

APPENDIX F

2020 Traffic Impact Assessment, 2023 Update and 2023 VMT Memo



1800 30th Street, Suite 260
Bakersfield, CA 93301

February 8, 2023

665-02
Electronic Mail

Mr. Danny Simon
Pacific First Capital Group
21031 Warner Center Ln, Suite B
Woodland Hills, CA 91367

REF: Supplemental Traffic Analysis for Proposed Mixed Use Project at Nason Street and
Cactus Avenue, Moreno Valley

Dear Mr. Simon,

Pursuant to your request, we have prepared a supplemental traffic analysis for the above referenced project in accordance with comments and requirements by the City of Moreno Valley. By way of background, a traffic study was prepared for the project, dated January 6, 2020 by K2 Traffic Engineering, Inc. The traffic volume data contained in this report was utilized for the supplemental traffic analysis by our office.

1. Capacity and Queuing Analysis

A queue analysis was prepared for the following left turn movements:

- Westbound left (WBL) turn at Nason Street and Cactus Avenue
- Eastbound left (EBL) turn at Lynn Lee Lane and Cactus Avenue

As discussed above, utilizing the previous traffic study turn movement volumes, the following queue lengths were determined as shown in Tables 1 and 2. All distances are in feet.

Table 1
PM Peak Hour Queue Lengths

Intersection	Cactus Ave & Nason St	Cactus Ave & Lynn Lee Ln
Movement	WBL	EBL
Existing+Project	85	41
2024+Project	98	38
2040+Project	141	46

Table 2
 AM Peak Hour Queue Lengths

Intersection	Cactus Ave & Nason St	Cactus Ave & Lynn Lee Ln
Movement	WBL	EBL
Existing+Project	89	57
2024+Project	103	56
2040+Project	125	60

From the analysis shown in tables 1 and 2, it is recommended that the following storage lengths be used:

- WBL at Cactus Avenue & Nason Street – 140 feet
- EBL at Lynn Cactus Avenue & Lee Lane - 60 feet

Analysis sheets for the level of service and queue analysis are attached to this letter.

2. Traffic Signal Warrant Analysis Lynn Lee Lane & Cactus Avenue

The project does not propose to install a signal at the intersection of Lynn Lee Lane and Cactus Avenue, therefore, signal warrants do not apply. A signal at this location is not feasible due to proximity to Nason Street.

3. Alignment Exhibit for Project Access on Cactus Avenue

A striping exhibit was prepared, based on queue analysis shown above. The exhibit is attached to this letter.

4. Fair Share Contribution Analysis

Fair share calculations were prepared for the mitigation listed in Table 14 of the traffic study. The following equation was used to calculate the fair share percentage.

$$\% \text{ Share} = \frac{\text{Project Traffic}}{(\text{Future+Project Traffic}) - \text{Existing Traffic}} \times 100\%$$

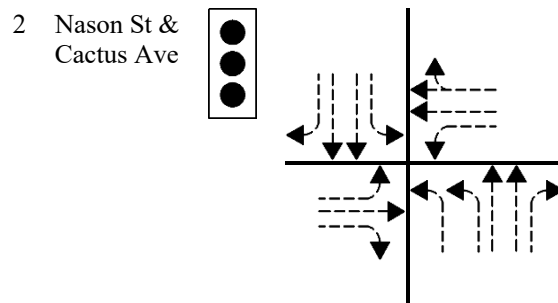
The results are shown in the following table.

#	Location	Project Trips	Existing Trips	2040+Project Trips	Project Share
7	Nason St at Iris Ave	79	2314	3827	5.22%

It is noted that analysis was run at the intersection of Cactus Avenue and Lasselle Avenue and found that mitigation is not required. See response item number 8.

5. Lane Configuration Diagram

Lane configuration diagrams were prepared for the intersection of Cactus Avenue/Nason Street and were prepared and is shown below.



6. On-Site Drive Through Queue

There are two drive through fast food restaurants shown on the site plan and included in the trip generation and level of service analysis in the traffic study. The City Standard minimum number of vehicles stacking from the service window is 8. It is not known at this time who the users will be for the drive throughs. Both drive throughs provide at least the minimum 8 vehicle stacking from the service window. Pad A provides for 8 vehicles, and pad C provides stacking for 17 vehicles.

7. Improvements to Cactus Ave & Nason Avenue

The queue length mitigation measures shown on page 3 of the traffic study should be revised to read as follows:

- Extend westbound left-turn lane on Cactus Avenue at Nason Street to provide 300 feet of storage length.
- Extend northbound left-turn lane on Nason Street at Cactus Avenue to provide 300 feet of storage length.

8. Proposed Mitigation at Cactus Ave & Lasselle Avenue

Level of service analysis was run for the intersection of Cactus Avenue and Lasselle Avenue utilizing turn movement volumes from the original study. The following table shows the resultant level of service. The analysis indicates that mitigation measures are not required at this intersection, as it will operate at a LOS D with and without the project in the near term and future year.

Intersection Level of Service PM Peak Hour

#	Intersection	Control Type	2019	2019+ Project	2024	2024+ Project	2040	2040+ Project
1	Lasselle St & Cactus Ave	Signal	D (42.4)	D (43.4)	D (45.7)	D (47.1)	D (45.4)	D (46.8)

Intersection Level of Service AM Peak Hour

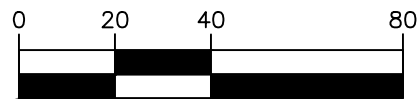
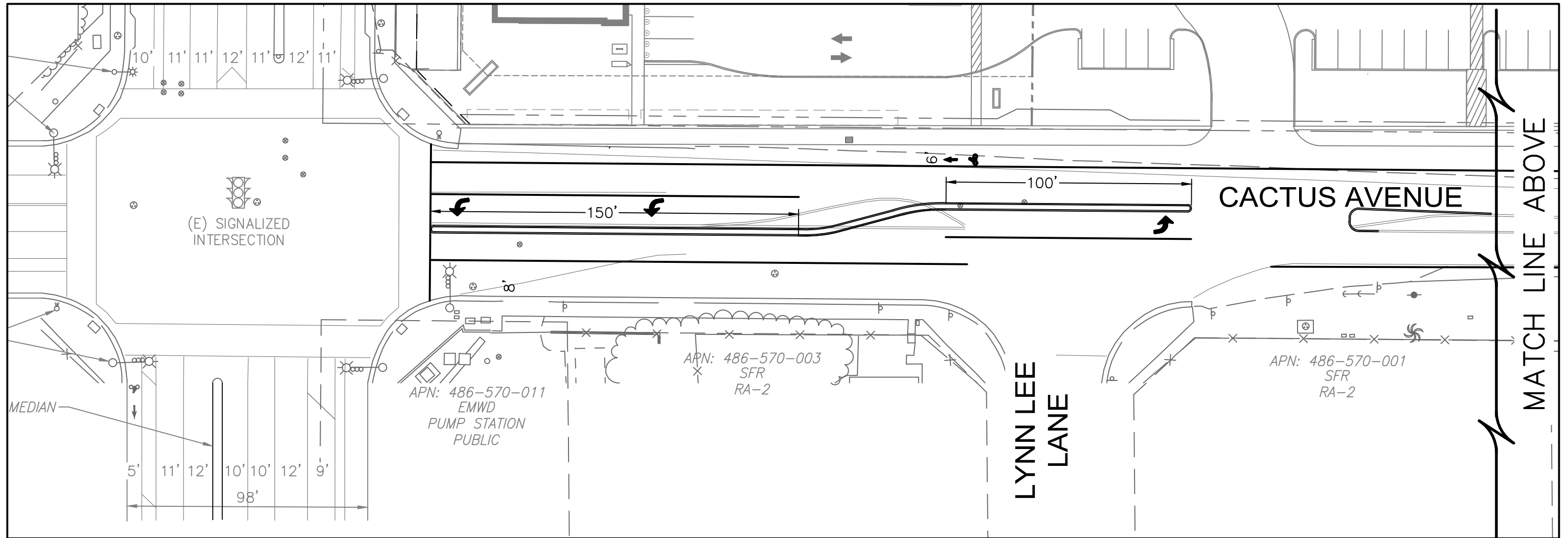
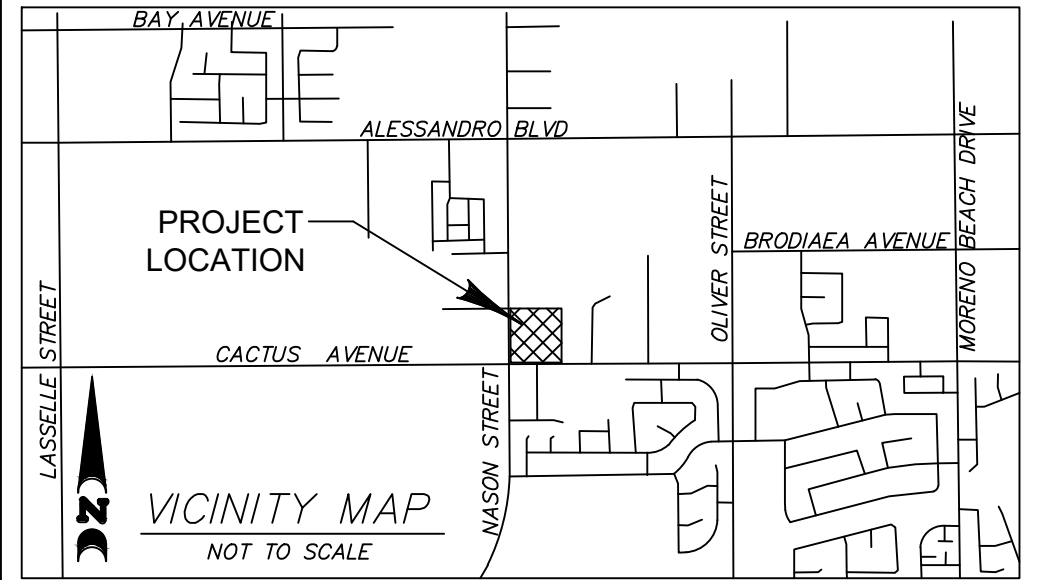
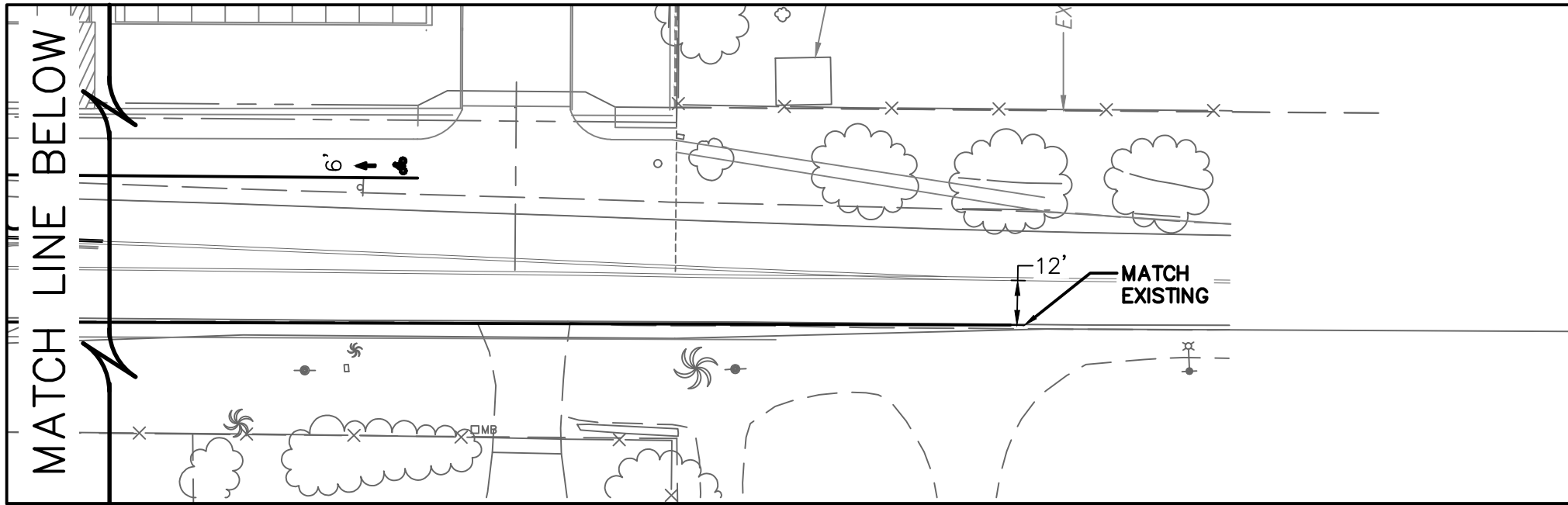
#	Intersection	Control Type	2019	2019+ Project	2024	2024+ Project	2040	2040+ Project
1	Lasselle St & Cactus Ave	Signal	D (47.9)	D (49.5)	D (53.7)	D (54.0)	D (53.9)	D (52.6)

Please contact me should you have any questions.

Very truly yours,

Ian J. Parks

Attachments



1 inch = 40 ft.

Striping Plan
Exhibit

DATE: 02-08-23 JOB#: 665-02

**RUETTIGERS
& SCHULER**
CIVIL ENGINEERS

Queue Analysis

Intersection: 2: Nason St & Cactus Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	L	L	T	T	R	L
Maximum Queue (ft)	225	527	45	119	130	187	28	107	211	186	78	159
Average Queue (ft)	127	187	17	40	69	85	2	41	121	74	19	82
95th Queue (ft)	213	369	40	85	116	139	13	84	185	156	51	136
Link Distance (ft)		1200	1200		236	236			467	467		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			95			250	250			330	300
Storage Blk Time (%)	2	5		4	2							
Queuing Penalty (veh)	6	10		5	1							

Intersection: 2: Nason St & Cactus Ave

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	198	159	72
Average Queue (ft)	121	81	34
95th Queue (ft)	199	151	61
Link Distance (ft)	732	732	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			330
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lynn Lee Ln & Cactus Ave

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	48	27	74
Average Queue (ft)	16	6	41
95th Queue (ft)	41	24	65
Link Distance (ft)		415	261
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 22

Intersection: 2: Nason St & Cactus Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	L	L	T	T	R	L
Maximum Queue (ft)	225	568	47	119	132	197	28	113	248	229	44	197
Average Queue (ft)	143	241	14	43	86	100	3	43	145	102	16	89
95th Queue (ft)	244	452	31	98	134	162	16	86	224	205	42	154
Link Distance (ft)		1200	1200		236	236			467	467		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			95			250	250			330	300
Storage Blk Time (%)	4	11		2	5				0			
Queuing Penalty (veh)	15	20		4	3				0			

Intersection: 2: Nason St & Cactus Ave

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	192	146	72
Average Queue (ft)	127	86	36
95th Queue (ft)	192	141	65
Link Distance (ft)	732	732	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			330
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lynn Lee Ln & Cactus Ave

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	52	28	26	114
Average Queue (ft)	12	2	2	53
95th Queue (ft)	38	13	15	90
Link Distance (ft)			415	261
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	100	50		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 42

Intersection: 2: Nason St & Cactus Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	L	L	T	T	R	L
Maximum Queue (ft)	225	577	47	120	263	238	49	275	501	500	355	325
Average Queue (ft)	152	253	21	104	162	168	11	101	357	308	39	222
95th Queue (ft)	249	436	44	141	275	242	34	277	520	474	180	340
Link Distance (ft)		1200	1200		236	236			467	467		
Upstream Blk Time (%)					12	2			6	2		
Queuing Penalty (veh)					35	5			0	0		
Storage Bay Dist (ft)	200			95			250	250			330	300
Storage Blk Time (%)	2	19		50	11			0	26	6	0	14
Queuing Penalty (veh)	10	37		82	12			0	17	4	0	70

Intersection: 2: Nason St & Cactus Ave

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	747	679	53
Average Queue (ft)	314	268	29
95th Queue (ft)	603	499	51
Link Distance (ft)	732	732	
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			330
Storage Blk Time (%)	1	0	
Queuing Penalty (veh)	3	0	

Intersection: 3: Lynn Lee Ln & Cactus Ave

Movement	EB	WB	WB	WB	NB	SB
Directions Served	L	L	T	TR	LTR	LTR
Maximum Queue (ft)	50	31	116	75	52	285
Average Queue (ft)	17	1	12	7	9	95
95th Queue (ft)	46	10	62	37	32	194
Link Distance (ft)			3594	3594	415	566
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	50				
Storage Blk Time (%)		0	6			
Queuing Penalty (veh)		0	0			

Network Summary

Network wide Queuing Penalty: 273

Intersection: 2: Nason St & Cactus Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	L	L	T	T	R	L
Maximum Queue (ft)	224	237	57	120	177	238	135	177	201	187	44	132
Average Queue (ft)	109	152	17	54	119	139	20	92	139	109	15	67
95th Queue (ft)	185	224	43	103	173	197	89	146	199	185	40	115
Link Distance (ft)		1200	1200		236	236			467	467		
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						1						
Storage Bay Dist (ft)	200			95			250	250			330	300
Storage Blk Time (%)	0	2		1	13							
Queuing Penalty (veh)	0	3		1	6							

Intersection: 2: Nason St & Cactus Ave

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	161	134	115
Average Queue (ft)	109	51	54
95th Queue (ft)	155	123	95
Link Distance (ft)	732	732	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			330
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lynn Lee Ln & Cactus Ave

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	72	26	27	75
Average Queue (ft)	20	1	3	37
95th Queue (ft)	57	8	16	56
Link Distance (ft)			415	261
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	100	50		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 11

Intersection: 2: Nason St & Cactus Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	L	L	T	T	R	L
Maximum Queue (ft)	225	399	50	120	210	224	168	242	316	230	45	182
Average Queue (ft)	113	160	16	47	130	134	50	116	141	103	13	91
95th Queue (ft)	218	284	37	103	189	203	150	188	221	185	34	164
Link Distance (ft)		1200	1200		236	236			467	467		
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)	200			95			250	250			330	300
Storage Blk Time (%)	1	4		1	17			0	1			
Queuing Penalty (veh)	3	8		3	9			0	1			

Intersection: 2: Nason St & Cactus Ave

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	163	140	146
Average Queue (ft)	108	55	65
95th Queue (ft)	157	109	114
Link Distance (ft)	732	732	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			330
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Lynn Lee Ln & Cactus Ave

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	77	26	117
Average Queue (ft)	24	2	45
95th Queue (ft)	56	12	87
Link Distance (ft)		415	261
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 24

Intersection: 2: Nason St & Cactus Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	TR	L	L	T	T	R	L
Maximum Queue (ft)	225	860	83	119	243	241	162	275	482	424	355	325
Average Queue (ft)	185	325	17	68	136	157	55	201	312	252	34	202
95th Queue (ft)	278	665	41	125	213	236	132	328	450	365	136	312
Link Distance (ft)		1200	1200		236	236			467	467		
Upstream Blk Time (%)					1	2			1			
Queuing Penalty (veh)					3	7			0			
Storage Bay Dist (ft)	200			95			250	250			330	300
Storage Blk Time (%)	30	15		4	19			0	21	3	0	2
Queuing Penalty (veh)	111	25		10	15			1	32	2	0	7

Intersection: 2: Nason St & Cactus Ave

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	366	298	147
Average Queue (ft)	184	132	57
95th Queue (ft)	304	229	110
Link Distance (ft)	732	732	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			330
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 3: Lynn Lee Ln & Cactus Ave

Movement	EB	WB	WB	WB	NB	SB
Directions Served	L	L	T	TR	LTR	LTR
Maximum Queue (ft)	97	29	46	50	26	152
Average Queue (ft)	28	2	3	5	4	45
95th Queue (ft)	60	13	19	28	19	94
Link Distance (ft)			3594	3594	415	261
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	100	50				
Storage Blk Time (%)	0		0			
Queuing Penalty (veh)	1		0			

Network Summary

Network wide Queuing Penalty: 214

Intersection 1
Lasselle St & Cactus Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↕		↙	↕	↗	↙	↕	↗	↙	↕	
Traffic Volume (veh/h)	57	323	190	190	303	34	137	553	165	29	550	22
Future Volume (veh/h)	57	323	190	190	303	34	137	553	165	29	550	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	64	363	213	221	352	40	173	700	0	37	696	28
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	431	249	246	1064	439	183	1470	606	45	1148	46
Arrive On Green	0.05	0.20	0.20	0.15	0.30	0.30	0.11	0.42	0.00	0.03	0.33	0.33
Sat Flow, veh/h	1634	2163	1249	1634	3539	1458	1634	3539	1458	1634	3468	139
Grp Volume(v), veh/h	64	296	280	221	352	40	173	700	0	37	355	369
Grp Sat Flow(s),veh/h/ln	1634	1770	1642	1634	1770	1458	1634	1770	1458	1634	1770	1838
Q Serve(g_s), s	4.5	18.6	19.1	15.4	9.0	2.3	12.2	16.7	0.0	2.6	19.5	19.5
Cycle Q Clear(g_c), s	4.5	18.6	19.1	15.4	9.0	2.3	12.2	16.7	0.0	2.6	19.5	19.5
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	81	353	328	246	1064	439	183	1470	606	45	586	608
V/C Ratio(X)	0.79	0.84	0.86	0.90	0.33	0.09	0.94	0.48	0.00	0.82	0.61	0.61
Avail Cap(c_a), veh/h	197	458	425	254	1064	439	183	1470	606	99	586	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.92	0.92	0.92	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	44.6	44.8	48.4	31.5	29.2	51.1	24.7	0.0	56.1	32.5	32.5
Incr Delay (d2), s/veh	15.9	10.3	12.7	29.1	0.2	0.1	50.6	1.1	0.0	28.4	4.6	4.4
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	2.4	10.1	9.8	8.9	4.4	0.9	8.1	8.4	0.0	1.5	10.2	10.6
LnGrp Delay(d),s/veh	70.5	55.0	57.5	77.5	31.7	29.2	101.7	25.8	0.0	84.5	37.1	36.9
LnGrp LOS	E	D	E	E	C	C	F	C		F	D	D
Approach Vol, veh/h		640			613			873			761	
Approach Delay, s/veh		57.6			48.0			40.9			39.3	
Approach LOS		E			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	9.2	54.2	23.5	29.1	19.0	44.4	11.7	40.9				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	37.0	18.0	30.0	13.0	31.0	14.0	34.0				
Max Q Clear Time (g_c+I1), s	4.6	18.7	17.4	21.1	14.2	21.5	6.5	11.0				
Green Ext Time (p_c), s	0.0	7.8	0.1	2.0	0.0	5.2	0.1	2.6				
Intersection Summary												
HCM 2010 Ctrl Delay					45.7							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↕		↙	↕	↗	↙	↕	↗	↙	↕	
Traffic Volume (veh/h)	57	336	190	206	323	48	137	553	175	38	550	22
Future Volume (veh/h)	57	336	190	206	323	48	137	553	175	38	550	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	64	378	213	240	376	56	173	700	0	48	696	28
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	447	248	254	1094	451	183	1409	581	60	1119	45
Arrive On Green	0.05	0.20	0.20	0.16	0.31	0.31	0.11	0.40	0.00	0.04	0.32	0.32
Sat Flow, veh/h	1634	2197	1220	1634	3539	1458	1634	3539	1458	1634	3468	139
Grp Volume(v), veh/h	64	303	288	240	376	56	173	700	0	48	355	369
Grp Sat Flow(s),veh/h/ln	1634	1770	1647	1634	1770	1458	1634	1770	1458	1634	1770	1838
Q Serve(g_s), s	4.5	19.1	19.5	16.9	9.5	3.2	12.2	17.2	0.0	3.4	19.7	19.7
Cycle Q Clear(g_c), s	4.5	19.1	19.5	16.9	9.5	3.2	12.2	17.2	0.0	3.4	19.7	19.7
Prop In Lane	1.00		0.74	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	81	360	335	254	1094	451	183	1409	581	60	571	593
V/C Ratio(X)	0.79	0.84	0.86	0.95	0.34	0.12	0.94	0.50	0.00	0.80	0.62	0.62
Avail Cap(c_a), veh/h	197	458	426	254	1094	451	183	1409	581	99	571	593
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	0.88	0.88	0.88	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	44.4	44.6	48.5	31.0	28.8	51.1	26.2	0.0	55.5	33.3	33.3
Incr Delay (d2), s/veh	15.9	11.0	13.3	38.8	0.2	0.1	50.6	1.3	0.0	21.4	5.0	4.9
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	2.4	10.5	10.1	10.3	4.7	1.3	8.1	8.6	0.0	1.9	10.5	10.8
LnGrp Delay(d),s/veh	70.5	55.4	57.9	87.3	31.1	28.9	101.7	27.4	0.0	76.9	38.3	38.2
LnGrp LOS	E	E	E	F	C	C	F	C		E	D	D
Approach Vol, veh/h		655			672			873			772	
Approach Delay, s/veh		58.0			51.0			42.2			40.6	
Approach LOS		E			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	10.2	52.2	24.0	29.6	19.0	43.4	11.7	41.9				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	37.0	18.0	30.0	13.0	31.0	14.0	34.0				
Max Q Clear Time (g_c+I1), s	5.4	19.2	18.9	21.5	14.2	21.7	6.5	11.5				
Green Ext Time (p_c), s	0.0	7.7	0.0	2.0	0.0	5.2	0.1	2.9				
Intersection Summary												
HCM 2010 Ctrl Delay				47.3								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗	↖	↖	↖↗	↖	↖	↖↗	
Traffic Volume (veh/h)	78	367	210	213	341	38	151	627	188	32	618	33
Future Volume (veh/h)	78	367	210	213	341	38	151	627	188	32	618	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	88	412	236	248	397	44	191	794	0	41	782	42
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	476	270	254	1086	447	183	1375	567	51	1050	56
Arrive On Green	0.07	0.22	0.22	0.16	0.31	0.31	0.11	0.39	0.00	0.03	0.31	0.31
Sat Flow, veh/h	1634	2179	1235	1634	3539	1458	1634	3539	1458	1634	3417	183
Grp Volume(v), veh/h	88	334	314	248	397	44	191	794	0	41	405	419
Grp Sat Flow(s),veh/h/ln	1634	1770	1645	1634	1770	1458	1634	1770	1458	1634	1770	1830
Q Serve(g_s), s	6.2	21.1	21.4	17.5	10.2	2.5	13.0	20.5	0.0	2.9	23.8	23.9
Cycle Q Clear(g_c), s	6.2	21.1	21.4	17.5	10.2	2.5	13.0	20.5	0.0	2.9	23.8	23.9
Prop In Lane	1.00		0.75	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	109	386	359	254	1086	447	183	1375	567	51	544	563
V/C Ratio(X)	0.81	0.86	0.87	0.98	0.37	0.10	1.04	0.58	0.00	0.81	0.74	0.74
Avail Cap(c_a), veh/h	197	458	425	254	1086	447	183	1375	567	99	544	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	43.7	43.8	48.8	31.4	28.7	51.5	28.0	0.0	55.9	36.1	36.1
Incr Delay (d2), s/veh	12.9	13.8	16.1	47.7	0.2	0.1	78.3	1.8	0.0	25.3	8.9	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	11.8	11.3	11.3	5.0	1.0	9.8	10.4	0.0	1.7	12.9	13.3
LnGrp Delay(d),s/veh	66.3	57.5	59.9	96.5	31.6	28.8	129.9	29.7	0.0	81.1	45.0	44.7
LnGrp LOS	E	E	E	F	C	C	F	C		F	D	D
Approach Vol, veh/h		736			689			985			865	
Approach Delay, s/veh		59.6			54.8			49.1			46.6	
Approach LOS		E			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	9.6	51.1	24.0	31.3	19.0	41.7	13.8	41.6				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	37.0	18.0	30.0	13.0	31.0	14.0	34.0				
Max Q Clear Time (g_c+I1), s	4.9	22.5	19.5	23.4	15.0	25.9	8.2	12.2				
Green Ext Time (p_c), s	0.0	7.8	0.0	1.9	0.0	3.6	0.1	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay				52.0								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖	↖	↗	↖	↖	↗	
Traffic Volume (veh/h)	78	380	210	229	361	52	151	627	198	41	618	33
Future Volume (veh/h)	78	380	210	229	361	52	151	627	198	41	618	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	88	427	236	266	420	60	191	794	0	52	782	42
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	490	268	254	1098	452	183	1332	549	65	1038	56
Arrive On Green	0.07	0.22	0.22	0.16	0.31	0.31	0.11	0.38	0.00	0.04	0.30	0.30
Sat Flow, veh/h	1634	2209	1210	1634	3539	1458	1634	3539	1458	1634	3417	183
Grp Volume(v), veh/h	88	341	322	266	420	60	191	794	0	52	405	419
Grp Sat Flow(s),veh/h/ln	1634	1770	1649	1634	1770	1458	1634	1770	1458	1634	1770	1830
Q Serve(g_s), s	6.2	21.6	21.9	18.0	10.8	3.4	13.0	20.9	0.0	3.7	24.0	24.0
Cycle Q Clear(g_c), s	6.2	21.6	21.9	18.0	10.8	3.4	13.0	20.9	0.0	3.7	24.0	24.0
Prop In Lane	1.00		0.73	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	109	393	366	254	1098	452	183	1332	549	65	538	556
V/C Ratio(X)	0.81	0.87	0.88	1.05	0.38	0.13	1.04	0.60	0.00	0.80	0.75	0.75
Avail Cap(c_a), veh/h	197	458	427	254	1098	452	183	1332	549	99	538	556
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	0.86	0.86	0.86	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	43.5	43.6	49.0	31.3	28.8	51.5	29.1	0.0	55.2	36.4	36.4
Incr Delay (d2), s/veh	12.9	14.6	16.8	65.9	0.2	0.1	78.3	2.0	0.0	23.0	9.4	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	12.1	11.6	12.7	5.3	1.4	9.8	10.6	0.0	2.1	13.1	13.5
LnGrp Delay(d),s/veh	66.3	58.1	60.4	114.9	31.5	28.9	129.9	31.1	0.0	78.3	45.8	45.6
LnGrp LOS	E	E	E	F	C	C	F	C		E	D	D
Approach Vol, veh/h		751			746			985			876	
Approach Delay, s/veh		60.1			61.0			50.2			47.6	
Approach LOS		E			E			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	49.6	24.0	31.7	19.0	41.3	13.8	42.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	37.0	18.0	30.0	13.0	31.0	14.0	34.0				
Max Q Clear Time (g_c+I1), s	5.7	22.9	20.0	23.9	15.0	26.0	8.2	12.8				
Green Ext Time (p_c), s	0.0	7.7	0.0	1.9	0.0	3.5	0.1	3.2				
Intersection Summary												
HCM 2010 Ctrl Delay				54.2								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷	↷	↶	↷	↷	↶	↷	↷
Traffic Volume (veh/h)	95	345	209	209	323	51	151	713	182	44	695	36
Future Volume (veh/h)	95	345	209	209	323	51	151	713	182	44	695	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	107	388	235	243	376	59	191	903	0	56	880	46
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	453	271	254	1018	420	183	1355	558	70	1073	56
Arrive On Green	0.08	0.21	0.21	0.16	0.29	0.29	0.11	0.38	0.00	0.04	0.31	0.31
Sat Flow, veh/h	1634	2133	1275	1634	3539	1458	1634	3539	1458	1634	3422	179
Grp Volume(v), veh/h	107	321	302	243	376	59	191	903	0	56	455	471
Grp Sat Flow(s),veh/h/ln	1634	1770	1638	1634	1770	1458	1634	1770	1458	1634	1770	1831
Q Serve(g_s), s	7.5	20.3	20.6	17.1	9.8	3.5	13.0	24.5	0.0	3.9	27.6	27.6
Cycle Q Clear(g_c), s	7.5	20.3	20.6	17.1	9.8	3.5	13.0	24.5	0.0	3.9	27.6	27.6
Prop In Lane	1.00		0.78	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	130	376	348	254	1018	420	183	1355	558	70	555	574
V/C Ratio(X)	0.82	0.85	0.87	0.96	0.37	0.14	1.04	0.67	0.00	0.80	0.82	0.82
Avail Cap(c_a), veh/h	197	458	424	254	1037	427	183	1355	558	99	555	574
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	0.81	0.81	0.81	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	44.0	44.1	48.6	32.9	30.7	51.5	29.7	0.0	55.0	36.8	36.8
Incr Delay (d2), s/veh	15.1	12.6	15.0	39.7	0.2	0.1	78.3	2.6	0.0	25.8	12.8	12.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	11.2	10.8	10.5	4.8	1.4	9.8	12.4	0.0	2.3	15.4	15.8
LnGrp Delay(d),s/veh	67.6	56.5	59.1	88.4	33.1	30.8	129.9	32.3	0.0	80.8	49.6	49.2
LnGrp LOS	E	E	E	F	C	C	F	C		F	D	D
Approach Vol, veh/h		730			678			1094			982	
Approach Delay, s/veh		59.2			52.7			49.3			51.2	
Approach LOS		E			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	11.0	50.4	24.0	30.6	19.0	42.4	15.3	39.4				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	37.0	18.0	30.0	13.0	31.0	14.0	34.0				
Max Q Clear Time (g_c+I1), s	5.9	26.5	19.1	22.6	15.0	29.6	9.5	11.8				
Green Ext Time (p_c), s	0.0	7.0	0.0	2.0	0.0	1.2	0.1	2.9				
Intersection Summary												
HCM 2010 Ctrl Delay				52.6								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖	↖	↗	↖	↖	↗	
Traffic Volume (veh/h)	95	358	209	225	343	65	151	713	192	53	695	36
Future Volume (veh/h)	95	358	209	225	343	65	151	713	192	53	695	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	107	402	235	262	399	76	191	903	0	67	880	46
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.86	0.86	0.86	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	466	270	254	1030	425	183	1313	541	84	1061	55
Arrive On Green	0.08	0.22	0.22	0.16	0.29	0.29	0.11	0.37	0.00	0.05	0.31	0.31
Sat Flow, veh/h	1634	2162	1249	1634	3539	1458	1634	3539	1458	1634	3422	179
Grp Volume(v), veh/h	107	328	309	262	399	76	191	903	0	67	455	471
Grp Sat Flow(s),veh/h/ln	1634	1770	1642	1634	1770	1458	1634	1770	1458	1634	1770	1831
Q Serve(g_s), s	7.5	20.7	21.1	18.0	10.4	4.5	13.0	25.0	0.0	4.7	27.7	27.7
Cycle Q Clear(g_c), s	7.5	20.7	21.1	18.0	10.4	4.5	13.0	25.0	0.0	4.7	27.7	27.7
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	130	382	354	254	1030	425	183	1313	541	84	549	568
V/C Ratio(X)	0.82	0.86	0.87	1.03	0.39	0.18	1.04	0.69	0.00	0.80	0.83	0.83
Avail Cap(c_a), veh/h	197	458	425	254	1037	427	183	1313	541	99	549	568
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	0.75	0.75	0.75	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	43.8	43.9	49.0	32.9	30.8	51.5	30.8	0.0	54.5	37.2	37.2
Incr Delay (d2), s/veh	15.1	13.3	15.6	57.8	0.2	0.1	78.3	3.0	0.0	31.9	13.5	13.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	11.5	11.1	12.2	5.1	1.8	9.8	12.7	0.0	2.9	15.6	16.1
LnGrp Delay(d),s/veh	67.6	57.1	59.5	106.9	33.0	30.9	129.9	33.8	0.0	86.3	50.7	50.3
LnGrp LOS	E	E	E	F	C	C	F	C		F	D	D
Approach Vol, veh/h		744			737			1094			993	
Approach Delay, s/veh		59.6			59.1			50.5			52.9	
Approach LOS		E			E			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	11.9	49.0	24.0	31.0	19.0	42.0	15.3	39.8				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	37.0	18.0	30.0	13.0	31.0	14.0	34.0				
Max Q Clear Time (g_c+I1), s	6.7	27.0	20.0	23.1	15.0	29.7	9.5	12.4				
Green Ext Time (p_c), s	0.0	6.8	0.0	1.9	0.0	1.1	0.1	3.1				
Intersection Summary												
HCM 2010 Ctrl Delay				54.8								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	342	185	209	421	50	188	637	291	61	485	69
Future Volume (veh/h)	54	342	185	209	421	50	188	637	291	61	485	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	54	342	185	209	421	50	188	637	0	61	485	69
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.72	0.72	0.72	0.79	0.79	0.79	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	415	220	237	1022	421	327	1466	604	76	812	115
Arrive On Green	0.04	0.19	0.19	0.14	0.29	0.29	0.20	0.41	0.00	0.05	0.26	0.26
Sat Flow, veh/h	1634	2236	1187	1634	3539	1458	1634	3539	1458	1634	3114	441
Grp Volume(v), veh/h	54	269	258	209	421	50	188	637	0	61	275	279
Grp Sat Flow(s),veh/h/ln	1634	1770	1653	1634	1770	1458	1634	1770	1458	1634	1770	1785
Q Serve(g_s), s	3.8	16.8	17.3	14.4	11.0	2.9	12.0	14.8	0.0	4.3	15.6	15.8
Cycle Q Clear(g_c), s	3.8	16.8	17.3	14.4	11.0	2.9	12.0	14.8	0.0	4.3	15.6	15.8
Prop In Lane	1.00		0.72	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	68	328	307	237	1022	421	327	1466	604	76	462	466
V/C Ratio(X)	0.79	0.82	0.84	0.88	0.41	0.12	0.58	0.43	0.00	0.80	0.60	0.60
Avail Cap(c_a), veh/h	242	462	431	270	1022	421	327	1466	604	99	462	466
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	0.83	0.83	0.83	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	45.0	45.2	48.2	33.0	30.1	41.6	24.1	0.0	54.3	37.2	37.2
Incr Delay (d2), s/veh	20.9	8.5	11.0	27.0	0.2	0.1	2.5	0.9	0.0	34.0	5.7	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.0	8.8	8.3	5.4	1.2	5.6	7.4	0.0	2.6	8.4	8.5
LnGrp Delay(d),s/veh	75.5	53.5	56.2	75.3	33.2	30.2	44.1	25.0	0.0	88.3	42.9	43.0
LnGrp LOS	E	D	E	E	C	C	D	C		F	D	D
Approach Vol, veh/h		581			680			825			615	
Approach Delay, s/veh		56.7			45.9			29.3			47.4	
Approach LOS		E			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	53.6	22.7	27.3	29.0	36.0	10.8	39.2				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	35.0	19.0	30.0	12.0	30.0	17.0	32.0				
Max Q Clear Time (g_c+I1), s	6.3	16.8	16.4	19.3	14.0	17.8	5.8	13.0				
Green Ext Time (p_c), s	0.0	4.0	0.3	2.0	0.0	2.2	0.1	2.9				
Intersection Summary												
HCM 2010 Ctrl Delay				43.5								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	362	185	218	432	58	188	637	307	75	485	69
Future Volume (veh/h)	54	362	185	218	432	58	188	637	307	75	485	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	54	362	185	218	432	58	188	637	0	75	485	69
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.72	0.72	0.72	0.79	0.79	0.79	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	435	219	245	1059	436	310	1393	574	93	812	115
Arrive On Green	0.04	0.19	0.19	0.15	0.30	0.30	0.19	0.39	0.00	0.06	0.26	0.26
Sat Flow, veh/h	1634	2282	1148	1634	3539	1458	1634	3539	1458	1634	3114	441
Grp Volume(v), veh/h	54	279	268	218	432	58	188	637	0	75	275	279
Grp Sat Flow(s),veh/h/ln	1634	1770	1660	1634	1770	1458	1634	1770	1458	1634	1770	1785
Q Serve(g_s), s	3.8	17.4	17.9	15.0	11.2	3.3	12.1	15.3	0.0	5.2	15.6	15.8
Cycle Q Clear(g_c), s	3.8	17.4	17.9	15.0	11.2	3.3	12.1	15.3	0.0	5.2	15.6	15.8
Prop In Lane	1.00		0.69	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	68	338	317	245	1059	436	310	1393	574	93	462	466
V/C Ratio(X)	0.79	0.83	0.84	0.89	0.41	0.13	0.61	0.46	0.00	0.80	0.60	0.60
Avail Cap(c_a), veh/h	242	462	433	270	1059	436	310	1393	574	99	462	466
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	0.80	0.80	0.80	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	44.7	44.9	47.9	32.2	29.4	42.7	25.8	0.0	53.6	37.2	37.2
Incr Delay (d2), s/veh	20.9	9.4	11.9	28.9	0.2	0.1	3.4	1.1	0.0	43.5	5.7	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.4	9.2	8.8	5.5	1.4	5.8	7.6	0.0	3.5	8.4	8.5
LnGrp Delay(d),s/veh	75.5	54.2	56.8	76.9	32.4	29.5	46.1	26.9	0.0	97.1	42.9	43.0
LnGrp LOS	E	D	E	E	C	C	D	C		F	D	D
Approach Vol, veh/h		601			708			825			629	
Approach Delay, s/veh		57.2			45.8			31.3			49.4	
Approach LOS		E			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.6	51.2	23.2	27.9	27.8	36.0	10.8	40.4				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	35.0	19.0	30.0	12.0	30.0	17.0	32.0				
Max Q Clear Time (g_c+I1), s	7.2	17.3	17.0	19.9	14.1	17.8	5.8	13.2				
Green Ext Time (p_c), s	0.0	3.9	0.2	2.1	0.0	2.2	0.1	3.0				
Intersection Summary												
HCM 2010 Ctrl Delay				44.8								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↕		↙	↕	↗	↙	↕	↗	↙	↕	
Traffic Volume (veh/h)	64	381	204	235	475	55	208	710	323	67	551	92
Future Volume (veh/h)	64	381	204	235	475	55	208	710	323	67	551	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	64	381	204	235	475	55	208	710	0	67	551	92
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.72	0.72	0.72	0.79	0.79	0.79	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	452	239	260	1103	455	277	1342	553	84	792	132
Arrive On Green	0.05	0.20	0.20	0.16	0.31	0.31	0.17	0.38	0.00	0.05	0.26	0.26
Sat Flow, veh/h	1634	2241	1183	1634	3539	1458	1634	3539	1458	1634	3038	506
Grp Volume(v), veh/h	64	300	285	235	475	55	208	710	0	67	320	323
Grp Sat Flow(s),veh/h/ln	1634	1770	1654	1634	1770	1458	1634	1770	1458	1634	1770	1774
Q Serve(g_s), s	4.5	18.7	19.1	16.2	12.3	3.1	13.9	17.9	0.0	4.7	18.8	18.9
Cycle Q Clear(g_c), s	4.5	18.7	19.1	16.2	12.3	3.1	13.9	17.9	0.0	4.7	18.8	18.9
Prop In Lane	1.00		0.72	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	81	357	334	260	1103	455	277	1342	553	84	462	463
V/C Ratio(X)	0.79	0.84	0.86	0.90	0.43	0.12	0.75	0.53	0.00	0.80	0.69	0.70
Avail Cap(c_a), veh/h	242	462	431	270	1103	455	277	1342	553	99	462	463
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	0.82	0.82	0.82	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	44.1	44.3	47.5	31.5	28.3	45.5	27.7	0.0	54.0	38.4	38.4
Incr Delay (d2), s/veh	17.6	11.4	14.1	34.8	0.2	0.1	11.7	1.5	0.0	38.3	8.7	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	10.3	10.0	9.8	6.0	1.3	7.2	9.1	0.0	3.0	10.3	10.4
LnGrp Delay(d),s/veh	71.7	55.6	58.4	82.3	31.7	28.4	57.2	29.2	0.0	92.3	47.0	47.2
LnGrp LOS	E	E	E	F	C	C	E	C		F	D	D
Approach Vol, veh/h		649			765			918			710	
Approach Delay, s/veh		58.4			47.0			35.6			51.4	
Approach LOS		E			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	11.9	49.6	24.3	29.2	25.5	36.0	11.7	41.8				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	35.0	19.0	30.0	12.0	30.0	17.0	32.0				
Max Q Clear Time (g_c+I1), s	6.7	19.9	18.2	21.1	15.9	20.9	6.5	14.3				
Green Ext Time (p_c), s	0.0	4.2	0.1	2.1	0.0	2.3	0.1	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay				47.0								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖	↖	↗	↖	↖	↗	↖
Traffic Volume (veh/h)	64	401	204	244	486	63	208	710	339	81	551	92
Future Volume (veh/h)	64	401	204	244	486	63	208	710	339	81	551	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	64	401	204	244	486	63	208	710	0	81	551	92
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.72	0.72	0.72	0.79	0.79	0.79	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	472	237	268	1138	469	261	1272	524	99	792	132
Arrive On Green	0.05	0.21	0.21	0.16	0.32	0.32	0.16	0.36	0.00	0.06	0.26	0.26
Sat Flow, veh/h	1634	2283	1147	1634	3539	1458	1634	3539	1458	1634	3038	506
Grp Volume(v), veh/h	64	310	295	244	486	63	208	710	0	81	320	323
Grp Sat Flow(s),veh/h/ln	1634	1770	1660	1634	1770	1458	1634	1770	1458	1634	1770	1774
Q Serve(g_s), s	4.5	19.4	19.7	16.9	12.4	3.5	14.1	18.5	0.0	5.6	18.8	18.9
Cycle Q Clear(g_c), s	4.5	19.4	19.7	16.9	12.4	3.5	14.1	18.5	0.0	5.6	18.8	18.9
Prop In Lane	1.00		0.69	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	81	366	343	268	1138	469	261	1272	524	99	462	463
V/C Ratio(X)	0.79	0.85	0.86	0.91	0.43	0.13	0.80	0.56	0.00	0.81	0.69	0.70
Avail Cap(c_a), veh/h	242	462	433	270	1138	469	261	1272	524	99	462	463
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	0.80	0.80	0.80	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	43.9	44.0	47.2	30.7	27.7	46.6	29.5	0.0	53.4	38.4	38.4
Incr Delay (d2), s/veh	17.6	12.6	15.2	37.1	0.2	0.1	17.8	1.8	0.0	49.1	8.7	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	10.7	10.5	10.4	6.1	1.4	7.6	9.3	0.0	3.9	10.3	10.4
LnGrp Delay(d),s/veh	71.7	56.4	59.2	84.3	30.9	27.8	64.4	31.3	0.0	102.4	47.0	47.2
LnGrp LOS	E	E	E	F	C	C	E	C		F	D	D
Approach Vol, veh/h		669			793			918			724	
Approach Delay, s/veh		59.1			47.1			38.8			53.3	
Approach LOS		E			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	13.0	47.3	24.9	29.8	24.3	36.0	11.7	43.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	35.0	19.0	30.0	12.0	30.0	17.0	32.0				
Max Q Clear Time (g_c+I1), s	7.6	20.5	18.9	21.7	16.1	20.9	6.5	14.4				
Green Ext Time (p_c), s	0.0	4.1	0.0	2.1	0.0	2.3	0.1	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay					48.7							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶	↷		↶	↷	↶	↶	↷	↷	↶	↷	↷
Traffic Volume (veh/h)	73	349	204	230	463	65	207	745	320	84	630	95
Future Volume (veh/h)	73	349	204	230	463	65	207	745	320	84	630	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	73	349	204	230	463	65	207	745	0	84	630	95
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.72	0.72	0.72	0.79	0.79	0.79	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	419	241	256	1040	429	295	1346	555	99	805	121
Arrive On Green	0.06	0.19	0.19	0.16	0.29	0.29	0.18	0.38	0.00	0.06	0.26	0.26
Sat Flow, veh/h	1634	2168	1245	1634	3539	1458	1634	3539	1458	1634	3086	465
Grp Volume(v), veh/h	73	284	269	230	463	65	207	745	0	84	361	364
Grp Sat Flow(s),veh/h/ln	1634	1770	1643	1634	1770	1458	1634	1770	1458	1634	1770	1781
Q Serve(g_s), s	5.1	17.7	18.2	15.9	12.2	3.8	13.7	19.0	0.0	5.9	21.8	21.9
Cycle Q Clear(g_c), s	5.1	17.7	18.2	15.9	12.2	3.8	13.7	19.0	0.0	5.9	21.8	21.9
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	92	342	318	256	1040	429	295	1346	555	99	462	465
V/C Ratio(X)	0.79	0.83	0.85	0.90	0.45	0.15	0.70	0.55	0.00	0.84	0.78	0.78
Avail Cap(c_a), veh/h	242	462	429	270	1040	429	295	1346	555	99	462	465
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	0.77	0.77	0.77	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	44.6	44.7	47.6	33.0	30.0	44.2	28.0	0.0	53.5	39.5	39.5
Incr Delay (d2), s/veh	15.7	9.8	12.6	31.5	0.2	0.1	7.6	1.7	0.0	61.0	13.5	13.6
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	2.7	9.6	9.3	9.4	6.0	1.5	6.8	9.6	0.0	4.3	12.4	12.5
LnGrp Delay(d),s/veh	69.4	54.3	57.3	79.1	33.2	30.1	51.8	29.6	0.0	114.5	53.0	53.1
LnGrp LOS	E	D	E	E	C	C	D	C		F	D	D
Approach Vol, veh/h		626			758			952			809	
Approach Delay, s/veh		57.4			46.9			34.4			59.4	
Approach LOS		E			D			C			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	49.7	24.0	28.2	26.7	36.0	12.5	39.8				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	35.0	19.0	30.0	12.0	30.0	17.0	32.0				
Max Q Clear Time (g_c+I1), s	7.9	21.0	17.9	20.2	15.7	23.9	7.1	14.2				
Green Ext Time (p_c), s	0.0	4.3	0.1	2.1	0.0	2.0	0.1	3.2				
Intersection Summary												
HCM 2010 Ctrl Delay					48.4							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖	↖	↗	↖	↖	↗	
Traffic Volume (veh/h)	73	369	204	239	474	73	207	745	336	98	630	95
Future Volume (veh/h)	73	369	204	239	474	73	207	745	336	98	630	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1750	1716	1863	1716	1716	1863	1716	1716	1863	1750
Adj Flow Rate, veh/h	73	369	204	239	474	73	207	745	0	98	630	95
Adj No. of Lanes	1	2	0	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.72	0.72	0.72	0.79	0.79	0.79	0.87	0.87	0.87	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	440	239	264	1076	443	278	1311	540	99	805	121
Arrive On Green	0.06	0.20	0.20	0.16	0.30	0.30	0.17	0.37	0.00	0.06	0.26	0.26
Sat Flow, veh/h	1634	2214	1205	1634	3539	1458	1634	3539	1458	1634	3086	465
Grp Volume(v), veh/h	73	294	279	239	474	73	207	745	0	98	361	364
Grp Sat Flow(s),veh/h/ln	1634	1770	1650	1634	1770	1458	1634	1770	1458	1634	1770	1781
Q Serve(g_s), s	5.1	18.3	18.8	16.5	12.4	4.2	13.8	19.3	0.0	6.9	21.8	21.9
Cycle Q Clear(g_c), s	5.1	18.3	18.8	16.5	12.4	4.2	13.8	19.3	0.0	6.9	21.8	21.9
Prop In Lane	1.00		0.73	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	92	351	328	264	1076	443	278	1311	540	99	462	465
V/C Ratio(X)	0.79	0.84	0.85	0.91	0.44	0.16	0.74	0.57	0.00	0.99	0.78	0.78
Avail Cap(c_a), veh/h	242	462	430	270	1076	443	278	1311	540	99	462	465
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	0.74	0.74	0.74	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	44.3	44.5	47.4	32.2	29.3	45.3	28.9	0.0	53.9	39.5	39.5
Incr Delay (d2), s/veh	15.7	10.8	13.5	33.1	0.2	0.1	11.0	1.8	0.0	16.4	13.5	13.6
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	2.7	10.0	9.8	9.9	6.1	1.7	7.1	9.7	0.0	7.6	12.4	12.5
LnGrp Delay(d),s/veh	69.4	55.1	58.0	80.4	32.4	29.5	56.3	30.7	0.0	21.3	53.0	53.1
LnGrp LOS	E	E	E	F	C	C	E	C		F	D	D
Approach Vol, veh/h		646			786			952			823	
Approach Delay, s/veh		58.0			46.7			36.3			72.7	
Approach LOS		E			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	48.6	24.6	28.8	25.6	36.0	12.5	41.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	7.0	35.0	19.0	30.0	12.0	30.0	17.0	32.0				
Max Q Clear Time (g_c+I1), s	8.9	21.3	18.5	20.8	15.8	23.9	7.1	14.4				
Green Ext Time (p_c), s	0.0	4.2	0.1	2.1	0.0	2.0	0.1	3.3				
Intersection Summary												
HCM 2010 Ctrl Delay				52.5								
HCM 2010 LOS				D								

Intersection 2
Nason St & Cactus Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	355	89	20	212	44	60	363	19	92	436	112
Future Volume (veh/h)	141	355	89	20	212	44	60	363	19	92	436	112
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	158	399	100	23	244	51	66	399	21	103	490	126
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	458	358	51	349	72	1273	534	220	710	650	268
Arrive On Green	0.16	0.25	0.25	0.03	0.12	0.11	0.40	0.15	0.15	0.43	0.18	0.18
Sat Flow, veh/h	1634	1863	1458	1634	2925	601	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	158	399	100	23	146	149	66	399	21	103	490	126
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1757	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	10.5	23.8	2.2	1.6	9.2	9.5	1.5	12.5	1.2	4.4	15.2	9.0
Cycle Q Clear(g_c), s	10.5	23.8	2.2	1.6	9.2	9.5	1.5	12.5	1.2	4.4	15.2	9.0
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	257	458	358	51	211	210	1273	534	220	710	650	268
V/C Ratio(X)	0.61	0.87	0.28	0.45	0.69	0.71	0.05	0.75	0.10	0.15	0.75	0.47
Avail Cap(c_a), veh/h	257	554	434	141	450	447	1273	992	409	710	1526	629
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)	0.77	0.77	0.77	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	42.0	4.1	55.2	49.0	49.4	21.2	47.1	30.8	19.8	44.9	42.3
Incr Delay (d2), s/veh	3.3	9.8	0.3	6.1	3.9	4.3	0.0	9.2	0.9	0.1	7.9	5.8
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	5.0	13.5	0.9	0.8	4.7	4.9	0.6	6.8	0.5	2.0	8.1	4.0
LnGrp Delay(d),s/veh	48.9	51.8	4.5	61.4	53.0	53.7	21.2	56.3	31.6	19.9	52.8	48.1
LnGrp LOS	D	D	A	E	D	D	C	E	C	B	D	D
Approach Vol, veh/h		657			318			486			719	
Approach Delay, s/veh		43.9			53.9			50.5			47.3	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	54.4	21.5	7.6	32.5	50.6	25.3	22.3	17.8				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	6.4	14.5	3.6	25.8	3.5	17.2	12.5	11.5				
Green Ext Time (p_c), s	0.5	1.5	0.0	1.2	0.0	2.6	0.3	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay					47.9							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	378	89	50	286	44	60	386	31	119	451	112
Future Volume (veh/h)	176	378	89	50	286	44	60	386	31	119	451	112
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	198	425	100	57	329	51	66	424	34	134	507	126
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	482	377	92	441	68	1137	562	231	635	668	275
Arrive On Green	0.17	0.26	0.26	0.06	0.14	0.13	0.36	0.16	0.16	0.39	0.19	0.19
Sat Flow, veh/h	1634	1863	1458	1634	3077	472	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	198	425	100	57	188	192	66	424	34	134	507	126
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1779	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	13.3	25.4	2.5	4.0	11.8	12.0	1.6	13.3	1.9	6.3	15.7	8.9
Cycle Q Clear(g_c), s	13.3	25.4	2.5	4.0	11.8	12.0	1.6	13.3	1.9	6.3	15.7	8.9
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	482	377	92	254	255	1137	562	231	635	668	275
V/C Ratio(X)	0.71	0.88	0.27	0.62	0.74	0.75	0.06	0.75	0.15	0.21	0.76	0.46
Avail Cap(c_a), veh/h	280	554	434	141	450	453	1137	992	409	635	1526	629
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)	0.76	0.76	0.76	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	41.3	5.2	53.5	47.6	47.9	24.4	46.6	28.3	23.6	44.6	41.8
Incr Delay (d2), s/veh	6.1	11.2	0.3	6.6	4.2	4.4	0.0	9.1	1.3	0.2	7.9	5.4
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	6.5	14.6	1.0	2.0	6.1	6.2	0.7	7.2	0.9	2.9	8.4	4.0
LnGrp Delay(d),s/veh	51.4	52.5	5.5	60.1	51.8	52.3	24.4	55.7	29.6	23.8	52.5	47.2
LnGrp LOS	D	D	A	E	D	D	C	E	C	C	D	D
Approach Vol, veh/h		723			437			524			767	
Approach Delay, s/veh		45.7			53.1			50.1			46.6	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	49.1	22.4	10.5	34.0	45.6	25.9	23.9	20.6				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	8.3	15.3	6.0	27.4	3.6	17.7	15.3	14.0				
Green Ext Time (p_c), s	0.4	1.6	0.0	1.1	0.0	2.7	0.0	1.1				
Intersection Summary												
HCM 2010 Ctrl Delay				48.2								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	363	91	28	222	60	61	435	24	116	532	115
Future Volume (veh/h)	144	363	91	28	222	60	61	435	24	116	532	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	162	408	102	32	255	69	67	478	26	130	598	129
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	466	365	60	357	95	1138	617	254	655	765	315
Arrive On Green	0.16	0.25	0.25	0.04	0.13	0.12	0.36	0.17	0.17	0.40	0.22	0.22
Sat Flow, veh/h	1634	1863	1458	1634	2768	734	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	162	408	102	32	161	163	67	478	26	130	598	129
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1733	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	10.8	24.4	2.6	2.2	10.1	10.5	1.6	15.0	1.5	6.0	18.5	8.8
Cycle Q Clear(g_c), s	10.8	24.4	2.6	2.2	10.1	10.5	1.6	15.0	1.5	6.0	18.5	8.8
Prop In Lane	1.00		1.00	1.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	466	365	60	228	223	1138	617	254	655	765	315
V/C Ratio(X)	0.63	0.88	0.28	0.54	0.71	0.73	0.06	0.78	0.10	0.20	0.78	0.41
Avail Cap(c_a), veh/h	258	554	434	141	450	441	1138	992	409	655	1526	629
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)	0.73	0.73	0.73	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	41.7	5.5	54.9	48.4	48.9	24.3	45.7	28.5	22.6	42.9	39.1
Incr Delay (d2), s/veh	3.5	9.9	0.3	7.2	3.9	4.4	0.0	9.2	0.8	0.1	7.8	3.9
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	5.1	13.9	1.1	1.1	5.2	5.3	0.7	8.1	0.6	2.7	9.9	3.9
LnGrp Delay(d),s/veh	49.2	51.7	5.8	62.1	52.3	53.3	24.4	54.9	29.3	22.8	50.7	43.0
LnGrp LOS	D	D	A	E	D	D	C	D	C	C	D	D
Approach Vol, veh/h		672			356			571			857	
Approach Delay, s/veh		44.1			53.7			50.2			45.3	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	50.5	24.2	8.2	33.0	45.6	29.1	22.3	19.0				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	8.0	17.0	4.2	26.4	3.6	20.5	12.8	12.5				
Green Ext Time (p_c), s	0.5	1.8	0.0	1.1	0.0	3.1	0.2	1.0				
Intersection Summary												
HCM 2010 Ctrl Delay				47.3								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	386	91	58	296	60	61	458	36	143	547	115
Future Volume (veh/h)	179	386	91	58	296	60	61	458	36	143	547	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	201	434	102	67	340	69	67	503	40	161	615	129
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	284	490	383	104	449	90	996	643	265	578	784	323
Arrive On Green	0.17	0.26	0.26	0.06	0.15	0.14	0.31	0.18	0.18	0.35	0.22	0.22
Sat Flow, veh/h	1634	1863	1458	1634	2939	590	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	201	434	102	67	203	206	67	503	40	161	615	129
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1759	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	13.4	26.0	2.9	4.6	12.8	13.0	1.7	15.7	2.2	8.2	19.0	8.8
Cycle Q Clear(g_c), s	13.4	26.0	2.9	4.6	12.8	13.0	1.7	15.7	2.2	8.2	19.0	8.8
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	284	490	383	104	270	268	996	643	265	578	784	323
V/C Ratio(X)	0.71	0.89	0.27	0.64	0.75	0.77	0.07	0.78	0.15	0.28	0.78	0.40
Avail Cap(c_a), veh/h	284	554	434	141	450	447	996	992	409	578	1526	629
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)	0.72	0.72	0.72	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	41.1	6.7	53.0	47.0	47.4	27.9	45.3	25.9	26.9	42.6	38.6
Incr Delay (d2), s/veh	5.7	11.3	0.3	6.4	4.2	4.5	0.0	9.2	1.2	0.3	7.8	3.7
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	6.5	14.9	1.2	2.3	6.5	6.7	0.8	8.5	1.0	3.8	10.2	3.9
LnGrp Delay(d),s/veh	50.9	52.4	7.0	59.4	51.2	51.9	27.9	54.4	27.1	27.1	50.3	42.2
LnGrp LOS	D	D	A	E	D	D	C	D	C	C	D	D
Approach Vol, veh/h		737			476			610			905	
Approach Delay, s/veh		45.7			52.7			49.7			45.0	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	45.0	25.1	11.4	34.5	40.4	29.7	24.2	21.7				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	10.2	17.7	6.6	28.0	3.7	21.0	15.4	15.0				
Green Ext Time (p_c), s	0.4	1.9	0.0	1.0	0.0	3.2	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				47.6								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	390	98	79	258	164	66	777	49	240	1005	123
Future Volume (veh/h)	155	390	98	79	258	164	66	777	49	240	1005	123
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	174	438	110	91	297	189	73	854	54	270	1129	138
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	269	493	386	132	380	236	474	956	394	403	1299	535
Arrive On Green	0.16	0.26	0.26	0.08	0.18	0.17	0.15	0.27	0.27	0.25	0.37	0.37
Sat Flow, veh/h	1634	1863	1458	1634	2101	1302	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	174	438	110	91	249	237	73	854	54	270	1129	138
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1633	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	11.6	26.2	4.6	6.3	15.6	16.2	2.3	26.9	2.5	17.3	34.4	7.7
Cycle Q Clear(g_c), s	11.6	26.2	4.6	6.3	15.6	16.2	2.3	26.9	2.5	17.3	34.4	7.7
Prop In Lane	1.00		1.00	1.00		0.80	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	493	386	132	320	295	474	956	394	403	1299	535
V/C Ratio(X)	0.65	0.89	0.28	0.69	0.78	0.80	0.15	0.89	0.14	0.67	0.87	0.26
Avail Cap(c_a), veh/h	269	554	434	141	450	415	474	992	409	403	1526	629
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)	0.74	0.74	0.74	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	41.0	15.1	51.9	45.3	46.1	42.9	40.7	18.5	39.5	34.1	25.7
Incr Delay (d2), s/veh	4.0	11.7	0.3	12.1	5.4	7.2	0.1	12.5	0.7	4.3	8.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	15.1	1.9	3.3	8.1	7.9	1.0	14.8	1.1	8.3	18.2	3.3
LnGrp Delay(d),s/veh	49.3	52.7	15.4	64.0	50.7	53.3	43.1	53.2	19.2	43.7	42.2	26.8
LnGrp LOS	D	D	B	E	D	D	D	D	B	D	D	C
Approach Vol, veh/h		722			577			981			1537	
Approach Delay, s/veh		46.2			53.9			50.6			41.1	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	32.6	35.3	13.4	34.7	21.3	46.6	23.1	25.0				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	19.3	28.9	8.3	28.2	4.3	36.4	13.6	18.2				
Green Ext Time (p_c), s	0.2	0.9	0.0	1.0	0.0	4.7	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				46.4								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	413	98	109	332	164	66	800	61	267	1020	123
Future Volume (veh/h)	190	413	98	109	332	164	66	800	61	267	1020	123
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	213	464	110	125	382	189	73	879	67	300	1146	138
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.87	0.87	0.87	0.91	0.91	0.91	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	515	404	141	468	228	405	973	401	367	1314	542
Arrive On Green	0.16	0.28	0.28	0.09	0.20	0.19	0.13	0.27	0.27	0.22	0.37	0.37
Sat Flow, veh/h	1634	1863	1458	1634	2308	1126	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	213	464	110	125	292	279	73	879	67	300	1146	138
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1664	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	14.6	27.8	4.7	8.8	18.2	18.7	2.4	27.8	3.0	20.2	34.9	7.6
Cycle Q Clear(g_c), s	14.6	27.8	4.7	8.8	18.2	18.7	2.4	27.8	3.0	20.2	34.9	7.6
Prop In Lane	1.00		1.00	1.00		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	515	404	141	359	338	405	973	401	367	1314	542
V/C Ratio(X)	0.81	0.90	0.27	0.89	0.81	0.83	0.18	0.90	0.17	0.82	0.87	0.25
Avail Cap(c_a), veh/h	262	554	434	141	450	423	405	992	409	367	1526	629
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)	0.73	0.73	0.73	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	40.4	15.7	52.4	44.1	44.8	45.2	40.6	18.0	42.7	33.9	25.3
Incr Delay (d2), s/veh	13.4	13.2	0.3	43.7	8.7	10.3	0.2	13.3	0.9	13.6	8.2	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	7.5	16.2	1.9	5.7	9.8	9.6	1.1	15.3	1.3	10.5	18.5	3.2
LnGrp Delay(d),s/veh	60.5	53.6	16.0	96.1	52.8	55.1	45.4	53.9	18.9	56.3	42.1	26.4
LnGrp LOS	E	D	B	F	D	E	D	D	B	E	D	C
Approach Vol, veh/h		787			696			1019			1584	
Approach Delay, s/veh		50.2			61.5			51.0			43.4	
Approach LOS		D			E			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	30.0	35.9	14.0	36.1	18.8	47.1	22.6	27.5				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	22.2	29.8	10.8	29.8	4.4	36.9	16.6	20.7				
Green Ext Time (p_c), s	0.0	0.6	0.0	0.8	0.0	4.7	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				49.7								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	299	84	26	411	71	140	420	18	78	351	206
Future Volume (veh/h)	117	299	84	26	411	71	140	420	18	78	351	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	117	299	84	26	411	71	140	420	18	78	351	206
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	453	355	53	522	90	1275	556	229	701	652	269
Arrive On Green	0.10	0.24	0.24	0.03	0.17	0.16	0.40	0.16	0.16	0.43	0.18	0.18
Sat Flow, veh/h	1634	1863	1458	1634	3023	518	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	117	299	84	26	239	243	140	420	18	78	351	206
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1771	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	8.0	16.8	1.8	1.8	15.0	15.2	3.2	13.2	1.0	3.3	10.4	15.6
Cycle Q Clear(g_c), s	8.0	16.8	1.8	1.8	15.0	15.2	3.2	13.2	1.0	3.3	10.4	15.6
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	453	355	53	306	306	1275	556	229	701	652	269
V/C Ratio(X)	0.70	0.66	0.24	0.49	0.78	0.79	0.11	0.76	0.08	0.11	0.54	0.77
Avail Cap(c_a), veh/h	211	554	434	141	450	450	1275	992	409	701	1526	629
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)	0.81	0.81	0.81	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	39.6	4.2	55.2	45.9	46.2	21.7	46.8	30.1	19.8	42.9	45.0
Incr Delay (d2), s/veh	5.9	1.7	0.3	6.0	4.8	5.3	0.0	9.8	0.7	0.1	3.2	21.0
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	3.9	8.9	0.8	0.9	7.7	7.9	1.4	7.2	0.5	1.5	5.4	7.8
LnGrp Delay(d),s/veh	56.2	41.3	4.4	61.2	50.7	51.5	21.7	56.5	30.7	19.9	46.1	66.0
LnGrp LOS	E	D	A	E	D	D	C	E	C	B	D	E
Approach Vol, veh/h		500			508			578			635	
Approach Delay, s/veh		38.6			51.6			47.3			49.3	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	53.8	22.2	7.8	32.2	50.7	25.4	15.9	24.0				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	5.3	15.2	3.8	18.8	5.2	17.6	10.0	17.2				
Green Ext Time (p_c), s	0.7	1.6	0.0	1.5	0.0	2.3	0.7	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay					46.9							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	329	84	47	464	71	140	450	33	104	362	206
Future Volume (veh/h)	162	329	84	47	464	71	140	450	33	104	362	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	162	329	84	47	464	71	140	450	33	104	362	206
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	494	387	79	576	88	1154	589	243	624	653	269
Arrive On Green	0.13	0.27	0.27	0.05	0.19	0.17	0.36	0.17	0.17	0.38	0.18	0.18
Sat Flow, veh/h	1634	1863	1458	1634	3081	469	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	162	329	84	47	266	269	140	450	33	104	362	206
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1780	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	11.2	18.3	2.0	3.3	16.6	16.8	3.4	14.1	1.9	4.9	10.8	15.6
Cycle Q Clear(g_c), s	11.2	18.3	2.0	3.3	16.6	16.8	3.4	14.1	1.9	4.9	10.8	15.6
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	494	387	79	331	333	1154	589	243	624	653	269
V/C Ratio(X)	0.78	0.67	0.22	0.59	0.80	0.81	0.12	0.76	0.14	0.17	0.55	0.77
Avail Cap(c_a), veh/h	211	554	434	141	450	453	1154	992	409	624	1526	629
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)	0.80	0.80	0.80	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	38.0	4.7	54.1	45.1	45.4	24.5	46.2	28.3	23.6	43.0	44.9
Incr Delay (d2), s/veh	15.4	2.1	0.2	6.5	7.0	7.5	0.0	9.7	1.2	0.1	3.4	20.8
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	5.9	9.7	0.8	1.6	8.8	9.0	1.5	7.7	0.8	2.2	5.6	7.8
LnGrp Delay(d),s/veh	64.5	40.1	4.9	60.5	52.1	52.8	24.6	55.9	29.5	23.8	46.4	65.7
LnGrp LOS	E	D	A	E	D	D	C	E	C	C	D	E
Approach Vol, veh/h		575			582			623			672	
Approach Delay, s/veh		41.9			53.1			47.5			48.8	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	48.3	23.3	9.6	34.7	46.2	25.4	18.7	25.7				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	6.9	16.1	5.3	20.3	5.4	17.6	13.2	18.8				
Green Ext Time (p_c), s	0.3	1.7	0.0	1.7	0.0	2.3	0.1	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay					47.9							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	308	86	31	417	87	143	499	23	100	412	211
Future Volume (veh/h)	120	308	86	31	417	87	143	499	23	100	412	211
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	120	308	86	31	417	87	143	499	23	100	412	211
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	463	363	58	525	109	1230	638	263	649	671	277
Arrive On Green	0.10	0.25	0.25	0.04	0.18	0.17	0.39	0.18	0.18	0.40	0.19	0.19
Sat Flow, veh/h	1634	1863	1458	1634	2921	605	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	120	308	86	31	251	253	143	499	23	100	412	211
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1756	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	8.2	17.3	2.0	2.2	15.7	16.0	3.4	15.6	1.3	4.6	12.4	15.9
Cycle Q Clear(g_c), s	8.2	17.3	2.0	2.2	15.7	16.0	3.4	15.6	1.3	4.6	12.4	15.9
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	171	463	363	58	318	316	1230	638	263	649	671	277
V/C Ratio(X)	0.70	0.66	0.24	0.53	0.79	0.80	0.12	0.78	0.09	0.15	0.61	0.76
Avail Cap(c_a), veh/h	211	554	434	141	450	447	1230	992	409	649	1526	629
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)	0.78	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	50.2	39.2	4.4	55.0	45.5	45.8	22.8	45.4	28.0	22.4	43.1	44.5
Incr Delay (d2), s/veh	6.1	1.8	0.3	6.5	5.6	6.3	0.0	9.9	0.7	0.1	4.2	20.0
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	4.0	9.1	0.8	1.1	8.2	8.3	1.5	8.5	0.6	2.1	6.5	7.9
LnGrp Delay(d),s/veh	56.3	41.0	4.7	61.5	51.1	52.1	22.8	55.3	28.7	22.5	47.3	64.5
LnGrp LOS	E	D	A	E	D	D	C	E	C	C	D	E
Approach Vol, veh/h		514			535			665			723	
Approach Delay, s/veh		38.5			52.2			47.4			48.9	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	50.1	24.9	8.1	32.9	49.0	26.0	16.2	24.8				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	6.6	17.6	4.2	19.3	5.4	17.9	10.2	18.0				
Green Ext Time (p_c), s	0.3	1.8	0.0	1.6	0.0	2.6	0.7	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay					47.0							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	338	86	52	470	87	143	529	38	126	423	211
Future Volume (veh/h)	165	338	86	52	470	87	143	529	38	126	423	211
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	165	338	86	52	470	87	143	529	38	126	423	211
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	209	502	393	86	579	106	1111	670	276	574	673	277
Arrive On Green	0.13	0.27	0.27	0.05	0.19	0.18	0.35	0.19	0.19	0.35	0.19	0.19
Sat Flow, veh/h	1634	1863	1458	1634	2986	550	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	165	338	86	52	277	280	143	529	38	126	423	211
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1766	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	11.4	18.8	2.1	3.6	17.4	17.6	3.6	16.5	2.1	6.3	12.8	15.9
Cycle Q Clear(g_c), s	11.4	18.8	2.1	3.6	17.4	17.6	3.6	16.5	2.1	6.3	12.8	15.9
Prop In Lane	1.00		1.00	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	502	393	86	343	342	1111	670	276	574	673	277
V/C Ratio(X)	0.79	0.67	0.22	0.61	0.81	0.82	0.13	0.79	0.14	0.22	0.63	0.76
Avail Cap(c_a), veh/h	211	554	434	141	450	449	1111	992	409	574	1526	629
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)	0.77	0.77	0.77	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	37.8	5.0	53.8	44.7	45.0	25.6	44.8	26.2	26.5	43.2	44.5
Incr Delay (d2), s/veh	15.6	2.2	0.2	6.3	7.9	8.5	0.1	9.9	1.0	0.2	4.5	19.8
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	6.0	10.0	0.9	1.8	9.2	9.4	1.6	9.0	0.9	2.9	6.6	7.9
LnGrp Delay(d),s/veh	64.7	40.0	5.2	60.1	52.6	53.5	25.7	54.7	27.3	26.6	47.7	64.3
LnGrp LOS	E	D	A	E	D	D	C	D	C	C	D	E
Approach Vol, veh/h		589			609			710			760	
Approach Delay, s/veh		41.9			53.7			47.4			48.8	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	44.7	25.9	10.1	35.2	44.6	26.0	18.8	26.5				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	8.3	18.5	5.6	20.8	5.6	17.9	13.4	19.6				
Green Ext Time (p_c), s	0.4	1.9	0.0	1.7	0.0	2.7	0.0	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay					48.0							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	337	92	57	438	165	154	867	50	219	685	227
Future Volume (veh/h)	129	337	92	57	438	165	154	867	50	219	685	227
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	129	337	92	57	438	165	154	867	50	219	685	227
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	491	384	92	529	197	941	965	398	441	869	358
Arrive On Green	0.11	0.26	0.26	0.06	0.21	0.20	0.30	0.27	0.27	0.27	0.25	0.25
Sat Flow, veh/h	1634	1863	1458	1634	2524	942	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	129	337	92	57	306	297	154	867	50	219	685	227
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1696	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	8.8	18.9	2.7	4.0	19.2	19.5	4.2	27.4	2.4	13.1	21.0	16.1
Cycle Q Clear(g_c), s	8.8	18.9	2.7	4.0	19.2	19.5	4.2	27.4	2.4	13.1	21.0	16.1
Prop In Lane	1.00		1.00	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	491	384	92	371	356	941	965	398	441	869	358
V/C Ratio(X)	0.72	0.69	0.24	0.62	0.82	0.84	0.16	0.90	0.13	0.50	0.79	0.63
Avail Cap(c_a), veh/h	211	554	434	141	450	431	941	992	409	441	1526	629
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)	0.79	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	49.9	38.4	7.4	53.5	43.8	44.3	30.2	40.6	19.9	35.7	40.9	39.1
Incr Delay (d2), s/veh	7.7	2.5	0.3	6.1	9.9	11.3	0.1	15.3	0.7	0.9	7.5	8.6
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	4.4	10.1	1.1	1.9	10.4	10.2	1.8	15.4	1.0	6.0	11.2	7.3
LnGrp Delay(d),s/veh	57.6	40.9	7.6	59.7	53.7	55.7	30.2	55.9	20.6	36.6	48.5	47.7
LnGrp LOS	E	D	A	E	D	E	C	E	C	D	D	D
Approach Vol, veh/h		558			660			1071			1131	
Approach Delay, s/veh		39.2			55.1			50.6			46.0	
Approach LOS		D			E			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	35.3	35.6	10.5	34.6	38.4	32.5	16.8	28.3				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	15.1	29.4	6.0	20.9	6.2	23.0	10.8	21.5				
Green Ext Time (p_c), s	0.5	0.7	0.0	1.6	0.0	4.0	0.6	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				48.1								
HCM 2010 LOS				D								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	367	92	78	491	165	154	897	65	245	696	227
Future Volume (veh/h)	174	367	92	78	491	165	154	897	65	245	696	227
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1716	1863	1716	1716	1863	1750	1716	1863	1716	1716	1863	1716
Adj Flow Rate, veh/h	174	367	92	78	491	165	154	897	65	245	696	227
Adj No. of Lanes	1	1	1	1	2	0	2	2	1	1	2	1
Peak Hour Factor	0.80	0.80	0.80	0.87	0.87	0.87	0.89	0.89	0.89	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	522	408	117	580	194	829	983	405	380	881	363
Arrive On Green	0.13	0.28	0.28	0.07	0.22	0.21	0.26	0.28	0.28	0.23	0.25	0.25
Sat Flow, veh/h	1634	1863	1458	1634	2608	871	3170	3539	1458	1634	3539	1458
Grp Volume(v), veh/h	174	367	92	78	332	324	154	897	65	245	696	227
Grp Sat Flow(s),veh/h/ln	1634	1863	1458	1634	1770	1709	1585	1770	1458	1634	1770	1458
Q Serve(g_s), s	12.0	20.5	2.8	5.4	20.9	21.1	4.4	28.4	3.0	15.7	21.3	16.1
Cycle Q Clear(g_c), s	12.0	20.5	2.8	5.4	20.9	21.1	4.4	28.4	3.0	15.7	21.3	16.1
Prop In Lane	1.00		1.00	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	522	408	117	394	380	829	983	405	380	881	363
V/C Ratio(X)	0.82	0.70	0.23	0.67	0.84	0.85	0.19	0.91	0.16	0.64	0.79	0.63
Avail Cap(c_a), veh/h	211	554	434	141	450	435	829	992	409	380	1526	629
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)	0.78	0.78	0.78	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	37.4	8.2	52.5	43.2	43.6	33.3	40.5	18.7	40.2	40.7	38.8
Incr Delay (d2), s/veh	21.0	3.0	0.2	8.4	12.8	14.2	0.1	17.2	0.8	3.8	7.5	8.2
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	6.6	10.9	1.2	2.7	11.6	11.5	1.9	16.2	1.3	7.5	11.4	7.3
LnGrp Delay(d),s/veh	70.2	40.4	8.4	60.8	56.0	57.9	33.4	57.7	19.6	44.0	48.3	46.9
LnGrp LOS	E	D	A	E	E	E	C	E	B	D	D	D
Approach Vol, veh/h		633			734			1116			1168	
Approach Delay, s/veh		44.0			57.3			52.1			47.1	
Approach LOS		D			E			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	31.0	36.2	12.3	36.5	34.3	32.9	19.0	29.8				
Change Period (Y+Rc), s	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	21.5	31.0	8.5	33.0	4.0	48.5	13.5	28.0				
Max Q Clear Time (g_c+I1), s	17.7	30.4	7.4	22.5	6.4	23.3	14.0	23.1				
Green Ext Time (p_c), s	0.4	0.3	0.0	1.8	0.0	4.0	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay				50.2								
HCM 2010 LOS				D								

Intersection 3
Lynn Lee Ln & Cactus Ave



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶		↶	↶	↶		↶		↶	↶	
Traffic Volume (veh/h)	0	469	3	3	287	0	2	0	3	0	0	0
Future Volume (veh/h)	0	469	3	3	287	0	2	0	3	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	0	539	3	3	319	0	5	0	7	0	0	0
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.25	0.87	0.87	0.90	0.90	0.90	0.42	0.42	0.42	0.42	0.42	0.42
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	591	3	5	1279	0	0	0	888	0	2	0
Arrive On Green	0.00	0.32	0.32	0.00	0.36	0.00	0.56	0.00	0.56	0.00	0.00	0.00
Sat Flow, veh/h	0	1851	10	1634	3632	0	0	0	1583	0	1863	0
Grp Volume(v), veh/h	0	0	542	3	319	0	0	0	7	0	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1861	1634	1770	0	0	0	1583	0	1863	0
Q Serve(g_s), s	0.0	0.0	28.8	0.2	6.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	28.8	0.2	6.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Prop In Lane	0.00		0.01	1.00		0.00	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	594	5	1279	0	0	0	888	0	2	0
V/C Ratio(X)	0.00	0.00	0.91	0.57	0.25	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1120	63	2405	0	0	0	888	0	307	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)	0.00	0.00	0.70	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	33.7	51.3	23.1	0.0	0.0	0.0	10.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.3	72.9	0.1	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	15.5	0.2	3.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	38.0	124.2	23.2	0.0	0.0	0.0	10.0	0.0	0.0	0.0
LnGrp LOS				D	F	C				A		
Approach Vol, veh/h		542			322			7			0	
Approach Delay, s/veh		38.0			24.1			10.0			0.0	
Approach LOS		D			C			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	61.8	4.3	36.9	61.8	0.0		41.2				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.2	2.2	30.8	0.0	0.0		8.5				
Green Ext Time (p_c), s	0.0	0.0	0.2	2.1	0.0	0.0		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay					32.6							
HCM 2010 LOS					C							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↷		↶	↷	↶		↷		↷	↶	
Traffic Volume (veh/h)	37	478	3	3	287	23	2	0	3	60	0	74
Future Volume (veh/h)	37	478	3	3	287	23	2	0	3	60	0	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	148	549	3	3	319	26	5	0	7	143	0	176
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.25	0.87	0.87	0.90	0.90	0.90	0.42	0.42	0.42	0.42	0.42	0.42
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	597	3	5	1715	139	0	0	641	0	0	206
Arrive On Green	0.48	0.48	0.48	0.00	0.52	0.52	0.24	0.00	0.41	0.00	0.00	0.13
Sat Flow, veh/h	300	1256	7	1634	3316	269	0	0	1583	0	0	1583
Grp Volume(v), veh/h	700	0	0	3	169	176	0	0	7	0	0	176
Grp Sat Flow(s),veh/h/ln	1562	0	0	1634	1770	1815	0	0	1583	0	0	1583
Q Serve(g_s), s	38.7	0.0	0.0	0.2	5.3	5.3	0.0	0.0	0.3	0.0	0.0	11.2
Cycle Q Clear(g_c), s	44.1	0.0	0.0	0.2	5.3	5.3	0.0	0.0	0.3	0.0	0.0	11.2
Prop In Lane	0.21		0.00	1.00		0.15	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	785	0	0	5	915	939	0	0	641	0	0	206
V/C Ratio(X)	0.89	0.00	0.00	0.57	0.19	0.19	0.00	0.00	0.01	0.00	0.00	0.85
Avail Cap(c_a), veh/h	986	0	0	63	1203	1234	0	0	641	0	0	261
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)	0.67	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	0.0	51.3	13.3	13.3	0.0	0.0	18.3	0.0	0.0	43.8
Incr Delay (d2), s/veh	6.2	0.0	0.0	72.9	0.1	0.1	0.0	0.0	0.0	0.0	0.0	33.8
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	20.2	0.0	0.0	0.2	2.6	2.7	0.0	0.0	0.1	0.0	0.0	6.8
LnGrp Delay(d),s/veh	32.2	0.0	0.0	124.2	13.4	13.4	0.0	0.0	18.3	0.0	0.0	77.6
LnGrp LOS	C			F	B	B			B			E
Approach Vol, veh/h		700			348			7				176
Approach Delay, s/veh		32.2			14.3			18.3				77.6
Approach LOS		C			B			B				E
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	45.7	4.3	52.9	28.3	17.4		57.3				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.3	2.2	46.1	0.0	13.2		7.3				
Green Ext Time (p_c), s	0.0	0.0	0.2	2.9	0.0	0.2		1.2				
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)	0	511	3	3	329	0	2	0	3	0	0	0
Future Volume (veh/h)	0	511	3	3	329	0	2	0	3	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	0	587	3	3	366	0	5	0	7	0	0	0
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.25	0.87	0.87	0.90	0.90	0.90	0.42	0.42	0.42	0.42	0.42	0.42
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	640	3	5	1372	0	0	0	846	0	2	0
Arrive On Green	0.00	0.35	0.35	0.00	0.39	0.00	0.53	0.00	0.53	0.00	0.00	0.00
Sat Flow, veh/h	0	1852	9	1634	3632	0	0	0	1583	0	1863	0
Grp Volume(v), veh/h	0	0	590	3	366	0	0	0	7	0	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1861	1634	1770	0	0	0	1583	0	1863	0
Q Serve(g_s), s	0.0	0.0	31.3	0.2	7.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	31.3	0.2	7.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Prop In Lane	0.00		0.01	1.00		0.00	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	643	5	1372	0	0	0	846	0	2	0
V/C Ratio(X)	0.00	0.00	0.92	0.57	0.27	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1120	63	2405	0	0	0	846	0	307	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)	0.00	0.00	0.68	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	32.3	51.3	21.5	0.0	0.0	0.0	11.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.8	72.9	0.1	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	16.9	0.2	3.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	37.1	124.2	21.6	0.0	0.0	0.0	11.2	0.0	0.0	0.0
LnGrp LOS				D	F	C				B		
Approach Vol, veh/h		590			369			7			0	
Approach Delay, s/veh		37.1			22.5			11.2			0.0	
Approach LOS		D			C			B				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	59.1	4.3	39.6	59.1	0.0		43.9				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.2	2.2	33.3	0.0	0.0		9.3				
Green Ext Time (p_c), s	0.0	0.0	0.3	2.3	0.0	0.0		1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				31.3								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↷		↶	↷			↕			↕	
Traffic Volume (veh/h)	36	520	3	3	329	23	2	0	3	60	0	74
Future Volume (veh/h)	36	520	3	3	329	23	2	0	3	60	0	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	144	598	3	3	366	26	5	0	7	143	0	176
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.25	0.87	0.87	0.90	0.90	0.90	0.42	0.42	0.42	0.42	0.42	0.42
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	646	3	5	1821	129	0	0	600	0	0	206
Arrive On Green	0.50	0.50	0.50	0.00	0.54	0.54	0.21	0.00	0.38	0.00	0.00	0.13
Sat Flow, veh/h	273	1289	6	1634	3353	237	0	0	1583	0	0	1583
Grp Volume(v), veh/h	745	0	0	3	192	200	0	0	7	0	0	176
Grp Sat Flow(s),veh/h/ln	1568	0	0	1634	1770	1821	0	0	1583	0	0	1583
Q Serve(g_s), s	40.9	0.0	0.0	0.2	5.7	5.8	0.0	0.0	0.3	0.0	0.0	11.2
Cycle Q Clear(g_c), s	46.6	0.0	0.0	0.2	5.7	5.8	0.0	0.0	0.3	0.0	0.0	11.2
Prop In Lane	0.19		0.00	1.00		0.13	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	827	0	0	5	961	989	0	0	600	0	0	206
V/C Ratio(X)	0.90	0.00	0.00	0.57	0.20	0.20	0.00	0.00	0.01	0.00	0.00	0.85
Avail Cap(c_a), veh/h	988	0	0	63	1203	1237	0	0	600	0	0	261
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)	0.65	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	0.0	51.3	12.1	12.1	0.0	0.0	19.9	0.0	0.0	43.8
Incr Delay (d2), s/veh	6.8	0.0	0.0	72.9	0.1	0.1	0.0	0.0	0.0	0.0	0.0	33.8
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	21.6	0.0	0.0	0.2	2.8	2.9	0.0	0.0	0.1	0.0	0.0	6.8
LnGrp Delay(d),s/veh	31.5	0.0	0.0	124.2	12.2	12.2	0.0	0.0	20.0	0.0	0.0	77.6
LnGrp LOS	C			F	B	B			B			E
Approach Vol, veh/h		745			395			7				176
Approach Delay, s/veh		31.5			13.0			20.0				77.6
Approach LOS		C			B			B				E
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	43.1	4.3	55.6	25.7	17.4		59.9				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.3	2.2	48.6	0.0	13.2		7.8				
Green Ext Time (p_c), s	0.0	0.0	0.3	3.0	0.0	0.2		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				32.1								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶		↷	↶↷			↕			↕	
Traffic Volume (veh/h)	0	674	5	5	506	0	4	0	6	0	0	0
Future Volume (veh/h)	0	674	5	5	506	0	4	0	6	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	0	775	6	6	562	0	10	0	14	0	0	0
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.25	0.87	0.87	0.90	0.90	0.90	0.42	0.42	0.42	0.42	0.42	0.42
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	829	6	10	1749	0	0	0	678	0	2	0
Arrive On Green	0.00	0.45	0.45	0.01	0.49	0.00	0.43	0.00	0.43	0.00	0.00	0.00
Sat Flow, veh/h	0	1846	14	1634	3632	0	0	0	1583	0	1863	0
Grp Volume(v), veh/h	0	0	781	6	562	0	0	0	14	0	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1860	1634	1770	0	0	0	1583	0	1863	0
Q Serve(g_s), s	0.0	0.0	41.1	0.4	9.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	41.1	0.4	9.8	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Prop In Lane	0.00		0.01	1.00		0.00	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	836	10	1749	0	0	0	678	0	2	0
V/C Ratio(X)	0.00	0.00	0.93	0.60	0.32	0.00	0.00	0.00	0.02	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1120	63	2405	0	0	0	678	0	307	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)	0.00	0.00	0.49	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	26.9	51.1	15.7	0.0	0.0	0.0	17.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	6.5	46.3	0.1	0.0	0.0	0.0	0.1	0.0	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	0.0	0.0	22.6	0.3	4.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	33.4	97.3	15.8	0.0	0.0	0.0	17.0	0.0	0.0	0.0
LnGrp LOS			C	F	B				B			
Approach Vol, veh/h		781			568			14				0
Approach Delay, s/veh		33.4			16.6			17.0				0.0
Approach LOS		C			B			B				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	48.1	4.6	50.3	48.1	0.0		54.9				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.5	2.4	43.1	0.0	0.0		11.8				
Green Ext Time (p_c), s	0.0	0.0	0.4	3.2	0.0	0.0		2.5				
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)	36	683	5	5	506	23	4	0	6	60	0	74
Future Volume (veh/h)	36	683	5	5	506	23	4	0	6	60	0	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	144	785	6	6	562	26	10	0	14	143	0	176
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.25	0.87	0.87	0.90	0.90	0.90	0.42	0.42	0.42	0.42	0.42	0.42
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	799	6	10	2229	103	0	0	436	0	0	206
Arrive On Green	0.60	0.60	0.60	0.01	0.65	0.65	0.11	0.00	0.28	0.00	0.00	0.13
Sat Flow, veh/h	213	1327	10	1634	3445	159	0	0	1583	0	0	1583
Grp Volume(v), veh/h	935	0	0	6	288	300	0	0	14	0	0	176
Grp Sat Flow(s),veh/h/ln	1549	0	0	1634	1770	1835	0	0	1583	0	0	1583
Q Serve(g_s), s	54.9	0.0	0.0	0.4	7.1	7.1	0.0	0.0	0.7	0.0	0.0	11.2
Cycle Q Clear(g_c), s	62.0	0.0	0.0	0.4	7.1	7.1	0.0	0.0	0.7	0.0	0.0	11.2
Prop In Lane	0.15		0.01	1.00		0.09	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	973	0	0	10	1145	1187	0	0	436	0	0	206
V/C Ratio(X)	0.96	0.00	0.00	0.60	0.25	0.25	0.00	0.00	0.03	0.00	0.00	0.85
Avail Cap(c_a), veh/h	973	0	0	63	1203	1247	0	0	436	0	0	261
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)	0.45	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	0.0	51.1	7.7	7.7	0.0	0.0	27.3	0.0	0.0	43.8
Incr Delay (d2), s/veh	11.6	0.0	0.0	46.3	0.1	0.1	0.0	0.0	0.1	0.0	0.0	33.8
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	29.4	0.0	0.0	0.3	3.5	3.6	0.0	0.0	0.3	0.0	0.0	6.8
LnGrp Delay(d),s/veh	32.3	0.0	0.0	97.3	7.8	7.8	0.0	0.0	27.4	0.0	0.0	77.6
LnGrp LOS	C			F	A	A			C			E
Approach Vol, veh/h		935			594			14				176
Approach Delay, s/veh		32.3			8.7			27.4				77.6
Approach LOS		C			A			C				E
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	32.4	4.6	66.0	15.0	17.4		70.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.7	2.4	64.0	0.0	13.2		9.1				
Green Ext Time (p_c), s	0.0	0.0	0.4	0.0	0.0	0.2		2.1				
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)	0	369	1	2	504	0	2	0	3	0	0	0
Future Volume (veh/h)	0	369	1	2	504	0	2	0	3	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	0	369	1	2	504	0	2	0	3	0	0	0
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.70	0.70	0.70	0.90	0.90	0.90	0.63	0.63	0.63	0.63	0.63	0.63
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	417	1	4	940	0	0	0	1040	0	2	0
Arrive On Green	0.00	0.22	0.22	0.00	0.27	0.00	0.66	0.00	0.66	0.00	0.00	0.00
Sat Flow, veh/h	0	1857	5	1634	3632	0	0	0	1583	0	1863	0
Grp Volume(v), veh/h	0	0	370	2	504	0	0	0	3	0	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1862	1634	1770	0	0	0	1583	0	1863	0
Q Serve(g_s), s	0.0	0.0	19.8	0.1	12.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	19.8	0.1	12.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	418	4	940	0	0	0	1040	0	2	0
V/C Ratio(X)	0.00	0.00	0.88	0.57	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1121	63	2405	0	0	0	1040	0	307	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)	0.00	0.00	0.85	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	38.6	51.3	32.4	0.0	0.0	0.0	6.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	5.9	12.3	0.5	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	10.9	0.2	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	44.5	175.6	32.9	0.0	0.0	0.0	6.1	0.0	0.0	0.0
LnGrp LOS				D	F	C				A		
Approach Vol, veh/h		370			506				3			0
Approach Delay, s/veh		44.5			33.4				6.1			0.0
Approach LOS		D			C				A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	71.6	4.2	27.1	71.6	0.0		31.4				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	21.8	0.0	0.0		14.6				
Green Ext Time (p_c), s	0.0	0.0	0.4	1.3	0.0	0.0		2.2				
Intersection Summary												
HCM 2010 Ctrl Delay					38.0							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↷		↶	↷			↕			↕	
Traffic Volume (veh/h)	45	375	1	2	504	30	2	0	3	42	0	53
Future Volume (veh/h)	45	375	1	2	504	30	2	0	3	42	0	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	45	375	1	2	504	30	2	0	3	42	0	53
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.70	0.70	0.70	0.90	0.90	0.90	0.63	0.63	0.63	0.63	0.63	0.63
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	432	1	4	1146	68	0	0	926	0	0	84
Arrive On Green	0.30	0.30	0.30	0.00	0.34	0.34	0.49	0.00	0.58	0.00	0.00	0.05
Sat Flow, veh/h	108	1457	4	1634	3395	202	0	0	1583	0	0	1583
Grp Volume(v), veh/h	421	0	0	2	262	272	0	0	3	0	0	53
Grp Sat Flow(s),veh/h/ln	1569	0	0	1634	1770	1827	0	0	1583	0	0	1583
Q Serve(g_s), s	14.9	0.0	0.0	0.1	11.9	11.9	0.0	0.0	0.1	0.0	0.0	3.4
Cycle Q Clear(g_c), s	26.9	0.0	0.0	0.1	11.9	11.9	0.0	0.0	0.1	0.0	0.0	3.4
Prop In Lane	0.11		0.00	1.00		0.11	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	504	0	0	4	597	617	0	0	926	0	0	84
V/C Ratio(X)	0.84	0.00	0.00	0.57	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.63
Avail Cap(c_a), veh/h	1010	0	0	63	1203	1242	0	0	926	0	0	261
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)	0.83	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	51.3	26.5	26.5	0.0	0.0	8.9	0.0	0.0	47.8
Incr Delay (d2), s/veh	3.2	0.0	0.0	124.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	34.9
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	12.0	0.0	0.0	0.2	5.9	6.1	0.0	0.0	0.0	0.0	0.0	2.3
LnGrp Delay(d),s/veh	38.1	0.0	0.0	175.7	27.0	27.0	0.0	0.0	8.9	0.0	0.0	82.7
LnGrp LOS	D			F	C	C			A			F
Approach Vol, veh/h		421			536			3				53
Approach Delay, s/veh		38.1			27.6			8.9				82.7
Approach LOS		D			C			A				F
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	64.2	4.2	34.6	54.8	9.5		38.8				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	28.9	0.0	5.4		13.9				
Green Ext Time (p_c), s	0.0	0.0	0.4	1.7	0.0	0.1		1.9				
Intersection Summary												
HCM 2010 Ctrl Delay				34.8								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↷		↶	↷			↕			↕	
Traffic Volume (veh/h)	0	409	1	2	538	0	2	0	3	0	0	0
Future Volume (veh/h)	0	409	1	2	538	0	2	0	3	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	0	409	1	2	538	0	2	0	3	0	0	0
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.70	0.70	0.70	0.90	0.90	0.90	0.63	0.63	0.63	0.63	0.63	0.63
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	458	1	4	1018	0	0	0	1005	0	2	0
Arrive On Green	0.00	0.25	0.25	0.00	0.29	0.00	0.63	0.00	0.63	0.00	0.00	0.00
Sat Flow, veh/h	0	1857	5	1634	3632	0	0	0	1583	0	1863	0
Grp Volume(v), veh/h	0	0	410	2	538	0	0	0	3	0	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1862	1634	1770	0	0	0	1583	0	1863	0
Q Serve(g_s), s	0.0	0.0	21.9	0.1	13.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	21.9	0.1	13.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	459	4	1018	0	0	0	1005	0	2	0
V/C Ratio(X)	0.00	0.00	0.89	0.57	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1121	63	2405	0	0	0	1005	0	307	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)	0.00	0.00	0.84	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	37.5	51.3	30.8	0.0	0.0	0.0	6.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	5.7	124.3	0.4	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	12.0	0.2	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	43.2	175.6	31.2	0.0	0.0	0.0	6.9	0.0	0.0	0.0
LnGrp LOS				D	F	C				A		
Approach Vol, veh/h		410			540			3			0	
Approach Delay, s/veh		43.2			31.8			6.9			0.0	
Approach LOS		D			C			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	69.4	4.2	29.4	69.4	0.0		33.6				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	23.9	0.0	0.0		15.2				
Green Ext Time (p_c), s	0.0	0.0	0.5	1.5	0.0	0.0		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay					36.6							
HCM 2010 LOS					D							



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	415	1	2	538	30	2	0	3	42	0	53
Future Volume (veh/h)	45	415	1	2	538	30	2	0	3	42	0	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	45	415	1	2	538	30	2	0	3	42	0	53
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.70	0.70	0.70	0.90	0.90	0.90	0.63	0.63	0.63	0.63	0.63	0.63
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	473	1	4	1221	68	0	0	893	0	0	84
Arrive On Green	0.32	0.32	0.32	0.00	0.36	0.36	0.47	0.00	0.56	0.00	0.00	0.05
Sat Flow, veh/h	101	1493	3	1634	3409	190	0	0	1583	0	0	1583
Grp Volume(v), veh/h	461	0	0	2	279	289	0	0	3	0	0	53
Grp Sat Flow(s),veh/h/ln	1597	0	0	1634	1770	1829	0	0	1583	0	0	1583
Q Serve(g_s), s	16.4	0.0	0.0	0.1	12.4	12.4	0.0	0.0	0.1	0.0	0.0	3.4
Cycle Q Clear(g_c), s	28.8	0.0	0.0	0.1	12.4	12.4	0.0	0.0	0.1	0.0	0.0	3.4
Prop In Lane	0.10		0.00	1.00		0.10	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	545	0	0	4	634	655	0	0	893	0	0	84
V/C Ratio(X)	0.85	0.00	0.00	0.57	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.63
Avail Cap(c_a), veh/h	1019	0	0	63	1203	1243	0	0	893	0	0	261
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)	0.81	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	0.0	51.3	25.2	25.2	0.0	0.0	9.8	0.0	0.0	47.8
Incr Delay (d2), s/veh	3.1	0.0	0.0	124.3	0.5	0.5	0.0	0.0	0.0	0.0	0.0	34.9
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	13.0	0.0	0.0	0.2	6.1	6.4	0.0	0.0	0.0	0.0	0.0	2.3
LnGrp Delay(d),s/veh	36.9	0.0	0.0	175.6	25.7	25.7	0.0	0.0	9.8	0.0	0.0	82.7
LnGrp LOS	D			F	C	C			A			F
Approach Vol, veh/h	461			570			3			53		
Approach Delay, s/veh	36.9			26.2			9.8			82.7		
Approach LOS	D			C			A			F		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	0.0	62.1	4.2	36.7	52.7	9.5	40.9					
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0	70.0					
Max Q Clear Time (g_c+I1), s	0.0	2.1	2.1	30.8	0.0	5.4	14.4					
Green Ext Time (p_c), s	0.0	0.0	0.5	1.9	0.0	0.1	2.0					
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)	0	569	1	2	661	0	4	0	6	0	0	0
Future Volume (veh/h)	0	569	1	2	661	0	4	0	6	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	0	569	1	2	661	0	4	0	6	0	0	0
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.70	0.70	0.70	0.90	0.90	0.90	0.63	0.63	0.63	0.63	0.63	0.63
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	622	1	4	1329	0	0	0	866	0	2	0
Arrive On Green	0.00	0.33	0.33	0.00	0.38	0.00	0.55	0.00	0.55	0.00	0.00	0.00
Sat Flow, veh/h	0	1859	3	1634	3632	0	0	0	1583	0	1863	0
Grp Volume(v), veh/h	0	0	570	2	661	0	0	0	6	0	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1862	1634	1770	0	0	0	1583	0	1863	0
Q Serve(g_s), s	0.0	0.0	30.2	0.1	14.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	30.2	0.1	14.8	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	0.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	0	623	4	1329	0	0	0	866	0	2	0
V/C Ratio(X)	0.00	0.00	0.91	0.57	0.50	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1121	63	2405	0	0	0	866	0	307	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)	0.00	0.00	0.72	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	32.9	51.3	24.7	0.0	0.0	0.0	10.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	5.0	124.3	0.3	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	16.4	0.2	7.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	37.9	175.6	25.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0
LnGrp LOS				D	F	C				B		
Approach Vol, veh/h		570			663			6			0	
Approach Delay, s/veh		37.9			25.4			10.6			0.0	
Approach LOS		D			C			B				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	60.3	4.2	38.5	60.3	0.0		42.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0				
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0		70.0				
Max Q Clear Time (g_c+I1), s	0.0	2.2	2.1	32.2	0.0	0.0		16.8				
Green Ext Time (p_c), s	0.0	0.0	0.6	2.2	0.0	0.0		3.0				
Intersection Summary												
HCM 2010 Ctrl Delay				31.1								
HCM 2010 LOS				C								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↩		↩	↩	↩		↕			↕	
Traffic Volume (veh/h)	45	575	1	2	661	30	4	0	6	42	0	53
Future Volume (veh/h)	45	575	1	2	661	30	4	0	6	42	0	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1750	1863	1750	1716	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	45	575	1	2	661	30	4	0	6	42	0	53
Adj No. of Lanes	0	1	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.70	0.70	0.70	0.90	0.90	0.90	0.63	0.63	0.63	0.63	0.63	0.63
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	636	1	4	1501	68	0	0	771	0	0	84
Arrive On Green	0.39	0.39	0.39	0.00	0.44	0.44	0.40	0.00	0.49	0.00	0.00	0.05
Sat Flow, veh/h	80	1614	3	1634	3448	156	0	0	1583	0	0	1583
Grp Volume(v), veh/h	621	0	0	2	339	352	0	0	6	0	0	53
Grp Sat Flow(s),veh/h/ln	1697	0	0	1634	1770	1835	0	0	1583	0	0	1583
Q Serve(g_s), s	22.1	0.0	0.0	0.1	13.8	13.8	0.0	0.0	0.2	0.0	0.0	3.4
Cycle Q Clear(g_c), s	35.9	0.0	0.0	0.1	13.8	13.8	0.0	0.0	0.2	0.0	0.0	3.4
Prop In Lane	0.07		0.00	1.00		0.09	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	707	0	0	4	770	799	0	0	771	0	0	84
V/C Ratio(X)	0.88	0.00	0.00	0.57	0.44	0.44	0.00	0.00	0.01	0.00	0.00	0.63
Avail Cap(c_a), veh/h	1056	0	0	63	1203	1247	0	0	771	0	0	261
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)	0.70	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	0.0	51.3	20.3	20.3	0.0	0.0	13.6	0.0	0.0	47.8
Incr Delay (d2), s/veh	4.5	0.0	0.0	124.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0	34.9
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	17.6	0.0	0.0	0.2	6.8	7.0	0.0	0.0	0.1	0.0	0.0	2.3
LnGrp Delay(d),s/veh	34.0	0.0	0.0	175.6	20.7	20.7	0.0	0.0	13.6	0.0	0.0	82.7
LnGrp LOS	C			F	C	C			B			F
Approach Vol, veh/h	621		693			6			53			
Approach Delay, s/veh	34.0		21.2			13.6			82.7			
Approach LOS	C		C			B			F			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	0.0	54.2	4.2	44.6	44.7	9.5	48.8					
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Max Green Setting (Gmax), s	4.0	17.0	4.0	62.0	4.0	17.0	70.0					
Max Q Clear Time (g_c+I1), s	0.0	2.2	2.1	37.9	0.0	5.4	15.8					
Green Ext Time (p_c), s	0.0	0.0	0.6	2.7	0.0	0.1	2.6					
Intersection Summary												
HCM 2010 Ctrl Delay			29.3									
HCM 2010 LOS			C									