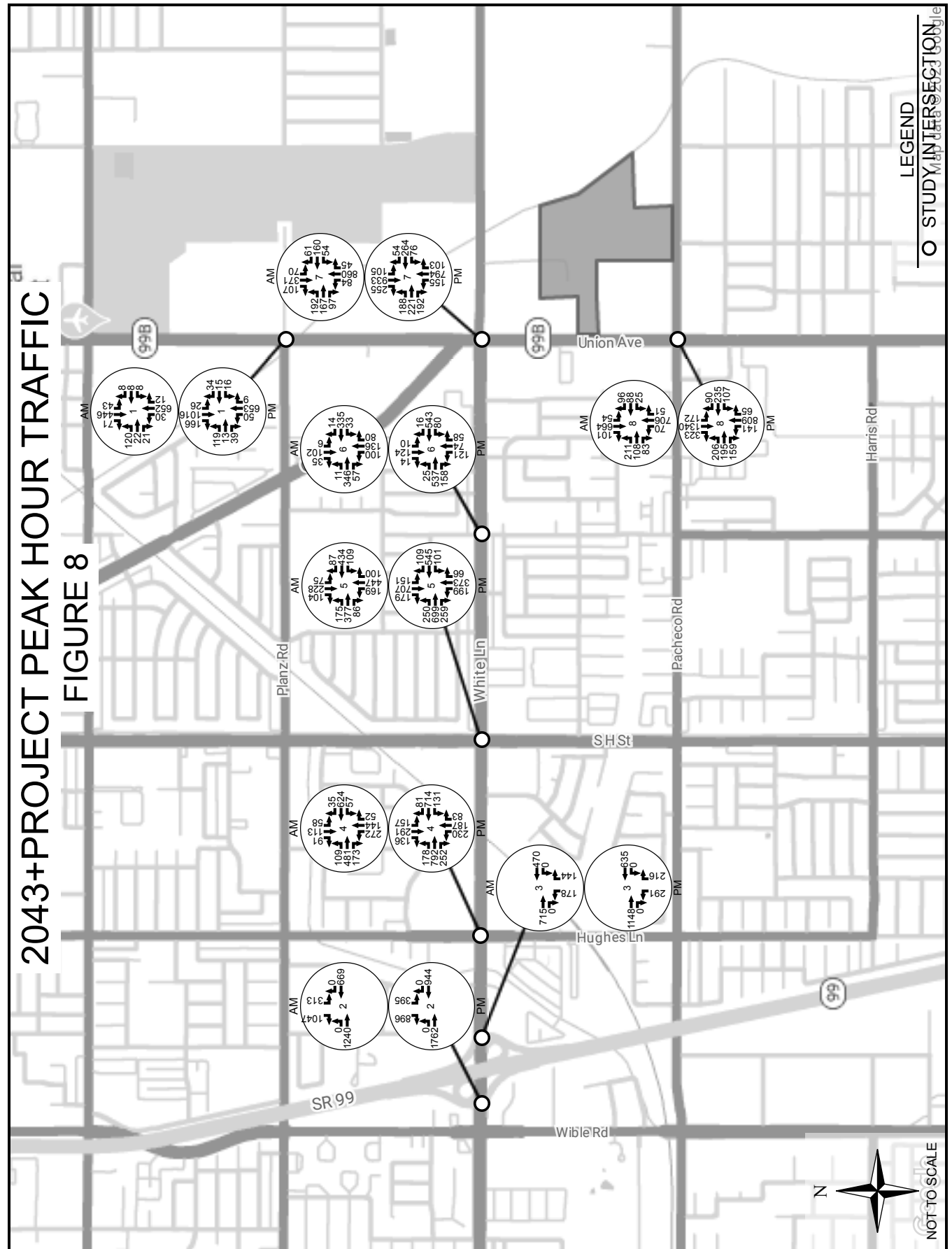
Existing peak hour volumes are shown in Figure 5, and existing plus project peak hour volumes are shown in Figure 6. Peak hour volumes for the year 2043, both without and with project traffic, are shown in Figures 7 and 8, respectively.











INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro software from Trafficware. The analysis was performed for each of the following traffic scenarios:

- Existing (2023)
- Existing (2023) + Project
- Future (2043)
- Future (2043) + Project

Criteria for intersection level of service (LOS) are shown in the tables below. The City of Bakersfield generally utilizes three performance criteria for determining whether a traffic forecast to be generated by a project would cause a significant impact and therefore require mitigation. First, a significant impact is found where the addition of project traffic causes the level of service of an intersection or roadway segment to drop below LOS C. Second, a significant impact is found if an intersection or roadway segment operates below LOS C in the base year prior to the addition of project traffic, and the added project traffic lowers the level of service below its pre-project status. Third, mitigation is required if the addition of the project traffic creates an additional control or average delay per vehicle of more than five seconds to the existing or projected congestion at an intersection already or projected to operate at LOS D, E, or F. Peak hour level of service for the study intersections is presented in Tables 3a and 3b.

LEVEL OF SERVICE CRITERIA UNSIGNALIZED INTERSECTION

Level of Service	Average Control Delay (sec/veh)	Expected Delay to Minor Street Traffic
A	≤ 10	Little or no delay
B	> 10 and ≤ 15	Short delays
C	> 15 and ≤ 25	Average delays
D	> 25 and ≤ 35	Long delays
E	> 35 and ≤ 50	Very long delays
F	> 50	Extreme delays

LEVEL OF SERVICE CRITERIA SIGNALIZED INTERSECTIONS

Level of Service	Average Control Delay (sec/veh)	Volume-to-Capacity Ratio
A	≤ 10	< 0.60
B	> 10 and ≤ 20	0.61 - 0.70
C	> 20 and ≤ 35	0.71 - 0.80
D	> 35 and ≤ 55	0.81 - 0.90
E	> 55 and ≤ 80	0.91 - 1.00
F	> 80	> 1.00

Intersection delay in seconds per vehicle is shown within parentheses for intersections operating at or below LOS C.

Table 3a
Intersection Level of Service
Weekday PM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project
1	Union Ave & Planz Rd	Signal	C	C	C	C
2	SR 99 SB OffRamp & White Ln	Signal	C	C	C	C
3	SR 99 NB OffRamp & White Ln	Signal	C	C	C	C
4	Hughes Ln & White Ln	Signal	B	B	B	B
5	H St & White Ln	Signal	C	C	C	C
6	Monitor St & White Ln	Signal	C	C	C	C
7	Union Ave & White Ln	Signal	C	C	D (35.2)	D ¹ (37.7)
8	Union Ave & Pacheco Rd	Signal	C	C	F (90.0)	F ¹ (90.4)

¹Project traffic does not add more than five seconds of delay.

Table 3b
Intersection Level of Service
Weekday AM Peak Hour

#	Intersection	Control Type	2023	2023+ Project	2043	2043+ Project
1	Union Ave & Planz Rd	Signal	B	B	C	C
2	SR 99 SB OffRamp & White Ln	Signal	C	C	C	C
3	SR 99 NB OffRamp & White Ln	Signal	C	C	C	C
4	Hughes Ln & White Ln	Signal	B	B	B	B
5	H St & White Ln	Signal	C	C	C	C
6	Monitor St & White Ln	Signal	C	C	C	C
7	Union Ave & White Ln	Signal	C	C	C	C
8	Union Ave & Pacheco Rd	Signal	C	C	C	C

ROADWAY ANALYSIS

Published ADT information and future projected traffic, as shown in Table 4a, were used to calculate the volume-to-capacity ratios shown in Table 4b.

A volume-to-capacity ratio (v/c) of greater than 0.80 corresponds to a LOS of less than “C”, as defined in the Highway Capacity Manual. As mentioned previously, a level of service “C” is an accepted standard in the City of Bakersfield within the metropolitan Bakersfield areas. A significant impact is generally defined as a condition where the addition of project traffic reduces the LOS to below LOS C, or where the pre-existing condition of the roadway is below LOS C, and the LOS degrades below the pre-existing level of service with the addition of the project.

Table 4a
Roadway ADT & Capacity

Roadway Segment	2023 ¹	Project ADT	2022+Proj ADT	2043 ADT	2043+ Project ADT
White Ln: SR 99 SB - SR 99 NB	29,756	413	30,169	31,737	32,150
White Ln: SR 99 NB - Hughes Ln	29,827	498	30,325	30,324	30,822
White Ln: Hughes Ln - S H St	25,119	569	25,688	27,603	28,172
White Ln: S H St - Monitor St	15,915	669	16,584	17,550	18,219
White Ln: Monitor St - Union Ave	14,284	669	14,953	16,277	16,946
Union Ave: Planz Rd - White Ln	15,723	455	16,178	25,296	25,751
Union Ave: White Ln - Pacheco Rd	21,454	612	22,066	27,627	28,239

¹Published ADT Counts Grown out to 2023

Table 4b
Roadway Level of Service

Roadway Segment	Existing Capacity	v/c 2022	v/c 2022+Proj	v/c 2043	v/c 2043+ Project
White Ln: SR 99 SB - SR 99 NB	60,000	0.50	0.50	0.53	0.54
White Ln: SR 99 NB - Hughes Ln	60,000	0.50	0.51	0.51	0.51
White Ln: Hughes Ln - S H St	50,000	0.50	0.51	0.55	0.56
White Ln: S H St - Monitor St	50,000	0.32	0.33	0.35	0.36
White Ln: Monitor St - Union Ave	40,000	0.36	0.37	0.41	0.42
Union Ave: Planz Rd - White Ln	40,000	0.39	0.40	0.63	0.64
Union Ave: White Ln - Pacheco Rd	40,000	0.54	0.55	0.69	0.71

VEHICLE MILES TRAVELED (VMT) ANALYSIS

An evaluation of vehicle miles traveled (VMT) for project traffic was conducted based on applicable California Environmental Quality Act (CEQA) guidelines. The analysis involved comparing an estimate of VMT attributable to the project to a baseline VMT for the greater Bakersfield area and assessing whether project VMT would result in a significant transportation impact. As of June 2023, the City of Bakersfield has not yet formally adopted any policies. However, the Governor's Office of Planning and Research (OPR) has issued a Technical Advisory, which recommends 15% reduction in VMT below baseline as the threshold for significant impacts for residential development.

VMT data was obtained from the Kern Council of Governments (KernCOG) in order to establish a baseline for daily vehicle miles traveled in the Kern County area. Based on household and employment populations in the greater Kern County area, as well as travel patterns throughout the region, KernCOG data shows an average VMT per trip of 9.76 miles.

Several factors were taken into consideration when estimating project VMT, including project trip generation and distribution, trip type and probable trip destination. It is important to note that heavy trucks are not included in VMT analysis per OPR guidelines; therefore, analysis was only done for the passenger vehicles. As shown in Table 5, it is anticipated that the project would result in an average VMT per trip of 5.65 miles.

Table 5
VMT Analysis

Vehicle Type	Direction	Percentage of Total Trips (%)	Ave Trip Length <i>Passenger Vehicles</i> (Miles)	Total Trips¹	Weighted Average Trip Length (Miles)
Passenger Vehicles	North	35	7.38	737	5.65
	East	10	4.75	211	
	South	20	3.05	421	
	West	35	5.65	737	

¹Based on 2106 total daily vehicle trips as shown in Table 1.

The project average VMT of 5.65 miles is approximately 42% lower than the average regional VMT of 9.76 miles. Therefore, the project will not result in a significant transportation impact under CEQA.

SUMMARY AND CONCLUSIONS

The purpose of this study is to evaluate the potential traffic impacts of a proposed truck facility located on the southeast corner of Union Avenue and White Lane in Bakersfield, California. The study included both level of service (LOS) and vehicle miles traveled (VMT) analyses.

Level of Service Analysis

All intersections are anticipated to operate at an acceptable level of service prior to, and with the addition of project traffic in the existing year.

The intersections of Union Avenue & White Lane and Union Avenue & Pacheco Road are anticipated to operate below an acceptable level of service in 2043 prior to the addition of project traffic. However, it is important to note that the project does not create more than a five second delay at these intersections. All other intersections are anticipated to continue to operate at an acceptable level of service.

Roadway Capacity

All roadway segments within the scope of the study currently operate at or above LOS C and are expected to continue to do so through the year 2043, both with and without the project. Therefore, no improvements are required.

VMT

It was determined that project VMT is less than the threshold of significance, therefore the project does not create a significant impact.

REFERENCES

1. Annual Traffic Census, KernCOG
2. Kern County General Plan, approved September 22, 2009
3. Highway Capacity Manual, Special Report 209, Transportation Research Board
4. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2014 Edition, Federal Highway Administration (FHA)
5. Trip Generation, 11th Edition, Institute of Transportation Engineers (ITE)

APPENDIX

Intersection 1

Union Ave & Planz Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	↙
Traffic Volume (veh/h)	104	11	34	14	13	30	39	498	7	16	631	103
Future Volume (veh/h)	104	11	34	14	13	30	39	498	7	16	631	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)	0.99		0.97	0.99		0.97	1.00		0.98	1.00		0.98
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	113	12	37	15	14	33	42	541	8	17	686	112
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	47	144	72	67	111	71	714	11	912	2530	1017
Arrive On Green	0.13	0.13	0.12	0.13	0.13	0.12	0.04	0.20	0.19	0.56	0.71	0.71
Sat Flow, veh/h	1448	358	1104	231	514	848	1634	3569	53	1634	3539	1423
Grp Volume(v), veh/h	113	0	49	62	0	0	42	268	281	17	686	112
Grp Sat Flow(s),veh/h/ln	1448	0	1463	1594	0	0	1634	1770	1852	1634	1770	1423
Q Serve(g_s), s	3.8	0.0	3.3	0.0	0.0	0.0	2.7	15.4	15.4	0.5	7.4	2.6
Cycle Q Clear(g_c), s	7.4	0.0	3.3	3.6	0.0	0.0	2.7	15.4	15.4	0.5	7.4	2.6
Prop In Lane	1.00		0.76	0.24		0.53	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	256	0	191	249	0	0	71	354	371	912	2530	1017
V/C Ratio(X)	0.44	0.00	0.26	0.25	0.00	0.00	0.59	0.76	0.76	0.02	0.27	0.11
Avail Cap(c_a), veh/h	503	0	460	534	0	0	182	852	892	912	2530	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	0.0	42.7	42.7	0.0	0.0	50.7	40.7	40.7	10.6	5.4	4.8
Incr Delay (d2), s/veh	1.2	0.0	0.7	0.5	0.0	0.0	6.2	11.6	11.2	0.0	0.3	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	3.3	0.0	1.4	1.7	0.0	0.0	1.3	8.7	9.0	0.2	3.6	1.1
LnGrp Delay(d),s/veh	45.0	0.0	43.4	43.2	0.0	0.0	56.9	52.4	52.0	10.7	5.7	5.0
LnGrp LOS	D		D	D			E	D	D	B	A	A
Approach Vol, veh/h	162			62			591			815		
Approach Delay, s/veh	44.5			43.2			52.5			5.7		
Approach LOS	D			D			D			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	64.3	25.6		18.1	8.7	81.2		18.1				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	8.7	50.7		32.7	10.7	48.7		32.7				
Max Q Clear Time (g_c+I1), s	2.5	17.4		9.4	4.7	9.4		5.6				
Green Ext Time (p_c), s	1.9	1.9		0.7	0.0	3.7		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay				28.0								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	↙
Traffic Volume (veh/h)	104	11	34	14	13	30	39	510	7	16	631	103
Future Volume (veh/h)	104	11	34	14	13	30	39	510	7	16	631	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)	0.99		0.97	0.99		0.97	1.00		0.98	1.00		0.98
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	113	12	37	15	14	33	42	554	8	17	686	112
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	48	147	75	69	113	72	741	11	883	2490	1001
Arrive On Green	0.13	0.13	0.12	0.13	0.13	0.12	0.04	0.21	0.19	0.54	0.70	0.70
Sat Flow, veh/h	1445	358	1105	227	520	849	1634	3570	52	1634	3539	1423
Grp Volume(v), veh/h	113	0	49	62	0	0	42	274	288	17	686	112
Grp Sat Flow(s),veh/h/ln	1445	0	1463	1595	0	0	1634	1770	1852	1634	1770	1423
Q Serve(g_s), s	3.5	0.0	3.1	0.0	0.0	0.0	2.5	14.7	14.7	0.5	7.2	2.6
Cycle Q Clear(g_c), s	6.9	0.0	3.1	3.4	0.0	0.0	2.5	14.7	14.7	0.5	7.2	2.6
Prop In Lane	1.00		0.76	0.24		0.53	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	264	0	195	257	0	0	72	367	384	883	2490	1001
V/C Ratio(X)	0.43	0.00	0.25	0.24	0.00	0.00	0.58	0.75	0.75	0.02	0.28	0.11
Avail Cap(c_a), veh/h	510	0	464	540	0	0	178	859	899	883	2490	1001
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.82	0.82	0.82	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	39.7	39.7	0.0	0.0	47.4	37.5	37.6	10.8	5.5	4.8
Incr Delay (d2), s/veh	1.1	0.0	0.7	0.5	0.0	0.0	5.9	10.8	10.4	0.0	0.3	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	3.0	0.0	1.3	1.6	0.0	0.0	1.3	8.3	8.6	0.2	3.5	1.1
LnGrp Delay(d),s/veh	41.8	0.0	40.4	40.2	0.0	0.0	53.3	48.4	48.0	10.8	5.8	5.0
LnGrp LOS	D		D	D			D	D	D	B	A	A
Approach Vol, veh/h	162			62			604			815		
Approach Delay, s/veh	41.4			40.2			48.5			5.8		
Approach LOS	D			D			D			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	58.6	25.0		17.5	8.5	75.1		17.5				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	6.7	47.7		30.7	9.7	44.7		30.7				
Max Q Clear Time (g_c+I1), s	2.5	16.7		8.9	4.5	9.2		5.4				
Green Ext Time (p_c), s	1.5	2.0		0.7	0.0	3.6		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay				26.3								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	↔
Traffic Volume (veh/h)	119	13	39	16	15	34	50	641	9	26	1016	166
Future Volume (veh/h)	119	13	39	16	15	34	50	641	9	26	1016	166
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)	0.99		0.97	0.99		0.97	1.00		0.99	1.00		0.97
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	129	14	42	17	16	37	54	697	10	28	1104	180
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	52	155	72	70	118	641	2600	37	51	1299	520
Arrive On Green	0.14	0.14	0.13	0.14	0.14	0.13	0.39	0.73	0.72	0.03	0.37	0.37
Sat Flow, veh/h	1385	366	1099	249	499	839	1634	3571	51	1634	3539	1417
Grp Volume(v), veh/h	129	0	56	70	0	0	54	345	362	28	1104	180
Grp Sat Flow(s),veh/h/ln	1385	0	1466	1588	0	0	1634	1770	1853	1634	1770	1417
Q Serve(g_s), s	5.8	0.0	4.1	0.0	0.0	0.0	2.5	7.9	7.9	2.0	34.4	11.1
Cycle Q Clear(g_c), s	10.3	0.0	4.1	4.5	0.0	0.0	2.5	7.9	7.9	2.0	34.4	11.1
Prop In Lane	1.00		0.75	0.24		0.53	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	255	0	206	261	0	0	641	1288	1349	51	1299	520
V/C Ratio(X)	0.51	0.00	0.27	0.27	0.00	0.00	0.08	0.27	0.27	0.55	0.85	0.35
Avail Cap(c_a), veh/h	423	0	391	455	0	0	641	1288	1349	123	1858	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	0.0	46.5	46.6	0.0	0.0	22.9	5.5	5.5	57.3	34.9	27.5
Incr Delay (d2), s/veh	1.6	0.0	0.7	0.5	0.0	0.0	0.0	0.3	0.3	8.9	7.1	1.8
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	4.2	0.0	1.7	2.1	0.0	0.0	1.1	3.9	4.1	1.0	18.1	4.6
LnGrp Delay(d),s/veh	50.1	0.0	47.2	47.1	0.0	0.0	23.0	5.8	5.8	66.2	42.0	29.4
LnGrp LOS	D		D	D			C	A	A	E	D	C
Approach Vol, veh/h	185			70			761			1312		
Approach Delay, s/veh	49.3			47.1			7.0			40.8		
Approach LOS	D			D			A			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	91.4		20.9	51.1	48.0		20.9				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	7.7	65.7		30.7	11.7	61.7		30.7				
Max Q Clear Time (g_c+I1), s	4.0	9.9		12.3	4.5	36.4		6.5				
Green Ext Time (p_c), s	0.0	2.8		0.8	1.8	6.3		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay				30.6								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	↔
Traffic Volume (veh/h)	119	13	39	16	15	34	50	653	9	26	1016	166
Future Volume (veh/h)	119	13	39	16	15	34	50	653	9	26	1016	166
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)	0.99		0.97	0.99		0.97	1.00		0.99	1.00		0.97
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	129	14	42	17	16	37	54	710	10	28	1104	180
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	52	155	72	70	118	641	2601	37	51	1299	520
Arrive On Green	0.14	0.14	0.13	0.14	0.14	0.13	0.39	0.73	0.72	0.03	0.37	0.37
Sat Flow, veh/h	1385	366	1099	249	499	839	1634	3572	50	1634	3539	1417
Grp Volume(v), veh/h	129	0	56	70	0	0	54	352	368	28	1104	180
Grp Sat Flow(s),veh/h/ln	1385	0	1466	1588	0	0	1634	1770	1853	1634	1770	1417
Q Serve(g_s), s	5.8	0.0	4.1	0.0	0.0	0.0	2.5	8.1	8.1	2.0	34.4	11.1
Cycle Q Clear(g_c), s	10.3	0.0	4.1	4.5	0.0	0.0	2.5	8.1	8.1	2.0	34.4	11.1
Prop In Lane	1.00		0.75	0.24		0.53	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	255	0	206	261	0	0	641	1288	1349	51	1299	520
V/C Ratio(X)	0.51	0.00	0.27	0.27	0.00	0.00	0.08	0.27	0.27	0.55	0.85	0.35
Avail Cap(c_a), veh/h	423	0	391	455	0	0	641	1288	1349	123	1858	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.41	0.41	0.41	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	0.0	46.5	46.6	0.0	0.0	22.9	5.5	5.5	57.3	34.9	27.5
Incr Delay (d2), s/veh	1.6	0.0	0.7	0.5	0.0	0.0	0.0	0.2	0.2	8.9	7.1	1.8
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	4.2	0.0	1.7	2.1	0.0	0.0	1.1	4.0	4.2	1.0	18.1	4.6
LnGrp Delay(d),s/veh	50.1	0.0	47.2	47.1	0.0	0.0	22.9	5.8	5.8	66.2	42.0	29.4
LnGrp LOS	D		D	D			C	A	A	E	D	C
Approach Vol, veh/h	185			70			774			1312		
Approach Delay, s/veh	49.3			47.1			7.0			40.8		
Approach LOS	D			D			A			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	91.4		20.9	51.1	48.0		20.9				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	7.7	65.7		30.7	11.7	61.7		30.7				
Max Q Clear Time (g_c+I1), s	4.0	10.1		12.3	4.5	36.4		6.5				
Green Ext Time (p_c), s	0.0	2.9		0.8	1.8	6.3		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay				30.5								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↔	↔		↔	↔	↔
Traffic Volume (veh/h)	119	13	39	16	15	34	50	653	9	26	1016	166
Future Volume (veh/h)	119	13	39	16	15	34	50	653	9	26	1016	166
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)	0.99		0.97	0.99		0.97	1.00		0.99	1.00		0.97
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	129	14	42	17	16	37	54	710	10	28	1104	180
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	52	155	72	70	118	641	2601	37	51	1299	520
Arrive On Green	0.14	0.14	0.13	0.14	0.14	0.13	0.78	1.00	1.00	0.03	0.37	0.37
Sat Flow, veh/h	1385	366	1099	249	499	839	1634	3572	50	1634	3539	1417
Grp Volume(v), veh/h	129	0	56	70	0	0	54	352	368	28	1104	180
Grp Sat Flow(s),veh/h/ln	1385	0	1466	1588	0	0	1634	1770	1853	1634	1770	1417
Q Serve(g_s), s	5.8	0.0	4.1	0.0	0.0	0.0	0.9	0.0	0.0	2.0	34.4	11.1
Cycle Q Clear(g_c), s	10.3	0.0	4.1	4.5	0.0	0.0	0.9	0.0	0.0	2.0	34.4	11.1
Prop In Lane	1.00		0.75	0.24		0.53	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	255	0	206	261	0	0	641	1288	1349	51	1299	520
V/C Ratio(X)	0.51	0.00	0.27	0.27	0.00	0.00	0.08	0.27	0.27	0.55	0.85	0.35
Avail Cap(c_a), veh/h	423	0	391	455	0	0	641	1288	1349	123	1858	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.46	0.46	0.46	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	0.0	46.5	46.6	0.0	0.0	8.0	0.0	0.0	57.3	34.9	27.5
Incr Delay (d2), s/veh	1.6	0.0	0.7	0.5	0.0	0.0	0.0	0.2	0.2	8.9	7.1	1.8
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	4.2	0.0	1.7	2.1	0.0	0.0	0.4	0.1	0.1	1.0	18.1	4.6
LnGrp Delay(d),s/veh	50.1	0.0	47.2	47.1	0.0	0.0	8.0	0.2	0.2	66.2	42.0	29.4
LnGrp LOS	D		D	D			A	A	A	E	D	C
Approach Vol, veh/h	185			70			774			1312		
Approach Delay, s/veh	49.3			47.1			0.8			40.8		
Approach LOS	D			D			A			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.7	91.4		20.9	51.1	48.0		20.9				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	7.7	65.7		30.7	11.7	61.7		30.7				
Max Q Clear Time (g_c+I1), s	4.0	2.0		12.3	2.9	36.4		6.5				
Green Ext Time (p_c), s	0.0	2.9		0.8	2.0	6.3		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay				28.4								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	↙
Traffic Volume (veh/h)	105	19	18	7	7	7	23	500	9	27	277	44
Future Volume (veh/h)	105	19	18	7	7	7	23	500	9	27	277	44
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)	0.99		0.97	0.99		0.97	1.00		0.99	1.00		0.98
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	114	21	20	8	8	8	25	543	10	29	301	48
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	110	105	104	98	75	56	2467	45	60	2465	991
Arrive On Green	0.14	0.14	0.13	0.14	0.14	0.13	0.03	0.69	0.68	0.04	0.70	0.70
Sat Flow, veh/h	1410	788	750	371	702	536	1634	3554	65	1634	3539	1422
Grp Volume(v), veh/h	114	0	41	24	0	0	25	270	283	29	301	48
Grp Sat Flow(s),veh/h/ln	1410	0	1538	1609	0	0	1634	1770	1850	1634	1770	1422
Q Serve(g_s), s	5.8	0.0	2.2	0.0	0.0	0.0	1.4	5.1	5.1	1.6	2.6	1.0
Cycle Q Clear(g_c), s	6.9	0.0	2.2	1.1	0.0	0.0	1.4	5.1	5.1	1.6	2.6	1.0
Prop In Lane	1.00		0.49	0.33		0.33	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	275	0	216	277	0	0	56	1228	1284	60	2465	991
V/C Ratio(X)	0.41	0.00	0.19	0.09	0.00	0.00	0.44	0.22	0.22	0.48	0.12	0.05
Avail Cap(c_a), veh/h	571	0	546	611	0	0	176	1228	1284	193	2465	991
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.66	0.66	0.66	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	0.0	35.6	35.1	0.0	0.0	44.0	5.1	5.1	43.9	4.7	4.4
Incr Delay (d2), s/veh	1.0	0.0	0.4	0.1	0.0	0.0	3.6	0.3	0.3	5.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	1.0	0.6	0.0	0.0	0.7	2.6	2.7	0.8	1.3	0.4
LnGrp Delay(d),s/veh	38.2	0.0	36.0	35.2	0.0	0.0	47.6	5.4	5.4	49.9	4.8	4.5
LnGrp LOS	D		D	D			D	A	A	D	A	A
Approach Vol, veh/h	155			24			578			378		
Approach Delay, s/veh	37.6			35.2			7.2			8.2		
Approach LOS	D			D			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	68.6		17.0	7.2	68.8		17.0				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	9.7	35.7		31.7	8.7	36.7		31.7				
Max Q Clear Time (g_c+I1), s	3.6	7.1		8.9	3.4	4.6		3.1				
Green Ext Time (p_c), s	0.0	3.5		0.5	0.0	3.5		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				12.3								
HCM 2010 LOS				B								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	↘
Traffic Volume (veh/h)	105	19	18	7	7	7	23	508	9	27	277	44
Future Volume (veh/h)	105	19	18	7	7	7	23	508	9	27	277	44
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)	0.99		0.98	0.99		0.98	1.00		0.98	1.00		0.97
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	114	21	20	8	8	8	25	552	10	29	301	48
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	501	154	146	218	145	105	108	1270	23	113	1276	511
Arrive On Green	0.19	0.19	0.15	0.19	0.19	0.15	0.07	0.36	0.32	0.07	0.36	0.36
Sat Flow, veh/h	1404	789	751	339	743	541	1634	3555	64	1634	3539	1416
Grp Volume(v), veh/h	114	0	41	24	0	0	25	275	287	29	301	48
Grp Sat Flow(s),veh/h/ln	1404	0	1540	1623	0	0	1634	1770	1850	1634	1770	1416
Q Serve(g_s), s	1.8	0.0	0.7	0.0	0.0	0.0	0.5	3.7	3.8	0.5	1.9	0.7
Cycle Q Clear(g_c), s	2.2	0.0	0.7	0.4	0.0	0.0	0.5	3.7	3.8	0.5	1.9	0.7
Prop In Lane	1.00		0.49	0.33		0.33	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	501	0	300	468	0	0	108	632	661	113	1276	511
V/C Ratio(X)	0.23	0.00	0.14	0.05	0.00	0.00	0.23	0.43	0.44	0.26	0.24	0.09
Avail Cap(c_a), veh/h	1670	0	1604	1787	0	0	464	2066	2160	464	4132	1653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	0.0	10.8	10.6	0.0	0.0	14.0	7.8	7.8	14.0	7.1	6.7
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.0	0.0	0.0	1.1	0.5	0.5	1.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.3	0.2	0.0	0.0	0.2	1.8	1.9	0.3	0.9	0.3
LnGrp Delay(d),s/veh	11.3	0.0	11.0	10.6	0.0	0.0	15.1	8.2	8.2	15.1	7.2	6.8
LnGrp LOS	B		B	B			B	A	A	B	A	A
Approach Vol, veh/h	155			24			587			378		
Approach Delay, s/veh	11.3			10.6			8.5			7.7		
Approach LOS	B			B			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	15.3		10.2	6.1	15.4		10.2				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	7.7	35.7		31.7	7.7	35.7		31.7				
Max Q Clear Time (g_c+I1), s	2.5	5.8		4.2	2.5	3.9		2.4				
Green Ext Time (p_c), s	0.0	3.5		0.6	0.0	3.5		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				8.7								
HCM 2010 LOS				A								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	↙
Traffic Volume (veh/h)	120	22	21	8	8	8	30	644	12	43	446	71
Future Volume (veh/h)	120	22	21	8	8	8	30	644	12	43	446	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)	0.99		0.97	0.99		0.97	1.00		0.98	1.00		0.98
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	130	24	23	9	9	9	33	700	13	47	485	77
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	282	116	112	106	102	79	61	880	16	787	2449	984
Arrive On Green	0.15	0.15	0.13	0.15	0.15	0.13	0.04	0.25	0.23	0.48	0.69	0.69
Sat Flow, veh/h	1411	786	753	383	686	534	1634	3553	66	1634	3539	1422
Grp Volume(v), veh/h	130	0	47	27	0	0	33	349	364	47	485	77
Grp Sat Flow(s),veh/h/ln	1411	0	1538	1603	0	0	1634	1770	1850	1634	1770	1422
Q Serve(g_s), s	7.0	0.0	2.6	0.0	0.0	0.0	1.9	18.1	18.1	1.5	4.8	1.7
Cycle Q Clear(g_c), s	8.3	0.0	2.6	1.3	0.0	0.0	1.9	18.1	18.1	1.5	4.8	1.7
Prop In Lane	1.00		0.49	0.33		0.33	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	282	0	228	286	0	0	61	438	458	787	2449	984
V/C Ratio(X)	0.46	0.00	0.21	0.09	0.00	0.00	0.54	0.79	0.80	0.06	0.20	0.08
Avail Cap(c_a), veh/h	556	0	534	595	0	0	167	722	755	787	2449	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.47	0.47	0.47	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	37.0	36.3	0.0	0.0	46.3	34.5	34.6	13.6	5.4	4.9
Incr Delay (d2), s/veh	1.2	0.0	0.4	0.1	0.0	0.0	3.4	7.0	6.7	0.0	0.2	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	3.4	0.0	1.2	0.6	0.0	0.0	0.9	9.7	10.1	0.7	2.4	0.7
LnGrp Delay(d),s/veh	40.1	0.0	37.4	36.4	0.0	0.0	49.8	41.5	41.3	13.6	5.6	5.1
LnGrp LOS	D		D	D			D	D	D	B	A	A
Approach Vol, veh/h	177			27			746			609		
Approach Delay, s/veh	39.4			36.4			41.8			6.1		
Approach LOS	D			D			D			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	51.2	28.3		18.5	7.7	71.8		18.5				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	10.7	38.7		32.7	8.7	40.7		32.7				
Max Q Clear Time (g_c+I1), s	3.5	20.1		10.3	3.9	6.8		3.3				
Green Ext Time (p_c), s	1.5	2.4		0.6	0.0	2.5		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				27.5								
HCM 2010 LOS				C								

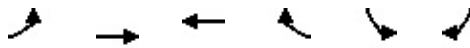


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	↙
Traffic Volume (veh/h)	120	22	21	8	8	8	30	652	12	43	446	71
Future Volume (veh/h)	120	22	21	8	8	8	30	652	12	43	446	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.98	1.00		0.98
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	130	24	23	9	9	9	33	709	13	47	485	77
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	282	116	112	106	102	79	61	889	16	783	2449	984
Arrive On Green	0.15	0.15	0.13	0.15	0.15	0.13	0.04	0.25	0.24	0.48	0.69	0.69
Sat Flow, veh/h	1411	786	753	383	686	534	1634	3554	65	1634	3539	1422
Grp Volume(v), veh/h	130	0	47	27	0	0	33	353	369	47	485	77
Grp Sat Flow(s),veh/h/ln	1411	0	1538	1603	0	0	1634	1770	1850	1634	1770	1422
Q Serve(g_s), s	7.0	0.0	2.6	0.0	0.0	0.0	1.9	18.3	18.3	1.5	4.8	1.7
Cycle Q Clear(g_c), s	8.3	0.0	2.6	1.3	0.0	0.0	1.9	18.3	18.3	1.5	4.8	1.7
Prop In Lane	1.00		0.49	0.33		0.33	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	282	0	228	286	0	0	61	442	463	783	2449	984
V/C Ratio(X)	0.46	0.00	0.21	0.09	0.00	0.00	0.54	0.80	0.80	0.06	0.20	0.08
Avail Cap(c_a), veh/h	556	0	534	595	0	0	167	722	755	783	2449	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.43	0.43	0.43	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	37.0	36.3	0.0	0.0	46.3	34.4	34.5	13.7	5.4	4.9
Incr Delay (d2), s/veh	1.2	0.0	0.4	0.1	0.0	0.0	3.1	6.4	6.2	0.0	0.2	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	3.4	0.0	1.2	0.6	0.0	0.0	0.9	9.7	10.1	0.7	2.4	0.7
LnGrp Delay(d),s/veh	40.1	0.0	37.4	36.4	0.0	0.0	49.5	40.9	40.6	13.7	5.6	5.1
LnGrp LOS	D		D	D			D	D	D	B	A	A
Approach Vol, veh/h	177			27			755			609		
Approach Delay, s/veh	39.4			36.4			41.1			6.1		
Approach LOS	D			D			D			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	51.0	28.5		18.5	7.7	71.8		18.5				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	10.7	38.7		32.7	8.7	40.7		32.7				
Max Q Clear Time (g_c+I1), s	3.5	20.3		10.3	3.9	6.8		3.3				
Green Ext Time (p_c), s	1.5	2.5		0.6	0.0	2.5		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				27.3								
HCM 2010 LOS				C								

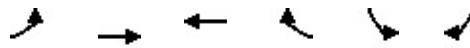


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	↙
Traffic Volume (veh/h)	120	22	21	8	8	8	30	652	12	43	446	71
Future Volume (veh/h)	120	22	21	8	8	8	30	652	12	43	446	71
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.98	1.00		0.98
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	1750	1863	1750	1750	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	130	24	23	9	9	9	33	709	13	47	485	77
Adj No. of Lanes	0	2	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	282	116	112	106	102	79	61	889	16	783	2449	984
Arrive On Green	0.15	0.15	0.13	0.15	0.15	0.13	0.04	0.25	0.24	0.48	0.69	0.69
Sat Flow, veh/h	1411	786	753	383	686	534	1634	3554	65	1634	3539	1422
Grp Volume(v), veh/h	130	0	47	27	0	0	33	353	369	47	485	77
Grp Sat Flow(s),veh/h/ln	1411	0	1538	1603	0	0	1634	1770	1850	1634	1770	1422
Q Serve(g_s), s	7.0	0.0	2.6	0.0	0.0	0.0	1.9	18.3	18.3	1.5	4.8	1.7
Cycle Q Clear(g_c), s	8.3	0.0	2.6	1.3	0.0	0.0	1.9	18.3	18.3	1.5	4.8	1.7
Prop In Lane	1.00		0.49	0.33		0.33	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	282	0	228	286	0	0	61	442	463	783	2449	984
V/C Ratio(X)	0.46	0.00	0.21	0.09	0.00	0.00	0.54	0.80	0.80	0.06	0.20	0.08
Avail Cap(c_a), veh/h	556	0	534	595	0	0	167	722	755	783	2449	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.40	0.40	0.40	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	0.0	37.0	36.3	0.0	0.0	46.3	34.4	34.5	13.7	5.4	4.9
Incr Delay (d2), s/veh	1.2	0.0	0.4	0.1	0.0	0.0	2.9	6.1	5.8	0.0	0.2	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	3.4	0.0	1.2	0.6	0.0	0.0	0.9	9.7	10.1	0.7	2.4	0.7
LnGrp Delay(d),s/veh	40.1	0.0	37.4	36.4	0.0	0.0	49.3	40.5	40.3	13.7	5.6	5.1
LnGrp LOS	D		D	D			D	D	D	B	A	A
Approach Vol, veh/h	177			27			755			609		
Approach Delay, s/veh	39.4			36.4			40.8			6.1		
Approach LOS	D			D			D			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	51.0	28.5		18.5	7.7	71.8		18.5				
Change Period (Y+Rc), s	5.3	5.3		5.3	5.3	5.3		5.3				
Max Green Setting (Gmax), s	10.7	38.7		32.7	8.7	40.7		32.7				
Max Q Clear Time (g_c+I1), s	3.5	20.3		10.3	3.9	6.8		3.3				
Green Ext Time (p_c), s	1.5	2.5		0.6	0.0	2.5		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				27.1								
HCM 2010 LOS				C								

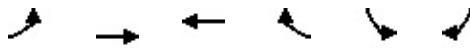
Intersection 2
SR 99 SB OffRamp & White Ln



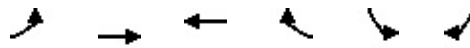
Movement	EBL EBT		WBT WBR				SBL SBR	
Lane Configurations	↑↑↑↑		↑↑↑↑				↑↑↑↑	
Traffic Volume (veh/h)	0 1643		878 0				361 841	
Future Volume (veh/h)	0 1643		878 0				361 841	
Number	7	4	8	18			1	16
Initial Q (Qb), veh	0	0	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00 1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	0 1863		1863 0				1716 1716	
Adj Flow Rate, veh/h	0 1786		954 0				392 914	
Adj No. of Lanes	0	4	3	0			2	2
Peak Hour Factor	0.92	0.92	0.92	0.92			0.92	0.92
Percent Heavy Veh, %	0	2	2	0			2	2
Cap, veh/h	0 2362		1875 0				1720 1392	
Arrive On Green	0.00	0.37	0.12	0.00			0.54	0.54
Sat Flow, veh/h	0 6929		5421 0				3170 2567	
Grp Volume(v), veh/h	0 1786		954 0				392 914	
Grp Sat Flow(s),veh/h/ln	0 1602		1695 0				1585 1283	
Q Serve(g_s), s	0.0	22.0	15.8	0.0			5.8	22.8
Cycle Q Clear(g_c), s	0.0	22.0	15.8	0.0			5.8	22.8
Prop In Lane	0.00		0.00				1.00 1.00	
Lane Grp Cap(c), veh/h	0 2362		1875 0				1720 1392	
V/C Ratio(X)	0.00	0.76	0.51	0.00			0.23	0.66
Avail Cap(c_a), veh/h	0 2492		1978 0				1720 1392	
HCM Platoon Ratio	1.00	1.00	0.33	1.00			1.00	1.00
Upstream Filter(I)	0.00	1.00	0.93	0.00			1.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	31.9	0.0			10.8	14.6
Incr Delay (d2), s/veh	0.0	1.3	0.2	0.0			0.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.9	7.5	0.0			2.6	8.5
LnGrp Delay(d),s/veh	0.0	26.2	32.1	0.0			11.1	17.1
LnGrp LOS	C		C				B B	
Approach Vol, veh/h	1786		954				1306	
Approach Delay, s/veh	26.2		32.1				15.3	
Approach LOS	C		C				B	
Timer	1	2	3	4	5	6	7	8
Assigned Phs			4		6		8	
Phs Duration (G+Y+Rc), s			37.2		52.8		37.2	
Change Period (Y+Rc), s			5.7		5.7		5.7	
Max Green Setting (Gmax), s			33.3		45.3		33.3	
Max Q Clear Time (g_c+I1), s			24.0		24.8		17.8	
Green Ext Time (p_c), s			7.5		6.6		11.3	
Intersection Summary								
HCM 2010 Ctrl Delay		24.0						
HCM 2010 LOS		C						



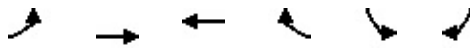
Movement	EBL		EBT		WBT				WBR		SBL		SBR	
Lane Configurations			↑↑↑↑						↑↑↑↑				↑↑↑↑	
Traffic Volume (veh/h)	0		1654		886				0		371		841	
Future Volume (veh/h)	0		1654		886				0		371		841	
Number	7		4		8				18		1		16	
Initial Q (Qb), veh	0		0		0				0		0		0	
Ped-Bike Adj(A_pbT)	1.00				1.00						1.00		1.00	
Parking Bus, Adj	1.00		1.00		1.00				1.00		1.00		1.00	
Adj Sat Flow, veh/h/ln	0		1863		1863				0		1716		1716	
Adj Flow Rate, veh/h	0		1798		963				0		403		914	
Adj No. of Lanes	0		4		3				0		2		2	
Peak Hour Factor	0.92		0.92		0.92				0.92		0.92		0.92	
Percent Heavy Veh, %	0		2		2				0		2		2	
Cap, veh/h	0		2390		1897				0		1729		1400	
Arrive On Green	0.00		0.37		0.25				0.00		0.55		0.55	
Sat Flow, veh/h	0		6929		5421				0		3170		2567	
Grp Volume(v), veh/h	0		1798		963				0		403		914	
Grp Sat Flow(s),veh/h/ln	0		1602		1695				0		1585		1283	
Q Serve(g_s), s	0.0		24.0		15.9				0.0		6.5		24.6	
Cycle Q Clear(g_c), s	0.0		24.0		15.9				0.0		6.5		24.6	
Prop In Lane	0.00				0.00						1.00		1.00	
Lane Grp Cap(c), veh/h	0		2390		1897				0		1729		1400	
V/C Ratio(X)	0.00		0.75		0.51				0.00		0.23		0.65	
Avail Cap(c_a), veh/h	0		2550		2024				0		1729		1400	
HCM Platoon Ratio	1.00		1.00		0.67				1.00		1.00		1.00	
Upstream Filter(I)	0.00		1.00		0.93				0.00		1.00		1.00	
Uniform Delay (d), s/veh	0.0		26.8		29.0				0.0		11.6		15.7	
Incr Delay (d2), s/veh	0.0		1.2		0.2				0.0		0.3		2.4	
Initial Q Delay(d3),s/veh	0.0		0.0		0.0				0.0		0.0		0.0	
%ile BackOfQ(50%),veh/ln	0.0		10.8		7.5				0.0		2.9		9.1	
LnGrp Delay(d),s/veh	0.0		28.0		29.2				0.0		11.9		18.1	
LnGrp LOS			C		C						B		B	
Approach Vol, veh/h	1798				963						1317			
Approach Delay, s/veh	28.0				29.2						16.2			
Approach LOS	C				C						B			
Timer	1	2	3	4	5	6	7	8						
Assigned Phs				4		6		8						
Phs Duration (G+Y+Rc), s				40.6		57.4		40.6						
Change Period (Y+Rc), s				5.7		5.7		5.7						
Max Green Setting (Gmax), s				37.3		49.3		37.3						
Max Q Clear Time (g_c+I1), s				26.0		26.6		17.9						
Green Ext Time (p_c), s				8.9		6.9		13.5						
Intersection Summary														
HCM 2010 Ctrl Delay			24.5											
HCM 2010 LOS			C											



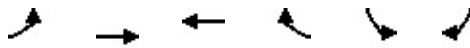
Movement	EBL EBT		WBT WBR				SBL SBR	
Lane Configurations	↑↑↑↑		↑↑↑↑				↑↑	
Traffic Volume (veh/h)	0 1751		936 0				385 896	
Future Volume (veh/h)	0 1751		936 0				385 896	
Number	7	4	8	18			1	16
Initial Q (Qb), veh	0	0	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00 1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	0 1863		1863 0				1716 1716	
Adj Flow Rate, veh/h	0 1903		1017 0				418 974	
Adj No. of Lanes	0	4	3	0			2	2
Peak Hour Factor	0.92	0.92	0.92	0.92			0.92	0.92
Percent Heavy Veh, %	0	2	2	0			2	2
Cap, veh/h	0 2413		1915 0				1694 1372	
Arrive On Green	0.00	0.38	0.38	0.00			0.53	0.53
Sat Flow, veh/h	0 6929		5421 0				3170 2567	
Grp Volume(v), veh/h	0 1903		1017 0				418 974	
Grp Sat Flow(s),veh/h/ln	0 1602		1695 0				1585 1283	
Q Serve(g_s), s	0.0	23.7	14.0	0.0			6.4	25.6
Cycle Q Clear(g_c), s	0.0	23.7	14.0	0.0			6.4	25.6
Prop In Lane	0.00		0.00				1.00 1.00	
Lane Grp Cap(c), veh/h	0 2413		1915 0				1694 1372	
V/C Ratio(X)	0.00	0.79	0.53	0.00			0.25	0.71
Avail Cap(c_a), veh/h	0 2492		1978 0				1694 1372	
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00
Upstream Filter(I)	0.00	1.00	0.93	0.00			1.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	21.9	0.0			11.2	15.7
Incr Delay (d2), s/veh	0.0	1.7	0.2	0.0			0.3	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.7	6.5	0.0			2.9	9.5
LnGrp Delay(d),s/veh	0.0	26.6	22.1	0.0			11.6	18.9
LnGrp LOS	C		C				B B	
Approach Vol, veh/h	1903		1017				1392	
Approach Delay, s/veh	26.6		22.1				16.7	
Approach LOS	C		C				B	
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4	6		8	
Phs Duration (G+Y+Rc), s				37.9	52.1		37.9	
Change Period (Y+Rc), s				5.7	5.7		5.7	
Max Green Setting (Gmax), s				33.3	45.3		33.3	
Max Q Clear Time (g_c+I1), s				25.7	27.6		16.0	
Green Ext Time (p_c), s				6.5	6.7		13.0	
Intersection Summary								
HCM 2010 Ctrl Delay		22.3						
HCM 2010 LOS		C						



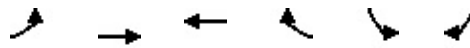
Movement	EBL EBT		WBT WBR				SBL SBR	
Lane Configurations	↑↑↑↑		↑↑↑↑				↑↑↑	
Traffic Volume (veh/h)	0 1762		944 0				395 896	
Future Volume (veh/h)	0 1762		944 0				395 896	
Number	7	4	8	18			1	16
Initial Q (Qb), veh	0	0	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00 1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	0 1863		1863 0				1716 1716	
Adj Flow Rate, veh/h	0 1915		1026 0				429 974	
Adj No. of Lanes	0	4	3	0			2	2
Peak Hour Factor	0.92	0.92	0.92	0.92			0.92	0.92
Percent Heavy Veh, %	0	2	2	0			2	2
Cap, veh/h	0 2418		1919 0				1692 1370	
Arrive On Green	0.00	0.38	0.38	0.00			0.53	0.53
Sat Flow, veh/h	0 6929		5421 0				3170 2567	
Grp Volume(v), veh/h	0 1915		1026 0				429 974	
Grp Sat Flow(s),veh/h/ln	0 1602		1695 0				1585 1283	
Q Serve(g_s), s	0.0	23.9	14.2	0.0			6.6	25.7
Cycle Q Clear(g_c), s	0.0	23.9	14.2	0.0			6.6	25.7
Prop In Lane	0.00		0.00				1.00 1.00	
Lane Grp Cap(c), veh/h	0 2418		1919 0				1692 1370	
V/C Ratio(X)	0.00	0.79	0.53	0.00			0.25	0.71
Avail Cap(c_a), veh/h	0 2492		1978 0				1692 1370	
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00
Upstream Filter(I)	0.00	1.00	0.93	0.00			1.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	21.9	0.0			11.3	15.8
Incr Delay (d2), s/veh	0.0	1.8	0.2	0.0			0.4	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.8	6.7	0.0			2.9	9.7
LnGrp Delay(d),s/veh	0.0	26.7	22.1	0.0			11.7	18.9
LnGrp LOS	C		C				B B	
Approach Vol, veh/h	1915		1026				1403	
Approach Delay, s/veh	26.7		22.1				16.7	
Approach LOS	C		C				B	
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4	6		8	
Phs Duration (G+Y+Rc), s				38.0	52.0		38.0	
Change Period (Y+Rc), s				5.7	5.7		5.7	
Max Green Setting (Gmax), s				33.3	45.3		33.3	
Max Q Clear Time (g_c+I1), s				25.9	27.7		16.2	
Green Ext Time (p_c), s				6.4	6.8		13.0	
Intersection Summary								
HCM 2010 Ctrl Delay		22.4						
HCM 2010 LOS		C						



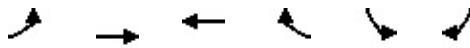
Movement	EBL EBT		WBT WBR				SBL SBR	
Lane Configurations	↑↑↑↑		↑↑↑↑				↑↑↑	
Traffic Volume (veh/h)	0 1762		944 0				395 896	
Future Volume (veh/h)	0 1762		944 0				395 896	
Number	7	4	8	18			1	16
Initial Q (Qb), veh	0	0	0	0			0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00 1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	0 1863		1863 0				1716 1716	
Adj Flow Rate, veh/h	0 1915		1026 0				429 974	
Adj No. of Lanes	0	4	3	0			2	2
Peak Hour Factor	0.92	0.92	0.92	0.92			0.92	0.92
Percent Heavy Veh, %	0	2	2	0			2	2
Cap, veh/h	0 2418		1919 0				1692 1370	
Arrive On Green	0.00	0.38	0.38	0.00			0.53	0.53
Sat Flow, veh/h	0 6929		5421 0				3170 2567	
Grp Volume(v), veh/h	0 1915		1026 0				429 974	
Grp Sat Flow(s),veh/h/ln	0 1602		1695 0				1585 1283	
Q Serve(g_s), s	0.0	23.9	14.2	0.0			6.6	25.7
Cycle Q Clear(g_c), s	0.0	23.9	14.2	0.0			6.6	25.7
Prop In Lane	0.00		0.00				1.00 1.00	
Lane Grp Cap(c), veh/h	0 2418		1919 0				1692 1370	
V/C Ratio(X)	0.00	0.79	0.53	0.00			0.25	0.71
Avail Cap(c_a), veh/h	0 2492		1978 0				1692 1370	
HCM Platoon Ratio	1.00	1.00	1.00	1.00			1.00	1.00
Upstream Filter(I)	0.00	1.00	0.93	0.00			1.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	21.9	0.0			11.3	15.8
Incr Delay (d2), s/veh	0.0	1.8	0.2	0.0			0.4	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0			0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.8	6.7	0.0			2.9	9.7
LnGrp Delay(d),s/veh	0.0	26.7	22.1	0.0			11.7	18.9
LnGrp LOS	C		C				B B	
Approach Vol, veh/h	1915		1026				1403	
Approach Delay, s/veh	26.7		22.1				16.7	
Approach LOS	C		C				B	
Timer	1	2	3	4	5	6	7	8
Assigned Phs			4		6		8	
Phs Duration (G+Y+Rc), s			38.0		52.0		38.0	
Change Period (Y+Rc), s			5.7		5.7		5.7	
Max Green Setting (Gmax), s			33.3		45.3		33.3	
Max Q Clear Time (g_c+I1), s			25.9		27.7		16.2	
Green Ext Time (p_c), s			6.4		6.8		13.0	
Intersection Summary								
HCM 2010 Ctrl Delay		22.4						
HCM 2010 LOS		C						



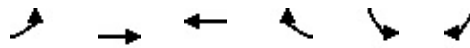
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↑↑↑↑		↑↑↑↑		↑↑	↑↑		
Traffic Volume (veh/h)	0	1155	623	0	286	982		
Future Volume (veh/h)	0	1155	623	0	286	982		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1716	1716		
Adj Flow Rate, veh/h	0	1255	677	0	311	1067		
Adj No. of Lanes	0	4	3	0	2	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1711	1358	0	2051	1661		
Arrive On Green	0.00	0.27	0.09	0.00	0.65	0.65		
Sat Flow, veh/h	0	6929	5421	0	3170	2567		
Grp Volume(v), veh/h	0	1255	677	0	311	1067		
Grp Sat Flow(s),veh/h/ln	0	1602	1695	0	1585	1283		
Q Serve(g_s), s	0.0	16.6	11.8	0.0	3.6	23.4		
Cycle Q Clear(g_c), s	0.0	16.6	11.8	0.0	3.6	23.4		
Prop In Lane	0.00		0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1711	1358	0	2051	1661		
V/C Ratio(X)	0.00	0.73	0.50	0.00	0.15	0.64		
Avail Cap(c_a), veh/h	0	1860	1476	0	2051	1661		
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.93	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	31.1	36.5	0.0	6.4	9.9		
Incr Delay (d2), s/veh	0.0	1.4	0.3	0.0	0.2	1.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	7.5	5.6	0.0	1.6	8.6		
LnGrp Delay(d),s/veh	0.0	32.5	36.7	0.0	6.6	11.8		
LnGrp LOS	C		D		A	B		
Approach Vol, veh/h	1255		677		1378			
Approach Delay, s/veh	32.5		36.7		10.7			
Approach LOS	C		D		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4	6		8	
Phs Duration (G+Y+Rc), s				28.8	64.2		28.8	
Change Period (Y+Rc), s				5.7	5.7		5.7	
Max Green Setting (Gmax), s				25.3	56.3		25.3	
Max Q Clear Time (g_c+I1), s				18.6	25.4		13.8	
Green Ext Time (p_c), s				4.5	8.2		6.7	
Intersection Summary								
HCM 2010 Ctrl Delay		24.3						
HCM 2010 LOS		C						



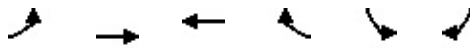
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↑↑↑↑		↑↑↑↑		↑↑	↑↑		
Traffic Volume (veh/h)	0	1164	628	0	294	982		
Future Volume (veh/h)	0	1164	628	0	294	982		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1716	1716		
Adj Flow Rate, veh/h	0	1265	683	0	320	1067		
Adj No. of Lanes	0	4	3	0	2	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1752	1391	0	2021	1637		
Arrive On Green	0.00	0.27	0.09	0.00	0.64	0.64		
Sat Flow, veh/h	0	6929	5421	0	3170	2567		
Grp Volume(v), veh/h	0	1265	683	0	320	1067		
Grp Sat Flow(s),veh/h/ln	0	1602	1695	0	1585	1283		
Q Serve(g_s), s	0.0	16.1	11.5	0.0	3.7	23.2		
Cycle Q Clear(g_c), s	0.0	16.1	11.5	0.0	3.7	23.2		
Prop In Lane	0.00		0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1752	1391	0	2021	1637		
V/C Ratio(X)	0.00	0.72	0.49	0.00	0.16	0.65		
Avail Cap(c_a), veh/h	0	1922	1526	0	2021	1637		
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.93	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	29.6	35.0	0.0	6.6	10.1		
Incr Delay (d2), s/veh	0.0	1.2	0.3	0.0	0.2	2.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	7.3	5.4	0.0	1.6	8.6		
LnGrp Delay(d),s/veh	0.0	30.8	35.2	0.0	6.7	12.1		
LnGrp LOS	C		D		A	B		
Approach Vol, veh/h	1265		683		1387			
Approach Delay, s/veh	30.8		35.2		10.9			
Approach LOS	C		D		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4	6		8	
Phs Duration (G+Y+Rc), s				28.6	61.4		28.6	
Change Period (Y+Rc), s				5.7	5.7		5.7	
Max Green Setting (Gmax), s				25.3	53.3		25.3	
Max Q Clear Time (g_c+I1), s				18.1	25.2		13.5	
Green Ext Time (p_c), s				4.8	8.0		6.9	
Intersection Summary								
HCM 2010 Ctrl Delay		23.4						
HCM 2010 LOS		C						



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↑↑↑↑		↑↑↑↑		↑↑	↑↑		
Traffic Volume (veh/h)	0	1231	664	0	305	1047		
Future Volume (veh/h)	0	1231	664	0	305	1047		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1716	1716		
Adj Flow Rate, veh/h	0	1338	722	0	332	1138		
Adj No. of Lanes	0	4	3	0	2	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1771	1405	0	2035	1648		
Arrive On Green	0.00	0.28	0.09	0.00	0.64	0.64		
Sat Flow, veh/h	0	6929	5421	0	3170	2567		
Grp Volume(v), veh/h	0	1338	722	0	332	1138		
Grp Sat Flow(s),veh/h/ln	0	1602	1695	0	1585	1283		
Q Serve(g_s), s	0.0	18.7	13.3	0.0	4.1	27.9		
Cycle Q Clear(g_c), s	0.0	18.7	13.3	0.0	4.1	27.9		
Prop In Lane	0.00		0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1771	1405	0	2035	1648		
V/C Ratio(X)	0.00	0.76	0.51	0.00	0.16	0.69		
Avail Cap(c_a), veh/h	0	1896	1505	0	2035	1648		
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.94	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	32.4	38.3	0.0	7.0	11.3		
Incr Delay (d2), s/veh	0.0	1.7	0.3	0.0	0.2	2.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.5	6.3	0.0	1.8	10.3		
LnGrp Delay(d),s/veh	0.0	34.1	38.5	0.0	7.2	13.7		
LnGrp LOS	C		D		A	B		
Approach Vol, veh/h	1338		722		1470			
Approach Delay, s/veh	34.1		38.5		12.2			
Approach LOS	C		D		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs			4		6		8	
Phs Duration (G+Y+Rc), s			31.1		66.9		31.1	
Change Period (Y+Rc), s			5.7		5.7		5.7	
Max Green Setting (Gmax), s			27.3		59.3		27.3	
Max Q Clear Time (g_c+I1), s			20.7		29.9		15.3	
Green Ext Time (p_c), s			4.7		8.8		7.4	
Intersection Summary								
HCM 2010 Ctrl Delay		25.9						
HCM 2010 LOS		C						

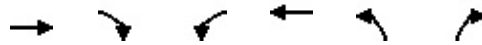


Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↑↑↑↑		↑↑↑↑		↑↑	↑↑		
Traffic Volume (veh/h)	0	1240	669	0	313	1047		
Future Volume (veh/h)	0	1240	669	0	313	1047		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1716	1716		
Adj Flow Rate, veh/h	0	1348	727	0	340	1138		
Adj No. of Lanes	0	4	3	0	2	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1777	1410	0	2032	1645		
Arrive On Green	0.00	0.28	0.09	0.00	0.64	0.64		
Sat Flow, veh/h	0	6929	5421	0	3170	2567		
Grp Volume(v), veh/h	0	1348	727	0	340	1138		
Grp Sat Flow(s),veh/h/ln	0	1602	1695	0	1585	1283		
Q Serve(g_s), s	0.0	18.9	13.4	0.0	4.2	28.0		
Cycle Q Clear(g_c), s	0.0	18.9	13.4	0.0	4.2	28.0		
Prop In Lane	0.00		0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1777	1410	0	2032	1645		
V/C Ratio(X)	0.00	0.76	0.52	0.00	0.17	0.69		
Avail Cap(c_a), veh/h	0	1896	1505	0	2032	1645		
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.94	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	32.4	38.2	0.0	7.1	11.3		
Incr Delay (d2), s/veh	0.0	1.7	0.3	0.0	0.2	2.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.5	6.3	0.0	1.9	10.4		
LnGrp Delay(d),s/veh	0.0	34.1	38.5	0.0	7.2	13.8		
LnGrp LOS	C		D		A	B		
Approach Vol, veh/h	1348		727		1478			
Approach Delay, s/veh	34.1		38.5		12.3			
Approach LOS	C		D		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4	6		8	
Phs Duration (G+Y+Rc), s				31.2	66.8		31.2	
Change Period (Y+Rc), s				5.7	5.7		5.7	
Max Green Setting (Gmax), s				27.3	59.3		27.3	
Max Q Clear Time (g_c+I1), s				20.9	30.0		15.4	
Green Ext Time (p_c), s				4.6	8.9		7.4	
Intersection Summary								
HCM 2010 Ctrl Delay		25.9						
HCM 2010 LOS		C						

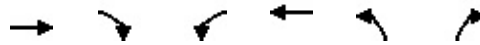


Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations	↑↑↑↑		↑↑↑↑		↑↑	↑↑		
Traffic Volume (veh/h)	0	1240	669	0	313	1047		
Future Volume (veh/h)	0	1240	669	0	313	1047		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1716	1716		
Adj Flow Rate, veh/h	0	1348	727	0	340	1138		
Adj No. of Lanes	0	4	3	0	2	2		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	0	2	2	0	2	2		
Cap, veh/h	0	1777	1410	0	2032	1645		
Arrive On Green	0.00	0.28	0.09	0.00	0.64	0.64		
Sat Flow, veh/h	0	6929	5421	0	3170	2567		
Grp Volume(v), veh/h	0	1348	727	0	340	1138		
Grp Sat Flow(s),veh/h/ln	0	1602	1695	0	1585	1283		
Q Serve(g_s), s	0.0	18.9	13.4	0.0	4.2	28.0		
Cycle Q Clear(g_c), s	0.0	18.9	13.4	0.0	4.2	28.0		
Prop In Lane	0.00		0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	1777	1410	0	2032	1645		
V/C Ratio(X)	0.00	0.76	0.52	0.00	0.17	0.69		
Avail Cap(c_a), veh/h	0	1896	1505	0	2032	1645		
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.94	0.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	32.4	38.2	0.0	7.1	11.3		
Incr Delay (d2), s/veh	0.0	1.7	0.3	0.0	0.2	2.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.5	6.3	0.0	1.9	10.4		
LnGrp Delay(d),s/veh	0.0	34.1	38.5	0.0	7.2	13.8		
LnGrp LOS	C		D		A	B		
Approach Vol, veh/h	1348		727		1478			
Approach Delay, s/veh	34.1		38.5		12.3			
Approach LOS	C		D		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4	6		8	
Phs Duration (G+Y+Rc), s				31.2	66.8		31.2	
Change Period (Y+Rc), s				5.7	5.7		5.7	
Max Green Setting (Gmax), s				27.3	59.3		27.3	
Max Q Clear Time (g_c+I1), s				20.9	30.0		15.4	
Green Ext Time (p_c), s				4.6	8.9		7.4	
Intersection Summary								
HCM 2010 Ctrl Delay		25.9						
HCM 2010 LOS		C						

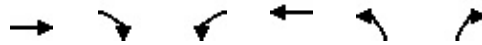
Intersection 3
SR 99 NB OffRamp & White Ln



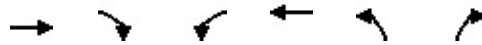
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	1064	0	0	611	273	196		
Future Volume (veh/h)	1064	0	0	611	273	196		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	1157	0	0	664	297	213		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1690	0	0	1690	946	844		
Arrive On Green	0.22	0.00	0.00	0.66	0.58	0.58		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	1157	0	0	664	297	213		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	18.8	0.0	0.0	5.3	8.4	6.5		
Cycle Q Clear(g_c), s	18.8	0.0	0.0	5.3	8.4	6.5		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1690	0	0	1690	946	844		
V/C Ratio(X)	0.68	0.00	0.00	0.39	0.31	0.25		
Avail Cap(c_a), veh/h	2317	0	0	2317	946	844		
HCM Platoon Ratio	0.67	1.00	1.00	2.00	1.00	1.00		
Upstream Filter(I)	0.73	0.00	0.00	0.92	1.00	1.00		
Uniform Delay (d), s/veh	30.7	0.0	0.0	11.0	9.8	9.3		
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.9	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	8.8	0.0	0.0	2.5	4.0	2.8		
LnGrp Delay(d),s/veh	31.0	0.0	0.0	11.1	10.6	10.1		
LnGrp LOS	C			B	B	B		
Approach Vol, veh/h	1157			664	510			
Approach Delay, s/veh	31.0			11.1	10.4			
Approach LOS	C			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		56.1		33.9				33.9
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		40.5		40.5				40.5
Max Q Clear Time (g_c+I1), s		10.4		20.8				7.3
Green Ext Time (p_c), s		2.0		8.6				10.4
Intersection Summary								
HCM 2010 Ctrl Delay		20.8						
HCM 2010 LOS		C						



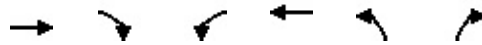
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	1078	0	0	625	273	203		
Future Volume (veh/h)	1078	0	0	625	273	203		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	1172	0	0	679	297	221		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1684	0	0	1684	959	856		
Arrive On Green	0.22	0.00	0.00	0.66	0.59	0.59		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	1172	0	0	679	297	221		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	20.8	0.0	0.0	6.0	9.0	7.2		
Cycle Q Clear(g_c), s	20.8	0.0	0.0	6.0	9.0	7.2		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1684	0	0	1684	959	856		
V/C Ratio(X)	0.70	0.00	0.00	0.40	0.31	0.26		
Avail Cap(c_a), veh/h	2335	0	0	2335	959	856		
HCM Platoon Ratio	0.67	1.00	1.00	2.00	1.00	1.00		
Upstream Filter(I)	0.72	0.00	0.00	0.92	1.00	1.00		
Uniform Delay (d), s/veh	33.6	0.0	0.0	12.1	10.2	9.8		
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.8	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.0	2.8	4.3	3.1		
LnGrp Delay(d),s/veh	34.0	0.0	0.0	12.2	11.0	10.6		
LnGrp LOS	C			B	B	B		
Approach Vol, veh/h	1172			679	518			
Approach Delay, s/veh	34.0			12.2	10.8			
Approach LOS	C			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		61.5		36.5				36.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		44.5		44.5				44.5
Max Q Clear Time (g_c+I1), s		11.0		22.8				8.0
Green Ext Time (p_c), s		2.0		9.2				10.9
Intersection Summary								
HCM 2010 Ctrl Delay		22.7						
HCM 2010 LOS		C						



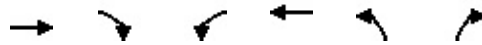
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	1134	0	0	621	291	209		
Future Volume (veh/h)	1134	0	0	621	291	209		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	1233	0	0	675	316	227		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1728	0	0	1728	934	833		
Arrive On Green	0.34	0.00	0.00	0.23	0.57	0.57		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	1233	0	0	675	316	227		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	19.0	0.0	0.0	10.1	9.3	7.1		
Cycle Q Clear(g_c), s	19.0	0.0	0.0	10.1	9.3	7.1		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1728	0	0	1728	934	833		
V/C Ratio(X)	0.71	0.00	0.00	0.39	0.34	0.27		
Avail Cap(c_a), veh/h	2317	0	0	2317	934	833		
HCM Platoon Ratio	1.00	1.00	1.00	0.67	1.00	1.00		
Upstream Filter(I)	0.69	0.00	0.00	0.91	1.00	1.00		
Uniform Delay (d), s/veh	25.9	0.0	0.0	26.9	10.3	9.8		
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	1.0	0.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.0	0.0	0.0	4.8	4.4	3.0		
LnGrp Delay(d),s/veh	26.4	0.0	0.0	27.0	11.2	10.6		
LnGrp LOS	C			C	B	B		
Approach Vol, veh/h	1233			675	543			
Approach Delay, s/veh	26.4			27.0	11.0			
Approach LOS	C			C	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		55.4		34.6				34.6
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		40.5		40.5				40.5
Max Q Clear Time (g_c+I1), s		11.3		21.0				12.1
Green Ext Time (p_c), s		2.1		9.1				10.6
Intersection Summary								
HCM 2010 Ctrl Delay		23.1						
HCM 2010 LOS		C						



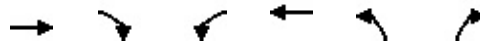
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	1148	0	0	635	291	216		
Future Volume (veh/h)	1148	0	0	635	291	216		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	1248	0	0	690	316	235		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1746	0	0	1746	928	828		
Arrive On Green	0.34	0.00	0.00	0.23	0.57	0.57		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	1248	0	0	690	316	235		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	19.2	0.0	0.0	10.3	9.3	7.5		
Cycle Q Clear(g_c), s	19.2	0.0	0.0	10.3	9.3	7.5		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1746	0	0	1746	928	828		
V/C Ratio(X)	0.71	0.00	0.00	0.40	0.34	0.28		
Avail Cap(c_a), veh/h	2317	0	0	2317	928	828		
HCM Platoon Ratio	1.00	1.00	1.00	0.67	1.00	1.00		
Upstream Filter(I)	0.69	0.00	0.00	0.90	1.00	1.00		
Uniform Delay (d), s/veh	25.7	0.0	0.0	26.7	10.4	10.0		
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	1.0	0.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.1	0.0	0.0	4.9	4.4	3.2		
LnGrp Delay(d),s/veh	26.2	0.0	0.0	26.9	11.4	10.9		
LnGrp LOS	C			C	B	B		
Approach Vol, veh/h	1248			690	551			
Approach Delay, s/veh	26.2			26.9	11.2			
Approach LOS	C			C	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		55.1		34.9				34.9
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		40.5		40.5				40.5
Max Q Clear Time (g_c+I1), s		11.3		21.2				12.3
Green Ext Time (p_c), s		2.1		9.2				10.8
Intersection Summary								
HCM 2010 Ctrl Delay		23.1						
HCM 2010 LOS		C						



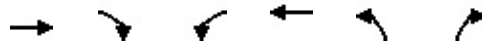
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	1148	0	0	635	291	216		
Future Volume (veh/h)	1148	0	0	635	291	216		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	1248	0	0	690	316	235		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1746	0	0	1746	928	828		
Arrive On Green	0.34	0.00	0.00	0.23	0.57	0.57		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	1248	0	0	690	316	235		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	19.2	0.0	0.0	10.3	9.3	7.5		
Cycle Q Clear(g_c), s	19.2	0.0	0.0	10.3	9.3	7.5		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1746	0	0	1746	928	828		
V/C Ratio(X)	0.71	0.00	0.00	0.40	0.34	0.28		
Avail Cap(c_a), veh/h	2317	0	0	2317	928	828		
HCM Platoon Ratio	1.00	1.00	1.00	0.67	1.00	1.00		
Upstream Filter(I)	0.69	0.00	0.00	0.90	1.00	1.00		
Uniform Delay (d), s/veh	25.7	0.0	0.0	26.7	10.4	10.0		
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	1.0	0.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.1	0.0	0.0	4.9	4.4	3.2		
LnGrp Delay(d),s/veh	26.2	0.0	0.0	26.9	11.4	10.9		
LnGrp LOS	C			C	B	B		
Approach Vol, veh/h	1248			690	551			
Approach Delay, s/veh	26.2			26.9	11.2			
Approach LOS	C			C	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		55.1		34.9				34.9
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		40.5		40.5				40.5
Max Q Clear Time (g_c+I1), s		11.3		21.2				12.3
Green Ext Time (p_c), s		2.1		9.2				10.8
Intersection Summary								
HCM 2010 Ctrl Delay		23.1						
HCM 2010 LOS		C						



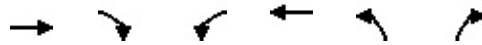
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	660	0	0	454	167	129		
Future Volume (veh/h)	660	0	0	454	167	129		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	717	0	0	493	182	140		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1105	0	0	1105	1138	1016		
Arrive On Green	0.22	0.00	0.00	0.07	0.70	0.70		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	717	0	0	493	182	140		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	11.9	0.0	0.0	8.6	3.5	3.0		
Cycle Q Clear(g_c), s	11.9	0.0	0.0	8.6	3.5	3.0		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1105	0	0	1105	1138	1016		
V/C Ratio(X)	0.65	0.00	0.00	0.45	0.16	0.14		
Avail Cap(c_a), veh/h	2297	0	0	2297	1138	1016		
HCM Platoon Ratio	1.00	1.00	1.00	0.33	1.00	1.00		
Upstream Filter(I)	0.78	0.00	0.00	0.94	1.00	1.00		
Uniform Delay (d), s/veh	33.2	0.0	0.0	37.8	4.8	4.7		
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.3	0.3	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.6	0.0	0.0	4.1	1.7	1.3		
LnGrp Delay(d),s/veh	33.7	0.0	0.0	38.1	5.1	5.0		
LnGrp LOS	C			D	A	A		
Approach Vol, veh/h	717			493	322			
Approach Delay, s/veh	33.7			38.1	5.1			
Approach LOS	C			D	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		68.8		24.2				24.2
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		42.5		41.5				41.5
Max Q Clear Time (g_c+I1), s		5.5		13.9				10.6
Green Ext Time (p_c), s		1.2		5.8				5.9
Intersection Summary								
HCM 2010 Ctrl Delay		29.1						
HCM 2010 LOS		C						



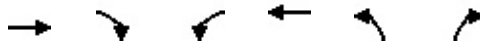
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	671	0	0	463	167	135		
Future Volume (veh/h)	671	0	0	463	167	135		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	729	0	0	503	182	147		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1153	0	0	1153	1118	998		
Arrive On Green	0.15	0.00	0.00	0.45	0.68	0.68		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	729	0	0	503	182	147		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	12.1	0.0	0.0	6.1	3.6	3.2		
Cycle Q Clear(g_c), s	12.1	0.0	0.0	6.1	3.6	3.2		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1153	0	0	1153	1118	998		
V/C Ratio(X)	0.63	0.00	0.00	0.44	0.16	0.15		
Avail Cap(c_a), veh/h	2260	0	0	2260	1118	998		
HCM Platoon Ratio	0.67	1.00	1.00	2.00	1.00	1.00		
Upstream Filter(I)	0.79	0.00	0.00	0.94	1.00	1.00		
Uniform Delay (d), s/veh	34.6	0.0	0.0	20.7	5.0	5.0		
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	0.3	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.7	0.0	0.0	2.8	1.7	1.4		
LnGrp Delay(d),s/veh	35.1	0.0	0.0	20.9	5.4	5.3		
LnGrp LOS	D			C	A	A		
Approach Vol, veh/h	729			503	329			
Approach Delay, s/veh	35.1			20.9	5.3			
Approach LOS	D			C	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		65.6		24.4				24.4
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		41.5		39.5				39.5
Max Q Clear Time (g_c+I1), s		5.6		14.1				8.1
Green Ext Time (p_c), s		1.2		5.8				6.0
Intersection Summary								
HCM 2010 Ctrl Delay		24.3						
HCM 2010 LOS		C						



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	704	0	0	461	178	138		
Future Volume (veh/h)	704	0	0	461	178	138		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	765	0	0	501	193	150		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1190	0	0	1190	1118	998		
Arrive On Green	0.08	0.00	0.00	0.08	0.68	0.68		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	765	0	0	501	193	150		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	14.3	0.0	0.0	9.2	4.1	3.5		
Cycle Q Clear(g_c), s	14.3	0.0	0.0	9.2	4.1	3.5		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1190	0	0	1190	1118	998		
V/C Ratio(X)	0.64	0.00	0.00	0.42	0.17	0.15		
Avail Cap(c_a), veh/h	2335	0	0	2335	1118	998		
HCM Platoon Ratio	0.33	1.00	1.00	0.33	1.00	1.00		
Upstream Filter(I)	0.76	0.00	0.00	0.93	1.00	1.00		
Uniform Delay (d), s/veh	41.2	0.0	0.0	38.9	5.5	5.4		
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.3	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	4.4	2.0	1.5		
LnGrp Delay(d),s/veh	41.7	0.0	0.0	39.1	5.9	5.8		
LnGrp LOS	D			D	A	A		
Approach Vol, veh/h	765			501	343			
Approach Delay, s/veh	41.7			39.1	5.8			
Approach LOS	D			D	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		71.1		26.9				26.9
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		44.5		44.5				44.5
Max Q Clear Time (g_c+I1), s		6.1		16.3				11.2
Green Ext Time (p_c), s		1.3		6.1				6.3
Intersection Summary								
HCM 2010 Ctrl Delay		33.2						
HCM 2010 LOS		C						



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	715	0	0	470	178	144		
Future Volume (veh/h)	715	0	0	470	178	144		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	777	0	0	511	193	157		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1208	0	0	1208	1112	993		
Arrive On Green	0.08	0.00	0.00	0.08	0.68	0.68		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	777	0	0	511	193	157		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	14.5	0.0	0.0	9.4	4.2	3.8		
Cycle Q Clear(g_c), s	14.5	0.0	0.0	9.4	4.2	3.8		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1208	0	0	1208	1112	993		
V/C Ratio(X)	0.64	0.00	0.00	0.42	0.17	0.16		
Avail Cap(c_a), veh/h	2335	0	0	2335	1112	993		
HCM Platoon Ratio	0.33	1.00	1.00	0.33	1.00	1.00		
Upstream Filter(I)	0.76	0.00	0.00	0.93	1.00	1.00		
Uniform Delay (d), s/veh	41.1	0.0	0.0	38.8	5.7	5.6		
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.3	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.9	0.0	0.0	4.4	2.0	1.6		
LnGrp Delay(d),s/veh	41.6	0.0	0.0	39.0	6.0	5.9		
LnGrp LOS	D			D	A	A		
Approach Vol, veh/h	777			511	350			
Approach Delay, s/veh	41.6			39.0	6.0			
Approach LOS	D			D	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		70.7		27.3				27.3
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		44.5		44.5				44.5
Max Q Clear Time (g_c+I1), s		6.2		16.5				11.4
Green Ext Time (p_c), s		1.3		6.3				6.4
Intersection Summary								
HCM 2010 Ctrl Delay		33.2						
HCM 2010 LOS		C						



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑			↑↑↑	↖	↗		
Traffic Volume (veh/h)	715	0	0	470	178	144		
Future Volume (veh/h)	715	0	0	470	178	144		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1716	1716		
Adj Flow Rate, veh/h	777	0	0	511	193	157		
Adj No. of Lanes	3	0	0	3	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	1208	0	0	1208	1112	993		
Arrive On Green	0.08	0.00	0.00	0.08	0.68	0.68		
Sat Flow, veh/h	5421	0	0	5421	1634	1458		
Grp Volume(v), veh/h	777	0	0	511	193	157		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1634	1458		
Q Serve(g_s), s	14.5	0.0	0.0	9.4	4.2	3.8		
Cycle Q Clear(g_c), s	14.5	0.0	0.0	9.4	4.2	3.8		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1208	0	0	1208	1112	993		
V/C Ratio(X)	0.64	0.00	0.00	0.42	0.17	0.16		
Avail Cap(c_a), veh/h	2335	0	0	2335	1112	993		
HCM Platoon Ratio	0.33	1.00	1.00	0.33	1.00	1.00		
Upstream Filter(I)	0.76	0.00	0.00	0.93	1.00	1.00		
Uniform Delay (d), s/veh	41.1	0.0	0.0	38.8	5.7	5.6		
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.3	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.9	0.0	0.0	4.4	2.0	1.6		
LnGrp Delay(d),s/veh	41.6	0.0	0.0	39.0	6.0	5.9		
LnGrp LOS	D			D	A	A		
Approach Vol, veh/h	777			511	350			
Approach Delay, s/veh	41.6			39.0	6.0			
Approach LOS	D			D	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		70.7		27.3				27.3
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		44.5		44.5				44.5
Max Q Clear Time (g_c+I1), s		6.2		16.5				11.4
Green Ext Time (p_c), s		1.3		6.3				6.4
Intersection Summary								
HCM 2010 Ctrl Delay		33.2						
HCM 2010 LOS		C						

Intersection 4 Hughes Ln & White Ln



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲ ↳			↰ ↱ ↳			↰ ↱ ↳ ↲		
Traffic Volume (veh/h)	175	759	248	118	637	73	212	173	76	143	269	126
Future Volume (veh/h)	175	759	248	118	637	73	212	173	76	143	269	126
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		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	190	825	270	128	692	79	230	188	83	155	292	137
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	2012	653	332	2468	279	310	911	385	407	704	542
Arrive On Green	1.00	1.00	1.00	0.53	0.53	0.52	0.38	0.38	0.36	0.38	0.38	0.38
Sat Flow, veh/h	640	3773	1225	472	4627	524	878	2411	1020	1014	1863	1433
Grp Volume(v), veh/h	190	741	354	128	505	266	230	136	135	155	292	137
Grp Sat Flow(s),veh/h/ln	640	1695	1608	472	1695	1761	878	1770	1662	1014	1863	1433
Q Serve(g_s), s	9.4	0.0	0.0	15.6	7.4	7.5	23.6	4.7	5.0	11.0	10.4	5.9
Cycle Q Clear(g_c), s	17.0	0.0	0.0	15.6	7.4	7.5	34.0	4.7	5.0	16.0	10.4	5.9
Prop In Lane	1.00		0.76	1.00		0.30	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	368	1808	858	332	1808	939	310	669	628	407	704	542
V/C Ratio(X)	0.52	0.41	0.41	0.39	0.28	0.28	0.74	0.20	0.22	0.38	0.41	0.25
Avail Cap(c_a), veh/h	368	1808	858	332	1808	939	310	669	628	407	704	542
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	0.73	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.3	0.0	0.0	13.4	11.5	11.7	33.2	18.9	19.3	24.4	20.7	19.3
Incr Delay (d2), s/veh	3.7	0.5	1.1	2.5	0.3	0.5	9.2	0.1	0.2	0.6	0.4	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	1.9	0.1	0.3	2.3	3.5	3.8	6.5	2.3	2.3	3.1	5.4	2.4
LnGrp Delay(d),s/veh	5.0	0.5	1.1	15.9	11.8	12.2	42.4	19.0	19.4	25.0	21.1	19.5
LnGrp LOS	A	A	A	B	B	B	D	B	B	C	C	B
Approach Vol, veh/h	1285			899			501			584		
Approach Delay, s/veh	1.3			12.5			29.8			21.7		
Approach LOS	A			B			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	38.0			52.0			38.0			52.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	32.7			46.7			32.7			46.7		
Max Q Clear Time (g_c+I1), s	36.0			19.0			18.0			17.6		
Green Ext Time (p_c), s	0.0			14.5			4.4			14.8		
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)	175	780	248	119	651	74	212	173	77	145	269	126
Future Volume (veh/h)	175	780	248	119	651	74	212	173	77	145	269	126
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		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	190	848	270	129	708	80	230	188	84	158	292	137
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	361	2056	650	323	2505	281	303	907	388	399	703	541
Arrive On Green	1.00	1.00	1.00	0.54	0.54	0.53	0.38	0.38	0.36	0.38	0.38	0.38
Sat Flow, veh/h	630	3801	1202	462	4633	519	878	2401	1028	1013	1863	1433
Grp Volume(v), veh/h	190	756	362	129	517	271	230	136	136	158	292	137
Grp Sat Flow(s),veh/h/ln	630	1695	1613	462	1695	1761	878	1770	1660	1013	1863	1433
Q Serve(g_s), s	10.4	0.0	0.0	17.4	8.1	8.3	25.7	5.1	5.5	12.3	11.3	6.4
Cycle Q Clear(g_c), s	18.7	0.0	0.0	17.4	8.1	8.3	37.0	5.1	5.5	17.8	11.3	6.4
Prop In Lane	1.00		0.75	1.00		0.29	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	361	1833	872	323	1833	953	303	668	627	399	703	541
V/C Ratio(X)	0.53	0.41	0.42	0.40	0.28	0.28	0.76	0.20	0.22	0.40	0.42	0.25
Avail Cap(c_a), veh/h	361	1833	872	323	1833	953	303	668	627	399	703	541
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.71	0.71	0.71	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.5	0.0	0.0	14.3	12.2	12.3	36.2	20.6	21.0	26.7	22.5	21.0
Incr Delay (d2), s/veh	3.9	0.5	1.0	2.6	0.3	0.5	10.5	0.1	0.2	0.6	0.4	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	2.0	0.1	0.3	2.5	3.8	4.2	7.1	2.5	2.5	3.5	5.9	2.6
LnGrp Delay(d),s/veh	5.3	0.5	1.0	16.9	12.5	12.9	46.7	20.7	21.1	27.4	22.9	21.2
LnGrp LOS	A	A	A	B	B	B	D	C	C	C	C	C
Approach Vol, veh/h	1308			917			502			587		
Approach Delay, s/veh	1.3			13.2			32.7			23.7		
Approach LOS	A			B			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	41.0		57.0		41.0		57.0					
Change Period (Y+Rc), s	5.3		5.3		5.3		5.3					
Max Green Setting (Gmax), s	35.7		51.7		35.7		51.7					
Max Q Clear Time (g_c+I1), s	39.0		20.7		19.8		19.4					
Green Ext Time (p_c), s	0.0		15.7		4.6		16.0					
Intersection Summary												
HCM 2010 Ctrl Delay	13.3											
HCM 2010 LOS	B											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲			↰ ↱ ↲			↰ ↱			↰ ↱ ↲		
Traffic Volume (veh/h)	178	771	252	130	700	80	230	187	82	155	291	136
Future Volume (veh/h)	178	771	252	130	700	80	230	187	82	155	291	136
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		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	193	838	274	141	761	87	250	203	89	168	316	148
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	342	2012	653	328	2467	280	293	912	384	396	704	542
Arrive On Green	1.00	1.00	1.00	0.53	0.53	0.52	0.38	0.38	0.36	0.38	0.38	0.38
Sat Flow, veh/h	596	3773	1225	464	4625	525	851	2414	1018	995	1863	1433
Grp Volume(v), veh/h	193	752	360	141	556	292	250	147	145	168	316	148
Grp Sat Flow(s),veh/h/ln	596	1695	1608	464	1695	1760	851	1770	1662	995	1863	1433
Q Serve(g_s), s	13.0	0.0	0.0	18.3	8.2	8.4	22.6	5.1	5.4	12.5	11.4	6.4
Cycle Q Clear(g_c), s	21.4	0.0	0.0	18.3	8.2	8.4	34.0	5.1	5.4	17.9	11.4	6.4
Prop In Lane	1.00		0.76	1.00		0.30	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	342	1808	858	328	1808	939	293	669	628	396	704	542
V/C Ratio(X)	0.56	0.42	0.42	0.43	0.31	0.31	0.85	0.22	0.23	0.42	0.45	0.27
Avail Cap(c_a), veh/h	342	1808	858	328	1808	939	293	669	628	396	704	542
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.9	0.0	0.0	14.1	11.7	11.9	35.4	19.0	19.4	25.2	21.0	19.4
Incr Delay (d2), s/veh	4.7	0.5	1.1	2.6	0.3	0.5	20.8	0.2	0.2	0.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.1	0.3	2.6	3.9	4.2	7.9	2.5	2.5	3.5	6.0	2.6
LnGrp Delay(d),s/veh	6.6	0.5	1.1	16.7	12.0	12.4	56.2	19.2	19.6	25.9	21.4	19.7
LnGrp LOS	A	A	A	B	B	B	E	B	B	C	C	B
Approach Vol, veh/h	1305			989			542			632		
Approach Delay, s/veh	1.6			12.8			36.3			22.2		
Approach LOS	A			B			D			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	38.0			52.0			38.0			52.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	32.7			46.7			32.7			46.7		
Max Q Clear Time (g_c+I1), s	36.0			23.4			19.9			20.3		
Green Ext Time (p_c), s	0.0			14.1			4.6			15.2		
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)	178	792	252	131	714	81	230	187	83	157	291	136
Future Volume (veh/h)	178	792	252	131	714	81	230	187	83	157	291	136
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		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	193	861	274	142	776	88	250	203	90	171	316	148
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	2027	641	322	2469	278	293	909	387	395	704	542
Arrive On Green	1.00	1.00	1.00	0.53	0.53	0.52	0.38	0.38	0.36	0.38	0.38	0.38
Sat Flow, veh/h	587	3801	1202	454	4630	522	851	2405	1025	994	1863	1433
Grp Volume(v), veh/h	193	767	368	142	567	297	250	147	146	171	316	148
Grp Sat Flow(s),veh/h/ln	587	1695	1613	454	1695	1761	851	1770	1661	994	1863	1433
Q Serve(g_s), s	13.8	0.0	0.0	19.1	8.4	8.6	22.6	5.1	5.5	12.8	11.4	6.4
Cycle Q Clear(g_c), s	22.4	0.0	0.0	19.1	8.4	8.6	34.0	5.1	5.5	18.2	11.4	6.4
Prop In Lane	1.00		0.75	1.00		0.30	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	337	1808	860	322	1808	939	293	669	627	395	704	542
V/C Ratio(X)	0.57	0.42	0.43	0.44	0.31	0.32	0.85	0.22	0.23	0.43	0.45	0.27
Avail Cap(c_a), veh/h	337	1808	860	322	1808	939	293	669	627	395	704	542
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	0.62	0.62	0.62	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.0	0.0	0.0	14.3	11.8	11.9	35.4	19.0	19.4	25.3	21.0	19.4
Incr Delay (d2), s/veh	5.0	0.5	1.1	2.7	0.3	0.6	20.8	0.2	0.2	0.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.1	0.3	2.6	4.0	4.3	7.9	2.5	2.5	3.6	6.0	2.6
LnGrp Delay(d),s/veh	7.0	0.5	1.1	17.0	12.1	12.5	56.2	19.2	19.6	26.1	21.4	19.7
LnGrp LOS	A	A	A	B	B	B	E	B	B	C	C	B
Approach Vol, veh/h	1328			1006			543			635		
Approach Delay, s/veh	1.6			12.9			36.3			22.3		
Approach LOS	A			B			D			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	38.0			52.0			38.0			52.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	32.7			46.7			32.7			46.7		
Max Q Clear Time (g_c+I1), s	36.0			24.4			20.2			21.1		
Green Ext Time (p_c), s	0.0			14.0			4.6			15.3		
Intersection Summary												
HCM 2010 Ctrl Delay	13.9											
HCM 2010 LOS	B											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲ ↳			↰ ↱ ↳			↰ ↱ ↳		
Traffic Volume (veh/h)	178	792	252	131	714	81	230	187	83	157	291	136
Future Volume (veh/h)	178	792	252	131	714	81	230	187	83	157	291	136
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	0.97		1.00	0.98		1.00	0.98		1.00	0.98	
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	193	861	274	142	776	88	250	203	90	171	316	148
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	337	2027	641	322	2469	278	293	909	387	395	704	542
Arrive On Green	1.00	1.00	1.00	0.53	0.53	0.52	0.38	0.38	0.36	0.38	0.38	0.38
Sat Flow, veh/h	587	3801	1202	454	4630	522	851	2405	1025	994	1863	1433
Grp Volume(v), veh/h	193	767	368	142	567	297	250	147	146	171	316	148
Grp Sat Flow(s),veh/h/ln	587	1695	1613	454	1695	1761	851	1770	1661	994	1863	1433
Q Serve(g_s), s	13.8	0.0	0.0	19.1	8.4	8.6	22.6	5.1	5.5	12.8	11.4	6.4
Cycle Q Clear(g_c), s	22.4	0.0	0.0	19.1	8.4	8.6	34.0	5.1	5.5	18.2	11.4	6.4
Prop In Lane	1.00	0.75		1.00	0.30		1.00	0.62		1.00	1.00	
Lane Grp Cap(c), veh/h	337	1808	860	322	1808	939	293	669	627	395	704	542
V/C Ratio(X)	0.57	0.42	0.43	0.44	0.31	0.32	0.85	0.22	0.23	0.43	0.45	0.27
Avail Cap(c_a), veh/h	337	1808	860	322	1808	939	293	669	627	395	704	542
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.72	0.72	0.72	0.72	0.72	0.72	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.0	0.0	0.0	14.3	11.8	11.9	35.4	19.0	19.4	25.3	21.0	19.4
Incr Delay (d2), s/veh	5.0	0.5	1.1	3.1	0.3	0.6	20.8	0.2	0.2	0.7	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.1	0.3	2.6	4.0	4.3	7.9	2.5	2.5	3.6	6.0	2.6
LnGrp Delay(d),s/veh	7.0	0.5	1.1	17.4	12.1	12.5	56.2	19.2	19.6	26.1	21.4	19.7
LnGrp LOS	A	A	A	B	B	B	E	B	B	C	C	B
Approach Vol, veh/h	1328			1006			543			635		
Approach Delay, s/veh	1.6			13.0			36.3			22.3		
Approach LOS	A			B			D			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	38.0			52.0			38.0			52.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	32.7			46.7			32.7			46.7		
Max Q Clear Time (g_c+I1), s	36.0			24.4			20.2			21.1		
Green Ext Time (p_c), s	0.0			14.0			4.6			15.3		
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)	107	457	170	51	560	31	251	133	47	52	104	84
Future Volume (veh/h)	107	457	170	51	560	31	251	133	47	52	104	84
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		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	116	497	185	55	609	34	273	145	51	57	113	91
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	445	2094	749	474	2812	156	401	888	300	405	639	492
Arrive On Green	1.00	1.00	1.00	0.57	0.57	0.56	0.34	0.34	0.33	0.34	0.34	0.34
Sat Flow, veh/h	721	3668	1313	695	4926	273	1078	2587	873	1085	1863	1433
Grp Volume(v), veh/h	116	458	224	55	418	225	273	97	99	57	113	91
Grp Sat Flow(s),veh/h/ln	721	1695	1590	695	1695	1809	1078	1770	1690	1085	1863	1433
Q Serve(g_s), s	2.2	0.0	0.0	3.4	5.6	5.7	22.1	3.6	3.8	3.6	3.9	4.1
Cycle Q Clear(g_c), s	7.9	0.0	0.0	3.4	5.6	5.7	26.0	3.6	3.8	7.4	3.9	4.1
Prop In Lane	1.00		0.83	1.00		0.15	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	445	1935	908	474	1935	1033	401	607	580	405	639	492
V/C Ratio(X)	0.26	0.24	0.25	0.12	0.22	0.22	0.68	0.16	0.17	0.14	0.18	0.19
Avail Cap(c_a), veh/h	445	1935	908	474	1935	1033	518	799	763	523	841	647
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.4	0.0	0.0	9.3	9.8	9.8	30.5	21.2	21.6	23.9	21.4	21.4
Incr Delay (d2), s/veh	1.1	0.2	0.5	0.4	0.2	0.4	2.4	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.1	0.7	2.7	3.0	6.8	1.7	1.8	1.1	2.0	1.7
LnGrp Delay(d),s/veh	1.6	0.2	0.5	9.8	10.0	10.3	32.9	21.4	21.7	24.1	21.5	21.6
LnGrp LOS	A	A	A	A	B	B	C	C	C	C	C	C
Approach Vol, veh/h	798			698			469			261		
Approach Delay, s/veh	0.5			10.1			28.1			22.1		
Approach LOS	A			B			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	35.9		57.1		35.9		57.1					
Change Period (Y+Rc), s	5.3		5.3		5.3		5.3					
Max Green Setting (Gmax), s	40.7		41.7		40.7		41.7					
Max Q Clear Time (g_c+I1), s	28.0		9.9		9.4		7.7					
Green Ext Time (p_c), s	2.6		8.0		3.2		8.1					
Intersection Summary												
HCM 2010 Ctrl Delay	11.9											
HCM 2010 LOS	B											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲ ↳			↰ ↱ ↳			↰ ↱ ↳		
Traffic Volume (veh/h)	107	474	170	52	569	32	251	133	48	54	104	84
Future Volume (veh/h)	107	474	170	52	569	32	251	133	48	54	104	84
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	0.97		1.00	0.98		1.00	0.98		1.00	0.98	
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	116	515	185	57	618	35	273	145	52	59	113	91
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	440	2100	728	468	2792	157	405	885	304	408	641	493
Arrive On Green	1.00	1.00	1.00	0.57	0.57	0.55	0.34	0.34	0.33	0.34	0.34	0.34
Sat Flow, veh/h	714	3703	1283	683	4922	277	1078	2573	885	1084	1863	1433
Grp Volume(v), veh/h	116	470	230	57	424	229	273	98	99	59	113	91
Grp Sat Flow(s),veh/h/ln	714	1695	1596	683	1695	1809	1078	1770	1688	1084	1863	1433
Q Serve(g_s), s	2.3	0.0	0.0	3.5	5.6	5.7	21.3	3.5	3.7	3.6	3.8	4.0
Cycle Q Clear(g_c), s	7.9	0.0	0.0	3.5	5.6	5.7	25.1	3.5	3.7	7.3	3.8	4.0
Prop In Lane	1.00	0.80		1.00	0.15		1.00	0.52		1.00	1.00	
Lane Grp Cap(c), veh/h	440	1923	905	468	1923	1026	405	609	580	408	641	493
V/C Ratio(X)	0.26	0.24	0.25	0.12	0.22	0.22	0.67	0.16	0.17	0.14	0.18	0.18
Avail Cap(c_a), veh/h	440	1923	905	468	1923	1026	513	786	750	517	828	637
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.4	0.0	0.0	9.2	9.6	9.7	29.4	20.5	20.8	23.1	20.6	20.7
Incr Delay (d2), s/veh	1.2	0.2	0.5	0.5	0.2	0.4	2.4	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.1	0.7	2.7	2.9	6.6	1.7	1.7	1.1	2.0	1.6
LnGrp Delay(d),s/veh	1.6	0.2	0.5	9.7	9.9	10.1	31.8	20.6	21.0	23.3	20.7	20.9
LnGrp LOS	A	A	A	A	A	B	C	C	C	C	C	C
Approach Vol, veh/h	816			710			470			263		
Approach Delay, s/veh	0.5			9.9			27.2			21.4		
Approach LOS	A			A			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	35.0			55.0			35.0			55.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	38.7			40.7			38.7			40.7		
Max Q Clear Time (g_c+I1), s	27.1			9.9			9.3			7.7		
Green Ext Time (p_c), s	2.5			8.2			3.2			8.3		
Intersection Summary												
HCM 2010 Ctrl Delay	11.5											
HCM 2010 LOS	B											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲ ↳			↰ ↱ ↳			↰ ↱ ↳ ↲		
Traffic Volume (veh/h)	109	464	173	56	615	34	272	144	51	56	113	91
Future Volume (veh/h)	109	464	173	56	615	34	272	144	51	56	113	91
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		0.97	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	118	504	188	61	668	37	296	157	55	61	123	99
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	400	2018	725	453	2714	150	416	952	320	421	685	527
Arrive On Green	1.00	1.00	1.00	0.55	0.55	0.54	0.37	0.37	0.35	0.37	0.37	0.37
Sat Flow, veh/h	681	3664	1315	688	4928	272	1060	2589	872	1070	1863	1433
Grp Volume(v), veh/h	118	465	227	61	458	247	296	105	107	61	123	99
Grp Sat Flow(s),veh/h/ln	681	1695	1589	688	1695	1810	1060	1770	1691	1070	1863	1433
Q Serve(g_s), s	3.2	0.0	0.0	4.3	6.9	7.0	25.7	3.9	4.2	4.0	4.4	4.6
Cycle Q Clear(g_c), s	10.2	0.0	0.0	4.3	6.9	7.0	30.1	3.9	4.2	8.2	4.4	4.6
Prop In Lane	1.00		0.83	1.00		0.15	1.00		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	400	1867	875	453	1867	997	416	651	622	421	685	527
V/C Ratio(X)	0.30	0.25	0.26	0.13	0.25	0.25	0.71	0.16	0.17	0.14	0.18	0.19
Avail Cap(c_a), veh/h	400	1867	875	453	1867	997	502	795	759	508	836	644
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.7	0.0	0.0	10.9	11.4	11.5	31.2	20.8	21.2	23.7	21.0	21.1
Incr Delay (d2), s/veh	1.5	0.2	0.6	0.5	0.3	0.5	3.7	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.1	0.1	0.9	3.3	3.6	7.9	1.9	2.0	1.2	2.3	1.8
LnGrp Delay(d),s/veh	2.1	0.2	0.6	11.4	11.7	12.0	34.9	21.0	21.3	23.9	21.1	21.2
LnGrp LOS	A	A	A	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h	810			766			508			283		
Approach Delay, s/veh	0.6			11.8			29.1			21.7		
Approach LOS	A			B			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	40.0			58.0			40.0			58.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	42.7			44.7			42.7			44.7		
Max Q Clear Time (g_c+I1), s	32.1			12.2			10.2			9.0		
Green Ext Time (p_c), s	2.6			8.8			3.6			8.9		
Intersection Summary												
HCM 2010 Ctrl Delay	12.9											
HCM 2010 LOS	B											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰ ↱ ↲ ↳			↰ ↱ ↲ ↳			↰ ↱ ↳			↰ ↱ ↳ ↲		
Traffic Volume (veh/h)	109	481	173	57	624	35	272	144	52	58	113	91
Future Volume (veh/h)	109	481	173	57	624	35	272	144	52	58	113	91
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	0.97		1.00	0.98		1.00	0.98		1.00	0.98	
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	118	523	188	62	678	38	296	157	57	63	123	99
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	396	2038	707	446	2712	151	416	942	329	420	685	527
Arrive On Green	1.00	1.00	1.00	0.55	0.55	0.54	0.37	0.37	0.35	0.37	0.37	0.37
Sat Flow, veh/h	674	3701	1285	676	4925	275	1060	2563	893	1068	1863	1433
Grp Volume(v), veh/h	118	477	234	62	466	250	296	106	108	63	123	99
Grp Sat Flow(s),veh/h/ln	674	1695	1596	676	1695	1809	1060	1770	1686	1068	1863	1433
Q Serve(g_s), s	3.3	0.0	0.0	4.4	7.0	7.1	25.7	4.0	4.3	4.2	4.4	4.6
Cycle Q Clear(g_c), s	10.4	0.0	0.0	4.4	7.0	7.1	30.1	4.0	4.3	8.4	4.4	4.6
Prop In Lane	1.00	0.80		1.00	0.15		1.00	0.53		1.00	1.00	
Lane Grp Cap(c), veh/h	396	1867	879	446	1867	996	416	651	620	420	685	527
V/C Ratio(X)	0.30	0.26	0.27	0.14	0.25	0.25	0.71	0.16	0.17	0.15	0.18	0.19
Avail Cap(c_a), veh/h	396	1867	879	446	1867	996	502	795	757	507	836	644
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.7	0.0	0.0	10.9	11.5	11.5	31.2	20.8	21.2	23.8	21.0	21.0
Incr Delay (d2), s/veh	1.5	0.3	0.6	0.6	0.3	0.5	3.7	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1	0.1	0.9	3.3	3.7	7.9	1.9	2.0	1.2	2.3	1.8
LnGrp Delay(d),s/veh	2.2	0.3	0.6	11.5	11.7	12.1	34.9	21.0	21.3	23.9	21.1	21.2
LnGrp LOS	A	A	A	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h	829			778			510			285		
Approach Delay, s/veh	0.6			11.8			29.1			21.8		
Approach LOS	A			B			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	40.0			58.0			40.0			58.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	42.7			44.7			42.7			44.7		
Max Q Clear Time (g_c+I1), s	32.1			12.4			10.4			9.1		
Green Ext Time (p_c), s	2.7			9.0			3.6			9.2		
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)	109	481	173	57	624	35	272	144	52	58	113	91
Future Volume (veh/h)	109	481	173	57	624	35	272	144	52	58	113	91
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	0.97		1.00	0.98		1.00	0.98		1.00	0.98	
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	1716	1863	1750	1716	1863	1750	1716	1863	1750	1716	1863	1716
Adj Flow Rate, veh/h	118	523	188	62	678	38	296	157	57	63	123	99
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	2038	707	446	2712	151	416	942	329	420	685	527
Arrive On Green	1.00	1.00	1.00	0.73	0.73	0.71	0.37	0.37	0.35	0.37	0.37	0.37
Sat Flow, veh/h	674	3701	1285	676	4925	275	1060	2563	893	1068	1863	1433
Grp Volume(v), veh/h	118	477	234	62	466	250	296	106	108	63	123	99
Grp Sat Flow(s),veh/h/ln	674	1695	1596	676	1695	1809	1060	1770	1686	1068	1863	1433
Q Serve(g_s), s	2.1	0.0	0.0	2.7	4.4	4.5	25.7	4.0	4.3	4.2	4.4	4.6
Cycle Q Clear(g_c), s	6.6	0.0	0.0	2.7	4.4	4.5	30.1	4.0	4.3	8.4	4.4	4.6
Prop In Lane	1.00	0.80		1.00	0.15		1.00	0.53		1.00	1.00	
Lane Grp Cap(c), veh/h	414	1867	879	446	1867	996	416	651	620	420	685	527
V/C Ratio(X)	0.29	0.26	0.27	0.14	0.25	0.25	0.71	0.16	0.17	0.15	0.18	0.19
Avail Cap(c_a), veh/h	414	1867	879	446	1867	996	502	795	757	507	836	644
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.88	0.88	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.3	0.0	0.0	6.3	6.5	6.6	31.2	20.8	21.2	23.8	21.0	21.0
Incr Delay (d2), s/veh	1.3	0.3	0.6	0.6	0.3	0.5	3.7	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.1	0.6	2.1	2.4	7.9	1.9	2.0	1.2	2.3	1.8
LnGrp Delay(d),s/veh	1.6	0.3	0.6	6.8	6.8	7.1	34.9	21.0	21.3	23.9	21.1	21.2
LnGrp LOS	A	A	A	A	A	A	C	C	C	C	C	C
Approach Vol, veh/h	829			778			510			285		
Approach Delay, s/veh	0.5			6.9			29.1			21.8		
Approach LOS	A			A			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2			4			6			8		
Phs Duration (G+Y+Rc), s	40.0			58.0			40.0			58.0		
Change Period (Y+Rc), s	5.3			5.3			5.3			5.3		
Max Green Setting (Gmax), s	42.7			44.7			42.7			44.7		
Max Q Clear Time (g_c+I1), s	32.1			8.6			10.4			6.5		
Green Ext Time (p_c), s	2.7			9.2			3.6			9.3		
Intersection Summary												
HCM 2010 Ctrl Delay	11.2											
HCM 2010 LOS	B											

Intersection 5 H St & White Ln



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	615	236	92	480	96	181	340	60	133	641	162
Future Volume (veh/h)	228	615	236	92	480	96	181	340	60	133	641	162
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	248	668	257	100	522	104	197	370	65	145	697	176
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	304	1798	507	147	756	150	306	915	370	197	1000	404
Arrive On Green	0.19	0.35	0.35	0.09	0.26	0.24	0.10	0.26	0.26	0.12	0.28	0.28
Sat Flow, veh/h	1634	5085	1433	1634	2934	582	3170	3539	1430	1634	3539	1431
Grp Volume(v), veh/h	248	668	257	100	314	312	197	370	65	145	697	176
Grp Sat Flow(s),veh/h/ln	1634	1695	1433	1634	1770	1746	1585	1770	1430	1634	1770	1431
Q Serve(g_s), s	13.1	8.8	12.8	5.4	14.4	14.6	5.4	7.8	3.2	7.7	15.9	9.1
Cycle Q Clear(g_c), s	13.1	8.8	12.8	5.4	14.4	14.6	5.4	7.8	3.2	7.7	15.9	9.1
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	1798	507	147	456	450	306	915	370	197	1000	404
V/C Ratio(X)	0.81	0.37	0.51	0.68	0.69	0.69	0.64	0.40	0.18	0.74	0.70	0.44
Avail Cap(c_a), veh/h	398	2045	576	250	551	544	334	1196	483	243	1349	545
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	35.2	21.7	23.0	39.8	30.2	30.5	39.3	27.7	26.0	38.3	28.9	26.5
Incr Delay (d2), s/veh	9.5	0.1	0.8	5.4	2.8	3.0	3.7	0.3	0.2	8.8	1.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	4.2	5.1	2.6	7.4	7.4	2.5	3.8	1.3	4.0	7.9	3.6
LnGrp Delay(d),s/veh	44.8	21.8	23.8	45.1	33.0	33.4	43.0	28.0	26.2	47.2	29.9	27.2
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h	1173			726			632			1018		
Approach Delay, s/veh	27.1			34.9			32.5			31.9		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.9	27.3	12.1	35.9	12.7	29.5	20.8	27.2				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	12.1	29.2	12.5	35.0	8.2	33.1	20.7	26.8				
Max Q Clear Time (g_c+I1), s	9.7	9.8	7.4	14.8	7.4	17.9	15.1	16.6				
Green Ext Time (p_c), s	0.1	5.6	0.1	6.6	0.1	5.1	0.4	4.8				
Intersection Summary												
HCM 2010 Ctrl Delay				31.0								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	639	236	92	496	99	181	340	60	137	641	162
Future Volume (veh/h)	228	639	236	92	496	99	181	340	60	137	641	162
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	248	695	257	100	539	108	197	370	65	149	697	176
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	307	1154	324	336	718	143	308	634	255	317	976	395
Arrive On Green	0.19	0.23	0.23	0.21	0.25	0.23	0.10	0.18	0.18	0.19	0.28	0.28
Sat Flow, veh/h	1634	5085	1429	1634	2930	585	3170	3539	1425	1634	3539	1431
Grp Volume(v), veh/h	248	695	257	100	325	322	197	370	65	149	697	176
Grp Sat Flow(s),veh/h/ln	1634	1695	1429	1634	1770	1745	1585	1770	1425	1634	1770	1431
Q Serve(g_s), s	12.0	10.1	9.9	4.3	14.0	14.1	4.9	7.9	3.2	6.7	14.6	8.4
Cycle Q Clear(g_c), s	12.0	10.1	9.9	4.3	14.0	14.1	4.9	7.9	3.2	6.7	14.6	8.4
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	1154	324	336	434	428	308	634	255	317	976	395
V/C Ratio(X)	0.81	0.60	0.79	0.30	0.75	0.75	0.64	0.58	0.25	0.47	0.71	0.45
Avail Cap(c_a), veh/h	357	2051	576	336	615	606	308	1367	551	317	1479	598
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	32.0	28.5	15.0	27.7	28.7	29.0	35.8	31.0	29.1	29.4	26.9	24.6
Incr Delay (d2), s/veh	11.4	0.5	4.4	0.5	3.1	3.3	4.4	0.9	0.5	1.1	1.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	4.8	4.8	2.0	7.1	7.2	2.3	3.9	1.3	3.1	7.3	3.4
LnGrp Delay(d),s/veh	43.5	29.0	19.4	28.2	31.9	32.3	40.2	31.8	29.6	30.5	27.9	25.4
LnGrp LOS	D	C	B	C	C	C	D	C	C	C	C	C
Approach Vol, veh/h	1200			747			632			1022		
Approach Delay, s/veh	29.9			31.6			34.2			27.8		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	18.7	20.9	22.7	12.0	26.7	19.4	24.2				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	9.3	30.5	12.1	31.9	6.7	33.1	16.7	27.3				
Max Q Clear Time (g_c+I1), s	8.7	9.9	6.3	12.1	6.9	16.6	14.0	16.1				
Green Ext Time (p_c), s	0.3	1.7	1.5	4.1	0.0	3.4	0.2	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			30.4									
HCM 2010 LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	675	259	101	529	106	199	373	66	147	707	179
Future Volume (veh/h)	250	675	259	101	529	106	199	373	66	147	707	179
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	272	734	282	110	575	115	216	405	72	160	768	195
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	1694	477	160	743	148	225	915	370	199	1094	443
Arrive On Green	0.18	0.33	0.33	0.10	0.25	0.24	0.07	0.26	0.26	0.12	0.31	0.31
Sat Flow, veh/h	1634	5085	1432	1634	2931	584	3170	3539	1430	1634	3539	1432
Grp Volume(v), veh/h	272	734	282	110	346	344	216	405	72	160	768	195
Grp Sat Flow(s),veh/h/ln	1634	1695	1432	1634	1770	1746	1585	1770	1430	1634	1770	1432
Q Serve(g_s), s	13.9	9.5	13.8	5.5	15.4	15.5	5.8	8.1	3.3	8.1	16.2	5.2
Cycle Q Clear(g_c), s	13.9	9.5	13.8	5.5	15.4	15.5	5.8	8.1	3.3	8.1	16.2	5.2
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	1694	477	160	449	443	225	915	370	199	1094	443
V/C Ratio(X)	0.94	0.43	0.59	0.69	0.77	0.78	0.96	0.44	0.19	0.80	0.70	0.44
Avail Cap(c_a), veh/h	290	2019	569	193	598	590	225	1259	509	199	1438	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	34.4	22.0	23.4	36.9	29.3	29.6	39.2	26.3	24.5	36.2	25.8	7.4
Incr Delay (d2), s/veh	37.0	0.2	1.2	7.7	4.4	4.6	49.0	0.3	0.3	20.9	1.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	4.4	5.6	2.8	8.1	8.0	4.0	4.0	1.3	4.8	8.1	3.2
LnGrp Delay(d),s/veh	71.3	22.2	24.6	44.6	33.7	34.2	88.2	26.6	24.8	57.1	26.8	8.1
LnGrp LOS	E	C	C	D	C	C	F	C	C	E	C	A
Approach Vol, veh/h	1288			800			693			1123		
Approach Delay, s/veh	33.1			35.4			45.6			27.9		
Approach LOS	C			D			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	14.3	25.9	12.3	32.2	10.0	30.2	19.0	25.5				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	9.0	28.8	8.7	32.3	4.7	33.1	13.7	27.3				
Max Q Clear Time (g_c+I1), s	10.1	10.1	7.5	15.8	7.8	18.2	15.9	17.5				
Green Ext Time (p_c), s	0.0	6.2	0.0	5.2	0.0	5.6	0.0	1.9				
Intersection Summary												
HCM 2010 Ctrl Delay				34.3								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	699	259	101	545	109	199	373	66	151	707	179
Future Volume (veh/h)	250	699	259	101	545	109	199	373	66	151	707	179
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	272	760	282	110	592	118	216	405	72	164	768	195
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	1822	513	158	759	151	280	875	353	204	1005	406
Arrive On Green	0.20	0.36	0.36	0.10	0.26	0.24	0.09	0.25	0.25	0.13	0.28	0.28
Sat Flow, veh/h	1634	5085	1433	1634	2933	583	3170	3539	1430	1634	3539	1431
Grp Volume(v), veh/h	272	760	282	110	357	353	216	405	72	164	768	195
Grp Sat Flow(s),veh/h/ln	1634	1695	1433	1634	1770	1746	1585	1770	1430	1634	1770	1431
Q Serve(g_s), s	14.9	10.5	10.0	6.0	17.3	17.5	6.2	9.0	3.7	9.0	18.4	5.9
Cycle Q Clear(g_c), s	14.9	10.5	10.0	6.0	17.3	17.5	6.2	9.0	3.7	9.0	18.4	5.9
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	1822	513	158	458	452	280	875	353	204	1005	406
V/C Ratio(X)	0.85	0.42	0.55	0.70	0.78	0.78	0.77	0.46	0.20	0.80	0.76	0.48
Avail Cap(c_a), veh/h	326	1822	513	249	533	526	280	1184	478	204	1313	531
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	35.9	22.4	11.1	40.5	31.9	32.1	41.3	29.7	27.7	39.4	30.3	8.8
Incr Delay (d2), s/veh	18.3	0.2	1.2	5.4	6.3	6.5	12.3	0.4	0.3	20.1	2.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	4.9	4.7	3.0	9.2	9.3	3.2	4.4	1.5	5.2	9.2	3.6
LnGrp Delay(d),s/veh	54.2	22.6	12.4	45.9	38.2	38.7	53.6	30.0	27.9	59.5	32.3	9.7
LnGrp LOS	D	C	B	D	D	D	D	C	C	E	C	A
Approach Vol, veh/h	1314			820			693			1127		
Approach Delay, s/veh	26.9			39.4			37.2			32.4		
Approach LOS	C			D			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	15.6	26.9	13.0	37.2	12.2	30.3	22.2	28.0				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	10.3	29.7	12.8	31.0	6.9	33.1	17.2	26.6				
Max Q Clear Time (g_c+I1), s	11.0	11.0	8.0	12.5	8.2	20.4	16.9	19.5				
Green Ext Time (p_c), s	0.0	2.7	0.1	7.4	0.0	3.5	0.0	2.9				
Intersection Summary												
HCM 2010 Ctrl Delay				32.9								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑↑	↱	↰	↑↑	↱	↰	↑↑	↱	↰	↑↑	↱
Traffic Volume (veh/h)	250	699	259	101	545	109	199	373	66	151	707	179
Future Volume (veh/h)	250	699	259	101	545	109	199	373	66	151	707	179
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	272	760	282	110	592	118	216	405	72	164	768	195
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	369	2018	569	153	777	154	264	853	345	197	984	398
Arrive On Green	0.23	0.40	0.40	0.09	0.26	0.25	0.08	0.24	0.24	0.12	0.28	0.28
Sat Flow, veh/h	1634	5085	1434	1634	2933	583	3170	3539	1429	1634	3539	1431
Grp Volume(v), veh/h	272	760	282	110	357	353	216	405	72	164	768	195
Grp Sat Flow(s),veh/h/ln	1634	1695	1434	1634	1770	1746	1585	1770	1429	1634	1770	1431
Q Serve(g_s), s	16.7	11.4	16.0	7.1	20.0	20.2	7.2	10.6	4.3	10.6	21.6	6.8
Cycle Q Clear(g_c), s	16.7	11.4	16.0	7.1	20.0	20.2	7.2	10.6	4.3	10.6	21.6	6.8
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	369	2018	569	153	469	462	264	853	345	197	984	398
V/C Ratio(X)	0.74	0.38	0.50	0.72	0.76	0.76	0.82	0.47	0.21	0.83	0.78	0.49
Avail Cap(c_a), veh/h	369	2018	569	216	469	462	264	996	402	197	1127	456
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)	0.91	0.91	0.91	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	23.1	24.5	47.6	36.6	36.8	48.7	35.1	32.8	46.4	35.9	9.9
Incr Delay (d2), s/veh	6.9	0.5	2.8	5.0	8.6	8.9	17.9	0.4	0.3	25.4	3.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	5.4	6.7	3.4	10.9	10.9	3.8	5.2	1.7	6.2	11.0	2.8
LnGrp Delay(d),s/veh	45.8	23.6	27.3	52.6	45.2	45.7	66.6	35.5	33.1	71.8	39.1	10.8
LnGrp LOS	D	C	C	D	D	D	E	D	C	E	D	B
Approach Vol, veh/h	1314			820			693			1127		
Approach Delay, s/veh	29.0			46.4			45.0			39.0		
Approach LOS	C			D			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	30.0	14.1	46.8	13.0	34.0	28.4	32.6				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	11.7	29.1	13.0	33.0	7.7	33.1	18.7	27.3				
Max Q Clear Time (g_c+I1), s	12.6	12.6	9.1	18.0	9.2	23.6	18.7	22.2				
Green Ext Time (p_c), s	0.0	5.9	0.1	5.1	0.0	4.4	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay	38.2											
HCM 2010 LOS	D											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑↑	↱	↰	↑↑	↱	↰	↑↑	↱	↰	↑↑	↱
Traffic Volume (veh/h)	159	325	78	99	384	77	154	407	91	65	207	94
Future Volume (veh/h)	159	325	78	99	384	77	154	407	91	65	207	94
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	173	353	85	108	417	84	167	442	99	71	225	102
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	2425	684	154	848	169	200	671	270	116	699	282
Arrive On Green	0.28	0.48	0.48	0.09	0.29	0.28	0.06	0.19	0.19	0.07	0.20	0.20
Sat Flow, veh/h	1634	5085	1435	1634	2931	585	3170	3539	1426	1634	3539	1427
Grp Volume(v), veh/h	173	353	85	108	250	251	167	442	99	71	225	102
Grp Sat Flow(s),veh/h/ln	1634	1695	1435	1634	1770	1746	1585	1770	1426	1634	1770	1427
Q Serve(g_s), s	8.1	3.7	3.1	6.1	11.1	11.4	4.9	11.0	4.3	4.0	5.2	3.0
Cycle Q Clear(g_c), s	8.1	3.7	3.1	6.1	11.1	11.4	4.9	11.0	4.3	4.0	5.2	3.0
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	460	2425	684	154	512	505	200	671	270	116	699	282
V/C Ratio(X)	0.38	0.15	0.12	0.70	0.49	0.50	0.83	0.66	0.37	0.61	0.32	0.36
Avail Cap(c_a), veh/h	460	2425	684	165	512	505	200	1129	455	174	1282	517
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)	0.98	0.98	0.98	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	14.0	13.8	41.8	27.9	28.2	44.0	35.7	18.7	42.8	32.7	8.6
Incr Delay (d2), s/veh	0.5	0.1	0.4	10.8	3.0	3.2	25.0	1.1	0.8	5.1	0.3	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	3.7	1.8	1.3	3.2	5.9	5.9	2.9	5.4	1.8	2.0	2.6	1.2
LnGrp Delay(d),s/veh	27.9	14.1	14.2	52.5	31.0	31.4	69.1	36.8	19.5	47.9	32.9	9.4
LnGrp LOS	C	B	B	D	C	C	E	D	B	D	C	A
Approach Vol, veh/h	611			609			708			398		
Approach Delay, s/veh	18.0			34.9			42.0			29.6		
Approach LOS	B			C			D			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	22.0	12.9	49.3	10.0	22.8	30.7	31.5				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	8.8	29.0	8.3	27.7	4.7	33.1	9.8	26.2				
Max Q Clear Time (g_c+I1), s	6.0	13.0	8.1	5.7	6.9	7.2	10.1	13.4				
Green Ext Time (p_c), s	0.4	2.0	0.0	2.4	0.0	1.5	0.0	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				31.7								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	345	78	99	395	79	154	407	91	68	207	94
Future Volume (veh/h)	159	345	78	99	395	79	154	407	91	68	207	94
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	173	375	85	108	429	86	167	442	99	74	225	102
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	2378	671	154	1305	259	200	708	285	114	732	295
Arrive On Green	0.12	0.47	0.47	0.09	0.44	0.43	0.06	0.20	0.20	0.07	0.21	0.21
Sat Flow, veh/h	1634	5085	1435	1634	2934	583	3170	3539	1427	1634	3539	1427
Grp Volume(v), veh/h	173	375	85	108	257	258	167	442	99	74	225	102
Grp Sat Flow(s),veh/h/ln	1634	1695	1435	1634	1770	1748	1585	1770	1427	1634	1770	1427
Q Serve(g_s), s	9.9	4.0	3.2	6.1	9.0	9.2	4.9	10.8	5.7	4.2	5.1	5.8
Cycle Q Clear(g_c), s	9.9	4.0	3.2	6.1	9.0	9.2	4.9	10.8	5.7	4.2	5.1	5.8
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	191	2378	671	154	787	778	200	708	285	114	732	295
V/C Ratio(X)	0.91	0.16	0.13	0.70	0.33	0.33	0.83	0.62	0.35	0.65	0.31	0.35
Avail Cap(c_a), veh/h	191	2378	671	165	787	778	200	1121	452	177	1282	517
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)	0.98	0.98	0.98	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	14.5	14.3	41.8	17.1	17.3	44.0	34.7	32.7	43.0	31.9	32.2
Incr Delay (d2), s/veh	39.4	0.1	0.4	10.7	1.0	1.0	25.0	0.9	0.7	6.0	0.2	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	6.6	1.9	1.3	3.2	4.6	4.6	2.9	5.4	2.3	2.1	2.5	2.3
LnGrp Delay(d),s/veh	80.9	14.7	14.7	52.5	18.1	18.4	69.1	35.6	33.4	49.1	32.1	32.9
LnGrp LOS	F	B	B	D	B	B	E	D	C	D	C	C
Approach Vol, veh/h	633			623			708			401		
Approach Delay, s/veh	32.8			24.2			43.2			35.5		
Approach LOS	C			C			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	23.0	12.9	48.4	10.0	23.6	15.1	46.3				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	9.0	28.8	8.3	27.7	4.7	33.1	9.8	26.2				
Max Q Clear Time (g_c+I1), s	6.2	12.8	8.1	6.0	6.9	7.8	11.9	11.2				
Green Ext Time (p_c), s	0.0	3.3	0.0	3.8	0.0	3.6	0.0	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay	34.1											
HCM 2010 LOS	C											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	357	86	109	423	85	169	447	100	72	228	104
Future Volume (veh/h)	175	357	86	109	423	85	169	447	100	72	228	104
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	190	388	93	118	460	92	184	486	109	78	248	113
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	457	2371	669	163	839	167	222	700	282	125	722	291
Arrive On Green	0.28	0.47	0.47	0.10	0.29	0.27	0.07	0.20	0.20	0.08	0.20	0.20
Sat Flow, veh/h	1634	5085	1435	1634	2934	583	3170	3539	1427	1634	3539	1427
Grp Volume(v), veh/h	190	388	93	118	276	276	184	486	109	78	248	113
Grp Sat Flow(s),veh/h/ln	1634	1695	1435	1634	1770	1747	1585	1770	1427	1634	1770	1427
Q Serve(g_s), s	9.5	4.4	3.7	7.0	13.2	13.4	5.7	12.8	4.9	4.6	6.0	3.5
Cycle Q Clear(g_c), s	9.5	4.4	3.7	7.0	13.2	13.4	5.7	12.8	4.9	4.6	6.0	3.5
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	457	2371	669	163	506	500	222	700	282	125	722	291
V/C Ratio(X)	0.42	0.16	0.14	0.72	0.55	0.55	0.83	0.69	0.39	0.63	0.34	0.39
Avail Cap(c_a), veh/h	457	2371	669	172	506	500	222	1083	437	176	1217	491
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)	0.98	0.98	0.98	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	15.4	15.2	43.7	30.2	30.5	45.9	37.3	19.3	44.8	34.1	9.1
Incr Delay (d2), s/veh	0.6	0.1	0.4	11.8	3.7	3.8	22.3	1.3	0.9	5.1	0.3	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	4.4	2.1	1.5	3.7	7.0	7.0	3.2	6.3	2.0	2.3	3.0	1.4
LnGrp Delay(d),s/veh	29.9	15.6	15.7	55.5	33.9	34.3	68.3	38.6	20.1	49.9	34.3	10.0
LnGrp LOS	C	B	B	E	C	C	E	D	C	D	C	A
Approach Vol, veh/h	671			670			779			439		
Approach Delay, s/veh	19.6			37.8			43.0			30.8		
Approach LOS	B			D			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	11.6	23.8	14.0	50.6	11.0	24.4	32.0	32.6				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	9.5	29.3	9.2	30.8	5.7	33.1	12.7	27.3				
Max Q Clear Time (g_c+I1), s	6.6	14.8	9.0	6.4	7.7	8.0	11.5	15.4				
Green Ext Time (p_c), s	0.5	2.1	0.0	2.7	0.0	1.7	0.4	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay	33.4											
HCM 2010 LOS	C											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	377	86	109	434	87	169	447	100	75	228	104
Future Volume (veh/h)	175	377	86	109	434	87	169	447	100	75	228	104
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	190	410	93	118	472	95	184	486	109	82	248	113
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	442	2323	655	163	838	168	222	737	297	123	755	305
Arrive On Green	0.27	0.46	0.46	0.10	0.29	0.27	0.07	0.21	0.21	0.08	0.21	0.21
Sat Flow, veh/h	1634	5085	1435	1634	2930	586	3170	3539	1427	1634	3539	1428
Grp Volume(v), veh/h	190	410	93	118	284	283	184	486	109	82	248	113
Grp Sat Flow(s),veh/h/ln	1634	1695	1435	1634	1770	1746	1585	1770	1427	1634	1770	1428
Q Serve(g_s), s	9.6	4.8	3.8	7.0	13.6	13.9	5.7	12.6	6.5	4.9	5.9	3.5
Cycle Q Clear(g_c), s	9.6	4.8	3.8	7.0	13.6	13.9	5.7	12.6	6.5	4.9	5.9	3.5
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	442	2323	655	163	506	499	222	737	297	123	755	305
V/C Ratio(X)	0.43	0.18	0.14	0.72	0.56	0.57	0.83	0.66	0.37	0.67	0.33	0.37
Avail Cap(c_a), veh/h	442	2323	655	172	506	499	222	1076	434	180	1217	491
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)	0.98	0.98	0.98	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	16.0	15.8	43.7	30.4	30.6	45.9	36.3	33.9	45.0	33.3	9.1
Incr Delay (d2), s/veh	0.6	0.2	0.4	11.8	3.9	4.0	22.3	1.0	0.8	6.1	0.3	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	4.4	2.3	1.6	3.7	7.2	7.3	3.2	6.2	2.6	2.4	2.9	1.4
LnGrp Delay(d),s/veh	30.8	16.2	16.2	55.5	34.2	34.7	68.3	37.3	34.7	51.1	33.5	9.9
LnGrp LOS	C	B	B	E	C	C	E	D	C	D	C	A
Approach Vol, veh/h	693			685			779			443		
Approach Delay, s/veh	20.2			38.1			44.3			30.7		
Approach LOS	C			D			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	11.5	24.8	14.0	49.7	11.0	25.3	31.1	32.6				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	9.7	29.1	9.2	30.8	5.7	33.1	12.7	27.3				
Max Q Clear Time (g_c+I1), s	6.9	14.6	9.0	6.8	7.7	7.9	11.6	15.9				
Green Ext Time (p_c), s	0.0	3.5	0.0	2.8	0.0	4.1	0.4	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay				33.9								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↑↑↑	↱	↰	↑↑	↱	↰	↑↑	↱	↰	↑↑	↱
Traffic Volume (veh/h)	175	377	86	109	434	87	169	447	100	75	228	104
Future Volume (veh/h)	175	377	86	109	434	87	169	447	100	75	228	104
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		0.98	1.00		0.98	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	190	410	93	118	472	95	184	486	109	82	248	113
Adj No. of Lanes	1	3	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	440	2294	647	164	825	165	226	743	300	123	758	306
Arrive On Green	0.09	0.15	0.15	0.10	0.28	0.27	0.07	0.21	0.21	0.08	0.21	0.21
Sat Flow, veh/h	1634	5085	1435	1634	2930	586	3170	3539	1428	1634	3539	1428
Grp Volume(v), veh/h	190	410	93	118	284	283	184	486	109	82	248	113
Grp Sat Flow(s),veh/h/ln	1634	1695	1435	1634	1770	1746	1585	1770	1428	1634	1770	1428
Q Serve(g_s), s	10.8	6.9	5.5	6.9	13.4	13.7	5.6	12.3	6.4	4.8	5.8	3.4
Cycle Q Clear(g_c), s	10.8	6.9	5.5	6.9	13.4	13.7	5.6	12.3	6.4	4.8	5.8	3.4
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	440	2294	647	164	498	492	226	743	300	123	758	306
V/C Ratio(X)	0.43	0.18	0.14	0.72	0.57	0.58	0.81	0.65	0.36	0.66	0.33	0.37
Avail Cap(c_a), veh/h	440	2294	647	172	498	492	226	1101	444	182	1242	501
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	25.8	25.2	42.8	30.1	30.4	44.9	35.4	33.1	44.1	32.5	8.9
Incr Delay (d2), s/veh	0.7	0.2	0.5	11.6	4.1	4.2	19.7	1.0	0.7	6.0	0.2	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	5.0	3.3	2.3	3.6	7.1	7.1	3.1	6.1	2.6	2.4	2.9	1.4
LnGrp Delay(d),s/veh	38.2	26.0	25.7	54.4	34.2	34.6	64.6	36.4	33.8	50.1	32.8	9.6
LnGrp LOS	D	C	C	D	C	C	E	D	C	D	C	A
Approach Vol, veh/h	693			685			779			443		
Approach Delay, s/veh	29.3			37.9			42.7			30.1		
Approach LOS	C			D			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	11.4	24.6	13.8	48.2	11.0	25.0	30.4	31.6				
Change Period (Y+Rc), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3				
Max Green Setting (Gmax), s	9.6	29.2	9.0	29.0	5.7	33.1	11.7	26.3				
Max Q Clear Time (g_c+I1), s	6.8	14.3	8.9	8.9	7.6	7.8	12.8	15.7				
Green Ext Time (p_c), s	0.0	3.5	0.0	2.7	0.0	4.1	0.0	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay	35.7											
HCM 2010 LOS	D											

Intersection 6 Monitor St & White Ln



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	462	143	70	459	14	110	67	53	9	109	12
Future Volume (veh/h)	23	462	143	70	459	14	110	67	53	9	109	12
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		0.96	1.00		0.97	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	25	502	155	76	499	15	120	73	58	10	118	13
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	735	292	116	869	346	147	1120	864	71	737	78
Arrive On Green	0.03	0.21	0.21	0.07	0.25	0.25	0.09	0.60	0.60	0.47	0.47	0.47
Sat Flow, veh/h	1634	3539	1407	1634	3539	1410	1634	1863	1436	68	1563	166
Grp Volume(v), veh/h	25	502	155	76	499	15	120	73	58	141	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1407	1634	1770	1410	1634	1863	1436	1797	0	0
Q Serve(g_s), s	1.5	13.1	9.8	4.5	12.4	0.8	7.2	1.6	1.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.5	13.1	9.8	4.5	12.4	0.8	7.2	1.6	1.7	4.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.07		0.09
Lane Grp Cap(c), veh/h	54	735	292	116	869	346	147	1120	864	886	0	0
V/C Ratio(X)	0.46	0.68	0.53	0.66	0.57	0.04	0.82	0.07	0.07	0.16	0.00	0.00
Avail Cap(c_a), veh/h	100	920	366	173	1079	430	235	1120	864	886	0	0
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)	0.92	0.92	0.92	0.94	0.94	0.94	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.5	36.6	35.3	45.3	33.1	28.8	44.7	8.3	8.3	15.1	0.0	0.0
Incr Delay (d2), s/veh	5.6	1.4	1.4	5.9	0.6	0.0	11.0	0.1	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	6.6	3.9	2.2	6.1	0.3	3.7	0.9	0.7	2.3	0.0	0.0
LnGrp Delay(d),s/veh	53.1	38.0	36.6	51.1	33.7	28.8	55.7	8.4	8.4	15.5	0.0	0.0
LnGrp LOS	D	D	D	D	C	C	E	A	A	B		
Approach Vol, veh/h	682			590			251			141		
Approach Delay, s/veh	38.2			35.8			31.0			15.5		
Approach LOS	D			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	64.1		11.1	24.8	13.0	51.1	7.3	28.5				
Change Period (Y+Rc), s	4.0		5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s	51.4		9.3	24.7	14.4	33.0	4.8	29.2				
Max Q Clear Time (g_c+I1), s	3.7		6.5	15.1	9.2	6.4	3.5	14.4				
Green Ext Time (p_c), s	1.0		0.0	3.6	0.1	0.9	0.0	4.5				
Intersection Summary												
HCM 2010 Ctrl Delay				34.4								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	490	143	70	478	14	110	67	53	9	109	12
Future Volume (veh/h)	23	490	143	70	478	14	110	67	53	9	109	12
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		0.97	1.00		0.97	1.00		0.98	0.99		0.97
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	25	533	155	76	520	15	120	73	58	10	118	13
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	55	767	305	116	900	359	690	1099	847	47	200	21
Arrive On Green	0.03	0.22	0.22	0.07	0.25	0.25	0.42	0.59	0.59	0.13	0.13	0.13
Sat Flow, veh/h	1634	3539	1408	1634	3539	1411	1634	1863	1436	60	1573	166
Grp Volume(v), veh/h	25	533	155	76	520	15	120	73	58	141	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1408	1634	1770	1411	1634	1863	1436	1798	0	0
Q Serve(g_s), s	1.5	13.6	3.1	4.4	12.6	0.8	4.5	1.6	1.7	0.7	0.0	0.0
Cycle Q Clear(g_c), s	1.5	13.6	3.1	4.4	12.6	0.8	4.5	1.6	1.7	7.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.07		0.09
Lane Grp Cap(c), veh/h	55	767	305	116	900	359	690	1099	847	268	0	0
V/C Ratio(X)	0.46	0.70	0.51	0.66	0.58	0.04	0.17	0.07	0.07	0.53	0.00	0.00
Avail Cap(c_a), veh/h	102	935	372	167	1076	429	690	1099	847	622	0	0
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)	0.88	0.88	0.88	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.5	35.4	3.5	44.4	31.9	27.5	17.7	8.6	8.6	40.5	0.0	0.0
Incr Delay (d2), s/veh	5.2	1.5	1.2	5.7	0.5	0.0	0.1	0.1	0.2	7.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.8	1.3	2.2	6.2	0.3	2.1	0.9	0.7	4.1	0.0	0.0
LnGrp Delay(d),s/veh	51.7	36.9	4.7	50.1	32.5	27.6	17.8	8.7	8.7	47.7	0.0	0.0
LnGrp LOS	D	D	A	D	C	C	B	A	A	D		
Approach Vol, veh/h	713			611			251			141		
Approach Delay, s/veh	30.4			34.6			13.0			47.7		
Approach LOS	C			C			B			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		61.8	11.0	25.2	45.4	16.4	7.3	28.9				
Change Period (Y+Rc), s		4.0	5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s		50.1	8.7	24.6	14.0	32.1	4.8	28.5				
Max Q Clear Time (g_c+I1), s		3.7	6.4	15.6	6.5	9.2	3.5	14.6				
Green Ext Time (p_c), s		0.9	0.0	3.6	0.5	0.4	0.0	4.6				
Intersection Summary												
HCM 2010 Ctrl Delay				30.8								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	509	158	80	524	16	121	74	58	10	124	14
Future Volume (veh/h)	25	509	158	80	524	16	121	74	58	10	124	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	27	553	172	87	570	17	132	80	63	11	135	15
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	735	292	135	907	362	160	1098	847	67	708	76
Arrive On Green	0.03	0.21	0.21	0.08	0.26	0.26	0.10	0.59	0.59	0.45	0.45	0.45
Sat Flow, veh/h	1634	3539	1407	1634	3539	1411	1634	1863	1436	63	1568	168
Grp Volume(v), veh/h	27	553	172	87	570	17	132	80	63	161	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1407	1634	1770	1411	1634	1863	1436	1798	0	0
Q Serve(g_s), s	1.6	14.7	8.2	5.2	14.3	0.9	7.9	1.8	1.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	14.7	8.2	5.2	14.3	0.9	7.9	1.8	1.9	5.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.07		0.09
Lane Grp Cap(c), veh/h	56	735	292	135	907	362	160	1098	847	850	0	0
V/C Ratio(X)	0.48	0.75	0.59	0.64	0.63	0.05	0.82	0.07	0.07	0.19	0.00	0.00
Avail Cap(c_a), veh/h	101	917	364	163	1051	419	245	1098	847	850	0	0
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)	0.87	0.87	0.87	0.68	0.68	0.68	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.4	37.2	19.7	44.4	33.0	28.0	44.2	8.8	8.8	16.5	0.0	0.0
Incr Delay (d2), s/veh	5.6	2.4	1.7	4.2	0.6	0.0	12.5	0.1	0.2	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.4	3.3	2.5	7.0	0.4	4.1	1.0	0.8	2.8	0.0	0.0
LnGrp Delay(d),s/veh	53.0	39.6	21.4	48.6	33.6	28.0	56.7	8.9	9.0	17.0	0.0	0.0
LnGrp LOS	D	D	C	D	C	C	E	A	A	B		
Approach Vol, veh/h	752			674			275			161		
Approach Delay, s/veh	35.9			35.4			31.9			17.0		
Approach LOS	D			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	63.0		12.3	24.8	13.8	49.1	7.4	29.6				
Change Period (Y+Rc), s	4.0		5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s	52.1		8.7	24.6	15.0	33.1	4.9	28.4				
Max Q Clear Time (g_c+I1), s	3.9		7.2	16.7	9.9	7.3	3.6	16.3				
Green Ext Time (p_c), s	1.1		0.5	2.0	0.1	1.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay				33.5								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	537	158	80	543	16	121	74	58	10	124	14
Future Volume (veh/h)	25	537	158	80	543	16	121	74	58	10	124	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	27	584	172	87	590	17	132	80	63	11	135	15
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	759	302	136	932	372	160	1085	837	66	697	74
Arrive On Green	0.03	0.21	0.21	0.08	0.26	0.26	0.10	0.58	0.58	0.44	0.44	0.44
Sat Flow, veh/h	1634	3539	1408	1634	3539	1412	1634	1863	1436	62	1569	168
Grp Volume(v), veh/h	27	584	172	87	590	17	132	80	63	161	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1408	1634	1770	1412	1634	1863	1436	1798	0	0
Q Serve(g_s), s	1.6	15.5	8.1	5.2	14.7	0.9	7.9	1.9	1.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	15.5	8.1	5.2	14.7	0.9	7.9	1.9	1.9	5.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.07		0.09
Lane Grp Cap(c), veh/h	56	759	302	136	932	372	160	1085	837	838	0	0
V/C Ratio(X)	0.48	0.77	0.57	0.64	0.63	0.05	0.82	0.07	0.08	0.19	0.00	0.00
Avail Cap(c_a), veh/h	101	917	365	163	1051	419	245	1085	837	838	0	0
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)	0.88	0.88	0.88	0.78	0.78	0.78	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.4	36.9	19.2	44.4	32.6	27.5	44.2	9.1	9.1	16.9	0.0	0.0
Incr Delay (d2), s/veh	5.6	2.9	1.5	4.8	0.8	0.0	12.5	0.1	0.2	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	7.9	3.2	2.5	7.3	0.4	4.1	1.0	0.8	2.8	0.0	0.0
LnGrp Delay(d),s/veh	53.1	39.9	20.7	49.2	33.4	27.5	56.7	9.2	9.3	17.4	0.0	0.0
LnGrp LOS	D	D	C	D	C	C	E	A	A	B		
Approach Vol, veh/h	783			694			275			161		
Approach Delay, s/veh	36.1			35.2			32.0			17.4		
Approach LOS	D			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		62.3	12.3	25.5	13.8	48.4	7.4	30.3				
Change Period (Y+Rc), s		4.0	5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s		52.1	8.7	24.6	15.0	33.1	4.9	28.4				
Max Q Clear Time (g_c+I1), s		3.9	7.2	17.5	9.9	7.4	3.6	16.7				
Green Ext Time (p_c), s		1.1	0.5	2.0	0.1	1.0	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay				33.6								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	537	158	80	543	16	121	74	58	10	124	14
Future Volume (veh/h)	25	537	158	80	543	16	121	74	58	10	124	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	27	584	172	87	590	17	132	80	63	11	135	15
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	756	301	142	949	379	160	1095	845	65	709	76
Arrive On Green	0.01	0.07	0.07	0.09	0.27	0.27	0.10	0.59	0.59	0.45	0.45	0.45
Sat Flow, veh/h	1634	3539	1407	1634	3539	1412	1634	1863	1436	65	1564	167
Grp Volume(v), veh/h	27	584	172	87	590	17	132	80	63	161	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1407	1634	1770	1412	1634	1863	1436	1797	0	0
Q Serve(g_s), s	1.8	17.5	9.6	5.5	15.8	1.0	8.6	2.0	2.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	17.5	9.6	5.5	15.8	1.0	8.6	2.0	2.0	5.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.07		0.09
Lane Grp Cap(c), veh/h	53	756	301	142	949	379	160	1095	845	850	0	0
V/C Ratio(X)	0.51	0.77	0.57	0.61	0.62	0.04	0.83	0.07	0.07	0.19	0.00	0.00
Avail Cap(c_a), veh/h	95	885	352	197	1104	441	272	1095	845	850	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.83	0.83	0.83	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	52.6	47.6	25.6	47.5	34.7	29.3	47.8	9.6	9.6	17.7	0.0	0.0
Incr Delay (d2), s/veh	6.5	3.2	1.5	3.5	0.7	0.0	10.2	0.1	0.2	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.9	3.9	2.7	7.8	0.4	4.3	1.1	0.8	3.0	0.0	0.0
LnGrp Delay(d),s/veh	59.0	50.9	27.1	51.0	35.4	29.3	58.1	9.7	9.8	18.2	0.0	0.0
LnGrp LOS	E	D	C	D	D	C	E	A	A	B		
Approach Vol, veh/h	783			694			275			161		
Approach Delay, s/veh	45.9			37.2			32.9			18.2		
Approach LOS	D			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		67.5	13.4	27.1	14.6	53.0	7.5	33.0				
Change Period (Y+Rc), s		4.0	5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s		56.0	11.7	25.7	18.0	34.0	5.0	32.4				
Max Q Clear Time (g_c+I1), s		4.0	7.5	19.5	10.6	7.7	3.8	17.8				
Green Ext Time (p_c), s		1.1	1.2	1.8	0.2	1.0	0.0	2.5				
Intersection Summary												
HCM 2010 Ctrl Delay				38.6								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	293	52	29	283	12	91	123	73	5	89	31
Future Volume (veh/h)	10	293	52	29	283	12	91	123	73	5	89	31
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		0.96	1.00		0.96	1.00		0.99	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	11	318	57	32	308	13	99	134	79	5	97	34
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	534	211	62	582	230	124	1270	980	54	731	248
Arrive On Green	0.02	0.15	0.15	0.04	0.16	0.16	0.08	0.68	0.68	0.56	0.56	0.56
Sat Flow, veh/h	1634	3539	1398	1634	3539	1401	1634	1863	1437	24	1298	441
Grp Volume(v), veh/h	11	318	57	32	308	13	99	134	79	136	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1398	1634	1770	1401	1634	1863	1437	1762	0	0
Q Serve(g_s), s	0.6	7.8	2.6	1.8	7.4	0.7	5.5	2.3	1.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	7.8	2.6	1.8	7.4	0.7	5.5	2.3	1.7	3.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.04		0.25
Lane Grp Cap(c), veh/h	40	534	211	62	582	230	124	1270	980	1032	0	0
V/C Ratio(X)	0.27	0.60	0.27	0.51	0.53	0.06	0.80	0.11	0.08	0.13	0.00	0.00
Avail Cap(c_a), veh/h	93	989	391	112	1031	408	221	1270	980	1032	0	0
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)	0.99	0.99	0.99	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.5	36.8	21.1	43.9	35.6	32.8	42.3	5.1	5.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	3.5	1.0	0.7	6.3	0.7	0.1	11.1	0.2	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.9	1.0	0.9	3.7	0.3	2.9	1.2	0.7	1.7	0.0	0.0
LnGrp Delay(d),s/veh	48.1	37.9	21.7	50.1	36.3	32.9	53.4	5.2	5.1	9.9	0.0	0.0
LnGrp LOS	D	D	C	D	D	C	D	A	A	A		
Approach Vol, veh/h	386			353			312			136		
Approach Delay, s/veh	35.8			37.4			20.5			9.9		
Approach LOS	D			D			C			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		67.4	7.5	18.0	11.0	56.4	6.3	19.3				
Change Period (Y+Rc), s		4.0	5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s		48.6	5.1	24.7	12.6	32.0	4.0	25.8				
Max Q Clear Time (g_c+I1), s		4.3	3.8	9.8	7.5	5.4	2.6	9.4				
Green Ext Time (p_c), s		1.2	0.2	1.3	0.1	1.2	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				29.3								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	316	52	29	295	12	91	123	73	5	89	31
Future Volume (veh/h)	10	316	52	29	295	12	91	123	73	5	89	31
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		0.96	1.00		0.96	1.00		0.99	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	11	343	57	32	321	13	99	134	79	5	97	34
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	564	223	64	613	243	123	1245	960	54	712	242
Arrive On Green	0.03	0.16	0.16	0.04	0.17	0.17	0.08	0.67	0.67	0.55	0.55	0.55
Sat Flow, veh/h	1634	3539	1400	1634	3539	1402	1634	1863	1437	23	1299	441
Grp Volume(v), veh/h	11	343	57	32	321	13	99	134	79	136	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1400	1634	1770	1402	1634	1863	1437	1763	0	0
Q Serve(g_s), s	0.6	8.1	2.5	1.7	7.4	0.7	5.4	2.3	1.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	8.1	2.5	1.7	7.4	0.7	5.4	2.3	1.7	3.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.04		0.25
Lane Grp Cap(c), veh/h	41	564	223	64	613	243	123	1245	960	1008	0	0
V/C Ratio(X)	0.27	0.61	0.26	0.50	0.52	0.05	0.80	0.11	0.08	0.13	0.00	0.00
Avail Cap(c_a), veh/h	96	1019	403	109	1046	414	182	1245	960	1008	0	0
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)	0.98	0.98	0.98	0.98	0.98	0.98	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	43.1	35.2	19.7	42.4	33.8	31.1	40.9	5.3	5.2	9.9	0.0	0.0
Incr Delay (d2), s/veh	3.4	1.0	0.6	5.9	0.7	0.1	14.6	0.2	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.0	1.0	0.9	3.7	0.3	2.9	1.3	0.7	1.7	0.0	0.0
LnGrp Delay(d),s/veh	46.4	36.3	20.2	48.3	34.5	31.1	55.5	5.5	5.4	10.2	0.0	0.0
LnGrp LOS	D	D	C	D	C	C	E	A	A	B		
Approach Vol, veh/h	411			366			312			136		
Approach Delay, s/veh	34.3			35.6			21.4			10.2		
Approach LOS	C			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	64.2		7.5	18.3	10.8	53.4	6.3	19.6				
Change Period (Y+Rc), s	4.0		5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s	46.1		4.7	24.6	10.0	32.1	4.0	25.3				
Max Q Clear Time (g_c+I1), s	4.3		3.7	10.1	7.4	5.4	2.6	9.4				
Green Ext Time (p_c), s	1.2		0.2	1.4	0.1	1.2	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				28.7								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	323	57	33	323	14	100	136	80	6	102	35
Future Volume (veh/h)	11	323	57	33	323	14	100	136	80	6	102	35
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		0.96	1.00		0.96	1.00		0.99	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	12	351	62	36	351	15	109	148	87	7	111	38
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	556	220	65	509	201	135	1268	978	58	722	239
Arrive On Green	0.05	0.16	0.16	0.04	0.14	0.14	0.08	0.68	0.68	0.56	0.56	0.56
Sat Flow, veh/h	1634	3539	1400	1634	3539	1397	1634	1863	1437	34	1295	428
Grp Volume(v), veh/h	12	351	62	36	351	15	109	148	87	156	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1400	1634	1770	1397	1634	1863	1437	1757	0	0
Q Serve(g_s), s	0.7	9.1	3.8	2.1	9.2	0.9	6.4	2.7	2.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	9.1	3.8	2.1	9.2	0.9	6.4	2.7	2.0	4.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.04		0.24
Lane Grp Cap(c), veh/h	87	556	220	65	509	201	135	1268	978	1018	0	0
V/C Ratio(X)	0.14	0.63	0.28	0.56	0.69	0.07	0.81	0.12	0.09	0.15	0.00	0.00
Avail Cap(c_a), veh/h	88	975	386	117	1036	409	233	1268	978	1018	0	0
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)	0.98	0.98	0.98	0.96	0.96	0.96	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.3	38.6	36.4	46.2	39.9	36.3	44.2	5.4	5.3	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.7	1.2	0.7	7.0	1.6	0.2	10.7	0.2	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.5	1.5	1.1	4.6	0.4	3.3	1.4	0.8	2.1	0.0	0.0
LnGrp Delay(d),s/veh	45.0	39.8	37.1	53.2	41.5	36.5	54.9	5.6	5.5	10.9	0.0	0.0
LnGrp LOS	D	D	D	D	D	D	D	A	A	B		
Approach Vol, veh/h	425			402			344			156		
Approach Delay, s/veh	39.6			42.4			21.2			10.9		
Approach LOS	D			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	70.7		7.9	19.4	12.1	58.6	9.2	18.1				
Change Period (Y+Rc), s	4.0		5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s	52.0		5.7	25.7	14.0	34.0	4.0	27.4				
Max Q Clear Time (g_c+I1), s	4.7		4.1	11.1	8.4	6.2	2.7	11.2				
Green Ext Time (p_c), s	1.4		0.0	1.5	0.1	1.4	0.3	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				32.3								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	346	57	33	335	14	100	136	80	6	102	35
Future Volume (veh/h)	11	346	57	33	335	14	100	136	80	6	102	35
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		0.96	1.00		0.96	1.00		0.99	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	12	376	62	36	364	15	109	148	87	7	111	38
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	579	229	65	521	206	135	1256	969	57	714	236
Arrive On Green	0.06	0.16	0.16	0.04	0.15	0.15	0.08	0.67	0.67	0.55	0.55	0.55
Sat Flow, veh/h	1634	3539	1401	1634	3539	1398	1634	1863	1437	34	1295	428
Grp Volume(v), veh/h	12	376	62	36	364	15	109	148	87	156	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1401	1634	1770	1398	1634	1863	1437	1758	0	0
Q Serve(g_s), s	0.7	9.7	3.8	2.1	9.6	0.9	6.4	2.8	2.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	9.7	3.8	2.1	9.6	0.9	6.4	2.8	2.1	4.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.04		0.24
Lane Grp Cap(c), veh/h	92	579	229	65	521	206	135	1256	969	1007	0	0
V/C Ratio(X)	0.13	0.65	0.27	0.56	0.70	0.07	0.81	0.12	0.09	0.15	0.00	0.00
Avail Cap(c_a), veh/h	92	975	386	117	1036	409	233	1256	969	1007	0	0
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)	0.98	0.98	0.98	0.93	0.93	0.93	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.0	38.4	35.9	46.2	39.7	36.0	44.2	5.6	5.5	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.6	1.2	0.6	6.8	1.6	0.1	10.7	0.2	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	4.8	1.5	1.1	4.8	0.4	3.3	1.5	0.8	2.2	0.0	0.0
LnGrp Delay(d),s/veh	44.6	39.6	36.5	53.0	41.3	36.2	54.9	5.8	5.7	11.2	0.0	0.0
LnGrp LOS	D	D	D	D	D	D	D	A	A	B		
Approach Vol, veh/h	450			415			344			156		
Approach Delay, s/veh	39.3			42.1			21.3			11.2		
Approach LOS	D			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		70.1	7.9	20.0	12.1	58.0	9.5	18.4				
Change Period (Y+Rc), s		4.0	5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s		52.0	5.7	25.7	14.0	34.0	4.0	27.4				
Max Q Clear Time (g_c+I1), s		4.8	4.1	11.7	8.4	6.2	2.7	11.6				
Green Ext Time (p_c), s		1.4	0.0	1.5	0.1	1.4	0.3	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				32.4								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	346	57	33	335	14	100	136	80	6	102	35
Future Volume (veh/h)	11	346	57	33	335	14	100	136	80	6	102	35
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		0.96	1.00		0.96	1.00		0.99	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1716	1750	1863	1750
Adj Flow Rate, veh/h	12	376	62	36	364	15	109	148	87	7	111	38
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	592	235	65	531	210	135	1249	963	57	708	234
Arrive On Green	0.02	0.06	0.06	0.01	0.05	0.05	0.08	0.67	0.67	0.55	0.55	0.55
Sat Flow, veh/h	1634	3539	1401	1634	3539	1398	1634	1863	1437	34	1295	428
Grp Volume(v), veh/h	12	376	62	36	364	15	109	148	87	156	0	0
Grp Sat Flow(s),veh/h/ln	1634	1770	1401	1634	1770	1398	1634	1863	1437	1758	0	0
Q Serve(g_s), s	0.7	10.2	4.2	2.1	9.9	1.0	6.4	2.8	2.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	10.2	4.2	2.1	9.9	1.0	6.4	2.8	2.1	4.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.04		0.24
Lane Grp Cap(c), veh/h	93	592	235	65	531	210	135	1249	963	1000	0	0
V/C Ratio(X)	0.13	0.63	0.26	0.55	0.69	0.07	0.81	0.12	0.09	0.16	0.00	0.00
Avail Cap(c_a), veh/h	93	975	386	117	1036	409	233	1249	963	1000	0	0
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.91	0.91	0.91	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	45.7	43.4	40.5	47.5	44.3	40.1	44.2	5.8	5.7	11.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	1.1	0.6	6.6	1.4	0.1	10.7	0.2	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	5.1	1.7	1.1	5.0	0.4	3.3	1.5	0.9	2.2	0.0	0.0
LnGrp Delay(d),s/veh	46.3	44.5	41.1	54.1	45.7	40.2	54.9	6.0	5.9	11.4	0.0	0.0
LnGrp LOS	D	D	D	D	D	D	D	A	A	B		
Approach Vol, veh/h	450			415			344			156		
Approach Delay, s/veh	44.1			46.3			21.4			11.4		
Approach LOS	D			D			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s		69.7	7.9	20.4	12.1	57.6	9.6	18.7				
Change Period (Y+Rc), s		4.0	5.3	5.3	4.0	4.0	5.3	5.3				
Max Green Setting (Gmax), s		52.0	5.7	25.7	14.0	34.0	4.0	27.4				
Max Q Clear Time (g_c+I1), s		4.8	4.1	12.2	8.4	6.3	2.7	11.9				
Green Ext Time (p_c), s		1.4	0.0	1.5	0.1	1.4	0.3	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				35.3								
HCM 2010 LOS				D								

Intersection 7 Union Ave & White Ln



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↰	↱↱	↰	↰	↱↱		↰	↱↱	
Traffic Volume (veh/h)	165	183	154	67	224	41	90	489	64	75	717	198
Future Volume (veh/h)	165	183	154	67	224	41	90	489	64	75	717	198
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		0.98	1.00		0.98	1.00		0.97	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	179	199	167	73	243	45	98	532	70	82	779	215
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	339	259	200	564	227	151	1226	161	132	1036	286
Arrive On Green	0.14	0.18	0.18	0.12	0.16	0.16	0.09	0.39	0.37	0.08	0.38	0.36
Sat Flow, veh/h	1634	1863	1426	1634	3539	1423	1634	3135	411	1634	2730	754
Grp Volume(v), veh/h	179	199	167	73	243	45	98	299	303	82	505	489
Grp Sat Flow(s),veh/h/ln	1634	1863	1426	1634	1770	1423	1634	1770	1776	1634	1770	1714
Q Serve(g_s), s	7.5	7.0	5.6	2.9	4.4	2.0	4.1	8.9	9.0	3.5	17.7	17.8
Cycle Q Clear(g_c), s	7.5	7.0	5.6	2.9	4.4	2.0	4.1	8.9	9.0	3.5	17.7	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.44
Lane Grp Cap(c), veh/h	237	339	259	200	564	227	151	692	695	132	672	651
V/C Ratio(X)	0.76	0.59	0.64	0.37	0.43	0.20	0.65	0.43	0.44	0.62	0.75	0.75
Avail Cap(c_a), veh/h	343	1019	780	249	1734	697	206	780	783	286	867	840
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	29.3	26.8	14.0	28.8	27.1	26.1	31.3	15.9	16.1	31.8	19.2	19.5
Incr Delay (d2), s/veh	5.6	1.6	2.7	1.1	0.5	0.4	4.7	0.4	0.4	4.7	2.7	2.8
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	3.8	3.7	2.8	1.4	2.2	0.8	2.0	4.4	4.5	1.7	9.1	8.8
LnGrp Delay(d),s/veh	34.9	28.4	16.7	29.9	27.6	26.5	36.0	16.4	16.5	36.5	22.0	22.3
LnGrp LOS	C	C	B	C	C	C	D	B	B	D	C	C
Approach Vol, veh/h	545			361			700			1076		
Approach Delay, s/veh	27.0			27.9			19.2			23.3		
Approach LOS	C			C			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	9.8	31.9	12.7	17.0	10.6	31.1	14.4	15.4				
Change Period (Y+Rc), s	5.3	5.3	5.3	4.9	5.3	5.3	4.9	5.3				
Max Green Setting (Gmax), s	11.2	30.2	9.6	38.2	7.7	33.7	14.1	33.7				
Max Q Clear Time (g_c+I1), s	5.5	11.0	4.9	9.0	6.1	19.8	9.5	6.4				
Green Ext Time (p_c), s	0.1	6.4	0.6	1.3	0.0	5.6	0.2	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				23.6								
HCM 2010 LOS				C								

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	195	170	67	233	48	100	496	64	83	727	198
Future Volume (veh/h)	165	195	170	67	233	48	100	496	64	83	727	198
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		0.98	1.00		0.98	1.00		0.97	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	179	212	185	73	253	52	109	539	70	90	790	215
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	445	342	119	618	249	162	1201	155	140	1010	275
Arrive On Green	0.14	0.24	0.24	0.07	0.17	0.17	0.10	0.38	0.37	0.09	0.37	0.35
Sat Flow, veh/h	1634	1863	1429	1634	3539	1425	1634	3140	406	1634	2740	746
Grp Volume(v), veh/h	179	212	185	73	253	52	109	303	306	90	510	495
Grp Sat Flow(s),veh/h/ln	1634	1863	1429	1634	1770	1425	1634	1770	1777	1634	1770	1716
Q Serve(g_s), s	7.9	7.3	8.4	3.2	4.7	2.3	4.8	9.5	9.6	4.0	19.1	19.1
Cycle Q Clear(g_c), s	7.9	7.3	8.4	3.2	4.7	2.3	4.8	9.5	9.6	4.0	19.1	19.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.43
Lane Grp Cap(c), veh/h	233	445	342	119	618	249	162	677	680	140	652	633
V/C Ratio(X)	0.77	0.48	0.54	0.61	0.41	0.21	0.67	0.45	0.45	0.64	0.78	0.78
Avail Cap(c_a), veh/h	285	932	715	235	1662	669	197	758	761	200	760	737
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	30.8	24.3	24.8	33.5	27.3	26.3	32.4	17.1	17.3	33.0	20.9	21.1
Incr Delay (d2), s/veh	9.7	0.8	1.3	5.1	0.4	0.4	6.5	0.5	0.5	4.9	4.6	4.7
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	4.2	3.8	3.5	1.6	2.4	0.9	2.4	4.7	4.8	2.0	10.0	9.8
LnGrp Delay(d),s/veh	40.5	25.1	26.1	38.6	27.8	26.8	38.8	17.6	17.8	37.9	25.5	25.9
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	C	C
Approach Vol, veh/h	576			378			718			1095		
Approach Delay, s/veh	30.2			29.7			20.9			26.7		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.4	32.5	9.4	22.2	11.4	31.5	14.6	17.0				
Change Period (Y+Rc), s	5.3	5.3	5.3	* 5.3	5.3	5.3	4.9	5.3				
Max Green Setting (Gmax), s	7.8	30.6	9.4	* 36	7.7	30.7	12.1	33.7				
Max Q Clear Time (g_c+I1), s	6.0	11.6	5.2	10.4	6.8	21.1	9.9	6.7				
Green Ext Time (p_c), s	0.0	6.4	0.1	2.7	0.0	4.6	0.1	2.7				
Intersection Summary												
HCM 2010 Ctrl Delay	26.3											
HCM 2010 LOS	C											
Notes												
User approved volume balancing among the lanes for turning movement.												
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.												



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↰	↰	↱↱	↰	↰	↱↱		↰	↱↱	
Traffic Volume (veh/h)	188	209	176	76	255	47	145	787	103	97	923	255
Future Volume (veh/h)	188	209	176	76	255	47	145	787	103	97	923	255
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		0.98	1.00		0.98	1.00		0.97	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	204	227	191	83	277	51	158	855	112	105	1003	277
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	395	303	130	557	224	179	1311	172	156	1104	303
Arrive On Green	0.13	0.21	0.21	0.08	0.16	0.16	0.11	0.42	0.40	0.10	0.40	0.39
Sat Flow, veh/h	1634	1863	1428	1634	3539	1423	1634	3135	411	1634	2734	751
Grp Volume(v), veh/h	204	227	191	83	277	51	158	483	484	105	647	633
Grp Sat Flow(s),veh/h/ln	1634	1863	1428	1634	1770	1423	1634	1770	1776	1634	1770	1715
Q Serve(g_s), s	10.1	9.0	7.1	4.0	5.9	1.9	7.8	17.9	18.0	5.1	28.2	28.6
Cycle Q Clear(g_c), s	10.1	9.0	7.1	4.0	5.9	1.9	7.8	17.9	18.0	5.1	28.2	28.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.44
Lane Grp Cap(c), veh/h	219	395	303	130	557	224	179	740	743	156	715	693
V/C Ratio(X)	0.93	0.57	0.63	0.64	0.50	0.23	0.88	0.65	0.65	0.67	0.91	0.91
Avail Cap(c_a), veh/h	219	727	557	279	1510	607	179	740	743	259	733	711
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	35.1	29.0	14.8	36.6	31.6	16.2	36.0	19.1	19.2	35.9	23.0	23.4
Incr Delay (d2), s/veh	42.0	1.3	2.2	5.2	0.7	0.5	36.2	2.1	2.0	5.0	14.7	16.0
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	7.1	4.7	2.9	2.0	2.9	0.8	5.3	9.1	9.2	2.5	16.6	16.6
LnGrp Delay(d),s/veh	77.2	30.3	17.0	41.8	32.3	16.8	72.2	21.2	21.3	40.8	37.7	39.4
LnGrp LOS	E	C	B	D	C	B	E	C	C	D	D	D
Approach Vol, veh/h	622			411			1125			1385		
Approach Delay, s/veh	41.6			32.3			28.4			38.7		
Approach LOS	D			C			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	38.3	10.5	21.4	13.0	37.1	15.0	16.9				
Change Period (Y+Rc), s	5.3	5.3	5.3	4.9	5.3	5.3	4.9	5.3				
Max Green Setting (Gmax), s	11.7	28.7	12.7	31.1	7.7	32.7	10.1	33.7				
Max Q Clear Time (g_c+I1), s	7.1	20.0	6.0	11.0	9.8	30.6	12.1	7.9				
Green Ext Time (p_c), s	0.1	3.1	0.1	2.2	0.0	1.2	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay	35.2											
HCM 2010 LOS	D											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	221	192	76	264	54	155	794	103	105	933	255
Future Volume (veh/h)	188	221	192	76	264	54	155	794	103	105	933	255
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		0.98	1.00		0.98	1.00		0.97	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	204	240	209	83	287	59	168	863	112	114	1014	277
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	363	278	148	579	233	179	1315	171	165	1124	305
Arrive On Green	0.12	0.20	0.20	0.09	0.16	0.16	0.11	0.42	0.40	0.10	0.41	0.39
Sat Flow, veh/h	1634	1863	1427	1634	3539	1424	1634	3139	407	1634	2741	745
Grp Volume(v), veh/h	204	240	209	83	287	59	168	486	489	114	653	638
Grp Sat Flow(s),veh/h/ln	1634	1863	1427	1634	1770	1424	1634	1770	1777	1634	1770	1716
Q Serve(g_s), s	10.0	9.8	8.1	4.0	6.1	3.0	8.4	18.1	18.1	5.5	28.3	28.7
Cycle Q Clear(g_c), s	10.0	9.8	8.1	4.0	6.1	3.0	8.4	18.1	18.1	5.5	28.3	28.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.43
Lane Grp Cap(c), veh/h	199	363	278	148	579	233	179	741	744	165	725	704
V/C Ratio(X)	1.02	0.66	0.75	0.56	0.50	0.25	0.94	0.66	0.66	0.69	0.90	0.91
Avail Cap(c_a), veh/h	199	849	650	171	1553	625	179	746	749	167	733	711
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	36.0	30.5	15.9	35.8	31.2	29.9	36.2	19.1	19.2	35.7	22.6	23.0
Incr Delay (d2), s/veh	70.3	2.1	4.1	3.3	0.7	0.6	49.3	2.1	2.1	11.4	14.0	15.4
Initial Q Delay(d3),s/veh	0.2	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	5.2	4.0	1.9	3.0	1.2	6.2	9.2	9.3	3.0	16.6	16.5
LnGrp Delay(d),s/veh	106.5	32.6	20.0	39.1	31.9	30.5	85.6	21.2	21.3	47.0	36.7	38.4
LnGrp LOS	F	C	C	D	C	C	F	C	C	D	D	D
Approach Vol, veh/h	653			429			1143			1405		
Approach Delay, s/veh	51.7			33.1			30.7			38.3		
Approach LOS	D			C			C			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	38.4	11.4	20.0	13.0	37.6	14.0	17.4				
Change Period (Y+Rc), s	5.3	5.3	5.3	4.9	5.3	5.3	4.9	5.3				
Max Green Setting (Gmax), s	7.1	33.3	7.3	36.5	7.7	32.7	9.1	34.7				
Max Q Clear Time (g_c+I1), s	7.5	20.1	6.0	11.8	10.4	30.7	12.0	8.1				
Green Ext Time (p_c), s	0.0	7.9	0.3	1.6	0.0	1.6	0.0	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay	37.7											
HCM 2010 LOS	D											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	138	74	47	135	50	48	531	28	49	282	83
Future Volume (veh/h)	168	138	74	47	135	50	48	531	28	49	282	83
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		0.98	1.00		0.98	1.00		0.96	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	166	173	80	51	147	54	52	577	30	53	307	90
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	959	739	84	1168	473	85	747	39	90	598	172
Arrive On Green	0.24	0.52	0.52	0.05	0.33	0.33	0.05	0.22	0.21	0.05	0.22	0.21
Sat Flow, veh/h	1634	1863	1435	1634	3539	1432	1634	3416	177	1634	2700	776
Grp Volume(v), veh/h	166	173	80	51	147	54	52	298	309	53	199	198
Grp Sat Flow(s),veh/h/ln	1634	1863	1435	1634	1770	1432	1634	1770	1824	1634	1770	1706
Q Serve(g_s), s	8.6	5.0	2.9	3.1	2.9	2.6	3.1	15.8	15.9	3.2	9.9	10.3
Cycle Q Clear(g_c), s	8.6	5.0	2.9	3.1	2.9	2.6	3.1	15.8	15.9	3.2	9.9	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.45
Lane Grp Cap(c), veh/h	386	959	739	84	1168	473	85	387	399	90	392	378
V/C Ratio(X)	0.43	0.18	0.11	0.61	0.13	0.11	0.61	0.77	0.77	0.59	0.51	0.52
Avail Cap(c_a), veh/h	386	959	739	126	1168	473	88	517	533	127	559	539
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)	0.91	0.91	0.91	1.00	1.00	1.00	0.96	0.96	0.96	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	13.0	12.5	46.4	23.4	23.3	46.4	36.7	36.8	46.2	34.1	34.6
Incr Delay (d2), s/veh	0.7	0.4	0.3	6.9	0.2	0.5	10.7	4.8	4.8	6.1	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	2.6	1.2	1.5	1.4	1.1	1.7	8.2	8.5	1.6	4.9	5.0
LnGrp Delay(d),s/veh	33.1	13.3	12.7	53.3	23.6	23.8	57.1	41.6	41.6	52.3	35.2	35.7
LnGrp LOS	C	B	B	D	C	C	E	D	D	D	D	D
Approach Vol, veh/h	419			252			659			450		
Approach Delay, s/veh	21.1			29.7			42.8			37.4		
Approach LOS	C			C			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	25.9	9.1	55.5	9.2	26.1	27.6	37.0				
Change Period (Y+Rc), s	5.3	5.3	5.3	4.9	5.3	5.3	4.9	5.3				
Max Green Setting (Gmax), s	6.5	27.9	6.4	38.4	4.1	30.3	13.1	31.7				
Max Q Clear Time (g_c+I1), s	5.2	17.9	5.1	7.0	5.1	12.3	10.6	4.9				
Green Ext Time (p_c), s	0.3	1.6	0.0	1.5	0.0	1.5	0.2	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay	34.5											
HCM 2010 LOS	C											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	→	↱	↰	→	↱	↰	→	↱	↰	→	↱
Traffic Volume (veh/h)	168	148	87	47	141	54	55	536	28	56	290	83
Future Volume (veh/h)	168	148	87	47	141	54	55	536	28	56	290	83
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		0.98	1.00		0.98	1.00		0.97	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	172	176	95	51	153	59	60	583	30	61	315	90
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	456	350	107	610	246	115	1022	53	115	814	228
Arrive On Green	0.15	0.24	0.24	0.07	0.17	0.17	0.07	0.30	0.27	0.07	0.30	0.27
Sat Flow, veh/h	1634	1863	1429	1634	3539	1425	1634	3419	176	1634	2718	763
Grp Volume(v), veh/h	172	176	95	51	153	59	60	301	312	61	203	202
Grp Sat Flow(s), veh/h/ln	1634	1863	1429	1634	3539	1425	1634	3419	176	1634	2718	763
Q Serve(g_s), s	5.2	4.0	2.8	1.5	1.9	1.8	1.8	7.4	7.4	1.8	4.7	4.9
Cycle Q Clear(g_c), s	5.2	4.0	2.8	1.5	1.9	1.8	1.8	7.4	7.4	1.8	4.7	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.45
Lane Grp Cap(c), veh/h	238	456	350	107	610	246	115	529	546	115	530	512
V/C Ratio(X)	0.72	0.39	0.27	0.48	0.25	0.24	0.52	0.57	0.57	0.53	0.38	0.39
Avail Cap(c_a), veh/h	287	1257	965	239	2285	920	169	1053	1086	204	1091	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	16.1	15.7	23.1	18.4	18.3	23.0	15.2	15.2	23.0	14.2	14.5
Incr Delay (d2), s/veh	6.9	0.5	0.4	3.2	0.2	0.5	3.7	1.0	0.9	3.7	0.5	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	2.8	2.1	1.1	0.8	1.0	0.7	0.9	3.7	3.9	0.9	2.3	2.3
LnGrp Delay(d),s/veh	27.8	16.7	16.1	26.3	18.6	18.8	26.7	16.1	16.2	26.7	14.7	15.0
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h	443			263			673			466		
Approach Delay, s/veh	20.9			20.1			17.1			16.4		
Approach LOS	C			C			B			B		

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	19.3	7.4	16.9	7.6	19.4	11.5	12.8
Change Period (Y+Rc), s	5.3	5.3	5.3	* 5.3	5.3	5.3	4.9	5.3
Max Green Setting (Gmax), s	5.1	29.2	6.2	* 34	4.0	30.3	8.1	31.8
Max Q Clear Time (g_c+I1), s	3.8	9.4	3.5	6.0	3.8	6.9	7.2	3.9
Green Ext Time (p_c), s	0.0	3.6	0.0	1.8	0.0	3.7	0.0	1.8

Intersection Summary

HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	157	84	54	154	57	77	855	45	63	363	107
Future Volume (veh/h)	192	157	84	54	154	57	77	855	45	63	363	107
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		0.98	1.00		0.97	1.00		0.97	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	190	198	91	59	167	62	84	929	49	68	395	116
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	344	264	191	517	208	136	1284	68	115	979	284
Arrive On Green	0.16	0.18	0.18	0.12	0.15	0.15	0.08	0.38	0.36	0.07	0.36	0.34
Sat Flow, veh/h	1634	1863	1426	1634	3539	1422	1634	3414	180	1634	2696	782
Grp Volume(v), veh/h	190	198	91	59	167	62	84	482	496	68	258	253
Grp Sat Flow(s),veh/h/ln	1634	1863	1426	1634	1770	1422	1634	1770	1825	1634	1770	1708
Q Serve(g_s), s	7.1	6.2	2.5	2.1	2.7	2.5	3.2	14.9	14.9	2.6	6.9	7.1
Cycle Q Clear(g_c), s	7.1	6.2	2.5	2.1	2.7	2.5	3.2	14.9	14.9	2.6	6.9	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.46
Lane Grp Cap(c), veh/h	255	344	264	191	517	208	136	665	686	115	643	620
V/C Ratio(X)	0.75	0.57	0.35	0.31	0.32	0.30	0.62	0.72	0.72	0.59	0.40	0.41
Avail Cap(c_a), veh/h	411	1158	887	251	1857	746	205	934	963	154	878	848
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	25.7	23.7	11.4	25.7	24.4	24.3	28.2	17.0	17.1	28.7	15.1	15.4
Incr Delay (d2), s/veh	4.3	1.5	0.8	0.9	0.4	0.8	4.5	1.7	1.6	4.7	0.4	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	3.5	3.3	1.3	1.0	1.3	1.0	1.6	7.5	7.8	1.3	3.4	3.4
LnGrp Delay(d),s/veh	30.0	25.2	12.1	26.6	24.7	25.1	32.7	18.7	18.7	33.4	15.5	15.8
LnGrp LOS	C	C	B	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h	479			288			1062			579		
Approach Delay, s/veh	24.6			25.2			19.8			17.8		
Approach LOS	C			C			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.5	27.9	11.5	15.8	9.3	27.1	13.9	13.3				
Change Period (Y+Rc), s	5.3	5.3	5.3	4.9	5.3	5.3	4.9	5.3				
Max Green Setting (Gmax), s	4.7	32.3	8.5	38.7	6.7	30.3	15.1	32.1				
Max Q Clear Time (g_c+I1), s	4.6	16.9	4.1	8.2	5.2	9.1	9.1	4.7				
Green Ext Time (p_c), s	0.0	5.3	0.4	1.0	0.0	5.9	0.3	1.1				
Intersection Summary												
HCM 2010 Ctrl Delay	20.9											
HCM 2010 LOS	C											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	192	167	97	54	160	61	84	860	45	70	371	107
Future Volume (veh/h)	192	167	97	54	160	61	84	860	45	70	371	107
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		0.98	1.00		0.98	1.00		0.97	1.00		0.98
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	1716	1863	1716	1716	1863	1716	1716	1863	1750	1716	1863	1750
Adj Flow Rate, veh/h	196	201	105	59	174	66	91	935	49	76	403	116
Adj No. of Lanes	1	1	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	346	265	194	520	209	144	1273	67	125	978	278
Arrive On Green	0.16	0.19	0.19	0.12	0.15	0.15	0.09	0.37	0.35	0.08	0.36	0.34
Sat Flow, veh/h	1634	1863	1426	1634	3539	1422	1634	3415	179	1634	2709	771
Grp Volume(v), veh/h	196	201	105	59	174	66	91	484	500	76	262	257
Grp Sat Flow(s),veh/h/ln	1634	1863	1426	1634	1770	1422	1634	1770	1825	1634	1770	1710
Q Serve(g_s), s	7.5	6.4	3.0	2.1	2.9	2.7	3.5	15.3	15.4	2.9	7.2	7.4
Cycle Q Clear(g_c), s	7.5	6.4	3.0	2.1	2.9	2.7	3.5	15.3	15.4	2.9	7.2	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.45
Lane Grp Cap(c), veh/h	257	346	265	194	520	209	144	659	680	125	639	617
V/C Ratio(X)	0.76	0.58	0.40	0.30	0.33	0.32	0.63	0.73	0.73	0.61	0.41	0.42
Avail Cap(c_a), veh/h	317	1045	800	242	1822	732	161	878	906	146	862	833
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	26.2	24.1	11.6	26.2	24.8	24.8	28.6	17.6	17.6	29.0	15.5	15.8
Incr Delay (d2), s/veh	8.4	1.5	1.0	0.9	0.4	0.9	6.5	2.2	2.1	5.3	0.4	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	4.0	3.4	1.2	1.0	1.4	1.1	1.8	7.8	8.0	1.5	3.6	3.5
LnGrp Delay(d),s/veh	34.5	25.7	12.5	27.0	25.2	25.6	35.1	19.8	19.8	34.4	16.0	16.3
LnGrp LOS	C	C	B	C	C	C	D	B	B	C	B	B
Approach Vol, veh/h	502			299			1075			595		
Approach Delay, s/veh	26.4			25.7			21.1			18.5		
Approach LOS	C			C			C			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	28.2	11.7	16.1	9.7	27.4	14.2	13.5				
Change Period (Y+Rc), s	5.3	5.3	5.3	4.9	5.3	5.3	4.9	5.3				
Max Green Setting (Gmax), s	4.5	30.9	8.3	35.5	5.1	30.3	11.7	32.1				
Max Q Clear Time (g_c+I1), s	4.9	17.4	4.1	8.4	5.5	9.4	9.5	4.9				
Green Ext Time (p_c), s	0.0	5.1	0.4	1.1	0.0	6.0	0.1	1.1				
Intersection Summary												
HCM 2010 Ctrl Delay	22.1											
HCM 2010 LOS	C											

Intersection 8
Union Ave & Pacheco Rd



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	108	88	59	130	50	78	448	36	95	741	179
Future Volume (veh/h)	114	108	88	59	130	50	78	448	36	95	741	179
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		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	124	117	96	64	141	54	85	487	39	103	805	195
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	448	343	91	246	94	134	1256	503	143	1014	246
Arrive On Green	0.10	0.24	0.24	0.06	0.19	0.18	0.08	0.35	0.35	0.09	0.36	0.35
Sat Flow, veh/h	1634	1863	1429	1634	1275	488	1634	3539	1416	1634	2808	680
Grp Volume(v), veh/h	124	117	96	64	0	195	85	487	39	103	507	493
Grp Sat Flow(s),veh/h/ln	1634	1863	1429	1634	0	1763	1634	1770	1416	1634	1770	1719
Q Serve(g_s), s	4.5	3.1	2.3	2.4	0.0	6.2	3.1	6.3	1.1	3.8	15.7	15.8
Cycle Q Clear(g_c), s	4.5	3.1	2.3	2.4	0.0	6.2	3.1	6.3	1.1	3.8	15.7	15.8
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	169	448	343	91	0	340	134	1256	503	143	639	621
V/C Ratio(X)	0.73	0.26	0.28	0.70	0.00	0.57	0.64	0.39	0.08	0.72	0.79	0.79
Avail Cap(c_a), veh/h	320	1003	769	272	0	897	229	1853	741	365	1074	1043
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	18.9	9.3	28.4	0.0	22.5	27.3	14.8	13.1	27.2	17.5	17.6
Incr Delay (d2), s/veh	6.0	0.3	0.4	9.3	0.0	1.5	5.0	0.2	0.1	6.6	2.3	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	2.3	1.6	1.2	1.3	0.0	3.1	1.6	3.1	0.4	1.9	8.0	7.8
LnGrp Delay(d),s/veh	32.7	19.2	9.7	37.7	0.0	24.1	32.2	15.0	13.2	33.8	19.8	20.0
LnGrp LOS	C	B	A	D		C	C	B	B	C	B	B
Approach Vol, veh/h	337			259			611			1103		
Approach Delay, s/veh	21.5			27.4			17.3			21.2		
Approach LOS	C			C			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	9.4	25.8	7.4	18.7	9.0	26.1	10.3	15.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	13.2	31.6	9.7	32.5	8.1	36.7	11.5	30.7				
Max Q Clear Time (g_c+I1), s	5.8	8.3	4.4	5.1	5.1	17.8	6.5	8.2				
Green Ext Time (p_c), s	0.1	2.4	0.1	1.4	0.8	3.9	0.1	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				20.9								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	108	88	59	130	50	78	448	36	95	743	179
Future Volume (veh/h)	114	108	88	59	130	50	78	448	36	95	743	179
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		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	124	117	96	64	141	54	85	487	39	103	808	195
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	448	344	91	246	94	133	1251	501	143	1012	244
Arrive On Green	0.10	0.24	0.24	0.06	0.19	0.18	0.08	0.35	0.35	0.09	0.36	0.35
Sat Flow, veh/h	1634	1863	1429	1634	1275	488	1634	3539	1416	1634	2811	678
Grp Volume(v), veh/h	124	117	96	64	0	195	85	487	39	103	509	494
Grp Sat Flow(s),veh/h/ln	1634	1863	1429	1634	0	1763	1634	1770	1416	1634	1770	1719
Q Serve(g_s), s	4.5	3.1	2.3	2.3	0.0	6.1	3.1	6.3	1.1	3.7	15.8	15.8
Cycle Q Clear(g_c), s	4.5	3.1	2.3	2.3	0.0	6.1	3.1	6.3	1.1	3.7	15.8	15.8
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	169	448	344	91	0	341	133	1251	501	143	637	619
V/C Ratio(X)	0.73	0.26	0.28	0.70	0.00	0.57	0.64	0.39	0.08	0.72	0.80	0.80
Avail Cap(c_a), veh/h	300	989	759	268	0	902	225	1694	678	359	992	964
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	18.8	9.2	28.3	0.0	22.4	27.2	14.8	13.1	27.1	17.5	17.6
Incr Delay (d2), s/veh	6.1	0.3	0.4	9.3	0.0	1.5	5.1	0.2	0.1	6.6	2.6	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	2.3	1.6	1.0	1.3	0.0	3.1	1.6	3.1	0.4	1.9	8.1	7.9
LnGrp Delay(d),s/veh	32.6	19.1	9.6	37.6	0.0	23.9	32.2	15.0	13.2	33.7	20.1	20.3
LnGrp LOS	C	B	A	D		C	C	B	B	C	C	C
Approach Vol, veh/h	337			259			611			1106		
Approach Delay, s/veh	21.4			27.3			17.3			21.4		
Approach LOS	C			C			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	9.4	25.6	7.4	18.7	9.0	26.0	10.3	15.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	12.9	28.7	9.5	31.9	7.9	33.7	10.7	30.7				
Max Q Clear Time (g_c+I1), s	5.7	8.3	4.3	5.1	5.1	17.8	6.5	8.1				
Green Ext Time (p_c), s	0.1	2.4	0.0	1.4	0.8	3.7	0.1	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				21.0								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	195	159	107	235	90	141	809	65	172	1338	323
Future Volume (veh/h)	206	195	159	107	235	90	141	809	65	172	1338	323
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		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	224	212	173	116	255	98	153	879	71	187	1454	351
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	310	237	286	291	112	128	1363	546	220	1250	292
Arrive On Green	0.11	0.17	0.17	0.17	0.23	0.22	0.08	0.39	0.39	0.13	0.44	0.44
Sat Flow, veh/h	1634	1863	1424	1634	1274	490	1634	3539	1417	1634	2833	661
Grp Volume(v), veh/h	224	212	173	116	0	353	153	879	71	187	889	916
Grp Sat Flow(s),veh/h/ln	1634	1863	1424	1634	0	1764	1634	1770	1417	1634	1770	1724
Q Serve(g_s), s	13.0	12.3	13.3	7.3	0.0	22.2	9.0	23.4	2.2	12.9	50.8	50.8
Cycle Q Clear(g_c), s	13.0	12.3	13.3	7.3	0.0	22.2	9.0	23.4	2.2	12.9	50.8	50.8
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	185	310	237	286	0	403	128	1363	546	220	781	761
V/C Ratio(X)	1.21	0.68	0.73	0.41	0.00	0.88	1.20	0.64	0.13	0.85	1.14	1.20
Avail Cap(c_a), veh/h	185	532	407	286	0	478	128	1363	546	253	781	761
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	45.1	45.5	42.2	0.0	42.9	53.0	28.9	7.9	48.7	32.1	32.2
Incr Delay (d2), s/veh	135.5	2.7	4.3	0.9	0.0	14.7	142.2	1.1	0.1	21.1	77.4	103.9
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	12.8	6.6	5.5	3.4	0.0	12.4	9.1	11.6	1.4	7.1	41.5	46.1
LnGrp Delay(d),s/veh	186.5	47.8	49.8	43.1	0.0	57.6	195.3	30.0	8.0	69.8	109.6	136.2
LnGrp LOS	F	D	D	D		E	F	C	A	E	F	F
Approach Vol, veh/h	609			469			1103			1992		
Approach Delay, s/veh	99.4			54.0			51.5			118.1		
Approach LOS	F			D			D			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.5	48.3	24.1	23.2	13.0	54.8	17.0	30.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	17.3	41.5	10.8	32.4	8.5	50.3	12.5	30.7				
Max Q Clear Time (g_c+I1), s	14.9	25.4	9.3	15.3	11.0	52.8	15.0	24.2				
Green Ext Time (p_c), s	0.1	4.4	0.3	1.3	0.0	0.0	0.0	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay	90.6											
HCM 2010 LOS	F											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	195	159	107	235	90	141	809	65	172	1340	323
Future Volume (veh/h)	206	195	159	107	235	90	141	809	65	172	1340	323
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		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	224	212	173	116	255	98	153	879	71	187	1457	351
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	299	228	296	291	112	128	1363	546	220	1251	291
Arrive On Green	0.11	0.16	0.16	0.18	0.23	0.22	0.08	0.39	0.39	0.13	0.44	0.44
Sat Flow, veh/h	1634	1863	1423	1634	1274	490	1634	3539	1417	1634	2835	660
Grp Volume(v), veh/h	224	212	173	116	0	353	153	879	71	187	890	918
Grp Sat Flow(s),veh/h/ln	1634	1863	1423	1634	0	1764	1634	1770	1417	1634	1770	1725
Q Serve(g_s), s	13.0	12.4	10.9	7.2	0.0	22.2	9.0	23.4	2.2	12.9	50.8	50.8
Cycle Q Clear(g_c), s	13.0	12.4	10.9	7.2	0.0	22.2	9.0	23.4	2.2	12.9	50.8	50.8
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	185	299	228	296	0	403	128	1363	546	220	781	761
V/C Ratio(X)	1.21	0.71	0.76	0.39	0.00	0.88	1.20	0.64	0.13	0.85	1.14	1.21
Avail Cap(c_a), veh/h	185	532	407	296	0	478	128	1363	546	253	781	761
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	45.8	30.6	41.5	0.0	42.9	53.0	28.9	7.7	48.7	32.1	32.2
Incr Delay (d2), s/veh	135.5	3.1	5.1	0.8	0.0	14.7	142.2	1.1	0.1	21.1	78.1	104.8
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	12.8	6.6	4.9	3.3	0.0	12.4	9.1	11.6	1.4	7.1	41.7	46.3
LnGrp Delay(d),s/veh	186.5	48.9	35.7	42.4	0.0	57.6	195.3	30.0	7.8	69.8	110.2	137.1
LnGrp LOS	F	D	D	D		E	F	C	A	E	F	F
Approach Vol, veh/h	609			469			1103			1995		
Approach Delay, s/veh	95.8			53.8			51.5			118.8		
Approach LOS	F			D			D			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.5	48.3	24.8	22.5	13.0	54.8	17.0	30.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	17.3	41.5	10.8	32.4	8.5	50.3	12.5	30.7				
Max Q Clear Time (g_c+I1), s	14.9	25.4	9.2	14.4	11.0	52.8	15.0	24.2				
Green Ext Time (p_c), s	0.1	11.7	0.3	1.3	0.0	0.0	0.0	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay	90.4											
HCM 2010 LOS	F											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	195	159	107	235	90	141	809	65	172	1340	323
Future Volume (veh/h)	206	195	159	107	235	90	141	809	65	172	1340	323
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		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	224	212	173	116	255	98	153	879	71	187	1457	351
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	467	358	145	295	113	170	1402	561	214	1200	279
Arrive On Green	0.11	0.25	0.25	0.09	0.23	0.23	0.10	0.40	0.40	0.26	0.85	0.84
Sat Flow, veh/h	1634	1863	1430	1634	1274	490	1634	3539	1417	1634	2834	660
Grp Volume(v), veh/h	224	212	173	116	0	353	153	879	71	187	890	918
Grp Sat Flow(s),veh/h/ln	1634	1863	1430	1634	0	1764	1634	1770	1417	1634	1770	1724
Q Serve(g_s), s	13.0	11.5	9.4	8.4	0.0	23.1	11.1	23.9	3.8	13.1	50.8	50.8
Cycle Q Clear(g_c), s	13.0	11.5	9.4	8.4	0.0	23.1	11.1	23.9	3.8	13.1	50.8	50.8
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	177	467	358	145	0	408	170	1402	561	214	749	730
V/C Ratio(X)	1.27	0.45	0.48	0.80	0.00	0.87	0.90	0.63	0.13	0.87	1.19	1.26
Avail Cap(c_a), veh/h	177	511	392	154	0	459	170	1402	561	242	749	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.26	0.26	0.26
Uniform Delay (d), s/veh	53.5	38.0	22.2	53.6	0.0	44.4	53.2	29.1	23.0	43.3	9.2	9.4
Incr Delay (d2), s/veh	156.5	0.7	1.0	24.0	0.0	14.6	42.0	2.1	0.5	8.4	88.5	118.8
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	13.5	6.0	3.8	4.7	0.0	12.9	7.0	12.1	1.6	6.4	40.9	46.0
LnGrp Delay(d),s/veh	210.0	38.7	23.2	77.7	0.0	59.0	95.2	31.2	23.5	51.7	97.7	128.2
LnGrp LOS	F	D	C	E		E	F	C	C	D	F	F
Approach Vol, veh/h	609			469			1103			1995		
Approach Delay, s/veh	97.3			63.7			39.6			107.4		
Approach LOS	F			E			D			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.7	51.5	14.7	34.1	16.5	54.8	17.0	31.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	17.3	41.5	10.8	32.4	8.5	50.3	12.5	30.7				
Max Q Clear Time (g_c+I1), s	15.1	25.9	10.4	13.5	13.1	52.8	15.0	25.1				
Green Ext Time (p_c), s	0.1	4.3	0.0	2.7	0.0	0.0	0.0	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				83.1								
HCM 2010 LOS				F								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	60	46	14	49	53	39	391	28	30	367	56
Future Volume (veh/h)	117	60	46	14	49	53	39	391	28	30	367	56
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		0.98	1.00		0.97	1.00		0.97	1.00		0.96
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	127	65	50	15	53	58	42	425	30	33	399	61
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	383	293	31	98	107	712	2044	821	49	525	80
Arrive On Green	0.10	0.21	0.21	0.02	0.12	0.12	0.44	0.58	0.58	0.03	0.17	0.17
Sat Flow, veh/h	1634	1863	1427	1634	801	877	1634	3539	1421	1634	3064	464
Grp Volume(v), veh/h	127	65	50	15	0	111	42	425	30	33	229	231
Grp Sat Flow(s),veh/h/ln	1634	1863	1427	1634	0	1678	1634	1770	1421	1634	1770	1759
Q Serve(g_s), s	7.2	2.7	0.9	0.9	0.0	5.9	1.4	5.5	0.9	1.9	11.7	11.9
Cycle Q Clear(g_c), s	7.2	2.7	0.9	0.9	0.0	5.9	1.4	5.5	0.9	1.9	11.7	11.9
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	168	383	293	31	0	204	712	2044	821	49	303	301
V/C Ratio(X)	0.76	0.17	0.17	0.48	0.00	0.54	0.06	0.21	0.04	0.68	0.75	0.77
Avail Cap(c_a), veh/h	275	827	634	86	0	551	712	2044	821	120	462	459
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	0.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	41.5	31.1	3.4	46.1	0.0	39.4	15.5	9.6	8.7	45.6	37.5	37.6
Incr Delay (d2), s/veh	6.8	0.2	0.3	11.1	0.0	2.2	0.0	0.2	0.1	14.4	15.1	16.0
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	3.6	1.4	0.4	0.5	0.0	2.9	0.6	2.7	0.4	1.1	7.0	7.1
LnGrp Delay(d),s/veh	48.2	31.3	3.7	57.3	0.0	41.6	15.6	9.9	8.7	60.1	52.5	53.6
LnGrp LOS	D	C	A	E		D	B	A	A	E	D	D
Approach Vol, veh/h	242			126			497			493		
Approach Delay, s/veh	34.5			43.5			10.3			53.5		
Approach LOS	C			D			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	6.8	58.9	5.8	23.5	45.4	20.3	13.8	15.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	6.5	24.3	4.5	41.7	6.5	24.3	15.5	30.7				
Max Q Clear Time (g_c+I1), s	3.9	7.5	2.9	4.7	3.4	13.9	9.2	7.9				
Green Ext Time (p_c), s	0.0	1.8	0.0	0.8	0.7	1.2	0.4	0.3				
Intersection Summary												
HCM 2010 Ctrl Delay				33.4								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	60	46	14	49	53	39	391	28	30	368	56
Future Volume (veh/h)	117	60	46	14	49	53	39	391	28	30	368	56
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		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	127	65	50	15	53	58	42	425	30	33	400	61
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	474	364	47	138	151	84	865	345	73	729	110
Arrive On Green	0.11	0.25	0.25	0.03	0.17	0.16	0.05	0.24	0.24	0.04	0.24	0.22
Sat Flow, veh/h	1634	1863	1430	1634	803	879	1634	3539	1410	1634	3067	464
Grp Volume(v), veh/h	127	65	50	15	0	111	42	425	30	33	229	232
Grp Sat Flow(s),veh/h/ln	1634	1863	1430	1634	0	1682	1634	1770	1410	1634	1770	1762
Q Serve(g_s), s	2.8	1.0	0.6	0.3	0.0	2.2	0.9	3.9	0.6	0.7	4.2	4.3
Cycle Q Clear(g_c), s	2.8	1.0	0.6	0.3	0.0	2.2	0.9	3.9	0.6	0.7	4.2	4.3
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	182	474	364	47	0	288	84	865	345	73	421	419
V/C Ratio(X)	0.70	0.14	0.14	0.32	0.00	0.38	0.50	0.49	0.09	0.45	0.55	0.55
Avail Cap(c_a), veh/h	612	2028	1557	197	0	1404	306	2121	845	280	1032	1027
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	10.8	4.0	17.8	0.0	13.9	17.3	12.1	10.9	17.4	12.5	12.6
Incr Delay (d2), s/veh	4.7	0.1	0.2	3.8	0.0	0.8	4.6	0.4	0.1	4.4	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.5	0.4	0.2	0.0	1.1	0.5	1.9	0.2	0.4	2.2	2.2
LnGrp Delay(d),s/veh	20.7	10.9	4.2	21.6	0.0	14.7	21.9	12.6	11.0	21.8	13.6	13.7
LnGrp LOS	C	B	A	C		B	C	B	B	C	B	B
Approach Vol, veh/h	242			126			497			494		
Approach Delay, s/veh	14.7			15.5			13.2			14.2		
Approach LOS	B			B			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.7	13.1	5.1	13.5	5.9	12.9	8.2	10.4				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.9	21.9	4.0	40.2	6.5	21.3	13.5	30.7				
Max Q Clear Time (g_c+I1), s	2.7	5.9	2.3	3.0	2.9	6.3	4.8	4.2				
Green Ext Time (p_c), s	0.0	1.8	0.0	0.8	0.7	1.4	0.2	0.8				
Intersection Summary												
HCM 2010 Ctrl Delay	14.1											
HCM 2010 LOS	B											



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	108	83	25	88	96	70	706	51	54	663	101
Future Volume (veh/h)	211	108	83	25	88	96	70	706	51	54	663	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		0.98	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	229	117	90	27	96	104	76	767	55	59	721	110
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	306	636	489	51	150	162	141	1186	474	84	921	140
Arrive On Green	0.19	0.34	0.34	0.03	0.19	0.18	0.09	0.34	0.34	0.05	0.30	0.29
Sat Flow, veh/h	1634	1863	1433	1634	808	876	1634	3539	1415	1634	3065	467
Grp Volume(v), veh/h	229	117	90	27	0	200	76	767	55	59	416	415
Grp Sat Flow(s),veh/h/ln	1634	1863	1433	1634	0	1684	1634	1770	1415	1634	1770	1763
Q Serve(g_s), s	8.8	2.9	1.9	1.1	0.0	7.3	3.0	12.2	1.8	2.4	14.3	14.3
Cycle Q Clear(g_c), s	8.8	2.9	1.9	1.1	0.0	7.3	3.0	12.2	1.8	2.4	14.3	14.3
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	306	636	489	51	0	312	141	1186	474	84	532	530
V/C Ratio(X)	0.75	0.18	0.18	0.53	0.00	0.64	0.54	0.65	0.12	0.70	0.78	0.78
Avail Cap(c_a), veh/h	614	1393	1071	160	0	790	270	2002	800	251	980	976
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	15.4	6.8	31.7	0.0	25.2	29.1	18.8	15.3	31.0	21.3	21.3
Incr Delay (d2), s/veh	3.7	0.1	0.2	8.3	0.0	2.2	3.2	0.6	0.1	10.1	2.6	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	4.3	1.5	1.1	0.6	0.0	3.6	1.5	6.1	0.7	1.3	7.3	7.3
LnGrp Delay(d),s/veh	29.2	15.5	6.9	40.0	0.0	27.3	32.3	19.4	15.4	41.1	23.8	23.9
LnGrp LOS	C	B	A	D		C	C	B	B	D	C	C
Approach Vol, veh/h	436			227			898			890		
Approach Delay, s/veh	20.9			28.8			20.2			25.0		
Approach LOS	C			C			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.4	26.3	6.1	26.7	9.7	24.0	16.4	16.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	9.7	37.1	6.0	49.2	10.5	36.3	24.5	30.7				
Max Q Clear Time (g_c+I1), s	4.4	14.2	3.1	4.9	5.0	16.3	10.8	9.3				
Green Ext Time (p_c), s	0.0	3.9	0.0	1.6	2.0	3.1	1.3	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				22.9								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	108	83	25	88	96	70	706	51	54	664	101
Future Volume (veh/h)	211	108	83	25	88	96	70	706	51	54	664	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		0.97	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	229	117	90	27	96	104	76	767	55	59	722	110
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	263	201	367	151	164	132	1178	471	84	930	142
Arrive On Green	0.18	0.14	0.14	0.22	0.19	0.18	0.08	0.33	0.33	0.05	0.30	0.30
Sat Flow, veh/h	1634	1863	1421	1634	808	876	1634	3539	1415	1634	3066	467
Grp Volume(v), veh/h	229	117	90	27	0	200	76	767	55	59	417	415
Grp Sat Flow(s),veh/h/ln	1634	1863	1421	1634	0	1684	1634	1770	1415	1634	1770	1763
Q Serve(g_s), s	8.6	3.7	3.7	0.8	0.0	7.0	2.9	11.8	0.8	2.3	13.8	13.8
Cycle Q Clear(g_c), s	8.6	3.7	3.7	0.8	0.0	7.0	2.9	11.8	0.8	2.3	13.8	13.8
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	292	263	201	367	0	316	132	1178	471	84	537	535
V/C Ratio(X)	0.78	0.44	0.45	0.07	0.00	0.63	0.58	0.65	0.12	0.70	0.78	0.78
Avail Cap(c_a), veh/h	586	1388	1059	367	0	819	229	2031	812	204	988	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	25.2	25.2	19.6	0.0	24.2	28.4	18.2	3.0	29.9	20.3	20.4
Incr Delay (d2), s/veh	4.6	1.2	1.6	0.1	0.0	2.1	3.9	0.6	0.1	10.1	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	2.0	1.5	0.4	0.0	3.5	1.4	5.9	0.6	1.3	7.1	7.1
LnGrp Delay(d),s/veh	29.7	26.4	26.8	19.7	0.0	26.3	32.3	18.8	3.2	40.0	22.8	22.9
LnGrp LOS	C	C	C	B		C	C	B	A	D	C	C
Approach Vol, veh/h	436			227			898			891		
Approach Delay, s/veh	28.2			25.5			19.0			24.0		
Approach LOS	C			C			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	7.3	25.3	18.4	13.1	9.2	23.5	15.5	16.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.5	36.3	5.9	47.3	8.5	35.3	22.5	30.7				
Max Q Clear Time (g_c+I1), s	4.3	13.8	2.8	5.7	4.9	15.8	10.6	9.0				
Green Ext Time (p_c), s	0.0	3.8	0.2	0.7	1.4	3.0	0.6	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			23.1									
HCM 2010 LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	108	83	25	88	96	70	706	51	54	664	101
Future Volume (veh/h)	211	108	83	25	88	96	70	706	51	54	664	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		0.97	1.00		0.98	1.00		0.97	1.00		0.97
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	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	229	117	90	27	96	104	76	767	55	59	722	110
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	227	173	339	135	146	410	1620	650	81	786	120
Arrive On Green	0.16	0.12	0.12	0.21	0.17	0.16	0.25	0.46	0.46	0.10	0.51	0.50
Sat Flow, veh/h	1634	1863	1418	1634	808	875	1634	3539	1419	1634	3065	467
Grp Volume(v), veh/h	229	117	90	27	0	200	76	767	55	59	417	415
Grp Sat Flow(s),veh/h/ln	1634	1863	1418	1634	0	1683	1634	1770	1419	1634	1770	1762
Q Serve(g_s), s	13.4	5.8	5.8	1.3	0.0	11.0	3.6	14.7	1.0	3.4	21.2	21.3
Cycle Q Clear(g_c), s	13.4	5.8	5.8	1.3	0.0	11.0	3.6	14.7	1.0	3.4	21.2	21.3
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	266	227	173	339	0	281	410	1620	650	81	454	452
V/C Ratio(X)	0.86	0.52	0.52	0.08	0.00	0.71	0.19	0.47	0.08	0.73	0.92	0.92
Avail Cap(c_a), veh/h	283	798	608	339	0	536	410	1620	650	103	502	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	40.0	40.3	40.4	31.3	0.0	38.7	28.8	18.4	3.0	43.5	22.9	23.1
Incr Delay (d2), s/veh	21.9	1.8	2.4	0.1	0.0	3.3	0.2	1.0	0.3	15.9	24.4	24.6
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	7.7	3.1	2.4	0.6	0.0	5.4	1.7	7.4	0.4	1.9	13.3	13.2
LnGrp Delay(d),s/veh	61.8	42.1	42.8	31.4	0.0	42.1	29.1	19.4	3.3	59.4	47.3	47.7
LnGrp LOS	E	D	D	C		D	C	B	A	E	D	D
Approach Vol, veh/h	436			227			898			891		
Approach Delay, s/veh	52.6			40.8			19.2			48.3		
Approach LOS	D			D			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	8.8	48.9	24.4	15.9	28.6	29.1	19.9	20.3				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.7	27.1	5.7	41.5	5.5	27.3	16.5	30.7				
Max Q Clear Time (g_c+I1), s	5.4	16.7	3.3	7.8	5.6	23.3	15.4	13.0				
Green Ext Time (p_c), s	0.0	2.9	0.2	0.7	0.0	1.3	0.1	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				37.7								
HCM 2010 LOS				D								

VEHICLE TURNING MOVEMENT COUNT

#1 Union Avenue & Planz Road - PM PEAK HOUR

LOCATION #:	1	PEAK HOUR	4:30 PM to 5:30 PM
NORTH / SOUTH:	Union Avenue	DATE:	6/15/2023
EAST / WEST:	Planz Road	VICINITY:	Bakersfield, CA

DIRECTION:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTALS:
4:30 PM	7	142	0	7	191	28	20	2	8	3	1	9	418
4:45 PM	9	124	6	0	131	16	17	3	9	4	1	5	325
5:00 PM	11	129	1	0	181	41	34	3	6	7	7	10	430
5:15 PM	13	103	0	9	128	18	33	3	11	0	4	6	328
VOLUME STATS:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
TOTAL:	40	498	7	16	631	103	104	11	34	14	13	30	1501
P.H.F:		0.914			0.830			0.793			0.594		0.873

(1) Peak Hour Factor (directional aggregate)

VEHICLE TURNING MOVEMENT COUNT

#1 Union Avenue & Planz Road - AM PEAK HOUR

LOCATION #:	1	PEAK HOUR	7:30 AM to 8:30 AM
NORTH / SOUTH:	Union Avenue	DATE:	6/15/2023
EAST / WEST:	Planz Road	VICINITY:	Bakersfield, CA

DIRECTION:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTALS:
7:30 AM	3	148	3	5	57	16	46	5	9	0	2	2	296
7:45 AM	4	156	3	9	62	13	24	4	3	3	2	0	283
8:00 AM	11	100	2	7	78	12	13	6	3	2	2	3	239
8:15 AM	5	96	1	6	80	3	22	4	3	2	1	2	225
VOLUME STATS:	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
TOTAL:	23	500	9	27	277	44	105	19	18	7	7	7	1043
1P.H.F:		0.816			0.897			0.592			0.750		0.881

(1) Peak Hour Factor (directional aggregate)

Date: 6/13/2023
City: Bakersfield, CA

Peak Hr Begin:	7:15													
PHV	1003	0	312	0	620	1	0	0	0	0	1198	0	3134	
PHF	0.901			0.882			0.000			0.954				

Total Volume:	1651	0	733	0	1724	0	0	0	0	0	3020	0	7128
Approach %	69%	0%	31%	0%	100%	0%	0%	0%	0%	0%	100%	0%	

Location ID: 2
 North/South: SR 99 NB Off-Ramp
 East/West: White Lane

Date: 6/13/2023
 City: Bakersfield, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
6:30	0	0	0	122	72	0	14	0	18	0	112	0	338
6:45	0	0	0	119	65	0	23	0	27	0	114	0	348
7:00	0	0	0	103	81	0	28	0	35	0	101	0	348
7:15	0	0	0	127	104	0	20	0	27	0	160	0	438
7:30	0	0	0	180	127	0	32	0	45	0	156	0	540
7:45	0	0	0	120	128	0	46	0	43	0	185	0	522
8:00	0	0	0	107	110	0	29	0	37	0	181	0	464
8:15	0	0	0	94	89	0	22	0	42	0	138	0	385

Total Volume:	0	0	0	972	776	0	214	0	274	0	1147	0	3383
Approach %	0%	0%	0%	56%	44%	0%	0%	0%	0%	0%	100%	0%	

Peak Hr Begin:	7:15												
PHV	0	0	0	534	469	0	127	0	152	0	682	0	1964
PHF	0.000			0.817			0.784			0.922			

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	0	0	0	83	146	0	40	0	52	0	239	0	560
16:15	0	0	0	94	159	0	52	0	60	0	258	0	623
16:30	0	0	0	93	152	0	57	0	66	0	249	0	617
16:45	0	0	0	76	148	0	39	0	67	0	276	0	606
17:00	0	0	0	102	145	0	48	0	65	0	270	0	630
17:15	0	0	0	105	166	0	52	0	75	0	269	0	667
17:30	0	0	0	97	162	0	40	0	64	0	239	0	602
17:45	0	0	0	91	161	0	54	0	54	0	220	0	580

Total Volume:	0	0	0	741	1239	0	382	0	503	0	2020	0	4885
Approach %	0%	0%	0%	37%	63%	0%	0%	0%	0%	0%	100%	0%	

Location ID: 3
 North/South: Hughes Lane
 East/West: White Lane

Date: 6/13/2023
 City: Bakersfield, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
6:30	19	15	7	2	108	4	4	13	66	22	75	12	347
6:45	18	16	2	8	92	3	2	15	50	23	89	13	331
7:00	19	19	7	6	101	5	6	30	53	18	81	21	366
7:15	20	32	13	9	117	12	12	29	87	27	122	24	504
7:30	27	37	12	10	188	20	16	45	79	48	105	24	611
7:45	23	23	13	10	128	5	15	34	60	52	136	27	526
8:00	18	15	16	8	134	13	6	31	58	42	125	25	491
8:15	16	29	11	3	110	13	10	23	54	28	91	31	419

Total Volume:	160	186	81	56	978	75	71	220	507	260	824	177	3595
Approach %	37%	44%	19%	5%	88%	7%	0%	0%	0%	21%	65%	14%	

Peak Hr Begin:	7:15												
PHV	88	107	54	37	567	50	49	139	284	169	488	100	2132
PHF	0.819			0.750			0.843			0.880			

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	35	49	25	17	165	26	11	47	49	48	186	50	708
16:15	33	57	16	14	182	28	10	31	51	75	205	37	739
16:30	39	55	30	16	142	23	16	38	47	66	163	46	681
16:45	20	69	38	19	165	27	11	40	34	60	197	37	717
17:00	32	62	37	20	168	36	26	44	64	62	209	47	807
17:15	35	83	38	18	162	32	23	51	67	60	190	45	804
17:30	21	70	26	23	177	31	17	43	51	53	185	42	739
17:45	19	51	30	25	182	18	18	37	50	52	188	33	703

Location ID: 4
 North/South: Union Ave
 East/West: Pacheco Rd

Date: 7/13/2021
 City: Bakersfield, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
6:30	3	40	5	8	8	0	2	73	10	7	14	28	198
6:45	16	64	4	9	20	5	4	82	8	8	19	15	254
7:00	9	68	8	12	16	9	4	117	13	8	25	40	329
7:15	15	74	7	15	21	5	6	138	11	15	28	42	377
7:30	12	89	6	13	14	5	12	89	9	10	17	41	317
7:45	14	80	7	10	7	1	6	114	11	9	13	24	296
8:00	20	80	11	18	14	4	5	86	9	14	18	28	307
8:15	10	118	6	12	14	4	5	102	10	13	12	24	330

Total Volume:	99	613	54	97	114	33	44	801	81	84	146	242	2408
Approach %	13%	80%	7%	40%	47%	14%	5%	87%	9%	18%	31%	51%	

Peak Hr Begin:	7:30												
PHV	50	311	28	50	58	20	28	458	44	42	83	147	1319
PHF	0.909			0.780			0.855			0.800			0.875

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	35	160	23	20	29	11	5	143	19	14	32	28	519
16:15	22	186	12	16	28	14	7	118	15	26	25	34	503
16:30	49	191	24	11	31	21	11	107	24	12	31	32	544
16:45	34	185	26	10	35	12	4	110	20	29	20	23	508
17:00	43	167	18	16	26	13	13	120	20	18	32	27	513
17:15	53	198	27	13	38	13	8	111	14	29	25	32	561
17:30	25	169	15	13	19	14	11	91	17	27	29	24	454
17:45	30	175	19	12	25	17	2	105	26	13	21	20	465

Total Volume:	291	1431	164	111	231	115	61	905	155	168	215	220	4067
Approach %	15%	76%	9%	24%	51%	25%	5%	81%	14%	28%	36%	36%	

Location ID: 4
 North/South: S H Street
 East/West: White Lane

Date: 6/13/2023
 City: Bakersfield, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
6:30	12	37	9	7	66	4	3	53	26	12	37	25	291
6:45	11	32	6	5	70	10	4	65	21	12	62	35	333
7:00	19	40	16	7	65	11	14	53	26	14	52	27	344
7:15	15	47	13	17	94	25	42	76	31	27	92	38	517
7:30	27	58	18	28	118	35	38	123	55	23	90	44	657
7:45	20	61	14	23	84	27	36	126	40	15	89	50	585
8:00	27	47	15	11	93	15	7	82	30	19	83	36	465
8:15	20	41	18	15	89	22	10	76	29	21	63	29	433

Total Volume:	151	363	109	113	679	149	154	654	258	143	568	284	3625
Approach %	24%	58%	17%	12%	72%	16%	0%	0%	0%	14%	57%	29%	

Peak Hr Begin:	7:15												
PHV	89	213	60	79	389	102	123	407	156	84	354	168	2224
PHF	0.879			0.787			0.794			0.965			

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	50	133	35	25	104	35	23	97	47	56	136	50	791
16:15	36	147	38	13	124	22	17	92	61	54	127	48	779
16:30	40	148	27	32	102	29	16	78	53	56	158	51	790
16:45	37	132	32	17	134	15	14	67	42	63	148	58	759
17:00	49	167	37	18	103	32	11	106	35	57	142	65	822
17:15	36	194	37	29	141	16	19	89	51	60	167	54	893
17:30	38	173	28	17	111	22	12	88	45	51	141	65	791
17:45	42	122	27	12	103	21	11	67	50	66	109	41	671

Total Volume:	328	1216	261	163	922	192	123	684	384	463	1128	432	6296
Approach %	18%	67%	14%	13%	72%	15%	0%	0%	0%	23%	56%	21%	

Location ID: 5
 North/South: Monitor Street
 East/West: White Lane

Date: 6/13/2023
 City: Bakersfield, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
6:30	4	7	0	1	37	6	9	3	13	8	31	0	119
6:45	1	4	0	0	48	4	5	7	9	8	52	2	140
7:00	4	5	2	1	54	5	12	23	24	10	37	1	178
7:15	4	16	1	8	58	7	8	48	37	16	45	0	248
7:30	14	51	3	3	91	10	21	53	26	16	78	2	368
7:45	13	20	1	6	65	6	16	38	27	12	81	2	287
8:00	2	12	0	2	63	8	18	14	16	12	69	3	219
8:15	2	6	1	1	64	5	18	18	22	12	65	3	217

Total Volume:	44	121	8	22	480	51	107	204	174	94	458	13	1776
Approach %	25%	70%	5%	4%	87%	9%	0%	0%	0%	17%	81%	2%	

Peak Hr Begin:	7:15												
PHV	33	99	5	19	277	31	63	153	106	56	273	7	1122
PHF	0.504			0.786			0.805			0.875			

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	18	46	3	3	108	17	20	20	26	33	103	2	399
16:15	3	25	1	1	97	20	18	22	23	35	119	5	369
16:30	4	24	4	2	113	7	11	13	28	41	98	5	350
16:45	4	34	1	3	114	20	9	21	22	37	108	3	376
17:00	1	22	3	8	120	17	20	15	28	30	128	7	399
17:15	3	29	1	1	112	26	13	18	32	35	128	8	406
17:30	5	23	2	0	99	19	16	20	25	32	92	6	339
17:45	2	20	0	2	93	10	17	16	20	34	89	4	307

Total Volume:	40	223	15	20	856	136	124	145	204	277	865	40	2945
Approach %	14%	80%	5%	2%	85%	13%	0%	0%	0%	23%	73%	3%	

Location ID: 6
 North/South: Union Avenue
 East/West: White Lane

Date: 6/13/2023
 City: Bakersfield, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
6:30	11	40	7	5	20	2	4	89	11	5	23	25	242
6:45	11	54	8	8	19	14	5	88	11	14	16	21	269
7:00	10	42	6	4	22	14	8	88	16	12	20	29	271
7:15	18	59	8	10	34	7	9	105	10	12	26	30	328
7:30	20	81	10	16	39	5	6	156	15	15	30	55	448
7:45	19	74	11	14	39	12	11	147	13	18	49	47	454
8:00	23	67	13	13	26	16	7	130	8	24	26	31	384
8:15	21	60	15	7	31	14	4	98	12	17	33	35	347

Total Volume:	133	477	78	77	230	84	54	901	96	117	223	273	2743
Approach %	19%	69%	11%	20%	59%	21%	0%	0%	0%	19%	36%	45%	

Peak Hr Begin:	7:30												
PHV	83	282	49	50	135	47	28	531	48	74	138	168	1633
PHF	0.932			0.892			0.857			0.833			

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	48	169	22	21	56	17	19	140	26	21	44	37	620
16:15	39	148	26	8	54	16	23	95	22	31	53	38	553
16:30	35	131	21	12	60	15	9	115	20	33	51	44	546
16:45	44	200	19	10	53	14	22	143	26	29	31	35	626
17:00	58	175	20	7	51	18	14	112	24	48	50	43	620
17:15	61	211	15	12	60	20	19	119	20	44	51	43	675
17:30	40	152	20	9	50	15	23	94	34	29	34	30	530
17:45	37	146	7	10	42	14	17	80	16	22	33	31	455

Total Volume:	362	1332	150	89	426	129	146	898	188	257	347	301	4625
Approach %	20%	72%	8%	14%	66%	20%	0%	0%	0%	28%	38%	33%	