













Appendix K























Peak Hour Intersection Calculation Worksheets & Queuing Reports

HCM 2010 Signalized Intersection Summary













1: I-5 SB Ramps & Seaworld Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↘↗	↑↑					↘		↗
Traffic Volume (veh/h)	0	1480	30	420	260	0	0	0	0	310	0	730
Future Volume (veh/h)	0	1480	30	420	260	0	0	0	0	310	0	730
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	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
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1558	32	442	274	0				326	0	47
Adj No. of Lanes	0	2	1	2	2	0				1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1641	698	535	2407	0				358	0	320
Arrive On Green	0.00	0.46	0.46	0.16	0.68	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	3632	1506	3442	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	1558	32	442	274	0				326	0	47
Grp Sat Flow(s),veh/h/ln	0	1770	1506	1721	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	38.0	1.0	11.2	2.4	0.0				16.2	0.0	2.2
Cycle Q Clear(g_c), s	0.0	38.0	1.0	11.2	2.4	0.0				16.2	0.0	2.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1641	698	535	2407	0				358	0	320
V/C Ratio(X)	0.00	0.95	0.05	0.83	0.11	0.00				0.91	0.00	0.15
Avail Cap(c_a), veh/h	0	1671	711	535	2407	0				373	0	332
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.32	0.32	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.1	13.2	36.8	5.0	0.0				35.1	0.0	29.5
Incr Delay (d2), s/veh	0.0	13.1	0.1	3.3	0.0	0.0				24.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	21.4	0.5	5.6	1.2	0.0				10.3	0.0	1.0
LnGrp Delay(d),s/veh	0.0	36.2	13.4	40.1	5.0	0.0				59.4	0.0	29.6
LnGrp LOS		D	B	D	A					E		C
Approach Vol, veh/h		1590			716						373	
Approach Delay, s/veh		35.8			26.7						55.7	
Approach LOS		D			C						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.5	47.2		23.3		66.7						
Change Period (Y+Rc), s	5.5	* 5.5		5.1		5.5						
Max Green Setting (Gmax), s	13.3	* 43		18.9		60.5						
Max Q Clear Time (g_c+I1), s	13.2	40.0		18.2		4.4						
Green Ext Time (p_c), s	0.0	1.8		0.0		1.1						
Intersection Summary												
HCM 2010 Ctrl Delay			36.1									
HCM 2010 LOS			D									
Notes												




















HCM 2010 Signalized Intersection Summary
 2: I-5 NB Ramps & Seaworld Drive/Tecolote Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 	 			
Traffic Volume (veh/h)	1220	570	0	0	580	480	100	30	270	0	0	0
Future Volume (veh/h)	1220	570	0	0	580	480	100	30	270	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.94			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	1284	600	0	0	611	326	105	32	221			
Adj No. of Lanes	2	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	1215	2796	0	0	862	460	136	41	147			
Arrive On Green	0.35	0.79	0.00	0.00	0.39	0.39	0.10	0.10	0.10			
Sat Flow, veh/h	3442	3632	0	0	2302	1179	1375	419	1487			
Grp Volume(v), veh/h	1284	600	0	0	489	448	137	0	221			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1618	1794	0	1487			
Q Serve(g_s), s	35.3	4.3	0.0	0.0	23.3	23.3	7.4	0.0	9.9			
Cycle Q Clear(g_c), s	35.3	4.3	0.0	0.0	23.3	23.3	7.4	0.0	9.9			
Prop In Lane	1.00		0.00	0.00		0.73	0.77		1.00			
Lane Grp Cap(c), veh/h	1215	2796	0	0	690	631	178	0	147			
V/C Ratio(X)	1.06	0.21	0.00	0.00	0.71	0.71	0.77	0.00	1.50			
Avail Cap(c_a), veh/h	1215	2796	0	0	690	631	178	0	147			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.29	0.29	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.3	2.7	0.0	0.0	25.7	25.7	43.9	0.0	45.0			
Incr Delay (d2), s/veh	32.0	0.1	0.0	0.0	6.1	6.6	17.0	0.0	257.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	22.1	2.1	0.0	0.0	12.4	11.5	4.5	0.0	18.3			
LnGrp Delay(d),s/veh	64.3	2.7	0.0	0.0	31.8	32.3	60.9	0.0	302.5			
LnGrp LOS	F	A			C	C	E		F			
Approach Vol, veh/h		1884			937			358				
Approach Delay, s/veh		44.7			32.1			210.1				
Approach LOS		D			C			F				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		85.0		15.0	40.0	45.0						
Change Period (Y+Rc), s		6.0		5.1	* 4.7	6.0						
Max Green Setting (Gmax), s		79.0		9.9	* 35	39.0						
Max Q Clear Time (g_c+I1), s		6.3		11.9	37.3	25.3						
Green Ext Time (p_c), s		2.5		0.0	0.0	3.2						
Intersection Summary												
HCM 2010 Ctrl Delay				59.6								
HCM 2010 LOS				E								
Notes												

























HCM 2010 Signalized Intersection Summary 3: I-805 SB Ramps & Phyllis Place

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖↗	↑					↖↗	↗	
Traffic Volume (veh/h)	0	835	420	385	405	0	0	0	0	260	20	690
Future Volume (veh/h)	0	835	420	385	405	0	0	0	0	260	20	690
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.99
Parking Bus, Adj	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	1863	1863	1863	0				1863	1863	1900
Adj Flow Rate, veh/h	0	879	407	405	426	0				274	21	706
Adj No. of Lanes	0	2	1	2	1	0				2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1028	450	465	874	0				1463	19	647
Arrive On Green	0.00	0.29	0.29	0.14	0.47	0.00				0.43	0.43	0.43
Sat Flow, veh/h	0	3632	1551	3442	1863	0				3442	45	1523
Grp Volume(v), veh/h	0	879	407	405	426	0				274	0	727
Grp Sat Flow(s),veh/h/ln	0	1770	1551	1721	1863	0				1721	0	1568
Q Serve(g_s), s	0.0	25.1	27.0	12.3	16.8	0.0				5.3	0.0	45.5
Cycle Q Clear(g_c), s	0.0	25.1	27.0	12.3	16.8	0.0				5.3	0.0	45.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.97
Lane Grp Cap(c), veh/h	0	1028	450	465	874	0				1463	0	667
V/C Ratio(X)	0.00	0.86	0.90	0.87	0.49	0.00				0.19	0.00	1.09
Avail Cap(c_a), veh/h	0	1098	481	492	926	0				1463	0	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	35.9	36.5	45.4	19.5	0.0				19.2	0.0	30.8
Incr Delay (d2), s/veh	0.0	6.0	18.8	14.2	0.2	0.0				0.0	0.0	62.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.1	13.9	6.8	8.7	0.0				2.5	0.0	31.1
LnGrp Delay(d),s/veh	0.0	41.9	55.3	59.6	19.7	0.0				19.2	0.0	92.8
LnGrp LOS		D	E	E	B					B		F
Approach Vol, veh/h		1286			831						1001	
Approach Delay, s/veh		46.1			39.2						72.7	
Approach LOS		D			D						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.2	36.9		51.0		56.0						
Change Period (Y+Rc), s	* 4.7	5.8		5.5		5.8						
Max Green Setting (Gmax), s	* 15	33.2		45.5		53.2						
Max Q Clear Time (g_c+I1), s	14.3	29.0		47.5		18.8						
Green Ext Time (p_c), s	0.1	2.1		0.0		1.7						
Intersection Summary												
HCM 2010 Ctrl Delay			52.8									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 4: I-805 NB Ramps & Phyllis Place























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 				 							
Traffic Volume (veh/h)	735	360	0	0	470	280	320	20	475	0	0	0
Future Volume (veh/h)	735	360	0	0	470	280	320	20	475	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	774	379	0	0	495	48	337	21	284			
Adj No. of Lanes	2	1	0	0	2	0	0	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	842	1060	0	0	860	83	490	31	447			
Arrive On Green	0.24	0.57	0.00	0.00	0.26	0.26	0.29	0.29	0.29			
Sat Flow, veh/h	3442	1863	0	0	3347	314	1675	104	1529			
Grp Volume(v), veh/h	774	379	0	0	268	275	358	0	284			
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1799	1779	0	1529			
Q Serve(g_s), s	17.2	8.7	0.0	0.0	10.3	10.4	14.0	0.0	12.7			
Cycle Q Clear(g_c), s	17.2	8.7	0.0	0.0	10.3	10.4	14.0	0.0	12.7			
Prop In Lane	1.00		0.00	0.00		0.17	0.94		1.00			
Lane Grp Cap(c), veh/h	842	1060	0	0	468	476	520	0	447			
V/C Ratio(X)	0.92	0.36	0.00	0.00	0.57	0.58	0.69	0.00	0.64			
Avail Cap(c_a), veh/h	845	1423	0	0	812	826	995	0	856			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.9	9.2	0.0	0.0	25.1	25.1	24.6	0.0	24.2			
Incr Delay (d2), s/veh	14.6	0.1	0.0	0.0	0.4	0.4	0.6	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	9.9	4.4	0.0	0.0	5.1	5.2	6.9	0.0	5.4			
LnGrp Delay(d),s/veh	43.5	9.2	0.0	0.0	25.5	25.5	25.3	0.0	24.7			
LnGrp LOS	D	A			C	C	C		C			
Approach Vol, veh/h		1153			543			642				
Approach Delay, s/veh		32.3			25.5			25.0				
Approach LOS		C			C			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.5			24.0	26.6		28.1				
Change Period (Y+Rc), s		5.8			* 4.7	5.8		5.1				
Max Green Setting (Gmax), s		60.1			* 19	36.1		44.0				
Max Q Clear Time (g_c+1), s		10.7			19.2	12.4		16.0				
Green Ext Time (p_c), s		1.5			0.0	2.0		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay				28.7								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary
 5: Mission Center Road & Civita Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	50	100	280	190	70	480	190	60	30	300	290
Future Volume (veh/h)	80	50	100	280	190	70	480	190	60	30	300	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	84	53	44	295	200	6	505	200	16	32	316	42
Adj No. of Lanes	1	1	1	2	1	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	203	163	358	286	234	548	2224	986	41	1742	770
Arrive On Green	0.06	0.11	0.11	0.10	0.15	0.15	0.16	0.63	0.63	0.02	0.49	0.49
Sat Flow, veh/h	1774	1863	1496	3442	1863	1521	3442	3539	1568	1774	3539	1564
Grp Volume(v), veh/h	84	53	44	295	200	6	505	200	16	32	316	42
Grp Sat Flow(s),veh/h/ln	1774	1863	1496	1721	1863	1521	1721	1770	1568	1774	1770	1564
Q Serve(g_s), s	6.5	3.7	3.8	11.8	14.3	0.5	20.2	3.1	0.5	2.5	7.0	2.0
Cycle Q Clear(g_c), s	6.5	3.7	3.8	11.8	14.3	0.5	20.2	3.1	0.5	2.5	7.0	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	203	163	358	286	234	548	2224	986	41	1742	770
V/C Ratio(X)	0.80	0.26	0.27	0.82	0.70	0.03	0.92	0.09	0.02	0.79	0.18	0.05
Avail Cap(c_a), veh/h	324	440	354	629	440	360	556	2224	986	86	1742	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	57.2	57.3	61.5	56.2	50.4	58.0	10.2	9.8	68.0	19.8	18.5
Incr Delay (d2), s/veh	5.2	2.0	2.6	4.8	7.8	0.1	19.5	0.1	0.0	11.6	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.0	1.7	5.9	8.0	0.2	11.1	1.6	0.2	1.4	3.4	0.9
LnGrp Delay(d),s/veh	70.2	59.2	59.8	66.3	64.0	50.5	77.4	10.3	9.8	79.6	20.0	18.7
LnGrp LOS	E	E	E	E	E	D	E	B	A	E	C	B
Approach Vol, veh/h		181			501			721			390	
Approach Delay, s/veh		64.4			65.2			57.3			24.8	
Approach LOS		E			E			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	93.3	19.0	20.1	26.7	74.2	12.7	26.4				
Change Period (Y+Rc), s	4.4	5.3	4.4	4.9	4.4	5.3	4.4	4.9				
Max Green Setting (Gmax), s	6.8	55.5	25.6	33.1	22.6	39.7	25.6	33.1				
Max Q Clear Time (g_c+I1), s	4.5	5.1	13.8	5.8	22.2	9.0	8.5	16.3				
Green Ext Time (p_c), s	0.0	1.8	0.8	0.9	0.1	5.5	0.1	2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			53.2									
HCM 2010 LOS			D									
Notes												

















HCM 2010 Signalized Intersection Summary

6: Mission Center Road & Westside Drive





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	20	185	195	40	40	245	620	65	30	560	90
Future Volume (veh/h)	70	20	185	195	40	40	245	620	65	30	560	90
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.97	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	74	21	39	205	42	21	258	653	28	32	589	21
Adj No. of Lanes	0	1	1	1	1	0	2	3	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	31	277	330	215	108	354	1640	501	46	869	373
Arrive On Green	0.08	0.08	0.08	0.19	0.19	0.19	0.10	0.32	0.32	0.03	0.25	0.25
Sat Flow, veh/h	1397	396	1462	1774	1159	579	3442	5085	1554	1774	3539	1519
Grp Volume(v), veh/h	95	0	39	205	0	63	258	653	28	32	589	21
Grp Sat Flow(s),veh/h/ln	1793	0	1462	1774	0	1738	1721	1695	1554	1774	1770	1519
Q Serve(g_s), s	4.0	0.0	1.7	8.2	0.0	2.3	5.6	7.6	1.0	1.4	11.5	0.8
Cycle Q Clear(g_c), s	4.0	0.0	1.7	8.2	0.0	2.3	5.6	7.6	1.0	1.4	11.5	0.8
Prop In Lane	0.78		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	140	0	277	330	0	323	354	1640	501	46	869	373
V/C Ratio(X)	0.68	0.00	0.14	0.62	0.00	0.19	0.73	0.40	0.06	0.70	0.68	0.06
Avail Cap(c_a), veh/h	728	0	756	674	0	660	835	3212	981	160	1695	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	26.4	28.7	0.0	26.3	33.3	20.2	17.9	37.0	26.2	22.1
Incr Delay (d2), s/veh	2.1	0.0	0.1	2.5	0.0	0.4	1.1	0.3	0.1	7.0	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	0.7	4.2	0.0	1.2	2.7	3.6	0.4	0.8	5.8	0.3
LnGrp Delay(d),s/veh	36.5	0.0	26.5	31.3	0.0	26.7	34.4	20.4	18.0	44.0	27.5	22.2
LnGrp LOS	D		C	C		C	C	C	B	D	C	C
Approach Vol, veh/h		134			268			939			642	
Approach Delay, s/veh		33.6			30.2			24.2			28.1	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.3	29.3		10.9	6.4	35.2		24.2				
Change Period (Y+Rc), s	4.4	10.5		4.9	4.4	10.5		9.9				
Max Green Setting (Gmax), s	18.6	36.7		31.1	6.9	48.4		29.1				
Max Q Clear Time (g_c+I1), s	7.6	13.5		6.0	3.4	9.6		10.2				
Green Ext Time (p_c), s	0.3	5.3		0.4	0.0	8.3		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			26.9									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary

7: Seaworld Drive & Friar Roads























								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	 		 		 	 		
Traffic Volume (veh/h)	545	295	1250	570	190	760		
Future Volume (veh/h)	545	295	1250	570	190	760		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	589	295	1316	600	200	800		
Adj No. of Lanes	2	1	2	1	2	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	810	361	1559	1043	285	2082		
Arrive On Green	0.23	0.23	0.44	0.44	0.08	0.59		
Sat Flow, veh/h	3548	1583	3632	1547	3442	3632		
Grp Volume(v), veh/h	589	295	1316	600	200	800		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1547	1721	1770		
Q Serve(g_s), s	10.4	11.9	22.4	14.2	3.8	8.1		
Cycle Q Clear(g_c), s	10.4	11.9	22.4	14.2	3.8	8.1		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	810	361	1559	1043	285	2082		
V/C Ratio(X)	0.73	0.82	0.84	0.58	0.70	0.38		
Avail Cap(c_a), veh/h	1469	656	1602	1062	285	2167		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	24.1	24.7	16.9	6.1	30.2	7.4		
Incr Delay (d2), s/veh	0.5	1.7	4.4	0.9	6.4	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	5.1	5.4	11.7	10.4	2.1	4.0		
LnGrp Delay(d),s/veh	24.6	26.5	21.3	7.0	36.6	7.7		
LnGrp LOS	C	C	C	A	D	A		
Approach Vol, veh/h	884		1916			1000		
Approach Delay, s/veh	25.2		16.8			13.5		
Approach LOS	C		B			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.0	36.0				46.0		21.6
Change Period (Y+Rc), s	4.4	6.2				* 6.2		6.2
Max Green Setting (Gmax), s	5.6	30.6				* 41		28.0
Max Q Clear Time (g_c+I1), s	5.8	24.4				10.1		13.9
Green Ext Time (p_c), s	0.0	5.4				11.4		1.5
Intersection Summary								
HCM 2010 Ctrl Delay			17.9					
HCM 2010 LOS			B					
Notes								

HCM 2010 Signalized Intersection Summary
 8: Friar Roads & Napa Street

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	460	0	0	850	780	0	0	0	250	0	120
Future Volume (veh/h)	290	460	0	0	850	780	0	0	0	250	0	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	305	484	0	0	895	705	0	0	0	263	0	68
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0	2	2	2
Cap, veh/h	340	2265	0	0	1424	856	0	2	0	487	0	219
Arrive On Green	0.19	0.64	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.14	0.00	0.14
Sat Flow, veh/h	1774	3632	0	0	3632	1560	0	-74510	0	3371	0	1518
Grp Volume(v), veh/h	305	484	0	0	895	705	0	0	0	263	0	68
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1560	0	1863	0	1685	0	1518
Q Serve(g_s), s	16.0	5.4	0.0	0.0	19.3	35.6	0.0	0.0	0.0	6.9	0.0	3.8
Cycle Q Clear(g_c), s	16.0	5.4	0.0	0.0	19.3	35.6	0.0	0.0	0.0	6.9	0.0	3.8
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	340	2265	0	0	1424	856	0	2	0	487	0	219
V/C Ratio(X)	0.90	0.21	0.00	0.00	0.63	0.82	0.00	0.00	0.00	0.54	0.00	0.31
Avail Cap(c_a), veh/h	459	2677	0	0	1428	858	0	528	0	924	0	416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.6	7.1	0.0	0.0	22.7	17.8	0.0	0.0	0.0	37.8	0.0	36.5
Incr Delay (d2), s/veh	13.8	0.1	0.0	0.0	1.1	6.9	0.0	0.0	0.0	2.0	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	2.6	0.0	0.0	9.5	20.0	0.0	0.0	0.0	3.3	0.0	3.4
LnGrp Delay(d),s/veh	51.3	7.2	0.0	0.0	23.8	24.7	0.0	0.0	0.0	39.8	0.0	38.2
LnGrp LOS	D	A			C	C				D		D
Approach Vol, veh/h		789			1600			0			331	
Approach Delay, s/veh		24.3			24.2			0.0			39.4	
Approach LOS		C			C						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		71.5		23.7	22.6	48.9		0.0				
Change Period (Y+Rc), s		* 11		* 9.9	4.4	* 11		4.0				
Max Green Setting (Gmax), s		* 72		* 26	24.6	* 38		27.0				
Max Q Clear Time (g_c+I1), s		7.4		8.9	18.0	37.6		0.0				
Green Ext Time (p_c), s		5.9		2.3	0.3	0.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				26.1								
HCM 2010 LOS				C								
Notes												























HCM 2010 Signalized Intersection Summary

9: Colusa Street & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (veh/h)	55	480	50	50	1720	150	70	20	50	90	20	50
Future Volume (veh/h)	55	480	50	50	1720	150	70	20	50	90	20	50
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	58	505	48	53	1811	153	74	21	17	95	21	21
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	1916	182	68	1929	160	287	74	342	276	187	187
Arrive On Green	0.04	0.59	0.59	0.04	0.58	0.58	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3262	309	1774	3303	275	1005	332	1541	1335	843	843
Grp Volume(v), veh/h	58	273	280	53	957	1007	95	0	17	95	0	42
Grp Sat Flow(s),veh/h/ln	1774	1770	1802	1774	1770	1809	1337	0	1541	1335	0	1686
Q Serve(g_s), s	3.3	7.6	7.6	3.0	49.3	52.6	5.0	0.0	0.9	6.5	0.0	2.0
Cycle Q Clear(g_c), s	3.3	7.6	7.6	3.0	49.3	52.6	7.0	0.0	0.9	13.5	0.0	2.0
Prop In Lane	1.00		0.17	1.00		0.15	0.78		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	74	1039	1058	68	1033	1056	361	0	342	276	0	375
V/C Ratio(X)	0.78	0.26	0.26	0.78	0.93	0.95	0.26	0.00	0.05	0.34	0.00	0.11
Avail Cap(c_a), veh/h	85	1039	1058	157	1034	1057	484	0	476	392	0	521
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.7	10.1	10.1	48.0	19.0	19.7	33.5	0.0	30.8	38.9	0.0	31.2
Incr Delay (d2), s/veh	28.1	0.5	0.5	7.0	15.0	18.6	0.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.9	4.0	1.6	28.2	31.5	2.3	0.0	0.4	2.4	0.0	0.9
LnGrp Delay(d),s/veh	75.9	10.6	10.6	55.0	34.0	38.2	33.7	0.0	30.8	39.1	0.0	31.3
LnGrp LOS	E	B	B	D	C	D	C		C	D		C
Approach Vol, veh/h		611			2017			112			137	
Approach Delay, s/veh		16.8			36.7			33.2			36.7	
Approach LOS		B			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	65.1		27.3	8.6	64.8		27.3				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	8.9	* 55		31.1	4.8	58.8		31.1				
Max Q Clear Time (g_c+I1), s	5.0	9.6		15.5	5.3	54.6		9.0				
Green Ext Time (p_c), s	0.0	9.6		0.2	0.0	4.1		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			32.3									
HCM 2010 LOS			C									
Notes												




















HCM 2010 Signalized Intersection Summary

10: Via Las Cumbres & Friar Roads




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	450	110	280	1270	465	120	170	210	140	210	140
Future Volume (veh/h)	140	450	110	280	1270	465	120	170	210	140	210	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	146	469	93	295	1337	331	126	179	126	147	221	105
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	954	188	323	1457	636	149	369	304	170	248	118
Arrive On Green	0.10	0.32	0.32	0.18	0.41	0.41	0.08	0.20	0.20	0.10	0.21	0.21
Sat Flow, veh/h	1774	2939	579	1774	3539	1545	1774	1863	1535	1774	1182	562
Grp Volume(v), veh/h	146	281	281	295	1337	331	126	179	126	147	0	326
Grp Sat Flow(s),veh/h/ln	1774	1770	1748	1774	1770	1545	1774	1863	1535	1774	0	1744
Q Serve(g_s), s	11.4	17.9	18.2	22.9	50.2	22.5	9.8	12.0	10.1	11.5	0.0	25.5
Cycle Q Clear(g_c), s	11.4	17.9	18.2	22.9	50.2	22.5	9.8	12.0	10.1	11.5	0.0	25.5
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	169	574	567	323	1457	636	149	369	304	170	0	366
V/C Ratio(X)	0.86	0.49	0.49	0.91	0.92	0.52	0.85	0.49	0.41	0.86	0.00	0.89
Avail Cap(c_a), veh/h	181	574	567	473	1548	676	155	425	350	181	0	430
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	62.6	38.1	38.1	56.3	39.1	30.9	63.4	50.0	49.2	62.6	0.0	53.9
Incr Delay (d2), s/veh	31.3	0.4	0.5	16.7	8.6	0.4	32.3	1.0	0.9	31.5	0.0	16.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	8.8	8.8	12.7	26.2	9.7	6.2	6.3	4.3	7.1	0.0	14.0
LnGrp Delay(d),s/veh	93.9	38.5	38.6	73.0	47.6	31.4	95.7	51.0	50.1	94.1	0.0	70.5
LnGrp LOS	F	D	D	E	D	C	F	D	D	F		E
Approach Vol, veh/h		708			1963			431				473
Approach Delay, s/veh		50.0			48.7			63.8				77.8
Approach LOS		D			D			E				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	31.3	56.5	17.5	35.2	19.1	68.7	19.2	33.5				
Change Period (Y+Rc), s	5.7	* 11	5.7	* 5.7	5.7	* 11	5.7	5.7				
Max Green Setting (Gmax), s	37.4	* 39	12.3	* 35	14.3	* 61	14.3	32.0				
Max Q Clear Time (g_c+1), s	24.9	20.2	11.8	27.5	13.4	52.2	13.5	14.0				
Green Ext Time (p_c), s	0.7	2.4	0.0	0.7	0.0	5.6	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			54.6									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

11: Fashion Valley Road & Friar Roads























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	580	80	120	1590	10	180	5	120	20	5	5
Future Volume (veh/h)	5	580	80	120	1590	10	180	5	120	20	5	5
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	0.98		0.97	0.98		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	5	611	58	126	1674	11	189	5	126	21	5	0
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	2071	194	154	1876	12	354	7	298	150	28	0
Arrive On Green	0.01	0.44	0.44	0.17	1.00	1.00	0.19	0.19	0.19	0.19	0.19	0.00
Sat Flow, veh/h	1774	4717	443	1774	3603	24	1418	38	1534	402	147	0
Grp Volume(v), veh/h	5	437	232	126	821	864	194	0	126	26	0	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1770	1774	1770	1857	1456	0	1534	549	0	0
Q Serve(g_s), s	0.3	7.5	7.6	6.2	0.0	0.0	0.0	0.0	6.5	1.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	7.5	7.6	6.2	0.0	0.0	10.9	0.0	6.5	11.9	0.0	0.0
Prop In Lane	1.00		0.25	1.00		0.01	0.97		1.00	0.81		0.00
Lane Grp Cap(c), veh/h	9	1488	777	154	921	967	362	0	298	179	0	0
V/C Ratio(X)	0.54	0.29	0.30	0.82	0.89	0.89	0.54	0.00	0.42	0.15	0.00	0.00
Avail Cap(c_a), veh/h	79	1488	777	177	921	967	632	0	597	435	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.70	0.70	0.70	0.86	0.00	0.86	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.7	16.3	16.3	36.5	0.0	0.0	33.6	0.0	31.8	34.9	0.0	0.0
Incr Delay (d2), s/veh	16.9	0.5	1.0	14.6	9.4	9.2	0.6	0.0	0.4	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	3.6	3.9	3.6	2.4	2.5	4.5	0.0	2.8	0.6	0.0	0.0
LnGrp Delay(d),s/veh	61.6	16.8	17.3	51.1	9.4	9.2	34.2	0.0	32.3	35.1	0.0	0.0
LnGrp LOS	E	B	B	D	A	A	C		C	D		
Approach Vol, veh/h		674			1811			320			26	
Approach Delay, s/veh		17.3			12.2			33.4			35.1	
Approach LOS		B			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.2	50.4		27.4	4.9	57.8		27.4				
Change Period (Y+Rc), s	4.4	* 11		* 9.9	4.4	* 11		* 9.9				
Max Green Setting (Gmax), s	9.0	* 21		* 35	4.0	* 26		* 35				
Max Q Clear Time (g_c+I1), s	8.2	9.6		13.9	2.3	2.0		12.9				
Green Ext Time (p_c), s	0.0	2.9		0.1	0.0	16.0		1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			16.0									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary
 12: Via De La Moda & Friar Roads


































												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 										
Traffic Volume (veh/h)	0	750	30	70	1690	0	20	0	90	0	0	0
Future Volume (veh/h)	0	750	30	70	1690	0	20	0	90	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.96	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			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	0	1863	0	1863			
Adj Flow Rate, veh/h	0	789	32	74	1779	0	21	0	74			
Adj No. of Lanes	1	3	0	2	2	0	1	0	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	2	2	2	0	2	0	2			
Cap, veh/h	2	3712	150	129	2930	0	112	0	100			
Arrive On Green	0.00	1.00	1.00	0.04	0.83	0.00	0.06	0.00	0.06			
Sat Flow, veh/h	1774	5006	202	3442	3632	0	1774	0	1583			
Grp Volume(v), veh/h	0	534	287	74	1779	0	21	0	74			
Grp Sat Flow(s),veh/h/ln	1774	1695	1818	1721	1770	0	1774	0	1583			
Q Serve(g_s), s	0.0	0.0	0.0	1.9	15.7	0.0	1.0	0.0	4.1			
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.9	15.7	0.0	1.0	0.0	4.1			
Prop In Lane	1.00		0.11	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	2	2514	1348	129	2930	0	112	0	100			
V/C Ratio(X)	0.00	0.21	0.21	0.57	0.61	0.00	0.19	0.00	0.74			
Avail Cap(c_a), veh/h	99	2514	1348	688	2930	0	631	0	563			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.94	0.94	0.88	0.88	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	0.0	0.0	42.6	2.7	0.0	40.0	0.0	41.4			
Incr Delay (d2), s/veh	0.0	0.2	0.3	1.3	0.8	0.0	0.3	0.0	4.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.9	7.8	0.0	0.5	0.0	1.9			
LnGrp Delay(d),s/veh	0.0	0.2	0.3	43.9	3.5	0.0	40.3	0.0	45.4			
LnGrp LOS		A	A	D	A		D		D			
Approach Vol, veh/h		821			1853			95				
Approach Delay, s/veh		0.2			5.1			44.3				
Approach LOS		A			A			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	7.8	72.1			0.0	79.9		10.1				
Change Period (Y+Rc), s	4.4	5.4			4.4	* 5.4		4.4				
Max Green Setting (Gmax), s	18.0	25.8			5.0	* 39		32.0				
Max Q Clear Time (g_c+I1), s	3.9	2.0			0.0	17.7		6.1				
Green Ext Time (p_c), s	0.1	6.3			0.0	15.6		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay				5.0								
HCM 2010 LOS				A								
Notes												

HCM 2010 Signalized Intersection Summary













13: Avenida De Las Tiendas & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	795	40	100	1680	40	20	5	30	40	5	10
Future Volume (veh/h)	5	795	40	100	1680	40	20	5	30	40	5	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.96		0.96	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	5	837	37	105	1768	42	21	13	11	42	5	8
Adj No. of Lanes	1	3	0	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	9	1307	58	1377	3412	81	292	306	251	291	104	166
Arrive On Green	0.00	0.09	0.09	0.40	0.67	0.67	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	1774	4984	220	3442	5105	121	1346	1863	1525	1334	631	1009
Grp Volume(v), veh/h	5	569	305	105	1174	636	21	13	11	42	0	13
Grp Sat Flow(s),veh/h/ln	1774	1695	1814	1721	1695	1836	1346	1863	1525	1334	0	1640
Q Serve(g_s), s	0.3	14.6	14.7	1.7	15.8	15.8	1.2	0.5	0.5	2.5	0.0	0.6
Cycle Q Clear(g_c), s	0.3	14.6	14.7	1.7	15.8	15.8	1.8	0.5	0.5	3.0	0.0	0.6
Prop In Lane	1.00		0.12	1.00		0.07	1.00		1.00	1.00		0.62
Lane Grp Cap(c), veh/h	9	889	476	1377	2266	1227	292	306	251	291	0	269
V/C Ratio(X)	0.54	0.64	0.64	0.08	0.52	0.52	0.07	0.04	0.04	0.14	0.00	0.05
Avail Cap(c_a), veh/h	83	1443	772	1377	2266	1227	521	623	510	518	0	548
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	0.72	0.72	0.72	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.8	37.0	37.0	16.7	7.6	7.6	32.4	31.7	31.7	32.9	0.0	31.7
Incr Delay (d2), s/veh	16.6	3.4	6.4	0.0	0.6	1.1	0.0	0.0	0.0	0.1	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	0.2	7.3	8.2	0.8	7.5	8.3	0.5	0.3	0.2	0.9	0.0	0.3
LnGrp Delay(d),s/veh	61.4	40.4	43.4	16.7	8.2	8.7	32.5	31.7	31.7	33.0	0.0	31.7
LnGrp LOS	E	D	D	B	A	A	C	C	C	C		C
Approach Vol, veh/h		879			1915			45			55	
Approach Delay, s/veh		41.6			8.8			32.1			32.7	
Approach LOS		D			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	41.3	29.0		19.7	4.9	65.4		19.7				
Change Period (Y+Rc), s	5.3	* 5.4		4.9	4.4	5.3		4.9				
Max Green Setting (Gmax), s	6.9	* 38		30.1	4.2	41.1		30.1				
Max Q Clear Time (g_c+I1), s	3.7	16.7		5.0	2.3	17.8		3.8				
Green Ext Time (p_c), s	0.0	6.5		0.1	0.0	15.8		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay				19.6								
HCM 2010 LOS				B								
Notes												

HCM 2010 Signalized Intersection Summary
 14: SR-163 SB Ramps/Ulric Street & Friar Roads
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  	 	 		 	 		
Traffic Volume (veh/h)	140	405	320	530	1150	480	560	20	810	350	20	110
Future Volume (veh/h)	140	405	320	530	1150	480	560	20	810	350	20	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	147	426	200	558	1211	242	589	21	511	368	21	37
Adj No. of Lanes	2	3	1	2	3	2	2	1	2	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	193	1816	860	621	2466	1753	661	358	1022	517	89	156
Arrive On Green	0.06	0.36	0.36	0.18	0.48	0.48	0.19	0.19	0.19	0.15	0.15	0.15
Sat Flow, veh/h	3442	5085	1557	3442	5085	2752	3442	1863	2700	3442	590	1039
Grp Volume(v), veh/h	147	426	200	558	1211	242	589	21	511	368	0	58
Grp Sat Flow(s),veh/h/ln	1721	1695	1557	1721	1695	1376	1721	1863	1350	1721	0	1629
Q Serve(g_s), s	6.3	8.8	10.0	23.8	24.1	5.3	25.0	1.4	22.0	15.3	0.0	4.7
Cycle Q Clear(g_c), s	6.3	8.8	10.0	23.8	24.1	5.3	25.0	1.4	22.0	15.3	0.0	4.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.64
Lane Grp Cap(c), veh/h	193	1816	860	621	2466	1753	661	358	1022	517	0	245
V/C Ratio(X)	0.76	0.23	0.23	0.90	0.49	0.14	0.89	0.06	0.50	0.71	0.00	0.24
Avail Cap(c_a), veh/h	252	1816	860	766	2466	1753	792	428	1124	757	0	358
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)	0.97	0.97	0.97	0.79	0.79	0.79	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	69.8	33.8	17.5	60.1	26.1	10.9	59.1	49.5	36.4	60.6	0.0	56.2
Incr Delay (d2), s/veh	9.3	0.3	0.6	9.6	0.6	0.1	9.8	0.0	0.1	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	4.2	6.3	12.1	11.5	2.9	12.8	0.7	8.2	7.3	0.0	2.1
LnGrp Delay(d),s/veh	79.1	34.1	18.1	69.7	26.7	11.1	68.8	49.5	36.5	61.3	0.0	56.3
LnGrp LOS	E	C	B	E	C	B	E	D	D	E		E
Approach Vol, veh/h		773			2011			1121			426	
Approach Delay, s/veh		38.5			36.7			53.8			60.6	
Approach LOS		D			D			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.6	58.1		27.0	12.4	77.2		33.3				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	33.4	31.1		33.0	11.0	54.0		34.5				
Max Q Clear Time (g_c+1), s	25.8	12.0		17.3	8.3	26.1		27.0				
Green Ext Time (p_c), s	1.3	3.4		0.8	0.1	11.3		1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			43.8									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 15: Friar Roads & SR-163 NB Ramps




















								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	480	1085	1440	740	820	720		
Future Volume (veh/h)	480	1085	1440	740	820	720		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	485	1096	1455	38	828	424		
Adj No. of Lanes	2	4	4	2	3	2		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1188	4571	1931	812	878	489		
Arrive On Green	0.35	0.71	0.30	0.30	0.18	0.18		
Sat Flow, veh/h	3442	6669	6669	2694	5003	2787		
Grp Volume(v), veh/h	485	1096	1455	38	828	424		
Grp Sat Flow(s),veh/h/ln	1721	1602	1602	1347	1668	1393		
Q Serve(g_s), s	9.7	5.3	18.5	0.9	14.7	13.3		
Cycle Q Clear(g_c), s	9.7	5.3	18.5	0.9	14.7	13.3		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	1188	4571	1931	812	878	489		
V/C Ratio(X)	0.41	0.24	0.75	0.05	0.94	0.87		
Avail Cap(c_a), veh/h	1188	4571	2350	988	1278	712		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.79	0.79	0.33	0.33	1.00	1.00		
Uniform Delay (d), s/veh	22.5	4.5	28.4	22.3	36.7	36.1		
Incr Delay (d2), s/veh	0.1	0.1	0.9	0.0	10.7	7.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.6	2.4	8.3	0.3	7.6	10.1		
LnGrp Delay(d),s/veh	22.5	4.6	29.3	22.3	47.3	43.8		
LnGrp LOS	C	A	C	C	D	D		
Approach Vol, veh/h		1581	1493		1252			
Approach Delay, s/veh		10.1	29.2		46.1			
Approach LOS		B	C		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		70.2		19.8	37.1	33.1		
Change Period (Y+Rc), s		6.0		4.0	6.0	* 6		
Max Green Setting (Gmax), s		57.0		23.0	19.0	* 33		
Max Q Clear Time (g_c+I1), s		7.3		15.3	11.7	20.5		
Green Ext Time (p_c), s		5.3		0.5	0.6	5.5		
Intersection Summary								
HCM 2010 Ctrl Delay			27.1					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary





















16: Frazee Road & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	630	790	425	80	1740	80	120	120	40	40	60	240
Future Volume (veh/h)	630	790	425	80	1740	80	120	120	40	40	60	240
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	656	823	157	83	1812	39	125	125	21	42	62	31
Adj No. of Lanes	2	4	2	2	3	1	2	2	0	2	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	636	3402	1452	130	1952	598	179	444	73	128	246	351
Arrive On Green	0.18	0.53	0.53	0.04	0.38	0.38	0.05	0.15	0.15	0.04	0.13	0.13
Sat Flow, veh/h	3442	6408	2734	3442	5085	1559	3442	3025	495	3442	1863	2660
Grp Volume(v), veh/h	656	823	157	83	1812	39	125	72	74	42	62	31
Grp Sat Flow(s),veh/h/ln	1721	1602	1367	1721	1695	1559	1721	1770	1751	1721	1863	1330
Q Serve(g_s), s	22.6	8.4	3.5	2.9	41.7	1.9	4.4	4.4	4.6	1.5	3.7	1.3
Cycle Q Clear(g_c), s	22.6	8.4	3.5	2.9	41.7	1.9	4.4	4.4	4.6	1.5	3.7	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	636	3402	1452	130	1952	598	179	260	257	128	246	351
V/C Ratio(X)	1.03	0.24	0.11	0.64	0.93	0.07	0.70	0.28	0.29	0.33	0.25	0.09
Avail Cap(c_a), veh/h	636	3402	1452	211	1964	602	284	637	630	169	684	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	15.4	14.3	58.0	36.0	23.8	57.0	46.4	46.5	57.3	47.6	46.6
Incr Delay (d2), s/veh	43.8	0.1	0.0	1.9	8.5	0.1	2.7	0.2	0.2	0.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.6	3.7	1.3	1.4	21.0	0.8	2.1	2.2	2.2	0.7	1.9	0.5
LnGrp Delay(d),s/veh	93.6	15.5	14.3	59.9	44.5	23.9	59.7	46.6	46.7	58.1	47.9	46.6
LnGrp LOS	F	B	B	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1636			1934			271			135	
Approach Delay, s/veh		46.7			44.8			52.6			50.8	
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	9.0	76.4	10.7	26.0	27.0	58.4	9.0	27.8				
Change Period (Y+Rc), s	4.4	* 12	4.4	* 9.9	4.4	11.5	4.4	* 9.9				
Max Green Setting (Gmax), s	7.5	* 63	10.1	* 45	22.6	47.2	6.0	* 44				
Max Q Clear Time (g_c+I1), s	4.9	10.4	6.4	5.7	24.6	43.7	3.5	6.6				
Green Ext Time (p_c), s	0.0	10.3	0.1	0.3	0.0	3.2	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			46.3									
HCM 2010 LOS			D									
Notes												



















HCM 2010 Signalized Intersection Summary
 17: Mission Center Road & Friar WB

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	160	5	340	160	590	0	0	660	280
Future Volume (veh/h)	0	0	0	160	5	340	160	590	0	0	660	280
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.95	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				167	0	123	163	602	0	0	673	92
Adj No. of Lanes				2	0	1	2	2	0	0	2	1
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.95	0.95	0.98	0.98
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				452	0	192	215	2560	0	0	2228	981
Arrive On Green				0.13	0.00	0.13	0.12	1.00	0.00	0.00	0.63	0.63
Sat Flow, veh/h				3548	0	1509	3442	3632	0	0	3632	1558
Grp Volume(v), veh/h				167	0	123	163	602	0	0	673	92
Grp Sat Flow(s),veh/h/ln				1774	0	1509	1721	1770	0	0	1770	1558
Q Serve(g_s), s				6.0	0.0	10.8	6.4	0.0	0.0	0.0	12.2	3.3
Cycle Q Clear(g_c), s				6.0	0.0	10.8	6.4	0.0	0.0	0.0	12.2	3.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				452	0	192	215	2560	0	0	2228	981
V/C Ratio(X)				0.37	0.00	0.64	0.76	0.24	0.00	0.00	0.30	0.09
Avail Cap(c_a), veh/h				991	0	421	482	2560	0	0	2228	981
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.96	0.96	0.00	0.00	0.75	0.75
Uniform Delay (d), s/veh				55.9	0.0	58.0	60.2	0.0	0.0	0.0	11.9	10.2
Incr Delay (d2), s/veh				0.5	0.0	3.5	5.2	0.2	0.0	0.0	0.3	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.0	0.0	4.7	3.2	0.1	0.0	0.0	6.0	1.4
LnGrp Delay(d),s/veh				56.4	0.0	61.6	65.4	0.2	0.0	0.0	12.1	10.4
LnGrp LOS				E		E	E	A			B	B
Approach Vol, veh/h					290			765			765	
Approach Delay, s/veh					58.6			14.1			11.9	
Approach LOS					E			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		112.3			13.1	99.1		27.7				
Change Period (Y+Rc), s		* 11			4.4	11.0		9.9				
Max Green Setting (Gmax), s		* 81			19.6	56.0		39.1				
Max Q Clear Time (g_c+11), s		2.0			8.4	14.2		12.8				
Green Ext Time (p_c), s		8.7			0.3	10.3		1.0				
Intersection Summary												
HCM 2010 Ctrl Delay				20.3								
HCM 2010 LOS				C								
Notes												




















HCM 2010 Signalized Intersection Summary
 18: Mission Center Road & Friar EB

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	20	190	0	0	0	0	580	160	190	630	0
Future Volume (veh/h)	170	20	190	0	0	0	0	580	160	190	630	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	194	0	200				0	611	168	200	663	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	484	0	207				0	2166	953	249	2533	0
Arrive On Green	0.14	0.00	0.14				0.00	1.00	1.00	0.14	1.00	0.00
Sat Flow, veh/h	3548	0	1514				0	3632	1557	3442	3632	0
Grp Volume(v), veh/h	194	0	200				0	611	168	200	663	0
Grp Sat Flow(s),veh/h/ln	1774	0	1514				0	1770	1557	1721	1770	0
Q Serve(g_s), s	7.0	0.0	18.4				0.0	0.0	0.0	7.9	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	18.4				0.0	0.0	0.0	7.9	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	484	0	207				0	2166	953	249	2533	0
V/C Ratio(X)	0.40	0.00	0.97				0.00	0.28	0.18	0.80	0.26	0.00
Avail Cap(c_a), veh/h	484	0	207				0	2166	953	556	2533	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.96	0.96	0.96	0.96	0.00
Uniform Delay (d), s/veh	55.2	0.0	60.2				0.0	0.0	0.0	58.9	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	53.4				0.0	0.3	0.4	2.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	10.8				0.0	0.1	0.1	3.8	0.1	0.0
LnGrp Delay(d),s/veh	55.8	0.0	113.6				0.0	0.3	0.4	61.1	0.2	0.0
LnGrp LOS	E		F					A	A	E	A	
Approach Vol, veh/h		394						779			863	
Approach Delay, s/veh		85.1						0.3			14.3	
Approach LOS		F						A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.5	96.5		29.0		111.0						
Change Period (Y+Rc), s	4.4	* 11		* 9.9		10.8						
Max Green Setting (Gmax), s	22.6	* 74		* 19		100.2						
Max Q Clear Time (g_c+I1), s	9.9	2.0		20.4		2.0						
Green Ext Time (p_c), s	0.3	7.9		0.0		6.1						
Intersection Summary												
HCM 2010 Ctrl Delay			22.7									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 19: Qualcomm Way & WB Friar





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	320	20	270	510	520	0	0	630	190
Future Volume (veh/h)	0	0	0	320	20	270	510	520	0	0	630	190
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				327	20	92	520	531	0	0	643	16
Adj No. of Lanes				1	1	0	2	2	0	0	3	1
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.95	0.95	0.98	0.98
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				354	57	260	604	2360	0	0	2333	711
Arrive On Green				0.20	0.20	0.20	0.06	0.22	0.00	0.00	0.46	0.46
Sat Flow, veh/h				1774	283	1302	3442	3632	0	0	5253	1549
Grp Volume(v), veh/h				327	0	112	520	531	0	0	643	16
Grp Sat Flow(s),veh/h/ln				1774	0	1585	1721	1770	0	0	1695	1549
Q Serve(g_s), s				27.1	0.0	9.1	22.5	18.5	0.0	0.0	11.7	0.8
Cycle Q Clear(g_c), s				27.1	0.0	9.1	22.5	18.5	0.0	0.0	11.7	0.8
Prop In Lane				1.00		0.82	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				354	0	317	604	2360	0	0	2333	711
V/C Ratio(X)				0.92	0.00	0.35	0.86	0.22	0.00	0.00	0.28	0.02
Avail Cap(c_a), veh/h				522	0	466	851	2360	0	0	2333	711
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.87	0.87	0.00	0.00	0.59	0.59
Uniform Delay (d), s/veh				58.9	0.0	51.7	68.8	26.7	0.0	0.0	25.1	22.2
Incr Delay (d2), s/veh				13.7	0.0	0.2	6.2	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.7	0.0	4.0	11.3	9.1	0.0	0.0	5.5	0.4
LnGrp Delay(d),s/veh				72.6	0.0	51.9	75.0	26.9	0.0	0.0	25.3	22.2
LnGrp LOS				E		D	E	C			C	C
Approach Vol, veh/h					439			1051			659	
Approach Delay, s/veh					67.3			50.7			25.2	
Approach LOS					E			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		110.1			31.2	78.9		39.9				
Change Period (Y+Rc), s		* 10			4.9	* 10		9.9				
Max Green Setting (Gmax), s		* 86			37.1	* 44		44.1				
Max Q Clear Time (g_c+1), s		20.5			24.5	13.7		29.1				
Green Ext Time (p_c), s		4.3			1.8	4.2		0.8				
Intersection Summary												
HCM 2010 Ctrl Delay				46.3								
HCM 2010 LOS				D								
Notes												

HCM 2010 Signalized Intersection Summary
 20: Qualcomm Way & EB Friar

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	5	130	0	0	0	0	970	300	220	730	0
Future Volume (veh/h)	60	5	130	0	0	0	0	970	300	220	730	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94				1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	67	0	53				0	1021	158	232	768	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	348	0	146				0	2329	1026	279	2720	0
Arrive On Green	0.10	0.00	0.10				0.00	1.00	1.00	0.16	1.00	0.00
Sat Flow, veh/h	3548	0	1487				0	3632	1559	3442	3632	0
Grp Volume(v), veh/h	67	0	53				0	1021	158	232	768	0
Grp Sat Flow(s),veh/h/ln	1774	0	1487				0	1770	1559	1721	1770	0
Q Serve(g_s), s	2.6	0.0	5.0				0.0	0.0	0.0	9.8	0.0	0.0
Cycle Q Clear(g_c), s	2.6	0.0	5.0				0.0	0.0	0.0	9.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	348	0	146				0	2329	1026	279	2720	0
V/C Ratio(X)	0.19	0.00	0.36				0.00	0.44	0.15	0.83	0.28	0.00
Avail Cap(c_a), veh/h	807	0	338				0	2329	1026	748	2720	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	2.00	2.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	0.91	0.91	0.87	0.87	0.00
Uniform Delay (d), s/veh	62.2	0.0	63.3				0.0	0.0	0.0	61.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6				0.0	0.5	0.3	2.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	2.1				0.0	0.2	0.1	4.7	0.1	0.0
LnGrp Delay(d),s/veh	62.3	0.0	63.8				0.0	0.5	0.3	64.0	0.2	0.0
LnGrp LOS	E		E					A	A	E	A	
Approach Vol, veh/h		120						1179			1000	
Approach Delay, s/veh		63.0						0.5			15.0	
Approach LOS		E						A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.6	108.8		24.6		125.4						
Change Period (Y+Rc), s	4.4	* 10		* 9.9		* 10						
Max Green Setting (Gmax), s	32.6	* 59		* 34		* 96						
Max Q Clear Time (g_c+I1), s	11.8	2.0		7.0		2.0						
Green Ext Time (p_c), s	0.4	11.2		0.2		3.4						
Intersection Summary												
HCM 2010 Ctrl Delay			10.1									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary

























21: River Run Drive & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	970	90	230	2005	220	160	60	120	30	20	40
Future Volume (veh/h)	130	970	90	230	2005	220	160	60	120	30	20	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	137	1021	55	242	2111	211	168	63	58	32	21	27
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	1844	558	281	2049	202	294	91	461	101	68	56
Arrive On Green	0.08	0.36	0.36	0.16	0.44	0.44	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1774	5085	1540	1774	4695	463	743	305	1551	141	229	188
Grp Volume(v), veh/h	137	1021	55	242	1517	805	231	0	58	80	0	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1540	1774	1695	1768	1048	0	1551	558	0	0
Q Serve(g_s), s	6.5	13.6	2.0	11.3	37.2	37.2	0.0	0.0	2.3	0.9	0.0	0.0
Cycle Q Clear(g_c), s	6.5	13.6	2.0	11.3	37.2	37.2	19.3	0.0	2.3	20.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.26	0.73		1.00	0.40		0.34
Lane Grp Cap(c), veh/h	150	1844	558	281	1479	772	385	0	461	225	0	0
V/C Ratio(X)	0.91	0.55	0.10	0.86	1.03	1.04	0.60	0.00	0.13	0.36	0.00	0.00
Avail Cap(c_a), veh/h	150	1844	558	431	1479	772	465	0	548	307	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.7	21.7	18.0	35.0	24.0	24.0	27.7	0.0	21.9	23.7	0.0	0.0
Incr Delay (d2), s/veh	48.1	1.2	0.4	7.0	30.0	44.4	1.1	0.0	0.1	1.1	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	5.2	6.5	0.9	6.1	23.4	27.5	5.1	0.0	1.0	1.4	0.0	0.0
LnGrp Delay(d),s/veh	86.8	22.9	18.3	42.0	54.0	68.4	28.8	0.0	22.0	24.9	0.0	0.0
LnGrp LOS	F	C	B	D	F	F	C		C	C		
Approach Vol, veh/h		1213			2564			289			80	
Approach Delay, s/veh		29.9			57.4			27.4			24.9	
Approach LOS		C			E			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.9	37.1		30.2	11.6	43.4		30.2				
Change Period (Y+Rc), s	4.4	6.2		4.9	4.4	6.2		4.9				
Max Green Setting (Gmax), s	20.7	23.7		30.1	7.2	37.2		30.1				
Max Q Clear Time (g_c+1), s	13.3	15.6		22.2	8.5	39.2		21.3				
Green Ext Time (p_c), s	0.2	6.7		0.2	0.0	0.0		0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			46.6									
HCM 2010 LOS			D									



















HCM 2010 Signalized Intersection Summary
 22: Fenton Parkway & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	790	230	250	2075	40	290	80	160	90	160	90
Future Volume (veh/h)	100	790	230	250	2075	40	290	80	160	90	160	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	105	832	201	263	2184	29	305	84	26	95	168	-31
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	2369	861	310	2608	865	289	383	316	139	300	323
Arrive On Green	0.04	0.47	0.47	0.09	0.51	0.51	0.08	0.21	0.21	0.04	0.16	0.00
Sat Flow, veh/h	3442	5085	1563	3442	5085	1565	3442	1863	1537	3548	1863	1583
Grp Volume(v), veh/h	105	832	201	263	2184	29	305	84	26	95	168	-31
Grp Sat Flow(s),veh/h/ln	1721	1695	1563	1721	1695	1565	1721	1863	1537	1774	1863	1583
Q Serve(g_s), s	4.5	15.7	10.0	11.3	55.0	1.3	12.6	5.6	2.1	4.0	12.5	0.0
Cycle Q Clear(g_c), s	4.5	15.7	10.0	11.3	55.0	1.3	12.6	5.6	2.1	4.0	12.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	148	2369	861	310	2608	865	289	383	316	139	300	323
V/C Ratio(X)	0.71	0.35	0.23	0.85	0.84	0.03	1.06	0.22	0.08	0.68	0.56	-0.10
Avail Cap(c_a), veh/h	174	2369	861	413	2608	865	289	566	467	213	522	511
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)	0.85	0.85	0.85	0.48	0.48	0.48	0.92	0.92	0.92	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.9	25.6	17.4	67.2	31.2	15.3	68.7	49.6	48.1	71.1	58.1	0.0
Incr Delay (d2), s/veh	6.5	0.4	0.5	4.8	1.7	0.0	66.1	0.7	0.3	2.2	7.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.4	4.4	5.6	26.1	0.6	8.6	3.0	0.9	2.0	7.1	0.0
LnGrp Delay(d),s/veh	77.3	25.9	18.0	72.1	32.9	15.4	134.8	50.3	48.4	73.3	65.5	0.0
LnGrp LOS	E	C	B	E	C	B	F	D	D	E	E	
Approach Vol, veh/h		1138			2476			415			232	
Approach Delay, s/veh		29.3			36.8			112.3			77.4	
Approach LOS		C			D			F			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	17.9	81.1	17.0	34.0	10.8	88.1	10.3	40.7				
Change Period (Y+Rc), s	4.4	11.2	4.4	* 9.9	4.4	11.2	4.4	* 9.9				
Max Green Setting (Gmax), s	18.0	47.5	12.6	* 42	7.6	57.9	9.0	* 46				
Max Q Clear Time (g_c+11), s	13.3	17.7	14.6	14.5	6.5	57.0	6.0	7.6				
Green Ext Time (p_c), s	0.2	16.3	0.0	2.9	0.0	0.9	0.0	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			44.4									
HCM 2010 LOS			D									
Notes												




















HCM 2010 Signalized Intersection Summary
 23: Northside Drive & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	830	180	470	2135	50	110	120	270	90	170	120
Future Volume (veh/h)	30	830	180	470	2135	50	110	120	270	90	170	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	31	865	73	490	2224	11	115	125	182	94	177	0
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	2209	678	492	2821	929	173	363	526	131	341	289
Arrive On Green	0.02	0.43	0.43	0.14	0.55	0.55	0.05	0.20	0.20	0.04	0.18	0.00
Sat Flow, veh/h	3442	5085	1561	3442	5085	1566	3442	1863	1535	3442	1863	1583
Grp Volume(v), veh/h	31	865	73	490	2224	11	115	125	182	94	177	0
Grp Sat Flow(s),veh/h/ln	1721	1695	1561	1721	1695	1566	1721	1863	1535	1721	1863	1583
Q Serve(g_s), s	0.9	12.2	2.9	14.9	36.3	0.3	3.4	6.1	9.4	2.8	9.0	0.0
Cycle Q Clear(g_c), s	0.9	12.2	2.9	14.9	36.3	0.3	3.4	6.1	9.4	2.8	9.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	2209	678	492	2821	929	173	363	526	131	341	289
V/C Ratio(X)	0.40	0.39	0.11	1.00	0.79	0.01	0.66	0.34	0.35	0.72	0.52	0.00
Avail Cap(c_a), veh/h	131	2209	678	492	2821	929	229	656	767	131	603	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	20.2	17.6	45.0	18.5	8.8	49.0	36.5	26.1	49.9	38.7	0.0
Incr Delay (d2), s/veh	1.1	0.5	0.3	39.6	2.3	0.0	1.5	1.4	1.0	14.9	5.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.8	1.3	9.8	17.5	0.1	1.7	3.3	4.1	1.6	5.1	0.0
LnGrp Delay(d),s/veh	51.7	20.7	17.9	84.6	20.8	8.8	50.5	37.9	27.1	64.9	44.3	0.0
LnGrp LOS	D	C	B	F	C	A	D	D	C	E	D	
Approach Vol, veh/h		969			2725			422			271	
Approach Delay, s/veh		21.5			32.2			36.7			51.4	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.4	51.8	9.7	24.1	6.8	64.4	8.4	25.4				
Change Period (Y+Rc), s	4.4	* 6.2	4.4	4.9	4.4	6.2	4.4	4.9				
Max Green Setting (Gmax), s	15.0	* 29	7.0	34.0	4.0	40.1	4.0	37.0				
Max Q Clear Time (g_c+I1), s	16.9	14.2	5.4	11.0	2.9	38.3	4.8	11.4				
Green Ext Time (p_c), s	0.0	8.7	0.0	3.3	0.0	1.7	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			31.5									
HCM 2010 LOS			C									
Notes												






















HCM 2010 Signalized Intersection Summary
 24: MissioN Village Drive & Friar Road WB

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	340	20	350	570	570	0	0	400	240
Future Volume (veh/h)	0	0	0	340	20	350	570	570	0	0	400	240
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.94
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				358	21	0	600	600	0	0	421	74
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				444	26	418	634	2079	0	0	579	243
Arrive On Green				0.26	0.26	0.00	0.36	0.59	0.00	0.00	0.16	0.16
Sat Flow, veh/h				1680	99	1583	1774	3632	0	0	3632	1487
Grp Volume(v), veh/h				379	0	0	600	600	0	0	421	74
Grp Sat Flow(s),veh/h/ln				1779	0	1583	1774	1770	0	0	1770	1487
Q Serve(g_s), s				16.0	0.0	0.0	26.3	6.7	0.0	0.0	9.0	3.5
Cycle Q Clear(g_c), s				16.0	0.0	0.0	26.3	6.7	0.0	0.0	9.0	3.5
Prop In Lane				0.94		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				470	0	418	634	2079	0	0	579	243
V/C Ratio(X)				0.81	0.00	0.00	0.95	0.29	0.00	0.00	0.73	0.30
Avail Cap(c_a), veh/h				644	0	573	680	2390	0	0	800	336
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				27.6	0.0	0.0	25.0	8.2	0.0	0.0	31.8	29.5
Incr Delay (d2), s/veh				3.7	0.0	0.0	20.9	0.1	0.0	0.0	2.6	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.3	0.0	0.0	16.5	3.3	0.0	0.0	4.7	1.5
LnGrp Delay(d),s/veh				31.3	0.0	0.0	45.9	8.3	0.0	0.0	34.4	30.4
LnGrp LOS				C			D	A			C	C
Approach Vol, veh/h					379			1200			495	
Approach Delay, s/veh					31.3			27.1			33.8	
Approach LOS					C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	34.0	20.1				54.1		26.1				
Change Period (Y+Rc), s	5.3	7.0				7.0		4.9				
Max Green Setting (Gmax), s	30.7	18.1				54.1		29.0				
Max Q Clear Time (g_c+I1), s	28.3	11.0				8.7		18.0				
Green Ext Time (p_c), s	0.3	2.1				6.2		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay					29.5							
HCM 2010 LOS					C							























HCM 2010 Signalized Intersection Summary
 25: MissioN Village Drive & Friar Road eb

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	5	280	0	0	0	0	960	550	290	450	0
Future Volume (veh/h)	180	5	280	0	0	0	0	960	550	290	450	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.98	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
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	189	5	295				0	1011	511	305	474	0
Adj No. of Lanes	0	1	1				0	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	277	7	244				0	944	787	302	602	0
Arrive On Green	0.16	0.16	0.16				0.00	0.51	0.51	0.17	0.17	0.00
Sat Flow, veh/h	1730	46	1524				0	1863	1552	1774	3632	0
Grp Volume(v), veh/h	194	0	295				0	1011	511	305	474	0
Grp Sat Flow(s),veh/h/ln	1776	0	1524				0	1863	1552	1774	1770	0
Q Serve(g_s), s	10.3	0.0	16.0				0.0	50.7	24.2	17.0	12.8	0.0
Cycle Q Clear(g_c), s	10.3	0.0	16.0				0.0	50.7	24.2	17.0	12.8	0.0
Prop In Lane	0.97		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	284	0	244				0	944	787	302	602	0
V/C Ratio(X)	0.68	0.00	1.21				0.00	1.07	0.65	1.01	0.79	0.00
Avail Cap(c_a), veh/h	284	0	244				0	944	787	302	602	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.6	0.0	42.0				0.0	24.7	18.1	41.5	39.8	0.0
Incr Delay (d2), s/veh	6.5	0.0	126.3				0.0	50.1	4.1	54.7	6.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	15.3				0.0	38.8	11.3	12.9	6.8	0.0
LnGrp Delay(d),s/veh	46.2	0.0	168.3				0.0	74.7	22.2	96.3	46.7	0.0
LnGrp LOS	D		F					F	C	F	D	
Approach Vol, veh/h		489						1522			779	
Approach Delay, s/veh		119.8						57.1			66.1	
Approach LOS		F						E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		55.6		21.2		23.2						
Change Period (Y+Rc), s		4.9		5.2		6.2						
Max Green Setting (Gmax), s		50.7		16.0		17.0						
Max Q Clear Time (g_c+11), s		52.7		18.0		19.0						
Green Ext Time (p_c), s		0.0		0.0		0.0						
Intersection Summary												
HCM 2010 Ctrl Delay			70.6									
HCM 2010 LOS			E									







HCM 2010 Signalized Intersection Summary
 26: I-15 SB Ramps & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	720	430	410	1795	520	0	0	0	850	0	740
Future Volume (veh/h)	420	720	430	410	1795	520	0	0	0	850	0	740
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863				1863	1863	1863
Adj Flow Rate, veh/h	433	742	422	423	1851	0				876	0	763
Adj No. of Lanes	1	3	1	1	3	1				3	0	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.95	0.97
Percent Heavy Veh, %	2	2	2	2	2	2				2	2	2
Cap, veh/h	541	2210	672	450	1839	572				992	0	1538
Arrive On Green	0.31	0.43	0.43	0.08	0.12	0.00				0.19	0.00	0.19
Sat Flow, veh/h	1774	5085	1547	1774	5085	1583				5322	0	3065
Grp Volume(v), veh/h	433	742	422	423	1851	0				876	0	763
Grp Sat Flow(s),veh/h/ln	1774	1695	1547	1774	1695	1583				1774	0	1532
Q Serve(g_s), s	29.2	12.6	27.6	30.8	47.0	0.0				20.8	0.0	0.0
Cycle Q Clear(g_c), s	29.2	12.6	27.6	30.8	47.0	0.0				20.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	541	2210	672	450	1839	572				992	0	1538
V/C Ratio(X)	0.80	0.34	0.63	0.94	1.01	0.00				0.88	0.00	0.50
Avail Cap(c_a), veh/h	541	2210	672	611	1839	572				1429	0	1789
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	41.5	24.3	28.6	58.6	57.2	0.0				51.5	0.0	22.1
Incr Delay (d2), s/veh	7.7	0.4	4.4	2.3	8.0	0.0				3.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	5.9	12.5	15.4	23.4	0.0				10.6	0.0	13.7
LnGrp Delay(d),s/veh	49.3	24.7	33.0	60.9	65.3	0.0				55.2	0.0	22.2
LnGrp LOS	D	C	C	E	F					E		C
Approach Vol, veh/h		1597			2274						1639	
Approach Delay, s/veh		33.6			64.4						39.8	
Approach LOS		C			E						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	37.2	63.5		29.3	46.7	54.0						
Change Period (Y+Rc), s	* 4.2	7.0		5.1	7.0	* 7						
Max Green Setting (Gmax), s	* 45	34.0		34.9	31.3	* 47						
Max Q Clear Time (g_c+I1), s	32.8	29.6		22.8	31.2	49.0						
Green Ext Time (p_c), s	0.1	1.8		1.4	0.0	0.0						
Intersection Summary												
HCM 2010 Ctrl Delay			48.2									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 27: I-15 NB Ramps & Friar Roads












												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	640	930	0	0	2120	1170	0	0	390	0	0	605
Future Volume (veh/h)	640	930	0	0	2120	1170	0	0	390	0	0	605
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	674	979	0	0	2232	0	0	0	0	0	0	0
Adj No. of Lanes	1	3	0	0	3	1	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	2	0	2	2
Cap, veh/h	484	4851	0	0	3611	1023	0	1	0	0	1	0
Arrive On Green	0.18	0.64	0.00	0.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	5253	0	0	5588	1583	0	-74510	0	0	-74510	0
Grp Volume(v), veh/h	674	979	0	0	2232	0	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1695	0	0	1863	1583	0	1863	0	0	1863	0
Q Serve(g_s), s	35.5	10.4	0.0	0.0	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	35.5	10.4	0.0	0.0	30.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	484	4851	0	0	3611	1023	0	1	0	0	1	0
V/C Ratio(X)	1.39	0.20	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	484	4851	0	0	3611	1023	0	258	0	0	258	0
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	53.1	3.0	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	183.5	0.1	0.0	0.0	0.6	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	42.1	4.9	0.0	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	236.6	3.0	0.0	0.0	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	F	A			B							
Approach Vol, veh/h		1653			2232			0			0	
Approach Delay, s/veh		98.2			14.1			0.0			0.0	
Approach LOS		F			B							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		130.0		0.0	40.0	90.0		0.0				
Change Period (Y+Rc), s		* 6		4.0	4.5	6.0		4.0				
Max Green Setting (Gmax), s		* 1E2		18.0	35.5	62.0		18.0				
Max Q Clear Time (g_c+I1), s		12.4		0.0	37.5	32.6		0.0				
Green Ext Time (p_c), s		2.1		0.0	0.0	13.8		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				49.9								
HCM 2010 LOS				D								
Notes												

HCM 2010 Signalized Intersection Summary
 28: Rancho Mission Road & Friar Roads

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑	↑	↑	↑↑↑	↑↑↑	↑		
Traffic Volume (veh/h)	980	340	220	2610	580	350		
Future Volume (veh/h)	980	340	220	2610	580	350		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	1032	195	232	2747	627	314		
Adj No. of Lanes	3	1	1	4	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	2618	1148	259	4450	781	349		
Arrive On Green	0.34	0.34	0.15	0.69	0.22	0.22		
Sat Flow, veh/h	5253	1553	1774	6669	3548	1583		
Grp Volume(v), veh/h	1032	195	232	2747	627	314		
Grp Sat Flow(s),veh/h/ln	1695	1553	1774	1602	1774	1583		
Q Serve(g_s), s	20.0	6.4	16.7	29.8	21.8	25.1		
Cycle Q Clear(g_c), s	20.0	6.4	16.7	29.8	21.8	25.1		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2618	1148	259	4450	781	349		
V/C Ratio(X)	0.39	0.17	0.90	0.62	0.80	0.90		
Avail Cap(c_a), veh/h	2618	1148	445	4450	1062	474		
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.98	0.98	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	27.2	7.3	54.6	10.6	48.0	49.3		
Incr Delay (d2), s/veh	0.4	0.3	6.4	0.6	2.3	13.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.5	5.1	8.6	13.2	10.9	12.3		
LnGrp Delay(d),s/veh	27.6	7.6	61.0	11.3	50.3	63.0		
LnGrp LOS	C	A	E	B	D	E		
Approach Vol, veh/h	1227			2979	941			
Approach Delay, s/veh	24.5			15.1	54.5			
Approach LOS	C			B	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	23.3	72.9				96.3		33.7
Change Period (Y+Rc), s	4.4	* 6				6.0		5.1
Max Green Setting (Gmax), s	32.6	* 43				80.0		38.9
Max Q Clear Time (g_c+I1), s	18.7	22.0				31.8		27.1
Green Ext Time (p_c), s	0.2	10.4				46.0		1.5
Intersection Summary								
HCM 2010 Ctrl Delay			24.6					
HCM 2010 LOS			C					
Notes								


























HCM 2010 Signalized Intersection Summary

29: Friar Roads & Santo Road







								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	340	990	2420	340	130	410		
Future Volume (veh/h)	340	990	2420	340	130	410		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	351	1021	2495	313	134	415		
Adj No. of Lanes	2	3	4	0	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1188	4346	2697	334	212	644		
Arrive On Green	0.35	0.85	0.62	0.62	0.06	0.06		
Sat Flow, veh/h	3442	5253	6065	719	3442	1583		
Grp Volume(v), veh/h	351	1021	2060	748	134	415		
Grp Sat Flow(s),veh/h/ln	1721	1695	1602	1717	1721	1583		
Q Serve(g_s), s	9.7	4.8	49.5	51.4	4.9	0.0		
Cycle Q Clear(g_c), s	9.7	4.8	49.5	51.4	4.9	0.0		
Prop In Lane	1.00			0.42	1.00	1.00		
Lane Grp Cap(c), veh/h	1188	4346	2233	798	212	644		
V/C Ratio(X)	0.30	0.23	0.92	0.94	0.63	0.64		
Avail Cap(c_a), veh/h	1188	4346	2248	803	1032	1022		
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.32	0.32	1.00	1.00		
Uniform Delay (d), s/veh	31.0	1.7	22.8	23.1	59.6	31.0		
Incr Delay (d2), s/veh	0.1	0.1	2.8	8.3	1.2	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.6	2.2	22.1	25.8	2.4	14.9		
LnGrp Delay(d),s/veh	31.1	1.8	25.6	31.4	60.7	31.4		
LnGrp LOS	C	A	C	C	E	C		
Approach Vol, veh/h		1372	2808		549			
Approach Delay, s/veh		9.3	27.1		38.6			
Approach LOS		A	C		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		117.6		12.4	51.4	66.2		
Change Period (Y+Rc), s		6.5		4.4	6.5	* 5.8		
Max Green Setting (Gmax), s		80.1		39.0	15.6	* 61		
Max Q Clear Time (g_c+I1), s		6.8		6.9	11.7	53.4		
Green Ext Time (p_c), s		9.5		1.1	0.3	7.0		
Intersection Summary								
HCM 2010 Ctrl Delay			23.3					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary























30: Riverdale Street & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	130	750	190	180	2260	230	110	50	40	80	40	190
Future Volume (veh/h)	130	750	190	180	2260	230	110	50	40	80	40	190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.98	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	137	789	32	189	2379	221	116	53	16	84	42	168
Adj No. of Lanes	1	3	1	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	2607	796	215	2579	235	212	340	103	340	80	319
Arrive On Green	0.18	1.00	1.00	0.12	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	5085	1552	1774	4736	431	1151	1366	412	1299	320	1280
Grp Volume(v), veh/h	137	789	32	189	1689	911	116	0	69	84	0	210
Grp Sat Flow(s),veh/h/ln	1774	1695	1552	1774	1695	1777	1151	0	1778	1299	0	1600
Q Serve(g_s), s	9.8	0.0	0.0	13.6	58.8	62.3	12.6	0.0	3.9	7.0	0.0	14.7
Cycle Q Clear(g_c), s	9.8	0.0	0.0	13.6	58.8	62.3	27.3	0.0	3.9	11.0	0.0	14.7
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.23	1.00		0.80
Lane Grp Cap(c), veh/h	158	2607	796	215	1846	968	212	0	443	340	0	399
V/C Ratio(X)	0.87	0.30	0.04	0.88	0.91	0.94	0.55	0.00	0.16	0.25	0.00	0.53
Avail Cap(c_a), veh/h	158	2607	796	317	1846	968	236	0	480	367	0	432
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.47	0.47	0.47	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.6	0.0	0.0	56.2	26.9	27.7	54.0	0.0	38.1	42.4	0.0	42.2
Incr Delay (d2), s/veh	34.2	0.3	0.1	6.7	4.4	10.2	0.8	0.0	0.1	0.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.1	0.0	7.1	28.6	33.1	4.0	0.0	1.9	2.5	0.0	6.6
LnGrp Delay(d),s/veh	86.8	0.3	0.1	62.9	31.3	37.8	54.8	0.0	38.2	42.5	0.0	42.6
LnGrp LOS	F	A	A	E	C	D	D		D	D		D
Approach Vol, veh/h		958			2789			185			294	
Approach Delay, s/veh		12.7			35.6			48.6			42.6	
Approach LOS		B			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.1	72.6		37.3	16.0	76.7		37.3				
Change Period (Y+Rc), s	4.4	* 5.9		4.9	4.4	5.9		4.9				
Max Green Setting (Gmax), s	23.2	* 57		35.1	11.6	68.1		35.1				
Max Q Clear Time (g_c+I1), s	15.6	2.0		16.7	11.8	64.3		29.3				
Green Ext Time (p_c), s	0.1	7.7		1.0	0.0	3.6		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			31.4									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 31: Mission Gorge Road & Friar Roads

























								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑	↑	↑↑		↑	↑↑		
Traffic Volume (veh/h)	640	230	450	0	360	290		
Future Volume (veh/h)	640	230	450	0	360	290		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	674	0	474	0	379	197		
Adj No. of Lanes	3	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	0	2	2		
Cap, veh/h	954	297	1596	0	403	1925		
Arrive On Green	0.19	0.00	0.46	0.00	0.23	0.23		
Sat Flow, veh/h	5253	1583	3442	474	1774	2787		
Grp Volume(v), veh/h	674	0	474	20.1	379	197		
Grp Sat Flow(s),veh/h/ln	1695	1583	1721	C	1774	1393		
Q Serve(g_s), s	14.9	0.0	10.3		25.2	0.0		
Cycle Q Clear(g_c), s	14.9	0.0	10.3		25.2	0.0		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	954	297	1596		403	1925		
V/C Ratio(X)	0.71	0.00	0.30		0.94	0.10		
Avail Cap(c_a), veh/h	1661	517	1596		408	1933		
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		
Upstream Filter(I)	0.97	0.00	1.00		1.00	1.00		
Uniform Delay (d), s/veh	45.7	0.0	20.0		45.6	6.2		
Incr Delay (d2), s/veh	4.3	0.0	0.0		29.3	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.4	0.0	4.9		15.6	1.1		
LnGrp Delay(d),s/veh	49.9	0.0	20.1		74.9	6.2		
LnGrp LOS	D		C		E	A		
Approach Vol, veh/h	674				576			
Approach Delay, s/veh	49.9				51.4			
Approach LOS	D				D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2						8
Phs Duration (G+Y+Rc), s	60.0	28.3						31.7
Change Period (Y+Rc), s	4.4	5.8						4.4
Max Green Setting (Gmax), s	38.6	39.2						27.6
Max Q Clear Time (g_c+I1), s	12.3	16.9						27.2
Green Ext Time (p_c), s	0.8	4.6						0.1
Intersection Summary								
HCM 2010 Ctrl Delay			42.2					
HCM 2010 LOS			D					
Notes								

HCM 2010 Signalized Intersection Summary
 32: Mission Center Road & Mission Center Ct

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	40	70	130	40	100	100	600	60	80	660	80
Future Volume (veh/h)	40	40	70	130	40	100	100	600	60	80	660	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.83	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	42	42	63	137	42	84	105	632	52	84	695	73
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	66	328	223	54	280	128	1955	859	105	1909	838
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.07	0.55	0.55	0.06	0.54	0.54
Sat Flow, veh/h	186	311	1539	833	255	1316	1774	3539	1555	1774	3539	1554
Grp Volume(v), veh/h	84	0	63	179	0	84	105	632	52	84	695	73
Grp Sat Flow(s),veh/h/ln	498	0	1539	1088	0	1316	1774	1770	1555	1774	1770	1554
Q Serve(g_s), s	5.2	0.0	4.7	0.0	0.0	7.5	8.2	13.6	2.2	6.5	15.8	3.2
Cycle Q Clear(g_c), s	27.6	0.0	4.7	22.4	0.0	7.5	8.2	13.6	2.2	6.5	15.8	3.2
Prop In Lane	0.50		1.00	0.77		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	328	277	0	280	128	1955	859	105	1909	838
V/C Ratio(X)	0.58	0.00	0.19	0.65	0.00	0.30	0.82	0.32	0.06	0.80	0.36	0.09
Avail Cap(c_a), veh/h	244	0	430	373	0	367	261	1955	859	223	1909	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	0.95	0.95	0.95
Uniform Delay (d), s/veh	57.7	0.0	45.2	52.2	0.0	46.3	64.1	17.1	14.5	65.1	18.5	15.6
Incr Delay (d2), s/veh	1.4	0.0	0.1	0.9	0.0	0.2	4.6	0.4	0.1	5.0	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	2.0	6.6	0.0	2.8	4.2	6.8	1.0	3.4	7.9	1.4
LnGrp Delay(d),s/veh	59.0	0.0	45.3	53.1	0.0	46.5	68.7	17.5	14.6	70.1	19.0	15.8
LnGrp LOS	E		D	D		D	E	B	B	E	B	B
Approach Vol, veh/h		147			263			789			852	
Approach Delay, s/veh		53.2			51.0			24.1			23.8	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	87.6		39.7	14.5	85.8		39.7				
Change Period (Y+Rc), s	4.4	10.3		* 9.9	4.4	10.3		* 9.9				
Max Green Setting (Gmax), s	17.6	58.7		* 39	20.6	55.7		* 39				
Max Q Clear Time (g_c+I1), s	8.5	15.6		29.6	10.2	17.8		24.4				
Green Ext Time (p_c), s	0.1	3.9		0.2	0.1	7.9		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			29.5									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary

33: Qualcomm Way & Rio San Diego Drive
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	160	220	60	90	130	1070	640	90	590	180
Future Volume (veh/h)	110	20	160	220	60	90	130	1070	640	90	590	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	116	21	89	232	63	16	137	1126	227	95	621	136
Adj No. of Lanes	2	1	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	215	257	279	531	228	183	2893	885	137	2826	870
Arrive On Green	0.05	0.12	0.12	0.08	0.15	0.15	0.04	0.38	0.38	0.05	0.74	0.74
Sat Flow, veh/h	3442	1863	1501	3442	3539	1520	3442	5085	1555	3442	5085	1566
Grp Volume(v), veh/h	116	21	89	232	63	16	137	1126	227	95	621	136
Grp Sat Flow(s),veh/h/ln	1721	1863	1501	1721	1770	1520	1721	1695	1555	1721	1695	1566
Q Serve(g_s), s	5.0	1.5	7.9	10.0	2.3	1.4	5.9	24.1	15.0	4.1	5.7	3.8
Cycle Q Clear(g_c), s	5.0	1.5	7.9	10.0	2.3	1.4	5.9	24.1	15.0	4.1	5.7	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	215	257	279	531	228	183	2893	885	137	2826	870
V/C Ratio(X)	0.72	0.10	0.35	0.83	0.12	0.07	0.75	0.39	0.26	0.69	0.22	0.16
Avail Cap(c_a), veh/h	243	394	401	404	913	392	266	2893	885	197	2826	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.55	0.55	0.55	0.96	0.96	0.96
Uniform Delay (d), s/veh	70.6	59.3	55.1	67.9	55.2	54.8	71.4	27.5	24.7	70.1	9.4	9.2
Incr Delay (d2), s/veh	2.3	0.2	0.8	6.4	0.1	0.1	1.7	0.2	0.4	2.2	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.8	3.3	5.0	1.1	0.6	2.9	11.4	6.5	2.0	2.7	1.7
LnGrp Delay(d),s/veh	72.9	59.5	55.9	74.3	55.3	54.9	73.1	27.7	25.0	72.4	9.6	9.6
LnGrp LOS	E	E	E	E	E	D	E	C	C	E	A	A
Approach Vol, veh/h		226			311			1490			852	
Approach Delay, s/veh		65.0			69.4			31.5			16.6	
Approach LOS		E			E			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.4	95.4	16.6	27.6	12.4	93.5	11.4	32.8				
Change Period (Y+Rc), s	4.4	* 10	4.4	10.3	4.4	* 10	4.4	10.3				
Max Green Setting (Gmax), s	8.6	* 63	17.6	31.7	11.6	* 60	10.6	38.7				
Max Q Clear Time (g_c+I1), s	6.1	26.1	12.0	9.9	7.9	7.7	7.0	4.3				
Green Ext Time (p_c), s	0.0	15.0	0.2	0.3	0.1	8.9	0.1	0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			33.8									
HCM 2010 LOS			C									
Notes												

HCM 2010 Roundabout
 34: River Run Drive & Rio San Diego Drive























Intersection				
Intersection Delay, s/veh	12.5			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	485	631	63	316
Demand Flow Rate, veh/h	494	643	63	323
Vehicles Circulating, veh/h	161	160	580	514
Vehicles Exiting, veh/h	676	483	75	289
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	20	20	20	20
Ped Cap Adj	0.997	0.997	0.997	0.997
Approach Delay, s/veh	10.4	14.6	6.9	12.8
Approach LOS	B	B	A	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	494	643	63	323
Cap Entry Lane, veh/h	962	963	633	676
Entry HV Adj Factor	0.981	0.981	0.993	0.979
Flow Entry, veh/h	485	631	63	316
Cap Entry, veh/h	941	942	627	660
V/C Ratio	0.515	0.670	0.100	0.479
Control Delay, s/veh	10.4	14.6	6.9	12.8
LOS	B	B	A	B
95th %tile Queue, veh	3	5	0	3

HCM 2010 Signalized Intersection Summary
























35: Fenton Parkway & Rio San Diego Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	110	270	120	160	90	260	330	90	150	310	180
Future Volume (veh/h)	110	110	270	120	160	90	260	330	90	150	310	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	116	116	262	126	168	48	274	347	93	158	326	84
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	397	328	159	298	85	310	1041	450	232	661	280
Arrive On Green	0.08	0.21	0.21	0.09	0.22	0.22	0.17	0.29	0.29	0.07	0.19	0.19
Sat Flow, veh/h	1774	1863	1539	1774	1379	394	1774	3539	1529	3442	3539	1499
Grp Volume(v), veh/h	116	116	262	126	0	216	274	347	93	158	326	84
Grp Sat Flow(s),veh/h/ln	1774	1863	1539	1774	0	1773	1774	1770	1529	1721	1770	1499
Q Serve(g_s), s	5.7	4.7	14.4	6.2	0.0	9.7	13.4	6.8	4.1	4.0	7.3	4.3
Cycle Q Clear(g_c), s	5.7	4.7	14.4	6.2	0.0	9.7	13.4	6.8	4.1	4.0	7.3	4.3
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	148	397	328	159	0	383	310	1041	450	232	661	280
V/C Ratio(X)	0.78	0.29	0.80	0.79	0.00	0.56	0.88	0.33	0.21	0.68	0.49	0.30
Avail Cap(c_a), veh/h	697	628	519	697	0	598	371	1340	579	445	1054	446
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	29.4	33.2	39.7	0.0	31.2	35.9	24.6	23.6	40.6	32.4	31.2
Incr Delay (d2), s/veh	5.5	0.2	3.0	3.4	0.0	0.5	17.3	0.9	1.0	1.3	2.6	2.7
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	3.0	2.4	6.4	3.2	0.0	4.8	8.0	3.5	1.9	2.0	3.8	2.0
LnGrp Delay(d),s/veh	45.5	29.6	36.2	43.1	0.0	31.7	53.2	25.5	24.7	41.9	35.0	33.9
LnGrp LOS	D	C	D	D		C	D	C	C	D	D	C
Approach Vol, veh/h		494			342			714			568	
Approach Delay, s/veh		36.8			35.9			36.0			36.8	
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	10.4	36.6	12.9	29.2	19.9	27.0	12.6	29.4				
Change Period (Y+Rc), s	4.4	* 10	4.9	10.2	4.4	* 10	5.2	* 10				
Max Green Setting (Gmax), s	11.5	* 34	35.0	30.0	18.6	* 27	35.0	* 30				
Max Q Clear Time (g_c+I1), s	6.0	8.8	8.2	16.4	15.4	9.3	7.7	11.7				
Green Ext Time (p_c), s	0.1	8.0	0.1	0.9	0.1	6.0	0.2	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			36.4									
HCM 2010 LOS			D									
Notes												
























HCM 2010 Signalized Intersection Summary
 36: Northside Drive & Rio San Diego Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	70	20	30	20	60	60	120	20	350	120	70
Future Volume (veh/h)	320	70	20	30	20	60	60	120	20	350	120	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.92	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	216	243	21	32	21	47	63	126	16	368	126	21
Adj No. of Lanes	1	1	0	0	1	1	1	2	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	372	32	132	87	182	80	462	191	416	596	847
Arrive On Green	0.22	0.22	0.22	0.12	0.12	0.12	0.05	0.13	0.13	0.23	0.32	0.32
Sat Flow, veh/h	1774	1683	145	1092	716	1505	1774	3539	1462	1774	1863	1554
Grp Volume(v), veh/h	216	0	264	53	0	47	63	126	16	368	126	21
Grp Sat Flow(s),veh/h/ln	1774	0	1829	1808	0	1505	1774	1770	1462	1774	1863	1554
Q Serve(g_s), s	7.0	0.0	8.6	1.7	0.0	1.8	2.3	2.1	0.6	13.1	3.2	0.4
Cycle Q Clear(g_c), s	7.0	0.0	8.6	1.7	0.0	1.8	2.3	2.1	0.6	13.1	3.2	0.4
Prop In Lane	1.00		0.08	0.60		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	0	404	219	0	182	80	462	191	416	596	847
V/C Ratio(X)	0.55	0.00	0.65	0.24	0.00	0.26	0.79	0.27	0.08	0.88	0.21	0.02
Avail Cap(c_a), veh/h	762	0	785	832	0	692	261	1048	433	506	809	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	0.0	23.1	26.0	0.0	26.0	30.8	25.5	24.9	24.1	16.2	7.0
Incr Delay (d2), s/veh	0.5	0.0	0.7	0.2	0.0	0.3	6.3	0.1	0.1	13.2	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	4.4	0.9	0.0	0.8	1.3	1.0	0.3	7.9	1.7	0.3
LnGrp Delay(d),s/veh	23.0	0.0	23.8	26.2	0.0	26.3	37.1	25.7	25.0	37.3	16.6	7.0
LnGrp LOS	C		C	C		C	D	C	C	D	B	A
Approach Vol, veh/h		480			100			205			515	
Approach Delay, s/veh		23.4			26.2			29.1			31.0	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.7	13.4		19.3	7.3	25.8		12.8				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	18.6	19.3		28.0	9.6	28.3		30.0				
Max Q Clear Time (g_c+I1), s	15.1	4.1		10.6	4.3	5.2		3.8				
Green Ext Time (p_c), s	0.2	0.4		1.1	0.0	1.5		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			27.5									
HCM 2010 LOS			C									
Notes												













HCM 2010 Signalized Intersection Summary
 37: Rancho Mission Road & San Diego Mission Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	210	160	170	450	160	290	270	100	200	240	120
Future Volume (veh/h)	120	210	160	170	450	160	290	270	100	200	240	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	221	89	179	474	42	305	284	54	211	253	48
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	417	162	214	710	302	341	436	362	247	338	278
Arrive On Green	0.09	0.17	0.17	0.12	0.20	0.20	0.19	0.23	0.23	0.14	0.18	0.18
Sat Flow, veh/h	1774	2466	956	1774	3539	1504	1774	1863	1543	1774	1863	1531
Grp Volume(v), veh/h	126	156	154	179	474	42	305	284	54	211	253	48
Grp Sat Flow(s),veh/h/ln	1774	1770	1653	1774	1770	1504	1774	1863	1543	1774	1863	1531
Q Serve(g_s), s	5.9	6.8	7.3	8.4	10.5	2.0	14.3	11.7	2.4	9.9	10.9	2.3
Cycle Q Clear(g_c), s	5.9	6.8	7.3	8.4	10.5	2.0	14.3	11.7	2.4	9.9	10.9	2.3
Prop In Lane	1.00		0.58	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	299	280	214	710	302	341	436	362	247	338	278
V/C Ratio(X)	0.80	0.52	0.55	0.84	0.67	0.14	0.89	0.65	0.15	0.85	0.75	0.17
Avail Cap(c_a), veh/h	313	633	591	230	1107	471	376	684	566	292	592	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	32.2	32.4	36.6	31.4	28.0	33.5	29.4	25.8	35.7	32.9	29.4
Incr Delay (d2), s/veh	3.4	2.1	2.6	20.1	1.8	0.3	20.5	0.6	0.1	16.5	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.5	3.5	5.3	5.3	0.8	8.9	6.1	1.0	5.9	5.7	1.0
LnGrp Delay(d),s/veh	41.4	34.3	34.9	56.7	33.2	28.3	54.0	30.0	25.9	52.2	34.2	29.5
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		436			695			643			512	
Approach Delay, s/veh		36.6			38.9			41.0			41.2	
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	14.3	24.9	20.3	25.5	11.6	27.5	15.9	30.0				
Change Period (Y+Rc), s	4.0	10.5	4.0	* 10	4.0	* 11	4.0	* 10				
Max Green Setting (Gmax), s	11.0	30.4	18.0	* 27	15.0	* 27	14.0	* 31				
Max Q Clear Time (g_c+I1), s	10.4	9.3	16.3	12.9	7.9	12.5	11.9	13.7				
Green Ext Time (p_c), s	0.0	2.5	0.1	0.7	0.1	4.0	0.1	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			39.6									
HCM 2010 LOS			D									
Notes												






















HCM 2010 Signalized Intersection Summary
 38: Mission Center Road & Harzard Center Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	20	210	30	20	20	300	600	80	40	490	150
Future Volume (veh/h)	90	20	210	30	20	20	300	600	80	40	490	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.90	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	110	0	79	32	21	18	316	632	15	42	516	142
Adj No. of Lanes	2	0	1	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	0	408	49	32	64	435	1273	541	58	1054	281
Arrive On Green	0.14	0.00	0.14	0.04	0.04	0.04	0.13	0.36	0.36	0.03	0.27	0.27
Sat Flow, veh/h	3548	0	1495	1092	716	1431	3442	3539	1505	1774	3965	1056
Grp Volume(v), veh/h	110	0	79	53	0	18	316	632	15	42	439	219
Grp Sat Flow(s),veh/h/ln	1774	0	1495	1808	0	1431	1721	1770	1505	1774	1695	1631
Q Serve(g_s), s	1.8	0.0	2.6	1.9	0.0	0.8	5.7	8.9	0.4	1.5	7.0	7.3
Cycle Q Clear(g_c), s	1.8	0.0	2.6	1.9	0.0	0.8	5.7	8.9	0.4	1.5	7.0	7.3
Prop In Lane	1.00		1.00	0.60		1.00	1.00		1.00	1.00		0.65
Lane Grp Cap(c), veh/h	493	0	408	81	0	64	435	1273	541	58	901	434
V/C Ratio(X)	0.22	0.00	0.19	0.65	0.00	0.28	0.73	0.50	0.03	0.72	0.49	0.51
Avail Cap(c_a), veh/h	1604	0	876	310	0	245	1126	2686	1143	249	1680	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	0.0	18.3	30.2	0.0	29.6	27.0	16.0	13.3	30.7	19.9	20.0
Incr Delay (d2), s/veh	0.3	0.0	0.3	3.3	0.0	0.9	0.9	0.6	0.0	6.1	0.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.1	1.0	0.0	0.3	2.7	4.4	0.2	0.8	3.4	3.5
LnGrp Delay(d),s/veh	24.8	0.0	18.6	33.5	0.0	30.5	27.8	16.6	13.3	36.8	20.6	21.7
LnGrp LOS	C		B	C		C	C	B	B	D	C	C
Approach Vol, veh/h		189			71			963			700	
Approach Delay, s/veh		22.2			32.7			20.2			21.9	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	33.3		17.9	12.1	27.3		6.9				
Change Period (Y+Rc), s	4.0	* 10		9.0	4.0	10.2		4.0				
Max Green Setting (Gmax), s	9.0	* 49		29.0	21.0	31.8		11.0				
Max Q Clear Time (g_c+I1), s	3.5	10.9		4.6	7.7	9.3		3.9				
Green Ext Time (p_c), s	0.0	8.6		0.9	0.5	7.0		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			21.5									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 39: Camino De La Reina & Avenida Del Rio

























								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	610	310	150	250	90	120		
Future Volume (veh/h)	610	310	150	250	90	120		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.95	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	642	21	158	42	95	126		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	760	785	369	298	120	670		
Arrive On Green	0.43	0.43	0.20	0.20	0.07	0.36		
Sat Flow, veh/h	1774	1583	1863	1503	1774	1863		
Grp Volume(v), veh/h	642	21	158	42	95	126		
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1503	1774	1863		
Q Serve(g_s), s	13.8	0.3	3.2	1.0	2.2	2.0		
Cycle Q Clear(g_c), s	13.8	0.3	3.2	1.0	2.2	2.0		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	760	785	369	298	120	670		
V/C Ratio(X)	0.84	0.03	0.43	0.14	0.79	0.19		
Avail Cap(c_a), veh/h	2235	2102	812	655	209	1207		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	10.9	5.5	14.9	14.0	19.5	9.3		
Incr Delay (d2), s/veh	2.7	0.0	0.8	0.2	11.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.2	0.1	1.7	0.4	1.5	1.0		
LnGrp Delay(d),s/veh	13.6	5.5	15.7	14.3	30.6	9.5		
LnGrp LOS	B	A	B	B	C	A		
Approach Vol, veh/h	663		200		221			
Approach Delay, s/veh	13.3		15.4		18.6			
Approach LOS	B		B		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.9	12.9				19.8		22.7
Change Period (Y+Rc), s	4.0	4.5				4.5		4.5
Max Green Setting (Gmax), s	5.0	18.5				27.5		53.5
Max Q Clear Time (g_c+11), s	4.2	5.2				4.0		15.8
Green Ext Time (p_c), s	0.0	0.8				0.6		2.4
Intersection Summary								
HCM 2010 Ctrl Delay			14.8					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary
 40: Mission Center Road & Camino De La Reina

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	90	70	130	390	250	210	570	120	150	390	140
Future Volume (veh/h)	90	90	70	130	390	250	210	570	120	150	390	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	95	95	42	137	411	174	221	600	110	158	411	23
Adj No. of Lanes	2	2	0	2	2	0	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	652	270	214	685	286	201	1049	189	201	1236	369
Arrive On Green	0.05	0.27	0.27	0.06	0.28	0.28	0.06	0.24	0.24	0.06	0.24	0.24
Sat Flow, veh/h	3442	2414	1000	3442	2407	1005	3442	4316	777	3442	5085	1518
Grp Volume(v), veh/h	95	68	69	137	301	284	221	469	241	158	411	23
Grp Sat Flow(s),veh/h/ln	1721	1770	1644	1721	1770	1643	1721	1695	1702	1721	1695	1518
Q Serve(g_s), s	2.1	2.3	2.5	3.1	11.5	11.8	4.6	9.6	9.8	3.6	5.3	0.9
Cycle Q Clear(g_c), s	2.1	2.3	2.5	3.1	11.5	11.8	4.6	9.6	9.8	3.6	5.3	0.9
Prop In Lane	1.00		0.61	1.00		0.61	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	164	478	444	214	504	468	201	824	414	201	1236	369
V/C Ratio(X)	0.58	0.14	0.16	0.64	0.60	0.61	1.10	0.57	0.58	0.79	0.33	0.06
Avail Cap(c_a), veh/h	2033	1610	1496	471	807	749	201	1242	624	201	1876	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	21.9	21.9	36.1	24.3	24.4	37.2	26.2	26.3	36.7	24.6	23.0
Incr Delay (d2), s/veh	1.2	0.1	0.2	1.2	2.2	2.5	93.3	1.1	2.3	17.2	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.1	1.2	1.5	5.9	5.7	4.7	4.6	4.9	2.2	2.5	0.4
LnGrp Delay(d),s/veh	38.0	22.0	22.1	37.3	26.5	26.9	130.4	27.3	28.6	53.8	24.9	23.1
LnGrp LOS	D	C	C	D	C	C	F	C	C	D	C	C
Approach Vol, veh/h		232			722			931			592	
Approach Delay, s/veh		28.6			28.7			52.2			32.5	
Approach LOS		C			C			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	29.4	9.3	31.2	9.0	29.4	8.2	32.4				
Change Period (Y+Rc), s	4.4	10.2	4.4	* 9.9	4.4	* 10	4.4	* 9.9				
Max Green Setting (Gmax), s	4.6	28.9	10.8	* 72	4.6	* 29	46.6	* 36				
Max Q Clear Time (g_c+I1), s	5.6	11.8	5.1	4.5	6.6	7.3	4.1	13.8				
Green Ext Time (p_c), s	0.0	6.4	0.1	0.9	0.0	4.5	0.2	6.5				
Intersection Summary												
HCM 2010 Ctrl Delay			38.4									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

41: Camino Del Este & Camino De La Reina























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	160	90	130	620	70	120	90	80	140	290	120
Future Volume (veh/h)	80	160	90	130	620	70	120	90	80	140	290	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.98	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	84	168	66	137	653	59	126	95	66	147	305	73
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	867	373	173	998	431	325	1009	442	428	1009	436
Arrive On Green	0.06	0.24	0.24	0.10	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	3539	1522	1774	3539	1527	990	3539	1550	1200	3539	1529
Grp Volume(v), veh/h	84	168	66	137	653	59	126	95	66	147	305	73
Grp Sat Flow(s),veh/h/ln	1774	1770	1522	1774	1770	1527	990	1770	1550	1200	1770	1529
Q Serve(g_s), s	3.1	2.5	2.2	4.9	10.6	1.9	7.5	1.3	2.1	6.7	4.4	2.3
Cycle Q Clear(g_c), s	3.1	2.5	2.2	4.9	10.6	1.9	11.9	1.3	2.1	8.0	4.4	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	107	867	373	173	998	431	325	1009	442	428	1009	436
V/C Ratio(X)	0.78	0.19	0.18	0.79	0.65	0.14	0.39	0.09	0.15	0.34	0.30	0.17
Avail Cap(c_a), veh/h	152	1518	653	233	1674	722	557	1836	804	709	1836	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	19.6	19.5	28.9	20.7	17.6	23.0	17.2	17.5	20.2	18.3	17.6
Incr Delay (d2), s/veh	9.8	0.1	0.2	8.7	0.7	0.1	0.5	0.0	0.1	0.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.2	1.0	2.9	5.3	0.8	2.1	0.6	0.9	2.2	2.2	1.0
LnGrp Delay(d),s/veh	40.2	19.7	19.8	37.6	21.4	17.7	23.5	17.2	17.6	20.5	18.4	17.7
LnGrp LOS	D	B	B	D	C	B	C	B	B	C	B	B
Approach Vol, veh/h		318			849			287			525	
Approach Delay, s/veh		25.1			23.8			20.1			18.9	
Approach LOS		C			C			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	26.1		28.6	8.4	28.6		28.6				
Change Period (Y+Rc), s	4.4	* 10		* 9.9	4.4	* 10		* 9.9				
Max Green Setting (Gmax), s	8.6	* 28		* 34	5.6	* 31		* 34				
Max Q Clear Time (g_c+1), s	6.9	4.5		10.0	5.1	12.6		13.9				
Green Ext Time (p_c), s	0.0	1.3		2.2	0.0	4.5		1.0				
Intersection Summary												
HCM 2010 Ctrl Delay			22.2									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 42: Qualcomm Way & Camino De La Reina

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	140	140	300	440	270	320	1480	430	120	740	110
Future Volume (veh/h)	90	140	140	300	440	270	320	1480	430	120	740	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	92	153	75	306	449	164	327	1510	255	122	755	51
Adj No. of Lanes	1	2	1	2	2	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	568	401	367	678	290	375	1618	705	493	2353	714
Arrive On Green	0.06	0.15	0.15	0.11	0.19	0.19	0.11	0.46	0.46	0.05	0.15	0.15
Sat Flow, veh/h	1774	3725	1499	3442	3539	1514	3442	3539	1543	3442	5085	1543
Grp Volume(v), veh/h	92	153	75	306	449	164	327	1510	255	122	755	51
Grp Sat Flow(s),veh/h/ln	1774	1863	1499	1721	1770	1514	1721	1770	1543	1721	1695	1543
Q Serve(g_s), s	7.7	5.4	3.9	13.1	17.6	14.7	14.0	60.6	16.1	5.1	19.8	3.3
Cycle Q Clear(g_c), s	7.7	5.4	3.9	13.1	17.6	14.7	14.0	60.6	16.1	5.1	19.8	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	568	401	367	678	290	375	1618	705	493	2353	714
V/C Ratio(X)	0.82	0.27	0.19	0.83	0.66	0.57	0.87	0.93	0.36	0.25	0.32	0.07
Avail Cap(c_a), veh/h	181	844	512	381	819	350	482	1678	731	493	2353	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	0.49	0.49	0.49	0.95	0.95	0.95
Uniform Delay (d), s/veh	69.4	56.2	20.8	65.7	56.1	55.0	65.8	38.6	26.5	63.7	42.5	21.1
Incr Delay (d2), s/veh	6.1	0.2	0.2	13.3	0.9	0.6	5.9	6.3	0.7	0.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.8	1.9	6.9	8.7	6.2	7.0	31.0	7.0	2.5	9.4	1.8
LnGrp Delay(d),s/veh	75.5	56.4	21.0	79.0	57.0	55.6	71.8	44.8	27.2	63.8	42.9	21.3
LnGrp LOS	E	E	C	E	E	E	E	D	C	E	D	C
Approach Vol, veh/h		320			919			2092			928	
Approach Delay, s/veh		53.6			64.1			46.9			44.4	
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	26.4	75.3	20.4	28.0	27.3	74.3	13.9	34.4				
Change Period (Y+Rc), s	4.9	* 6.7	4.4	5.1	11.0	4.9	4.4	5.7				
Max Green Setting (Gmax), s	7.7	* 71	16.6	34.0	21.0	53.0	15.3	34.7				
Max Q Clear Time (g_c+1), s	7.1	62.6	15.1	7.4	16.0	21.8	9.7	19.6				
Green Ext Time (p_c), s	0.0	6.0	0.1	0.5	0.3	11.5	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			50.6									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

43: Fenton Parkway & Camino Del Rio North

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	150	60	140	450	90	180	380	90	70	400	190
Future Volume (veh/h)	80	150	60	140	450	90	180	380	90	70	400	190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	158	17	147	474	87	189	400	43	74	421	105
Adj No. of Lanes	1	1	1	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	555	649	174	513	94	216	645	69	94	463	115
Arrive On Green	0.06	0.30	0.30	0.10	0.34	0.34	0.12	0.39	0.39	0.05	0.32	0.32
Sat Flow, veh/h	1774	1863	1530	1774	1527	280	1774	1649	177	1774	1434	358
Grp Volume(v), veh/h	84	158	17	147	0	561	189	0	443	74	0	526
Grp Sat Flow(s),veh/h/ln	1774	1863	1530	1774	0	1807	1774	0	1826	1774	0	1792
Q Serve(g_s), s	5.7	7.9	0.8	9.9	0.0	36.4	12.8	0.0	23.7	5.0	0.0	34.3
Cycle Q Clear(g_c), s	5.7	7.9	0.8	9.9	0.0	36.4	12.8	0.0	23.7	5.0	0.0	34.3
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.10	1.00		0.20
Lane Grp Cap(c), veh/h	106	555	649	174	0	607	216	0	715	94	0	578
V/C Ratio(X)	0.80	0.28	0.03	0.84	0.00	0.92	0.87	0.00	0.62	0.79	0.00	0.91
Avail Cap(c_a), veh/h	118	555	649	300	0	696	243	0	849	134	0	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.5	32.8	20.7	54.0	0.0	39.0	52.6	0.0	29.8	57.0	0.0	39.5
Incr Delay (d2), s/veh	27.9	0.3	0.0	4.2	0.0	17.0	25.9	0.0	0.5	17.6	0.0	13.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	4.1	0.3	5.1	0.0	20.9	7.8	0.0	12.0	2.9	0.0	19.1
LnGrp Delay(d),s/veh	84.4	33.1	20.8	58.2	0.0	56.0	78.5	0.0	30.3	74.6	0.0	52.8
LnGrp LOS	F	C	C	E		E	E		C	E		D
Approach Vol, veh/h		259			708			632			600	
Approach Delay, s/veh		48.9			56.5			44.7			55.5	
Approach LOS		D			E			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	16.4	41.9	19.3	44.2	11.7	46.5	11.0	52.6				
Change Period (Y+Rc), s	4.4	5.6	4.5	* 4.9	4.5	* 5.6	4.5	4.9				
Max Green Setting (Gmax), s	20.6	34.2	16.7	* 50	8.1	* 47	9.2	56.6				
Max Q Clear Time (g_c+I1), s	11.9	9.9	14.8	36.3	7.7	38.4	7.0	25.7				
Green Ext Time (p_c), s	0.1	0.9	0.1	3.0	0.0	2.5	0.0	2.1				
Intersection Summary												
HCM 2010 Ctrl Delay			51.9									
HCM 2010 LOS			D									
Notes												

























HCM 2010 Signalized Intersection Summary

44: Camino Del Rio North & Rancho Mission Road

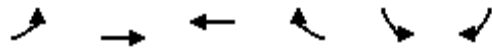


Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	120	110	490	330	250	270		
Future Volume (veh/h)	120	110	490	330	250	270		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	126	116	516	89	263	158		
Adj No. of Lanes	1	2	2	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	161	1499	889	382	334	441		
Arrive On Green	0.09	0.42	0.25	0.25	0.19	0.19		
Sat Flow, veh/h	1774	3632	3632	1520	1774	1583		
Grp Volume(v), veh/h	126	116	516	89	263	158		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1520	1774	1583		
Q Serve(g_s), s	3.7	1.1	6.9	2.5	7.6	4.3		
Cycle Q Clear(g_c), s	3.7	1.1	6.9	2.5	7.6	4.3		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	161	1499	889	382	334	441		
V/C Ratio(X)	0.78	0.08	0.58	0.23	0.79	0.36		
Avail Cap(c_a), veh/h	231	2413	1289	554	761	823		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	23.9	9.2	17.7	16.0	20.8	15.5		
Incr Delay (d2), s/veh	6.2	0.0	0.9	0.5	1.6	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.1	0.5	3.5	1.1	3.9	4.1		
LnGrp Delay(d),s/veh	30.2	9.3	18.6	16.5	22.4	15.7		
LnGrp LOS	C	A	B	B	C	B		
Approach Vol, veh/h		242	605		421			
Approach Delay, s/veh		20.2	18.3		19.9			
Approach LOS		C	B		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		33.8		20.0	9.3	24.5		
Change Period (Y+Rc), s		* 11		* 9.9	4.4	11.0		
Max Green Setting (Gmax), s		* 37		* 23	7.0	19.6		
Max Q Clear Time (g_c+I1), s		3.1		9.6	5.7	8.9		
Green Ext Time (p_c), s		1.0		0.5	0.0	3.7		
Intersection Summary								
HCM 2010 Ctrl Delay			19.2					
HCM 2010 LOS			B					
Notes								

HCM 2010 Signalized Intersection Summary
 45: Mission Gorge Road & Camino Del Rio North/I-8 WB Off Ramps

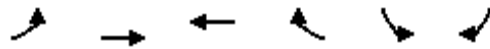
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	90	430	440	480	310	460	1480	280	20	850	190
Future Volume (veh/h)	150	90	430	440	480	310	460	1480	280	20	850	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	124	136	376	303	707	186	474	1526	222	21	876	98
Adj No. of Lanes	1	1	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	140	523	398	836	364	464	1940	858	39	1056	463
Arrive On Green	0.08	0.08	0.08	0.22	0.22	0.22	0.26	0.55	0.55	0.01	0.30	0.30
Sat Flow, veh/h	1774	1863	1457	1774	3725	1541	1774	3539	1566	3442	3539	1551
Grp Volume(v), veh/h	124	136	376	303	707	186	474	1526	222	21	876	98
Grp Sat Flow(s),veh/h/ln	1774	1863	1457	1774	1863	1541	1774	1770	1566	1721	1770	1551
Q Serve(g_s), s	10.1	10.6	10.9	23.2	26.3	15.2	37.9	49.7	10.8	0.9	33.5	6.9
Cycle Q Clear(g_c), s	10.1	10.6	10.9	23.2	26.3	15.2	37.9	49.7	10.8	0.9	33.5	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	140	523	398	836	364	464	1940	858	39	1056	463
V/C Ratio(X)	0.93	0.97	0.72	0.76	0.85	0.51	1.02	0.79	0.26	0.53	0.83	0.21
Avail Cap(c_a), veh/h	133	140	523	440	925	401	464	1940	858	69	1056	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	1.00	1.00	1.00	0.48	0.48	0.48	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	66.9	42.5	52.6	53.8	48.1	53.5	26.0	17.2	71.3	47.4	38.1
Incr Delay (d2), s/veh	56.1	66.8	4.1	5.8	6.1	0.4	34.7	1.6	0.4	4.1	7.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	8.0	13.8	12.0	14.3	6.5	23.0	24.6	4.8	0.4	17.4	3.1
LnGrp Delay(d),s/veh	122.8	133.7	46.6	58.4	59.9	48.5	88.3	27.6	17.6	75.4	55.0	39.2
LnGrp LOS	F	F	D	E	E	D	F	C	B	E	E	D
Approach Vol, veh/h		636			1196			2222			995	
Approach Delay, s/veh		80.1			57.8			39.6			53.9	
Approach LOS		F			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	84.6		16.0	43.0	48.3		37.7				
Change Period (Y+Rc), s	5.1	5.1		5.1	5.1	5.1		5.1				
Max Green Setting (Gmax), s	2.9	74.8		10.9	37.9	39.8		36.0				
Max Q Clear Time (g_c+I1), s	2.9	51.7		12.9	39.9	35.5		28.3				
Green Ext Time (p_c), s	0.0	8.4		0.0	0.0	1.7		2.5				
Intersection Summary												
HCM 2010 Ctrl Delay			51.8									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 46: Hotel Circle North & Hotel Circle Place



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations			↑↑		↑	↑		
Traffic Volume (veh/h)	0	0	450	50	0	150		
Future Volume (veh/h)	0	0	450	50	0	150		
Number			8	18	1	16		
Initial Q (Qb), veh			0	0	0	0		
Ped-Bike Adj(A_pbT)				0.98	1.00	1.00		
Parking Bus, Adj			1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln			1863	1900	1863	1863		
Adj Flow Rate, veh/h			474	53	0	158		
Adj No. of Lanes			2	0	1	1		
Peak Hour Factor			0.95	0.95	0.95	0.95		
Percent Heavy Veh, %			2	2	2	2		
Cap, veh/h			1780	198	0	0		
Arrive On Green			0.56	0.56	0.00	0.00		
Sat Flow, veh/h			3298	357	0			
Grp Volume(v), veh/h			261	266	0.0			
Grp Sat Flow(s),veh/h/ln			1770	1792				
Q Serve(g_s), s			0.8	0.8				
Cycle Q Clear(g_c), s			0.8	0.8				
Prop In Lane				0.20				
Lane Grp Cap(c), veh/h			983	995				
V/C Ratio(X)			0.27	0.27				
Avail Cap(c_a), veh/h			2710	2745				
HCM Platoon Ratio			1.00	1.00				
Upstream Filter(I)			1.00	1.00				
Uniform Delay (d), s/veh			1.2	1.2				
Incr Delay (d2), s/veh			0.1	0.1				
Initial Q Delay(d3),s/veh			0.0	0.0				
%ile BackOfQ(50%),veh/ln			0.4	0.4				
LnGrp Delay(d),s/veh			1.3	1.3				
LnGrp LOS			A	A				
Approach Vol, veh/h			527					
Approach Delay, s/veh			1.3					
Approach LOS			A					
Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								10.1
Change Period (Y+Rc), s								4.5
Max Green Setting (Gmax), s								15.5
Max Q Clear Time (g_c+I1), s								2.8
Green Ext Time (p_c), s								2.6
Intersection Summary								
HCM 2010 Ctrl Delay			1.3					
HCM 2010 LOS			A					

























HCM 2010 Signalized Intersection Summary
 48: Hotel Circle North/Camino De La Reina & Fashion Valley Road















Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations			↑↑	↑	↑	↑↑		
Traffic Volume (veh/h)	0	0	400	200	1	240		
Future Volume (veh/h)	0	0	400	200	1	240		
Number			2	12	7	14		
Initial Q (Qb), veh			0	0	0	0		
Ped-Bike Adj(A_pbT)				0.92	1.00	1.00		
Parking Bus, Adj			1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863		
Adj Flow Rate, veh/h			421	96	1	179		
Adj No. of Lanes			2	1	1	2		
Peak Hour Factor			0.95	0.95	0.95	0.95		
Percent Heavy Veh, %			2	2	2	2		
Cap, veh/h			650	269	0	0		
Arrive On Green			0.18	0.18	0.00	0.00		
Sat Flow, veh/h			3632	1464	0			
Grp Volume(v), veh/h			421	96	0.0			
Grp Sat Flow(s),veh/h/ln			1770	1464				
Q Serve(g_s), s			9.9	5.2				
Cycle Q Clear(g_c), s			9.9	5.2				
Prop In Lane				1.00				
Lane Grp Cap(c), veh/h			650	269				
V/C Ratio(X)			0.65	0.36				
Avail Cap(c_a), veh/h			1813	750				
HCM Platoon Ratio			1.00	1.00				
Upstream Filter(I)			1.00	1.00				
Uniform Delay (d), s/veh			34.0	32.1				
Incr Delay (d2), s/veh			1.5	1.1				
Initial Q Delay(d3),s/veh			0.0	0.0				
%ile BackOfQ(50%),veh/ln			5.0	2.2				
LnGrp Delay(d),s/veh			35.5	33.2				
LnGrp LOS			D	C				
Approach Vol, veh/h			517					
Approach Delay, s/veh			35.1					
Approach LOS			D					
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		26.4						
Change Period (Y+Rc), s		* 9.9						
Max Green Setting (Gmax), s		* 46						
Max Q Clear Time (g_c+I1), s		11.9						
Green Ext Time (p_c), s		4.6						
Intersection Summary								
HCM 2010 Ctrl Delay			35.1					
HCM 2010 LOS			D					
Notes								

HCM 2010 Signalized Intersection Summary













49: Mission Center Road & Camino Del Rio N

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	170	180	280	320	510	170	310	290	220	320	60
Future Volume (veh/h)	20	170	180	280	320	510	170	310	290	220	320	60
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		0.97	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	177	0	292	333	203	177	323	0	229	333	37
Adj No. of Lanes	1	2	1	2	1	1	2	2	1	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	32	485	217	369	421	348	250	1415	633	307	1474	641
Arrive On Green	0.02	0.14	0.00	0.11	0.23	0.23	0.02	0.13	0.00	0.09	0.42	0.42
Sat Flow, veh/h	1774	3539	1583	3442	1863	1541	3442	3539	1583	3442	3539	1538
Grp Volume(v), veh/h	21	177	0	292	333	203	177	323	0	229	333	37
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1863	1541	1721	1770	1583	1721	1770	1538
Q Serve(g_s), s	1.1	4.1	0.0	7.4	15.2	10.6	4.6	7.4	0.0	5.8	5.5	1.3
Cycle Q Clear(g_c), s	1.1	4.1	0.0	7.4	15.2	10.6	4.6	7.4	0.0	5.8	5.5	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	32	485	217	369	421	348	250	1415	633	307	1474	641
V/C Ratio(X)	0.65	0.37	0.00	0.79	0.79	0.58	0.71	0.23	0.00	0.75	0.23	0.06
Avail Cap(c_a), veh/h	79	1077	482	497	642	531	264	1415	633	421	1474	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.86	0.86	0.86	0.83	0.83	0.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	43.9	35.3	0.0	39.2	32.8	31.0	43.0	26.6	0.0	40.0	16.9	15.7
Incr Delay (d2), s/veh	8.0	0.5	0.0	3.7	1.6	0.5	5.5	0.3	0.0	4.4	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.0	0.0	3.7	8.0	4.5	2.4	3.7	0.0	3.0	2.7	0.6
LnGrp Delay(d),s/veh	51.9	35.7	0.0	42.8	34.4	31.5	48.5	26.9	0.0	44.4	17.2	15.9
LnGrp LOS	D	D		D	C	C	D	C		D	B	B
Approach Vol, veh/h		198			828			500			599	
Approach Delay, s/veh		37.5			36.7			34.6			27.5	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.4	40.9	14.1	22.6	10.9	42.4	6.0	30.6				
Change Period (Y+Rc), s	4.4	4.9	4.4	* 10	4.4	4.9	4.4	10.3				
Max Green Setting (Gmax), s	11.0	20.0	13.0	* 27	6.9	24.1	4.0	31.0				
Max Q Clear Time (g_c+I1), s	7.8	9.4	9.4	6.1	6.6	7.5	3.1	17.2				
Green Ext Time (p_c), s	0.2	0.9	0.2	1.1	0.0	2.9	0.0	1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			33.7									
HCM 2010 LOS			C									
Notes												






















HCM 2010 Signalized Intersection Summary
 50: I-8 WB Ramps/Mission Valley Mall Driveway & Camino Del Rio N

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑		↖	↗	↗			
Traffic Volume (veh/h)	0	270	410	140	260	0	850	90	120	0	0	0
Future Volume (veh/h)	0	270	410	140	260	0	850	90	120	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	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			
Parking Bus, Adj	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	1863	1863	1863	1900	1863	1863	1863			
Adj Flow Rate, veh/h	0	284	0	147	274	0	963	0	0			
Adj No. of Lanes	0	2	1	1	2	0	2	0	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	906	405	179	1528	0	1335	0	596			
Arrive On Green	0.00	0.26	0.00	0.10	0.43	0.00	0.38	0.00	0.00			
Sat Flow, veh/h	0	3632	1583	1774	3632	0	3548	0	1583			
Grp Volume(v), veh/h	0	284	0	147	274	0	963	0	0			
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0	1774	0	1583			
Q Serve(g_s), s	0.0	4.1	0.0	5.1	3.0	0.0	14.5	0.0	0.0			
Cycle Q Clear(g_c), s	0.0	4.1	0.0	5.1	3.0	0.0	14.5	0.0	0.0			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	906	405	179	1528	0	1335	0	596			
V/C Ratio(X)	0.00	0.31	0.00	0.82	0.18	0.00	0.72	0.00	0.00			
Avail Cap(c_a), veh/h	0	906	405	179	1528	0	2894	0	1292			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	0.0	18.8	0.0	27.6	10.9	0.0	16.7	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.9	0.0	24.1	0.1	0.0	1.1	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			
%ile BackOfQ(50%),veh/ln	0.0	2.1	0.0	3.7	1.5	0.0	7.3	0.0	0.0			
LnGrp Delay(d),s/veh	0.0	19.7	0.0	51.7	11.0	0.0	17.8	0.0	0.0			
LnGrp LOS		B		D	B		B					
Approach Vol, veh/h		284			421			963				
Approach Delay, s/veh		19.7			25.2			17.8				
Approach LOS		B			C			B				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	11.0	22.0		29.5		33.0						
Change Period (Y+Rc), s	* 4.7	6.0		6.0		6.0						
Max Green Setting (Gmax), s	* 6.3	16.0		51.0		27.0						
Max Q Clear Time (g_c+I1), s	7.1	6.1		16.5		5.0						
Green Ext Time (p_c), s	0.0	1.3		7.0		1.8						
Intersection Summary												
HCM 2010 Ctrl Delay				20.0								
HCM 2010 LOS				B								
Notes												


























HCM 2010 Signalized Intersection Summary
 51: Camino Del Rio N & Camino Del Este

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	150	250	230	260	270	120		
Future Volume (veh/h)	150	250	230	260	270	120		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	158	263	242	232	284	84		
Adj No. of Lanes	1	1	2	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	120	1201	1802	790	359	320		
Arrive On Green	0.07	0.64	0.51	0.51	0.20	0.20		
Sat Flow, veh/h	1774	1863	3632	1552	1774	1583		
Grp Volume(v), veh/h	158	263	242	232	284	84		
Grp Sat Flow(s),veh/h/ln	1774	1863	1770	1552	1774	1583		
Q Serve(g_s), s	4.0	3.4	2.1	5.1	9.0	2.6		
Cycle Q Clear(g_c), s	4.0	3.4	2.1	5.1	9.0	2.6		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	120	1201	1802	790	359	320		
V/C Ratio(X)	1.31	0.22	0.13	0.29	0.79	0.26		
Avail Cap(c_a), veh/h	120	1201	1802	790	542	484		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	27.5	4.3	7.6	8.3	22.3	19.8		
Incr Delay (d2), s/veh	187.4	0.4	0.2	0.9	5.8	0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	8.2	1.9	1.1	2.3	4.9	2.5		
LnGrp Delay(d),s/veh	214.9	4.7	7.8	9.3	28.1	20.4		
LnGrp LOS	F	A	A	A	C	C		
Approach Vol, veh/h		421	474		368			
Approach Delay, s/veh		83.6	8.5		26.3			
Approach LOS		F	A		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		42.5		16.4	8.0	34.5		
Change Period (Y+Rc), s		4.5		4.5	4.0	4.5		
Max Green Setting (Gmax), s		38.0		18.0	4.0	30.0		
Max Q Clear Time (g_c+I1), s		5.4		11.0	6.0	7.1		
Green Ext Time (p_c), s		1.4		1.0	0.0	2.0		
Intersection Summary								
HCM 2010 Ctrl Delay			38.7					
HCM 2010 LOS			D					

HCM 2010 Signalized Intersection Summary
 52: Qualcomm Way & Camino Del Rio N/I-8 WB Ramps

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	180	30	180	530	300	1600	250	0	690	490
Future Volume (veh/h)	100	0	180	30	180	530	300	1600	250	0	690	490
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	0	1863	1863
Adj Flow Rate, veh/h	105	0	110	32	189	226	316	1684	0	0	726	253
Adj No. of Lanes	0	1	1	0	1	1	1	3	1	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	261	0	223	51	301	292	228	2786	867	0	1373	605
Arrive On Green	0.15	0.00	0.15	0.19	0.19	0.19	0.13	0.55	0.00	0.00	0.13	0.13
Sat Flow, veh/h	1774	0	1519	268	1582	1533	1774	5085	1583	0	3632	1559
Grp Volume(v), veh/h	105	0	110	221	0	226	316	1684	0	0	726	253
Grp Sat Flow(s),veh/h/ln	1774	0	1519	1849	0	1533	1774	1695	1583	0	1770	1559
Q Serve(g_s), s	8.0	0.0	10.0	16.5	0.0	21.0	19.3	33.6	0.0	0.0	28.8	22.4
Cycle Q Clear(g_c), s	8.0	0.0	10.0	16.5	0.0	21.0	19.3	33.6	0.0	0.0	28.8	22.4
Prop In Lane	1.00		1.00	0.14		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	261	0	223	352	0	292	228	2786	867	0	1373	605
V/C Ratio(X)	0.40	0.00	0.49	0.63	0.00	0.77	1.38	0.60	0.00	0.00	0.53	0.42
Avail Cap(c_a), veh/h	485	0	415	456	0	378	228	2786	867	0	1373	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.77	0.77	0.00	0.00	0.90	0.90
Uniform Delay (d), s/veh	58.0	0.0	58.8	55.8	0.0	57.7	65.3	22.9	0.0	0.0	52.6	49.8
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.7	0.0	5.2	192.5	0.8	0.0	0.0	1.3	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	4.2	8.5	0.0	9.3	21.7	15.9	0.0	0.0	14.4	10.0
LnGrp Delay(d),s/veh	58.4	0.0	59.4	56.5	0.0	62.9	257.9	23.7	0.0	0.0	53.9	51.7
LnGrp LOS	E		E	E		E	F	C			D	D
Approach Vol, veh/h		215			447			2000			979	
Approach Delay, s/veh		58.9			59.7			60.7			53.3	
Approach LOS		E			E			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		89.2		27.2	24.0	65.2		33.7				
Change Period (Y+Rc), s		7.0		5.1	* 4.7	7.0		5.1				
Max Green Setting (Gmax), s		54.8		41.0	* 19	30.8		37.0				
Max Q Clear Time (g_c+I1), s		35.6		12.0	21.3	30.8		23.0				
Green Ext Time (p_c), s		8.0		0.1	0.0	0.0		1.1				
Intersection Summary												
HCM 2010 Ctrl Delay			58.5									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary
 53: Morena Boulevard & Taylor Street

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 					 	 	
Traffic Volume (veh/h)	310	120	20	60	860	520	0	10	20	90	10	230
Future Volume (veh/h)	310	120	20	60	860	520	0	10	20	90	10	230
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	0	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	326	126	10	63	905	526	0	11	0	103	0	221
Adj No. of Lanes	2	2	0	1	2	0	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	2
Cap, veh/h	385	1835	144	81	1053	598	0	13	0	690	0	476
Arrive On Green	0.11	0.55	0.55	0.05	0.49	0.49	0.00	0.01	0.00	0.19	0.00	0.19
Sat Flow, veh/h	3442	3320	261	1774	2167	1230	0	1863	0	3548	0	1534
Grp Volume(v), veh/h	326	67	69	63	735	696	0	11	0	103	0	221
Grp Sat Flow(s),veh/h/ln	1721	1770	1811	1774	1770	1628	0	1863	0	1774	0	1534
Q Serve(g_s), s	8.8	1.7	1.7	3.3	34.6	36.3	0.0	0.6	0.0	2.3	0.0	11.1
Cycle Q Clear(g_c), s	8.8	1.7	1.7	3.3	34.6	36.3	0.0	0.6	0.0	2.3	0.0	11.1
Prop In Lane	1.00		0.14	1.00		0.76	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	385	978	1001	81	860	791	0	13	0	690	0	476
V/C Ratio(X)	0.85	0.07	0.07	0.78	0.85	0.88	0.00	0.87	0.00	0.15	0.00	0.46
Avail Cap(c_a), veh/h	385	1022	1046	86	910	837	0	130	0	1128	0	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.2	9.8	9.9	44.7	21.4	21.8	0.0	47.0	0.0	31.6	0.0	26.6
Incr Delay (d2), s/veh	15.1	0.0	0.0	30.5	8.0	10.5	0.0	43.7	0.0	0.2	0.0	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	5.0	0.8	0.9	2.3	18.7	18.5	0.0	0.4	0.0	1.1	0.0	10.0
LnGrp Delay(d),s/veh	56.4	9.9	9.9	75.2	29.3	32.4	0.0	90.6	0.0	31.8	0.0	27.8
LnGrp LOS	E	A	A	E	C	C		F		C		C
Approach Vol, veh/h		462			1494			11			324	
Approach Delay, s/veh		42.7			32.7			90.6			29.1	
Approach LOS		D			C			F			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	57.2		23.7	15.0	50.9		5.0				
Change Period (Y+Rc), s	4.4	4.9		5.3	4.4	4.9		4.4				
Max Green Setting (Gmax), s	4.6	54.7		30.1	10.6	48.7		6.6				
Max Q Clear Time (g_c+1), s	5.3	3.7		13.1	10.8	38.3		2.6				
Green Ext Time (p_c), s	0.0	0.9		1.8	0.0	7.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			34.5									
HCM 2010 LOS			C									
Notes												










HCM 2010 Signalized Intersection Summary
 55: Taylor Street/Hotel Circle South & Hotel Circle North



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		↑			↗	↖		
Traffic Volume (veh/h)	0	130	0	0	100	500		
Future Volume (veh/h)	0	130	0	0	100	500		
Number	7	4			5	12		
Initial Q (Qb), veh	0	0			0	0		
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00		
Parking Bus, Adj	1.00	1.00			1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863			1863	1863		
Adj Flow Rate, veh/h	0	137			105	526		
Adj No. of Lanes	0	1			1	1		
Peak Hour Factor	0.95	0.95			0.95	0.95		
Percent Heavy Veh, %	0	2			2	2		
Cap, veh/h	0	444			0	0		
Arrive On Green	0.00	0.24			0.00	0.00		
Sat Flow, veh/h	0	1863			0			
Grp Volume(v), veh/h	0	137			0.0			
Grp Sat Flow(s),veh/h/ln	0	1863						
Q Serve(g_s), s	0.0	0.4						
Cycle Q Clear(g_c), s	0.0	0.4						
Prop In Lane	0.00							
Lane Grp Cap(c), veh/h	0	444						
V/C Ratio(X)	0.00	0.31						
Avail Cap(c_a), veh/h	0	7407						
HCM Platoon Ratio	1.00	1.00						
Upstream Filter(I)	0.00	1.00						
Uniform Delay (d), s/veh	0.0	1.8						
Incr Delay (d2), s/veh	0.0	0.4						
Initial Q Delay(d3),s/veh	0.0	0.0						
%ile BackOfQ(50%),veh/ln	0.0	0.2						
LnGrp Delay(d),s/veh	0.0	2.2						
LnGrp LOS		A						
Approach Vol, veh/h		137						
Approach Delay, s/veh		2.2						
Approach LOS		A						
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				5.9				
Change Period (Y+Rc), s				4.5				
Max Green Setting (Gmax), s				23.5				
Max Q Clear Time (g_c+I1), s				2.4				
Green Ext Time (p_c), s				0.6				
Intersection Summary								
HCM 2010 Ctrl Delay			2.2					
HCM 2010 LOS			A					



















HCM 2010 Signalized Intersection Summary

57: Bachman Place & Hotel Circle South






















								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	150	750	0	0	0	740		
Future Volume (veh/h)	150	750	0	0	0	740		
Number	2	12			7	14		
Initial Q (Qb), veh	0	0			0	0		
Ped-Bike Adj(A_pbT)		0.98			1.00	1.00		
Parking Bus, Adj	1.00	1.00			1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900			1863	1863		
Adj Flow Rate, veh/h	158	736			0	654		
Adj No. of Lanes	2	0			1	2		
Peak Hour Factor	0.95	0.95			0.95	0.95		
Percent Heavy Veh, %	2	2			2	2		
Cap, veh/h	1054	928			0	0		
Arrive On Green	0.60	0.60			0.00	0.00		
Sat Flow, veh/h	1863	1557			0			
Grp Volume(v), veh/h	158	736			0.0			
Grp Sat Flow(s),veh/h/ln	1770	1557						
Q Serve(g_s), s	1.0	9.0						
Cycle Q Clear(g_c), s	1.0	9.0						
Prop In Lane		1.00						
Lane Grp Cap(c), veh/h	1054	928						
V/C Ratio(X)	0.15	0.79						
Avail Cap(c_a), veh/h	1245	1095						
HCM Platoon Ratio	1.00	1.00						
Upstream Filter(I)	1.00	1.00						
Uniform Delay (d), s/veh	2.2	3.8						
Incr Delay (d2), s/veh	0.1	3.8						
Initial Q Delay(d3),s/veh	0.0	0.0						
%ile BackOfQ(50%),veh/ln	0.5	4.7						
LnGrp Delay(d),s/veh	2.3	7.6						
LnGrp LOS	A	A						
Approach Vol, veh/h	894							
Approach Delay, s/veh	6.7							
Approach LOS	A							
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		24.7						
Change Period (Y+Rc), s		10.0						
Max Green Setting (Gmax), s		17.4						
Max Q Clear Time (g_c+I1), s		11.0						
Green Ext Time (p_c), s		3.8						
Intersection Summary								
HCM 2010 Ctrl Delay			6.7					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary

58: Mission Center Road & I-8 EB Ramp












												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	430	0	420	0	0	0	0	340	140	350	430	0
Future Volume (veh/h)	430	0	420	0	0	0	0	340	140	350	430	0
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	453	0	0				0	358	0	274	585	0
Adj No. of Lanes	2	1	0				0	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1483	803	0				0	441	197	449	944	0
Arrive On Green	0.43	0.00	0.00				0.00	0.04	0.00	0.08	0.08	0.00
Sat Flow, veh/h	3442	1863	0				0	3632	1583	1774	3725	0
Grp Volume(v), veh/h	453	0	0				0	358	0	274	585	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0				0	1770	1583	1774	1863	0
Q Serve(g_s), s	7.8	0.0	0.0				0.0	9.0	0.0	13.4	13.7	0.0
Cycle Q Clear(g_c), s	7.8	0.0	0.0				0.0	9.0	0.0	13.4	13.7	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1483	803	0				0	441	197	449	944	0
V/C Ratio(X)	0.31	0.00	0.00				0.00	0.81	0.00	0.61	0.62	0.00
Avail Cap(c_a), veh/h	1483	803	0				0	511	229	749	1573	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	0.33	0.33	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.94	0.00	0.94	0.94	0.00
Uniform Delay (d), s/veh	16.8	0.0	0.0				0.0	42.1	0.0	36.9	37.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0				0.0	6.9	0.0	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0				0.0	4.8	0.0	6.7	7.1	0.0
LnGrp Delay(d),s/veh	17.3	0.0	0.0				0.0	49.0	0.0	37.4	37.3	0.0
LnGrp LOS	B							D		D	D	
Approach Vol, veh/h		453						358			859	
Approach Delay, s/veh		17.3						49.0			37.3	
Approach LOS		B						D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		44.9		16.2				28.9				
Change Period (Y+Rc), s		6.1		5.0				6.1				
Max Green Setting (Gmax), s		21.8		13.0				38.0				
Max Q Clear Time (g_c+I1), s		9.8		11.0				15.7				
Green Ext Time (p_c), s		0.8		0.2				2.7				
Intersection Summary												
HCM 2010 Ctrl Delay			34.4									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 59: Mission Center Road & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	90	20	20	260	230	20	30	20	330	100	420
Future Volume (veh/h)	220	90	20	20	260	230	20	30	20	330	100	420
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1900	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	232	95	21	21	274	242	21	32	21	226	274	442
Adj No. of Lanes	2	1	0	0	2	1	0	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	394	162	36	44	600	761	92	140	191	555	583	469
Arrive On Green	0.11	0.11	0.11	0.18	0.18	0.18	0.13	0.13	0.13	0.31	0.31	0.31
Sat Flow, veh/h	3548	1461	323	246	3374	1494	724	1103	1508	1774	1863	1498
Grp Volume(v), veh/h	232	0	116	158	137	242	53	0	21	226	274	442
Grp Sat Flow(s),veh/h/ln	1774	0	1784	1850	1770	1494	1827	0	1508	1774	1863	1498
Q Serve(g_s), s	5.6	0.0	5.6	6.9	6.2	8.9	2.3	0.0	1.1	9.0	10.7	25.9
Cycle Q Clear(g_c), s	5.6	0.0	5.6	6.9	6.2	8.9	2.3	0.0	1.1	9.0	10.7	25.9
Prop In Lane	1.00		0.18	0.13		1.00	0.40		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	394	0	198	329	315	761	232	0	191	555	583	469
V/C Ratio(X)	0.59	0.00	0.59	0.48	0.44	0.32	0.23	0.00	0.11	0.41	0.47	0.94
Avail Cap(c_a), veh/h	548	0	276	329	315	761	232	0	191	568	596	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	38.0	0.0	38.0	33.3	33.0	13.9	35.3	0.0	34.8	24.3	24.9	30.1
Incr Delay (d2), s/veh	0.5	0.0	1.0	0.4	0.4	0.1	0.5	0.0	0.3	1.8	2.2	25.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	2.8	3.5	3.1	5.9	1.2	0.0	0.5	4.7	5.8	14.0
LnGrp Delay(d),s/veh	38.6	0.0	39.1	33.7	33.3	14.0	35.8	0.0	35.0	26.1	27.1	55.4
LnGrp LOS	D		D	C	C	B	D		D	C	C	E
Approach Vol, veh/h		348			537			74			942	
Approach Delay, s/veh		38.7			24.7			35.6			40.1	
Approach LOS		D			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		17.5		22.1		34.3		16.1				
Change Period (Y+Rc), s		6.1		6.1		6.1		6.1				
Max Green Setting (Gmax), s		6.9		16.0		28.8		13.9				
Max Q Clear Time (g_c+I1), s		4.3		10.9		27.9		7.6				
Green Ext Time (p_c), s		0.0		0.8		0.3		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay				35.3								
HCM 2010 LOS				D								
Notes												

























HCM 2010 Signalized Intersection Summary

60: Qualcomm Way & I-8 EB Ramp

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	490	0	1300	630	270		
Future Volume (veh/h)	0	490	0	1300	630	270		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863		
Adj Flow Rate, veh/h	0	321	0	1368	663	0		
Adj No. of Lanes	1	2	0	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	2		
Cap, veh/h	273	429	0	2312	2312	1034		
Arrive On Green	0.00	0.15	0.00	0.65	0.65	0.00		
Sat Flow, veh/h	1774	2787	0	3725	3632	1583		
Grp Volume(v), veh/h	0	321	0	1368	663	0		
Grp Sat Flow(s),veh/h/ln	1774	1393	0	1770	1770	1583		
Q Serve(g_s), s	0.0	6.1	0.0	12.0	4.4	0.0		
Cycle Q Clear(g_c), s	0.0	6.1	0.0	12.0	4.4	0.0		
Prop In Lane	1.00	1.00	0.00				1.00	
Lane Grp Cap(c), veh/h	273	429	0	2312	2312	1034		
V/C Ratio(X)	0.00	0.75	0.00	0.59	0.29	0.00		
Avail Cap(c_a), veh/h	516	811	0	2312	2312	1034		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.00	0.09	0.35	0.00		
Uniform Delay (d), s/veh	0.0	22.2	0.0	5.4	4.1	0.0		
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.1	0.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.0	5.7	2.2	0.0		
LnGrp Delay(d),s/veh	0.0	23.2	0.0	5.5	4.2	0.0		
LnGrp LOS		C		A	A			
Approach Vol, veh/h	321			1368	663			
Approach Delay, s/veh	23.2			5.5	4.2			
Approach LOS	C			A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		41.0		14.0		41.0		
Change Period (Y+Rc), s		5.1		5.5		5.1		
Max Green Setting (Gmax), s		28.4		16.0		28.4		
Max Q Clear Time (g_c+I1), s		14.0		8.1		6.4		
Green Ext Time (p_c), s		5.6		0.5		2.6		
Intersection Summary								
HCM 2010 Ctrl Delay			7.5					
HCM 2010 LOS			A					
Notes								

HCM 2010 Signalized Intersection Summary

61: Qualcomm Way & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	90	90	60	90	160	140	1360	180	450	590	280
Future Volume (veh/h)	110	90	90	60	90	160	140	1360	180	450	590	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	112	92	32	61	92	60	143	1388	133	459	602	97
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	161	268	137	144	465	160	1645	157	396	2260	975
Arrive On Green	0.09	0.09	0.09	0.08	0.08	0.08	0.09	0.51	0.51	0.22	0.64	0.64
Sat Flow, veh/h	1774	1863	1453	1774	1863	1440	1774	3253	310	1774	3539	1526
Grp Volume(v), veh/h	112	92	32	61	92	60	143	751	770	459	602	97
Grp Sat Flow(s),veh/h/ln	1774	1863	1453	1774	1863	1440	1774	1770	1793	1774	1770	1526
Q Serve(g_s), s	12.3	9.5	3.7	6.6	9.6	6.1	16.0	72.9	74.4	44.6	14.8	4.9
Cycle Q Clear(g_c), s	12.3	9.5	3.7	6.6	9.6	6.1	16.0	72.9	74.4	44.6	14.8	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	153	161	268	137	144	465	160	895	907	396	2260	975
V/C Ratio(X)	0.73	0.57	0.12	0.44	0.64	0.13	0.89	0.84	0.85	1.16	0.27	0.10
Avail Cap(c_a), veh/h	239	251	339	266	279	569	233	895	907	396	2260	975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	89.1	87.8	69.3	88.2	89.5	51.1	90.0	42.4	42.8	77.7	15.7	13.9
Incr Delay (d2), s/veh	6.6	3.2	0.2	0.8	1.7	0.0	19.3	9.3	9.8	94.1	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	5.0	1.5	3.3	5.0	2.4	8.7	38.0	39.2	32.2	7.3	2.1
LnGrp Delay(d),s/veh	95.7	91.0	69.5	89.0	91.3	51.1	109.3	51.7	52.6	171.8	16.0	14.1
LnGrp LOS	F	F	E	F	F	D	F	D	D	F	B	B
Approach Vol, veh/h		236			213			1664			1158	
Approach Delay, s/veh		90.3			79.3			57.1			77.6	
Approach LOS		F			E			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	49.0	108.2		22.2	22.4	134.7		20.7				
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		5.2				
Max Green Setting (Gmax), s	44.6	76.9		27.0	26.3	* 97		30.0				
Max Q Clear Time (g_c+I1), s	46.6	76.4		14.3	18.0	16.8		11.6				
Green Ext Time (p_c), s	0.0	0.5		0.5	0.1	6.2		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			68.2									
HCM 2010 LOS			E									
Notes												













HCM 2010 Signalized Intersection Summary

62: Camino Del Rio South & Fenton Parkway



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	160	220	580	490	280	320		
Future Volume (veh/h)	160	220	580	490	280	320		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	168	232	611	138	295	212		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	215	1144	743	947	371	331		
Arrive On Green	0.12	0.61	0.40	0.40	0.21	0.21		
Sat Flow, veh/h	1774	1863	1863	1544	1774	1583		
Grp Volume(v), veh/h	168	232	611	138	295	212		
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1544	1774	1583		
Q Serve(g_s), s	4.9	2.9	15.6	0.0	8.4	6.5		
Cycle Q Clear(g_c), s	4.9	2.9	15.6	0.0	8.4	6.5		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	215	1144	743	947	371	331		
V/C Ratio(X)	0.78	0.20	0.82	0.15	0.79	0.64		
Avail Cap(c_a), veh/h	534	1667	953	1121	767	685		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	22.7	4.5	14.3	1.3	19.9	19.2		
Incr Delay (d2), s/veh	2.3	0.1	4.9	0.1	1.5	0.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.5	1.5	9.0	2.1	4.3	5.7		
LnGrp Delay(d),s/veh	25.0	4.6	19.2	1.4	21.4	20.0		
LnGrp LOS	C	A	B	A	C	B		
Approach Vol, veh/h		400	749		507			
Approach Delay, s/veh		13.2	15.9		20.8			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		37.7		15.5	11.4	26.2		
Change Period (Y+Rc), s		5.0		4.4	5.0	* 5		
Max Green Setting (Gmax), s		47.6		23.0	16.0	* 27		
Max Q Clear Time (g_c+I1), s		4.9		10.4	6.9	17.6		
Green Ext Time (p_c), s		1.6		0.7	0.1	3.3		
Intersection Summary								
HCM 2010 Ctrl Delay			16.8					
HCM 2010 LOS			B					
Notes								

HCM 2010 Signalized Intersection Summary
 63: I-15 SB Ramps & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑			↕		↖		↖
Traffic Volume (veh/h)	0	140	30	30	880	0	20	0	20	240	0	450
Future Volume (veh/h)	0	140	30	30	880	0	20	0	20	240	0	450
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.95	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	1900	1863	1863	0	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	0	147	21	32	926	0	21	0	19	253	0	274
Adj No. of Lanes	0	2	0	1	1	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	0	2
Cap, veh/h	0	1674	235	67	1282	0	39	0	35	0	0	0
Arrive On Green	0.00	0.54	0.54	0.04	0.69	0.00	0.05	0.00	0.05	0.00	0.00	0.00
Sat Flow, veh/h	0	3203	436	1774	1863	0	861	0	779		0	
Grp Volume(v), veh/h	0	82	86	32	926	0	40	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	0	1770	1776	1774	1863	0	1639	0	0			
Q Serve(g_s), s	0.0	0.8	0.9	0.7	11.6	0.0	0.9	0.0	0.0			
Cycle Q Clear(g_c), s	0.0	0.8	0.9	0.7	11.6	0.0	0.9	0.0	0.0			
Prop In Lane	0.00		0.25	1.00		0.00	0.52		0.47			
Lane Grp Cap(c), veh/h	0	953	956	67	1282	0	74	0	0			
V/C Ratio(X)	0.00	0.09	0.09	0.48	0.72	0.00	0.54	0.00	0.00			
Avail Cap(c_a), veh/h	0	1391	1396	251	1936	0	218	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	0.0	4.2	4.2	17.7	3.6	0.0	17.5	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.9	0.3	0.0	2.2	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.4	5.8	0.0	0.4	0.0	0.0			
LnGrp Delay(d),s/veh	0.0	4.2	4.2	19.6	3.9	0.0	19.8	0.0	0.0			
LnGrp LOS		A	A	B	A		B					
Approach Vol, veh/h		168			958			40				
Approach Delay, s/veh		4.2			4.4			19.8				
Approach LOS		A			A			B				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	5.6	25.7				31.3		6.2				
Change Period (Y+Rc), s	* 4.2	5.5				5.5		4.5				
Max Green Setting (Gmax), s	* 5.3	29.5				39.0		5.0				
Max Q Clear Time (g_c+I1), s	2.7	2.9				13.6		2.9				
Green Ext Time (p_c), s	0.0	0.5				1.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				4.9								
HCM 2010 LOS				A								
Notes												



















HCM 2010 Signalized Intersection Summary

64: I-15 SB Ramps & Camino Del Rio South


















	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↘	↑↑				
Traffic Volume (veh/h)	320	80	140	910	0	0		
Future Volume (veh/h)	320	80	140	910	0	0		
Number	2	12	1	6				
Initial Q (Qb), veh	0	0	0	0				
Ped-Bike Adj(A_pbT)		1.00	1.00					
Parking Bus, Adj	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863				
Adj Flow Rate, veh/h	337	0	147	958				
Adj No. of Lanes	2	0	1	2				
Peak Hour Factor	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	2	2				
Cap, veh/h	2125	0	197	2960				
Arrive On Green	0.60	0.00	0.11	0.84				
Sat Flow, veh/h	3725	0	1774	3632				
Grp Volume(v), veh/h	337	0	147	958				
Grp Sat Flow(s),veh/h/ln	1770	0	1774	1770				
Q Serve(g_s), s	1.4	0.0	2.7	2.0				
Cycle Q Clear(g_c), s	1.4	0.0	2.7	2.0				
Prop In Lane		0.00	1.00					
Lane Grp Cap(c), veh/h	2125	0	197	2960				
V/C Ratio(X)	0.16	0.00	0.75	0.32				
Avail Cap(c_a), veh/h	2369	0	412	3632				
HCM Platoon Ratio	1.00	1.00	1.00	1.00				
Upstream Filter(I)	1.00	0.00	1.00	1.00				
Uniform Delay (d), s/veh	3.0	0.0	14.5	0.6				
Incr Delay (d2), s/veh	0.0	0.0	2.1	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.4	0.9				
LnGrp Delay(d),s/veh	3.0	0.0	16.6	0.6				
LnGrp LOS	A		B	A				
Approach Vol, veh/h	337			1105				
Approach Delay, s/veh	3.0			2.8				
Approach LOS	A			A				
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	7.9	25.7				33.6		
Change Period (Y+Rc), s	* 4.2	5.5				5.5		
Max Green Setting (Gmax), s	* 7.8	22.5				34.5		
Max Q Clear Time (g_c+I1), s	4.7	3.4				4.0		
Green Ext Time (p_c), s	0.0	0.5				4.3		
Intersection Summary								
HCM 2010 Ctrl Delay			2.8					
HCM 2010 LOS			A					
Notes								

HCM 2010 Signalized Intersection Summary

























65: I-15 NB Ramps & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	210	0	0	400	150	650	10	110	0	0	0
Future Volume (veh/h)	110	210	0	0	400	150	650	10	110	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.96	1.00		0.99			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900			
Adj Flow Rate, veh/h	116	221	0	0	421	105	684	11	105			
Adj No. of Lanes	1	2	0	0	1	1	1	1	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	142	1370	0	0	454	370	711	60	575			
Arrive On Green	0.08	0.39	0.00	0.00	0.24	0.24	0.40	0.40	0.40			
Sat Flow, veh/h	1774	3632	0	0	1863	1518	1774	150	1434			
Grp Volume(v), veh/h	116	221	0	0	421	105	684	0	116			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1863	1518	1774	0	1584			
Q Serve(g_s), s	7.3	4.6	0.0	0.0	25.0	6.4	42.6	0.0	5.4			
Cycle Q Clear(g_c), s	7.3	4.6	0.0	0.0	25.0	6.4	42.6	0.0	5.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.91			
Lane Grp Cap(c), veh/h	142	1370	0	0	454	370	711	0	635			
V/C Ratio(X)	0.82	0.16	0.00	0.00	0.93	0.28	0.96	0.00	0.18			
Avail Cap(c_a), veh/h	154	1469	0	0	494	402	768	0	686			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	51.3	22.7	0.0	0.0	41.8	34.8	33.1	0.0	21.9			
Incr Delay (d2), s/veh	24.2	0.0	0.0	0.0	22.1	0.2	22.2	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.5	2.2	0.0	0.0	15.6	2.7	25.1	0.0	2.4			
LnGrp Delay(d),s/veh	75.5	22.7	0.0	0.0	63.9	34.9	55.3	0.0	22.0			
LnGrp LOS	E	C			E	C	E		C			
Approach Vol, veh/h		337			526			800				
Approach Delay, s/veh		40.9			58.1			50.5				
Approach LOS		D			E			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		55.8		57.4	16.2	39.6						
Change Period (Y+Rc), s		12.0		12.0	* 7.2	12.0						
Max Green Setting (Gmax), s		47.0		49.0	* 9.8	30.0						
Max Q Clear Time (g_c+I1), s		6.6		44.6	9.3	27.0						
Green Ext Time (p_c), s		0.8		0.8	0.0	0.6						
Intersection Summary												
HCM 2010 Ctrl Delay			51.0									
HCM 2010 LOS			D									
Notes												
















HCM 2010 Signalized Intersection Summary
 66: Mission Gorge Road & I-8 EB Off Ramps

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	 	  		 	  			
Traffic Volume (veh/h)	1120	1340	210	1160	950	320		
Future Volume (veh/h)	1120	1340	210	1160	950	320		
Number	1	16	3	8	4	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	1179	1164	221	1221	1000	242		
Adj No. of Lanes	2	3	1	2	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1267	1329	267	1761	1088	263		
Arrive On Green	0.37	0.37	0.15	0.50	0.27	0.27		
Sat Flow, veh/h	3442	3610	1774	3632	4224	979		
Grp Volume(v), veh/h	1179	1164	221	1221	835	407		
Grp Sat Flow(s),veh/h/ln	1721	1203	1774	1770	1695	1645		
Q Serve(g_s), s	19.6	17.9	7.2	15.8	14.3	14.3		
Cycle Q Clear(g_c), s	19.6	17.9	7.2	15.8	14.3	14.3		
Prop In Lane	1.00	1.00	1.00			0.60		
Lane Grp Cap(c), veh/h	1267	1329	267	1761	910	442		
V/C Ratio(X)	0.93	0.88	0.83	0.69	0.92	0.92		
Avail Cap(c_a), veh/h	1270	1332	277	1781	910	442		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	18.1	17.6	24.6	11.5	21.2	21.2		
Incr Delay (d2), s/veh	12.1	6.8	16.8	1.2	14.0	24.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	11.3	6.8	4.7	7.9	8.4	9.4		
LnGrp Delay(d),s/veh	30.3	24.4	41.4	12.6	35.2	45.8		
LnGrp LOS	C	C	D	B	D	D		
Approach Vol, veh/h	2343			1442	1242			
Approach Delay, s/veh	27.3			17.0	38.7			
Approach LOS	C			B	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.7	20.0		26.0		33.7
Change Period (Y+Rc), s			* 4.7	4.0		4.0		4.0
Max Green Setting (Gmax), s			* 9.3	16.0		22.0		30.0
Max Q Clear Time (g_c+I1), s			9.2	16.3		21.6		17.8
Green Ext Time (p_c), s			0.0	0.0		0.3		6.1
Intersection Summary								
HCM 2010 Ctrl Delay			27.2					
HCM 2010 LOS			C					
Notes								





















HCM 2010 Signalized Intersection Summary
 67: Qualcomm Way & Madison Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	50	40	30	60	510	70	910	60	70	610	120
Future Volume (veh/h)	360	50	40	30	60	510	70	910	60	70	610	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	379	53	15	32	63	305	74	958	52	74	642	115
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	333	273	348	366	301	94	838	696	60	1288	230
Arrive On Green	0.18	0.18	0.18	0.20	0.20	0.20	0.05	0.45	0.45	0.03	0.43	0.43
Sat Flow, veh/h	1774	1863	1530	1774	1863	1535	1774	1863	1548	1774	2989	534
Grp Volume(v), veh/h	379	53	15	32	63	305	74	958	52	74	380	377
Grp Sat Flow(s),veh/h/ln	1774	1863	1530	1774	1863	1535	1774	1863	1548	1774	1770	1753
Q Serve(g_s), s	24.1	3.2	1.1	2.0	3.8	26.5	5.6	60.7	2.6	4.6	21.0	21.1
Cycle Q Clear(g_c), s	24.1	3.2	1.1	2.0	3.8	26.5	5.6	60.7	2.6	4.6	21.0	21.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	317	333	273	348	366	301	94	838	696	60	763	756
V/C Ratio(X)	1.20	0.16	0.05	0.09	0.17	1.01	0.79	1.14	0.07	1.22	0.50	0.50
Avail Cap(c_a), veh/h	317	333	273	348	366	301	160	838	696	60	763	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	46.9	46.0	44.4	45.1	54.2	63.2	37.1	21.2	65.2	27.8	27.8
Incr Delay (d2), s/veh	115.1	0.1	0.0	0.0	0.1	55.0	5.5	78.8	0.1	188.1	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.9	1.7	0.5	1.0	2.0	15.9	2.9	49.5	1.1	5.4	10.4	10.3
LnGrp Delay(d),s/veh	170.6	47.0	46.0	44.4	45.2	109.3	68.7	115.9	21.2	253.3	28.5	28.6
LnGrp LOS	F	D	D	D	D	F	E	F	C	F	C	C
Approach Vol, veh/h		447			400			1084			831	
Approach Delay, s/veh		151.7			94.0			108.1			48.5	
Approach LOS		F			F			F			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	65.6		29.0	11.5	63.1		31.4				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	4.6	60.7		24.1	12.2	53.1		26.5				
Max Q Clear Time (g_c+1), s	6.6	62.7		26.1	7.6	23.1		28.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.7		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			95.2									
HCM 2010 LOS			F									







HCM 2010 Signalized Intersection Summary
 68: Franklin Ridge Road & Phyllis Place

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	 		 		 	 		
Traffic Volume (veh/h)	65	35	1035	60	35	1190		
Future Volume (veh/h)	65	35	1035	60	35	1190		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	68	0	1089	63	37	82		
Adj No. of Lanes	2	0	2	1	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	678	0	1425	1317	160	1405		
Arrive On Green	0.19	0.00	0.41	0.71	0.09	0.09		
Sat Flow, veh/h	3725	0	3442	1863	1774	2787		
Grp Volume(v), veh/h	68	0	1089	63	37	82		
Grp Sat Flow(s),veh/h/ln	1770	0	1721	1863	1774	1393		
Q Serve(g_s), s	0.7	0.0	12.0	0.5	0.9	0.7		
Cycle Q Clear(g_c), s	0.7	0.0	12.0	0.5	0.9	0.7		
Prop In Lane		0.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	678	0	1425	1317	160	1405		
V/C Ratio(X)	0.10	0.00	0.76	0.05	0.23	0.06		
Avail Cap(c_a), veh/h	2154	0	2522	2688	1080	2850		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	14.8	0.0	11.1	2.0	18.7	5.6		
Incr Delay (d2), s/veh	0.1	0.0	0.9	0.0	0.7	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.3	0.0	5.8	0.2	0.5	0.3		
LnGrp Delay(d),s/veh	14.8	0.0	12.0	2.0	19.5	5.6		
LnGrp LOS	B		B	A	B	A		
Approach Vol, veh/h	68			1152	119			
Approach Delay, s/veh	14.8			11.5	9.9			
Approach LOS	B			B	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		8.5	22.9	13.0				35.9
Change Period (Y+Rc), s		4.5	4.5	4.5				4.5
Max Green Setting (Gmax), s		27.0	32.5	27.0				64.0
Max Q Clear Time (g_c+11), s		2.9	14.0	2.7				2.5
Green Ext Time (p_c), s		0.4	4.3	0.3				0.3
Intersection Summary								
HCM 2010 Ctrl Delay			11.5					
HCM 2010 LOS			B					













HCM 2010 Signalized Intersection Summary
 69: Franklin Ridge Road & Via Alta

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	455	10	170	20	20	20	120	750	10	10	580	480
Future Volume (veh/h)	455	10	170	20	20	20	120	750	10	10	580	480
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	479	11	116	21	21	10	126	789	6	11	611	242
Adj No. of Lanes	1	1	0	0	1	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	572	49	519	241	232	99	128	886	7	19	779	647
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.07	0.48	0.48	0.01	0.42	0.42
Sat Flow, veh/h	1357	137	1443	513	645	276	1774	1846	14	1774	1863	1545
Grp Volume(v), veh/h	479	0	127	52	0	0	126	0	795	11	611	242
Grp Sat Flow(s),veh/h/ln	1357	0	1579	1434	0	0	1774	0	1860	1774	1863	1545
Q Serve(g_s), s	26.0	0.0	5.1	0.1	0.0	0.0	6.4	0.0	35.1	0.6	25.6	9.7
Cycle Q Clear(g_c), s	31.1	0.0	5.1	5.1	0.0	0.0	6.4	0.0	35.1	0.6	25.6	9.7
Prop In Lane	1.00		0.91	0.40		0.19	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	572	0	569	572	0	0	128	0	892	19	779	647
V/C Ratio(X)	0.84	0.00	0.22	0.09	0.00	0.00	0.99	0.00	0.89	0.58	0.78	0.37
Avail Cap(c_a), veh/h	572	0	569	572	0	0	128	0	1236	79	1186	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	20.1	19.1	0.0	0.0	41.8	0.0	21.3	44.5	22.7	18.1
Incr Delay (d2), s/veh	10.5	0.0	0.2	0.1	0.0	0.0	75.3	0.0	6.4	25.1	2.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	0.0	2.2	0.9	0.0	0.0	5.8	0.0	19.5	0.4	13.5	4.2
LnGrp Delay(d),s/veh	38.9	0.0	20.3	19.1	0.0	0.0	117.1	0.0	27.8	69.5	24.7	18.5
LnGrp LOS	D		C	B			F		C	E	C	B
Approach Vol, veh/h		606			52			921			864	
Approach Delay, s/veh		35.0			19.1			40.0			23.5	
Approach LOS		C			B			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	47.8		37.0	11.0	42.3		37.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	4.0	60.0		32.5	6.5	57.5		32.5				
Max Q Clear Time (g_c+1), s	2.6	37.1		33.1	8.4	27.6		7.1				
Green Ext Time (p_c), s	0.0	6.3		0.0	0.0	5.6		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			32.5									
HCM 2010 LOS			C									












HCM 2010 Signalized Intersection Summary
 70: Qualcomm Way & Civita Boulevard

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑↑	↑	↑↑	↑		
Traffic Volume (veh/h)	200	320	500	170	240	550		
Future Volume (veh/h)	200	320	500	170	240	550		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.94	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	211	232	526	179	253	453		
Adj No. of Lanes	2	1	2	1	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	631	266	604	715	1685	1053		
Arrive On Green	0.18	0.18	0.18	0.38	0.49	0.49		
Sat Flow, veh/h	3632	1494	3442	1863	3442	1583		
Grp Volume(v), veh/h	211	232	526	179	253	453		
Grp Sat Flow(s),veh/h/ln	1770	1494	1721	1863	1721	1583		
Q Serve(g_s), s	7.8	22.7	22.3	9.8	6.1	20.1		
Cycle Q Clear(g_c), s	7.8	22.7	22.3	9.8	6.1	20.1		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	631	266	604	715	1685	1053		
V/C Ratio(X)	0.33	0.87	0.87	0.25	0.15	0.43		
Avail Cap(c_a), veh/h	1026	433	1296	1298	1685	1053		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.96	0.96	0.98	0.98		
Uniform Delay (d), s/veh	53.9	60.0	60.2	31.5	21.1	11.8		
Incr Delay (d2), s/veh	0.3	10.5	3.9	0.2	0.2	1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.9	10.1	10.9	5.1	2.9	9.1		
LnGrp Delay(d),s/veh	54.2	70.5	64.1	31.7	21.3	13.0		
LnGrp LOS	D	E	E	C	C	B		
Approach Vol, veh/h	443			705	706			
Approach Delay, s/veh	62.7			55.9	16.0			
Approach LOS	E			E	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		83.0	30.8	36.2				67.0
Change Period (Y+Rc), s		9.5	4.5	9.5				9.5
Max Green Setting (Gmax), s		26.5	56.5	43.5				104.5
Max Q Clear Time (g_c+1), s		22.1	24.3	24.7				11.8
Green Ext Time (p_c), s		1.2	2.0	2.1				1.1
Intersection Summary								
HCM 2010 Ctrl Delay			42.3					
HCM 2010 LOS			D					












HCM 2010 Signalized Intersection Summary
 71: Franklin Ridge Road & Civita Boulevard

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	700	50	50	20	100	620		
Future Volume (veh/h)	700	50	50	20	100	620		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.94		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	737	21	53	21	105	21		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	836	746	130	643	335	1015		
Arrive On Green	0.47	0.47	0.07	0.35	0.18	0.18		
Sat Flow, veh/h	1774	1583	1774	1863	1863	1495		
Grp Volume(v), veh/h	737	21	53	21	105	21		
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1495		
Q Serve(g_s), s	18.4	0.3	1.4	0.4	2.4	0.2		
Cycle Q Clear(g_c), s	18.4	0.3	1.4	0.4	2.4	0.2		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	836	746	130	643	335	1015		
V/C Ratio(X)	0.88	0.03	0.41	0.03	0.31	0.02		
Avail Cap(c_a), veh/h	1393	1244	253	1235	798	1387		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	11.7	6.9	21.7	10.6	17.5	3.0		
Incr Delay (d2), s/veh	3.9	0.0	2.0	0.0	0.5	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.7	0.4	0.8	0.2	1.3	0.2		
LnGrp Delay(d),s/veh	15.6	7.0	23.7	10.7	18.0	3.0		
LnGrp LOS	B	A	C	B	B	A		
Approach Vol, veh/h	758			74	126			
Approach Delay, s/veh	15.4			20.0	15.5			
Approach LOS	B			C	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		21.4		27.6	8.1	13.3		
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s		32.5		38.5	7.0	21.0		
Max Q Clear Time (g_c+I1), s		2.4		20.4	3.4	4.4		
Green Ext Time (p_c), s		0.1		2.7	0.0	0.5		
Intersection Summary								
HCM 2010 Ctrl Delay			15.7					
HCM 2010 LOS			B					
Notes								






















HCM 2010 Signalized Intersection Summary
 72: Fenton Parkway & Street "I"

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	280	320	380	80	120	380		
Future Volume (veh/h)	280	320	380	80	120	380		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.96	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	295	14	400	39	126	400		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	390	348	878	85	246	1885		
Arrive On Green	0.22	0.22	0.27	0.27	0.14	0.53		
Sat Flow, veh/h	1774	1583	3341	315	1774	3632		
Grp Volume(v), veh/h	295	14	217	222	126	400		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1793	1774	1770		
Q Serve(g_s), s	5.7	0.3	3.7	3.8	2.4	2.2		
Cycle Q Clear(g_c), s	5.7	0.3	3.7	3.8	2.4	2.2		
Prop In Lane	1.00	1.00		0.18	1.00			
Lane Grp Cap(c), veh/h	390	348	478	485	246	1885		
V/C Ratio(X)	0.76	0.04	0.45	0.46	0.51	0.21		
Avail Cap(c_a), veh/h	888	792	900	912	478	3192		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	13.3	11.2	11.0	11.1	14.5	4.5		
Incr Delay (d2), s/veh	3.0	0.0	0.7	0.7	1.7	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.0	0.1	1.9	1.9	1.3	1.1		
LnGrp Delay(d),s/veh	16.3	11.2	11.7	11.7	16.2	4.5		
LnGrp LOS	B	B	B	B	B	A		
Approach Vol, veh/h	309		439			526		
Approach Delay, s/veh	16.0		11.7			7.3		
Approach LOS	B		B			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.5	14.3				23.9		12.5
Change Period (Y+Rc), s	4.5	4.5				4.5		4.5
Max Green Setting (Gmax), s	9.8	18.5				32.8		18.2
Max Q Clear Time (g_c+11), s	4.4	5.8				4.2		7.7
Green Ext Time (p_c), s	0.1	2.2				2.9		0.7
Intersection Summary								
HCM 2010 Ctrl Delay			11.0					
HCM 2010 LOS			B					





















HCM 2010 Signalized Intersection Summary
 73: Via Las Cumbres & Riverwalk Drive

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	90	40	530	60	20	620		
Future Volume (veh/h)	90	40	530	60	20	620		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	95	10	558	42	21	653		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	228	204	993	75	66	1649		
Arrive On Green	0.13	0.13	0.30	0.30	0.04	0.47		
Sat Flow, veh/h	1774	1583	3421	250	1774	3632		
Grp Volume(v), veh/h	95	10	296	304	21	653		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1808	1774	1770		
Q Serve(g_s), s	1.7	0.2	4.9	4.9	0.4	4.2		
Cycle Q Clear(g_c), s	1.7	0.2	4.9	4.9	0.4	4.2		
Prop In Lane	1.00	1.00		0.14	1.00			
Lane Grp Cap(c), veh/h	228	204	528	540	66	1649		
V/C Ratio(X)	0.42	0.05	0.56	0.56	0.32	0.40		
Avail Cap(c_a), veh/h	1393	1243	1143	1168	365	3988		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	13.8	13.2	10.2	10.2	16.2	6.0		
Incr Delay (d2), s/veh	1.2	0.1	0.9	0.9	2.8	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.9	0.1	2.4	2.6	0.2	2.0		
LnGrp Delay(d),s/veh	15.1	13.3	11.1	11.1	19.0	6.2		
LnGrp LOS	B	B	B	B	B	A		
Approach Vol, veh/h	105		600			674		
Approach Delay, s/veh	14.9		11.1			6.6		
Approach LOS	B		B			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.8	19.8				25.6		8.9
Change Period (Y+Rc), s	4.5	9.5				* 9.5		4.5
Max Green Setting (Gmax), s	7.1	22.3				* 39		27.1
Max Q Clear Time (g_c+I1), s	2.4	6.9				6.2		3.7
Green Ext Time (p_c), s	0.0	3.1				4.8		0.3
Intersection Summary								
HCM 2010 Ctrl Delay			9.2					
HCM 2010 LOS			A					
Notes								












HCM 2010 Signalized Intersection Summary
 74: Fashion Valley Road & Riverwalk Drive/Avenida Del Rio

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	350	90	70	150	90	180	370	150	80	200	70
Future Volume (veh/h)	90	350	90	70	150	90	180	370	150	80	200	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	368	74	74	158	53	189	389	74	84	211	11
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	407	82	116	354	119	220	1003	189	121	968	50
Arrive On Green	0.07	0.27	0.27	0.07	0.27	0.27	0.25	0.68	0.68	0.07	0.28	0.28
Sat Flow, veh/h	1774	1500	302	1774	1327	445	1774	2957	557	1774	3417	177
Grp Volume(v), veh/h	95	0	442	74	0	211	189	231	232	84	109	113
Grp Sat Flow(s),veh/h/ln	1774	0	1801	1774	0	1772	1774	1770	1745	1774	1770	1824
Q Serve(g_s), s	4.7	0.0	21.3	3.7	0.0	8.9	9.2	5.1	5.2	4.2	4.2	4.3
Cycle Q Clear(g_c), s	4.7	0.0	21.3	3.7	0.0	8.9	9.2	5.1	5.2	4.2	4.2	4.3
Prop In Lane	1.00		0.17	1.00		0.25	1.00		0.32	1.00		0.10
Lane Grp Cap(c), veh/h	125	0	489	116	0	472	220	600	592	121	501	517
V/C Ratio(X)	0.76	0.00	0.90	0.64	0.00	0.45	0.86	0.38	0.39	0.69	0.22	0.22
Avail Cap(c_a), veh/h	207	0	550	140	0	475	268	600	592	193	501	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.95	0.95	0.95	0.86	0.86	0.86
Uniform Delay (d), s/veh	41.1	0.0	31.7	41.0	0.0	27.5	33.1	10.4	10.4	41.0	24.6	24.6
Incr Delay (d2), s/veh	9.0	0.0	17.2	6.8	0.0	0.7	19.4	1.8	1.9	6.0	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	12.9	2.0	0.0	4.4	5.6	2.7	2.7	2.3	2.2	2.3
LnGrp Delay(d),s/veh	50.1	0.0	48.8	47.8	0.0	28.2	52.4	12.2	12.3	47.0	25.5	25.5
LnGrp LOS	D		D	D		C	D	B	B	D	C	C
Approach Vol, veh/h		537			285			652			306	
Approach Delay, s/veh		49.0			33.3			23.9			31.4	
Approach LOS		D			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.6	40.0	10.4	28.9	15.7	35.0	10.8	28.5				
Change Period (Y+Rc), s	4.5	9.5	4.5	4.5	4.5	9.5	4.5	4.5				
Max Green Setting (Gmax), s	9.8	22.6	7.1	27.5	13.6	18.8	10.5	24.1				
Max Q Clear Time (g_c+I1), s	6.2	7.2	5.7	23.3	11.2	6.3	6.7	10.9				
Green Ext Time (p_c), s	0.0	2.3	0.0	1.1	0.1	0.9	0.1	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			34.3									
HCM 2010 LOS			C									
Notes												













HCM 2010 Signalized Intersection Summary
 75: Avenida Del Rio & Harzard Center Drive & Fashion Valley Mall

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	350	100	60	280	30	150	150	160	20	50	20
Future Volume (veh/h)	50	350	100	60	280	30	150	150	160	20	50	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	368	84	63	295	21	158	158	94	21	53	10
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	445	101	141	535	38	210	262	156	62	241	46
Arrive On Green	0.07	0.30	0.30	0.08	0.31	0.31	0.12	0.24	0.24	0.04	0.16	0.16
Sat Flow, veh/h	1774	1462	334	1774	1714	122	1774	1077	641	1774	1506	284
Grp Volume(v), veh/h	53	0	452	63	0	316	158	0	252	21	0	63
Grp Sat Flow(s),veh/h/ln	1774	0	1796	1774	0	1836	1774	0	1717	1774	0	1790
Q Serve(g_s), s	1.5	0.0	12.5	1.8	0.0	7.6	4.6	0.0	6.9	0.6	0.0	1.6
Cycle Q Clear(g_c), s	1.5	0.0	12.5	1.8	0.0	7.6	4.6	0.0	6.9	0.6	0.0	1.6
Prop In Lane	1.00		0.19	1.00		0.07	1.00		0.37	1.00		0.16
Lane Grp Cap(c), veh/h	127	0	546	141	0	573	210	0	419	62	0	287
V/C Ratio(X)	0.42	0.00	0.83	0.45	0.00	0.55	0.75	0.00	0.60	0.34	0.00	0.22
Avail Cap(c_a), veh/h	233	0	690	236	0	709	536	0	882	233	0	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	17.3	23.4	0.0	15.2	22.7	0.0	17.9	25.1	0.0	19.5
Incr Delay (d2), s/veh	2.2	0.0	6.7	2.2	0.0	0.8	5.3	0.0	1.4	3.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	7.2	1.0	0.0	4.0	2.5	0.0	3.5	0.4	0.0	0.8
LnGrp Delay(d),s/veh	25.9	0.0	24.0	25.6	0.0	16.1	28.1	0.0	19.3	28.3	0.0	19.9
LnGrp LOS	C		C	C		B	C		B	C		B
Approach Vol, veh/h		505			379			410			84	
Approach Delay, s/veh		24.2			17.6			22.7			22.0	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.4	17.5	8.7	20.7	10.8	13.0	8.3	21.2				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.0	27.4	7.1	20.5	16.1	18.3	7.0	20.6				
Max Q Clear Time (g_c+1), s	2.6	8.9	3.8	14.5	6.6	3.6	3.5	9.6				
Green Ext Time (p_c), s	0.0	1.4	0.0	1.5	0.3	0.2	0.0	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay			21.8									
HCM 2010 LOS			C									



















HCM 2010 Signalized Intersection Summary
 76: Via Las Cumbres & Levi Cushman Street "B"

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	510	90	500	250	90	620		
Future Volume (veh/h)	510	90	500	250	90	620		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.96	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	537	11	526	105	95	653		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	615	549	784	156	185	1650		
Arrive On Green	0.35	0.35	0.27	0.27	0.10	0.47		
Sat Flow, veh/h	1774	1583	3016	580	1774	3632		
Grp Volume(v), veh/h	537	11	317	314	95	653		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1734	1774	1770		
Q Serve(g_s), s	13.7	0.2	7.7	7.8	2.4	5.8		
Cycle Q Clear(g_c), s	13.7	0.2	7.7	7.8	2.4	5.8		
Prop In Lane	1.00	1.00		0.33	1.00			
Lane Grp Cap(c), veh/h	615	549	475	465	185	1650		
V/C Ratio(X)	0.87	0.02	0.67	0.67	0.51	0.40		
Avail Cap(c_a), veh/h	792	707	661	648	258	2168		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	14.7	10.3	15.7	15.7	20.4	8.4		
Incr Delay (d2), s/veh	8.6	0.0	1.6	1.7	2.2	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	8.0	0.1	3.9	3.9	1.3	2.8		
LnGrp Delay(d),s/veh	23.4	10.4	17.3	17.5	22.6	8.6		
LnGrp LOS	C	B	B	B	C	A		
Approach Vol, veh/h	548		631			748		
Approach Delay, s/veh	23.1		17.4			10.3		
Approach LOS	C		B			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.5	17.4				27.0		21.2
Change Period (Y+Rc), s	4.5	4.5				4.5		4.5
Max Green Setting (Gmax), s	7.0	18.0				29.5		21.5
Max Q Clear Time (g_c+I1), s	4.4	9.8				7.8		15.7
Green Ext Time (p_c), s	0.0	2.4				4.4		1.1
Intersection Summary								
HCM 2010 Ctrl Delay			16.3					
HCM 2010 LOS			B					


















HCM 2010 Signalized Intersection Summary
 77: Fashion Valley Road & Levi Cushman Street "B"

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	150	130	350	650	110	250		
Future Volume (veh/h)	150	130	350	650	110	250		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	158	21	368	684	116	21		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	199	177	405	2592	1360	240		
Arrive On Green	0.11	0.11	0.23	0.73	0.45	0.45		
Sat Flow, veh/h	1774	1583	1774	3632	3089	529		
Grp Volume(v), veh/h	158	21	368	684	67	70		
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1755		
Q Serve(g_s), s	7.8	1.1	18.2	5.8	1.9	2.0		
Cycle Q Clear(g_c), s	7.8	1.1	18.2	5.8	1.9	2.0		
Prop In Lane	1.00	1.00	1.00			0.30		
Lane Grp Cap(c), veh/h	199	177	405	2592	803	797		
V/C Ratio(X)	0.79	0.12	0.91	0.26	0.08	0.09		
Avail Cap(c_a), veh/h	463	413	463	2592	803	797		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.93	0.93	0.89	0.89	0.94	0.94		
Uniform Delay (d), s/veh	38.9	36.0	33.8	4.0	14.0	14.0		
Incr Delay (d2), s/veh	6.6	0.3	18.2	0.2	0.2	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.2	1.0	10.9	2.8	1.0	1.0		
LnGrp Delay(d),s/veh	45.5	36.2	52.0	4.2	14.1	14.2		
LnGrp LOS	D	D	D	A	B	B		
Approach Vol, veh/h	179			1052	137			
Approach Delay, s/veh	44.4			20.9	14.2			
Approach LOS	D			C	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		75.4		14.6	25.1	50.3		
Change Period (Y+Rc), s		9.5		4.5	4.5	9.5		
Max Green Setting (Gmax), s		52.5		23.5	23.5	24.5		
Max Q Clear Time (g_c+I1), s		7.8		9.8	20.2	4.0		
Green Ext Time (p_c), s		5.3		0.4	0.4	0.6		
Intersection Summary								
HCM 2010 Ctrl Delay			23.3					
HCM 2010 LOS			C					











HCM 2010 Signalized Intersection Summary
 78: Via Las Cumbres & Hotel Circle North

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	100	340	350	520	400	0	0	900	230
Future Volume (veh/h)	0	0	0	100	340	350	520	400	0	0	900	230
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				105	358	10	547	421	0	0	947	95
Adj No. of Lanes				0	2	1	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				133	482	262	551	2232	0	0	1047	435
Arrive On Green				0.17	0.17	0.17	0.31	0.63	0.00	0.00	0.28	0.28
Sat Flow, veh/h				777	2817	1528	1774	3632	0	0	3725	1550
Grp Volume(v), veh/h				247	216	10	547	421	0	0	947	95
Grp Sat Flow(s),veh/h/ln				1824	1770	1528	1774	1770	0	0	1863	1550
Q Serve(g_s), s				14.9	13.3	0.6	35.4	5.7	0.0	0.0	28.2	5.4
Cycle Q Clear(g_c), s				14.9	13.3	0.6	35.4	5.7	0.0	0.0	28.2	5.4
Prop In Lane				0.43		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				312	303	262	551	2232	0	0	1047	435
V/C Ratio(X)				0.79	0.71	0.04	0.99	0.19	0.00	0.00	0.90	0.22
Avail Cap(c_a), veh/h				428	415	359	551	2277	0	0	1095	455
HCM Platoon Ratio				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	0.24	0.24	0.00	0.00	0.77	0.77
Uniform Delay (d), s/veh				45.7	45.0	39.8	39.5	8.9	0.0	0.0	39.9	31.7
Incr Delay (d2), s/veh				6.7	3.6	0.1	17.3	0.0	0.0	0.0	10.2	0.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.1	6.8	0.3	20.0	2.8	0.0	0.0	15.9	2.4
LnGrp Delay(d),s/veh				52.4	48.6	39.8	56.8	8.9	0.0	0.0	50.0	32.6
LnGrp LOS				D	D	D	E	A			D	C
Approach Vol, veh/h					473			968			1042	
Approach Delay, s/veh					50.4			36.0			48.4	
Approach LOS					D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		77.0			40.2	36.8		29.2				
Change Period (Y+Rc), s		4.5			4.5	4.5		9.5				
Max Green Setting (Gmax), s		74.0			35.7	33.8		27.0				
Max Q Clear Time (g_c+I1), s		7.7			37.4	30.2		16.9				
Green Ext Time (p_c), s		3.0			0.0	2.1		1.9				
Intersection Summary												
HCM 2010 Ctrl Delay				44.0								
HCM 2010 LOS				D								
Notes												

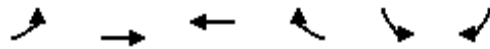
HCM 2010 Signalized Intersection Summary
 79: Via Las Cumbres & Hotel Circle South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	700	30	0	0	0	0	120	60	1500	100	0
Future Volume (veh/h)	400	700	30	0	0	0	0	120	60	1500	100	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96				1.00		0.96	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
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	421	737	21				0	126	52	1579	105	0
Adj No. of Lanes	1	2	0				0	1	0	2	1	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	421	834	24				0	186	77	1577	854	0
Arrive On Green	0.08	0.08	0.08				0.00	0.15	0.15	0.46	0.46	0.00
Sat Flow, veh/h	1774	3510	100				0	1237	511	3442	1863	0
Grp Volume(v), veh/h	421	372	386				0	0	178	1579	105	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1840				0	0	1748	1721	1863	0
Q Serve(g_s), s	28.5	24.9	25.0				0.0	0.0	11.6	55.0	3.9	0.0
Cycle Q Clear(g_c), s	28.5	24.9	25.0				0.0	0.0	11.6	55.0	3.9	0.0
Prop In Lane	1.00		0.05				0.00		0.29	1.00		0.00
Lane Grp Cap(c), veh/h	421	420	437				0	0	262	1577	854	0
V/C Ratio(X)	1.00	0.88	0.88				0.00	0.00	0.68	1.00	0.12	0.00
Avail Cap(c_a), veh/h	421	420	437				0	0	262	1577	854	0
HCM Platoon Ratio	0.33	0.33	0.33				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	0.00	1.00	0.23	0.23	0.00
Uniform Delay (d), s/veh	55.3	53.7	53.7				0.0	0.0	48.3	32.5	18.7	0.0
Incr Delay (d2), s/veh	13.0	2.3	2.2				0.0	0.0	6.9	11.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	12.5	13.0				0.0	0.0	6.1	28.5	2.0	0.0
LnGrp Delay(d),s/veh	68.2	56.0	55.9				0.0	0.0	55.2	43.5	18.7	0.0
LnGrp LOS	E	E	E						E	F	B	
Approach Vol, veh/h		1179						178			1684	
Approach Delay, s/veh		60.3						55.2			42.0	
Approach LOS		E						E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		22.5		38.0		59.5						
Change Period (Y+Rc), s		4.5		9.5		4.5						
Max Green Setting (Gmax), s		18.0		28.5		55.0						
Max Q Clear Time (g_c+I1), s		13.6		30.5		57.0						
Green Ext Time (p_c), s		0.4		0.0		0.0						
Intersection Summary												
HCM 2010 Ctrl Delay			49.9									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary
 80: Hotel Circle South & Camino De La Reina

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	0	160	440	450	0	0		
Future Volume (veh/h)	0	160	440	450	0	0		
Number	7	14	2	12				
Initial Q (Qb), veh	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98				
Parking Bus, Adj	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900				
Adj Flow Rate, veh/h	0	10	463	42				
Adj No. of Lanes	1	1	2	0				
Peak Hour Factor	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	2	2				
Cap, veh/h	0	0	1447	131				
Arrive On Green	0.00	0.00	0.44	0.44				
Sat Flow, veh/h	0		3369	296				
Grp Volume(v), veh/h	0.0		249	256				
Grp Sat Flow(s),veh/h/ln			1770	1802				
Q Serve(g_s), s			1.6	1.6				
Cycle Q Clear(g_c), s			1.6	1.6				
Prop In Lane				0.16				
Lane Grp Cap(c), veh/h			782	796				
V/C Ratio(X)			0.32	0.32				
Avail Cap(c_a), veh/h			1872	1906				
HCM Platoon Ratio			1.00	1.00				
Upstream Filter(I)			1.00	1.00				
Uniform Delay (d), s/veh			3.1	3.1				
Incr Delay (d2), s/veh			0.2	0.2				
Initial Q Delay(d3),s/veh			0.0	0.0				
%ile BackOfQ(50%),veh/ln			0.7	0.8				
LnGrp Delay(d),s/veh			3.3	3.3				
LnGrp LOS			A	A				
Approach Vol, veh/h			505					
Approach Delay, s/veh			3.3					
Approach LOS			A					
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		17.0						
Change Period (Y+Rc), s		9.5						
Max Green Setting (Gmax), s		18.0						
Max Q Clear Time (g_c+I1), s		3.6						
Green Ext Time (p_c), s		2.5						
Intersection Summary								
HCM 2010 Ctrl Delay			3.3					
HCM 2010 LOS			A					





















HCM 2010 Signalized Intersection Summary
 81: Harzard Center Drive & Frazee Road



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	90	230	320	150	95	140		
Future Volume (veh/h)	90	230	320	150	95	140		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	95	242	337	21	100	31		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	227	1926	899	56	275	246		
Arrive On Green	0.13	0.54	0.27	0.27	0.16	0.16		
Sat Flow, veh/h	1774	3632	3470	209	1774	1583		
Grp Volume(v), veh/h	95	242	176	182	100	31		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1816	1774	1583		
Q Serve(g_s), s	1.5	1.0	2.4	2.5	1.5	0.5		
Cycle Q Clear(g_c), s	1.5	1.0	2.4	2.5	1.5	0.5		
Prop In Lane	1.00			0.12	1.00	1.00		
Lane Grp Cap(c), veh/h	227	1926	471	484	275	246		
V/C Ratio(X)	0.42	0.13	0.37	0.38	0.36	0.13		
Avail Cap(c_a), veh/h	444	4609	1596	1638	1600	1428		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	12.0	3.3	8.9	9.0	11.3	10.9		
Incr Delay (d2), s/veh	1.2	0.0	0.5	0.5	0.8	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.8	0.5	1.2	1.3	0.8	0.5		
LnGrp Delay(d),s/veh	13.3	3.4	9.4	9.4	12.1	11.1		
LnGrp LOS	B	A	A	A	B	B		
Approach Vol, veh/h		337	358		131			
Approach Delay, s/veh		6.2	9.4		11.9			
Approach LOS		A	A		B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				20.8		9.1	8.3	12.5
Change Period (Y+Rc), s				4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s				39.0		27.0	7.5	27.0
Max Q Clear Time (g_c+I1), s				3.0		3.5	3.5	4.5
Green Ext Time (p_c), s				1.8		0.3	0.1	2.2
Intersection Summary								
HCM 2010 Ctrl Delay			8.5					
HCM 2010 LOS			A					




















HCM 2010 Signalized Intersection Summary

8: Friar Roads & Napa Street

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.90	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	0	0	0	0	0	-116	0	0	0	0	0	-58
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0	2	2	2
Cap, veh/h	9999	9999	0	0	9999	0	0	9999	0	9999	9999	9999
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	3632	0	0	-10995	1583	0	-74510	0	1597	1863	1583
Grp Volume(v), veh/h	0	0	0	0	0	-116	0	0	0	0	0	-58
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	0	1863	0	1597	1863	1583
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	3208192614003436544		0	640034375489403648		33686020096		288737348666020883		3114624		3114624
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	46197922625327177856		0	180489686676886041216		9095224492032		18767925789521366432		2407552		2407552
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), 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
Incr Delay (d2), 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
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),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
LnGrp LOS												
Approach Vol, veh/h		0			-116			0				-58
Approach Delay, s/veh		0.0			0.0			0.0				0.0
Approach LOS					A							A
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		0.0		0.0	0.0	0.0		0.0				0.0
Change Period (Y+Rc), s		6.0		4.9	4.4	* 6		4.0				
Max Green Setting (Gmax), s		46.6		6.5	14.4	* 28		27.0				
Max Q Clear Time (g_c+I1), s		0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s		0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				0.0								
HCM 2010 LOS				A								
Notes												



















HCM 2010 Signalized Intersection Summary

11: Fashion Valley Road & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1215	175	195	655	35	190	20	150	10	5	5
Future Volume (veh/h)	10	1215	175	195	655	35	190	20	150	10	5	5
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	0.98		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	10	1240	153	199	668	36	194	20	153	10	5	0
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	1868	230	216	1775	96	326	27	335	113	45	0
Arrive On Green	0.01	0.41	0.41	0.24	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.00
Sat Flow, veh/h	1774	4570	564	1774	3407	183	1186	122	1540	244	208	0
Grp Volume(v), veh/h	10	920	473	199	347	357	214	0	153	15	0	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1744	1774	1770	1821	1308	0	1540	451	0	0
Q Serve(g_s), s	0.6	22.0	22.0	10.9	0.0	0.0	0.0	0.0	8.6	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	22.0	22.0	10.9	0.0	0.0	15.9	0.0	8.6	16.0	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.10	0.91		1.00	0.67		0.00
Lane Grp Cap(c), veh/h	17	1385	713	216	922	949	353	0	335	158	0	0
V/C Ratio(X)	0.58	0.66	0.66	0.92	0.38	0.38	0.61	0.00	0.46	0.09	0.00	0.00
Avail Cap(c_a), veh/h	71	1385	713	216	922	949	541	0	539	338	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	49.3	24.0	24.0	37.3	0.0	0.0	36.8	0.0	34.0	32.0	0.0	0.0
Incr Delay (d2), s/veh	11.0	2.5	4.8	37.3	1.1	1.1	0.9	0.0	0.5	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	10.7	11.5	7.6	0.3	0.3	5.6	0.0	3.7	0.3	0.0	0.0
LnGrp Delay(d),s/veh	60.3	26.5	28.8	74.7	1.1	1.1	37.7	0.0	34.5	32.1	0.0	0.0
LnGrp LOS	E	C	C	E	A	A	D		C	C		
Approach Vol, veh/h		1403			903			367			15	
Approach Delay, s/veh		27.5			17.3			36.4			32.1	
Approach LOS		C			B			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.6	51.8		31.6	5.4	63.0		31.6				
Change Period (Y+Rc), s	4.4	* 11		* 9.9	4.4	* 11		* 9.9				
Max Green Setting (Gmax), s	12.2	* 28		* 35	4.0	* 36		* 35				
Max Q Clear Time (g_c+I1), s	12.9	24.0		18.0	2.6	2.0		17.9				
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	5.7		1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			25.3									
HCM 2010 LOS			C									
Notes												























HCM 2010 Signalized Intersection Summary

12: Via De La Moda & Friar Roads


































												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1360	105	605	910	0	75	0	295	0	0	0
Future Volume (veh/h)	10	1360	105	605	910	0	75	0	295	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.96	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			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	0	1863	0	1863			
Adj Flow Rate, veh/h	11	1432	111	637	958	0	79	0	290			
Adj No. of Lanes	1	3	0	2	2	0	1	0	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	2	2	2	0	2	0	2			
Cap, veh/h	19	2293	178	606	2278	0	362	0	323			
Arrive On Green	0.02	0.96	0.96	0.18	0.64	0.00	0.20	0.00	0.20			
Sat Flow, veh/h	1774	4796	372	3442	3632	0	1774	0	1583			
Grp Volume(v), veh/h	11	1012	531	637	958	0	79	0	290			
Grp Sat Flow(s),veh/h/ln	1774	1695	1777	1721	1770	0	1774	0	1583			
Q Serve(g_s), s	0.6	3.2	3.2	17.6	13.2	0.0	3.7	0.0	17.9			
Cycle Q Clear(g_c), s	0.6	3.2	3.2	17.6	13.2	0.0	3.7	0.0	17.9			
Prop In Lane	1.00		0.21	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	19	1621	850	606	2278	0	362	0	323			
V/C Ratio(X)	0.59	0.62	0.62	1.05	0.42	0.00	0.22	0.00	0.90			
Avail Cap(c_a), veh/h	71	1621	850	606	2278	0	554	0	494			
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.59	0.59	0.59	0.93	0.93	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	48.7	1.2	1.2	41.2	8.7	0.0	33.2	0.0	38.8			
Incr Delay (d2), s/veh	6.3	1.1	2.1	49.5	0.5	0.0	0.1	0.0	9.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.3	1.1	1.4	12.5	6.6	0.0	1.8	0.0	8.7			
LnGrp Delay(d),s/veh	55.0	2.3	3.3	90.7	9.2	0.0	33.3	0.0	48.6			
LnGrp LOS	E	A	A	F	A		C		D			
Approach Vol, veh/h		1554			1595			369				
Approach Delay, s/veh		3.0			41.8			45.3				
Approach LOS		A			D			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	22.0	53.2			5.5	69.8		24.8				
Change Period (Y+Rc), s	4.4	5.4			4.4	* 5.4		4.4				
Max Green Setting (Gmax), s	17.6	37.0			4.0	* 51		31.2				
Max Q Clear Time (g_c+1), s	19.6	5.2			2.6	15.2		19.9				
Green Ext Time (p_c), s	0.0	15.5			0.0	9.6		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			25.0									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
























13: Avenida De Las Tiendas & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1540	105	935	1465	10	45	5	265	15	5	5
Future Volume (veh/h)	10	1540	105	935	1465	10	45	5	265	15	5	5
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	0.95		0.95	0.97		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	1621	106	984	1542	11	47	0	267	16	5	2
Adj No. of Lanes	1	3	0	2	3	0	1	0	2	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	17	2299	150	1046	3990	28	212	0	380	183	157	63
Arrive On Green	0.01	0.47	0.47	0.30	0.77	0.77	0.13	0.00	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1774	4869	318	3442	5208	37	1338	0	3016	1071	1247	499
Grp Volume(v), veh/h	11	1128	599	984	1004	549	47	0	267	16	0	7
Grp Sat Flow(s),veh/h/ln	1774	1695	1797	1721	1695	1855	1338	0	1508	1071	0	1745
Q Serve(g_s), s	0.9	39.5	39.6	41.8	14.8	14.8	4.8	0.0	12.7	2.0	0.0	0.5
Cycle Q Clear(g_c), s	0.9	39.5	39.6	41.8	14.8	14.8	5.3	0.0	12.7	2.0	0.0	0.5
Prop In Lane	1.00		0.18	1.00		0.02	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	17	1601	848	1046	2598	1421	212	0	380	183	0	220
V/C Ratio(X)	0.63	0.70	0.71	0.94	0.39	0.39	0.22	0.00	0.70	0.09	0.00	0.03
Avail Cap(c_a), veh/h	47	1601	848	1285	2598	1421	311	0	603	262	0	349
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)	0.71	0.71	0.71	0.31	0.31	0.31	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	74.0	31.3	31.3	50.9	5.8	5.8	59.9	0.0	62.9	58.2	0.0	57.5
Incr Delay (d2), s/veh	9.6	1.9	3.5	4.1	0.1	0.2	0.2	0.0	0.9	0.1	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	0.5	18.9	20.5	20.4	6.9	7.6	1.8	0.0	5.4	0.6	0.0	0.3
LnGrp Delay(d),s/veh	83.6	33.2	34.8	55.0	6.0	6.1	60.1	0.0	63.8	58.2	0.0	57.5
LnGrp LOS	F	C	C	E	A	A	E		E	E		E
Approach Vol, veh/h		1738			2537			314			23	
Approach Delay, s/veh		34.1			25.0			63.2			58.0	
Approach LOS		C			C			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	50.0	76.2		23.8	5.9	120.3		23.8				
Change Period (Y+Rc), s	4.4	5.4		4.9	4.4	* 5.4		4.9				
Max Green Setting (Gmax), s	56.0	49.3		30.0	4.0	* 1E2		30.0				
Max Q Clear Time (g_c+I1), s	43.8	41.6		4.0	2.9	16.8		14.7				
Green Ext Time (p_c), s	1.8	6.2		0.0	0.0	21.8		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				31.2								
HCM 2010 LOS				C								
Notes												

























HCM 2010 Signalized Intersection Summary
 14: SR-163 SB Ramps/Ulric Street & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  	 	 		 	 		
Traffic Volume (veh/h)	200	1075	665	490	1735	420	550	75	705	295	10	125
Future Volume (veh/h)	200	1075	665	490	1735	420	550	75	705	295	10	125
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	211	1132	458	516	1826	137	579	79	479	311	11	53
Adj No. of Lanes	2	3	1	2	3	2	2	1	2	2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1851	866	588	2317	1565	650	360	998	386	31	150
Arrive On Green	0.08	0.36	0.36	0.17	0.46	0.46	0.19	0.19	0.19	0.11	0.12	0.12
Sat Flow, veh/h	3442	5085	1557	3442	5085	2750	3442	1863	2700	3442	267	1287
Grp Volume(v), veh/h	211	1132	458	516	1826	137	579	79	479	311	0	64
Grp Sat Flow(s),veh/h/ln	1721	1695	1557	1721	1695	1375	1721	1863	1350	1721	0	1554
Q Serve(g_s), s	6.6	20.0	20.4	16.0	33.4	1.3	18.0	3.9	15.0	9.7	0.0	4.2
Cycle Q Clear(g_c), s	6.6	20.0	20.4	16.0	33.4	1.3	18.0	3.9	15.0	9.7	0.0	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.83
Lane Grp Cap(c), veh/h	272	1851	866	588	2317	1565	650	360	998	386	0	181
V/C Ratio(X)	0.77	0.61	0.53	0.88	0.79	0.09	0.89	0.22	0.48	0.81	0.00	0.35
Avail Cap(c_a), veh/h	314	2088	938	675	2645	1743	722	629	1387	597	0	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.5	28.5	15.5	44.3	25.3	4.0	43.4	37.2	26.9	47.5	0.0	44.6
Incr Delay (d2), s/veh	10.1	0.5	0.5	11.5	1.5	0.0	12.4	0.1	0.1	4.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	9.4	8.9	8.5	15.9	0.6	9.6	2.0	5.6	4.8	0.0	1.8
LnGrp Delay(d),s/veh	59.6	29.0	16.1	55.8	26.8	4.0	55.8	37.3	27.1	52.1	0.0	45.0
LnGrp LOS	E	C	B	E	C	A	E	D	C	D		D
Approach Vol, veh/h		1801			2479			1137			375	
Approach Delay, s/veh		29.3			31.6			42.4			50.9	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	23.2	44.4	24.7	17.3	13.2	54.4	16.3	25.7				
Change Period (Y+Rc), s	4.5	4.5	4.0	4.5	4.5	* 4.5	4.0	4.5				
Max Green Setting (Gmax), s	21.5	45.0	23.0	33.0	10.0	* 57	19.0	37.0				
Max Q Clear Time (g_c+I1), s	18.0	22.4	20.0	6.2	8.6	35.4	11.7	17.0				
Green Ext Time (p_c), s	0.7	10.6	0.7	0.2	0.1	14.5	0.6	1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			34.2									
HCM 2010 LOS			C									
Notes												

























HCM 2010 Signalized Intersection Summary
 16: Frazee Road & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	555	1175	595	120	1590	125	395	110	115	125	190	490
Future Volume (veh/h)	555	1175	595	120	1590	125	395	110	115	125	190	490
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	578	1224	334	125	1656	86	411	115	99	130	198	291
Adj No. of Lanes	2	4	2	2	3	1	2	2	0	2	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	632	3241	1381	179	1902	583	479	421	328	171	253	362
Arrive On Green	0.18	0.51	0.51	0.05	0.37	0.37	0.14	0.23	0.23	0.05	0.14	0.14
Sat Flow, veh/h	3442	6408	2732	3442	5085	1558	3442	1870	1458	3442	1863	2664
Grp Volume(v), veh/h	578	1224	334	125	1656	86	411	108	106	130	198	291
Grp Sat Flow(s),veh/h/ln	1721	1602	1366	1721	1695	1558	1721	1770	1558	1721	1863	1332
Q Serve(g_s), s	19.9	14.1	8.3	4.3	36.5	4.4	14.1	6.1	6.8	4.5	12.4	12.8
Cycle Q Clear(g_c), s	19.9	14.1	8.3	4.3	36.5	4.4	14.1	6.1	6.8	4.5	12.4	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.94	1.00		1.00
Lane Grp Cap(c), veh/h	632	3241	1381	179	1902	583	479	398	351	171	253	362
V/C Ratio(X)	0.91	0.38	0.24	0.70	0.87	0.15	0.86	0.27	0.30	0.76	0.78	0.80
Avail Cap(c_a), veh/h	673	3241	1381	285	1947	597	719	719	633	171	460	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	18.2	16.8	56.3	35.1	25.0	50.8	38.6	38.9	56.6	50.4	50.6
Incr Delay (d2), s/veh	15.9	0.1	0.1	1.8	4.8	0.2	5.1	0.1	0.2	16.6	3.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	6.2	3.2	2.1	17.9	1.9	7.0	3.0	3.0	2.5	6.6	4.8
LnGrp Delay(d),s/veh	64.3	18.3	16.9	58.1	39.8	25.2	55.9	38.7	39.0	73.2	53.7	53.2
LnGrp LOS	E	B	B	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		2136			1867			625			619	
Approach Delay, s/veh		30.5			40.4			50.1			57.6	
Approach LOS		C			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	10.7	67.5	21.2	21.3	26.6	51.6	10.4	32.1				
Change Period (Y+Rc), s	4.4	* 6.5	4.4	4.9	4.4	6.5	4.4	4.9				
Max Green Setting (Gmax), s	10.0	* 61	25.2	29.8	23.6	46.2	6.0	49.0				
Max Q Clear Time (g_c+I1), s	6.3	16.1	16.1	14.8	21.9	38.5	6.5	8.8				
Green Ext Time (p_c), s	0.1	18.8	0.7	1.6	0.3	6.7	0.0	0.9				
Intersection Summary												
HCM 2010 Ctrl Delay			39.5									
HCM 2010 LOS			D									
Notes												























HCM 2010 Signalized Intersection Summary
 22: Fenton Parkway & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1295	590	250	880	30	335	30	390	30	25	70
Future Volume (veh/h)	70	1295	590	250	880	30	335	30	390	30	25	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	71	1308	557	253	889	18	338	30	258	30	25	-50
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	2	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	2336	881	259	2550	817	355	400	331	72	246	262
Arrive On Green	0.03	0.46	0.46	0.15	1.00	1.00	0.10	0.21	0.21	0.02	0.13	0.00
Sat Flow, veh/h	3442	5085	1563	3442	5085	1564	3442	1863	1539	3548	1863	1583
Grp Volume(v), veh/h	71	1308	557	253	889	18	338	30	258	30	25	-50
Grp Sat Flow(s),veh/h/ln	1721	1695	1563	1721	1695	1564	1721	1863	1539	1774	1863	1583
Q Serve(g_s), s	2.6	24.3	31.5	9.5	0.0	0.0	12.7	1.7	20.6	1.1	1.5	0.0
Cycle Q Clear(g_c), s	2.6	24.3	31.5	9.5	0.0	0.0	12.7	1.7	20.6	1.1	1.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	2336	881	259	2550	817	355	400	331	72	246	262
V/C Ratio(X)	0.62	0.56	0.63	0.98	0.35	0.02	0.95	0.07	0.78	0.42	0.10	-0.19
Avail Cap(c_a), veh/h	302	2336	881	259	2550	817	355	665	549	246	602	564
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	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	0.83	0.83	0.83	1.00	1.00	0.00
Uniform Delay (d), s/veh	62.0	25.6	19.3	55.1	0.0	0.0	58.0	40.7	48.1	62.9	49.6	0.0
Incr Delay (d2), s/veh	2.0	1.0	3.4	46.5	0.3	0.0	31.4	0.2	8.4	1.4	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	11.6	14.3	6.2	0.1	0.0	7.6	0.9	9.5	0.5	0.8	0.0
LnGrp Delay(d),s/veh	64.1	26.6	22.8	101.6	0.3	0.0	89.4	40.9	56.5	64.3	50.4	0.0
LnGrp LOS	E	C	C	F	A	A	F	D	E	E	D	
Approach Vol, veh/h		1936			1160			626			5	
Approach Delay, s/veh		26.9			22.4			73.5			638.1	
Approach LOS		C			C			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.2	70.9	17.8	27.1	8.7	76.4	7.0	37.8				
Change Period (Y+Rc), s	4.4	11.2	4.4	* 9.9	4.4	11.2	4.4	* 9.9				
Max Green Setting (Gmax), s	9.8	34.9	13.4	* 42	11.4	33.3	9.0	* 46				
Max Q Clear Time (g_c+I1), s	11.5	33.5	14.7	3.5	4.6	2.0	3.1	22.6				
Green Ext Time (p_c), s	0.0	1.3	0.0	0.3	0.0	15.2	0.0	2.7				
Intersection Summary												
HCM 2010 Ctrl Delay			34.1									
HCM 2010 LOS			C									
Notes												
























HCM 2010 Signalized Intersection Summary
 23: Northside Drive & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1125	465	690	825	65	235	30	620	105	20	100
Future Volume (veh/h)	125	1125	465	690	825	65	235	30	620	105	20	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	129	1160	386	711	851	27	242	31	541	108	21	-21
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	2	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	1666	509	651	2366	799	296	530	741	156	455	386
Arrive On Green	0.10	0.66	0.66	0.19	0.47	0.47	0.09	0.28	0.28	0.05	0.24	0.00
Sat Flow, veh/h	3442	5085	1554	3442	5085	1563	3442	1863	1550	3442	1863	1583
Grp Volume(v), veh/h	129	1160	386	711	851	27	242	31	541	108	21	-21
Grp Sat Flow(s),veh/h/ln	1721	1695	1554	1721	1695	1563	1721	1863	1550	1721	1863	1583
Q Serve(g_s), s	4.7	18.8	22.1	24.6	14.0	1.1	9.0	1.6	36.7	4.0	1.1	0.0
Cycle Q Clear(g_c), s	4.7	18.8	22.1	24.6	14.0	1.1	9.0	1.6	36.7	4.0	1.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	1666	509	651	2366	799	296	530	741	156	455	386
V/C Ratio(X)	0.73	0.70	0.76	1.09	0.36	0.03	0.82	0.06	0.73	0.69	0.05	-0.05
Avail Cap(c_a), veh/h	254	1666	509	651	2366	799	402	530	741	175	455	386
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.4	18.3	18.9	52.7	22.3	15.8	58.4	33.8	27.6	61.1	37.6	0.0
Incr Delay (d2), s/veh	1.7	1.7	7.1	62.9	0.4	0.1	5.3	0.1	4.0	7.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	8.8	10.3	17.4	6.6	0.5	4.5	0.8	16.5	2.1	0.6	0.0
LnGrp Delay(d),s/veh	59.1	20.0	26.0	115.6	22.7	15.9	63.7	33.9	31.6	68.4	37.8	0.0
LnGrp LOS	E	B	C	F	C	B	E	C	C	E	D	
Approach Vol, veh/h		1675			1589			814			108	
Approach Delay, s/veh		24.4			64.2			41.2			75.8	
Approach LOS		C			E			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	29.0	48.8	15.6	36.6	11.1	66.7	10.3	41.9				
Change Period (Y+Rc), s	4.4	* 6.2	4.4	4.9	4.4	6.2	4.4	4.9				
Max Green Setting (Gmax), s	24.6	* 42	15.2	28.4	9.6	56.9	6.6	37.0				
Max Q Clear Time (g_c+I1), s	26.6	24.1	11.0	3.1	6.7	16.0	6.0	38.7				
Green Ext Time (p_c), s	0.0	14.0	0.2	0.2	0.0	13.7	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			44.1									
HCM 2010 LOS			D									
Notes												
























HCM 2010 Signalized Intersection Summary
 36: Northside Drive & Rio San Diego Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	20	20	15	25	125	20	180	30	140	295	395
Future Volume (veh/h)	580	20	20	15	25	125	20	180	30	140	295	395
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		0.96	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	646	0	0	16	26	116	21	189	27	147	311	332
Adj No. of Lanes	2	1	0	0	1	1	1	2	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	894	470	0	111	181	244	35	660	279	186	506	819
Arrive On Green	0.25	0.00	0.00	0.16	0.16	0.16	0.02	0.19	0.19	0.10	0.27	0.27
Sat Flow, veh/h	3548	1863	0	696	1132	1524	1774	3539	1498	1774	1863	1548
Grp Volume(v), veh/h	646	0	0	42	0	116	21	189	27	147	311	332
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1828	0	1524	1774	1770	1498	1774	1863	1548
Q Serve(g_s), s	10.7	0.0	0.0	1.3	0.0	4.5	0.8	3.0	1.0	5.2	9.4	8.4
Cycle Q Clear(g_c), s	10.7	0.0	0.0	1.3	0.0	4.5	0.8	3.0	1.0	5.2	9.4	8.4
Prop In Lane	1.00		0.00	0.38		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	894	470	0	292	0	244	35	660	279	186	506	819
V/C Ratio(X)	0.72	0.00	0.00	0.14	0.00	0.48	0.61	0.29	0.10	0.79	0.62	0.41
Avail Cap(c_a), veh/h	1550	814	0	853	0	711	110	996	422	268	689	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	0.0	23.2	0.0	24.6	31.3	22.5	21.7	28.1	20.5	9.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.5	6.3	0.1	0.1	6.0	3.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	0.0	0.6	0.0	1.9	0.4	1.5	0.4	2.8	5.3	5.6
LnGrp Delay(d),s/veh	22.4	0.0	0.0	23.3	0.0	25.1	37.6	22.6	21.7	34.1	23.6	10.1
LnGrp LOS	C			C		C	D	C	C	C	C	B
Approach Vol, veh/h		646			158			237			790	
Approach Delay, s/veh		22.4			24.6			23.8			19.9	
Approach LOS		C			C			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	16.9		21.1	5.7	22.4		15.2				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	9.7	18.1		28.1	4.0	23.8		30.0				
Max Q Clear Time (g_c+I1), s	7.2	5.0		12.7	2.8	11.4		6.5				
Green Ext Time (p_c), s	0.0	0.7		1.2	0.0	5.2		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			21.7									
HCM 2010 LOS			C									
Notes												













HCM 2010 Signalized Intersection Summary
 37: Rancho Mission Road & San Diego Mission Road

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0	
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0	
Number	5	2	12	1	6	16	3	8	18	7	4	14	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863	
Adj Flow Rate, veh/h	0	0	-79	0	0	-126	0	0	-51	0	0	-78	
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	9999	9999	419	9999	9999	9999	9999	9999	9999	9999	9999	9999	
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sat Flow, veh/h	1774	3632	0	1774	3539	1583	1774	1863	1583	1774	1863	1583	
Grp Volume(v), veh/h	0	-79	-79	0	0	-126	0	0	-51	0	0	-78	
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1863	1583	1774	1863	1583	
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00	
Lane Grp Cap(c), veh/h	2650	2459	2620	448	2650	2459	2387	2400	2385	344	2650	2459	2387
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Avail Cap(c_a), veh/h	1397	5368	803	660	470	6816	2915	2706	600	5812	5953	567	589
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d), 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	
Incr Delay (d2), 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	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
LnGrp Delay(d),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	
LnGrp LOS													
Approach Vol, veh/h		-158			-126			-51			-78		
Approach Delay, s/veh		0.0			0.0			0.0			0.0		
Approach LOS		A			A			A			A		
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Change Period (Y+Rc), s	4.0	10.5	4.0	* 10	4.0	* 11	4.0	* 10					
Max Green Setting (Gmax), s	11.0	30.4	18.0	* 27	15.0	* 27	14.0	* 31					
Max Q Clear Time (g_c+11), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
Intersection Summary													
HCM 2010 Ctrl Delay			0.0										
HCM 2010 LOS			A										
Notes													

HCM 2010 Signalized Intersection Summary
 38: Mission Center Road & Harzard Center Drive






























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	155	10	400	30	15	15	325	810	50	85	880	95
Future Volume (veh/h)	155	10	400	30	15	15	325	810	50	85	880	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		0.96	1.00		0.88	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	171	0	274	32	16	11	342	853	42	89	926	79
Adj No. of Lanes	2	0	1	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	805	0	503	46	23	53	342	1178	500	114	1417	121
Arrive On Green	0.23	0.00	0.23	0.04	0.04	0.04	0.10	0.33	0.33	0.06	0.30	0.30
Sat Flow, veh/h	3548	0	1522	1202	601	1392	3442	3539	1502	1774	4761	405
Grp Volume(v), veh/h	171	0	274	48	0	11	342	853	42	89	659	346
Grp Sat Flow(s),veh/h/ln	1774	0	1522	1803	0	1392	1721	1770	1502	1774	1695	1775
Q Serve(g_s), s	3.2	0.0	11.9	2.1	0.0	0.6	8.0	17.1	1.5	4.0	13.6	13.7
Cycle Q Clear(g_c), s	3.2	0.0	11.9	2.1	0.0	0.6	8.0	17.1	1.5	4.0	13.6	13.7
Prop In Lane	1.00		1.00	0.67		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	805	0	503	69	0	53	342	1178	500	114	1009	528
V/C Ratio(X)	0.21	0.00	0.55	0.69	0.00	0.21	1.00	0.72	0.08	0.78	0.65	0.66
Avail Cap(c_a), veh/h	1410	0	762	358	0	277	342	1481	628	132	1128	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	0.0	22.3	38.3	0.0	37.5	36.3	23.6	18.4	37.1	24.6	24.7
Incr Delay (d2), s/veh	0.2	0.0	1.2	4.6	0.0	0.7	48.7	2.0	0.1	19.0	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	5.1	1.1	0.0	0.2	6.1	8.6	0.7	2.6	6.6	7.2
LnGrp Delay(d),s/veh	25.5	0.0	23.5	42.9	0.0	38.2	85.0	25.6	18.6	56.1	26.3	27.9
LnGrp LOS	C		C	D		D	F	C	B	E	C	C
Approach Vol, veh/h		445			59			1237			1094	
Approach Delay, s/veh		24.2			42.0			41.8			29.2	
Approach LOS		C			D			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	37.0		27.3	12.0	34.2		7.1				
Change Period (Y+Rc), s	4.0	* 10		9.0	4.0	10.2		4.0				
Max Green Setting (Gmax), s	6.0	* 34		32.0	8.0	26.8		16.0				
Max Q Clear Time (g_c+I1), s	6.0	19.1		13.9	10.0	15.7		4.1				
Green Ext Time (p_c), s	0.0	7.7		2.1	0.0	6.7		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			34.2									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 39: Camino De La Reina & Avenida Del Rio

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	300	425	140	330	395	120		
Future Volume (veh/h)	300	425	140	330	395	120		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.96	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	316	352	147	252	416	126		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	415	794	458	374	474	1101		
Arrive On Green	0.23	0.23	0.25	0.25	0.27	0.59		
Sat Flow, veh/h	1774	1583	1863	1519	1774	1863		
Grp Volume(v), veh/h	316	352	147	252	416	126		
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1519	1774	1863		
Q Serve(g_s), s	8.5	7.3	3.3	7.7	11.5	1.5		
Cycle Q Clear(g_c), s	8.5	7.3	3.3	7.7	11.5	1.5		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	415	794	458	374	474	1101		
V/C Ratio(X)	0.76	0.44	0.32	0.67	0.88	0.11		
Avail Cap(c_a), veh/h	621	977	652	531	517	1267		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	18.4	8.2	15.9	17.5	18.0	4.6		
Incr Delay (d2), s/veh	3.1	0.4	0.4	2.1	14.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.5	3.3	1.8	3.4	7.5	0.8		
LnGrp Delay(d),s/veh	21.4	8.6	16.3	19.7	32.9	4.7		
LnGrp LOS	C	A	B	B	C	A		
Approach Vol, veh/h	668		399			542		
Approach Delay, s/veh	14.7		18.4			26.3		
Approach LOS	B		B			C		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	17.7	17.1				34.9		16.5
Change Period (Y+Rc), s	4.0	4.5				4.5		4.5
Max Green Setting (Gmax), s	15.0	18.0				35.0		18.0
Max Q Clear Time (g_c+I1), s	13.5	9.7				3.5		10.5
Green Ext Time (p_c), s	0.2	1.1				0.7		1.5
Intersection Summary								
HCM 2010 Ctrl Delay			19.5					
HCM 2010 LOS			B					

























HCM 2010 Signalized Intersection Summary

40: Mission Center Road & Camino De La Reina

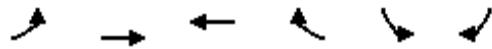
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	 		 	 	
Traffic Volume (veh/h)	280	440	260	370	350	340	230	565	285	390	640	260
Future Volume (veh/h)	280	440	260	370	350	340	230	565	285	390	640	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	286	449	194	378	357	276	235	577	220	398	653	173
Adj No. of Lanes	2	2	0	2	2	0	2	3	0	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	366	598	256	458	523	397	228	832	308	332	1319	395
Arrive On Green	0.11	0.25	0.25	0.13	0.28	0.28	0.07	0.23	0.23	0.10	0.26	0.26
Sat Flow, veh/h	3442	2387	1021	3442	1887	1431	3442	3629	1344	3442	5085	1522
Grp Volume(v), veh/h	286	332	311	378	334	299	235	538	259	398	653	173
Grp Sat Flow(s),veh/h/ln	1721	1770	1637	1721	1770	1548	1721	1695	1583	1721	1695	1522
Q Serve(g_s), s	8.1	17.2	17.5	10.6	16.7	17.2	6.6	14.5	15.0	9.6	10.9	9.4
Cycle Q Clear(g_c), s	8.1	17.2	17.5	10.6	16.7	17.2	6.6	14.5	15.0	9.6	10.9	9.4
Prop In Lane	1.00		0.62	1.00		0.92	1.00		0.85	1.00		1.00
Lane Grp Cap(c), veh/h	366	444	410	458	491	429	228	777	363	332	1319	395
V/C Ratio(X)	0.78	0.75	0.76	0.83	0.68	0.70	1.03	0.69	0.71	1.20	0.50	0.44
Avail Cap(c_a), veh/h	1612	1039	961	837	640	560	228	985	460	332	1641	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	34.4	34.5	42.0	32.0	32.2	46.4	35.1	35.3	44.9	31.3	30.8
Incr Delay (d2), s/veh	1.4	2.7	3.0	1.5	3.4	4.3	67.3	2.3	5.5	114.7	0.6	1.5
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	8.7	8.2	5.1	8.6	7.8	5.2	7.0	7.1	9.8	5.1	4.1
LnGrp Delay(d),s/veh	44.7	37.0	37.5	43.5	35.5	36.5	113.9	37.4	40.8	159.7	31.9	32.3
LnGrp LOS	D	D	D	D	D	D	F	D	D	F	C	C
Approach Vol, veh/h		929			1011			1032			1224	
Approach Delay, s/veh		39.5			38.7			55.7			73.5	
Approach LOS		D			D			E			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	14.0	33.0	17.6	34.8	11.0	36.0	15.0	37.5				
Change Period (Y+Rc), s	4.4	10.2	4.4	* 9.9	4.4	* 10	4.4	* 9.9				
Max Green Setting (Gmax), s	9.6	28.9	24.2	* 58	6.6	* 32	46.6	* 36				
Max Q Clear Time (g_c+I1), s	11.6	17.0	12.6	19.5	8.6	12.9	10.1	19.2				
Green Ext Time (p_c), s	0.0	5.8	0.6	4.9	0.0	7.9	0.5	6.2				
Intersection Summary												
HCM 2010 Ctrl Delay			53.2									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

41: Camino Del Este & Camino De La Reina

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	525	235	185	425	40	150	130	100	120	285	265
Future Volume (veh/h)	205	525	235	185	425	40	150	130	100	120	285	265
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	214	547	193	193	443	32	156	135	73	125	297	214
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	844	363	233	803	343	307	1075	471	415	1075	465
Arrive On Green	0.14	0.24	0.24	0.13	0.23	0.23	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1774	3539	1521	1774	3539	1514	878	3539	1552	1153	3539	1531
Grp Volume(v), veh/h	214	547	193	193	443	32	156	135	73	125	297	214
Grp Sat Flow(s),veh/h/ln	1774	1770	1521	1774	1770	1514	878	1770	1552	1153	1770	1531
Q Serve(g_s), s	8.8	10.4	8.3	7.9	8.3	1.2	12.3	2.1	2.6	6.6	4.8	8.5
Cycle Q Clear(g_c), s	8.8	10.4	8.3	7.9	8.3	1.2	17.0	2.1	2.6	8.6	4.8	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	844	363	233	803	343	307	1075	471	415	1075	465
V/C Ratio(X)	0.84	0.65	0.53	0.83	0.55	0.09	0.51	0.13	0.15	0.30	0.28	0.46
Avail Cap(c_a), veh/h	275	1368	588	304	1420	607	440	1610	706	589	1610	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	25.6	24.8	31.6	25.5	22.8	26.3	18.8	19.0	22.0	19.8	21.1
Incr Delay (d2), s/veh	18.0	0.9	1.3	10.7	0.6	0.1	0.9	0.0	0.1	0.3	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	5.2	3.6	4.6	4.1	0.5	3.0	1.0	1.1	2.1	2.3	3.6
LnGrp Delay(d),s/veh	49.2	26.5	26.1	42.4	26.1	22.9	27.1	18.9	19.1	22.2	19.9	21.5
LnGrp LOS	D	C	C	D	C	C	C	B	B	C	B	C
Approach Vol, veh/h		954			668			364			636	
Approach Delay, s/veh		31.5			30.7			22.5			20.9	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	27.9		32.6	15.1	27.1		32.6				
Change Period (Y+Rc), s	4.4	* 10		* 9.9	4.4	* 10		* 9.9				
Max Green Setting (Gmax), s	12.8	* 29		* 34	11.6	* 30		* 34				
Max Q Clear Time (g_c+I1), s	9.9	12.4		10.6	10.8	10.3		19.0				
Green Ext Time (p_c), s	0.1	4.2		2.5	0.0	2.9		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay				27.5								
HCM 2010 LOS				C								
Notes												

























HCM 2010 Signalized Intersection Summary
 48: Hotel Circle North/Camino De La Reina & Fashion Valley Road















Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations			↑↑	↗	↖	↗↗		
Traffic Volume (veh/h)	0	0	405	450	0	490		
Future Volume (veh/h)	0	0	405	450	0	490		
Number			2	12	7	14		
Initial Q (Qb), veh			0	0	0	0		
Ped-Bike Adj(A_pbT)				0.95	1.00	1.00		
Parking Bus, Adj			1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863		
Adj Flow Rate, veh/h			426	358	0	421		
Adj No. of Lanes			2	1	1	2		
Peak Hour Factor			0.95	0.95	0.95	0.95		
Percent Heavy Veh, %			2	2	2	2		
Cap, veh/h			1110	470	0	0		
Arrive On Green			0.31	0.31	0.00	0.00		
Sat Flow, veh/h			3632	1500	0			
Grp Volume(v), veh/h			426	358	0.0			
Grp Sat Flow(s),veh/h/ln			1770	1500				
Q Serve(g_s), s			6.1	14.0				
Cycle Q Clear(g_c), s			6.1	14.0				
Prop In Lane				1.00				
Lane Grp Cap(c), veh/h			1110	470				
V/C Ratio(X)			0.38	0.76				
Avail Cap(c_a), veh/h			1530	649				
HCM Platoon Ratio			1.00	1.00				
Upstream Filter(I)			1.00	1.00				
Uniform Delay (d), s/veh			17.4	20.1				
Incr Delay (d2), s/veh			0.3	4.3				
Initial Q Delay(d3),s/veh			0.0	0.0				
%ile BackOfQ(50%),veh/ln			3.0	6.3				
LnGrp Delay(d),s/veh			17.7	24.5				
LnGrp LOS			B	C				
Approach Vol, veh/h			784					
Approach Delay, s/veh			20.8					
Approach LOS			C					
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		30.3						
Change Period (Y+Rc), s		* 9.9						
Max Green Setting (Gmax), s		* 28						
Max Q Clear Time (g_c+I1), s		16.0						
Green Ext Time (p_c), s		4.4						
Intersection Summary								
HCM 2010 Ctrl Delay			20.8					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary













49: Mission Center Road & Camino Del Rio N

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	325	145	335	325	600	220	465	515	315	690	85
Future Volume (veh/h)	15	325	145	335	325	600	220	465	515	315	690	85
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		0.98	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	15	335	0	345	335	413	227	479	0	325	711	67
Adj No. of Lanes	1	2	1	2	1	1	2	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	689	308	442	575	479	311	842	377	418	953	410
Arrive On Green	0.01	0.19	0.00	0.13	0.31	0.31	0.09	0.24	0.00	0.12	0.27	0.27
Sat Flow, veh/h	1774	3539	1583	3442	1863	1553	3442	3539	1583	3442	3539	1523
Grp Volume(v), veh/h	15	335	0	345	335	413	227	479	0	325	711	67
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1863	1553	1721	1770	1583	1721	1770	1523
Q Serve(g_s), s	0.6	6.4	0.0	7.3	11.5	18.9	4.9	9.0	0.0	6.9	13.9	2.5
Cycle Q Clear(g_c), s	0.6	6.4	0.0	7.3	11.5	18.9	4.9	9.0	0.0	6.9	13.9	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	25	689	308	442	575	479	311	842	377	418	953	410
V/C Ratio(X)	0.59	0.49	0.00	0.78	0.58	0.86	0.73	0.57	0.00	0.78	0.75	0.16
Avail Cap(c_a), veh/h	94	1184	530	687	763	636	346	922	412	514	1095	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	27.1	0.0	31.9	22.0	24.6	33.5	25.4	0.0	32.2	25.3	21.1
Incr Delay (d2), s/veh	7.9	0.5	0.0	1.2	0.3	7.4	5.5	0.3	0.0	6.0	3.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.2	0.0	3.6	5.9	9.0	2.5	4.4	0.0	3.6	7.1	1.1
LnGrp Delay(d),s/veh	45.0	27.6	0.0	33.1	22.4	32.0	39.0	25.7	0.0	38.2	28.2	21.4
LnGrp LOS	D	C		C	C	C	D	C		D	C	C
Approach Vol, veh/h		350			1093			706			1103	
Approach Delay, s/veh		28.4			29.4			30.0			30.8	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.6	22.9	14.1	25.0	11.2	25.3	5.5	33.7				
Change Period (Y+Rc), s	4.4	4.9	4.4	* 10	4.4	4.9	4.4	10.3				
Max Green Setting (Gmax), s	11.3	19.7	15.1	* 25	7.6	23.4	4.0	31.0				
Max Q Clear Time (g_c+I1), s	8.9	11.0	9.3	8.4	6.9	15.9	2.6	20.9				
Green Ext Time (p_c), s	0.3	1.3	0.4	2.0	0.0	3.8	0.0	1.8				
Intersection Summary												
HCM 2010 Ctrl Delay			29.9									
HCM 2010 LOS			C									
Notes												






















HCM 2010 Signalized Intersection Summary
 50: I-8 WB Ramps/Mission Valley Mall Driveway & Camino Del Rio N

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑		↖	↗	↗			
Traffic Volume (veh/h)	0	430	725	330	465	0	795	255	275	0	0	0
Future Volume (veh/h)	0	430	725	330	465	0	795	255	275	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	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			
Parking Bus, Adj	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	1863	1863	1863	1900	1863	1863	1863			
Adj Flow Rate, veh/h	0	453	0	347	489	0	552	666	0			
Adj No. of Lanes	0	2	1	1	2	0	1	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	692	310	382	1645	0	704	739	629			
Arrive On Green	0.00	0.20	0.00	0.22	0.46	0.00	0.40	0.40	0.00			
Sat Flow, veh/h	0	3632	1583	1774	3632	0	1774	1863	1583			
Grp Volume(v), veh/h	0	453	0	347	489	0	552	666	0			
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0	1774	1863	1583			
Q Serve(g_s), s	0.0	10.3	0.0	16.6	7.5	0.0	23.7	29.2	0.0			
Cycle Q Clear(g_c), s	0.0	10.3	0.0	16.6	7.5	0.0	23.7	29.2	0.0			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	692	310	382	1645	0	704	739	629			
V/C Ratio(X)	0.00	0.65	0.00	0.91	0.30	0.00	0.78	0.90	0.00			
Avail Cap(c_a), veh/h	0	692	310	414	1710	0	735	772	656			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	0.0	32.2	0.0	33.3	14.4	0.0	22.9	24.6	0.0			
Incr Delay (d2), s/veh	0.0	4.8	0.0	21.6	0.1	0.0	5.7	13.7	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	5.5	0.0	10.4	3.6	0.0	12.6	17.8	0.0			
LnGrp Delay(d),s/veh	0.0	37.0	0.0	54.8	14.5	0.0	28.7	38.3	0.0			
LnGrp LOS		D		D	B		C	D				
Approach Vol, veh/h		453			836			1218				
Approach Delay, s/veh		37.0			31.3			33.9				
Approach LOS		D			C			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	23.4	23.0		40.5		46.4						
Change Period (Y+Rc), s	* 4.7	6.0		6.0		6.0						
Max Green Setting (Gmax), s	* 20	17.0		36.0		42.0						
Max Q Clear Time (g_c+I1), s	18.6	12.3		31.2		9.5						
Green Ext Time (p_c), s	0.1	1.3		3.3		3.8						
Intersection Summary												
HCM 2010 Ctrl Delay			33.6									
HCM 2010 LOS			C									
Notes												






















HCM 2010 Signalized Intersection Summary
 51: Camino Del Rio N & Camino Del Este

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	240	295	325	195	425	185		
Future Volume (veh/h)	240	295	325	195	425	185		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	247	304	335	160	438	150		
Adj No. of Lanes	1	1	2	1	1	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	285	1145	1428	623	481	429		
Arrive On Green	0.16	0.61	0.40	0.40	0.27	0.27		
Sat Flow, veh/h	1774	1863	3632	1544	1774	1583		
Grp Volume(v), veh/h	247	304	335	160	438	150		
Grp Sat Flow(s),veh/h/ln	1774	1863	1770	1544	1774	1583		
Q Serve(g_s), s	10.7	5.9	4.9	5.4	18.9	6.0		
Cycle Q Clear(g_c), s	10.7	5.9	4.9	5.4	18.9	6.0		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	285	1145	1428	623	481	429		
V/C Ratio(X)	0.87	0.27	0.23	0.26	0.91	0.35		
Avail Cap(c_a), veh/h	292	1145	1428	623	506	452		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	32.3	7.0	15.5	15.7	27.8	23.1		
Incr Delay (d2), s/veh	21.6	0.6	0.4	1.0	20.4	0.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.9	3.2	2.4	2.5	12.0	5.7		
LnGrp Delay(d),s/veh	53.9	7.6	15.9	16.7	48.3	23.8		
LnGrp LOS	D	A	B	B	D	C		
Approach Vol, veh/h		551	495		588			
Approach Delay, s/veh		28.3	16.1		42.0			
Approach LOS		C	B		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		53.0		25.9	16.7	36.3		
Change Period (Y+Rc), s		4.5		4.5	4.0	4.5		
Max Green Setting (Gmax), s		48.5		22.5	13.0	31.5		
Max Q Clear Time (g_c+I1), s		7.9		20.9	12.7	7.4		
Green Ext Time (p_c), s		1.7		0.5	0.0	2.3		
Intersection Summary								
HCM 2010 Ctrl Delay			29.6					
HCM 2010 LOS			C					












HCM 2010 Signalized Intersection Summary
 58: Mission Center Road & I-8 EB Ramp

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	735	0	270	0	0	0	0	465	220	605	565	0
Future Volume (veh/h)	735	0	270	0	0	0	0	465	220	605	565	0
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	774	0	0				0	489	0	688	524	0
Adj No. of Lanes	2	1	0				0	2	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1233	667	0				0	393	176	1205	633	0
Arrive On Green	0.36	0.00	0.00				0.00	0.11	0.00	0.34	0.34	0.00
Sat Flow, veh/h	3442	1863	0				0	3632	1583	3548	1863	0
Grp Volume(v), veh/h	774	0	0				0	489	0	688	524	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0				0	1770	1583	1774	1863	0
Q Serve(g_s), s	16.8	0.0	0.0				0.0	10.0	0.0	14.3	23.3	0.0
Cycle Q Clear(g_c), s	16.8	0.0	0.0				0.0	10.0	0.0	14.3	23.3	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1233	667	0				0	393	176	1205	633	0
V/C Ratio(X)	0.63	0.00	0.00				0.00	1.24	0.00	0.57	0.83	0.00
Avail Cap(c_a), veh/h	1233	667	0				0	393	176	1612	847	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00				0.00	0.87	0.00	0.74	0.74	0.00
Uniform Delay (d), s/veh	23.9	0.0	0.0				0.0	40.0	0.0	24.3	27.3	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0				0.0	127.0	0.0	0.1	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	0.0				0.0	11.8	0.0	7.0	12.4	0.0
LnGrp Delay(d),s/veh	26.3	0.0	0.0				0.0	167.0	0.0	24.5	30.2	0.0
LnGrp LOS	C							F		C	C	
Approach Vol, veh/h		774						489			1212	
Approach Delay, s/veh		26.3						167.0			27.0	
Approach LOS		C						F			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		38.3		15.0				36.7				
Change Period (Y+Rc), s		6.1		5.0				6.1				
Max Green Setting (Gmax), s		21.9		10.0				40.9				
Max Q Clear Time (g_c+I1), s		18.8		12.0				25.3				
Green Ext Time (p_c), s		0.7		0.0				3.1				
Intersection Summary												
HCM 2010 Ctrl Delay			54.4									
HCM 2010 LOS			D									
Notes												

























HCM 2010 Signalized Intersection Summary
 59: Mission Center Road & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	375	155	10	15	80	280	5	30	10	380	50	405
Future Volume (veh/h)	375	155	10	15	80	280	5	30	10	380	50	405
Number	3	8	18	7	4	14	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		0.95	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1900	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	395	163	0	16	84	263	5	32	6	438	0	405
Adj No. of Lanes	2	1	0	0	2	1	0	1	1	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	474	249	0	56	625	755	23	148	137	1059	0	446
Arrive On Green	0.13	0.13	0.00	0.19	0.19	0.19	0.09	0.09	0.09	0.30	0.00	0.30
Sat Flow, veh/h	3548	1863	0	296	3322	1499	250	1600	1481	3548	0	1496
Grp Volume(v), veh/h	395	163	0	100	0	263	37	0	6	438	0	405
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1848	1770	1499	1850	0	1481	1774	0	1496
Q Serve(g_s), s	9.2	7.1	0.0	3.9	0.0	9.3	1.6	0.0	0.3	8.4	0.0	22.1
Cycle Q Clear(g_c), s	9.2	7.1	0.0	3.9	0.0	9.3	1.6	0.0	0.3	8.4	0.0	22.1
Prop In Lane	1.00		0.00	0.16		1.00	0.14		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	474	249	0	348	333	755	171	0	137	1059	0	446
V/C Ratio(X)	0.83	0.65	0.00	0.29	0.00	0.35	0.22	0.00	0.04	0.41	0.00	0.91
Avail Cap(c_a), veh/h	497	261	0	348	333	755	171	0	137	1156	0	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	0.71	0.00	0.71
Uniform Delay (d), s/veh	35.9	35.0	0.0	29.6	0.0	13.6	35.7	0.0	35.1	23.9	0.0	28.7
Incr Delay (d2), s/veh	10.4	4.1	0.0	0.2	0.0	0.1	0.6	0.0	0.1	0.8	0.0	19.2
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	5.2	3.9	0.0	2.0	0.0	6.1	0.8	0.0	0.1	4.2	0.0	11.5
LnGrp Delay(d),s/veh	46.3	39.1	0.0	29.8	0.0	13.7	36.3	0.0	35.3	24.7	0.0	47.9
LnGrp LOS	D	D		C		B	D		D	C		D
Approach Vol, veh/h		558			363			43			843	
Approach Delay, s/veh		44.2			18.1			36.2			35.8	
Approach LOS		D			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.0		22.1		31.5		17.5				
Change Period (Y+Rc), s		6.1		6.1		6.1		6.1				
Max Green Setting (Gmax), s		5.0		16.0		27.7		11.9				
Max Q Clear Time (g_c+I1), s		3.6		11.3		24.1		11.2				
Green Ext Time (p_c), s		0.0		0.4		0.8		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay				34.9								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary
 60: Qualcomm Way & I-8 EB Ramp













								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	520	0	1220	965	500		
Future Volume (veh/h)	0	520	0	1220	965	500		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				0.96	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863		
Adj Flow Rate, veh/h	0	342	0	1245	985	234		
Adj No. of Lanes	1	2	0	2	2	1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Percent Heavy Veh, %	2	2	0	2	2	2		
Cap, veh/h	331	520	0	1798	1798	772		
Arrive On Green	0.00	0.19	0.00	0.51	0.51	0.51		
Sat Flow, veh/h	1774	2787	0	3725	3632	1520		
Grp Volume(v), veh/h	0	342	0	1245	985	234		
Grp Sat Flow(s),veh/h/ln	1774	1393	0	1770	1770	1520		
Q Serve(g_s), s	0.0	4.0	0.0	9.3	6.6	3.1		
Cycle Q Clear(g_c), s	0.0	4.0	0.0	9.3	6.6	3.1		
Prop In Lane	1.00	1.00	0.00				1.00	
Lane Grp Cap(c), veh/h	331	520	0	1798	1798	772		
V/C Ratio(X)	0.00	0.66	0.00	0.69	0.55	0.30		
Avail Cap(c_a), veh/h	2172	3412	0	4782	4782	2054		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	13.1	0.0	6.5	5.8	5.0		
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.2	0.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	1.6	0.0	4.4	3.2	1.3		
LnGrp Delay(d),s/veh	0.0	13.6	0.0	6.7	5.9	5.0		
LnGrp LOS		B		A	A	A		
Approach Vol, veh/h	342			1245	1219			
Approach Delay, s/veh	13.6			6.7	5.8			
Approach LOS	B			A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		22.7		12.0		22.7		
Change Period (Y+Rc), s		5.1		5.5		5.1		
Max Green Setting (Gmax), s		46.9		42.5		46.9		
Max Q Clear Time (g_c+I1), s		11.3		6.0		8.6		
Green Ext Time (p_c), s		6.4		0.8		3.4		
Intersection Summary								
HCM 2010 Ctrl Delay			7.1					
HCM 2010 LOS			A					
Notes								

HCM 2010 Signalized Intersection Summary
 61: Texas Street/Qualcomm Way & Camino Del Rio South























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	105	100	110	70	455	85	910	155	410	745	280
Future Volume (veh/h)	195	105	100	110	70	455	85	910	155	410	745	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	205	111	52	116	74	142	89	958	121	432	784	274
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	284	328	213	224	528	112	1030	130	392	1720	738
Arrive On Green	0.15	0.15	0.15	0.12	0.12	0.12	0.06	0.33	0.33	0.22	0.49	0.49
Sat Flow, veh/h	1774	1863	1501	1774	1863	1484	1774	3141	397	1774	3539	1519
Grp Volume(v), veh/h	205	111	52	116	74	142	89	540	539	432	784	274
Grp Sat Flow(s),veh/h/ln	1774	1863	1501	1774	1863	1484	1774	1770	1768	1774	1770	1519
Q Serve(g_s), s	13.3	6.5	3.4	7.4	4.4	8.4	6.0	35.5	35.5	26.6	17.6	13.6
Cycle Q Clear(g_c), s	13.3	6.5	3.4	7.4	4.4	8.4	6.0	35.5	35.5	26.6	17.6	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	270	284	328	213	224	528	112	580	580	392	1720	738
V/C Ratio(X)	0.76	0.39	0.16	0.54	0.33	0.27	0.80	0.93	0.93	1.10	0.46	0.37
Avail Cap(c_a), veh/h	398	418	437	442	464	720	218	587	586	392	1720	738
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	46.0	38.4	49.8	48.5	28.9	55.6	39.1	39.1	46.9	20.4	19.4
Incr Delay (d2), s/veh	4.8	0.9	0.2	0.8	0.3	0.1	4.8	22.5	22.6	75.8	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	3.4	1.4	3.7	2.3	3.5	3.1	20.9	20.9	21.2	8.7	5.8
LnGrp Delay(d),s/veh	53.7	46.9	38.6	50.6	48.8	29.0	60.4	61.6	61.7	122.7	20.7	19.8
LnGrp LOS	D	D	D	D	D	C	E	E	E	F	C	B
Approach Vol, veh/h		368			332			1168			1490	
Approach Delay, s/veh		49.5			41.0			61.5			50.1	
Approach LOS		D			D			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.0	46.5		23.2	12.0	65.5		19.7				
Change Period (Y+Rc), s	4.4	7.0		4.9	4.4	* 7		5.2				
Max Green Setting (Gmax), s	26.6	39.9		27.0	14.8	* 54		30.0				
Max Q Clear Time (g_c+I1), s	28.6	37.5		15.3	8.0	19.6		10.4				
Green Ext Time (p_c), s	0.0	2.0		1.1	0.0	9.2		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			53.1									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary













1: I-5 SB Ramps & Seaworld Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↗↗	↑↑					↘		↗
Traffic Volume (veh/h)	0	1140	160	290	580	0	0	0	0	330	0	1320
Future Volume (veh/h)	0	1140	160	290	580	0	0	0	0	330	0	1320
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	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
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	1188	167	302	604	0				344	0	88
Adj No. of Lanes	0	2	1	2	2	0				1	0	1
Peak Hour Factor	0.95	0.96	0.96	0.96	0.96	0.95				0.96	0.95	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1323	559	930	2456	0				372	0	332
Arrive On Green	0.00	0.37	0.37	0.27	0.69	0.00				0.21	0.00	0.21
Sat Flow, veh/h	0	3632	1495	3442	3632	0				1774	0	1583
Grp Volume(v), veh/h	0	1188	167	302	604	0				344	0	88
Grp Sat Flow(s),veh/h/ln	0	1770	1495	1721	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	34.8	8.7	7.7	6.9	0.0				20.9	0.0	5.1
Cycle Q Clear(g_c), s	0.0	34.8	8.7	7.7	6.9	0.0				20.9	0.0	5.1
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1323	559	930	2456	0				372	0	332
V/C Ratio(X)	0.00	0.90	0.30	0.32	0.25	0.00				0.93	0.00	0.27
Avail Cap(c_a), veh/h	0	1528	646	930	2456	0				514	0	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.09	0.09	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	32.5	24.3	32.1	6.2	0.0				42.6	0.0	36.4
Incr Delay (d2), s/veh	0.0	9.8	1.4	0.0	0.0	0.0				15.9	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.8	3.8	3.7	3.4	0.0				11.9	0.0	2.3
LnGrp Delay(d),s/veh	0.0	42.3	25.6	32.1	6.2	0.0				58.5	0.0	36.5
LnGrp LOS		D	C	C	A					E		D
Approach Vol, veh/h		1355			906						432	
Approach Delay, s/veh		40.3			14.9						54.0	
Approach LOS		D			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	35.2	46.6		28.2		81.8						
Change Period (Y+Rc), s	5.5	* 5.5		5.1		5.5						
Max Green Setting (Gmax), s	15.3	* 48		31.9		67.5						
Max Q Clear Time (g_c+I1), s	9.7	36.8		22.9		8.9						
Green Ext Time (p_c), s	0.3	4.3		0.1		2.5						
Intersection Summary												
HCM 2010 Ctrl Delay			33.9									
HCM 2010 LOS			C									
Notes												


















HCM 2010 Signalized Intersection Summary
 2: I-5 NB Ramps & Seaworld Drive/Tecolote Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 	 			
Traffic Volume (veh/h)	810	660	0	0	550	530	320	20	620	0	0	0
Future Volume (veh/h)	810	660	0	0	550	530	320	20	620	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	844	688	0	0	573	292	333	21	438			
Adj No. of Lanes	2	2	0	0	2	0	0	1	1			
Peak Hour Factor	0.96	0.96	0.95	0.95	0.96	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	875	2164	0	0	714	363	495	31	459			
Arrive On Green	0.25	0.61	0.00	0.00	0.32	0.32	0.30	0.30	0.30			
Sat Flow, veh/h	3442	3632	0	0	2338	1142	1674	106	1551			
Grp Volume(v), veh/h	844	688	0	0	452	413	354	0	438			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1618	1779	0	1551			
Q Serve(g_s), s	29.1	11.3	0.0	0.0	28.0	28.1	21.0	0.0	33.2			
Cycle Q Clear(g_c), s	29.1	11.3	0.0	0.0	28.0	28.1	21.0	0.0	33.2			
Prop In Lane	1.00		0.00	0.00		0.71	0.94		1.00			
Lane Grp Cap(c), veh/h	875	2164	0	0	563	515	527	0	459			
V/C Ratio(X)	0.96	0.32	0.00	0.00	0.80	0.80	0.67	0.00	0.95			
Avail Cap(c_a), veh/h	875	2164	0	0	563	515	550	0	480			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.65	0.65	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	44.2	11.2	0.0	0.0	37.5	37.5	37.1	0.0	41.4			
Incr Delay (d2), s/veh	16.7	0.3	0.0	0.0	11.5	12.5	2.4	0.0	28.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	15.9	5.5	0.0	0.0	15.5	14.3	10.7	0.0	17.9			
LnGrp Delay(d),s/veh	60.9	11.5	0.0	0.0	48.9	50.0	39.5	0.0	70.0			
LnGrp LOS	E	B			D	D	D		E			
Approach Vol, veh/h		1532			865			792				
Approach Delay, s/veh		38.7			49.4			56.4				
Approach LOS		D			D			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		79.4		40.6	35.2	44.2						
Change Period (Y+Rc), s		6.0		5.1	* 4.7	6.0						
Max Green Setting (Gmax), s		71.8		37.1	* 31	36.6						
Max Q Clear Time (g_c+I1), s		13.3		35.2	31.1	30.1						
Green Ext Time (p_c), s		2.9		0.3	0.0	2.0						
Intersection Summary												
HCM 2010 Ctrl Delay				46.0								
HCM 2010 LOS				D								
Notes												

























HCM 2010 Signalized Intersection Summary
 3: I-805 SB Ramps & Phyllis Place

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖↗	↑					↖↗	↗	
Traffic Volume (veh/h)	0	1090	350	570	690	0	0	0	0	370	10	920
Future Volume (veh/h)	0	1090	350	570	690	0	0	0	0	370	10	920
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1900
Adj Flow Rate, veh/h	0	1147	157	600	726	0				389	11	547
Adj No. of Lanes	0	2	1	2	1	0				2	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1149	505	448	933	0				1338	12	596
Arrive On Green	0.00	0.32	0.32	0.13	0.50	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	3632	1554	3442	1863	0				3442	31	1533
Grp Volume(v), veh/h	0	1147	157	600	726	0				389	0	558
Grp Sat Flow(s),veh/h/ln	0	1770	1554	1721	1863	0				1721	0	1564
Q Serve(g_s), s	0.0	33.1	7.8	13.3	32.6	0.0				8.0	0.0	34.7
Cycle Q Clear(g_c), s	0.0	33.1	7.8	13.3	32.6	0.0				8.0	0.0	34.7
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.98
Lane Grp Cap(c), veh/h	0	1149	505	448	933	0				1338	0	608
V/C Ratio(X)	0.00	1.00	0.31	1.34	0.78	0.00				0.29	0.00	0.92
Avail Cap(c_a), veh/h	0	1149	505	448	933	0				1935	0	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	34.5	25.9	44.5	20.9	0.0				21.5	0.0	29.7
Incr Delay (d2), s/veh	0.0	26.1	0.1	167.6	3.9	0.0				0.0	0.0	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
%ile BackOfQ(50%),veh/ln	0.0	20.2	3.3	16.7	17.7	0.0				3.8	0.0	16.4
LnGrp Delay(d),s/veh	0.0	60.6	26.1	212.1	24.7	0.0				21.6	0.0	38.5
LnGrp LOS		E	C	F	C					C		D
Approach Vol, veh/h		1304			1326						947	
Approach Delay, s/veh		56.4			109.5						31.5	
Approach LOS		E			F						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.0	39.0		45.3		57.0						
Change Period (Y+Rc), s	* 4.7	5.8		5.5		5.8						
Max Green Setting (Gmax), s	* 13	33.2		57.5		51.2						
Max Q Clear Time (g_c+I1), s	15.3	35.1		36.7		34.6						
Green Ext Time (p_c), s	0.0	0.0		3.1		3.0						
Intersection Summary												
HCM 2010 Ctrl Delay			69.5									
HCM 2010 LOS			E									
Notes												























HCM 2010 Signalized Intersection Summary
 4: I-805 NB Ramps & Phyllis Place

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1030	430	0	0	720	440	540	10	520	0	0	0
Future Volume (veh/h)	1030	430	0	0	720	440	540	10	520	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1900	1863	1863			
Adj Flow Rate, veh/h	1084	453	0	0	758	216	568	11	284			
Adj No. of Lanes	2	1	0	0	2	0	0	1	1			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	957	1120	0	0	786	224	564	11	497			
Arrive On Green	0.28	0.60	0.00	0.00	0.29	0.29	0.32	0.32	0.32			
Sat Flow, veh/h	3442	1863	0	0	2799	771	1742	34	1534			
Grp Volume(v), veh/h	1084	453	0	0	496	478	579	0	284			
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1708	1776	0	1534			
Q Serve(g_s), s	40.3	18.6	0.0	0.0	40.0	40.0	46.9	0.0	22.3			
Cycle Q Clear(g_c), s	40.3	18.6	0.0	0.0	40.0	40.0	46.9	0.0	22.3			
Prop In Lane	1.00		0.00	0.00		0.45	0.98		1.00			
Lane Grp Cap(c), veh/h	957	1120	0	0	514	496	575	0	497			
V/C Ratio(X)	1.13	0.40	0.00	0.00	0.96	0.96	1.01	0.00	0.57			
Avail Cap(c_a), veh/h	957	1121	0	0	515	497	575	0	497			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	52.3	15.2	0.0	0.0	50.7	50.7	49.0	0.0	40.7			
Incr Delay (d2), s/veh	72.8	0.1	0.0	0.0	30.3	31.0	39.4	0.0	1.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	28.7	9.6	0.0	0.0	23.9	23.1	29.3	0.0	9.6			
LnGrp Delay(d),s/veh	125.1	15.3	0.0	0.0	81.0	81.7	88.4	0.0	41.7			
LnGrp LOS	F	B			F	F	F		D			
Approach Vol, veh/h		1537			974			863				
Approach Delay, s/veh		92.7			81.3			73.0				
Approach LOS		F			F			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		92.9			45.0	47.9		52.0				
Change Period (Y+Rc), s		5.8			* 4.7	5.8		5.1				
Max Green Setting (Gmax), s		87.2			* 40	42.2		46.9				
Max Q Clear Time (g_c+I1), s		20.6			42.3	42.0		48.9				
Green Ext Time (p_c), s		1.8			0.0	0.1		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				84.4								
HCM 2010 LOS				F								
Notes												

HCM 2010 Signalized Intersection Summary
 5: Mission Center Road & Civita Boulevard

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	280	350	120	10	80	160	370	130	60	430	75
Future Volume (veh/h)	180	280	350	120	10	80	160	370	130	60	430	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	295	368	126	11	84	168	389	137	63	453	79
Adj No. of Lanes	1	1	1	2	1	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	541	450	181	418	346	1038	1613	712	81	681	295
Arrive On Green	0.12	0.29	0.29	0.05	0.22	0.22	0.10	0.15	0.15	0.05	0.19	0.19
Sat Flow, veh/h	1774	1863	1551	3442	1863	1541	3442	3539	1562	1774	3539	1534
Grp Volume(v), veh/h	189	295	368	126	11	84	168	389	137	63	453	79
Grp Sat Flow(s),veh/h/ln	1774	1863	1551	1721	1863	1541	1721	1770	1562	1774	1770	1534
Q Serve(g_s), s	13.1	16.7	27.6	4.5	0.6	5.6	5.6	12.1	7.2	4.4	14.8	4.1
Cycle Q Clear(g_c), s	13.1	16.7	27.6	4.5	0.6	5.6	5.6	12.1	7.2	4.4	14.8	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	541	450	181	418	346	1038	1613	712	81	681	295
V/C Ratio(X)	0.87	0.55	0.82	0.70	0.03	0.24	0.16	0.24	0.19	0.78	0.66	0.27
Avail Cap(c_a), veh/h	406	702	584	319	449	371	1038	1613	712	193	926	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	37.4	41.3	58.2	37.8	39.7	41.8	34.1	18.7	59.0	46.7	24.3
Incr Delay (d2), s/veh	4.2	2.5	11.4	4.8	0.1	0.9	0.0	0.3	0.6	5.9	5.1	2.2
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	6.7	9.0	13.3	2.3	0.3	2.5	2.7	6.0	4.1	2.3	7.7	2.4
LnGrp Delay(d),s/veh	58.1	39.9	52.7	63.0	37.9	40.7	41.9	34.4	19.3	65.0	51.8	26.5
LnGrp LOS	E	D	D	E	D	D	D	C	B	E	D	C
Approach Vol, veh/h		852			221			694			595	
Approach Delay, s/veh		49.5			53.3			33.2			49.8	
Approach LOS		D			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	10.1	62.3	11.5	41.2	43.0	29.4	19.7	33.0				
Change Period (Y+Rc), s	4.4	5.3	4.9	* 4.9	5.3	* 5.3	4.4	4.9				
Max Green Setting (Gmax), s	13.6	33.7	11.6	* 47	14.6	* 33	28.6	30.1				
Max Q Clear Time (g_c+I1), s	6.4	14.1	6.5	29.6	7.6	16.8	15.1	7.6				
Green Ext Time (p_c), s	0.0	3.6	0.1	6.7	0.2	6.0	0.2	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			45.1									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 6: Mission Center Road & Westside Drive





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	110	410	110	30	30	340	510	150	40	750	110
Future Volume (veh/h)	120	110	410	110	30	30	340	510	150	40	750	110
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	116	221	116	32	21	358	537	105	42	789	74
Adj No. of Lanes	0	1	1	1	1	0	2	3	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	147	135	384	214	124	81	319	2320	713	54	1394	608
Arrive On Green	0.16	0.16	0.16	0.12	0.12	0.12	0.09	0.46	0.46	0.01	0.13	0.13
Sat Flow, veh/h	945	870	1522	1774	1028	674	3442	5085	1563	1774	3539	1543
Grp Volume(v), veh/h	242	0	221	116	0	53	358	537	105	42	789	74
Grp Sat Flow(s),veh/h/ln	1815	0	1522	1774	0	1702	1721	1695	1563	1774	1770	1543
Q Serve(g_s), s	16.2	0.0	16.0	7.7	0.0	3.5	11.6	8.0	4.9	3.0	26.2	5.3
Cycle Q Clear(g_c), s	16.2	0.0	16.0	7.7	0.0	3.5	11.6	8.0	4.9	3.0	26.2	5.3
Prop In Lane	0.52		1.00	1.00		0.40	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	282	0	384	214	0	205	319	2320	713	54	1394	608
V/C Ratio(X)	0.86	0.00	0.58	0.54	0.00	0.26	1.12	0.23	0.15	0.78	0.57	0.12
Avail Cap(c_a), veh/h	450	0	524	369	0	354	319	2320	713	102	1394	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.92	0.92	0.92	0.91	0.91	0.91
Uniform Delay (d), s/veh	51.4	0.0	41.3	51.7	0.0	49.9	56.7	20.7	19.8	61.5	44.4	35.3
Incr Delay (d2), s/veh	5.3	0.0	0.5	2.8	0.0	0.9	85.2	0.2	0.4	7.9	1.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	6.7	3.9	0.0	1.7	9.3	3.8	2.2	1.6	13.1	2.3
LnGrp Delay(d),s/veh	56.7	0.0	41.8	54.6	0.0	50.8	141.9	20.9	20.2	69.3	45.9	35.6
LnGrp LOS	E		D	D		D	F	C	C	E	D	D
Approach Vol, veh/h		463			169			1000			905	
Approach Delay, s/veh		49.6			53.4			64.1			46.1	
Approach LOS		D			D			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	59.7		24.3	8.2	67.5		24.9				
Change Period (Y+Rc), s	4.4	10.5		4.9	4.4	10.5		9.9				
Max Green Setting (Gmax), s	11.6	26.7		31.0	7.2	31.1		26.0				
Max Q Clear Time (g_c+I1), s	13.6	28.2		18.2	5.0	10.0		9.7				
Green Ext Time (p_c), s	0.0	0.0		1.2	0.0	6.0		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			54.3									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary





















7: Seaworld Drive & Friar Roads

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations	 		 		 	 		
Traffic Volume (veh/h)	510	180	1410	760	480	1390		
Future Volume (veh/h)	510	180	1410	760	480	1390		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	531	188	1469	792	500	1448		
Adj No. of Lanes	2	1	2	1	2	2		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	639	285	1643	1005	568	2404		
Arrive On Green	0.18	0.18	0.46	0.46	0.17	0.68		
Sat Flow, veh/h	3548	1583	3632	1549	3442	3632		
Grp Volume(v), veh/h	531	188	1469	792	500	1448		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1549	1721	1770		
Q Serve(g_s), s	12.7	9.7	33.5	32.8	12.5	19.6		
Cycle Q Clear(g_c), s	12.7	9.7	33.5	32.8	12.5	19.6		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	639	285	1643	1005	568	2404		
V/C Ratio(X)	0.83	0.66	0.89	0.79	0.88	0.60		
Avail Cap(c_a), veh/h	1126	503	1661	1012	577	2464		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	34.9	33.6	21.6	11.4	36.0	7.7		
Incr Delay (d2), s/veh	1.1	1.0	6.8	4.5	13.9	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.3	4.3	17.9	20.4	7.1	9.7		
LnGrp Delay(d),s/veh	35.9	34.6	28.4	15.9	49.9	8.4		
LnGrp LOS	D	C	C	B	D	A		
Approach Vol, veh/h	719		2261			1948		
Approach Delay, s/veh	35.6		24.0			19.0		
Approach LOS	D		C			B		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.0	47.1				66.1		22.1
Change Period (Y+Rc), s	4.4	6.2				* 6.2		6.2
Max Green Setting (Gmax), s	14.8	41.4				* 61		28.0
Max Q Clear Time (g_c+I1), s	14.5	35.5				21.6		14.7
Green Ext Time (p_c), s	0.0	5.4				26.3		1.2
Intersection Summary								
HCM 2010 Ctrl Delay			23.7					
HCM 2010 LOS			C					
Notes								


























HCM 2010 Signalized Intersection Summary
 8: Napa Street & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1040	0	0	430	360	0	0	0	510	0	220
Future Volume (veh/h)	160	1040	0	0	430	360	0	0	0	510	0	220
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	168	1095	0	0	453	274	0	0	0	537	0	179
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0	2	2	2
Cap, veh/h	208	1594	0	0	965	845	0	3	0	901	0	414
Arrive On Green	0.12	0.45	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.27	0.00	0.27
Sat Flow, veh/h	1774	3632	0	0	3632	1548	0	-74510	0	3371	0	1548
Grp Volume(v), veh/h	168	1095	0	0	453	274	0	0	0	537	0	179
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1548	0	1863	0	1685	0	1548
Q Serve(g_s), s	6.7	17.9	0.0	0.0	7.7	7.2	0.0	0.0	0.0	10.1	0.0	7.0
Cycle Q Clear(g_c), s	6.7	17.9	0.0	0.0	7.7	7.2	0.0	0.0	0.0	10.1	0.0	7.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	1594	0	0	965	845	0	3	0	901	0	414
V/C Ratio(X)	0.81	0.69	0.00	0.00	0.47	0.32	0.00	0.00	0.00	0.60	0.00	0.43
Avail Cap(c_a), veh/h	332	2194	0	0	1092	901	0	693	0	2001	0	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.3	15.9	0.0	0.0	22.0	9.3	0.0	0.0	0.0	23.2	0.0	22.0
Incr Delay (d2), s/veh	3.2	1.0	0.0	0.0	0.5	0.3	0.0	0.0	0.0	1.4	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	8.9	0.0	0.0	3.8	4.9	0.0	0.0	0.0	4.9	0.0	6.4
LnGrp Delay(d),s/veh	34.5	16.8	0.0	0.0	22.6	9.7	0.0	0.0	0.0	24.5	0.0	23.6
LnGrp LOS	C	B			C	A				C		C
Approach Vol, veh/h		1263			727			0			716	
Approach Delay, s/veh		19.2			17.7			0.0			24.3	
Approach LOS		B			B						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		43.3		29.3	12.9	30.4		0.0				
Change Period (Y+Rc), s		* 11		* 9.9	4.4	* 11		4.0				
Max Green Setting (Gmax), s		* 45		* 43	13.6	* 22		27.0				
Max Q Clear Time (g_c+I1), s		19.9		12.1	8.7	9.7		0.0				
Green Ext Time (p_c), s		12.8		6.7	0.1	4.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				20.1								
HCM 2010 LOS				C								
Notes												




















HCM 2010 Signalized Intersection Summary
 9: Colusa Street & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1495	50	50	880	75	20	20	30	180	20	75
Future Volume (veh/h)	20	1495	50	50	880	75	20	20	30	180	20	75
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		1.00	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	1557	47	52	917	73	21	21	-4	188	21	47
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	1828	55	65	1789	142	229	206	377	432	120	268
Arrive On Green	0.02	0.52	0.52	0.04	0.54	0.54	0.24	0.24	0.00	0.24	0.24	0.24
Sat Flow, veh/h	1774	3506	106	1774	3316	264	659	867	1583	1358	503	1126
Grp Volume(v), veh/h	21	784	820	52	489	501	42	0	-4	188	0	68
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1810	1525	0	1583	1358	0	1630
Q Serve(g_s), s	0.9	28.6	28.8	2.2	13.2	13.2	0.0	0.0	0.0	5.9	0.0	2.5
Cycle Q Clear(g_c), s	0.9	28.6	28.8	2.2	13.2	13.2	2.5	0.0	0.0	8.4	0.0	2.5
Prop In Lane	1.00		0.06	1.00		0.15	0.50		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	34	923	960	65	955	976	435	0	377	432	0	388
V/C Ratio(X)	0.63	0.85	0.85	0.79	0.51	0.51	0.10	0.00	-0.01	0.44	0.00	0.18
Avail Cap(c_a), veh/h	128	936	974	99	955	976	705	0	656	671	0	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.6	15.4	15.5	35.9	11.0	11.0	22.3	0.0	0.0	24.8	0.0	22.7
Incr Delay (d2), s/veh	6.9	9.2	9.1	11.7	1.9	1.9	0.0	0.0	0.0	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	16.1	17.0	1.3	6.9	7.1	0.7	0.0	0.0	3.4	0.0	1.1
LnGrp Delay(d),s/veh	43.5	24.6	24.6	47.6	12.9	12.9	22.3	0.0	0.0	25.1	0.0	22.8
LnGrp LOS	D	C	C	D	B	B	C			C		C
Approach Vol, veh/h		1625			1042			38			256	
Approach Delay, s/veh		24.9			14.7			24.7			24.5	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	45.1		22.8	5.8	46.5		22.8				
Change Period (Y+Rc), s	4.4	* 6		4.9	4.4	6.0		4.9				
Max Green Setting (Gmax), s	4.2	* 40		31.1	5.4	38.2		31.1				
Max Q Clear Time (g_c+I1), s	4.2	30.8		10.4	2.9	15.2		4.5				
Green Ext Time (p_c), s	0.0	8.3		0.5	0.0	14.6		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			21.2									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 10: Via Las Cumbres & Friar Roads



















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (veh/h)	180	1090	90	90	610	260	110	420	170	105	360	120
Future Volume (veh/h)	180	1090	90	90	610	260	110	420	170	105	360	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	188	1135	52	94	635	209	115	438	115	109	375	73
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1225	56	118	1060	458	141	500	415	134	400	78
Arrive On Green	0.12	0.36	0.36	0.07	0.30	0.30	0.08	0.27	0.27	0.08	0.26	0.26
Sat Flow, veh/h	1774	3444	158	1774	3539	1530	1774	1863	1548	1774	1509	294
Grp Volume(v), veh/h	188	583	604	94	635	209	115	438	115	109	0	448
Grp Sat Flow(s),veh/h/ln	1774	1770	1832	1774	1770	1530	1774	1863	1548	1774	0	1803
Q Serve(g_s), s	12.5	38.0	38.0	6.3	18.4	13.3	7.7	27.0	7.0	7.3	0.0	29.1
Cycle Q Clear(g_c), s	12.5	38.0	38.0	6.3	18.4	13.3	7.7	27.0	7.0	7.3	0.0	29.1
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	218	629	652	118	1060	458	141	500	415	134	0	477
V/C Ratio(X)	0.86	0.93	0.93	0.79	0.60	0.46	0.82	0.88	0.28	0.81	0.00	0.94
Avail Cap(c_a), veh/h	352	669	692	241	1110	480	182	579	482	197	0	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.6	37.1	37.1	55.1	35.9	34.1	54.4	42.0	34.7	54.6	0.0	43.1
Incr Delay (d2), s/veh	11.6	18.2	17.8	11.3	0.7	0.5	19.6	12.8	0.4	14.7	0.0	19.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	21.6	22.4	3.5	9.1	5.7	4.5	15.6	3.0	4.1	0.0	17.1
LnGrp Delay(d),s/veh	63.2	55.3	55.0	66.4	36.5	34.6	74.0	54.8	35.0	69.2	0.0	62.4
LnGrp LOS	E	E	D	E	D	C	E	D	D	E		E
Approach Vol, veh/h		1375			938			668			557	
Approach Delay, s/veh		56.2			39.1			54.7			63.7	
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	13.7	53.5	15.2	37.5	20.5	46.8	14.8	37.9				
Change Period (Y+Rc), s	5.7	* 11	5.7	* 5.7	5.7	* 11	5.7	5.7				
Max Green Setting (Gmax), s	16.3	* 45	12.3	* 39	23.8	* 38	13.3	37.3				
Max Q Clear Time (g_c+I1), s	8.3	40.0	9.7	31.1	14.5	20.4	9.3	29.0				
Green Ext Time (p_c), s	0.1	2.6	0.1	0.5	0.3	3.3	0.1	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			52.6									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 11: Fashion Valley Road & Friar Roads























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1560	270	220	880	30	180	20	190	10	10	10
Future Volume (veh/h)	20	1560	270	220	880	30	180	20	190	10	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	21	1642	231	232	926	32	189	21	126	11	11	6
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	28	1649	231	254	1877	65	252	23	437	44	40	14
Arrive On Green	0.02	0.37	0.37	0.29	1.00	1.00	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1774	4490	629	1774	3485	120	732	81	1550	38	141	49
Grp Volume(v), veh/h	21	1238	635	232	470	488	210	0	126	28	0	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1729	1774	1770	1836	813	0	1550	228	0	0
Q Serve(g_s), s	1.8	54.6	55.1	18.9	0.0	0.0	0.0	0.0	9.5	0.7	0.0	0.0
Cycle Q Clear(g_c), s	1.8	54.6	55.1	18.9	0.0	0.0	39.5	0.0	9.5	40.2	0.0	0.0
Prop In Lane	1.00		0.36	1.00		0.07	0.90		1.00	0.39		0.21
Lane Grp Cap(c), veh/h	28	1245	635	254	953	988	275	0	437	98	0	0
V/C Ratio(X)	0.76	0.99	1.00	0.91	0.49	0.49	0.76	0.00	0.29	0.29	0.00	0.00
Avail Cap(c_a), veh/h	71	1245	635	254	953	988	355	0	524	182	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.93	0.93	0.93	0.59	0.00	0.59	1.00	0.00	0.00
Uniform Delay (d), s/veh	73.6	47.3	47.4	52.6	0.0	0.0	52.9	0.0	42.1	43.8	0.0	0.0
Incr Delay (d2), s/veh	14.7	24.1	35.7	31.8	1.7	1.6	3.4	0.0	0.1	0.9	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	1.0	29.6	32.6	11.5	0.5	0.5	8.8	0.0	4.1	0.9	0.0	0.0
LnGrp Delay(d),s/veh	88.2	71.4	83.1	84.3	1.7	1.6	56.3	0.0	42.2	44.7	0.0	0.0
LnGrp LOS	F	E	F	F	A	A	E		D	D		
Approach Vol, veh/h		1894			1190			336			28	
Approach Delay, s/veh		75.5			17.8			51.0			44.7	
Approach LOS		E			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	31.8	66.0		52.2	6.7	91.1		52.2				
Change Period (Y+Rc), s	* 10	* 11		* 9.9	4.4	10.3		* 9.9				
Max Green Setting (Gmax), s	* 19	* 55		* 51	6.0	68.7		* 51				
Max Q Clear Time (g_c+I1), s	20.9	57.1		42.2	3.8	2.0		41.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.4		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			50.6									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary


































12: Via De La Moda & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1820	140	340	1020	0	110	0	220	0	0	0
Future Volume (veh/h)	0	1820	140	340	1020	0	110	0	220	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.95	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			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	0	1863	0	1863			
Adj Flow Rate, veh/h	0	1857	123	347	1041	0	112	0	163			
Adj No. of Lanes	1	3	0	2	2	0	1	0	1			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.95	0.98	0.95	0.98			
Percent Heavy Veh, %	2	2	2	2	2	0	2	0	2			
Cap, veh/h	1	2060	136	1232	2895	0	208	0	186			
Arrive On Green	0.00	0.85	0.85	0.72	1.00	0.00	0.12	0.00	0.12			
Sat Flow, veh/h	1774	4857	321	3442	3632	0	1774	0	1583			
Grp Volume(v), veh/h	0	1294	686	347	1041	0	112	0	163			
Grp Sat Flow(s),veh/h/ln	1774	1695	1788	1721	1770	0	1774	0	1583			
Q Serve(g_s), s	0.0	36.7	37.6	5.4	0.0	0.0	8.9	0.0	15.2			
Cycle Q Clear(g_c), s	0.0	36.7	37.6	5.4	0.0	0.0	8.9	0.0	15.2			
Prop In Lane	1.00		0.18	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	1	1438	758	1232	2895	0	208	0	186			
V/C Ratio(X)	0.00	0.90	0.90	0.28	0.36	0.00	0.54	0.00	0.88			
Avail Cap(c_a), veh/h	47	1776	937	1232	2895	0	386	0	344			
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.56	0.56	0.96	0.96	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	0.0	9.3	9.4	14.4	0.0	0.0	62.4	0.0	65.1			
Incr Delay (d2), s/veh	0.0	5.6	10.2	0.0	0.3	0.0	0.8	0.0	5.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	16.9	19.3	2.5	0.1	0.0	4.4	0.0	6.9			
LnGrp Delay(d),s/veh	0.0	15.0	19.6	14.5	0.3	0.0	63.2	0.0	70.3			
LnGrp LOS		B	B	B	A		E		E			
Approach Vol, veh/h		1980			1388			275				
Approach Delay, s/veh		16.6			3.9			67.4				
Approach LOS		B			A			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	59.0	69.0			0.0	128.0		22.0				
Change Period (Y+Rc), s	5.3	* 5.4			4.4	5.3		4.4				
Max Green Setting (Gmax), s	24.6	* 79			4.0	99.3		32.6				
Max Q Clear Time (g_c+I1), s	7.4	39.6			0.0	2.0		17.2				
Green Ext Time (p_c), s	0.6	24.1			0.0	12.2		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				15.9								
HCM 2010 LOS				B								
Notes												

HCM 2010 Signalized Intersection Summary
 13: Avenida De Las Tiendas & Friar Roads













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1900	110	680	1080	20	70	5	230	30	10	10
Future Volume (veh/h)	30	1900	110	680	1080	20	70	5	230	30	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.94		0.94	0.95		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	32	2000	111	716	1137	21	74	0	230	32	11	8
Adj No. of Lanes	1	3	0	2	3	0	1	0	2	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	2885	159	765	4034	74	157	0	278	150	91	66
Arrive On Green	0.05	1.00	1.00	0.22	0.79	0.79	0.09	0.00	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1774	4925	272	3442	5137	95	1306	0	2964	1093	973	708
Grp Volume(v), veh/h	32	1374	737	716	750	408	74	0	230	32	0	19
Grp Sat Flow(s),veh/h/ln	1774	1695	1807	1721	1695	1842	1306	0	1482	1093	0	1681
Q Serve(g_s), s	2.7	0.0	0.0	30.6	9.2	9.2	8.3	0.0	11.4	4.1	0.0	1.6
Cycle Q Clear(g_c), s	2.7	0.0	0.0	30.6	9.2	9.2	9.8	0.0	11.4	4.1	0.0	1.6
Prop In Lane	1.00		0.15	1.00		0.05	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	41	1986	1059	765	2662	1446	157	0	278	150	0	158
V/C Ratio(X)	0.78	0.69	0.70	0.94	0.28	0.28	0.47	0.00	0.83	0.21	0.00	0.12
Avail Cap(c_a), veh/h	83	1986	1059	844	2662	1446	297	0	595	267	0	337
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	0.73	0.73	0.73	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.2	0.0	0.0	57.3	4.4	4.4	66.8	0.0	66.8	63.5	0.0	62.3
Incr Delay (d2), s/veh	8.8	1.5	2.8	12.5	0.2	0.4	0.8	0.0	2.4	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.4	0.8	15.9	4.3	4.8	3.0	0.0	4.8	1.3	0.0	0.7
LnGrp Delay(d),s/veh	79.9	1.5	2.8	69.8	4.6	4.8	67.6	0.0	69.2	63.7	0.0	62.4
LnGrp LOS	E	A	A	E	A	A	E		E	E		E
Approach Vol, veh/h		2143			1874			304				51
Approach Delay, s/veh		3.1			29.5			68.8				63.2
Approach LOS		A			C			E				E
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	37.8	93.3		19.0	7.8	123.2		19.0				
Change Period (Y+Rc), s	4.4	5.4		4.9	4.4	* 5.4		4.9				
Max Green Setting (Gmax), s	36.8	68.4		30.1	7.0	* 98		30.1				
Max Q Clear Time (g_c+I1), s	32.6	2.0		6.1	4.7	11.2		13.4				
Green Ext Time (p_c), s	0.7	35.5		0.1	0.0	12.8		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			19.7									
HCM 2010 LOS			B									
Notes												

HCM 2010 Signalized Intersection Summary
 14: SR-163 SB Ramps/Ulric Street & Friar Roads
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  	 	 		 	 		
Traffic Volume (veh/h)	220	1190	750	480	1180	280	410	60	950	480	30	190
Future Volume (veh/h)	220	1190	750	480	1180	280	410	60	950	480	30	190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	224	1214	561	490	1204	194	418	61	637	490	31	117
Adj No. of Lanes	2	3	1	2	3	2	2	1	2	2	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1699	886	384	1894	1536	796	431	938	636	62	232
Arrive On Green	0.08	0.33	0.33	0.11	0.37	0.37	0.23	0.23	0.23	0.18	0.18	0.18
Sat Flow, veh/h	3442	5085	1555	3442	5085	2742	3442	1863	2714	3442	333	1258
Grp Volume(v), veh/h	224	1214	561	490	1204	194	418	61	637	490	0	148
Grp Sat Flow(s),veh/h/ln	1721	1695	1555	1721	1695	1371	1721	1863	1357	1721	0	1591
Q Serve(g_s), s	8.4	27.1	31.9	14.5	25.3	4.4	13.8	3.4	26.2	17.6	0.0	10.9
Cycle Q Clear(g_c), s	8.4	27.1	31.9	14.5	25.3	4.4	13.8	3.4	26.2	17.6	0.0	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.79
Lane Grp Cap(c), veh/h	265	1699	886	384	1894	1536	796	431	938	636	0	294
V/C Ratio(X)	0.85	0.71	0.63	1.28	0.64	0.13	0.53	0.14	0.68	0.77	0.00	0.50
Avail Cap(c_a), veh/h	265	1699	886	384	1894	1536	874	473	1000	874	0	404
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)	0.56	0.56	0.56	0.72	0.72	0.72	1.00	1.00	1.00	0.74	0.00	0.74
Uniform Delay (d), s/veh	59.2	37.9	19.2	57.8	33.5	13.7	43.7	39.7	36.7	50.4	0.0	47.6
Incr Delay (d2), s/veh	13.3	1.5	1.9	138.5	0.5	0.0	0.2	0.1	1.3	1.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	12.9	20.6	14.3	11.9	2.4	6.6	1.8	9.9	8.5	0.0	4.8
LnGrp Delay(d),s/veh	72.6	39.3	21.2	196.2	34.1	13.7	43.9	39.8	38.0	51.7	0.0	48.0
LnGrp LOS	E	D	C	F	C	B	D	D	D	D		D
Approach Vol, veh/h		1999			1888			1116			638	
Approach Delay, s/veh		38.0			74.1			40.3			50.9	
Approach LOS		D			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.0	47.9		28.5	14.0	52.9		34.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	14.5	31.5		33.0	10.0	36.5		33.0				
Max Q Clear Time (g_c+1), s	16.5	33.9		19.6	10.4	27.3		28.2				
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	5.7		1.4				
Intersection Summary												
HCM 2010 Ctrl Delay			52.0									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary




















15: Friar Roads & SR-163 NB Ramps

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	660	1960	1150	990	720	790		
Future Volume (veh/h)	660	1960	1150	990	720	790		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	673	2000	1173	653	735	500		
Adj No. of Lanes	2	4	4	2	3	2		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	931	4250	2003	843	1018	567		
Arrive On Green	0.27	0.66	0.63	0.63	0.20	0.20		
Sat Flow, veh/h	3442	6669	6669	2698	5003	2787		
Grp Volume(v), veh/h	673	2000	1173	653	735	500		
Grp Sat Flow(s),veh/h/ln	1721	1602	1602	1349	1668	1393		
Q Serve(g_s), s	13.3	11.5	8.1	13.2	10.3	13.1		
Cycle Q Clear(g_c), s	13.3	11.5	8.1	13.2	10.3	13.1		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	931	4250	2003	843	1018	567		
V/C Ratio(X)	0.72	0.47	0.59	0.77	0.72	0.88		
Avail Cap(c_a), veh/h	931	4250	2649	1115	1067	594		
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00		
Upstream Filter(I)	0.40	0.40	0.63	0.63	1.00	1.00		
Uniform Delay (d), s/veh	24.8	6.2	11.2	12.1	27.9	29.0		
Incr Delay (d2), s/veh	1.0	0.1	0.8	4.4	2.3	14.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.4	5.0	3.6	5.1	4.9	10.4		
LnGrp Delay(d),s/veh	25.8	6.3	12.0	16.6	30.2	43.1		
LnGrp LOS	C	A	B	B	C	D		
Approach Vol, veh/h		2673	1826		1235			
Approach Delay, s/veh		11.2	13.6		35.4			
Approach LOS		B	B		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		55.7		19.3	26.3	29.4		
Change Period (Y+Rc), s		6.0		4.0	6.0	* 6		
Max Green Setting (Gmax), s		49.0		16.0	13.0	* 31		
Max Q Clear Time (g_c+I1), s		13.5		15.1	15.3	15.2		
Green Ext Time (p_c), s		12.9		0.2	0.0	6.5		
Intersection Summary								
HCM 2010 Ctrl Delay			17.2					
HCM 2010 LOS			B					
Notes								





















HCM 2010 Signalized Intersection Summary
 16: Frazee Road & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	1760	550	320	1250	350	380	130	270	190	230	510
Future Volume (veh/h)	370	1760	550	320	1250	350	380	130	270	190	230	510
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	378	1796	337	327	1276	296	388	133	256	194	235	296
Adj No. of Lanes	2	4	2	2	3	1	2	2	0	2	1	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	631	2621	1112	371	1454	443	439	388	338	238	300	432
Arrive On Green	0.37	0.82	0.82	0.11	0.29	0.29	0.13	0.22	0.22	0.07	0.16	0.16
Sat Flow, veh/h	3442	6408	2719	3442	5085	1550	3442	1770	1540	3442	1863	2683
Grp Volume(v), veh/h	378	1796	337	327	1276	296	388	133	256	194	235	296
Grp Sat Flow(s),veh/h/ln	1721	1602	1359	1721	1695	1550	1721	1770	1540	1721	1863	1341
Q Serve(g_s), s	13.4	17.4	4.5	14.1	35.9	19.1	16.6	9.5	23.3	8.3	18.2	9.7
Cycle Q Clear(g_c), s	13.4	17.4	4.5	14.1	35.9	19.1	16.6	9.5	23.3	8.3	18.2	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	631	2621	1112	371	1454	443	439	388	338	238	300	432
V/C Ratio(X)	0.60	0.69	0.30	0.88	0.88	0.67	0.88	0.34	0.76	0.81	0.78	0.69
Avail Cap(c_a), veh/h	631	2621	1112	404	1492	455	567	519	452	266	446	642
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	0.70	0.70	0.70	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	9.7	8.5	66.0	51.0	26.9	64.3	49.4	54.8	68.9	60.4	22.8
Incr Delay (d2), s/veh	0.9	1.2	0.6	17.7	7.8	7.8	8.3	0.1	2.3	14.6	3.8	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	6.4	7.4	1.7	7.6	17.8	9.7	8.4	4.7	10.2	4.4	9.6	5.2
LnGrp Delay(d),s/veh	43.9	10.9	9.1	83.6	58.8	34.7	72.6	49.6	57.2	83.5	64.2	24.0
LnGrp LOS	D	B	A	F	E	C	E	D	E	F	E	C
Approach Vol, veh/h		2511			1899			777			725	
Approach Delay, s/veh		15.6			59.3			63.6			52.9	
Approach LOS		B			E			E			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	20.6	71.9	23.5	34.0	38.0	54.4	14.8	42.8				
Change Period (Y+Rc), s	4.4	10.5	4.4	* 9.9	10.5	* 12	4.4	* 9.9				
Max Green Setting (Gmax), s	17.6	47.6	24.7	* 36	20.2	* 44	11.6	* 44				
Max Q Clear Time (g_c+I1), s	16.1	19.4	18.6	20.2	15.4	37.9	10.3	25.3				
Green Ext Time (p_c), s	0.1	21.3	0.5	1.8	0.3	5.0	0.1	1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			40.5									
HCM 2010 LOS			D									
Notes												



















HCM 2010 Signalized Intersection Summary
 17: Mission Center Road & Friar WB

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	370	10	240	270	760	0	0	940	330
Future Volume (veh/h)	0	0	0	370	10	240	270	760	0	0	940	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				397	0	21	284	800	0	0	989	147
Adj No. of Lanes				2	0	1	2	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				534	0	229	899	2489	0	0	1278	556
Arrive On Green				0.15	0.00	0.15	0.26	0.70	0.00	0.00	0.36	0.36
Sat Flow, veh/h				3548	0	1520	3442	3632	0	0	3632	1540
Grp Volume(v), veh/h				397	0	21	284	800	0	0	989	147
Grp Sat Flow(s),veh/h/ln				1774	0	1520	1721	1770	0	0	1770	1540
Q Serve(g_s), s				14.6	0.0	1.6	9.0	11.8	0.0	0.0	33.7	9.2
Cycle Q Clear(g_c), s				14.6	0.0	1.6	9.0	11.8	0.0	0.0	33.7	9.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				534	0	229	899	2489	0	0	1278	556
V/C Ratio(X)				0.74	0.00	0.09	0.32	0.32	0.00	0.00	0.77	0.26
Avail Cap(c_a), veh/h				809	0	347	899	2489	0	0	1587	691
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	0.00	1.00	0.76	0.76	0.00	0.00	0.62	0.62
Uniform Delay (d), s/veh				55.3	0.0	49.8	40.5	7.7	0.0	0.0	38.5	30.7
Incr Delay (d2), s/veh				2.1	0.0	0.2	0.2	0.3	0.0	0.0	2.9	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.3	0.0	0.7	4.3	5.8	0.0	0.0	17.0	4.0
LnGrp Delay(d),s/veh				57.3	0.0	49.9	40.6	8.0	0.0	0.0	41.4	31.4
LnGrp LOS				E		D	D	A			D	C
Approach Vol, veh/h					418			1084			1136	
Approach Delay, s/veh					57.0			16.5			40.1	
Approach LOS					E			B			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		105.6			45.5	60.1		30.4				
Change Period (Y+Rc), s		10.0			10.0	* 11		9.9				
Max Green Setting (Gmax), s		85.0			18.6	* 61		31.0				
Max Q Clear Time (g_c+11), s		13.8			11.0	35.7		16.6				
Green Ext Time (p_c), s		12.8			0.6	13.4		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				33.1								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary
 18: Mission Center Road & Friar EB




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	10	440	0	0	0	0	740	480	590	720	0
Future Volume (veh/h)	290	10	440	0	0	0	0	740	480	590	720	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98				1.00		0.97	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
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	313	0	463				0	779	505	621	758	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1025	0	448				0	1104	478	683	1931	0
Arrive On Green	0.29	0.00	0.29				0.00	0.31	0.31	0.20	0.55	0.00
Sat Flow, veh/h	3548	0	1550				0	3632	1533	3442	3632	0
Grp Volume(v), veh/h	313	0	463				0	779	505	621	758	0
Grp Sat Flow(s),veh/h/ln	1774	0	1550				0	1770	1533	1721	1770	0
Q Serve(g_s), s	8.6	0.0	36.1				0.0	24.3	39.0	22.1	15.5	0.0
Cycle Q Clear(g_c), s	8.6	0.0	36.1				0.0	24.3	39.0	22.1	15.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1025	0	448				0	1104	478	683	1931	0
V/C Ratio(X)	0.31	0.00	1.03				0.00	0.71	1.06	0.91	0.39	0.00
Avail Cap(c_a), veh/h	1025	0	448				0	1104	478	815	1931	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	0.82	0.82	0.80	0.80	0.00
Uniform Delay (d), s/veh	34.7	0.0	44.5				0.0	37.9	43.0	49.0	16.4	0.0
Incr Delay (d2), s/veh	0.2	0.0	51.6				0.0	3.1	53.0	9.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	21.8				0.0	12.3	23.5	11.4	7.7	0.0
LnGrp Delay(d),s/veh	34.8	0.0	96.0				0.0	41.1	96.0	58.7	16.9	0.0
LnGrp LOS	C		F					D	F	E	B	
Approach Vol, veh/h		776						1284			1379	
Approach Delay, s/veh		71.3						62.7			35.7	
Approach LOS		E						E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	29.2	49.8		46.0		79.0						
Change Period (Y+Rc), s	4.4	* 11		* 9.9		10.8						
Max Green Setting (Gmax), s	29.6	* 35		* 36		68.2						
Max Q Clear Time (g_c+I1), s	24.1	41.0		38.1		17.5						
Green Ext Time (p_c), s	0.7	0.0		0.0		7.1						
Intersection Summary												
HCM 2010 Ctrl Delay			53.8									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 19: Qualcomm Way & WB Friar





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	430	10	450	640	1150	0	0	890	290
Future Volume (veh/h)	0	0	0	430	10	450	640	1150	0	0	890	290
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.96
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1900	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				439	10	173	653	1173	0	0	908	112
Adj No. of Lanes				1	1	0	2	2	0	0	3	1
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.95	0.95	0.98	0.98
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				469	23	390	846	2115	0	0	1441	433
Arrive On Green				0.26	0.26	0.26	0.49	1.00	0.00	0.00	0.28	0.28
Sat Flow, veh/h				1774	85	1477	3442	3632	0	0	5253	1527
Grp Volume(v), veh/h				439	0	183	653	1173	0	0	908	112
Grp Sat Flow(s),veh/h/ln				1774	0	1562	1721	1770	0	0	1695	1527
Q Serve(g_s), s				35.1	0.0	14.2	22.5	0.0	0.0	0.0	22.6	8.2
Cycle Q Clear(g_c), s				35.1	0.0	14.2	22.5	0.0	0.0	0.0	22.6	8.2
Prop In Lane				1.00		0.95	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				469	0	413	846	2115	0	0	1441	433
V/C Ratio(X)				0.94	0.00	0.44	0.77	0.55	0.00	0.00	0.63	0.26
Avail Cap(c_a), veh/h				613	0	540	846	2115	0	0	1441	433
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.40	0.40	0.00	0.00	0.70	0.70
Uniform Delay (d), s/veh				52.1	0.0	44.4	33.5	0.0	0.0	0.0	45.3	40.2
Incr Delay (d2), s/veh				16.9	0.0	0.3	1.9	0.4	0.0	0.0	1.5	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				19.4	0.0	6.1	10.8	0.1	0.0	0.0	10.8	3.6
LnGrp Delay(d),s/veh				69.0	0.0	44.7	35.4	0.4	0.0	0.0	46.8	41.2
LnGrp LOS				E		D	D	A			D	D
Approach Vol, veh/h					622			1826			1020	
Approach Delay, s/veh					61.9			12.9			46.2	
Approach LOS					E			B			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		96.8			45.8	51.0		48.2				
Change Period (Y+Rc), s		* 10			* 10	* 9.9		9.9				
Max Green Setting (Gmax), s		* 75			* 29	* 41		50.1				
Max Q Clear Time (g_c+1), s		2.0			24.5	24.6		37.1				
Green Ext Time (p_c), s		12.8			1.3	4.8		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay				31.5								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary

























20: Qualcomm Way & EB Friar

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	585	10	320	0	0	0	0	1205	930	270	1050	0
Future Volume (veh/h)	585	10	320	0	0	0	0	1205	930	270	1050	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.98	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
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	624	0	253				0	1268	821	284	1105	0
Adj No. of Lanes	2	0	1				0	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	702	0	304				0	1940	852	294	2351	0
Arrive On Green	0.20	0.00	0.20				0.00	0.55	0.55	0.17	1.00	0.00
Sat Flow, veh/h	3548	0	1535				0	3632	1554	3442	3632	0
Grp Volume(v), veh/h	624	0	253				0	1268	821	284	1105	0
Grp Sat Flow(s),veh/h/ln	1774	0	1535				0	1770	1554	1721	1770	0
Q Serve(g_s), s	24.8	0.0	22.9				0.0	36.6	73.3	11.9	0.0	0.0
Cycle Q Clear(g_c), s	24.8	0.0	22.9				0.0	36.6	73.3	11.9	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	702	0	304				0	1940	852	294	2351	0
V/C Ratio(X)	0.89	0.00	0.83				0.00	0.65	0.96	0.96	0.47	0.00
Avail Cap(c_a), veh/h	1162	0	503				0	1940	852	294	2351	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	0.59	0.59	0.73	0.73	0.00
Uniform Delay (d), s/veh	56.6	0.0	55.8				0.0	23.1	31.4	59.9	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	2.4				0.0	1.0	16.4	35.3	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	0.0	10.0				0.0	18.1	35.1	7.1	0.2	0.0
LnGrp Delay(d),s/veh	59.5	0.0	58.3				0.0	24.1	47.7	95.2	0.5	0.0
LnGrp LOS	E		E					C	D	F	A	
Approach Vol, veh/h		877						2089			1389	
Approach Delay, s/veh		59.1						33.4			19.9	
Approach LOS		E						C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.8	89.6		38.6		106.4						
Change Period (Y+Rc), s	4.4	* 10		* 9.9		* 10						
Max Green Setting (Gmax), s	12.4	* 61		* 48		* 78						
Max Q Clear Time (g_c+I1), s	13.9	75.3		26.8		2.0						
Green Ext Time (p_c), s	0.0	0.0		1.7		5.5						
Intersection Summary												
HCM 2010 Ctrl Delay			34.2									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 21: River Run Drive & Friar Roads

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	2515	160	180	1800	60	150	10	180	190	20	80
Future Volume (veh/h)	40	2515	160	180	1800	60	150	10	180	190	20	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	42	2647	126	189	1895	42	158	11	126	200	21	63
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	2577	786	186	2975	66	382	23	401	193	15	45
Arrive On Green	0.03	0.51	0.51	0.11	0.58	0.58	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1774	5085	1552	1774	5117	113	1251	87	1547	546	57	172
Grp Volume(v), veh/h	42	2647	126	189	1255	682	169	0	126	284	0	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1552	1774	1695	1840	1338	0	1547	776	0	0
Q Serve(g_s), s	2.8	60.8	5.2	12.6	29.5	29.6	0.0	0.0	7.9	18.2	0.0	0.0
Cycle Q Clear(g_c), s	2.8	60.8	5.2	12.6	29.5	29.6	12.9	0.0	7.9	31.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.06	0.93		1.00	0.70		0.22
Lane Grp Cap(c), veh/h	54	2577	786	186	1971	1070	405	0	401	252	0	0
V/C Ratio(X)	0.78	1.03	0.16	1.01	0.64	0.64	0.42	0.00	0.31	1.13	0.00	0.00
Avail Cap(c_a), veh/h	105	2577	786	186	1971	1070	405	0	401	252	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	57.8	29.6	15.9	53.7	16.7	16.7	37.7	0.0	35.9	52.7	0.0	0.0
Incr Delay (d2), s/veh	8.8	25.1	0.4	69.8	1.6	2.9	0.5	0.0	0.3	94.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	34.2	2.3	9.8	14.2	15.8	4.8	0.0	3.4	15.0	0.0	0.0
LnGrp Delay(d),s/veh	66.6	54.7	16.3	123.6	18.3	19.6	38.2	0.0	36.2	147.7	0.0	0.0
LnGrp LOS	E	F	B	F	B	B	D		D	F		
Approach Vol, veh/h		2815			2126			295			284	
Approach Delay, s/veh		53.2			28.1			37.3			147.7	
Approach LOS		D			C			D			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.0	67.0		36.0	8.0	76.0		36.0				
Change Period (Y+Rc), s	4.4	6.2		4.9	4.4	6.2		4.9				
Max Green Setting (Gmax), s	12.6	60.8		31.1	7.1	66.3		31.1				
Max Q Clear Time (g_c+I1), s	14.6	62.8		33.1	4.8	31.6		14.9				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	32.5		1.1				
Intersection Summary												
HCM 2010 Ctrl Delay				47.5								
HCM 2010 LOS				D								

HCM 2010 Signalized Intersection Summary
 22: Fenton Parkway & Friar Roads



















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	2335	410	320	1650	80	320	70	435	50	20	70
Future Volume (veh/h)	140	2335	410	320	1650	80	320	70	435	50	20	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	143	2383	296	327	1684	51	327	71	322	51	43	35
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	2	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	2327	862	976	3680	1172	320	420	348	81	341	362
Arrive On Green	0.05	0.46	0.46	0.28	0.72	0.72	0.09	0.23	0.23	0.02	0.18	0.18
Sat Flow, veh/h	3442	5085	1563	3442	5085	1570	3442	1863	1541	3548	1863	1531
Grp Volume(v), veh/h	143	2383	296	327	1684	51	327	71	322	51	43	35
Grp Sat Flow(s),veh/h/ln	1721	1695	1563	1721	1695	1570	1721	1863	1541	1774	1863	1531
Q Serve(g_s), s	8.2	91.5	10.9	15.0	27.4	0.5	18.6	6.1	40.9	2.8	3.9	3.6
Cycle Q Clear(g_c), s	8.2	91.5	10.9	15.0	27.4	0.5	18.6	6.1	40.9	2.8	3.9	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	177	2327	862	976	3680	1172	320	420	348	81	341	362
V/C Ratio(X)	0.81	1.02	0.34	0.34	0.46	0.04	1.02	0.17	0.93	0.63	0.13	0.10
Avail Cap(c_a), veh/h	241	2327	862	976	3680	1172	320	479	396	163	391	403
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)	0.13	0.13	0.13	0.91	0.91	0.91	0.61	0.61	0.61	1.00	1.00	1.00
Uniform Delay (d), s/veh	93.9	54.2	20.8	56.7	11.4	8.4	90.7	62.3	75.8	96.9	68.3	60.0
Incr Delay (d2), s/veh	1.3	14.1	0.1	0.1	0.4	0.1	44.7	0.3	20.4	2.9	0.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	45.9	6.8	7.2	12.9	0.8	10.8	3.2	19.4	1.4	2.1	1.6
LnGrp Delay(d),s/veh	95.2	68.4	21.0	56.8	11.8	8.4	135.5	62.6	96.2	99.8	69.1	60.5
LnGrp LOS	F	F	C	E	B	A	F	E	F	F	E	E
Approach Vol, veh/h		2822			2062			720			129	
Approach Delay, s/veh		64.8			18.9			110.7			78.9	
Approach LOS		E			B			F			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	68.4	102.7	23.0	46.5	14.7	156.4	14.5	55.0				
Change Period (Y+Rc), s	11.2	* 11	4.4	* 9.9	4.4	11.2	* 9.9	* 9.9				
Max Green Setting (Gmax), s	18.0	* 92	18.6	* 42	14.0	95.5	* 9.2	* 51				
Max Q Clear Time (g_c+I1), s	17.0	93.5	20.6	5.9	10.2	29.4	4.8	42.9				
Green Ext Time (p_c), s	0.1	0.0	0.0	1.1	0.1	49.1	0.0	2.2				
Intersection Summary												
HCM 2010 Ctrl Delay			54.3									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary




















23: Northside Drive & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	2210	350	520	1130	150	250	60	760	100	20	80
Future Volume (veh/h)	170	2210	350	520	1130	150	250	60	760	100	20	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	2302	271	542	1177	114	260	62	480	104	21	-42
Adj No. of Lanes	2	3	1	2	3	1	2	1	1	2	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	2136	656	905	3198	1035	506	267	633	106	50	42
Arrive On Green	0.06	0.42	0.42	0.26	0.63	0.63	0.15	0.14	0.14	0.03	0.03	0.00
Sat Flow, veh/h	3442	5085	1561	3442	5085	1568	3442	1863	1517	3442	1863	1583
Grp Volume(v), veh/h	177	2302	271	542	1177	114	260	62	480	104	21	-42
Grp Sat Flow(s),veh/h/ln	1721	1695	1561	1721	1695	1568	1721	1863	1517	1721	1863	1583
Q Serve(g_s), s	7.6	63.0	18.3	20.7	16.8	1.1	10.5	4.4	0.0	4.5	1.7	0.0
Cycle Q Clear(g_c), s	7.6	63.0	18.3	20.7	16.8	1.1	10.5	4.4	0.0	4.5	1.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	2136	656	905	3198	1035	506	267	633	106	50	42
V/C Ratio(X)	0.80	1.08	0.41	0.60	0.37	0.11	0.51	0.23	0.76	0.99	0.42	-0.99
Avail Cap(c_a), veh/h	301	2136	656	905	3198	1035	506	484	811	106	299	254
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)	0.25	0.25	0.25	1.00	1.00	1.00	0.71	0.71	0.71	1.00	1.00	0.00
Uniform Delay (d), s/veh	69.2	43.5	30.5	48.4	13.4	3.2	59.0	57.0	38.0	72.7	71.9	0.0
Incr Delay (d2), s/veh	1.9	37.7	0.5	0.8	0.3	0.2	0.3	0.9	4.2	82.6	24.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	36.9	8.0	10.0	7.9	0.9	5.0	2.3	17.5	3.4	1.2	0.0
LnGrp Delay(d),s/veh	71.0	81.2	31.0	49.1	13.8	3.4	59.3	57.9	42.2	155.2	96.1	0.0
LnGrp LOS	E	F	C	D	B	A	E	E	D	F	F	
Approach Vol, veh/h		2750			1833			802			83	
Approach Delay, s/veh		75.6			23.6			49.0			218.8	
Approach LOS		E			C			D			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	45.6	69.0	26.5	8.9	14.1	100.5	9.0	26.4				
Change Period (Y+Rc), s	6.2	* 6	4.4	4.9	4.4	6.2	4.4	4.9				
Max Green Setting (Gmax), s	23.7	* 63	19.5	24.1	13.1	73.4	4.6	39.0				
Max Q Clear Time (g_c+I1), s	22.7	65.0	12.5	3.7	9.6	18.8	6.5	6.4				
Green Ext Time (p_c), s	0.3	0.0	0.3	0.2	0.1	24.7	0.0	6.8				
Intersection Summary												
HCM 2010 Ctrl Delay			56.4									
HCM 2010 LOS			E									
Notes												






















HCM 2010 Signalized Intersection Summary
 24: MissioN Village Drive & Friar Road WB

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	870	10	280	510	420	0	0	900	520
Future Volume (veh/h)	0	0	0	870	10	280	510	420	0	0	900	520
Number				3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				916	11	0	537	442	0	0	947	326
Adj No. of Lanes				0	1	1	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				703	8	635	417	1809	0	0	839	359
Arrive On Green				0.40	0.40	0.00	0.23	0.51	0.00	0.00	0.24	0.24
Sat Flow, veh/h				1754	21	1583	1774	3632	0	0	3632	1517
Grp Volume(v), veh/h				927	0	0	537	442	0	0	947	326
Grp Sat Flow(s),veh/h/ln				1775	0	1583	1774	1770	0	0	1770	1517
Q Serve(g_s), s				54.1	0.0	0.0	31.7	9.4	0.0	0.0	32.0	28.2
Cycle Q Clear(g_c), s				54.1	0.0	0.0	31.7	9.4	0.0	0.0	32.0	28.2
Prop In Lane				0.99		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				711	0	635	417	1809	0	0	839	359
V/C Ratio(X)				1.30	0.00	0.00	1.29	0.24	0.00	0.00	1.13	0.91
Avail Cap(c_a), veh/h				711	0	635	417	1809	0	0	839	359
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				40.5	0.0	0.0	51.6	18.4	0.0	0.0	51.5	50.1
Incr Delay (d2), s/veh				146.6	0.0	0.0	147.1	0.1	0.0	0.0	72.9	26.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				55.4	0.0	0.0	32.5	4.6	0.0	0.0	24.1	14.4
LnGrp Delay(d),s/veh				187.0	0.0	0.0	198.8	18.5	0.0	0.0	124.4	76.1
LnGrp LOS				F			F	B			F	E
Approach Vol, veh/h					927			979			1273	
Approach Delay, s/veh					187.0			117.4			112.0	
Approach LOS					F			F			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	37.0	39.0				76.0		59.0				
Change Period (Y+Rc), s	5.3	7.0				7.0		4.9				
Max Green Setting (Gmax), s	31.7	32.0				69.0		54.1				
Max Q Clear Time (g_c+I1), s	33.7	34.0				11.4		56.1				
Green Ext Time (p_c), s	0.0	0.0				4.4		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay					135.6							
HCM 2010 LOS					F							

HCM 2010 Signalized Intersection Summary
 25: MissioN Village Drive & Friar Road eb























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	10	340	0	0	0	0	580	620	460	1310	0
Future Volume (veh/h)	350	10	340	0	0	0	0	580	620	460	1310	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.97	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
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	368	11	358				0	611	421	484	1379	0
Adj No. of Lanes	0	1	1				0	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	356	11	317				0	575	473	639	1274	0
Arrive On Green	0.21	0.21	0.21				0.00	0.31	0.31	0.36	0.36	0.00
Sat Flow, veh/h	1725	52	1537				0	1863	1532	1774	3632	0
Grp Volume(v), veh/h	379	0	358				0	611	421	484	1379	0
Grp Sat Flow(s),veh/h/ln	1776	0	1537				0	1863	1532	1774	1770	0
Q Serve(g_s), s	26.8	0.0	26.8				0.0	40.1	34.1	31.2	46.8	0.0
Cycle Q Clear(g_c), s	26.8	0.0	26.8				0.0	40.1	34.1	31.2	46.8	0.0
Prop In Lane	0.97		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	366	0	317				0	575	473	639	1274	0
V/C Ratio(X)	1.03	0.00	1.13				0.00	1.06	0.89	0.76	1.08	0.00
Avail Cap(c_a), veh/h	366	0	317				0	575	473	639	1274	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.6	0.0	51.6				0.0	45.0	42.9	36.6	41.6	0.0
Incr Delay (d2), s/veh	56.3	0.0	90.3				0.0	55.5	21.6	5.2	50.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	0.0	19.3				0.0	29.5	17.2	16.3	31.8	0.0
LnGrp Delay(d),s/veh	107.9	0.0	141.9				0.0	100.5	64.5	41.8	92.2	0.0
LnGrp LOS	F		F					F	E	D	F	
Approach Vol, veh/h		737						1032			1863	
Approach Delay, s/veh		124.4						85.8			79.1	
Approach LOS		F						F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		45.0		32.0		53.0						
Change Period (Y+Rc), s		4.9		5.2		6.2						
Max Green Setting (Gmax), s		40.1		26.8		46.8						
Max Q Clear Time (g_c+I1), s		42.1		28.8		48.8						
Green Ext Time (p_c), s		0.0		0.0		0.0						
Intersection Summary												
HCM 2010 Ctrl Delay			90.2									
HCM 2010 LOS			F									

HCM 2010 Signalized Intersection Summary
 26: I-15 SB Ramps & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	570	2070	840	350	1720	450	0	0	0	1160	0	970
Future Volume (veh/h)	570	2070	840	350	1720	450	0	0	0	1160	0	970
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863				1863	1863	1863
Adj Flow Rate, veh/h	582	2112	551	357	1755	0				1184	0	837
Adj No. of Lanes	1	3	1	1	3	1				3	0	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2				2	2	2
Cap, veh/h	478	2254	686	705	3004	935				1277	0	1593
Arrive On Green	0.27	0.44	0.44	0.40	0.59	0.00				0.24	0.00	0.24
Sat Flow, veh/h	1774	5085	1548	1774	5085	1583				5322	0	3087
Grp Volume(v), veh/h	582	2112	551	357	1755	0				1184	0	837
Grp Sat Flow(s),veh/h/ln	1774	1695	1548	1774	1695	1583				1774	0	1544
Q Serve(g_s), s	32.3	47.5	36.9	18.2	25.9	0.0				26.1	0.0	21.9
Cycle Q Clear(g_c), s	32.3	47.5	36.9	18.2	25.9	0.0				26.1	0.0	21.9
Prop In Lane	1.00		1.00	1.00		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	478	2254	686	705	3004	935				1277	0	1593
V/C Ratio(X)	1.22	0.94	0.80	0.51	0.58	0.00				0.93	0.00	0.53
Avail Cap(c_a), veh/h	478	2288	696	705	3004	935				1326	0	1622
HCM Platoon Ratio	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	0.28	0.28	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	43.8	31.8	28.9	27.3	15.4	0.0				44.6	0.0	19.8
Incr Delay (d2), s/veh	116.3	9.0	9.7	0.1	0.2	0.0				10.8	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.2	24.0	17.6	8.9	12.1	0.0				14.1	0.0	20.7
LnGrp Delay(d),s/veh	160.1	40.8	38.5	27.3	15.6	0.0				55.4	0.0	20.0
LnGrp LOS	F	D	D	C	B					E		B
Approach Vol, veh/h		3245			2112						2021	
Approach Delay, s/veh		61.8			17.6						40.7	
Approach LOS		E			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6						
Phs Duration (G+Y+Rc), s	55.6	60.2		33.9	37.0	78.8						
Change Period (Y+Rc), s	7.0	* 7		5.1	* 4.7	7.0						
Max Green Setting (Gmax), s	19.8	* 54		29.9	* 32	41.0						
Max Q Clear Time (g_c+I1), s	20.2	49.5		28.1	34.3	27.9						
Green Ext Time (p_c), s	0.0	3.7		0.7	0.0	6.6						
Intersection Summary												
HCM 2010 Ctrl Delay			43.4									
HCM 2010 LOS			D									
Notes												







HCM 2010 Signalized Intersection Summary

27: I-15 NB Ramps & Friar Roads












												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	770	2460	0	0	1360	800	0	0	1030	0	0	1160
Future Volume (veh/h)	770	2460	0	0	1360	800	0	0	1030	0	0	1160
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	0	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	786	2510	0	0	1388	0	0	0	0	0	0	0
Adj No. of Lanes	1	3	0	0	3	1	0	1	0	0	1	0
Peak Hour Factor	0.98	0.98	0.95	0.95	0.98	0.98	0.95	0.98	0.98	0.95	0.98	0.98
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	2	0	2	2
Cap, veh/h	389	4851	0	0	3912	1108	0	1	0	0	1	0
Arrive On Green	0.22	0.95	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	5253	0	0	5588	1583	0	-74510	0	0	-74510	0
Grp Volume(v), veh/h	786	2510	0	0	1388	0	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1695	0	0	1863	1583	0	1863	0	0	1863	0
Q Serve(g_s), s	28.5	5.8	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	28.5	5.8	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h	389	4851	0	0	3912	1108	0	1	0	0	1	0
V/C Ratio(X)	2.02	0.52	0.00	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	389	4851	0	0	3912	1108	0	516	0	0	516	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)	0.09	0.09	0.00	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	50.8	0.3	0.0	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	460.3	0.0	0.0	0.0	0.2	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	63.7	2.3	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	511.0	0.3	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	F	A			A							
Approach Vol, veh/h		3296			1388			0			0	
Approach Delay, s/veh		122.1			8.0			0.0			0.0	
Approach LOS		F			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		130.0		0.0	33.0	97.0		0.0				
Change Period (Y+Rc), s		* 6		4.0	4.5	6.0		4.0				
Max Green Setting (Gmax), s		* 86		36.0	28.5	51.0		36.0				
Max Q Clear Time (g_c+I1), s		7.8		0.0	30.5	14.9		0.0				
Green Ext Time (p_c), s		8.7		0.0	0.0	6.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				88.3								
HCM 2010 LOS				F								
Notes												

HCM 2010 Signalized Intersection Summary


























28: Rancho Mission Road & Friar Roads

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑	↑	↑	↑↑↑	↑↑↑	↑		
Traffic Volume (veh/h)	2880	610	210	1620	540	350		
Future Volume (veh/h)	2880	610	210	1620	540	350		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	2969	443	216	1670	570	285		
Adj No. of Lanes	3	1	1	4	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	2937	1209	212	4660	696	311		
Arrive On Green	0.58	0.58	0.12	0.73	0.20	0.20		
Sat Flow, veh/h	5253	1556	1774	6669	3548	1583		
Grp Volume(v), veh/h	2969	443	216	1670	570	285		
Grp Sat Flow(s),veh/h/ln	1695	1556	1774	1602	1774	1583		
Q Serve(g_s), s	83.7	13.1	17.3	13.9	22.3	25.6		
Cycle Q Clear(g_c), s	83.7	13.1	17.3	13.9	22.3	25.6		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2937	1209	212	4660	696	311		
V/C Ratio(X)	1.01	0.37	1.02	0.36	0.82	0.92		
Avail Cap(c_a), veh/h	2937	1209	212	4660	783	349		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.58	0.58	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	30.6	5.2	63.9	7.3	55.8	57.1		
Incr Delay (d2), s/veh	15.5	0.5	67.3	0.2	5.5	25.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.2	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	43.1	10.6	12.4	6.2	11.5	13.4		
LnGrp Delay(d),s/veh	46.1	5.7	131.3	7.5	61.3	82.4		
LnGrp LOS	F	A	F	A	E	F		
Approach Vol, veh/h	3412			1886	855			
Approach Delay, s/veh	40.8			21.7	68.3			
Approach LOS	D			C	E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	21.7	89.7				111.4		33.6
Change Period (Y+Rc), s	4.4	* 6				6.0		5.1
Max Green Setting (Gmax), s	17.3	* 80				101.9		32.0
Max Q Clear Time (g_c+I1), s	19.3	85.7				15.9		27.6
Green Ext Time (p_c), s	0.0	0.0				43.5		0.9
Intersection Summary								
HCM 2010 Ctrl Delay			38.8					
HCM 2010 LOS			D					
Notes								

HCM 2010 Signalized Intersection Summary
 29: Friar Roads & Santo Road

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	390	2840	1370	340	210	460		
Future Volume (veh/h)	390	2840	1370	340	210	460		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	402	2928	1412	310	216	466		
Adj No. of Lanes	2	3	4	0	2	1		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	466	3158	2341	513	947	650		
Arrive On Green	0.14	0.62	0.44	0.44	0.28	0.28		
Sat Flow, veh/h	3442	5253	5537	1157	3442	1583		
Grp Volume(v), veh/h	402	2928	1286	436	216	466		
Grp Sat Flow(s),veh/h/ln	1721	1695	1602	1627	1721	1583		
Q Serve(g_s), s	12.0	54.0	21.3	21.4	5.1	25.8		
Cycle Q Clear(g_c), s	12.0	54.0	21.3	21.4	5.1	25.8		
Prop In Lane	1.00			0.71	1.00	1.00		
Lane Grp Cap(c), veh/h	466	3158	2132	722	947	650		
V/C Ratio(X)	0.86	0.93	0.60	0.60	0.23	0.72		
Avail Cap(c_a), veh/h	538	3158	2132	722	1213	772		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.17	0.17	1.00	1.00		
Uniform Delay (d), s/veh	44.4	17.8	22.2	22.2	29.4	25.8		
Incr Delay (d2), s/veh	11.0	6.1	0.2	0.7	0.0	1.9		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.4	26.7	9.4	9.7	2.4	21.8		
LnGrp Delay(d),s/veh	55.4	23.9	22.4	22.9	29.5	27.7		
LnGrp LOS	E	C	C	C	C	C		
Approach Vol, veh/h		3330	1722		682			
Approach Delay, s/veh		27.7	22.5		28.3			
Approach LOS		C	C		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		71.7		33.3	18.6	53.1		
Change Period (Y+Rc), s		6.5		4.4	4.4	* 6.5		
Max Green Setting (Gmax), s		57.1		37.0	16.4	* 37		
Max Q Clear Time (g_c+I1), s		56.0		27.8	14.0	23.4		
Green Ext Time (p_c), s		1.1		1.1	0.2	9.4		
Intersection Summary								
HCM 2010 Ctrl Delay			26.2					
HCM 2010 LOS			C					
Notes								























HCM 2010 Signalized Intersection Summary
 30: Riverdale Street & Friar Roads

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Traffic Volume (veh/h)	280	2460	310	90	1160	110	330	90	120	160	40	220
Future Volume (veh/h)	280	2460	310	90	1160	110	330	90	120	160	40	220
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	295	2589	263	95	1221	95	347	95	105	168	42	106
Adj No. of Lanes	1	3	1	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	422	2471	753	112	1435	112	375	261	289	334	151	381
Arrive On Green	0.24	0.49	0.49	0.06	0.30	0.30	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1774	5085	1551	1774	4799	373	1219	801	886	1164	463	1168
Grp Volume(v), veh/h	295	2589	263	95	863	453	347	0	200	168	0	148
Grp Sat Flow(s),veh/h/ln	1774	1695	1551	1774	1695	1782	1219	0	1687	1164	0	1631
Q Serve(g_s), s	18.2	58.3	12.6	6.4	28.7	28.7	31.0	0.0	10.9	15.5	0.0	8.1
Cycle Q Clear(g_c), s	18.2	58.3	12.6	6.4	28.7	28.7	39.1	0.0	10.9	26.4	0.0	8.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.52	1.00		0.72
Lane Grp Cap(c), veh/h	422	2471	753	112	1014	533	375	0	550	334	0	531
V/C Ratio(X)	0.70	1.05	0.35	0.85	0.85	0.85	0.93	0.00	0.36	0.50	0.00	0.28
Avail Cap(c_a), veh/h	422	2471	753	112	1133	595	375	0	550	334	0	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.52	0.52	0.52	0.09	0.09	0.09	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.8	30.9	19.1	55.6	39.5	39.5	45.9	0.0	30.9	41.0	0.0	30.0
Incr Delay (d2), s/veh	2.3	28.0	0.7	5.3	0.9	1.7	27.9	0.0	0.2	0.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	33.6	5.5	3.3	13.5	14.4	14.4	0.0	5.1	5.0	0.0	3.6
LnGrp Delay(d),s/veh	44.1	58.8	19.8	60.9	40.4	41.2	73.8	0.0	31.1	41.5	0.0	30.1
LnGrp LOS	D	F	B	E	D	D	E		C	D		C
Approach Vol, veh/h		3147			1411			547			316	
Approach Delay, s/veh		54.2			42.1			58.2			36.2	
Approach LOS		D			D			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.0	64.0		44.0	34.2	41.8		44.0				
Change Period (Y+Rc), s	4.4	5.7		4.9	5.7	* 5.9		4.9				
Max Green Setting (Gmax), s	7.6	58.3		39.1	25.6	* 40		39.1				
Max Q Clear Time (g_c+I1), s	8.4	60.3		28.4	20.2	30.7		41.1				
Green Ext Time (p_c), s	0.0	0.0		0.7	0.2	5.2		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			50.4									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 31: Mission Gorge Road & Friar Roads

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑↑	↑	↖↙		↖	↗↗		
Traffic Volume (veh/h)	2350	390	310	0	370	670		
Future Volume (veh/h)	2350	390	310	0	370	670		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	1863	1863		
Adj Flow Rate, veh/h	2398	0	316	0	378	623		
Adj No. of Lanes	3	1	2	0	1	2		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Percent Heavy Veh, %	2	2	2	0	2	2		
Cap, veh/h	2462	767	709	0	334	1099		
Arrive On Green	0.64	0.00	0.21	0.00	0.19	0.19		
Sat Flow, veh/h	5253	1583	3442	316	1774	2787		
Grp Volume(v), veh/h	2398	0	316	41.8	378	623		
Grp Sat Flow(s),veh/h/ln	1695	1583	1721	D	1774	1393		
Q Serve(g_s), s	54.1	0.0	9.6		22.6	0.0		
Cycle Q Clear(g_c), s	54.1	0.0	9.6		22.6	0.0		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	2462	767	709		334	1099		
V/C Ratio(X)	0.97	0.00	0.45		1.13	0.57		
Avail Cap(c_a), veh/h	2466	768	709		334	1099		
HCM Platoon Ratio	1.33	1.33	1.00		1.00	1.00		
Upstream Filter(I)	0.09	0.00	1.00		1.00	1.00		
Uniform Delay (d), s/veh	20.6	0.0	41.7		48.7	28.4		
Incr Delay (d2), s/veh	2.1	0.0	0.2		89.7	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0		0.0	0.0		
%ile BackOfQ(50%),veh/ln	25.3	0.0	4.6		19.4	8.0		
LnGrp Delay(d),s/veh	22.7	0.0	41.8		138.4	28.8		
LnGrp LOS	C		D		F	C		
Approach Vol, veh/h	2398				1001			
Approach Delay, s/veh	22.7				70.2			
Approach LOS	C				E			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2						8
Phs Duration (G+Y+Rc), s	29.1	63.9						27.0
Change Period (Y+Rc), s	4.4	5.8						4.4
Max Green Setting (Gmax), s	24.6	58.2						22.6
Max Q Clear Time (g_c+I1), s	11.6	56.1						24.6
Green Ext Time (p_c), s	0.5	2.0						0.0
Intersection Summary								
HCM 2010 Ctrl Delay			37.1					
HCM 2010 LOS			D					
Notes								

HCM 2010 Signalized Intersection Summary
 32: Mission Center Road & Mission Center Ct

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	20	140	100	50	210	130	890	110	200	800	160
Future Volume (veh/h)	120	20	140	100	50	210	130	890	110	200	800	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.99		0.97	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	21	126	105	53	126	137	937	84	211	842	126
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	27	336	278	130	336	447	1602	701	234	1011	437
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.25	0.45	0.45	0.26	0.57	0.57
Sat Flow, veh/h	670	122	1540	1054	596	1540	1774	3539	1548	1774	3539	1528
Grp Volume(v), veh/h	147	0	126	158	0	126	137	937	84	211	842	126
Grp Sat Flow(s),veh/h/ln	792	0	1540	1649	0	1540	1774	1770	1548	1774	1770	1528
Q Serve(g_s), s	14.2	0.0	8.7	0.0	0.0	8.7	7.8	24.6	3.9	14.4	24.3	5.3
Cycle Q Clear(g_c), s	24.3	0.0	8.7	10.2	0.0	8.7	7.8	24.6	3.9	14.4	24.3	5.3
Prop In Lane	0.86		1.00	0.66		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	0	336	408	0	336	447	1602	701	234	1011	437
V/C Ratio(X)	0.65	0.00	0.37	0.39	0.00	0.37	0.31	0.58	0.12	0.90	0.83	0.29
Avail Cap(c_a), veh/h	244	0	358	430	0	358	447	1602	701	349	1515	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.87	0.87	0.87	0.79	0.79	0.79
Uniform Delay (d), s/veh	52.4	0.0	41.6	42.1	0.0	41.6	37.9	25.5	19.8	45.2	24.3	20.3
Incr Delay (d2), s/veh	3.8	0.0	0.3	0.2	0.0	0.3	0.1	1.4	0.3	11.8	6.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	3.7	4.7	0.0	3.7	3.9	12.3	1.7	7.7	12.5	2.4
LnGrp Delay(d),s/veh	56.2	0.0	41.8	42.3	0.0	41.8	38.0	26.8	20.1	57.0	30.8	21.6
LnGrp LOS	E		D	D		D	D	C	C	E	C	C
Approach Vol, veh/h		273			284			1158			1179	
Approach Delay, s/veh		49.6			42.1			27.7			34.5	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.9	66.9		37.2	41.8	46.0		37.2				
Change Period (Y+Rc), s	4.4	10.3		* 9.9	10.3	* 10		* 9.9				
Max Green Setting (Gmax), s	24.6	46.7		* 29	17.8	* 54		* 29				
Max Q Clear Time (g_c+I1), s	16.4	26.6		26.3	9.8	26.3		12.2				
Green Ext Time (p_c), s	0.2	5.6		0.2	0.1	9.4		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			33.9									
HCM 2010 LOS			C									
Notes												
























HCM 2010 Signalized Intersection Summary
 33: Qualcomm Way & Rio San Diego Drive

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	270	470	740	320	390	320	1075	230	190	820	260
Future Volume (veh/h)	370	270	470	740	320	390	320	1075	230	190	820	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	381	278	392	763	330	309	330	1108	175	196	845	175
Adj No. of Lanes	2	1	1	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	422	522	801	1183	633	377	1327	766	245	1132	541
Arrive On Green	0.12	0.23	0.23	0.23	0.33	0.33	0.11	0.26	0.26	0.07	0.22	0.22
Sat Flow, veh/h	3442	1863	1541	3442	3539	1555	3442	5085	1523	3442	5085	1541
Grp Volume(v), veh/h	381	278	392	763	330	309	330	1108	175	196	845	175
Grp Sat Flow(s),veh/h/ln	1721	1863	1541	1721	1770	1555	1721	1695	1523	1721	1695	1541
Q Serve(g_s), s	15.3	19.0	31.7	30.6	9.6	20.6	13.2	28.8	9.2	7.9	21.7	11.7
Cycle Q Clear(g_c), s	15.3	19.0	31.7	30.6	9.6	20.6	13.2	28.8	9.2	7.9	21.7	11.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	430	422	522	801	1183	633	377	1327	766	245	1132	541
V/C Ratio(X)	0.89	0.66	0.75	0.95	0.28	0.49	0.88	0.83	0.23	0.80	0.75	0.32
Avail Cap(c_a), veh/h	489	422	522	801	1183	633	408	1327	766	334	1132	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.17	0.17	0.17	0.78	0.78	0.78
Uniform Delay (d), s/veh	60.3	49.2	41.4	52.9	34.2	30.9	61.4	48.9	20.3	64.0	50.7	33.6
Incr Delay (d2), s/veh	15.0	3.7	6.0	20.8	0.1	0.6	3.5	1.2	0.1	5.2	3.5	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	8.1	10.2	14.4	16.8	4.7	9.0	6.5	13.7	3.9	3.9	10.5	5.2
LnGrp Delay(d),s/veh	75.3	53.0	47.4	73.7	34.3	31.5	64.9	50.0	20.4	69.2	54.3	34.9
LnGrp LOS	E	D	D	E	C	C	E	D	C	E	D	C
Approach Vol, veh/h		1051			1402			1613			1216	
Approach Delay, s/veh		59.0			55.1			49.9			53.9	
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	14.4	46.6	37.0	42.0	19.7	41.3	21.9	57.1				
Change Period (Y+Rc), s	4.4	* 10	4.4	10.3	4.4	* 10	4.4	10.3				
Max Green Setting (Gmax), s	13.6	* 33	32.6	31.7	16.6	* 30	19.9	44.4				
Max Q Clear Time (g_c+I1), s	9.9	30.8	32.6	33.7	15.2	23.7	17.3	22.6				
Green Ext Time (p_c), s	0.1	1.6	0.0	0.0	0.1	4.0	0.2	3.1				
Intersection Summary												
HCM 2010 Ctrl Delay			54.0									
HCM 2010 LOS			D									
Notes												























HCM 2010 Roundabout
 34: River Run Drive & Rio San Diego Drive

Intersection				
Intersection Delay, s/veh	13.5			
Intersection LOS	B			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	632	500	30	265
Demand Flow Rate, veh/h	644	510	30	270
Vehicles Circulating, veh/h	240	166	822	354
Vehicles Exiting, veh/h	384	686	62	322
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	20	20	20	20
Ped Cap Adj	0.997	0.997	0.997	0.997
Approach Delay, s/veh	17.9	10.8	8.1	8.7
Approach LOS	C	B	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	644	510	30	270
Cap Entry Lane, veh/h	889	957	497	793
Entry HV Adj Factor	0.981	0.980	0.993	0.981
Flow Entry, veh/h	632	500	30	265
Cap Entry, veh/h	869	936	492	776
V/C Ratio	0.727	0.534	0.061	0.341
Control Delay, s/veh	17.9	10.8	8.1	8.7
LOS	C	B	A	A
95th %tile Queue, veh	7	3	0	2
























HCM 2010 Signalized Intersection Summary
 35: Fenton Parkway & Rio San Diego Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	380	190	205	300	240	150	480	180	420	320	110
Future Volume (veh/h)	150	380	190	205	300	240	150	480	180	420	320	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	388	123	209	306	153	153	490	113	429	327	30
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	481	399	240	332	166	181	691	293	491	835	358
Arrive On Green	0.10	0.26	0.26	0.14	0.29	0.29	0.10	0.20	0.20	0.14	0.24	0.24
Sat Flow, veh/h	1774	1863	1547	1774	1158	579	1774	3539	1502	3442	3539	1516
Grp Volume(v), veh/h	153	388	123	209	0	459	153	490	113	429	327	30
Grp Sat Flow(s),veh/h/ln	1774	1863	1547	1774	0	1737	1774	1770	1502	1721	1770	1516
Q Serve(g_s), s	9.4	21.7	7.1	12.9	0.0	28.5	9.4	14.4	7.3	13.6	8.7	1.7
Cycle Q Clear(g_c), s	9.4	21.7	7.1	12.9	0.0	28.5	9.4	14.4	7.3	13.6	8.7	1.7
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	481	399	240	0	499	181	691	293	491	835	358
V/C Ratio(X)	0.83	0.81	0.31	0.87	0.00	0.92	0.85	0.71	0.39	0.87	0.39	0.08
Avail Cap(c_a), veh/h	558	711	590	558	0	663	186	779	331	563	982	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	38.7	33.3	47.2	0.0	38.5	49.1	41.8	39.0	46.7	35.8	33.1
Incr Delay (d2), s/veh	5.9	3.2	0.3	3.8	0.0	13.3	26.6	6.1	3.8	11.8	1.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	11.6	3.1	6.6	0.0	15.5	6.0	7.6	3.3	7.2	4.4	0.8
LnGrp Delay(d),s/veh	54.8	41.9	33.6	50.9	0.0	51.7	75.7	47.9	42.8	58.6	37.2	33.6
LnGrp LOS	D	D	C	D		D	E	D	D	E	D	C
Approach Vol, veh/h		664			668			756			786	
Approach Delay, s/veh		43.3			51.5			52.8			48.7	
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	20.3	32.1	20.0	38.9	15.7	36.7	16.7	42.2				
Change Period (Y+Rc), s	4.4	* 10	4.9	10.2	4.4	* 10	5.2	* 10				
Max Green Setting (Gmax), s	18.2	* 25	35.0	42.5	11.7	* 31	35.0	* 43				
Max Q Clear Time (g_c+I1), s	15.6	16.4	14.9	23.7	11.4	10.7	11.4	30.5				
Green Ext Time (p_c), s	0.3	4.9	0.3	1.8	0.0	6.0	0.2	1.4				
Intersection Summary												
HCM 2010 Ctrl Delay			49.2									
HCM 2010 LOS			D									
Notes												
























HCM 2010 Signalized Intersection Summary
 36: Northside Drive & Rio San Diego Drive

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	490	20	20	20	50	270	20	250	10	120	240	340
Future Volume (veh/h)	490	20	20	20	50	270	20	250	10	120	240	340
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		0.97	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	551	0	0	21	53	268	21	263	6	126	253	305
Adj No. of Lanes	2	1	0	0	1	1	1	2	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	796	418	0	125	315	370	34	604	254	160	450	728
Arrive On Green	0.22	0.00	0.00	0.24	0.24	0.24	0.02	0.17	0.17	0.09	0.24	0.24
Sat Flow, veh/h	3548	1863	0	521	1315	1544	1774	3539	1491	1774	1863	1544
Grp Volume(v), veh/h	551	0	0	74	0	268	21	263	6	126	253	305
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1837	0	1544	1774	1770	1491	1774	1863	1544
Q Serve(g_s), s	9.9	0.0	0.0	2.2	0.0	11.1	0.8	4.6	0.2	4.8	8.3	9.1
Cycle Q Clear(g_c), s	9.9	0.0	0.0	2.2	0.0	11.1	0.8	4.6	0.2	4.8	8.3	9.1
Prop In Lane	1.00		0.00	0.28		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	796	418	0	440	0	370	34	604	254	160	450	728
V/C Ratio(X)	0.69	0.00	0.00	0.17	0.00	0.72	0.62	0.44	0.02	0.79	0.56	0.42
Avail Cap(c_a), veh/h	1432	752	0	794	0	668	102	934	393	246	642	887
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	0.0	0.0	20.9	0.0	24.3	33.8	25.8	24.0	30.9	23.1	12.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	1.0	6.6	0.2	0.0	4.2	2.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	0.0	1.1	0.0	4.8	0.5	2.3	0.1	2.5	4.6	5.7
LnGrp Delay(d),s/veh	25.1	0.0	0.0	21.0	0.0	25.3	40.3	26.0	24.0	35.1	25.9	13.3
LnGrp LOS	C			C		C	D	C	C	D	C	B
Approach Vol, veh/h		551			342			290			684	
Approach Delay, s/veh		25.1			24.4			27.0			22.0	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	16.7		20.5	5.7	21.7		21.5				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	9.6	18.3		28.0	4.0	23.9		30.0				
Max Q Clear Time (g_c+I1), s	6.8	6.6		11.9	2.8	11.1		13.1				
Green Ext Time (p_c), s	0.0	0.9		1.0	0.0	4.5		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			24.1									
HCM 2010 LOS			C									
Notes												













HCM 2010 Signalized Intersection Summary
 37: Rancho Mission Road & San Diego Mission Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	550	480	130	120	180	150	350	120	170	280	190
Future Volume (veh/h)	190	550	480	130	120	180	150	350	120	170	280	190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	200	579	379	137	126	147	158	368	84	179	295	147
Adj No. of Lanes	1	2	0	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	662	434	157	1007	435	186	404	334	205	424	351
Arrive On Green	0.13	0.33	0.33	0.09	0.28	0.28	0.10	0.22	0.22	0.12	0.23	0.23
Sat Flow, veh/h	1774	2035	1332	1774	3539	1528	1774	1863	1540	1774	1863	1542
Grp Volume(v), veh/h	200	503	455	137	126	147	158	368	84	179	295	147
Grp Sat Flow(s),veh/h/ln	1774	1770	1598	1774	1770	1528	1774	1863	1540	1774	1863	1542
Q Serve(g_s), s	12.5	30.2	30.2	8.6	3.0	8.6	9.9	21.7	5.1	11.2	16.4	9.2
Cycle Q Clear(g_c), s	12.5	30.2	30.2	8.6	3.0	8.6	9.9	21.7	5.1	11.2	16.4	9.2
Prop In Lane	1.00		0.83	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	576	520	157	1007	435	186	404	334	205	424	351
V/C Ratio(X)	0.87	0.87	0.87	0.87	0.13	0.34	0.85	0.91	0.25	0.87	0.70	0.42
Avail Cap(c_a), veh/h	346	620	560	157	1007	435	205	481	397	205	478	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	35.8	35.8	50.7	29.9	31.9	49.6	43.1	36.6	49.1	40.0	37.2
Incr Delay (d2), s/veh	10.0	13.2	14.4	36.2	0.1	0.8	23.7	17.9	0.1	30.7	2.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	16.8	15.3	5.8	1.5	3.7	6.0	13.2	2.2	7.2	8.8	4.0
LnGrp Delay(d),s/veh	58.1	49.0	50.2	86.9	30.0	32.7	73.3	61.0	36.7	79.7	42.8	37.5
LnGrp LOS	E	D	D	F	C	C	E	E	D	E	D	D
Approach Vol, veh/h		1158			410			610			621	
Approach Delay, s/veh		51.1			50.0			60.8			52.2	
Approach LOS		D			D			E			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	14.0	47.2	15.8	35.7	18.6	42.6	17.0	34.5				
Change Period (Y+Rc), s	4.0	10.5	4.0	* 10	4.0	* 11	4.0	* 10				
Max Green Setting (Gmax), s	10.0	39.5	13.0	* 29	22.0	* 28	13.0	* 29				
Max Q Clear Time (g_c+I1), s	10.6	32.2	11.9	18.4	14.5	10.6	13.2	23.7				
Green Ext Time (p_c), s	0.0	4.4	0.0	0.9	0.2	1.8	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			53.3									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 38: Mission Center Road & Harzard Center Drive
































												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	20	720	80	50	50	460	830	20	60	900	80
Future Volume (veh/h)	250	20	720	80	50	50	460	830	20	60	900	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.93	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	275	0	490	83	52	21	479	865	11	62	938	62
Adj No. of Lanes	2	0	1	0	1	1	2	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	943	0	659	100	63	134	549	1321	562	80	1256	83
Arrive On Green	0.27	0.00	0.27	0.09	0.09	0.09	0.16	0.37	0.37	0.04	0.26	0.26
Sat Flow, veh/h	3548	0	1528	1111	696	1478	3442	3539	1507	1774	4862	321
Grp Volume(v), veh/h	275	0	490	135	0	21	479	865	11	62	653	347
Grp Sat Flow(s),veh/h/ln	1774	0	1528	1807	0	1478	1721	1770	1507	1774	1695	1792
Q Serve(g_s), s	7.4	0.0	32.0	8.8	0.0	1.6	16.4	24.4	0.6	4.2	21.3	21.4
Cycle Q Clear(g_c), s	7.4	0.0	32.0	8.8	0.0	1.6	16.4	24.4	0.6	4.2	21.3	21.4
Prop In Lane	1.00		1.00	0.61		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	943	0	659	163	0	134	549	1321	562	80	876	463
V/C Ratio(X)	0.29	0.00	0.74	0.83	0.00	0.16	0.87	0.66	0.02	0.78	0.75	0.75
Avail Cap(c_a), veh/h	943	0	659	195	0	160	1172	2107	897	162	1036	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	29.3	53.8	0.0	50.5	49.4	31.3	23.8	56.9	41.0	41.1
Incr Delay (d2), s/veh	0.2	0.0	4.8	18.4	0.0	0.2	1.7	1.1	0.0	6.0	3.3	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	14.7	5.3	0.0	0.7	7.9	12.1	0.2	2.2	10.4	11.4
LnGrp Delay(d),s/veh	35.4	0.0	34.1	72.3	0.0	50.7	51.1	32.4	23.9	62.9	44.3	47.2
LnGrp LOS	D		C	E		D	D	C	C	E	D	D
Approach Vol, veh/h		765			156			1355			1062	
Approach Delay, s/veh		34.5			69.4			39.0			46.3	
Approach LOS		C			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	55.1		41.0	23.2	41.3		14.9				
Change Period (Y+Rc), s	4.0	* 10		9.0	4.0	10.2		4.0				
Max Green Setting (Gmax), s	11.0	* 72		32.0	41.0	36.8		13.0				
Max Q Clear Time (g_c+I1), s	6.2	26.4		34.0	18.4	23.4		10.8				
Green Ext Time (p_c), s	0.0	13.4		0.0	0.9	7.7		0.1				
Intersection Summary												
HCM 2010 Ctrl Delay			41.7									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 39: Camino De La Reina & Avenida Del Rio

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	390	490	290	490	490	280		
Future Volume (veh/h)	390	490	290	490	490	280		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.96	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	411	284	305	284	516	295		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	463	910	459	375	556	1146		
Arrive On Green	0.26	0.26	0.25	0.25	0.31	0.62		
Sat Flow, veh/h	1774	1583	1863	1519	1774	1863		
Grp Volume(v), veh/h	411	284	305	284	516	295		
Grp Sat Flow(s),veh/h/ln	1774	1583	1863	1519	1774	1863		
Q Serve(g_s), s	16.2	6.8	10.7	12.6	20.5	5.3		
Cycle Q Clear(g_c), s	16.2	6.8	10.7	12.6	20.5	5.3		
Prop In Lane	1.00	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	463	910	459	375	556	1146		
V/C Ratio(X)	0.89	0.31	0.66	0.76	0.93	0.26		
Avail Cap(c_a), veh/h	512	954	564	460	586	1281		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	25.8	8.0	24.7	25.4	24.2	6.4		
Incr Delay (d2), s/veh	16.1	0.2	2.1	5.7	20.7	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	9.9	3.0	5.8	5.9	13.2	2.7		
LnGrp Delay(d),s/veh	41.9	8.2	26.8	31.1	44.8	6.5		
LnGrp LOS	D	A	C	C	D	A		
Approach Vol, veh/h	695		589		811			
Approach Delay, s/veh	28.1		28.9		30.9			
Approach LOS	C		C		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			6		8	
Phs Duration (G+Y+Rc), s	26.8	22.4			49.2		23.5	
Change Period (Y+Rc), s	4.0	4.5			4.5		4.5	
Max Green Setting (Gmax), s	24.0	22.0			50.0		21.0	
Max Q Clear Time (g_c+I1), s	22.5	14.6			7.3		18.2	
Green Ext Time (p_c), s	0.3	1.8			1.9		0.8	
Intersection Summary								
HCM 2010 Ctrl Delay			29.4					
HCM 2010 LOS			C					

























HCM 2010 Signalized Intersection Summary

40: Mission Center Road & Camino De La Reina

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 		 	 		 	  		 	  	
Traffic Volume (veh/h)	260	560	300	300	310	290	250	720	250	460	920	290
Future Volume (veh/h)	260	560	300	300	310	290	250	720	250	460	920	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	274	589	221	316	326	210	263	758	200	484	968	210
Adj No. of Lanes	2	2	0	2	2	0	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	738	276	385	632	397	208	960	250	302	1361	408
Arrive On Green	0.10	0.30	0.30	0.11	0.31	0.31	0.06	0.24	0.24	0.09	0.27	0.27
Sat Flow, veh/h	3442	2496	934	3442	2060	1292	3442	3996	1042	3442	5085	1524
Grp Volume(v), veh/h	274	417	393	316	279	257	263	642	316	484	968	210
Grp Sat Flow(s),veh/h/ln	1721	1770	1661	1721	1770	1582	1721	1695	1647	1721	1695	1524
Q Serve(g_s), s	8.5	23.8	23.9	9.8	14.2	14.7	6.6	19.4	19.7	9.6	18.8	12.8
Cycle Q Clear(g_c), s	8.5	23.8	23.9	9.8	14.2	14.7	6.6	19.4	19.7	9.6	18.8	12.8
Prop In Lane	1.00		0.56	1.00		0.82	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	347	523	491	385	543	486	208	815	396	302	1361	408
V/C Ratio(X)	0.79	0.80	0.80	0.82	0.51	0.53	1.27	0.79	0.80	1.60	0.71	0.51
Avail Cap(c_a), veh/h	1467	1000	939	655	583	521	208	896	435	302	1493	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	35.5	35.5	47.5	31.2	31.4	51.4	38.9	39.0	49.9	36.2	34.0
Incr Delay (d2), s/veh	1.5	3.0	3.2	1.7	1.5	1.7	152.1	5.1	10.7	285.8	1.9	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	12.0	11.3	4.7	7.1	6.7	7.5	9.7	10.1	16.5	9.0	5.6
LnGrp Delay(d),s/veh	49.6	38.5	38.7	49.1	32.6	33.1	203.5	44.0	49.8	335.7	38.1	36.0
LnGrp LOS	D	D	D	D	C	C	F	D	D	F	D	D
Approach Vol, veh/h		1084			852			1221			1662	
Approach Delay, s/veh		41.4			38.9			79.8			124.5	
Approach LOS		D			D			E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.0	36.5	16.6	42.2	11.0	39.5	15.4	43.4				
Change Period (Y+Rc), s	4.4	10.2	4.4	* 9.9	4.4	* 10	4.4	* 9.9				
Max Green Setting (Gmax), s	9.6	28.9	20.8	* 62	6.6	* 32	46.6	* 36				
Max Q Clear Time (g_c+I1), s	11.6	21.7	11.8	25.9	8.6	20.8	10.5	16.7				
Green Ext Time (p_c), s	0.0	4.5	0.4	6.5	0.0	7.6	0.5	5.6				
Intersection Summary												
HCM 2010 Ctrl Delay			79.3									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary

41: Camino Del Este & Camino De La Reina























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	630	180	240	590	50	150	170	160	150	330	220
Future Volume (veh/h)	210	630	180	240	590	50	150	170	160	150	330	220
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	221	663	157	253	621	42	158	179	147	158	347	179
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	881	379	293	947	408	279	1064	466	357	1064	460
Arrive On Green	0.15	0.25	0.25	0.16	0.27	0.27	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1774	3539	1523	1774	3539	1524	866	3539	1552	1037	3539	1531
Grp Volume(v), veh/h	221	663	157	253	621	42	158	179	147	158	347	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1523	1774	1770	1524	866	1770	1552	1037	1770	1531
Q Serve(g_s), s	10.4	14.8	7.4	11.9	13.3	1.8	14.8	3.2	6.3	11.3	6.5	7.9
Cycle Q Clear(g_c), s	10.4	14.8	7.4	11.9	13.3	1.8	21.3	3.2	6.3	14.5	6.5	7.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	881	379	293	947	408	279	1064	466	357	1064	460
V/C Ratio(X)	0.85	0.75	0.41	0.86	0.66	0.10	0.57	0.17	0.32	0.44	0.33	0.39
Avail Cap(c_a), veh/h	427	1163	501	490	1283	553	363	1408	617	458	1408	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	29.7	26.9	34.8	27.8	23.6	31.4	22.0	23.1	27.4	23.2	23.7
Incr Delay (d2), s/veh	4.1	2.0	0.8	4.1	0.8	0.1	1.2	0.1	0.3	0.6	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	7.4	3.2	6.2	6.6	0.8	3.6	1.5	2.7	3.3	3.2	3.4
LnGrp Delay(d),s/veh	39.7	31.7	27.6	38.8	28.6	23.7	32.7	22.1	23.4	28.0	23.3	24.0
LnGrp LOS	D	C	C	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1041			916			484			684	
Approach Delay, s/veh		32.8			31.2			25.9			24.6	
Approach LOS		C			C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.5	31.4		35.6	16.9	33.0		35.6				
Change Period (Y+Rc), s	4.4	* 10		* 9.9	4.4	* 10		* 9.9				
Max Green Setting (Gmax), s	23.6	* 28		* 34	20.6	* 31		* 34				
Max Q Clear Time (g_c+I1), s	13.9	16.8		16.5	12.4	15.3		23.3				
Green Ext Time (p_c), s	0.3	4.0		2.8	0.2	3.9		1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			29.5									
HCM 2010 LOS			C									
Notes												

HCM 2010 Signalized Intersection Summary
 42: Qualcomm Way & Camino De La Reina/Camino Del Rio North

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	285	320	350	80	330	250	250	1420	300	295	1795	250
Future Volume (veh/h)	285	320	350	80	330	250	250	1420	300	295	1795	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	291	292	380	82	337	173	255	1449	224	301	1832	184
Adj No. of Lanes	1	1	2	2	2	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	499	1119	124	572	243	256	1590	693	275	2313	702
Arrive On Green	0.14	0.27	0.27	0.04	0.16	0.16	0.07	0.45	0.45	0.08	0.45	0.45
Sat Flow, veh/h	1774	1863	3054	3442	3539	1505	3442	3539	1543	3442	5085	1543
Grp Volume(v), veh/h	291	292	380	82	337	173	255	1449	224	301	1832	184
Grp Sat Flow(s),veh/h/ln	1774	1863	1527	1721	1770	1505	1721	1770	1543	1721	1695	1543
Q Serve(g_s), s	20.6	19.7	13.1	3.4	12.8	15.8	10.7	55.3	13.6	11.6	44.5	10.7
Cycle Q Clear(g_c), s	20.6	19.7	13.1	3.4	12.8	15.8	10.7	55.3	13.6	11.6	44.5	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	499	1119	124	572	243	256	1590	693	275	2313	702
V/C Ratio(X)	1.15	0.59	0.34	0.66	0.59	0.71	1.00	0.91	0.32	1.09	0.79	0.26
Avail Cap(c_a), veh/h	252	615	1310	173	830	353	280	1590	693	275	2313	702
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	1.00	1.00	1.00	0.70	0.70	0.70	0.51	0.51	0.51
Uniform Delay (d), s/veh	62.2	46.1	33.6	69.0	56.3	57.6	67.1	37.2	25.7	66.7	33.7	24.5
Incr Delay (d2), s/veh	97.0	0.6	0.1	2.2	0.4	1.4	41.7	6.9	0.9	66.4	1.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	10.2	5.5	1.7	6.3	6.7	6.6	28.5	5.9	8.0	21.2	4.6
LnGrp Delay(d),s/veh	159.2	46.7	33.7	71.2	56.7	59.0	108.8	44.1	26.6	133.1	35.1	24.9
LnGrp LOS	F	D	C	E	E	E	F	D	C	F	D	C
Approach Vol, veh/h		963			592			1928			2317	
Approach Delay, s/veh		75.6			59.4			50.6			47.1	
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	19.0	71.9	9.6	44.5	18.2	72.7	25.0	29.1				
Change Period (Y+Rc), s	4.4	6.7	4.4	* 5.7	4.4	* 6.7	4.4	5.7				
Max Green Setting (Gmax), s	14.6	54.6	7.3	* 48	14.8	* 56	20.6	34.0				
Max Q Clear Time (g_c+I1), s	14.6	57.3	5.4	21.7	13.7	46.5	22.6	17.8				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.1	9.2	0.0	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			54.2									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary

43: Fenton Parkway & Camino Del Rio North

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	300	340	230	260	80	180	280	190	120	360	180
Future Volume (veh/h)	150	300	340	230	260	80	180	280	190	120	360	180
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	316	305	242	274	63	189	295	168	126	379	157
Adj No. of Lanes	1	1	1	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	413	526	267	386	89	214	390	222	154	398	165
Arrive On Green	0.11	0.22	0.22	0.15	0.26	0.26	0.12	0.35	0.35	0.09	0.32	0.32
Sat Flow, veh/h	1774	1863	1512	1774	1459	335	1774	1103	628	1774	1245	516
Grp Volume(v), veh/h	158	316	305	242	0	337	189	0	463	126	0	536
Grp Sat Flow(s),veh/h/ln	1774	1863	1512	1774	0	1794	1774	0	1730	1774	0	1760
Q Serve(g_s), s	9.0	16.5	17.2	13.9	0.0	17.6	10.9	0.0	24.5	7.2	0.0	30.9
Cycle Q Clear(g_c), s	9.0	16.5	17.2	13.9	0.0	17.6	10.9	0.0	24.5	7.2	0.0	30.9
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.36	1.00		0.29
Lane Grp Cap(c), veh/h	189	413	526	267	0	475	214	0	612	154	0	563
V/C Ratio(X)	0.84	0.77	0.58	0.91	0.00	0.71	0.88	0.00	0.76	0.82	0.00	0.95
Avail Cap(c_a), veh/h	236	529	620	267	0	544	214	0	612	156	0	569
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	45.4	37.8	28.1	43.3	0.0	34.5	44.8	0.0	29.5	46.5	0.0	34.5
Incr Delay (d2), s/veh	18.7	5.2	1.1	30.9	0.0	3.7	32.1	0.0	4.8	27.6	0.0	26.2
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	5.4	9.0	7.3	9.1	0.0	9.2	7.2	0.0	12.5	4.7	0.0	19.0
LnGrp Delay(d),s/veh	64.0	43.0	29.2	74.2	0.0	38.2	76.9	0.0	34.4	74.1	0.0	60.7
LnGrp LOS	E	D	C	E		D	E		C	E		E
Approach Vol, veh/h		779			579			652			662	
Approach Delay, s/veh		41.8			53.2			46.7			63.2	
Approach LOS		D			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	20.0	28.6	17.0	38.0	15.5	33.0	13.5	41.5				
Change Period (Y+Rc), s	4.4	5.6	4.5	* 4.9	4.5	* 5.6	4.5	4.9				
Max Green Setting (Gmax), s	15.6	29.4	12.5	* 34	13.8	* 31	9.1	36.5				
Max Q Clear Time (g_c+I1), s	15.9	19.2	12.9	32.9	11.0	19.6	9.2	26.5				
Green Ext Time (p_c), s	0.0	2.4	0.0	0.3	0.1	1.6	0.0	1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			50.8									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 44: Camino Del Rio North & Rancho Mission Road



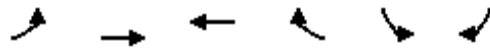
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	270	490	210	290	660	290		
Future Volume (veh/h)	270	490	210	290	660	290		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.94	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	284	516	221	210	695	231		
Adj No. of Lanes	1	2	2	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	294	1363	616	260	711	897		
Arrive On Green	0.17	0.39	0.17	0.17	0.40	0.40		
Sat Flow, veh/h	1774	3632	3632	1492	1774	1583		
Grp Volume(v), veh/h	284	516	221	210	695	231		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1492	1774	1583		
Q Serve(g_s), s	15.5	10.2	5.4	13.2	37.7	7.2		
Cycle Q Clear(g_c), s	15.5	10.2	5.4	13.2	37.7	7.2		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	294	1363	616	260	711	897		
V/C Ratio(X)	0.96	0.38	0.36	0.81	0.98	0.26		
Avail Cap(c_a), veh/h	294	1657	703	297	711	897		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	40.4	21.6	35.5	38.7	28.8	10.7		
Incr Delay (d2), s/veh	42.4	0.3	0.5	15.1	28.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	11.0	5.1	2.7	6.5	23.9	9.0		
LnGrp Delay(d),s/veh	82.9	21.9	36.0	53.8	56.9	10.8		
LnGrp LOS	F	C	D	D	E	B		
Approach Vol, veh/h		800	431		926			
Approach Delay, s/veh		43.5	44.7		45.4			
Approach LOS		D	D		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		48.6		49.0	20.6	28.0		
Change Period (Y+Rc), s		* 11		* 9.9	4.4	11.0		
Max Green Setting (Gmax), s		* 46		* 39	16.2	19.4		
Max Q Clear Time (g_c+I1), s		12.2		39.7	17.5	15.2		
Green Ext Time (p_c), s		5.6		0.0	0.0	1.2		
Intersection Summary								
HCM 2010 Ctrl Delay			44.6					
HCM 2010 LOS			D					
Notes								

HCM 2010 Signalized Intersection Summary
 45: Mission Gorge Road & Camino Del Rio North/I-8 WB Off Ramps

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	130	610	670	80	290	340	970	220	50	1520	90
Future Volume (veh/h)	110	130	610	670	80	290	340	970	220	50	1520	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	113	134	402	691	175	124	351	1000	175	52	1567	31
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	101	370	796	418	447	329	1828	808	220	1398	616
Arrive On Green	0.05	0.05	0.05	0.22	0.22	0.22	0.19	0.52	0.52	0.06	0.39	0.39
Sat Flow, veh/h	1774	1863	1409	3548	1863	1541	1774	3539	1565	3442	3539	1559
Grp Volume(v), veh/h	113	134	402	691	175	124	351	1000	175	52	1567	31
Grp Sat Flow(s),veh/h/ln	1774	1863	1409	1774	1863	1541	1774	1770	1565	1721	1770	1559
Q Serve(g_s), s	7.9	7.9	7.9	27.2	11.7	0.0	26.9	27.6	8.8	2.1	57.3	1.8
Cycle Q Clear(g_c), s	7.9	7.9	7.9	27.2	11.7	0.0	26.9	27.6	8.8	2.1	57.3	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	97	101	371	796	418	447	329	1828	808	220	1398	616
V/C Ratio(X)	1.17	1.32	1.09	0.87	0.42	0.28	1.07	0.55	0.22	0.24	1.12	0.05
Avail Cap(c_a), veh/h	97	101	371	903	474	493	329	1828	808	220	1398	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.6	68.6	55.4	54.2	48.1	39.8	59.0	23.6	19.1	64.5	43.9	27.1
Incr Delay (d2), s/veh	144.1	197.5	71.5	7.5	0.2	0.1	60.2	0.8	0.4	0.2	64.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	9.6	22.2	14.2	6.1	3.8	18.7	13.7	3.9	1.0	40.5	0.8
LnGrp Delay(d),s/veh	212.6	266.1	126.9	61.7	48.4	40.0	119.2	24.4	19.5	64.7	108.4	27.2
LnGrp LOS	F	F	F	E	D	D	F	C	B	E	F	C
Approach Vol, veh/h		649			990			1526			1650	
Approach Delay, s/veh		170.6			56.6			45.7			105.5	
Approach LOS		F			E			D			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.4	80.0		13.0	32.0	62.4		37.6				
Change Period (Y+Rc), s	5.1	5.1		5.1	5.1	5.1		5.1				
Max Green Setting (Gmax), s	4.9	74.9		7.9	26.9	52.9		36.9				
Max Q Clear Time (g_c+I1), s	4.1	29.6		9.9	28.9	59.3		29.2				
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	0.0		1.6				
Intersection Summary												
HCM 2010 Ctrl Delay			85.2									
HCM 2010 LOS			F									
Notes												

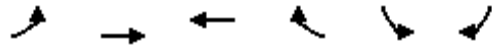
HCM 2010 Signalized Intersection Summary

46: Hotel Circle North & Hotel Circle Place



























Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations			↑↑		↑	↑		
Traffic Volume (veh/h)	0	0	200	100	0	90		
Future Volume (veh/h)	0	0	200	100	0	90		
Number			8	18	1	16		
Initial Q (Qb), veh			0	0	0	0		
Ped-Bike Adj(A_pbT)				0.97	1.00	1.00		
Parking Bus, Adj			1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln			1863	1900	1863	1863		
Adj Flow Rate, veh/h			211	105	0	95		
Adj No. of Lanes			2	0	1	1		
Peak Hour Factor			0.95	0.95	0.95	0.95		
Percent Heavy Veh, %			2	2	2	2		
Cap, veh/h			784	373	0	0		
Arrive On Green			0.34	0.34	0.00	0.00		
Sat Flow, veh/h			2397	1096	0			
Grp Volume(v), veh/h			160	156	0.0			
Grp Sat Flow(s),veh/h/ln			1770	1630				
Q Serve(g_s), s			0.9	1.0				
Cycle Q Clear(g_c), s			0.9	1.0				
Prop In Lane				0.67				
Lane Grp Cap(c), veh/h			602	555				
V/C Ratio(X)			0.27	0.28				
Avail Cap(c_a), veh/h			2027	1868				
HCM Platoon Ratio			1.00	1.00				
Upstream Filter(I)			1.00	1.00				
Uniform Delay (d), s/veh			3.4	3.5				
Incr Delay (d2), s/veh			0.2	0.3				
Initial Q Delay(d3),s/veh			0.0	0.0				
%ile BackOfQ(50%),veh/ln			0.5	0.5				
LnGrp Delay(d),s/veh			3.7	3.7				
LnGrp LOS			A	A				
Approach Vol, veh/h			316					
Approach Delay, s/veh			3.7					
Approach LOS			A					
Timer	1	2	3	4	5	6	7	8
Assigned Phs								8
Phs Duration (G+Y+Rc), s								14.4
Change Period (Y+Rc), s								9.5
Max Green Setting (Gmax), s								16.5
Max Q Clear Time (g_c+I1), s								3.0
Green Ext Time (p_c), s								1.5
Intersection Summary								
HCM 2010 Ctrl Delay			3.7					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
 48: Hotel Circle North/Camino De La Reina & Fashion Valley Road















Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations			↑↑	↑	↑	↑↑		
Traffic Volume (veh/h)	0	0	550	440	1	460		
Future Volume (veh/h)	0	0	550	440	1	460		
Number			2	12	7	14		
Initial Q (Qb), veh			0	0	0	0		
Ped-Bike Adj(A_pbT)				0.95	1.00	1.00		
Parking Bus, Adj			1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln			1863	1863	1863	1863		
Adj Flow Rate, veh/h			579	358	1	379		
Adj No. of Lanes			2	1	1	2		
Peak Hour Factor			0.95	0.95	0.95	0.95		
Percent Heavy Veh, %			2	2	2	2		
Cap, veh/h			1145	486	0	0		
Arrive On Green			0.32	0.32	0.00	0.00		
Sat Flow, veh/h			3632	1502	0			
Grp Volume(v), veh/h			579	358	0.0			
Grp Sat Flow(s),veh/h/ln			1770	1502				
Q Serve(g_s), s			11.9	19.1				
Cycle Q Clear(g_c), s			11.9	19.1				
Prop In Lane				1.00				
Lane Grp Cap(c), veh/h			1145	486				
V/C Ratio(X)			0.51	0.74				
Avail Cap(c_a), veh/h			1931	819				
HCM Platoon Ratio			1.00	1.00				
Upstream Filter(I)			1.00	1.00				
Uniform Delay (d), s/veh			24.6	27.0				
Incr Delay (d2), s/veh			0.5	3.0				
Initial Q Delay(d3),s/veh			0.0	0.0				
%ile BackOfQ(50%),veh/ln			5.9	8.3				
LnGrp Delay(d),s/veh			25.1	30.0				
LnGrp LOS			C	C				
Approach Vol, veh/h			937					
Approach Delay, s/veh			27.0					
Approach LOS			C					
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		39.0						
Change Period (Y+Rc), s		* 9.9						
Max Green Setting (Gmax), s		* 49						
Max Q Clear Time (g_c+I1), s		21.1						
Green Ext Time (p_c), s		8.1						
Intersection Summary								
HCM 2010 Ctrl Delay			27.0					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary
 49: Mission Center Road & Camino Del Rio N














												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	210	260	280	280	490	240	590	670	410	980	130
Future Volume (veh/h)	140	210	260	280	280	490	240	590	670	410	980	130
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		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	144	216	0	289	289	443	247	608	0	423	1010	103
Adj No. of Lanes	1	2	1	2	1	1	2	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	898	402	360	487	405	298	910	407	493	1111	480
Arrive On Green	0.10	0.25	0.00	0.10	0.26	0.26	0.09	0.26	0.00	0.14	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3442	1863	1547	3442	3539	1583	3442	3539	1529
Grp Volume(v), veh/h	144	216	0	289	289	443	247	608	0	423	1010	103
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1863	1547	1721	1770	1583	1721	1770	1529
Q Serve(g_s), s	7.9	4.8	0.0	8.2	13.5	26.0	7.0	15.3	0.0	11.9	27.2	4.9
Cycle Q Clear(g_c), s	7.9	4.8	0.0	8.2	13.5	26.0	7.0	15.3	0.0	11.9	27.2	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	898	402	360	487	405	298	910	407	493	1111	480
V/C Ratio(X)	0.84	0.24	0.00	0.80	0.59	1.09	0.83	0.67	0.00	0.86	0.91	0.21
Avail Cap(c_a), veh/h	171	954	427	492	487	405	298	910	407	544	1132	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	29.5	0.0	43.5	32.1	36.7	44.7	33.1	0.0	41.6	32.7	25.1
Incr Delay (d2), s/veh	28.1	0.1	0.0	4.7	1.3	72.7	16.6	1.5	0.0	12.1	11.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	2.4	0.0	4.1	7.1	19.2	4.0	7.7	0.0	6.5	15.0	2.1
LnGrp Delay(d),s/veh	72.2	29.6	0.0	48.2	33.4	109.4	61.2	34.7	0.0	53.7	43.8	25.5
LnGrp LOS	E	C		D	C	F	E	C		D	D	C
Approach Vol, veh/h		360			1021			855			1536	
Approach Delay, s/veh		46.7			70.6			42.3			45.3	
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	18.6	30.4	14.8	35.5	13.0	36.1	14.0	36.3				
Change Period (Y+Rc), s	4.4	4.9	4.4	* 10	4.4	4.9	4.4	10.3				
Max Green Setting (Gmax), s	15.7	24.7	14.2	* 27	8.6	31.8	9.6	26.0				
Max Q Clear Time (g_c+I1), s	13.9	17.3	10.2	6.8	9.0	29.2	9.9	28.0				
Green Ext Time (p_c), s	0.3	1.6	0.2	1.3	0.0	2.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			51.6									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 50: I-8 WB Ramps/Mission Valley Mall Driveway & Camino Del Rio N






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑		↖	↗	↗			
Traffic Volume (veh/h)	0	340	950	290	310	0	740	190	270	0	0	0
Future Volume (veh/h)	0	340	950	290	310	0	740	190	270	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	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			
Parking Bus, Adj	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	1863	1863	1863	1900	1863	1863	1863			
Adj Flow Rate, veh/h	0	351	0	299	320	0	480	593	0			
Adj No. of Lanes	0	2	1	1	2	0	1	1	1			
Peak Hour Factor	0.95	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2			
Cap, veh/h	0	1314	588	276	1975	0	642	674	573			
Arrive On Green	0.00	0.37	0.00	0.16	0.56	0.00	0.36	0.36	0.00			
Sat Flow, veh/h	0	3632	1583	1774	3632	0	1774	1863	1583			
Grp Volume(v), veh/h	0	351	0	299	320	0	480	593	0			
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0	1774	1863	1583			
Q Serve(g_s), s	0.0	10.4	0.0	23.3	6.6	0.0	35.5	44.7	0.0			
Cycle Q Clear(g_c), s	0.0	10.4	0.0	23.3	6.6	0.0	35.5	44.7	0.0			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	1314	588	276	1975	0	642	674	573			
V/C Ratio(X)	0.00	0.27	0.00	1.09	0.16	0.00	0.75	0.88	0.00			
Avail Cap(c_a), veh/h	0	1314	588	276	1975	0	757	795	676			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	0.85	0.00	1.00	1.00	0.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	0.0	32.9	0.0	63.3	16.1	0.0	41.8	44.8	0.0			
Incr Delay (d2), s/veh	0.0	0.4	0.0	78.8	0.2	0.0	4.0	10.6	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	5.1	0.0	17.4	3.2	0.0	18.0	24.9	0.0			
LnGrp Delay(d),s/veh	0.0	33.3	0.0	142.1	16.3	0.0	45.8	55.3	0.0			
LnGrp LOS		C		F	B		D	E				
Approach Vol, veh/h		351			619			1073				
Approach Delay, s/veh		33.3			77.1			51.1				
Approach LOS		C			E			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	28.0	61.7		60.3		89.7						
Change Period (Y+Rc), s	* 4.7	6.0		6.0		6.0						
Max Green Setting (Gmax), s	* 23	46.0		64.0		74.0						
Max Q Clear Time (g_c+I1), s	25.3	12.4		46.7		8.6						
Green Ext Time (p_c), s	0.0	2.6		7.6		2.5						
Intersection Summary												
HCM 2010 Ctrl Delay			55.9									
HCM 2010 LOS			E									
Notes												

HCM 2010 Signalized Intersection Summary


























51: Camino Del Rio N & Camino Del Este

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations			 					
Traffic Volume (veh/h)	270	430	350	230	460	330		
Future Volume (veh/h)	270	430	350	230	460	330		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	284	453	368	200	484	305		
Adj No. of Lanes	1	1	2	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	289	1108	1352	589	519	463		
Arrive On Green	0.16	0.59	0.38	0.38	0.29	0.29		
Sat Flow, veh/h	1774	1863	3632	1542	1774	1583		
Grp Volume(v), veh/h	284	453	368	200	484	305		
Grp Sat Flow(s),veh/h/ln	1774	1863	1770	1542	1774	1583		
Q Serve(g_s), s	12.7	10.4	5.7	7.4	21.2	13.5		
Cycle Q Clear(g_c), s	12.7	10.4	5.7	7.4	21.2	13.5		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	289	1108	1352	589	519	463		
V/C Ratio(X)	0.98	0.41	0.27	0.34	0.93	0.66		
Avail Cap(c_a), veh/h	289	1108	1352	589	522	466		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	33.3	8.7	17.0	17.5	27.5	24.8		
Incr Delay (d2), s/veh	48.0	1.1	0.5	1.6	24.1	3.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	10.0	5.6	2.9	3.4	13.8	12.0		
LnGrp Delay(d),s/veh	81.4	9.8	17.5	19.1	51.6	28.5		
LnGrp LOS	F	A	B	B	D	C		
Approach Vol, veh/h		737	568		789			
Approach Delay, s/veh		37.4	18.1		42.7			
Approach LOS		D	B		D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		52.0		27.8	17.0	35.0		
Change Period (Y+Rc), s		4.5		4.5	4.0	4.5		
Max Green Setting (Gmax), s		47.5		23.5	13.0	30.5		
Max Q Clear Time (g_c+I1), s		12.4		23.2	14.7	9.4		
Green Ext Time (p_c), s		2.7		0.1	0.0	2.6		
Intersection Summary								
HCM 2010 Ctrl Delay			34.1					
HCM 2010 LOS			C					

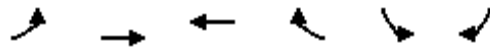
HCM 2010 Signalized Intersection Summary
 52: Qualcomm Way & Camino Del Rio N/I-8 WB Ramps

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	0	490	130	250	375	290	1285	250	0	1475	750
Future Volume (veh/h)	310	0	490	130	250	375	290	1285	250	0	1475	750
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		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	1863	0	1863	1863
Adj Flow Rate, veh/h	316	0	408	133	255	291	296	1311	0	0	1505	459
Adj No. of Lanes	1	0	1	0	1	1	1	3	1	0	2	1
Peak Hour Factor	0.98	0.95	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.95	0.98	0.98
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	2	0	2	2
Cap, veh/h	0	0	0	119	228	291	640	3814	1187	0	1255	552
Arrive On Green	0.00	0.00	0.00	0.19	0.19	0.19	0.36	0.75	0.00	0.00	0.35	0.35
Sat Flow, veh/h		0		628	1204	1533	1774	5085	1583	0	3632	1557
Grp Volume(v), veh/h		0.0		388	0	291	296	1311	0	0	1505	459
Grp Sat Flow(s),veh/h/ln				1831	0	1533	1774	1695	1583	0	1770	1557
Q Serve(g_s), s				37.9	0.0	37.9	25.6	17.4	0.0	0.0	70.9	54.0
Cycle Q Clear(g_c), s				37.9	0.0	37.9	25.6	17.4	0.0	0.0	70.9	54.0
Prop In Lane				0.34		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				347	0	291	640	3814	1187	0	1255	552
V/C Ratio(X)				1.12	0.00	1.00	0.46	0.34	0.00	0.00	1.20	0.83
Avail Cap(c_a), veh/h				347	0	291	640	3814	1187	0	1255	552
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.86	0.86	0.00	0.00	0.57	0.57
Uniform Delay (d), s/veh				81.1	0.0	81.1	49.1	8.4	0.0	0.0	64.6	59.1
Incr Delay (d2), s/veh				84.1	0.0	53.2	0.2	0.2	0.0	0.0	94.4	8.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				27.3	0.0	20.4	12.6	8.2	0.0	0.0	51.1	24.5
LnGrp Delay(d),s/veh				165.2	0.0	134.2	49.3	8.6	0.0	0.0	159.0	67.4
LnGrp LOS				F		F	D	A			F	E
Approach Vol, veh/h					679			1607			1964	
Approach Delay, s/veh					151.9			16.1			137.6	
Approach LOS					F			B			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		157.0			79.1	77.9		43.0				
Change Period (Y+Rc), s		7.0			7.0	* 7		5.1				
Max Green Setting (Gmax), s		103.9			28.3	* 71		37.9				
Max Q Clear Time (g_c+I1), s		19.4			27.6	72.9		39.9				
Green Ext Time (p_c), s		6.9			0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			93.9									
HCM 2010 LOS			F									
Notes												

HCM 2010 Signalized Intersection Summary
 53: Morena Boulevard & Taylor Street










												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 					 	 	
Traffic Volume (veh/h)	520	510	30	20	220	90	0	10	40	260	20	450
Future Volume (veh/h)	520	510	30	20	220	90	0	10	40	260	20	450
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	0	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	547	537	21	21	232	63	0	11	0	289	0	274
Adj No. of Lanes	2	2	0	1	2	0	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	2
Cap, veh/h	457	1060	41	36	531	140	0	12	0	1013	0	653
Arrive On Green	0.13	0.31	0.31	0.02	0.19	0.19	0.00	0.01	0.00	0.29	0.00	0.29
Sat Flow, veh/h	3442	3468	135	1774	2749	727	0	1863	0	3548	0	1550
Grp Volume(v), veh/h	547	274	284	21	147	148	0	11	0	289	0	274
Grp Sat Flow(s),veh/h/ln	1721	1770	1833	1774	1770	1707	0	1863	0	1774	0	1550
Q Serve(g_s), s	6.6	6.3	6.3	0.6	3.6	3.8	0.0	0.3	0.0	3.2	0.0	6.2
Cycle Q Clear(g_c), s	6.6	6.3	6.3	0.6	3.6	3.8	0.0	0.3	0.0	3.2	0.0	6.2
Prop In Lane	1.00		0.07	1.00		0.43	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	457	541	560	36	342	330	0	12	0	1013	0	653
V/C Ratio(X)	1.20	0.51	0.51	0.58	0.43	0.45	0.00	0.91	0.00	0.29	0.00	0.42
Avail Cap(c_a), veh/h	457	904	936	143	811	783	0	247	0	2140	0	1145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.6	14.2	14.2	24.2	17.7	17.7	0.0	24.7	0.0	13.8	0.0	10.2
Incr Delay (d2), s/veh	108.5	0.8	0.8	5.5	1.1	1.3	0.0	52.1	0.0	0.3	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	3.2	3.3	0.3	1.9	1.9	0.0	0.3	0.0	1.6	0.0	6.1
LnGrp Delay(d),s/veh	130.1	15.0	15.0	29.6	18.8	19.0	0.0	76.8	0.0	14.1	0.0	10.9
LnGrp LOS	F	B	B	C	B	B		E		B		B
Approach Vol, veh/h		1105			316			11				563
Approach Delay, s/veh		72.0			19.6			76.8				12.5
Approach LOS		E			B			E				B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.4	20.1		19.5	11.0	14.5		4.7				
Change Period (Y+Rc), s	4.4	4.9		5.3	4.4	4.9		4.4				
Max Green Setting (Gmax), s	4.0	25.4		30.0	6.6	22.8		6.6				
Max Q Clear Time (g_c+I1), s	2.6	8.3		8.2	8.6	5.8		2.3				
Green Ext Time (p_c), s	0.0	3.3		3.6	0.0	1.9		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				53.0								
HCM 2010 LOS				D								
Notes												

HCM 2010 Signalized Intersection Summary
 55: Taylor Street/Hotel Circle South & Hotel Circle North
























Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations		↑			↗	↖		
Traffic Volume (veh/h)	0	190	0	0	100	190		
Future Volume (veh/h)	0	190	0	0	100	190		
Number	7	4			1	16		
Initial Q (Qb), veh	0	0			0	0		
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00		
Parking Bus, Adj	1.00	1.00			1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863			1863	1863		
Adj Flow Rate, veh/h	0	200			105	168		
Adj No. of Lanes	0	1			1	1		
Peak Hour Factor	0.95	0.95			0.95	0.95		
Percent Heavy Veh, %	0	2			2	2		
Cap, veh/h	0	605			0	0		
Arrive On Green	0.00	0.32			0.00	0.00		
Sat Flow, veh/h	0	1863			0			
Grp Volume(v), veh/h	0	200			0.0			
Grp Sat Flow(s),veh/h/ln	0	1863						
Q Serve(g_s), s	0.0	0.5						
Cycle Q Clear(g_c), s	0.0	0.5						
Prop In Lane	0.00							
Lane Grp Cap(c), veh/h	0	605						
V/C Ratio(X)	0.00	0.33						
Avail Cap(c_a), veh/h	0	6287						
HCM Platoon Ratio	1.00	1.00						
Upstream Filter(I)	0.00	1.00						
Uniform Delay (d), s/veh	0.0	1.7						
Incr Delay (d2), s/veh	0.0	0.3						
Initial Q Delay(d3),s/veh	0.0	0.0						
%ile BackOfQ(50%),veh/ln	0.0	0.3						
LnGrp Delay(d),s/veh	0.0	2.0						
LnGrp LOS		A						
Approach Vol, veh/h		200						
Approach Delay, s/veh		2.0						
Approach LOS		A						
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				6.7				
Change Period (Y+Rc), s				4.5				
Max Green Setting (Gmax), s				22.5				
Max Q Clear Time (g_c+I1), s				2.5				
Green Ext Time (p_c), s				1.0				
Intersection Summary								
HCM 2010 Ctrl Delay			2.0					
HCM 2010 LOS			A					






















HCM 2010 Signalized Intersection Summary
 57: Bachman Place & Hotel Circle South

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	300	950	0	0	0	900		
Future Volume (veh/h)	300	950	0	0	0	900		
Number	2	12			3	18		
Initial Q (Qb), veh	0	0			0	0		
Ped-Bike Adj(A_pbT)		0.99			1.00	1.00		
Parking Bus, Adj	1.00	1.00			1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900			1863	1863		
Adj Flow Rate, veh/h	316	905			0	852		
Adj No. of Lanes	2	0			1	2		
Peak Hour Factor	0.95	0.95			0.95	0.95		
Percent Heavy Veh, %	2	2			2	2		
Cap, veh/h	1188	1047			0	0		
Arrive On Green	0.67	0.67			0.00	0.00		
Sat Flow, veh/h	1863	1560			0			
Grp Volume(v), veh/h	316	905			0.0			
Grp Sat Flow(s),veh/h/ln	1770	1560						
Q Serve(g_s), s	2.2	13.8						
Cycle Q Clear(g_c), s	2.2	13.8						
Prop In Lane		1.00						
Lane Grp Cap(c), veh/h	1188	1047						
V/C Ratio(X)	0.27	0.86						
Avail Cap(c_a), veh/h	1279	1128						
HCM Platoon Ratio	1.00	1.00						
Upstream Filter(I)	1.00	1.00						
Uniform Delay (d), s/veh	2.0	3.9						
Incr Delay (d2), s/veh	0.2	7.0						
Initial Q Delay(d3),s/veh	0.0	0.0						
%ile BackOfQ(50%),veh/ln	1.0	7.6						
LnGrp Delay(d),s/veh	2.2	10.9						
LnGrp LOS	A	B						
Approach Vol, veh/h	1221							
Approach Delay, s/veh	8.7							
Approach LOS	A							
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		30.4						
Change Period (Y+Rc), s		10.0						
Max Green Setting (Gmax), s		22.0						
Max Q Clear Time (g_c+I1), s		15.8						
Green Ext Time (p_c), s		4.6						
Intersection Summary								
HCM 2010 Ctrl Delay			8.7					
HCM 2010 LOS			A					












HCM 2010 Signalized Intersection Summary
 58: Mission Center Road & I-8 EB Ramp

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 							 			 	
Traffic Volume (veh/h)	840	0	370	0	0	0	0	530	270	990	530	0
Future Volume (veh/h)	840	0	370	0	0	0	0	530	270	990	530	0
Number	5	2	12				7	4	14	3	8	18
Initial Q (Qb), veh	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
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	884	0	0				0	558	0	1042	558	0
Adj No. of Lanes	2	1	0				0	2	1	2	1	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	1432	775	0				0	625	280	1038	545	0
Arrive On Green	0.42	0.00	0.00				0.00	0.06	0.00	0.29	0.29	0.00
Sat Flow, veh/h	3442	1863	0				0	3632	1583	3548	1863	0
Grp Volume(v), veh/h	884	0	0				0	558	0	1042	558	0
Grp Sat Flow(s),veh/h/ln	1721	1863	0				0	1770	1583	1774	1863	0
Q Serve(g_s), s	30.3	0.0	0.0				0.0	23.5	0.0	43.9	43.9	0.0
Cycle Q Clear(g_c), s	30.3	0.0	0.0				0.0	23.5	0.0	43.9	43.9	0.0
Prop In Lane	1.00		0.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1432	775	0				0	625	280	1038	545	0
V/C Ratio(X)	0.62	0.00	0.00				0.00	0.89	0.00	1.00	1.02	0.00
Avail Cap(c_a), veh/h	1432	775	0				0	873	391	1038	545	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.86	0.00	0.62	0.62	0.00
Uniform Delay (d), s/veh	34.4	0.0	0.0				0.0	69.2	0.0	53.1	53.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0				0.0	6.1	0.0	22.8	36.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.8	0.0	0.0				0.0	12.1	0.0	24.8	28.1	0.0
LnGrp Delay(d),s/veh	36.4	0.0	0.0				0.0	75.3	0.0	75.9	89.5	0.0
LnGrp LOS	D							E		F	F	
Approach Vol, veh/h		884						558			1600	
Approach Delay, s/veh		36.4						75.3			80.6	
Approach LOS		D						E			F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		68.5		31.5				50.0				
Change Period (Y+Rc), s		6.1		5.0				6.1				
Max Green Setting (Gmax), s		51.9		37.0				43.9				
Max Q Clear Time (g_c+I1), s		32.3		25.5				45.9				
Green Ext Time (p_c), s		1.8		1.0				0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			66.8									
HCM 2010 LOS			E									
Notes												

























HCM 2010 Signalized Intersection Summary
 59: Mission Center Road & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	360	20	10	190	430	30	40	30	525	30	345
Future Volume (veh/h)	330	360	20	10	190	430	30	40	30	525	30	345
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.85	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1900	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	245	521	10	11	200	453	32	42	32	576	0	363
Adj No. of Lanes	1	2	0	0	2	1	0	1	1	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	598	11	6	233	848	101	132	193	1701	0	727
Arrive On Green	0.16	0.16	0.16	0.07	0.07	0.07	0.13	0.13	0.13	0.48	0.00	0.48
Sat Flow, veh/h	1774	3640	70	97	3531	1343	788	1035	1509	3548	0	1517
Grp Volume(v), veh/h	245	266	265	211	0	453	74	0	32	576	0	363
Grp Sat Flow(s),veh/h/ln	1774	1863	1847	1858	1770	1343	1823	0	1509	1774	0	1517
Q Serve(g_s), s	20.1	20.9	21.0	9.9	0.0	9.9	5.5	0.0	2.8	15.1	0.0	24.6
Cycle Q Clear(g_c), s	20.1	20.9	21.0	9.9	0.0	9.9	5.5	0.0	2.8	15.1	0.0	24.6
Prop In Lane	1.00		0.04	0.05		1.00	0.43		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	292	306	304	123	117	848	233	0	193	1701	0	727
V/C Ratio(X)	0.84	0.87	0.87	1.72	0.00	0.53	0.32	0.00	0.17	0.34	0.00	0.50
Avail Cap(c_a), veh/h	377	396	393	123	117	848	233	0	193	1701	0	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.63	0.00	0.63
Uniform Delay (d), s/veh	60.8	61.1	61.1	70.1	0.0	17.8	59.5	0.0	58.3	24.3	0.0	26.7
Incr Delay (d2), s/veh	10.1	12.8	13.1	356.2	0.0	0.3	0.8	0.0	0.4	0.3	0.0	1.6
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	10.7	11.9	11.8	17.2	0.0	18.8	2.8	0.0	1.2	7.5	0.0	10.6
LnGrp Delay(d),s/veh	70.8	73.9	74.2	426.3	0.0	18.1	60.3	0.0	58.7	24.6	0.0	28.3
LnGrp LOS	E	E	E	F		B	E		E	C		C
Approach Vol, veh/h		776			664			106			939	
Approach Delay, s/veh		73.0			147.8			59.8			26.0	
Approach LOS		E			F			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		25.2		16.0		78.0		30.8				
Change Period (Y+Rc), s		6.1		6.1		6.1		6.1				
Max Green Setting (Gmax), s		11.9		9.9		71.9		31.9				
Max Q Clear Time (g_c+I1), s		7.5		11.9		26.6		23.0				
Green Ext Time (p_c), s		0.1		0.0		1.8		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay				74.7								
HCM 2010 LOS				E								
Notes												













HCM 2010 Signalized Intersection Summary
 60: Qualcomm Way & I-8 EB Ramp

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	0	450	0	1255	1580	515		
Future Volume (veh/h)	0	450	0	1255	1580	515		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863		
Adj Flow Rate, veh/h	0	279	0	1321	1663	258		
Adj No. of Lanes	1	2	0	2	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	0	2	2	2		
Cap, veh/h	206	323	0	2870	2870	1242		
Arrive On Green	0.00	0.12	0.00	1.00	0.81	0.81		
Sat Flow, veh/h	1774	2787	0	3725	3632	1532		
Grp Volume(v), veh/h	0	279	0	1321	1663	258		
Grp Sat Flow(s),veh/h/ln	1774	1393	0	1770	1770	1532		
Q Serve(g_s), s	0.0	14.3	0.0	0.0	24.3	5.6		
Cycle Q Clear(g_c), s	0.0	14.3	0.0	0.0	24.3	5.6		
Prop In Lane	1.00	1.00	0.00			1.00		
Lane Grp Cap(c), veh/h	206	323	0	2870	2870	1242		
V/C Ratio(X)	0.00	0.86	0.00	0.46	0.58	0.21		
Avail Cap(c_a), veh/h	422	663	0	2870	2870	1242		
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.00	0.11	0.09	0.09		
Uniform Delay (d), s/veh	0.0	63.0	0.0	0.0	4.9	3.1		
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.1	0.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	5.6	0.0	0.0	11.6	2.3		
LnGrp Delay(d),s/veh	0.0	65.6	0.0	0.1	5.0	3.2		
LnGrp LOS		E		A	A	A		
Approach Vol, veh/h	279			1321	1921			
Approach Delay, s/veh	65.6			0.1	4.7			
Approach LOS	E			A	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		122.7		22.3		122.7		
Change Period (Y+Rc), s		5.1		5.5		5.1		
Max Green Setting (Gmax), s		99.9		34.5		99.9		
Max Q Clear Time (g_c+I1), s		2.0		16.3		26.3		
Green Ext Time (p_c), s		7.2		0.6		8.9		
Intersection Summary								
HCM 2010 Ctrl Delay			7.8					
HCM 2010 LOS			A					
Notes								













HCM 2010 Signalized Intersection Summary
 61: Texas Street/Qualcomm Way & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	220	270	220	80	620	90	820	170	320	1290	420
Future Volume (veh/h)	290	220	270	220	80	620	90	820	170	320	1290	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.94	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	305	232	210	232	84	453	95	863	147	337	1358	368
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	344	379	297	312	602	111	824	140	391	1596	683
Arrive On Green	0.18	0.18	0.18	0.17	0.17	0.17	0.06	0.28	0.28	0.44	0.90	0.90
Sat Flow, veh/h	1774	1863	1512	1774	1863	1507	1774	2996	510	1774	3539	1516
Grp Volume(v), veh/h	305	232	210	232	84	453	95	510	500	337	1358	368
Grp Sat Flow(s),veh/h/ln	1774	1863	1512	1774	1863	1507	1774	1770	1736	1774	1770	1516
Q Serve(g_s), s	24.5	16.8	17.6	18.2	5.7	3.8	7.7	39.9	39.9	24.8	23.5	6.7
Cycle Q Clear(g_c), s	24.5	16.8	17.6	18.2	5.7	3.8	7.7	39.9	39.9	24.8	23.5	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	328	344	379	297	312	602	111	487	478	391	1596	683
V/C Ratio(X)	0.93	0.67	0.55	0.78	0.27	0.75	0.85	1.05	1.05	0.86	0.85	0.54
Avail Cap(c_a), veh/h	330	347	381	367	385	661	111	487	478	391	1596	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Uniform Delay (d), s/veh	58.2	55.0	47.7	57.8	52.6	38.0	67.3	52.6	52.6	38.5	5.1	4.2
Incr Delay (d2), s/veh	31.8	5.0	1.7	6.5	0.2	3.7	42.0	53.6	54.0	12.0	4.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	9.1	7.5	9.4	3.0	15.6	5.1	26.7	26.3	13.4	10.9	2.9
LnGrp Delay(d),s/veh	90.0	60.0	49.4	64.3	52.8	41.7	109.3	106.1	106.5	50.5	9.2	6.3
LnGrp LOS	F	E	D	E	D	D	F	F	F	D	A	A
Approach Vol, veh/h		747			769			1105			2063	
Approach Delay, s/veh		69.3			49.7			106.6			15.4	
Approach LOS		E			D			F			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	36.9	46.9		31.7	13.5	70.3		29.5				
Change Period (Y+Rc), s	4.9	* 7		4.9	4.4	4.9		5.2				
Max Green Setting (Gmax), s	26.6	* 40		27.0	9.1	59.5		30.0				
Max Q Clear Time (g_c+I1), s	26.8	41.9		26.5	9.7	25.5		20.2				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	18.3		1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			51.1									
HCM 2010 LOS			D									
Notes												

HCM 2010 Signalized Intersection Summary
 62: Camino Del Rio South & Fenton Parkway

								
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	250	580	320	400	650	280		
Future Volume (veh/h)	250	580	320	400	650	280		
Number	5	2	6	16	7	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.96	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	263	611	337	43	684	170		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	304	871	430	999	727	649		
Arrive On Green	0.17	0.47	0.23	0.23	0.41	0.41		
Sat Flow, veh/h	1774	1863	1863	1515	1774	1583		
Grp Volume(v), veh/h	263	611	337	43	684	170		
Grp Sat Flow(s),veh/h/ln	1774	1863	1863	1515	1774	1583		
Q Serve(g_s), s	11.1	20.0	13.0	0.0	28.4	5.4		
Cycle Q Clear(g_c), s	11.1	20.0	13.0	0.0	28.4	5.4		
Prop In Lane	1.00			1.00	1.00	1.00		
Lane Grp Cap(c), veh/h	304	871	430	999	727	649		
V/C Ratio(X)	0.87	0.70	0.78	0.04	0.94	0.26		
Avail Cap(c_a), veh/h	370	1068	573	1115	846	755		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	30.9	16.2	27.7	2.2	21.7	15.0		
Incr Delay (d2), s/veh	14.4	1.7	5.5	0.0	15.9	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.6	10.6	7.3	0.9	17.1	5.7		
LnGrp Delay(d),s/veh	45.4	17.9	33.2	2.2	37.6	15.0		
LnGrp LOS	D	B	C	A	D	B		
Approach Vol, veh/h		874	380		854			
Approach Delay, s/veh		26.2	29.7		33.1			
Approach LOS		C	C		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		40.9		35.9	18.1	22.7		
Change Period (Y+Rc), s		5.0		4.4	5.0	* 5		
Max Green Setting (Gmax), s		44.0		36.6	16.0	* 24		
Max Q Clear Time (g_c+I1), s		22.0		30.4	13.1	15.0		
Green Ext Time (p_c), s		4.7		1.1	0.1	1.4		
Intersection Summary								
HCM 2010 Ctrl Delay			29.6					
HCM 2010 LOS			C					
Notes								



















HCM 2010 Signalized Intersection Summary
 63: I-15 SB Ramps & Camino Del Rio South

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑			↕		↖		↖
Traffic Volume (veh/h)	0	1750	20	40	290	0	20	0	40	290	0	160
Future Volume (veh/h)	0	1750	20	40	290	0	20	0	40	290	0	160
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.94	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	1900	1863	1863	0	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	0	1842	10	42	305	0	21	0	40	305	0	-32
Adj No. of Lanes	0	2	0	1	1	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	0	2
Cap, veh/h	0	2260	12	78	1399	0	31	0	58	0	0	0
Arrive On Green	0.00	0.63	0.63	0.04	0.75	0.00	0.06	0.00	0.06	0.00	0.00	0.00
Sat Flow, veh/h	0	3702	20	1774	1863	0	542	0	1032		0	
Grp Volume(v), veh/h	0	902	950	42	305	0	61	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	0	1770	1859	1774	1863	0	1573	0	0			
Q Serve(g_s), s	0.0	20.2	20.3	1.2	2.5	0.0	2.0	0.0	0.0			
Cycle Q Clear(g_c), s	0.0	20.2	20.3	1.2	2.5	0.0	2.0	0.0	0.0			
Prop In Lane	0.00		0.01	1.00		0.00	0.34		0.66			
Lane Grp Cap(c), veh/h	0	1108	1164	78	1399	0	89	0	0			
V/C Ratio(X)	0.00	0.81	0.82	0.54	0.22	0.00	0.69	0.00	0.00			
Avail Cap(c_a), veh/h	0	1794	1884	174	2222	0	155	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	0.0	7.4	7.4	24.3	1.9	0.0	24.0	0.0	0.0			
Incr Delay (d2), s/veh	0.0	0.6	0.6	2.2	0.0	0.0	3.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	9.7	10.2	0.6	1.3	0.0	0.9	0.0	0.0			
LnGrp Delay(d),s/veh	0.0	8.0	8.0	26.5	2.0	0.0	27.5	0.0	0.0			
LnGrp LOS		A	A	C	A		C					
Approach Vol, veh/h		1852			347			61				
Approach Delay, s/veh		8.0			4.9			27.5				
Approach LOS		A			A			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	6.5	38.0				44.5		7.4				
Change Period (Y+Rc), s	* 4.2	5.5				5.5		4.5				
Max Green Setting (Gmax), s	* 5.1	52.6				61.9		5.1				
Max Q Clear Time (g_c+I1), s	3.2	22.3				4.5		4.0				
Green Ext Time (p_c), s	0.0	10.2				1.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				8.1								
HCM 2010 LOS				A								
Notes												

HCM 2010 Signalized Intersection Summary
 64: I-15 SB Ramps & Camino Del Rio South


















	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↙	↑↑				
Traffic Volume (veh/h)	1420	660	100	330	0	0		
Future Volume (veh/h)	1420	660	100	330	0	0		
Number	2	12	1	6				
Initial Q (Qb), veh	0	0	0	0				
Ped-Bike Adj(A_pbT)		1.00	1.00					
Parking Bus, Adj	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863				
Adj Flow Rate, veh/h	1495	0	105	347				
Adj No. of Lanes	2	0	1	2				
Peak Hour Factor	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	2	2				
Cap, veh/h	2176	0	166	2954				
Arrive On Green	0.61	0.00	0.09	0.83				
Sat Flow, veh/h	3725	0	1774	3632				
Grp Volume(v), veh/h	1495	0	105	347				
Grp Sat Flow(s),veh/h/ln	1770	0	1774	1770				
Q Serve(g_s), s	9.4	0.0	1.9	0.6				
Cycle Q Clear(g_c), s	9.4	0.0	1.9	0.6				
Prop In Lane		0.00	1.00					
Lane Grp Cap(c), veh/h	2176	0	166	2954				
V/C Ratio(X)	0.69	0.00	0.63	0.12				
Avail Cap(c_a), veh/h	8359	0	630	10063				
HCM Platoon Ratio	1.00	1.00	1.00	1.00				
Upstream Filter(I)	1.00	0.00	1.00	1.00				
Uniform Delay (d), s/veh	4.3	0.0	14.5	0.5				
Incr Delay (d2), s/veh	0.1	0.0	1.5	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	4.4	0.0	1.0	0.2				
LnGrp Delay(d),s/veh	4.4	0.0	16.0	0.5				
LnGrp LOS	A		B	A				
Approach Vol, veh/h	1495			452				
Approach Delay, s/veh	4.4			4.1				
Approach LOS	A			A				
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		
Phs Duration (G+Y+Rc), s	7.3	25.9				33.2		
Change Period (Y+Rc), s	* 4.2	5.5				5.5		
Max Green Setting (Gmax), s	* 12	78.5				94.5		
Max Q Clear Time (g_c+I1), s	3.9	11.4				2.6		
Green Ext Time (p_c), s	0.0	8.9				1.4		
Intersection Summary								
HCM 2010 Ctrl Delay			4.3					
HCM 2010 LOS			A					
Notes								

HCM 2010 Signalized Intersection Summary
 65: I-15 NB Ramps & Camino Del Rio South

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	970	0	0	230	80	200	0	90	0	0	0
Future Volume (veh/h)	450	970	0	0	230	80	200	0	90	0	0	0
Number	5	2	12	1	6	16	7	4	14			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.94	1.00		0.96			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900			
Adj Flow Rate, veh/h	474	1021	0	0	242	32	211	0	95			
Adj No. of Lanes	1	2	0	0	1	1	1	1	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	508	1967	0	0	331	266	248	0	212			
Arrive On Green	0.29	0.56	0.00	0.00	0.18	0.18	0.14	0.00	0.14			
Sat Flow, veh/h	1774	3632	0	0	1863	1494	1774	0	1515			
Grp Volume(v), veh/h	474	1021	0	0	242	32	211	0	95			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1863	1494	1774	0	1515			
Q Serve(g_s), s	20.5	14.2	0.0	0.0	9.7	1.4	9.1	0.0	4.5			
Cycle Q Clear(g_c), s	20.5	14.2	0.0	0.0	9.7	1.4	9.1	0.0	4.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	508	1967	0	0	331	266	248	0	212			
V/C Ratio(X)	0.93	0.52	0.00	0.00	0.73	0.12	0.85	0.00	0.45			
Avail Cap(c_a), veh/h	565	2471	0	0	537	431	248	0	212			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	27.4	10.9	0.0	0.0	30.6	27.2	33.1	0.0	31.1			
Incr Delay (d2), s/veh	20.5	0.1	0.0	0.0	1.2	0.1	22.7	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	12.9	6.8	0.0	0.0	5.1	0.6	6.0	0.0	1.9			
LnGrp Delay(d),s/veh	47.9	11.0	0.0	0.0	31.8	27.3	55.7	0.0	31.7			
LnGrp LOS	D	B			C	C	E		C			
Approach Vol, veh/h		1495			274			306				
Approach Delay, s/veh		22.7			31.3			48.3				
Approach LOS		C			C			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		55.8		23.0	29.8	26.0						
Change Period (Y+Rc), s		12.0		12.0	* 7.2	12.0						
Max Green Setting (Gmax), s		55.0		11.0	* 25	22.7						
Max Q Clear Time (g_c+11), s		16.2		11.1	22.5	11.7						
Green Ext Time (p_c), s		4.8		0.0	0.1	0.6						
Intersection Summary												
HCM 2010 Ctrl Delay				27.6								
HCM 2010 LOS				C								
Notes												

HCM 2010 Signalized Intersection Summary















66: Mission Gorge Road & I-8 EB Off Ramps

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	 	  		 	  			
Traffic Volume (veh/h)	950	2150	90	650	1540	0		
Future Volume (veh/h)	950	2150	90	650	1540	0		
Number	1	16	3	8	4	14		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	0		
Adj Flow Rate, veh/h	1000	1221	95	684	1621	0		
Adj No. of Lanes	2	3	1	2	3	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	0		
Cap, veh/h	1198	1256	121	1958	2171	0		
Arrive On Green	0.35	0.35	0.07	0.55	0.43	0.00		
Sat Flow, veh/h	3442	3610	1774	3632	5421	0		
Grp Volume(v), veh/h	1000	1221	95	684	1621	0		
Grp Sat Flow(s),veh/h/ln	1721	1203	1774	1770	1695	0		
Q Serve(g_s), s	21.6	27.0	4.3	8.7	21.7	0.0		
Cycle Q Clear(g_c), s	21.6	27.0	4.3	8.7	21.7	0.0		
Prop In Lane	1.00	1.00	1.00			0.00		
Lane Grp Cap(c), veh/h	1198	1256	121	1958	2171	0		
V/C Ratio(X)	0.83	0.97	0.78	0.35	0.75	0.00		
Avail Cap(c_a), veh/h	1198	1256	134	2350	2699	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	24.3	26.0	37.2	10.0	19.5	0.0		
Incr Delay (d2), s/veh	5.3	18.9	20.9	0.1	0.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	11.2	11.1	2.8	4.2	10.2	0.0		
LnGrp Delay(d),s/veh	29.5	45.0	58.0	10.1	20.4	0.0		
LnGrp LOS	C	D	E	B	C			
Approach Vol, veh/h	2221			779	1621			
Approach Delay, s/veh	38.0			16.0	20.4			
Approach LOS	D			B	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			10.2	38.6		32.2		48.8
Change Period (Y+Rc), s			* 4.7	4.0		4.0		4.0
Max Green Setting (Gmax), s			* 6.1	43.0		28.2		53.8
Max Q Clear Time (g_c+I1), s			6.3	23.7		29.0		10.7
Green Ext Time (p_c), s			0.0	10.9		0.0		4.6
Intersection Summary								
HCM 2010 Ctrl Delay	28.1							
HCM 2010 LOS	C							
Notes								





















HCM 2010 Signalized Intersection Summary
 67: Texas Street & Madison Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	90	60	80	70	290	150	570	160	210	1360	210
Future Volume (veh/h)	220	90	60	80	70	290	150	570	160	210	1360	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	232	95	31	84	74	137	158	600	94	221	1432	158
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	269	219	206	216	174	171	860	716	245	1617	177
Arrive On Green	0.14	0.14	0.14	0.12	0.12	0.12	0.10	0.46	0.46	0.14	0.50	0.50
Sat Flow, veh/h	1774	1863	1518	1774	1863	1502	1774	1863	1549	1774	3211	351
Grp Volume(v), veh/h	232	95	31	84	74	137	158	600	94	221	784	806
Grp Sat Flow(s),veh/h/ln	1774	1863	1518	1774	1863	1502	1774	1863	1549	1774	1770	1792
Q Serve(g_s), s	17.6	6.3	2.4	6.0	5.0	12.2	12.1	35.0	4.8	16.8	54.1	55.6
Cycle Q Clear(g_c), s	17.6	6.3	2.4	6.0	5.0	12.2	12.1	35.0	4.8	16.8	54.1	55.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	256	269	219	206	216	174	171	860	716	245	891	903
V/C Ratio(X)	0.91	0.35	0.14	0.41	0.34	0.79	0.92	0.70	0.13	0.90	0.88	0.89
Avail Cap(c_a), veh/h	263	276	225	247	260	209	171	866	720	295	947	959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	52.8	51.2	56.2	55.7	58.9	61.4	29.3	21.1	58.1	30.3	30.7
Incr Delay (d2), s/veh	30.6	0.3	0.1	0.5	0.3	12.2	46.7	2.7	0.1	23.7	9.5	10.6
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	10.8	3.3	1.0	3.0	2.6	5.7	8.1	18.6	2.1	9.8	28.7	30.0
LnGrp Delay(d),s/veh	88.3	53.1	51.3	56.7	56.1	71.1	108.1	31.9	21.2	81.8	39.8	41.3
LnGrp LOS	F	D	D	E	E	E	F	C	C	F	D	D
Approach Vol, veh/h		358			295			852			1811	
Approach Delay, s/veh		75.7			63.2			44.9			45.6	
Approach LOS		E			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.3	68.2		24.7	17.6	73.9		20.8				
Change Period (Y+Rc), s	4.4	4.9		4.9	4.4	4.9		4.9				
Max Green Setting (Gmax), s	22.8	63.7		20.3	13.2	73.3		19.1				
Max Q Clear Time (g_c+I1), s	18.8	37.0		19.6	14.1	57.6		14.2				
Green Ext Time (p_c), s	0.1	5.9		0.1	0.0	11.4		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			50.2									
HCM 2010 LOS			D									







HCM 2010 Signalized Intersection Summary
 68: Franklin Ridge Road & Phyllis Place

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	 		 			 		
Traffic Volume (veh/h)	160	60	1500	110	50	1280		
Future Volume (veh/h)	160	60	1500	110	50	1280		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.93	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863		
Adj Flow Rate, veh/h	168	42	1579	116	53	926		
Adj No. of Lanes	2	0	2	1	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	377	91	1803	1325	329	1977		
Arrive On Green	0.14	0.14	0.52	0.71	0.19	0.19		
Sat Flow, veh/h	2875	669	3442	1863	1774	2787		
Grp Volume(v), veh/h	104	106	1579	116	53	926		
Grp Sat Flow(s),veh/h/ln	1770	1682	1721	1863	1774	1393		
Q Serve(g_s), s	4.7	5.0	35.1	1.7	2.2	12.6		
Cycle Q Clear(g_c), s	4.7	5.0	35.1	1.7	2.2	12.6		
Prop In Lane		0.40	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	240	228	1803	1325	329	1977		
V/C Ratio(X)	0.44	0.46	0.88	0.09	0.16	0.47		
Avail Cap(c_a), veh/h	366	348	2791	1993	367	2037		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	34.5	34.7	18.2	3.9	29.7	5.5		
Incr Delay (d2), s/veh	1.2	1.5	2.2	0.0	0.2	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.4	2.4	17.0	0.8	1.1	4.8		
LnGrp Delay(d),s/veh	35.8	36.1	20.4	3.9	30.0	5.7		
LnGrp LOS	D	D	C	A	C	A		
Approach Vol, veh/h	210			1695	979			
Approach Delay, s/veh	36.0			19.2	7.0			
Approach LOS	D			B	A			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		20.6	50.0	16.3				66.3
Change Period (Y+Rc), s		4.5	4.5	4.5				4.5
Max Green Setting (Gmax), s		18.0	70.5	18.0				93.0
Max Q Clear Time (g_c+I1), s		14.6	37.1	7.0				3.7
Green Ext Time (p_c), s		1.5	8.5	0.8				0.7
Intersection Summary								
HCM 2010 Ctrl Delay			16.3					
HCM 2010 LOS			B					













HCM 2010 Signalized Intersection Summary
 69: Franklin Ridge Road & Via Alta

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	20	80	10	20	10	85	850	40	20	890	570
Future Volume (veh/h)	470	20	80	10	20	10	85	850	40	20	890	570
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	495	21	63	11	21	6	89	895	31	21	937	453
Adj No. of Lanes	1	1	0	0	1	0	1	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	516	137	410	174	322	87	93	978	34	29	951	792
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.05	0.55	0.55	0.02	0.51	0.51
Sat Flow, veh/h	1357	406	1217	415	957	257	1774	1789	62	1774	1863	1552
Grp Volume(v), veh/h	495	0	84	38	0	0	89	0	926	21	937	453
Grp Sat Flow(s),veh/h/ln	1357	0	1622	1629	0	0	1774	0	1850	1774	1863	1552
Q Serve(g_s), s	43.6	0.0	4.9	0.0	0.0	0.0	6.8	0.0	61.3	1.6	66.9	27.2
Cycle Q Clear(g_c), s	45.5	0.0	4.9	1.9	0.0	0.0	6.8	0.0	61.3	1.6	66.9	27.2
Prop In Lane	1.00		0.75	0.29		0.16	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	516	0	547	584	0	0	93	0	1012	29	951	792
V/C Ratio(X)	0.96	0.00	0.15	0.07	0.00	0.00	0.95	0.00	0.92	0.73	0.99	0.57
Avail Cap(c_a), veh/h	516	0	547	584	0	0	93	0	1012	85	951	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	0.0	31.3	30.3	0.0	0.0	63.8	0.0	27.7	66.1	32.6	22.9
Incr Delay (d2), s/veh	29.4	0.0	0.1	0.0	0.0	0.0	77.9	0.0	12.5	29.9	25.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.6	0.0	2.2	1.0	0.0	0.0	5.3	0.0	34.6	1.0	40.9	11.8
LnGrp Delay(d),s/veh	75.4	0.0	31.4	30.4	0.0	0.0	141.7	0.0	40.3	96.0	58.2	23.8
LnGrp LOS	E		C	C			F		D	F	E	C
Approach Vol, veh/h		579			38			1015			1411	
Approach Delay, s/veh		69.0			30.4			49.2			47.7	
Approach LOS		E			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	78.3		50.0	11.6	73.4		50.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	6.5	69.5		45.5	7.1	68.9		45.5				
Max Q Clear Time (g_c+1), s	3.6	63.3		47.5	8.8	68.9		3.9				
Green Ext Time (p_c), s	0.0	3.4		0.0	0.0	0.0		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			52.0									
HCM 2010 LOS			D									












HCM 2010 Signalized Intersection Summary
 70: Qualcomm Way & Civita Boulevard

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑↑	↑	↑↑	↑		
Traffic Volume (veh/h)	375	310	640	360	575	665		
Future Volume (veh/h)	375	310	640	360	575	665		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		0.93	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	395	179	674	379	605	489		
Adj No. of Lanes	2	1	2	1	2	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	531	222	783	864	1252	936		
Arrive On Green	0.15	0.15	0.23	0.46	0.36	0.36		
Sat Flow, veh/h	3632	1478	3442	1863	3442	1583		
Grp Volume(v), veh/h	395	179	674	379	605	489		
Grp Sat Flow(s),veh/h/ln	1770	1478	1721	1863	1721	1583		
Q Serve(g_s), s	11.7	12.9	20.7	15.1	14.9	0.0		
Cycle Q Clear(g_c), s	11.7	12.9	20.7	15.1	14.9	0.0		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	531	222	783	864	1252	936		
V/C Ratio(X)	0.74	0.81	0.86	0.44	0.48	0.52		
Avail Cap(c_a), veh/h	660	275	1173	1058	1252	936		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	0.58	0.58	0.76	0.76		
Uniform Delay (d), s/veh	44.7	45.2	40.8	19.9	27.0	13.3		
Incr Delay (d2), s/veh	3.6	13.4	2.7	0.2	1.0	1.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	6.0	6.1	10.1	7.7	7.2	9.0		
LnGrp Delay(d),s/veh	48.3	58.6	43.5	20.1	28.0	14.9		
LnGrp LOS	D	E	D	C	C	B		
Approach Vol, veh/h	574			1053	1094			
Approach Delay, s/veh	51.5			35.1	22.2			
Approach LOS	D			D	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		49.5	34.5	26.0				60.5
Change Period (Y+Rc), s		9.5	9.5	* 9.5				9.5
Max Green Setting (Gmax), s		28.5	37.5	* 21				62.5
Max Q Clear Time (g_c+I1), s		16.9	22.7	14.9				17.1
Green Ext Time (p_c), s		3.3	2.3	1.6				2.6
Intersection Summary								
HCM 2010 Ctrl Delay			33.3					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary
 71: Franklin Ridge Road & Civita Boulevard












								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	915	125	110	80	120	890		
Future Volume (veh/h)	915	125	110	80	120	890		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.95		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863		
Adj Flow Rate, veh/h	963	100	116	84	261	216		
Adj No. of Lanes	1	1	1	1	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1008	900	146	600	345	277		
Arrive On Green	0.57	0.57	0.08	0.32	0.19	0.19		
Sat Flow, veh/h	1774	1583	1774	1863	1863	1498		
Grp Volume(v), veh/h	963	100	116	84	261	216		
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1498		
Q Serve(g_s), s	42.1	2.4	5.3	2.6	10.9	11.3		
Cycle Q Clear(g_c), s	42.1	2.4	5.3	2.6	10.9	11.3		
Prop In Lane	1.00	1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	1008	900	146	600	345	277		
V/C Ratio(X)	0.96	0.11	0.79	0.14	0.76	0.78		
Avail Cap(c_a), veh/h	1091	974	151	692	431	347		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	16.7	8.2	37.0	19.8	31.7	31.9		
Incr Delay (d2), s/veh	16.9	0.1	24.0	0.1	5.9	8.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	25.1	3.3	3.6	1.4	6.1	5.3		
LnGrp Delay(d),s/veh	33.7	8.2	61.0	19.9	37.6	40.5		
LnGrp LOS	C	A	E	B	D	D		
Approach Vol, veh/h	1063			200	477			
Approach Delay, s/veh	31.3			43.7	38.9			
Approach LOS	C			D	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		30.9		51.2	11.3	19.7		
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s		30.5		50.5	7.0	19.0		
Max Q Clear Time (g_c+I1), s		4.6		44.1	7.3	13.3		
Green Ext Time (p_c), s		0.4		2.6	0.0	1.2		
Intersection Summary								
HCM 2010 Ctrl Delay			34.8					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary
 72: Fenton Parkway & Street "I"






















								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	280	320	430	80	120	380		
Future Volume (veh/h)	280	320	430	80	120	380		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.96	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	295	14	453	39	126	400		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	389	347	927	79	243	1910		
Arrive On Green	0.22	0.22	0.28	0.28	0.14	0.54		
Sat Flow, veh/h	1774	1583	3382	282	1774	3632		
Grp Volume(v), veh/h	295	14	243	249	126	400		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1801	1774	1770		
Q Serve(g_s), s	5.8	0.3	4.3	4.3	2.5	2.2		
Cycle Q Clear(g_c), s	5.8	0.3	4.3	4.3	2.5	2.2		
Prop In Lane	1.00	1.00		0.16	1.00			
Lane Grp Cap(c), veh/h	389	347	499	508	243	1910		
V/C Ratio(X)	0.76	0.04	0.49	0.49	0.52	0.21		
Avail Cap(c_a), veh/h	866	773	878	894	466	3114		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	13.6	11.5	11.1	11.2	14.9	4.5		
Incr Delay (d2), s/veh	3.1	0.0	0.7	0.7	1.7	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.1	0.1	2.1	2.2	1.3	1.1		
LnGrp Delay(d),s/veh	16.7	11.5	11.9	11.9	16.7	4.5		
LnGrp LOS	B	B	B	B	B	A		
Approach Vol, veh/h	309		492			526		
Approach Delay, s/veh	16.5		11.9			7.4		
Approach LOS	B		B			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.6	15.0				24.6		12.7
Change Period (Y+Rc), s	4.5	4.5				4.5		4.5
Max Green Setting (Gmax), s	9.8	18.5				32.8		18.2
Max Q Clear Time (g_c+11), s	4.5	6.3				4.2		7.8
Green Ext Time (p_c), s	0.1	2.5				2.9		0.7
Intersection Summary								
HCM 2010 Ctrl Delay			11.2					
HCM 2010 LOS			B					

HCM 2010 Signalized Intersection Summary





















73: Via Las Cumbres & Riverwalk Drive

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	150	80	1020	120	130	980		
Future Volume (veh/h)	150	80	1020	120	130	980		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	158	52	1074	105	137	1032		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	232	207	1258	123	209	2101		
Arrive On Green	0.13	0.13	0.39	0.39	0.12	0.59		
Sat Flow, veh/h	1774	1583	3342	317	1774	3632		
Grp Volume(v), veh/h	158	52	585	594	137	1032		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1797	1774	1770		
Q Serve(g_s), s	4.3	1.5	15.4	15.4	3.7	8.5		
Cycle Q Clear(g_c), s	4.3	1.5	15.4	15.4	3.7	8.5		
Prop In Lane	1.00	1.00		0.18	1.00			
Lane Grp Cap(c), veh/h	232	207	685	696	209	2101		
V/C Ratio(X)	0.68	0.25	0.85	0.85	0.66	0.49		
Avail Cap(c_a), veh/h	632	564	728	739	262	2641		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	21.1	19.8	14.2	14.3	21.4	5.9		
Incr Delay (d2), s/veh	3.5	0.6	9.3	9.2	4.0	0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.3	0.7	9.2	9.4	2.1	4.1		
LnGrp Delay(d),s/veh	24.6	20.5	23.5	23.5	25.4	6.1		
LnGrp LOS	C	C	C	C	C	A		
Approach Vol, veh/h	210		1179			1169		
Approach Delay, s/veh	23.6		23.5			8.4		
Approach LOS	C		C			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	10.5	29.2				39.6		11.1
Change Period (Y+Rc), s	4.5	9.5				* 9.5		4.5
Max Green Setting (Gmax), s	7.5	20.9				* 38		18.1
Max Q Clear Time (g_c+I1), s	5.7	17.4				10.5		6.3
Green Ext Time (p_c), s	0.1	2.3				8.2		0.5
Intersection Summary								
HCM 2010 Ctrl Delay			16.6					
HCM 2010 LOS			B					
Notes								












HCM 2010 Signalized Intersection Summary
 74: Fashion Valley Road & Riverwalk Drive/Avenida Del Rio

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	190	130	150	520	190	190	320	410	100	300	160
Future Volume (veh/h)	140	190	130	150	520	190	190	320	410	100	300	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	147	200	74	158	547	105	200	337	295	105	316	84
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	387	143	138	454	87	138	519	444	133	796	208
Arrive On Green	0.08	0.30	0.30	0.08	0.30	0.30	0.03	0.10	0.10	0.07	0.29	0.29
Sat Flow, veh/h	1774	1290	477	1774	1514	291	1774	1778	1522	1774	2756	719
Grp Volume(v), veh/h	147	0	274	158	0	652	200	335	297	105	201	199
Grp Sat Flow(s),veh/h/ln	1774	0	1767	1774	0	1804	1774	1770	1531	1774	1770	1706
Q Serve(g_s), s	7.0	0.0	11.6	7.0	0.0	27.0	7.0	16.4	16.8	5.2	8.2	8.5
Cycle Q Clear(g_c), s	7.0	0.0	11.6	7.0	0.0	27.0	7.0	16.4	16.8	5.2	8.2	8.5
Prop In Lane	1.00		0.27	1.00		0.16	1.00		0.99	1.00		0.42
Lane Grp Cap(c), veh/h	138	0	530	138	0	541	138	516	447	133	511	493
V/C Ratio(X)	1.07	0.00	0.52	1.15	0.00	1.20	1.45	0.65	0.66	0.79	0.39	0.40
Avail Cap(c_a), veh/h	138	0	530	138	0	541	138	516	447	171	511	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	0.27	0.27	0.27
Uniform Delay (d), s/veh	41.5	0.0	26.1	41.5	0.0	31.5	43.8	36.2	36.4	40.9	25.7	25.8
Incr Delay (d2), s/veh	95.1	0.0	0.9	120.9	0.0	108.6	235.9	5.8	7.1	5.1	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	5.8	8.0	0.0	29.7	12.5	8.9	8.0	2.8	4.1	4.1
LnGrp Delay(d),s/veh	136.7	0.0	27.0	162.4	0.0	140.1	279.7	42.0	43.5	46.1	26.3	26.4
LnGrp LOS	F		C	F		F	F	D	D	D	C	C
Approach Vol, veh/h		421			810			832			505	
Approach Delay, s/veh		65.3			144.4			99.7			30.5	
Approach LOS		E			F			F			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	35.8	11.5	31.5	11.5	35.5	11.5	31.5				
Change Period (Y+Rc), s	4.5	9.5	4.5	4.5	4.5	9.5	4.5	4.5				
Max Green Setting (Gmax), s	8.7	24.3	7.0	27.0	7.0	26.0	7.0	27.0				
Max Q Clear Time (g_c+I1), s	7.2	18.8	9.0	13.6	9.0	10.5	9.0	29.0				
Green Ext Time (p_c), s	0.0	1.9	0.0	1.4	0.0	2.0	0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			95.0									
HCM 2010 LOS			F									
Notes												













HCM 2010 Signalized Intersection Summary
 75: Avenida Del Rio & Harzard Center Drive & Fashion Valley Mall

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	260	290	240	460	50	200	350	230	70	240	90
Future Volume (veh/h)	50	260	290	240	460	50	200	350	230	70	240	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	274	210	253	484	42	211	368	147	74	253	84
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	293	225	282	692	60	242	400	160	101	316	105
Arrive On Green	0.05	0.30	0.30	0.16	0.41	0.41	0.14	0.32	0.32	0.06	0.24	0.24
Sat Flow, veh/h	1774	970	744	1774	1686	146	1774	1254	501	1774	1323	439
Grp Volume(v), veh/h	53	0	484	253	0	526	211	0	515	74	0	337
Grp Sat Flow(s),veh/h/ln	1774	0	1714	1774	0	1833	1774	0	1755	1774	0	1763
Q Serve(g_s), s	3.2	0.0	30.3	15.4	0.0	26.2	12.9	0.0	31.2	4.5	0.0	19.8
Cycle Q Clear(g_c), s	3.2	0.0	30.3	15.4	0.0	26.2	12.9	0.0	31.2	4.5	0.0	19.8
Prop In Lane	1.00		0.43	1.00		0.08	1.00		0.29	1.00		0.25
Lane Grp Cap(c), veh/h	90	0	518	282	0	752	242	0	559	101	0	421
V/C Ratio(X)	0.59	0.00	0.93	0.90	0.00	0.70	0.87	0.00	0.92	0.73	0.00	0.80
Avail Cap(c_a), veh/h	114	0	556	304	0	791	301	0	640	114	0	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	37.4	45.5	0.0	26.9	46.7	0.0	36.2	51.2	0.0	39.5
Incr Delay (d2), s/veh	5.9	0.0	22.4	26.2	0.0	2.6	20.0	0.0	17.5	19.0	0.0	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	17.5	9.6	0.0	13.7	7.7	0.0	17.9	2.8	0.0	10.7
LnGrp Delay(d),s/veh	57.1	0.0	59.8	71.7	0.0	29.5	66.7	0.0	53.7	70.2	0.0	48.6
LnGrp LOS	E		E	E		C	E		D	E		D
Approach Vol, veh/h		537			779			726			411	
Approach Delay, s/veh		59.5			43.2			57.5			52.5	
Approach LOS		E			D			E			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	10.8	39.6	22.0	37.8	19.5	30.9	10.1	49.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	7.1	40.2	18.9	35.8	18.7	28.6	7.1	47.6				
Max Q Clear Time (g_c+I1), s	6.5	33.2	17.4	32.3	14.9	21.8	5.2	28.2				
Green Ext Time (p_c), s	0.0	1.9	0.1	1.1	0.2	1.1	0.0	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			52.5									
HCM 2010 LOS			D									



















HCM 2010 Signalized Intersection Summary
 76: Via Las Cumbres & Levi Cushman Street "B"

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	290	180	960	50	120	1010		
Future Volume (veh/h)	290	180	960	50	120	1010		
Number	3	18	2	12	1	6		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	305	105	1011	-105	126	1063		
Adj No. of Lanes	1	1	2	0	1	2		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	428	382	1465	0	245	1816		
Arrive On Green	0.24	0.24	0.25	0.00	0.14	0.51		
Sat Flow, veh/h	1774	1583	3725	0	1774	3632		
Grp Volume(v), veh/h	305	105	906	0	126	1063		
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770		
Q Serve(g_s), s	5.8	2.0	0.0	0.0	2.4	7.7		
Cycle Q Clear(g_c), s	5.8	2.0	0.0	0.0	2.4	7.7		
Prop In Lane	1.00	1.00		0.00	1.00			
Lane Grp Cap(c), veh/h	428	382	0	0	245	1816		
V/C Ratio(X)	0.71	0.27	0.00	0.00	0.51	0.59		
Avail Cap(c_a), veh/h	1215	1084	0	0	353	3466		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00		
Uniform Delay (d), s/veh	12.7	11.3	0.0	0.0	14.7	6.2		
Incr Delay (d2), s/veh	2.2	0.4	0.0	0.0	1.7	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.1	0.9	0.0	0.0	1.3	3.8		
LnGrp Delay(d),s/veh	14.9	11.7	0.0	0.0	16.3	6.5		
LnGrp LOS	B	B			B	A		
Approach Vol, veh/h	410		906			1189		
Approach Delay, s/veh	14.1		0.0			7.6		
Approach LOS	B		A			A		
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.6	13.8				23.3		13.3
Change Period (Y+Rc), s	4.5	4.5				4.5		4.5
Max Green Setting (Gmax), s	7.3	24.1				35.9		25.1
Max Q Clear Time (g_c+I1), s	4.4	2.0				9.7		7.8
Green Ext Time (p_c), s	0.1	6.3				8.4		1.2
Intersection Summary								
HCM 2010 Ctrl Delay			5.9					
HCM 2010 LOS			A					


















HCM 2010 Signalized Intersection Summary
 77: Fashion Valley Road & Levi Cushman Street "B"

								
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations								
Traffic Volume (veh/h)	150	130	350	800	330	250		
Future Volume (veh/h)	150	130	350	800	330	250		
Number	7	14	5	2	6	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.95		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900		
Adj Flow Rate, veh/h	158	105	368	842	347	200		
Adj No. of Lanes	1	1	1	2	2	0		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	206	184	715	2578	472	266		
Arrive On Green	0.12	0.12	0.40	0.73	0.07	0.07		
Sat Flow, veh/h	1774	1583	1774	3632	2238	1207		
Grp Volume(v), veh/h	158	105	368	842	285	262		
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1582		
Q Serve(g_s), s	7.8	5.7	14.1	7.6	14.2	14.6		
Cycle Q Clear(g_c), s	7.8	5.7	14.1	7.6	14.2	14.6		
Prop In Lane	1.00	1.00	1.00			0.76		
Lane Grp Cap(c), veh/h	206	184	715	2578	389	348		
V/C Ratio(X)	0.77	0.57	0.51	0.33	0.73	0.75		
Avail Cap(c_a), veh/h	493	440	715	2578	472	422		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33		
Upstream Filter(I)	0.85	0.85	0.72	0.72	0.77	0.77		
Uniform Delay (d), s/veh	38.6	37.7	20.2	4.4	39.1	39.3		
Incr Delay (d2), s/veh	5.0	2.4	0.5	0.2	9.0	11.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.1	5.0	6.9	3.7	7.9	7.5		
LnGrp Delay(d),s/veh	43.6	40.0	20.7	4.6	48.1	50.4		
LnGrp LOS	D	D	C	A	D	D		
Approach Vol, veh/h	263			1210	547			
Approach Delay, s/veh	42.2			9.5	49.2			
Approach LOS	D			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		75.1		14.9	45.8	29.3		
Change Period (Y+Rc), s		9.5		4.5	9.5	* 9.5		
Max Green Setting (Gmax), s		51.0		25.0	22.5	* 24		
Max Q Clear Time (g_c+I1), s		9.6		9.8	16.1	16.6		
Green Ext Time (p_c), s		6.8		0.7	0.6	2.0		
Intersection Summary								
HCM 2010 Ctrl Delay			24.5					
HCM 2010 LOS			C					
Notes								

HCM 2010 Signalized Intersection Summary
 78: Via Las Cumbres & Hotel Circle North











												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	250	910	650	100	360	0	0	900	400
Future Volume (veh/h)	0	0	0	250	910	650	100	360	0	0	900	400
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1863
Adj Flow Rate, veh/h				263	958	484	105	379	0	0	947	274
Adj No. of Lanes				0	2	1	1	2	0	0	2	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				267	1037	565	138	1439	0	0	1073	447
Arrive On Green				0.36	0.36	0.36	0.08	0.41	0.00	0.00	0.29	0.29
Sat Flow, veh/h				736	2859	1557	1774	3632	0	0	3725	1550
Grp Volume(v), veh/h				652	569	484	105	379	0	0	947	274
Grp Sat Flow(s),veh/h/ln				1826	1770	1557	1774	1770	0	0	1863	1550
Q Serve(g_s), s				39.0	33.2	31.6	6.4	7.8	0.0	0.0	26.7	16.8
Cycle Q Clear(g_c), s				39.0	33.2	31.6	6.4	7.8	0.0	0.0	26.7	16.8
Prop In Lane				0.40		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				662	642	565	138	1439	0	0	1073	447
V/C Ratio(X)				0.98	0.89	0.86	0.76	0.26	0.00	0.00	0.88	0.61
Avail Cap(c_a), veh/h				662	642	565	290	1805	0	0	1138	474
HCM Platoon Ratio				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	0.79	0.79	0.00	0.00	0.80	0.80
Uniform Delay (d), s/veh				34.7	32.9	32.4	49.7	21.7	0.0	0.0	37.4	33.9
Incr Delay (d2), s/veh				31.0	14.1	12.4	6.8	0.1	0.0	0.0	8.7	5.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				25.3	18.6	15.5	3.4	3.9	0.0	0.0	15.0	7.9
LnGrp Delay(d),s/veh				65.8	47.0	44.8	56.5	21.8	0.0	0.0	46.1	38.9
LnGrp LOS				E	D	D	E	C			D	D
Approach Vol, veh/h					1705			484			1221	
Approach Delay, s/veh					53.6			29.3			44.5	
Approach LOS					D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		49.2			13.0	36.2		49.4				
Change Period (Y+Rc), s		4.5			4.5	4.5		9.5				
Max Green Setting (Gmax), s		56.1			18.0	33.6		39.9				
Max Q Clear Time (g_c+I1), s		9.8			8.4	28.7		41.0				
Green Ext Time (p_c), s		2.7			0.1	3.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay					46.9							
HCM 2010 LOS					D							
Notes												

HCM 2010 Signalized Intersection Summary
 79: Via Las Cumbres & Hotel Circle South

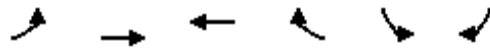
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	1000	40	0	0	0	0	20	40	1090	60	0
Future Volume (veh/h)	340	1000	40	0	0	0	0	20	40	1090	60	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97				1.00		0.97	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
Adj Sat Flow, veh/h/ln	1863	1863	1900				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	358	1053	31				0	21	31	1147	63	0
Adj No. of Lanes	1	2	0				0	1	0	2	1	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	539	1066	31				0	140	206	1187	642	0
Arrive On Green	0.30	0.30	0.30				0.00	0.21	0.21	0.34	0.34	0.00
Sat Flow, veh/h	1774	3507	103				0	668	986	3442	1863	0
Grp Volume(v), veh/h	358	531	553				0	0	52	1147	63	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1840				0	0	1654	1721	1863	0
Q Serve(g_s), s	22.9	38.8	38.8				0.0	0.0	3.3	42.6	3.0	0.0
Cycle Q Clear(g_c), s	22.9	38.8	38.8				0.0	0.0	3.3	42.6	3.0	0.0
Prop In Lane	1.00		0.06				0.00		0.60	1.00		0.00
Lane Grp Cap(c), veh/h	539	538	559				0	0	346	1187	642	0
V/C Ratio(X)	0.66	0.99	0.99				0.00	0.00	0.15	0.97	0.10	0.00
Avail Cap(c_a), veh/h	539	538	559				0	0	346	1191	645	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09				0.00	0.00	1.00	0.26	0.26	0.00
Uniform Delay (d), s/veh	39.5	45.0	45.0				0.0	0.0	42.0	41.8	28.9	0.0
Incr Delay (d2), s/veh	0.3	9.1	8.9				0.0	0.0	0.2	7.6	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	20.3	21.0				0.0	0.0	1.6	21.5	1.6	0.0
LnGrp Delay(d),s/veh	39.7	54.1	53.9				0.0	0.0	42.2	49.4	29.0	0.0
LnGrp LOS	D	D	D						D	D	C	
Approach Vol, veh/h		1442						52			1210	
Approach Delay, s/veh		50.5						42.2			48.4	
Approach LOS		D						D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		31.7		49.0		49.3						
Change Period (Y+Rc), s		4.5		9.5		4.5						
Max Green Setting (Gmax), s		27.0		39.5		45.0						
Max Q Clear Time (g_c+I1), s		5.3		40.8		44.6						
Green Ext Time (p_c), s		0.2		0.0		0.3						
Intersection Summary												
HCM 2010 Ctrl Delay			49.4									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary

80: Hotel Circle South & Camino De La Reina

								
Movement	WBL	WBR	NBT	NBR	SBL	SBT		
Lane Configurations								
Traffic Volume (veh/h)	0	350	650	550	0	0		
Future Volume (veh/h)	0	350	650	550	0	0		
Number	3	18	2	12				
Initial Q (Qb), veh	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98				
Parking Bus, Adj	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900				
Adj Flow Rate, veh/h	0	210	684	147				
Adj No. of Lanes	1	1	2	0				
Peak Hour Factor	0.95	0.95	0.95	0.95				
Percent Heavy Veh, %	2	2	2	2				
Cap, veh/h	0	0	1486	319				
Arrive On Green	0.00	0.00	0.51	0.51				
Sat Flow, veh/h	0		2981	620				
Grp Volume(v), veh/h	0.0		419	412				
Grp Sat Flow(s),veh/h/ln			1770	1739				
Q Serve(g_s), s			2.9	3.0				
Cycle Q Clear(g_c), s			2.9	3.0				
Prop In Lane				0.36				
Lane Grp Cap(c), veh/h			911	895				
V/C Ratio(X)			0.46	0.46				
Avail Cap(c_a), veh/h			2070	2034				
HCM Platoon Ratio			1.00	1.00				
Upstream Filter(I)			1.00	1.00				
Uniform Delay (d), s/veh			3.0	3.0				
Incr Delay (d2), s/veh			0.4	0.4				
Initial Q Delay(d3),s/veh			0.0	0.0				
%ile BackOfQ(50%),veh/ln			1.5	1.5				
LnGrp Delay(d),s/veh			3.4	3.4				
LnGrp LOS			A	A				
Approach Vol, veh/h			831					
Approach Delay, s/veh			3.4					
Approach LOS			A					
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2						
Phs Duration (G+Y+Rc), s		19.6						
Change Period (Y+Rc), s		9.5						
Max Green Setting (Gmax), s		22.9						
Max Q Clear Time (g_c+I1), s		5.0						
Green Ext Time (p_c), s		5.0						
Intersection Summary								
HCM 2010 Ctrl Delay			3.4					
HCM 2010 LOS			A					

HCM 2010 Signalized Intersection Summary
 81: Harzard Center Drive & Frazee Road



Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations								
Traffic Volume (veh/h)	180	810	440	150	180	120		
Future Volume (veh/h)	180	810	440	150	180	120		
Number	7	4	8	18	1	16		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			0.95	1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863		
Adj Flow Rate, veh/h	189	853	463	21	189	10		
Adj No. of Lanes	1	2	2	0	1	1		
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	242	1600	754	34	252	225		
Arrive On Green	0.14	0.45	0.22	0.22	0.14	0.14		
Sat Flow, veh/h	1774	3632	3534	156	1774	1583		
Grp Volume(v), veh/h	189	853	238	246	189	10		
Grp Sat Flow(s),veh/h/ln	1774	1770	1770	1827	1774	1583		
Q Serve(g_s), s	4.8	8.1	5.7	5.7	4.8	0.3		
Cycle Q Clear(g_c), s	4.8	8.1	5.7	5.7	4.8	0.3		
Prop In Lane	1.00			0.09	1.00	1.00		
Lane Grp Cap(c), veh/h	242	1600	388	401	252	225		
V/C Ratio(X)	0.78	0.53	0.61	0.62	0.75	0.04		
Avail Cap(c_a), veh/h	398	2872	680	702	682	609		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	19.5	9.3	16.5	16.5	19.3	17.3		
Incr Delay (d2), s/veh	5.4	0.3	1.6	1.5	4.4	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.7	4.0	2.9	3.0	2.6	0.2		
LnGrp Delay(d),s/veh	24.9	9.5	18.1	18.0	23.7	17.4		
LnGrp LOS	C	A	B	B	C	B		
Approach Vol, veh/h		1042	484		199			
Approach Delay, s/veh		12.3	18.0		23.4			
Approach LOS		B	B		C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				30.7		16.2	10.9	19.8
Change Period (Y+Rc), s				* 9.5		9.5	4.5	9.5
Max Green Setting (Gmax), s				* 38		18.0	10.5	18.0
Max Q Clear Time (g_c+I1), s				10.1		6.8	6.8	7.7
Green Ext Time (p_c), s				7.1		0.4	0.2	2.2
Intersection Summary								
HCM 2010 Ctrl Delay			15.2					
HCM 2010 LOS			B					
Notes								

Queues

1: I-5 SB Ramps & Seaworld Drive

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1558	32	442	274	326	768
v/c Ratio	0.91	0.04	0.88	0.11	0.92	0.49
Control Delay	31.3	0.1	58.6	5.2	68.3	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.3	0.1	58.6	5.2	68.3	1.1
Queue Length 50th (ft)	422	0	128	25	181	0
Queue Length 95th (ft)	#588	0	#210	38	#331	0
Internal Link Dist (ft)	1049			488		
Turn Bay Length (ft)		400	120			180
Base Capacity (vph)	1713	781	507	2414	371	1552
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.04	0.87	0.11	0.88	0.49

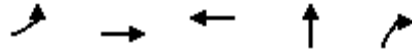
Intersection Summary

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

Queues

2: I-5 NB Ramps & Seaworld Drive/Tecolote Drive

10/17/2018



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	1284	600	1116	137	284
v/c Ratio	0.97	0.21	0.90	0.81	0.72
Control Delay	51.8	2.8	37.9	78.6	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	51.8	2.8	37.9	78.6	16.5
Queue Length 50th (ft)	~466	41	313	86	0
Queue Length 95th (ft)	#596	53	400	#186	#85
Internal Link Dist (ft)		488	1239	905	
Turn Bay Length (ft)	225				
Base Capacity (vph)	1317	2817	1324	180	403
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.97	0.21	0.84	0.76	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

3: I-805 SB Ramps & Phyllis Place

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	879	442	405	426	274	747
v/c Ratio	0.83	0.60	0.81	0.46	0.21	0.94
Control Delay	41.6	8.4	56.8	19.7	20.6	38.2
Queue Delay	0.7	0.0	0.0	0.0	0.0	0.0
Total Delay	42.2	8.4	56.8	19.7	20.6	38.2
Queue Length 50th (ft)	302	20	145	195	62	316
Queue Length 95th (ft)	382	110	#224	281	91	#586
Internal Link Dist (ft)	365			594		1186
Turn Bay Length (ft)		200	250			
Base Capacity (vph)	1229	790	549	1037	1634	901
Starvation Cap Reductn	111	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.56	0.74	0.41	0.17	0.83

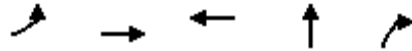
Intersection Summary

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

Queues

4: I-805 NB Ramps & Phyllis Place

10/17/2018



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	774	379	790	358	500
v/c Ratio	0.98	0.36	0.77	0.68	0.69
Control Delay	65.6	13.6	31.4	34.0	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	65.6	13.6	31.4	34.0	11.9
Queue Length 50th (ft)	191	88	162	159	43
Queue Length 95th (ft)	#508	233	307	296	166
Internal Link Dist (ft)		594	1043	1756	
Turn Bay Length (ft)	200				
Base Capacity (vph)	789	1334	1484	933	976
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.98	0.28	0.53	0.38	0.51

Intersection Summary

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

Queues

5: Mission Center Road & Civita Boulevard

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	84	53	105	295	200	74	505	200	63	32	316	305
v/c Ratio	0.60	0.11	0.22	0.70	0.36	0.14	0.92	0.12	0.08	0.42	0.27	0.44
Control Delay	79.5	34.2	4.5	67.5	37.6	1.2	80.7	28.3	3.8	81.1	41.6	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.5	34.2	4.5	67.5	37.6	1.2	80.7	28.3	3.8	81.1	41.6	7.2
Queue Length 50th (ft)	75	30	0	135	115	0	236	70	0	29	135	0
Queue Length 95th (ft)	129	64	30	178	184	6	#337	103	21	65	185	85
Internal Link Dist (ft)		193			1307			610			1184	
Turn Bay Length (ft)	170			290		200	240			200		200
Base Capacity (vph)	323	591	571	627	640	601	560	1852	834	85	1345	765
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.09	0.18	0.47	0.31	0.12	0.90	0.11	0.08	0.38	0.23	0.40

Intersection Summary

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

Queues

6: Mission Center Road & Westside Drive

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	95	195	205	84	258	653	68	32	589	95
v/c Ratio	0.50	0.41	0.59	0.23	0.58	0.36	0.12	0.29	0.69	0.21
Control Delay	53.5	8.7	43.8	25.7	46.9	25.2	0.7	55.8	38.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	8.7	43.8	25.7	46.9	25.2	0.7	55.8	38.9	1.6
Queue Length 50th (ft)	54	15	112	26	74	110	0	18	164	0
Queue Length 95th (ft)	125	49	223	78	141	174	3	59	279	5
Internal Link Dist (ft)	251			993		253			610	
Turn Bay Length (ft)		70	120		120		200	150		200
Base Capacity (vph)	610	583	563	557	698	2692	794	133	1421	666
Starvation Cap Reductn	0	0	0	0	0	500	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.33	0.36	0.15	0.37	0.30	0.09	0.24	0.41	0.14

Intersection Summary

Queues

7: Seaworld Drive & Friar Roads

10/17/2018



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	605	280	1316	600	200	800
v/c Ratio	0.69	0.57	0.87	0.56	0.74	0.39
Control Delay	27.7	13.7	28.0	5.7	51.7	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.7	13.7	28.0	5.7	51.7	9.7
Queue Length 50th (ft)	122	40	258	67	44	86
Queue Length 95th (ft)	170	113	#492	108	#110	171
Internal Link Dist (ft)	1397		566			1235
Turn Bay Length (ft)		230			280	
Base Capacity (vph)	1360	660	1535	1284	272	2077
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.42	0.86	0.47	0.74	0.39

Intersection Summary

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

Queues

8: Friar Roads & Napa Street

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	305	484	895	821	263	126
v/c Ratio	0.78	0.22	0.79	0.77	0.74	0.15
Control Delay	56.0	9.4	40.4	10.8	54.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.0	9.4	40.4	10.8	54.1	0.4
Queue Length 50th (ft)	209	73	304	127	186	0
Queue Length 95th (ft)	#349	98	382	254	#320	0
Internal Link Dist (ft)		3086	1666			
Turn Bay Length (ft)	220			190		120
Base Capacity (vph)	393	2302	1228	1067	356	835
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.21	0.73	0.77	0.74	0.15

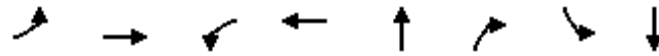
Intersection Summary

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

Queues

9: Colusa Street & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	58	558	53	1969	95	53	95	74
v/c Ratio	0.67	0.26	0.42	0.88	0.42	0.16	0.44	0.23
Control Delay	83.3	11.1	55.9	24.0	39.6	5.0	40.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.3	11.1	55.9	24.0	39.6	5.0	40.4	14.5
Queue Length 50th (ft)	33	64	29	414	52	0	52	11
Queue Length 95th (ft)	#115	153	77	#943	97	19	98	47
Internal Link Dist (ft)		1666		908	489			1477
Turn Bay Length (ft)	160		200				40	
Base Capacity (vph)	87	2161	163	2231	427	542	408	558
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.26	0.33	0.88	0.22	0.10	0.23	0.13

Intersection Summary

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

Queues

10: Via Las Cumbres & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	146	584	295	1337	489	126	179	221	147	368
v/c Ratio	0.84	0.57	0.82	0.94	0.67	0.83	0.47	0.45	0.85	0.92
Control Delay	101.5	45.0	73.4	55.3	21.1	104.9	55.1	9.0	101.9	80.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	101.5	45.0	73.4	55.3	21.1	104.9	55.1	9.0	101.9	80.9
Queue Length 50th (ft)	143	244	280	648	188	124	154	0	144	334
Queue Length 95th (ft)	#273	331	370	#795	322	#246	233	72	#277	#521
Internal Link Dist (ft)		931		958			859			325
Turn Bay Length (ft)	190				200	250			115	
Base Capacity (vph)	179	1022	470	1543	771	154	423	516	179	439
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.57	0.63	0.87	0.63	0.82	0.42	0.43	0.82	0.84

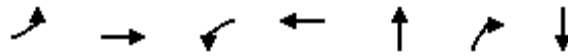
Intersection Summary

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

Queues

11: Fashion Valley Road & Friar Roads

10/18/2018



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	5	695	126	1685	194	126	31
v/c Ratio	0.05	0.38	0.59	0.91	0.65	0.36	0.12
Control Delay	41.2	23.2	44.9	23.1	33.8	23.0	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.2	23.2	44.9	23.1	33.8	23.0	21.7
Queue Length 50th (ft)	3	95	69	319	117	54	12
Queue Length 95th (ft)	14	164	m88	#828	166	74	30
Internal Link Dist (ft)		999		594	1292		249
Turn Bay Length (ft)	180		200				
Base Capacity (vph)	95	1850	222	1849	505	597	498
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.38	0.57	0.91	0.38	0.21	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

12: Via De La Moda & Friar Roads

10/17/2018



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	821	74	1779	21	95
v/c Ratio	0.25	0.30	0.67	0.07	0.25
Control Delay	16.5	39.6	12.7	24.9	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.5	39.6	12.7	24.9	3.2
Queue Length 50th (ft)	35	21	117	12	0
Queue Length 95th (ft)	180	33	#674	24	15
Internal Link Dist (ft)	594		1246		
Turn Bay Length (ft)		300			
Base Capacity (vph)	3296	686	2666	629	634
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.11	0.67	0.03	0.15

Intersection Summary

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

Queues

13: Avenida De Las Tiendas & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	5	879	105	1810	21	21	16	42	16
v/c Ratio	0.06	0.28	0.27	0.47	0.09	0.08	0.04	0.18	0.05
Control Delay	31.8	7.6	36.1	9.6	25.6	12.6	0.2	28.1	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	7.6	36.1	9.6	25.6	12.6	0.2	28.1	14.0
Queue Length 50th (ft)	3	6	29	81	11	3	0	23	3
Queue Length 95th (ft)	m13	193	46	368	24	18	0	40	16
Internal Link Dist (ft)		1246		672		252			222
Turn Bay Length (ft)	150		410						
Base Capacity (vph)	90	3388	410	3864	457	523	586	454	554
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.26	0.26	0.47	0.05	0.04	0.03	0.09	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

14: SR-163 SB Ramps/Ulric Street & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	147	426	337	558	1211	505	589	21	853	368	137
v/c Ratio	0.59	0.28	0.35	0.81	0.55	0.28	0.84	0.05	0.72	0.63	0.38
Control Delay	77.1	43.6	2.2	67.3	34.7	1.4	68.0	45.8	31.5	61.9	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.7
Total Delay	77.1	43.6	2.2	67.3	34.7	1.4	68.0	45.8	31.5	65.2	15.8
Queue Length 50th (ft)	72	126	0	267	346	0	286	17	307	166	17
Queue Length 95th (ft)	112	171	27	331	417	25	342	40	354	221	78
Internal Link Dist (ft)		672			1085			378			209
Turn Bay Length (ft)			100						300		
Base Capacity (vph)	264	1544	985	772	2205	1947	799	433	1259	755	435
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	286	119
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.28	0.34	0.72	0.55	0.26	0.74	0.05	0.68	0.78	0.43

Intersection Summary

Queues

15: Friar Roads & SR-163 NB Ramps

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	485	1096	1455	747	828	727
v/c Ratio	0.77	0.26	0.55	0.49	0.69	0.63
Control Delay	43.8	7.1	21.9	2.8	34.4	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	7.1	21.9	2.8	34.4	5.9
Queue Length 50th (ft)	135	72	187	0	148	10
Queue Length 95th (ft)	184	88	231	39	191	59
Internal Link Dist (ft)		1085	634		856	
Turn Bay Length (ft)	260					
Base Capacity (vph)	724	4165	2631	1529	1279	1196
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.26	0.55	0.49	0.65	0.61
Intersection Summary						

Queues

16: Frazee Road & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	656	823	443	83	1813	83	125	167	42	63	250
v/c Ratio	1.11	0.26	0.30	0.48	0.99	0.13	0.56	0.22	0.27	0.16	0.33
Control Delay	122.3	23.3	2.8	75.6	63.4	0.4	74.0	34.2	72.5	40.8	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	122.3	23.3	2.8	75.6	63.4	0.4	74.0	34.2	72.5	40.8	5.5
Queue Length 50th (ft)	~415	153	0	41	~752	0	62	51	21	45	0
Queue Length 95th (ft)	#541	181	36	71	#846	0	98	83	43	84	35
Internal Link Dist (ft)		634			586			693		685	
Turn Bay Length (ft)	200			130			200		140		
Base Capacity (vph)	589	3121	1467	195	1824	633	263	1150	156	635	1085
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.26	0.30	0.43	0.99	0.13	0.48	0.15	0.27	0.10	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

17: Mission Center Road & Friar WB

10/17/2018



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	81	87	347	163	602	673	286
v/c Ratio	0.35	0.37	0.79	0.56	0.24	0.32	0.31
Control Delay	55.0	55.7	28.2	66.0	8.8	16.8	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.2	1.0	0.7
Total Delay	55.0	55.7	28.2	66.0	9.0	17.7	3.6
Queue Length 50th (ft)	67	72	74	80	129	174	0
Queue Length 95th (ft)	115	124	185	95	93	246	48
Internal Link Dist (ft)		857			286	253	
Turn Bay Length (ft)	370		370				
Base Capacity (vph)	454	457	608	480	2526	2087	916
Starvation Cap Reductn	0	0	0	0	1116	1081	351
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.19	0.57	0.34	0.43	0.67	0.51

Intersection Summary

Queues

18: Mission Center Road & Friar EB

10/17/2018



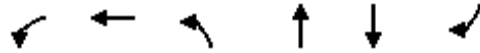
Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	100	100	200	611	168	200	663
v/c Ratio	0.60	0.58	0.60	0.27	0.18	0.65	0.25
Control Delay	74.0	72.7	14.9	9.9	1.1	68.6	4.6
Queue Delay	0.0	0.0	0.1	0.8	0.8	0.0	0.3
Total Delay	74.0	72.7	15.0	10.7	1.9	68.6	4.9
Queue Length 50th (ft)	93	93	0	86	0	86	46
Queue Length 95th (ft)	152	152	74	124	11	141	121
Internal Link Dist (ft)		604		170			286
Turn Bay Length (ft)	250		100			120	
Base Capacity (vph)	218	224	376	2226	941	554	2649
Starvation Cap Reductn	0	0	0	1238	534	0	1294
Spillback Cap Reductn	0	0	9	0	0	0	168
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.45	0.54	0.62	0.41	0.36	0.49

Intersection Summary

Queues

19: Qualcomm Way & WB Friar

10/17/2018



Lane Group	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	327	296	520	531	643	194
v/c Ratio	0.85	0.53	0.80	0.23	0.30	0.29
Control Delay	75.4	9.7	44.3	14.2	14.5	1.4
Queue Delay	0.0	0.0	0.6	1.6	0.0	0.0
Total Delay	75.4	9.7	44.8	15.8	14.5	1.4
Queue Length 50th (ft)	309	15	201	174	54	0
Queue Length 95th (ft)	395	93	227	192	101	11
Internal Link Dist (ft)		714		277	424	
Turn Bay Length (ft)	320					
Base Capacity (vph)	499	643	849	2267	2139	676
Starvation Cap Reductn	0	0	95	1511	0	0
Spillback Cap Reductn	0	0	0	0	36	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.46	0.69	0.70	0.31	0.29
Intersection Summary						

Queues

20: Qualcomm Way & EB Friar

10/17/2018



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	137	1021	316	232	768
v/c Ratio	0.31	0.42	0.48	0.35	0.70	0.30
Control Delay	58.6	11.8	15.4	3.7	69.9	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.9
Total Delay	58.6	11.8	15.4	3.7	69.9	9.4
Queue Length 50th (ft)	60	0	124	0	94	181
Queue Length 95th (ft)	109	60	185	27	143	321
Internal Link Dist (ft)	357		608			277
Turn Bay Length (ft)		360				
Base Capacity (vph)	373	450	2139	911	746	2592
Starvation Cap Reductn	0	0	0	0	0	1465
Spillback Cap Reductn	0	0	13	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.30	0.48	0.35	0.31	0.68

Intersection Summary

Queues

21: River Run Drive & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	137	1021	95	242	2343	231	126	95
v/c Ratio	0.86	0.54	0.15	0.74	1.00	0.67	0.26	0.24
Control Delay	83.0	23.7	2.9	45.8	42.7	36.7	4.3	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.0	23.7	2.9	45.8	42.7	36.7	4.3	15.4
Queue Length 50th (ft)	66	135	0	111	380	104	0	21
Queue Length 95th (ft)	#194	245	20	201	#668	175	29	55
Internal Link Dist (ft)		1668			1034	780		453
Turn Bay Length (ft)	220			240			60	
Base Capacity (vph)	160	1903	637	460	2339	529	671	579
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.54	0.15	0.53	1.00	0.44	0.19	0.16

Intersection Summary

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

Queues

22: Fenton Parkway & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	105	832	242	263	2184	42	305	84	168	95	210	53
v/c Ratio	0.51	0.40	0.26	0.73	0.95	0.05	1.06	0.19	0.34	0.52	0.59	0.10
Control Delay	76.9	34.0	3.0	76.8	50.0	0.2	132.8	45.2	7.6	79.4	57.8	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.9	34.0	3.0	76.8	50.0	0.2	132.8	45.2	7.6	79.4	57.8	0.4
Queue Length 50th (ft)	52	226	0	130	~848	0	~168	63	0	47	180	0
Queue Length 95th (ft)	84	281	45	175	#972	1	#268	110	58	79	270	0
Internal Link Dist (ft)		1034			1478			660			718	
Turn Bay Length (ft)	240		240	260		260	200			210		210
Base Capacity (vph)	211	2068	930	421	2299	882	288	566	579	205	482	529
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.40	0.26	0.62	0.95	0.05	1.06	0.15	0.29	0.46	0.44	0.10

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

23: Northside Drive & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	31	865	188	490	2224	52	115	125	281	94	177	125
v/c Ratio	0.21	0.49	0.29	0.82	0.86	0.06	0.53	0.26	0.39	0.72	0.42	0.26
Control Delay	52.2	29.4	5.6	55.4	29.6	2.9	56.7	30.4	13.0	80.1	35.7	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.2	29.4	5.6	55.4	29.6	2.9	56.7	30.4	13.0	80.1	35.7	2.9
Queue Length 50th (ft)	10	164	0	158	463	0	39	71	81	32	108	0
Queue Length 95th (ft)	26	229	52	#280	#739	15	68	102	120	#74	146	19
Internal Link Dist (ft)		1478			1233			692			645	
Turn Bay Length (ft)	300		300	260		260	180			190		300
Base Capacity (vph)	149	1762	653	596	2591	893	228	656	717	130	603	612
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.49	0.29	0.82	0.86	0.06	0.50	0.19	0.39	0.72	0.29	0.20

Intersection Summary

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

Queues

24: Mission Village Drive & Friar Road WB

10/17/2018



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	379	368	600	600	421	253
v/c Ratio	0.84	0.24	0.94	0.28	0.67	0.55
Control Delay	47.1	0.4	54.6	9.4	39.4	9.4
Queue Delay	0.0	0.0	18.2	0.0	0.0	0.0
Total Delay	47.1	0.4	72.7	9.4	39.4	9.4
Queue Length 50th (ft)	195	0	318	76	113	0
Queue Length 95th (ft)	307	0	#603	124	174	66
Internal Link Dist (ft)	702			344	646	
Turn Bay Length (ft)						
Base Capacity (vph)	593	1555	636	2244	750	502
Starvation Cap Reductn	0	0	53	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.24	1.03	0.27	0.56	0.50

Intersection Summary

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

Queues

25: Mission Village Drive & Friar Road eb

10/17/2018



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	194	295	1011	579	305	474
v/c Ratio	0.71	1.23	1.07	0.61	1.02	0.79
Control Delay	55.4	171.5	76.1	7.7	98.9	50.4
Queue Delay	0.0	0.0	14.0	7.2	0.0	0.0
Total Delay	55.4	171.5	90.1	15.0	98.9	50.4
Queue Length 50th (ft)	119	~233	~719	59	~200	154
Queue Length 95th (ft)	#215	#398	#961	161	#372	#224
Internal Link Dist (ft)	760		133			344
Turn Bay Length (ft)						
Base Capacity (vph)	273	240	944	956	300	601
Starvation Cap Reductn	0	0	315	327	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.71	1.23	1.61	0.92	1.02	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

26: I-15 SB Ramps & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	433	742	443	423	1851	536	876	763
v/c Ratio	1.02	0.43	0.56	0.89	1.01	0.35	1.01	0.54
Control Delay	96.5	35.7	6.3	32.2	27.5	0.1	81.1	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.5	35.7	6.3	32.2	27.5	0.1	81.1	19.8
Queue Length 50th (ft)	~377	178	0	289	~496	0	~416	215
Queue Length 95th (ft)	#593	242	91	m154	m315	m0	#564	273
Internal Link Dist (ft)		737			1071			
Turn Bay Length (ft)							600	600
Base Capacity (vph)	426	1712	796	609	1838	1536	864	1414
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.43	0.56	0.69	1.01	0.35	1.01	0.54

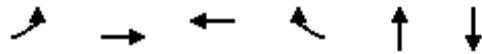
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

27: I-15 NB Ramps & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	674	979	2663	801	411	637
v/c Ratio	1.40	0.24	1.20	1.27	1.06	1.15
Control Delay	225.1	1.2	120.0	157.2	88.8	106.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	225.1	1.2	120.0	157.2	88.8	106.3
Queue Length 50th (ft)	~772	1	~1046	~984	~220	~323
Queue Length 95th (ft)	m#880	m1	#1136	#1267	#426	#560
Internal Link Dist (ft)		1071	878		868	773
Turn Bay Length (ft)	520					
Base Capacity (vph)	483	4068	2228	633	388	553
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.40	0.24	1.20	1.27	1.06	1.15

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

28: Rancho Mission Road & Friar Roads

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1032	358	232	2747	640	339
v/c Ratio	0.41	0.31	0.79	0.62	0.82	0.59
Control Delay	18.8	4.9	79.1	4.3	56.5	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	4.9	79.1	4.3	56.5	8.3
Queue Length 50th (ft)	182	64	206	67	264	0
Queue Length 95th (ft)	m280	m69	m201	105	311	84
Internal Link Dist (ft)	878			425	699	
Turn Bay Length (ft)		400	160		160	
Base Capacity (vph)	2492	1262	443	4405	1025	652
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.28	0.52	0.62	0.62	0.52

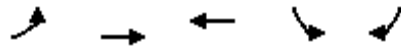
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

29: Friar Roads & Santo Road

10/17/2018



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	351	1021	2846	134	423
v/c Ratio	0.58	0.28	0.89	0.19	0.72
Control Delay	35.4	5.0	25.7	40.2	38.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	35.4	5.0	25.7	40.2	38.4
Queue Length 50th (ft)	114	54	~891	42	199
Queue Length 95th (ft)	#222	84	#777	68	371
Internal Link Dist (ft)		589	1602	1556	
Turn Bay Length (ft)	200			200	
Base Capacity (vph)	606	3627	3346	1029	590
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.58	0.28	0.85	0.13	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

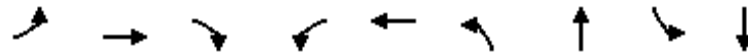
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

30: Riverdale Street & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	137	789	200	189	2621	116	95	84	242
v/c Ratio	0.85	0.29	0.23	0.78	0.90	0.85	0.25	0.33	0.52
Control Delay	101.9	18.9	6.8	75.1	30.5	93.1	27.9	44.4	17.1
Queue Delay	0.0	0.0	0.0	0.0	25.8	0.0	0.0	0.0	0.0
Total Delay	101.9	18.9	6.8	75.1	56.3	93.1	27.9	44.4	17.1
Queue Length 50th (ft)	112	201	44	156	~783	87	42	56	47
Queue Length 95th (ft)	#242	251	45	230	#927	#174	88	103	125
Internal Link Dist (ft)		1602			513		932		815
Turn Bay Length (ft)	220		315	190		150		130	
Base Capacity (vph)	165	2745	882	315	2916	177	484	332	551
Starvation Cap Reductn	0	0	0	0	426	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.29	0.23	0.60	1.05	0.66	0.20	0.25	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

31: Mission Gorge Road & Friar Roads

10/17/2018



Lane Group	EBT	EBR	WBL	NBL	NBR
Lane Group Flow (vph)	674	242	474	379	305
v/c Ratio	0.30	0.16	0.78	0.82	0.24
Control Delay	23.7	0.2	56.5	55.7	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	0.2	56.5	55.7	11.3
Queue Length 50th (ft)	123	0	182	273	48
Queue Length 95th (ft)	178	0	228	372	64
Internal Link Dist (ft)	513			1532	
Turn Bay Length (ft)		90	190	140	
Base Capacity (vph)	2230	1555	1104	475	1371
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.30	0.16	0.43	0.80	0.22

Intersection Summary

Queues

32: Mission Center Road & Mission Center Ct

10/17/2018



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	84	74	179	105	105	632	63	84	695	84
v/c Ratio	0.41	0.22	0.81	0.33	0.66	0.31	0.08	0.60	0.35	0.10
Control Delay	56.1	6.7	81.0	10.7	79.9	17.3	1.9	96.7	20.2	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2	0.6
Total Delay	56.1	6.7	81.0	10.7	79.9	17.3	1.9	96.9	21.4	6.8
Queue Length 50th (ft)	69	0	158	0	94	150	0	80	159	5
Queue Length 95th (ft)	115	29	230	49	153	236	13	138	334	17
Internal Link Dist (ft)	291		308			999			170	
Turn Bay Length (ft)		200		200	120			120		
Base Capacity (vph)	337	487	366	454	260	2039	835	222	1997	845
Starvation Cap Reductn	0	0	0	0	0	0	0	12	1011	538
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.15	0.49	0.23	0.40	0.31	0.08	0.40	0.70	0.27

Intersection Summary

Queues

33: Qualcomm Way & Rio San Diego Drive

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	116	21	168	232	63	95	137	1126	674	95	621	189
v/c Ratio	0.54	0.08	0.40	0.52	0.11	0.28	0.58	0.42	0.64	0.49	0.24	0.22
Control Delay	77.0	50.5	15.0	66.2	48.8	6.0	64.8	38.8	19.8	67.9	24.6	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.0	50.5	15.0	66.2	48.8	6.0	64.8	38.8	19.8	67.9	24.6	14.2
Queue Length 50th (ft)	57	17	34	115	25	0	72	371	317	50	186	84
Queue Length 95th (ft)	91	42	89	158	45	31	m91	373	352	77	267	170
Internal Link Dist (ft)		1252			1355			1284			608	
Turn Bay Length (ft)	140		120	120		160	335		200	180		200
Base Capacity (vph)	251	393	440	468	913	477	274	2671	1057	213	2608	868
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.05	0.38	0.50	0.07	0.20	0.50	0.42	0.64	0.45	0.24	0.22

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

35: Fenton Parkway & Rio San Diego Drive

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Group Flow (vph)	116	116	284	126	263	274	347	95	158	326	189	
v/c Ratio	0.57	0.32	0.55	0.60	0.75	0.81	0.34	0.19	0.51	0.49	0.44	
Control Delay	54.5	37.8	8.6	55.4	48.9	60.4	30.7	3.3	51.1	39.9	9.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	54.5	37.8	8.6	55.4	48.9	60.4	30.7	3.3	51.1	39.9	9.3	
Queue Length 50th (ft)	68	62	0	75	144	163	88	0	48	95	0	
Queue Length 95th (ft)	143	126	70	152	257	#385	158	21	95	163	62	
Internal Link Dist (ft)	1071						1444		453		660	
Turn Bay Length (ft)	250						160		200	300	200	
Base Capacity (vph)	638	576	663	638	548	339	1229	581	407	966	532	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.18	0.20	0.43	0.20	0.48	0.81	0.28	0.16	0.39	0.34	0.36	

Intersection Summary

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

Queues

36: Northside Drive & Rio San Diego Drive

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	233	199	53	63	63	126	21	368	126	74
v/c Ratio	0.66	0.55	0.18	0.17	0.38	0.27	0.07	0.79	0.18	0.08
Control Delay	40.9	36.3	31.3	1.0	48.8	38.4	0.4	48.7	29.4	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	36.3	31.3	1.0	48.8	38.4	0.4	48.7	29.4	3.6
Queue Length 50th (ft)	89	72	20	0	24	24	0	129	38	0
Queue Length 95th (ft)	240	202	61	0	88	72	0	#516	131	23
Internal Link Dist (ft)		1444	569			544			692	
Turn Bay Length (ft)	130			200	70		200	100		
Base Capacity (vph)	665	670	766	733	240	965	500	465	768	1110
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.30	0.07	0.09	0.26	0.13	0.04	0.79	0.16	0.07

Intersection Summary

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

Queues

37: Rancho Mission Road & San Diego Mission Road

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	126	389	179	474	168	305	284	105	211	253	126
v/c Ratio	0.63	0.51	0.86	0.66	0.39	0.89	0.66	0.23	0.80	0.74	0.32
Control Delay	56.7	21.5	79.9	40.5	8.5	69.4	42.3	3.1	64.7	50.7	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.7	21.5	79.9	40.5	8.5	69.4	42.3	3.1	64.7	50.7	6.3
Queue Length 50th (ft)	73	61	107	137	0	180	155	0	123	144	0
Queue Length 95th (ft)	152	115	#287	220	55	#430	271	18	#311	254	36
Internal Link Dist (ft)		1694		1560			1721			574	
Turn Bay Length (ft)	80		200		200	70			120		120
Base Capacity (vph)	284	1167	208	1009	535	341	623	604	265	539	543
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.33	0.86	0.47	0.31	0.89	0.46	0.17	0.80	0.47	0.23

Intersection Summary

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

Queues

38: Mission Center Road & Harzard Center Drive

10/17/2018



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	58	58	221	53	21	316	632	84	42	674
v/c Ratio	0.19	0.19	0.31	0.32	0.06	0.59	0.42	0.12	0.28	0.59
Control Delay	30.7	30.6	4.4	45.1	0.3	38.5	20.6	1.8	45.5	28.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.7	30.6	4.4	45.1	0.3	38.5	20.6	1.8	45.5	28.7
Queue Length 50th (ft)	24	24	12	22	0	65	106	0	17	85
Queue Length 95th (ft)	69	68	45	74	0	148	232	12	64	179
Internal Link Dist (ft)		357		605			887			999
Turn Bay Length (ft)	230				200	200		200	240	
Base Capacity (vph)	682	695	1063	278	411	1008	2403	1032	223	2195
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.08	0.21	0.19	0.05	0.31	0.26	0.08	0.19	0.31

Intersection Summary

Queues

39: Camino De La Reina & Avenida Del Rio

10/17/2018



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	642	326	158	263	95	126
v/c Ratio	0.78	0.33	0.44	0.53	0.57	0.19
Control Delay	20.1	1.7	26.3	8.0	46.3	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	1.7	26.3	8.0	46.3	15.7
Queue Length 50th (ft)	153	1	43	0	29	26
Queue Length 95th (ft)	328	26	118	57	#131	81
Internal Link Dist (ft)	612		631			319
Turn Bay Length (ft)		175				
Base Capacity (vph)	1599	1003	652	687	167	970
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.33	0.24	0.38	0.57	0.13

Intersection Summary

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

Queues

40: Mission Center Road & Camino De La Reina

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	95	169	137	674	221	726	158	411	147
v/c Ratio	0.33	0.18	0.41	0.68	1.18	0.62	0.84	0.34	0.32
Control Delay	42.5	14.5	42.1	27.2	159.8	31.3	78.6	28.6	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.5	14.5	42.1	27.2	159.8	31.3	78.6	28.6	7.0
Queue Length 50th (ft)	24	20	35	142	~71	119	42	65	0
Queue Length 95th (ft)	54	47	71	222	#170	182	#118	106	45
Internal Link Dist (ft)		2153		1856		444		887	
Turn Bay Length (ft)	290		140		160		320		
Base Capacity (vph)	1912	2780	443	1463	188	1715	188	1769	604
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.06	0.31	0.46	1.18	0.42	0.84	0.23	0.24

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

41: Camino Del Este & Camino De La Reina

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	84	168	95	137	653	74	126	95	84	147	305	126
v/c Ratio	0.53	0.20	0.21	0.59	0.67	0.15	0.50	0.11	0.18	0.48	0.35	0.27
Control Delay	49.1	22.3	3.4	44.3	25.7	1.5	28.6	19.3	2.1	26.7	21.3	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	22.3	3.4	44.3	25.7	1.5	28.6	19.3	2.1	26.7	21.3	5.3
Queue Length 50th (ft)	28	25	0	45	105	0	40	14	0	46	48	0
Queue Length 95th (ft)	#119	61	20	#165	211	7	97	34	11	108	92	33
Internal Link Dist (ft)		1214			1167			627			1301	
Turn Bay Length (ft)	120		200	260		200	160		200	160		200
Base Capacity (vph)	158	1590	755	243	1754	805	565	1924	893	687	1924	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.11	0.13	0.56	0.37	0.09	0.22	0.05	0.09	0.21	0.16	0.14

Intersection Summary

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

Queues

42: Qualcomm Way & Camino De La Reina

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	92	179	107	306	449	276	327	1510	439	122	755	112
v/c Ratio	0.60	0.33	0.26	0.76	0.68	0.64	0.79	0.80	0.48	0.68	0.34	0.15
Control Delay	81.4	49.2	6.4	77.2	61.3	26.4	57.5	46.8	24.3	84.4	28.8	12.9
Queue Delay	0.0	0.8	1.3	0.0	0.0	0.0	58.2	50.9	56.4	0.0	0.7	0.0
Total Delay	81.4	50.0	7.7	77.2	61.3	26.4	115.6	97.7	80.7	84.4	29.5	12.9
Queue Length 50th (ft)	86	70	6	153	206	85	170	767	283	63	201	43
Queue Length 95th (ft)	148	108	38	#221	266	186	m212	m845	m366	#108	250	92
Internal Link Dist (ft)		1167			1022			145			1284	
Turn Bay Length (ft)	250		325	250		200			200	250		200
Base Capacity (vph)	185	753	440	402	818	486	480	1883	914	184	2192	727
Starvation Cap Reductn	0	0	0	0	0	0	196	1150	523	0	0	0
Spillback Cap Reductn	0	338	195	0	0	0	0	0	0	0	1024	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.43	0.44	0.76	0.55	0.57	1.15	2.06	1.12	0.66	0.65	0.15

Intersection Summary

Description: 6 seconds was added to NBL Y and R to mimic LT transit only phasing

95th percentile volume exceeds capacity, queue may be longer.

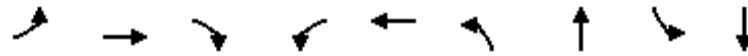
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

43: Fenton Parkway & Camino Del Rio North

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	158	63	147	569	189	495	74	621
v/c Ratio	0.81	0.31	0.10	0.74	0.96	0.90	0.67	0.66	0.97
Control Delay	112.1	43.1	2.8	81.0	72.6	101.0	38.3	90.8	72.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.1	43.1	2.8	81.0	72.6	101.0	38.3	90.8	72.4
Queue Length 50th (ft)	77	114	0	131	496	172	361	67	548
Queue Length 95th (ft)	#175	188	18	201	#727	#318	494	#138	#807
Internal Link Dist (ft)		1226			476		964		611
Turn Bay Length (ft)				70		80			
Base Capacity (vph)	104	506	652	264	619	214	737	118	638
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.31	0.10	0.56	0.92	0.88	0.67	0.63	0.97

Intersection Summary

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

Queues

44: Camino Del Rio North & Rancho Mission Road

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	126	116	516	347	263	284
v/c Ratio	0.64	0.06	0.60	0.55	0.66	0.41
Control Delay	46.4	8.5	24.5	6.5	30.4	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.4	8.5	24.5	6.5	30.4	9.5
Queue Length 50th (ft)	45	10	87	0	89	44
Queue Length 95th (ft)	#144	26	156	60	166	97
Internal Link Dist (ft)		1474	1627		1721	
Turn Bay Length (ft)	95			80		
Base Capacity (vph)	205	2150	1148	730	677	694
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.05	0.45	0.48	0.39	0.41

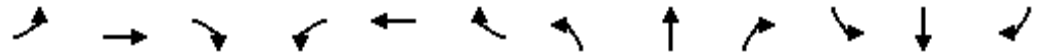
Intersection Summary

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

Queues

45: Mission Gorge Road & Camino Del Rio North/I-8 WB Off Ramps

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	139	109	443	304	677	288	474	1526	289	21	876	196
v/c Ratio	1.10	0.83	0.75	0.81	0.92	0.67	0.97	0.82	0.33	0.24	0.90	0.38
Control Delay	169.7	107.7	35.4	69.4	72.1	37.3	86.2	33.8	9.2	76.6	64.0	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0
Total Delay	169.7	107.7	35.4	69.4	72.1	37.3	86.2	36.3	9.2	76.6	64.0	16.9
Queue Length 50th (ft)	~156	108	220	294	357	171	~475	630	60	10	422	47
Queue Length 95th (ft)	#307	#226	364	#424	#465	282	#697	734	121	26	#537	119
Internal Link Dist (ft)		1010			920			738			884	
Turn Bay Length (ft)	130			520		140	220		200	90		150
Base Capacity (vph)	126	132	587	399	782	430	487	1856	883	87	971	515
Starvation Cap Reductn	0	0	0	0	0	0	0	210	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.10	0.83	0.75	0.76	0.87	0.67	0.97	0.93	0.33	0.24	0.90	0.38

Intersection Summary

Description: min green reduce to match split

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

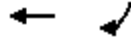
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

46: Hotel Circle North & Hotel Circle Place

10/17/2018



Lane Group	WBT	SBR
Lane Group Flow (vph)	527	158
v/c Ratio	0.28	0.36
Control Delay	6.7	4.5
Queue Delay	0.0	0.0
Total Delay	6.7	4.5
Queue Length 50th (ft)	28	0
Queue Length 95th (ft)	59	23
Internal Link Dist (ft)	302	
Turn Bay Length (ft)		
Base Capacity (vph)	2020	622
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.26	0.25
Intersection Summary		

Queues

48: Hotel Circle North/Camino De La Reina & Fashion Valley Road

10/17/2018



Lane Group	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	421	211	1	253
v/c Ratio	0.62	0.46	0.00	0.14
Control Delay	37.3	7.9	9.0	3.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	37.3	7.9	9.0	3.0
Queue Length 50th (ft)	116	0	0	0
Queue Length 95th (ft)	155	54	m1	34
Internal Link Dist (ft)	598		723	
Turn Bay Length (ft)		150		
Base Capacity (vph)	1812	873	1141	1796
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.23	0.24	0.00	0.14

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

49: Mission Center Road & Camino Del Rio N

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	21	177	188	292	333	531	177	323	302	229	333	63
v/c Ratio	0.21	0.29	0.12	0.66	0.71	0.82	0.57	0.25	0.19	0.57	0.24	0.08
Control Delay	46.0	31.2	0.2	44.3	38.5	21.3	42.7	33.6	0.2	43.2	21.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.0	31.2	0.2	44.3	38.5	21.3	42.7	33.6	0.2	43.2	21.5	0.2
Queue Length 50th (ft)	12	49	0	82	174	98	37	68	0	63	60	0
Queue Length 95th (ft)	35	63	0	120	232	207	m#90	151	m0	101	121	0
Internal Link Dist (ft)		650			381			678			444	
Turn Bay Length (ft)	70		70	160			190		190	150		
Base Capacity (vph)	98	1077	1555	507	641	755	313	1319	1554	433	1416	758
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.16	0.12	0.58	0.52	0.70	0.57	0.24	0.19	0.53	0.24	0.08

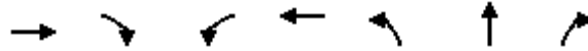
Intersection Summary

- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

50: I-8 WB Ramps/Mission Valley Mall Driveway & Camino Del Rio N

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	284	432	147	274	492	498	126
v/c Ratio	0.35	0.28	0.92	0.20	0.67	0.67	0.08
Control Delay	26.9	0.5	92.3	17.5	19.9	19.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.9	0.5	92.3	17.5	19.9	19.8	0.1
Queue Length 50th (ft)	53	0	64	39	167	169	0
Queue Length 95th (ft)	113	0	#215	91	257	260	0
Internal Link Dist (ft)	381			779		361	
Turn Bay Length (ft)			110		560		560
Base Capacity (vph)	814	1536	160	1374	1268	1283	1536
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.28	0.92	0.20	0.39	0.39	0.08

Intersection Summary

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

Queues

51: Camino Del Rio N & Camino Del Este

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	158	263	242	274	284	126
v/c Ratio	1.39	0.23	0.14	0.31	0.67	0.27
Control Delay	249.8	6.6	9.7	2.6	29.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	249.8	6.6	9.7	2.6	29.7	5.9
Queue Length 50th (ft)	~83	40	25	0	96	0
Queue Length 95th (ft)	#192	78	46	35	167	34
Internal Link Dist (ft)		1771	694		627	
Turn Bay Length (ft)	200			90		
Base Capacity (vph)	114	1145	1717	890	515	535
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.39	0.23	0.14	0.31	0.55	0.24

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

52: Qualcomm Way & Camino Del Rio N/I-8 WB Ramps

10/17/2018



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	105	189	221	558	316	1684	263	726	516
v/c Ratio	0.31	0.43	0.46	0.97	0.89	0.76	0.17	1.00	0.77
Control Delay	51.1	8.4	51.1	59.9	83.1	40.4	0.2	89.8	30.7
Queue Delay	0.1	0.0	0.0	24.5	0.0	48.2	0.0	38.2	24.9
Total Delay	51.2	8.4	51.1	84.3	83.1	88.6	0.2	128.0	55.7
Queue Length 50th (ft)	80	0	187	346	~410	571	0	~303	268
Queue Length 95th (ft)	134	61	273	#601	#607	639	0	#505	347
Internal Link Dist (ft)	573		350			965		145	
Turn Bay Length (ft)				200	100				
Base Capacity (vph)	483	555	476	578	356	2228	1536	726	668
Starvation Cap Reductn	0	0	0	0	0	0	0	316	163
Spillback Cap Reductn	31	0	0	50	0	843	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.34	0.46	1.06	0.89	1.22	0.17	1.77	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

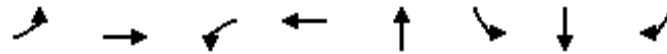
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

53: Morena Boulevard & Taylor Street

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	326	147	63	1452	32	57	49	242
v/c Ratio	0.72	0.07	0.62	0.85	0.28	0.19	0.16	0.42
Control Delay	53.2	11.5	76.9	27.1	34.1	35.4	34.9	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.2	11.5	76.9	27.1	34.1	35.4	34.9	7.8
Queue Length 50th (ft)	98	15	37	327	6	33	28	24
Queue Length 95th (ft)	#226	44	#133	#688	41	70	63	68
Internal Link Dist (ft)		1165		492	202		357	
Turn Bay Length (ft)	190		90			140		
Base Capacity (vph)	454	2250	101	2046	141	631	640	575
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.07	0.62	0.71	0.23	0.09	0.08	0.42

Intersection Summary

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

Queues

55: Taylor Street/Hotel Circle South & Hotel Circle North

10/17/2018

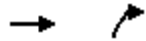


Lane Group	EBT	SBL	SBR
Lane Group Flow (vph)	137	105	526
v/c Ratio	0.32	0.09	0.51
Control Delay	13.9	0.1	3.2
Queue Delay	0.0	0.0	0.0
Total Delay	13.9	0.1	3.2
Queue Length 50th (ft)	20	0	0
Queue Length 95th (ft)	58	0	41
Internal Link Dist (ft)	719	273	
Turn Bay Length (ft)			
Base Capacity (vph)	1234	1503	1303
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.11	0.07	0.40
Intersection Summary			

Queues

57: Bachman Place & Hotel Circle South

10/17/2018



Lane Group	EBT	NBR
Lane Group Flow (vph)	947	779
v/c Ratio	0.63	0.60
Control Delay	3.9	2.7
Queue Delay	0.0	0.0
Total Delay	3.9	2.7
Queue Length 50th (ft)	8	0
Queue Length 95th (ft)	42	16
Internal Link Dist (ft)	1023	
Turn Bay Length (ft)		
Base Capacity (vph)	1948	1900
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.49	0.41
Intersection Summary		

Queues

58: Mission Center Road & I-8 EB Ramp

10/17/2018



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	453	442	358	147	265	556
v/c Ratio	0.34	0.51	0.79	0.09	0.57	0.57
Control Delay	23.2	5.0	38.7	0.1	41.0	38.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.2	5.0	38.7	0.1	41.0	38.4
Queue Length 50th (ft)	79	0	105	0	178	185
Queue Length 95th (ft)	163	68	88	0	252	230
Internal Link Dist (ft)		711	193			678
Turn Bay Length (ft)				80	330	
Base Capacity (vph)	1335	871	511	1555	679	1418
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	5	0	0	0	37
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.51	0.70	0.09	0.39	0.40
Intersection Summary						

Queues

59: Mission Center Road & Camino Del Rio South

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	116	232	295	242	53	21	229	223	442
v/c Ratio	0.55	0.54	0.47	0.26	0.36	0.08	0.37	0.36	0.53
Control Delay	46.3	39.5	36.1	3.9	45.9	0.6	16.9	16.6	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.5
Total Delay	46.3	39.5	36.1	3.9	45.9	0.6	17.6	17.3	4.9
Queue Length 50th (ft)	70	67	80	14	29	0	47	45	3
Queue Length 95th (ft)	123	100	120	51	66	0	208	203	182
Internal Link Dist (ft)		393	464		304			193	
Turn Bay Length (ft)	280			220		100			
Base Capacity (vph)	254	519	626	939	154	283	623	639	845
Starvation Cap Reductn	0	0	0	0	0	0	174	187	121
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.45	0.47	0.26	0.34	0.07	0.51	0.49	0.61

Intersection Summary

Queues

60: Qualcomm Way & I-8 EB Ramp

10/17/2018



Lane Group	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	516	1368	663	284
v/c Ratio	0.72	0.60	0.29	0.27
Control Delay	13.9	8.0	5.4	1.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.9	8.0	5.4	1.6
Queue Length 50th (ft)	32	110	40	0
Queue Length 95th (ft)	68	218	83	26
Internal Link Dist (ft)		396	965	
Turn Bay Length (ft)				
Base Capacity (vph)	1012	2268	2268	1070
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.51	0.60	0.29	0.27
Intersection Summary				

Queues

61: Qualcomm Way & Camino Del Rio South

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	112	92	92	61	92	163	143	1572	459	602	286
v/c Ratio	0.59	0.46	0.24	0.31	0.45	0.25	0.80	1.17	0.91	0.29	0.30
Control Delay	96.4	89.6	11.0	83.1	87.8	22.8	117.9	137.4	89.3	24.3	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.3	0.6	0.7
Total Delay	96.4	89.6	11.0	83.1	87.8	22.8	117.9	137.4	136.6	24.9	7.2
Queue Length 50th (ft)	139	112	13	72	110	79	187	~1304	~712	241	34
Queue Length 95th (ft)	214	180	50	126	176	142	267	#1437	#955	306	104
Internal Link Dist (ft)		351			536			1138		396	
Turn Bay Length (ft)	80		35	60		60	100				160
Base Capacity (vph)	238	251	428	265	279	664	232	1341	503	2064	941
Starvation Cap Reductn	0	0	0	0	0	0	0	0	89	1023	361
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.37	0.21	0.23	0.33	0.25	0.62	1.17	1.11	0.58	0.49

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

62: Camino Del Rio South & Fenton Parkway

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	168	232	611	516	295	337
v/c Ratio	0.60	0.20	0.83	0.48	0.71	0.55
Control Delay	36.8	6.8	33.0	3.6	34.4	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.8	6.8	33.0	3.6	34.4	6.7
Queue Length 50th (ft)	66	37	221	26	113	0
Queue Length 95th (ft)	134	82	#506	74	206	59
Internal Link Dist (ft)		1605	2056		964	
Turn Bay Length (ft)	160			230	75	
Base Capacity (vph)	433	1357	775	1152	622	745
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.17	0.79	0.45	0.47	0.45

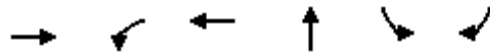
Intersection Summary

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

Queues

63: I-15 SB Ramps & Camino Del Rio South

10/17/2018



Lane Group	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	179	32	926	42	253	474
v/c Ratio	0.11	0.24	0.94	0.15	0.59	0.98
Control Delay	10.2	37.4	35.1	1.2	31.6	58.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.2	37.4	35.1	1.2	31.6	58.3
Queue Length 50th (ft)	16	14	384	0	108	~179
Queue Length 95th (ft)	41	40	#653	0	#186	#358
Internal Link Dist (ft)	1169		1	255		
Turn Bay Length (ft)		80				
Base Capacity (vph)	1670	139	1079	271	431	484
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.23	0.86	0.15	0.59	0.98

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

64: I-15 SB Ramps & Camino Del Rio South

10/17/2018

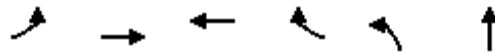


Lane Group	EBT	WBL	WBT
Lane Group Flow (vph)	421	147	958
v/c Ratio	0.19	0.49	0.27
Control Delay	3.4	20.1	0.2
Queue Delay	0.0	0.0	0.0
Total Delay	3.4	20.1	0.2
Queue Length 50th (ft)	13	26	0
Queue Length 95th (ft)	30	65	0
Internal Link Dist (ft)	1		1248
Turn Bay Length (ft)		350	
Base Capacity (vph)	2350	359	3281
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.18	0.41	0.29
Intersection Summary			

Queues

65: I-15 NB Ramps & Camino Del Rio South

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	116	221	421	158	684	127
v/c Ratio	0.83	0.16	0.93	0.33	0.96	0.20
Control Delay	94.5	23.8	70.9	9.1	59.7	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.5	23.8	70.9	9.1	59.7	23.8
Queue Length 50th (ft)	90	57	317	7	503	62
Queue Length 95th (ft)	#193	86	#503	61	#752	107
Internal Link Dist (ft)		1248	1726			753
Turn Bay Length (ft)	115			180	190	
Base Capacity (vph)	151	1455	488	499	758	672
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.15	0.86	0.32	0.90	0.19

Intersection Summary

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

Queues

66: Mission Gorge Road & I-8 EB Off Ramps

10/17/2018



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	1179	1411	221	1221	1337
v/c Ratio	0.93	0.40	0.84	0.69	0.96
Control Delay	33.6	0.3	54.9	14.1	36.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	0.3	54.9	14.1	36.9
Queue Length 50th (ft)	205	0	79	164	157
Queue Length 95th (ft)	#331	0	#180	228	#252
Internal Link Dist (ft)	658			1165	738
Turn Bay Length (ft)			180		
Base Capacity (vph)	1270	3502	277	1786	1399
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.93	0.40	0.80	0.68	0.96

Intersection Summary

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

Queues

67: Qualcomm Way & Madison Avenue

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	379	53	42	32	63	537	74	958	63	74	768
v/c Ratio	1.20	0.16	0.11	0.09	0.17	1.36	0.59	1.14	0.09	1.23	0.52
Control Delay	164.3	48.4	0.6	45.4	46.7	209.1	79.3	114.0	1.9	243.2	30.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	164.3	48.4	0.6	45.4	46.7	209.1	79.3	114.0	1.9	243.2	30.2
Queue Length 50th (ft)	~402	40	0	23	46	~527	64	~981	0	~80	260
Queue Length 95th (ft)	#604	80	0	53	89	#756	116	#1238	13	#185	333
Internal Link Dist (ft)		920			701			1175			1055
Turn Bay Length (ft)				110		110	85		200	190	
Base Capacity (vph)	315	332	371	347	365	395	159	837	700	60	1465
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.20	0.16	0.11	0.09	0.17	1.36	0.47	1.14	0.09	1.23	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

68: Franklin Ridge Road & Phyllis Place

10/17/2018



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	105	1089	63	37	1253
v/c Ratio	0.17	0.67	0.05	0.12	0.57
Control Delay	19.1	23.7	5.5	27.5	1.9
Queue Delay	0.0	0.1	0.0	0.0	0.0
Total Delay	19.1	23.8	5.5	27.5	1.9
Queue Length 50th (ft)	12	118	4	12	3
Queue Length 95th (ft)	37	#492	28	43	38
Internal Link Dist (ft)	928		365	360	
Turn Bay Length (ft)					
Base Capacity (vph)	1474	1813	1595	776	2240
Starvation Cap Reductn	0	103	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.64	0.04	0.05	0.56

Intersection Summary

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

Queues

69: Franklin Ridge Road & Via Alta

10/17/2018



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	479	190	63	126	800	11	611	505
v/c Ratio	0.97	0.29	0.11	0.99	0.82	0.14	0.78	0.56
Control Delay	66.7	6.3	18.2	126.5	26.3	52.1	30.1	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1
Total Delay	66.7	6.3	18.2	126.5	26.3	52.1	30.5	4.0
Queue Length 50th (ft)	267	4	16	74	346	6	294	0
Queue Length 95th (ft)	#610	58	55	#231	605	27	415	50
Internal Link Dist (ft)		713	111		622		360	
Turn Bay Length (ft)								
Base Capacity (vph)	494	663	569	127	1231	78	1184	1110
Starvation Cap Reductn	0	0	0	0	0	0	201	80
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.97	0.29	0.11	0.99	0.65	0.14	0.62	0.49

Intersection Summary

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

Queues

70: Qualcomm Way & Civita Boulevard

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	211	337	526	179	253	579
v/c Ratio	0.57	0.74	0.75	0.28	0.14	0.47
Control Delay	69.5	16.2	62.7	35.8	10.5	6.8
Queue Delay	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay	69.5	16.2	62.9	35.8	10.5	6.8
Queue Length 50th (ft)	104	0	252	128	25	210
Queue Length 95th (ft)	143	100	299	166	48	252
Internal Link Dist (ft)	871			304	424	
Turn Bay Length (ft)					150	
Base Capacity (vph)	1026	667	1293	1297	1834	1438
Starvation Cap Reductn	0	0	147	0	0	50
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.51	0.46	0.14	0.14	0.42

Intersection Summary

Queues

71: Franklin Ridge Road & Civita Boulevard

10/17/2018



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	737	53	53	21	386	372
v/c Ratio	0.84	0.07	0.24	0.03	0.76	0.31
Control Delay	26.3	3.9	35.9	14.7	25.8	1.3
Queue Delay	0.7	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	3.9	35.9	14.7	25.8	1.3
Queue Length 50th (ft)	284	0	24	6	106	8
Queue Length 95th (ft)	#536	17	60	19	#243	22
Internal Link Dist (ft)	304			65	1294	
Turn Bay Length (ft)						
Base Capacity (vph)	1183	1015	225	1103	688	1278
Starvation Cap Reductn	173	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.05	0.24	0.02	0.56	0.29

Intersection Summary

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

Queues

72: Fenton Parkway & Street "I"

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	295	337	484	126	400
v/c Ratio	0.58	0.49	0.50	0.35	0.23
Control Delay	20.6	5.1	16.0	23.2	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.6	5.1	16.0	23.2	6.8
Queue Length 50th (ft)	71	0	54	31	26
Queue Length 95th (ft)	155	50	103	86	54
Internal Link Dist (ft)	646		611		592
Turn Bay Length (ft)					
Base Capacity (vph)	797	876	1719	429	2572
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.37	0.38	0.28	0.29	0.16

Intersection Summary

Queues

73: Via Las Cumbres & Riverwalk Drive

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	95	42	621	21	653
v/c Ratio	0.23	0.11	0.33	0.07	0.28
Control Delay	16.2	6.3	11.6	22.9	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.2	6.3	11.6	22.9	6.3
Queue Length 50th (ft)	17	0	42	4	31
Queue Length 95th (ft)	60	19	177	29	122
Internal Link Dist (ft)	1499		980		859
Turn Bay Length (ft)	250			250	
Base Capacity (vph)	1180	1039	1872	295	3056
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	0.04	0.33	0.07	0.21

Intersection Summary

Queues

74: Fashion Valley Road & Riverwalk Drive/Avenida Del Rio

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	95	463	74	253	189	547	84	285
v/c Ratio	0.51	0.88	0.48	0.52	0.76	0.49	0.48	0.32
Control Delay	47.3	49.5	50.3	28.4	51.0	25.1	60.1	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	49.5	50.3	28.4	51.0	25.1	60.1	18.7
Queue Length 50th (ft)	52	231	40	99	107	142	50	58
Queue Length 95th (ft)	100	#401	#92	181	#201	193	97	64
Internal Link Dist (ft)		1066		876		637		1292
Turn Bay Length (ft)	250		250				250	
Base Capacity (vph)	211	562	154	501	267	1141	192	917
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.82	0.48	0.50	0.71	0.48	0.44	0.31

Intersection Summary

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

Queues

75: Avenida Del Rio & Harzard Center Drive & Fashion Valley Mall

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	53	473	63	327	158	326	21	74
v/c Ratio	0.24	0.71	0.28	0.48	0.48	0.53	0.09	0.25
Control Delay	32.7	28.7	33.3	22.2	30.2	16.5	31.4	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	28.7	33.3	22.2	30.2	16.5	31.4	21.7
Queue Length 50th (ft)	19	160	23	101	57	73	8	19
Queue Length 95th (ft)	60	#425	68	232	126	177	31	55
Internal Link Dist (ft)		637		648		319		139
Turn Bay Length (ft)	250		250					
Base Capacity (vph)	222	669	225	679	512	856	222	589
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.71	0.28	0.48	0.31	0.38	0.09	0.13

Intersection Summary

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

Queues

76: Via Las Cumbres & Levi Cushman Street "B"

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	537	95	789	95	653
v/c Ratio	0.83	0.15	0.72	0.38	0.41
Control Delay	30.9	4.3	18.9	29.7	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	30.9	4.3	18.9	29.7	10.4
Queue Length 50th (ft)	174	0	106	33	72
Queue Length 95th (ft)	#336	25	164	72	105
Internal Link Dist (ft)	3409		547		980
Turn Bay Length (ft)	250			250	
Base Capacity (vph)	760	712	1282	247	2086
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.71	0.13	0.62	0.38	0.31

Intersection Summary

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

Queues

77: Fashion Valley Road & Levi Cushman Street "B"

10/17/2018



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	158	137	368	684	379
v/c Ratio	0.58	0.39	0.79	0.28	0.29
Control Delay	43.4	9.2	42.6	6.1	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	43.4	9.2	42.6	6.1	15.6
Queue Length 50th (ft)	85	0	193	66	22
Queue Length 95th (ft)	139	47	277	120	m68
Internal Link Dist (ft)	3409			723	637
Turn Bay Length (ft)	250		250		
Base Capacity (vph)	462	497	501	2445	1316
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.28	0.73	0.28	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

78: Via Las Cumbres & Hotel Circle North

10/17/2018



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	463	368	547	421	971	218
v/c Ratio	0.69	0.62	0.91	0.17	0.94	0.44
Control Delay	48.6	9.0	57.3	7.1	56.7	20.1
Queue Delay	0.0	0.0	51.3	1.2	0.0	0.0
Total Delay	48.6	9.0	108.6	8.2	56.7	20.1
Queue Length 50th (ft)	169	0	377	52	390	72
Queue Length 95th (ft)	215	81	#634	83	#540	154
Internal Link Dist (ft)	1234			164	547	
Turn Bay Length (ft)		250				
Base Capacity (vph)	815	637	603	2426	1032	490
Starvation Cap Reductn	0	0	272	1736	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.58	1.65	0.61	0.94	0.44

Intersection Summary

Description: 600 car are expected to make the texas u-turn thus not entering the intersection

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

79: Via Las Cumbres & Hotel Circle South

10/17/2018



Lane Group	EBL	EBT	NBT	SBL	SBT
Lane Group Flow (vph)	421	769	189	1579	105
v/c Ratio	1.00	0.92	0.78	0.97	0.12
Control Delay	90.6	62.0	69.4	47.5	18.7
Queue Delay	0.0	0.0	0.0	43.3	1.4
Total Delay	90.6	62.0	69.4	90.9	20.1
Queue Length 50th (ft)	~329	306	134	615	46
Queue Length 95th (ft)	#540	#424	#230	#794	80
Internal Link Dist (ft)		1870	317		164
Turn Bay Length (ft)	250				
Base Capacity (vph)	420	834	270	1629	883
Starvation Cap Reductn	0	0	0	624	628
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.00	0.92	0.70	1.57	0.41

Intersection Summary

Description: 400 cars are expected to make the texas u turn thus not entering the intersection

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

80: Hotel Circle South & Camino De La Reina

10/17/2018



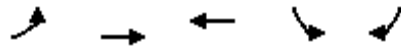
Lane Group	WBR	NBT
Lane Group Flow (vph)	168	937
v/c Ratio	0.38	0.46
Control Delay	5.8	4.5
Queue Delay	0.0	0.0
Total Delay	5.8	4.5
Queue Length 50th (ft)	0	29
Queue Length 95th (ft)	31	66
Internal Link Dist (ft)		594
Turn Bay Length (ft)		
Base Capacity (vph)	827	2075
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.20	0.45

Intersection Summary

Queues

81: Harzard Center Drive & Frazee Road

10/17/2018



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	95	242	495	100	147
v/c Ratio	0.26	0.11	0.32	0.22	0.30
Control Delay	19.8	5.3	9.7	14.9	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.8	5.3	9.7	14.9	5.3
Queue Length 50th (ft)	18	10	35	19	0
Queue Length 95th (ft)	71	36	89	55	33
Internal Link Dist (ft)		1709	357	693	
Turn Bay Length (ft)	150				
Base Capacity (vph)	384	3249	2555	1343	1166
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.07	0.19	0.07	0.13

Intersection Summary

Queues

84: Frazee Road & Murray Canyon Road

10/17/2018

Lane Group

Lane Group Flow (vph)

v/c Ratio

Control Delay

Queue Delay

Total Delay

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

Reduced v/c Ratio

Intersection Summary

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay
Queue Delay
Total Delay
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio
Intersection Summary

Queues

122: Westside Drive/Via Alta & Civita Boulevard

10/17/2018

Lane Group

Lane Group Flow (vph)

v/c Ratio

Control Delay

Queue Delay

Total Delay

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

Reduced v/c Ratio

Intersection Summary

Queues

170: Camino Del Este & Rio San Diego Drive

10/17/2018

Lane Group

Lane Group Flow (vph)

v/c Ratio

Control Delay

Queue Delay

Total Delay

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

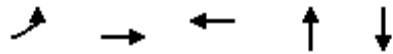
Reduced v/c Ratio

Intersection Summary

Queues

175: Phyllis Place & Mission Center Road

10/17/2018



Lane Group	EBL	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	126	231	53	95	95
v/c Ratio	0.36	0.42	0.11	0.13	0.08
Control Delay	12.4	5.8	8.9	6.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	12.4	5.8	8.9	6.8	0.1
Queue Length 50th (ft)	17	8	7	7	0
Queue Length 95th (ft)	43	38	21	34	0
Internal Link Dist (ft)		968	559	1043	578
Turn Bay Length (ft)					
Base Capacity (vph)	616	852	873	738	1248
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	0.27	0.06	0.13	0.08

Intersection Summary

Queues

181: I-8 WB On-Ramp & Hotel Circle North

10/17/2018



Lane Group	WBT
Lane Group Flow (vph)	1358
v/c Ratio	0.41
Control Delay	0.4
Queue Delay	0.0
Total Delay	0.4
Queue Length 50th (ft)	0
Queue Length 95th (ft)	0
Internal Link Dist (ft)	1497
Turn Bay Length (ft)	
Base Capacity (vph)	3309
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.41
Intersection Summary	

Queues

186: Metropolitan Drive & Civita Boulevard & Mission Valley Road

10/17/2018

Lane Group

Lane Group Flow (vph)

v/c Ratio

Control Delay

Queue Delay

Total Delay

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

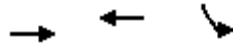
Reduced v/c Ratio

Intersection Summary

Queues

237: Harzard Center Drive

10/17/2018



Lane Group	EBT	WBT	SBL
Lane Group Flow (vph)	484	474	179
v/c Ratio	0.65	0.64	0.25
Control Delay	14.9	13.7	5.8
Queue Delay	0.0	0.0	0.0
Total Delay	14.9	13.7	5.8
Queue Length 50th (ft)	82	72	13
Queue Length 95th (ft)	155	144	39
Internal Link Dist (ft)	648	609	572
Turn Bay Length (ft)			
Base Capacity (vph)	745	741	716
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.65	0.64	0.25
Intersection Summary			

Queues

251: MissioN Village Drive & San Diego Mission Road

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	469	416	758	47	722
v/c Ratio	0.92	0.71	0.45	0.81	1.96
Control Delay	41.3	11.4	22.7	122.0	467.6
Queue Delay	0.0	0.0	0.0	0.0	0.9
Total Delay	41.3	11.4	22.7	122.0	468.5
Queue Length 50th (ft)	139	3	209	38	~481
Queue Length 95th (ft)	#324	104	272	#125	#621
Internal Link Dist (ft)	318		256		133
Turn Bay Length (ft)					
Base Capacity (vph)	574	642	1666	58	369
Starvation Cap Reductn	0	0	0	0	31
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.82	0.65	0.45	0.81	2.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

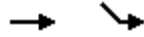
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

263: Hotel Circle South & I-8 EB Off-Ramp

10/17/2018



Lane Group	EBT	SEL
Lane Group Flow (vph)	242	1368
v/c Ratio	0.32	1.41
Control Delay	9.8	205.4
Queue Delay	0.0	0.0
Total Delay	9.8	205.4
Queue Length 50th (ft)	35	~379
Queue Length 95th (ft)	72	#581
Internal Link Dist (ft)	385	676
Turn Bay Length (ft)		
Base Capacity (vph)	745	972
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.32	1.41

Intersection Summary

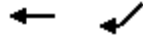
- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay
Queue Delay
Total Delay
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio
Intersection Summary

Queues

267: Hotel Circle North

10/17/2018



Lane Group	WBT	SWR
Lane Group Flow (vph)	1053	674
v/c Ratio	1.41	0.62
Control Delay	212.9	11.8
Queue Delay	0.0	0.0
Total Delay	212.9	11.8
Queue Length 50th (ft)	~341	58
Queue Length 95th (ft)	#516	101
Internal Link Dist (ft)	585	
Turn Bay Length (ft)		
Base Capacity (vph)	745	1093
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	1.41	0.62

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

556: Hotel Circle South & I-8 EB On-Ramp

10/17/2018



Lane Group	EBL	EBT
Lane Group Flow (vph)	1326	947
v/c Ratio	0.78	0.27
Control Delay	3.6	0.2
Queue Delay	0.0	0.0
Total Delay	3.6	0.2
Queue Length 50th (ft)	0	0
Queue Length 95th (ft)	0	0
Internal Link Dist (ft)		726
Turn Bay Length (ft)		
Base Capacity (vph)	1706	3539
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.78	0.27
Intersection Summary		

Queues

1: I-5 SB Ramps & Seaworld Drive

10/17/2018



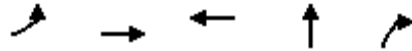
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1188	167	302	604	344	1375
v/c Ratio	0.65	0.20	0.72	0.25	0.87	0.89
Control Delay	23.2	3.5	56.6	7.8	62.1	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.2	3.5	56.6	7.8	62.1	8.6
Queue Length 50th (ft)	316	0	106	78	234	0
Queue Length 95th (ft)	456	39	151	127	318	0
Internal Link Dist (ft)	1049			488		
Turn Bay Length (ft)		400	120			180
Base Capacity (vph)	1819	856	479	2403	513	1552
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.20	0.63	0.25	0.67	0.89

Intersection Summary

Queues

2: I-5 NB Ramps & Seaworld Drive/Tecolote Drive

10/17/2018



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	844	688	1125	354	646
v/c Ratio	0.97	0.32	1.00	0.66	1.03
Control Delay	68.7	12.5	60.8	42.8	70.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	68.7	12.5	60.8	42.8	70.8
Queue Length 50th (ft)	334	132	~393	237	~407
Queue Length 95th (ft)	#464	167	#551	346	#640
Internal Link Dist (ft)		488	1239	905	
Turn Bay Length (ft)	225				
Base Capacity (vph)	872	2117	1126	539	628
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.97	0.32	1.00	0.66	1.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

3: I-805 SB Ramps & Phyllis Place

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	1147	368	600	726	389	979
v/c Ratio	1.17	0.63	1.58	0.91	0.24	1.23
Control Delay	127.3	19.4	308.2	50.0	18.8	142.8
Queue Delay	0.5	0.0	0.0	9.6	0.0	0.0
Total Delay	127.8	19.4	308.2	59.6	18.8	142.8
Queue Length 50th (ft)	~557	92	~340	519	88	~899
Queue Length 95th (ft)	#693	201	#456	#765	121	#1154
Internal Link Dist (ft)	365			594		1186
Turn Bay Length (ft)		200	250			
Base Capacity (vph)	979	583	380	794	1644	794
Starvation Cap Reductn	90	0	0	60	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.29	0.63	1.58	0.99	0.24	1.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

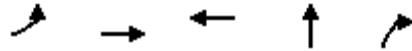
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

4: I-805 NB Ramps & Phyllis Place

10/17/2018



Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	1084	453	1221	579	547
v/c Ratio	1.14	0.40	1.20	1.01	0.74
Control Delay	121.0	16.6	138.8	88.0	19.5
Queue Delay	0.0	0.9	0.0	0.0	0.0
Total Delay	121.0	17.5	138.8	88.0	19.5
Queue Length 50th (ft)	~612	215	~701	~557	145
Queue Length 95th (ft)	#748	291	#842	#805	302
Internal Link Dist (ft)		594	1043	1756	
Turn Bay Length (ft)	200				
Base Capacity (vph)	954	1120	1021	574	741
Starvation Cap Reductn	0	402	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.14	0.63	1.20	1.01	0.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

5: Mission Center Road & Civita Boulevard

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	189	295	368	126	11	84	168	389	137	63	453	79
v/c Ratio	0.77	0.72	0.61	0.33	0.03	0.21	0.52	0.24	0.18	0.50	0.30	0.11
Control Delay	70.7	54.8	9.3	52.6	38.5	1.5	71.0	30.9	21.5	69.1	27.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.7	54.8	9.3	52.6	38.5	1.5	71.0	30.9	21.5	69.1	27.1	0.3
Queue Length 50th (ft)	149	222	12	47	7	0	74	140	56	50	131	0
Queue Length 95th (ft)	218	297	92	78	23	4	113	216	118	95	201	0
Internal Link Dist (ft)		193			1307			610			1184	
Turn Bay Length (ft)	170			290		200	240			200		200
Base Capacity (vph)	404	701	791	417	448	475	400	1634	777	192	1494	725
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.42	0.47	0.30	0.02	0.18	0.42	0.24	0.18	0.33	0.30	0.11

Intersection Summary

Queues

6: Mission Center Road & Westside Drive

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	242	432	116	64	358	537	158	42	789	116
v/c Ratio	0.79	0.66	0.41	0.22	0.67	0.27	0.24	0.41	0.80	0.23
Control Delay	67.8	14.7	49.9	25.3	57.3	30.0	6.4	69.1	56.7	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.8	14.7	49.9	25.3	57.3	30.0	6.4	69.1	56.7	16.3
Queue Length 50th (ft)	190	67	80	21	141	119	0	35	~353	15
Queue Length 95th (ft)	264	119	138	61	#239	172	55	77	#503	64
Internal Link Dist (ft)	251			993		253			610	
Turn Bay Length (ft)		70	120		120		200	150		200
Base Capacity (vph)	450	650	368	376	533	1987	648	113	989	506
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.66	0.32	0.17	0.67	0.27	0.24	0.37	0.80	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

7: Seaworld Drive & Friar Roads

10/17/2018



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	550	169	1469	792	500	1448
v/c Ratio	0.72	0.38	0.94	0.77	0.93	0.63
Control Delay	38.9	7.2	39.8	13.5	65.3	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	7.2	39.8	13.5	65.3	12.0
Queue Length 50th (ft)	156	0	416	212	151	227
Queue Length 95th (ft)	210	53	#663	327	#275	375
Internal Link Dist (ft)	1397		566			1235
Turn Bay Length (ft)		230			280	
Base Capacity (vph)	1022	533	1558	1147	540	2311
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.32	0.94	0.69	0.93	0.63

Intersection Summary

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

Queues

8: Napa Street & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	168	1095	453	379	537	232
v/c Ratio	0.71	0.75	0.68	0.34	0.83	0.22
Control Delay	60.4	28.9	43.3	1.3	38.8	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.4	28.9	43.3	1.3	38.8	0.5
Queue Length 50th (ft)	105	307	143	0	313	0
Queue Length 95th (ft)	#206	385	196	22	#543	0
Internal Link Dist (ft)		3086	1666			
Turn Bay Length (ft)	220			190		120
Base Capacity (vph)	239	1586	789	1117	649	1052
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.69	0.57	0.34	0.83	0.22

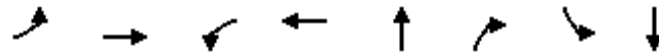
Intersection Summary

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

Queues

9: Colusa Street & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	21	1609	52	995	42	31	188	99
v/c Ratio	0.18	0.84	0.55	0.49	0.11	0.07	0.60	0.23
Control Delay	42.5	24.3	62.3	14.0	22.1	0.3	33.8	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.5	24.3	62.3	14.0	22.1	0.3	33.8	8.9
Queue Length 50th (ft)	9	299	24	97	16	0	80	8
Queue Length 95th (ft)	35	#660	#87	298	38	0	141	41
Internal Link Dist (ft)		1666		908	489			1477
Turn Bay Length (ft)	160		200				40	
Base Capacity (vph)	123	1909	95	2024	635	671	536	691
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.84	0.55	0.49	0.07	0.05	0.35	0.14

Intersection Summary

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

Queues

10: Via Las Cumbres & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	188	1229	94	635	271	115	438	177	109	500
v/c Ratio	0.76	1.05	0.59	0.63	0.45	0.76	0.84	0.32	0.70	0.97
Control Delay	75.7	83.4	74.5	46.4	8.2	90.3	61.7	5.3	83.7	78.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.7	83.4	74.5	46.4	8.2	90.3	61.7	5.3	83.7	78.4
Queue Length 50th (ft)	162	~624	81	260	9	101	369	0	94	430
Queue Length 95th (ft)	246	#799	142	341	84	#201	#574	45	#174	#688
Internal Link Dist (ft)		931		958			859			325
Turn Bay Length (ft)	190				200				115	
Base Capacity (vph)	311	1172	213	1007	601	160	523	556	174	518
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	1.05	0.44	0.63	0.45	0.72	0.84	0.32	0.63	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

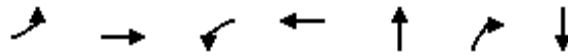
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

11: Fashion Valley Road & Friar Roads

10/18/2018



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	21	1926	232	958	210	200	33
v/c Ratio	0.28	0.77	1.04	0.44	0.79	0.65	0.12
Control Delay	78.4	33.9	129.0	13.7	75.9	63.5	33.4
Queue Delay	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Total Delay	78.4	34.0	129.0	13.8	75.9	63.5	33.4
Queue Length 50th (ft)	20	579	~244	200	189	174	17
Queue Length 95th (ft)	50	684	#426	186	275	252	45
Internal Link Dist (ft)		999		594	1292		249
Turn Bay Length (ft)	180		200				
Base Capacity (vph)	80	2489	224	2158	445	515	514
Starvation Cap Reductn	0	0	0	270	0	0	0
Spillback Cap Reductn	0	64	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.79	1.04	0.51	0.47	0.39	0.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

12: Via De La Moda & Friar Roads

10/17/2018



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	2000	347	1041	112	224
v/c Ratio	0.64	0.78	0.37	0.42	0.54
Control Delay	7.3	72.5	3.6	60.1	10.8
Queue Delay	0.1	0.0	0.0	0.0	0.0
Total Delay	7.4	72.5	3.6	60.1	10.8
Queue Length 50th (ft)	108	173	98	94	0
Queue Length 95th (ft)	412	229	53	154	74
Internal Link Dist (ft)	594		1246		
Turn Bay Length (ft)		300			
Base Capacity (vph)	3136	563	2777	384	505
Starvation Cap Reductn	296	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.70	0.62	0.37	0.29	0.44

Intersection Summary

Queues

13: Avenida De Las Tiendas & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	32	2116	716	1158	74	128	119	32	22
v/c Ratio	0.43	0.79	0.91	0.31	0.39	0.41	0.39	0.25	0.09
Control Delay	93.9	13.1	72.9	8.4	61.0	13.0	11.8	57.4	31.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	93.9	13.1	72.9	8.4	61.0	13.0	11.8	57.4	31.6
Queue Length 50th (ft)	32	706	350	173	62	4	0	26	9
Queue Length 95th (ft)	m54	135	425	200	113	65	58	60	35
Internal Link Dist (ft)		1246		672		252			222
Turn Bay Length (ft)	150		410						
Base Capacity (vph)	83	2674	843	3762	269	390	384	181	347
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.79	0.85	0.31	0.28	0.33	0.31	0.18	0.06

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

14: SR-163 SB Ramps/Ulric Street & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	224	1214	765	490	1204	286	418	61	969	490	225
v/c Ratio	0.69	0.92	0.79	0.74	0.65	0.17	0.60	0.16	0.86	0.70	0.48
Control Delay	68.3	58.4	11.7	58.2	39.2	1.7	49.7	40.8	41.3	53.2	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	0.9
Total Delay	68.3	58.4	11.7	58.2	39.2	1.7	49.7	40.8	41.3	59.3	13.2
Queue Length 50th (ft)	94	375	96	~216	351	0	158	41	382	190	23
Queue Length 95th (ft)	#168	#479	196	#381	410	21	203	77	#533	247	95
Internal Link Dist (ft)		672			1085			378			209
Turn Bay Length (ft)			100						300		
Base Capacity (vph)	326	1325	1031	664	1845	1791	878	476	1122	871	540
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	320	130
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.92	0.74	0.74	0.65	0.16	0.48	0.13	0.86	0.89	0.55

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: Friar Roads & SR-163 NB Ramps

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	673	2000	1173	1010	735	806
v/c Ratio	0.80	0.47	0.53	0.64	0.71	0.81
Control Delay	38.6	6.8	13.8	8.4	32.0	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.6	6.8	13.8	8.4	32.0	15.9
Queue Length 50th (ft)	153	117	125	302	112	56
Queue Length 95th (ft)	#292	141	128	250	151	#135
Internal Link Dist (ft)		1085	634		856	
Turn Bay Length (ft)	260					
Base Capacity (vph)	842	4229	2648	1694	1064	1012
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.47	0.44	0.60	0.69	0.80

Intersection Summary

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

Queues

16: Frazee Road & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	378	1796	561	327	1276	357	388	409	194	235	520
v/c Ratio	0.75	0.73	0.45	0.85	0.73	0.51	0.81	0.44	0.76	0.63	0.62
Control Delay	69.7	41.0	11.1	85.9	47.6	12.0	75.9	15.2	87.1	61.6	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.7	41.0	11.1	85.9	47.6	12.0	75.9	15.2	87.1	61.6	16.2
Queue Length 50th (ft)	192	505	47	163	433	52	191	51	97	196	59
Queue Length 95th (ft)	#264	551	107	#235	495	154	245	97	#148	294	128
Internal Link Dist (ft)		634			586			693		685	
Turn Bay Length (ft)	200			130			200		140		
Base Capacity (vph)	504	2476	1238	402	1752	706	565	1108	265	456	947
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.73	0.45	0.81	0.73	0.51	0.69	0.37	0.73	0.52	0.55

Intersection Summary

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

Queues

17: Mission Center Road & Friar WB

10/17/2018



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	194	206	253	284	800	989	347
v/c Ratio	0.67	0.71	0.60	0.68	0.33	0.54	0.40
Control Delay	62.9	65.1	19.4	65.7	10.4	25.2	3.8
Queue Delay	0.0	0.0	0.0	0.0	1.1	7.6	0.8
Total Delay	62.9	65.1	19.4	65.7	11.5	32.8	4.6
Queue Length 50th (ft)	167	178	49	125	150	310	0
Queue Length 95th (ft)	241	254	130	169	217	443	61
Internal Link Dist (ft)		857			286	253	
Turn Bay Length (ft)	370		370				
Base Capacity (vph)	376	379	494	480	2403	1844	874
Starvation Cap Reductn	0	0	0	0	1288	808	273
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.54	0.51	0.59	0.72	0.95	0.58

Intersection Summary

Queues

18: Mission Center Road & Friar EB

10/17/2018



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	159	157	463	779	505	621	758
v/c Ratio	0.38	0.37	0.92	0.65	0.63	0.86	0.37
Control Delay	40.0	39.8	53.0	32.0	11.6	60.7	15.5
Queue Delay	0.0	0.0	4.1	2.2	1.4	2.7	1.2
Total Delay	40.0	39.8	57.1	34.2	13.0	63.4	16.7
Queue Length 50th (ft)	107	105	243	305	208	250	178
Queue Length 95th (ft)	173	171	#430	280	165	310	224
Internal Link Dist (ft)		604		170			286
Turn Bay Length (ft)	250		100			120	
Base Capacity (vph)	469	473	549	1194	801	812	2045
Starvation Cap Reductn	0	0	0	273	137	101	996
Spillback Cap Reductn	0	0	42	0	0	0	154
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.33	0.91	0.85	0.76	0.87	0.72

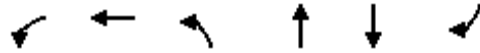
Intersection Summary

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

Queues

19: Qualcomm Way & WB Friar

10/17/2018



Lane Group	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	439	469	653	1173	908	296
v/c Ratio	0.79	0.93	0.95	0.60	0.57	0.47
Control Delay	56.0	67.8	65.1	18.9	43.9	6.8
Queue Delay	0.0	0.0	43.6	3.6	0.0	0.0
Total Delay	56.0	67.8	108.7	22.5	43.9	6.8
Queue Length 50th (ft)	366	381	323	308	271	0
Queue Length 95th (ft)	493	#568	m#360	m321	325	76
Internal Link Dist (ft)		714		277	424	
Turn Bay Length (ft)	320					
Base Capacity (vph)	611	553	688	1939	1603	627
Starvation Cap Reductn	0	0	119	655	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.85	1.15	0.91	0.57	0.47

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

20: Qualcomm Way & EB Friar

10/17/2018



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	627	337	1268	979	284	1105
v/c Ratio	1.14	0.61	0.86	1.02	0.97	0.58
Control Delay	125.5	35.1	45.2	45.9	120.5	10.5
Queue Delay	0.0	0.0	20.4	0.0	0.0	0.4
Total Delay	125.5	35.1	65.7	45.9	120.5	10.9
Queue Length 50th (ft)	~723	200	565	~570	145	188
Queue Length 95th (ft)	#974	308	666	#834	#237	211
Internal Link Dist (ft)	357		608			277
Turn Bay Length (ft)		360				
Base Capacity (vph)	552	555	1481	964	293	1896
Starvation Cap Reductn	0	0	180	0	0	320
Spillback Cap Reductn	2	0	250	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.14	0.61	1.03	1.02	0.97	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

21: River Run Drive & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	42	2647	168	189	1958	169	189	305
v/c Ratio	0.45	1.03	0.21	1.02	0.68	0.58	0.38	1.07
Control Delay	70.2	54.9	6.2	125.0	19.8	48.0	14.9	114.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.2	54.9	6.2	125.0	19.8	48.0	14.9	114.1
Queue Length 50th (ft)	32	~802	20	~152	386	115	35	~253
Queue Length 95th (ft)	70	#892	58	#305	442	192	101	#435
Internal Link Dist (ft)		1668			1034	780		453
Turn Bay Length (ft)	220			240			60	
Base Capacity (vph)	104	2576	798	185	2896	291	492	285
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	1.03	0.21	1.02	0.68	0.58	0.38	1.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

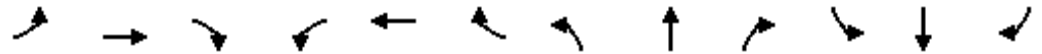
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

22: Fenton Parkway & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	143	2383	418	327	1684	82	327	71	444	51	51	40
v/c Ratio	0.69	0.95	0.39	1.06	0.63	0.09	0.79	0.17	0.93	0.34	0.18	0.09
Control Delay	108.8	56.6	6.1	150.3	36.6	2.0	98.3	61.8	69.9	98.8	31.5	0.4
Queue Delay	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	108.8	58.2	6.1	150.3	36.6	2.0	98.3	61.8	69.9	98.8	31.5	0.4
Queue Length 50th (ft)	96	~1216	82	~242	622	0	~235	75	364	33	22	0
Queue Length 95th (ft)	139	#1285	133	#355	682	19	#348	124	#531	61	69	0
Internal Link Dist (ft)		1034			1478			660			718	
Turn Bay Length (ft)	240		240	260		260	200			210		210
Base Capacity (vph)	240	2521	1066	308	2670	954	412	478	526	171	353	458
Starvation Cap Reductn	0	57	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.97	0.39	1.06	0.63	0.09	0.79	0.15	0.84	0.30	0.14	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

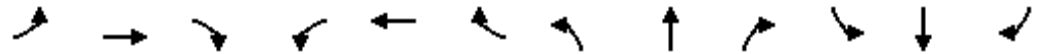
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

23: Northside Drive & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	177	2302	365	542	1177	156	260	63	792	104	21	83
v/c Ratio	0.68	0.96	0.43	1.00	0.42	0.15	0.49	0.19	1.41	0.38	0.14	0.30
Control Delay	80.4	48.8	11.8	100.9	21.5	1.6	59.7	49.8	227.9	72.1	65.5	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.4	48.8	11.8	100.9	21.5	1.6	59.7	49.8	227.9	72.1	65.5	2.8
Queue Length 50th (ft)	88	~917	85	277	271	0	113	48	~867	52	19	0
Queue Length 95th (ft)	129	#1004	177	#403	316	22	160	90	#1124	#95	48	0
Internal Link Dist (ft)		1478			1233			692			645	
Turn Bay Length (ft)	300		300	260		260	180			190		300
Base Capacity (vph)	299	2409	840	542	2817	1038	596	484	561	275	299	382
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.96	0.43	1.00	0.42	0.15	0.44	0.13	1.41	0.38	0.07	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

24: Mission Village Drive & Friar Road WB

10/17/2018



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	927	295	537	442	947	547
v/c Ratio	1.34	0.19	1.29	0.24	1.13	0.82
Control Delay	197.2	0.3	190.5	18.9	119.7	22.1
Queue Delay	0.0	0.0	1.2	0.0	0.0	0.0
Total Delay	197.2	0.3	191.7	18.9	119.7	22.1
Queue Length 50th (ft)	~1058	0	~599	111	~505	106
Queue Length 95th (ft)	#1313	0	#825	145	#639	276
Internal Link Dist (ft)	702			344	548	
Turn Bay Length (ft)						
Base Capacity (vph)	691	1555	415	1808	838	671
Starvation Cap Reductn	0	0	46	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.34	0.19	1.46	0.24	1.13	0.82

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

25: Mission Village Drive & Friar Road eb

10/17/2018



Lane Group	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	379	358	611	653	484	1379
v/c Ratio	1.06	1.14	1.06	0.90	0.76	1.08
Control Delay	114.7	141.6	98.9	34.3	45.8	90.4
Queue Delay	0.0	0.0	19.9	47.7	50.3	8.6
Total Delay	114.7	141.6	118.9	82.0	96.1	98.9
Queue Length 50th (ft)	~352	~353	~567	245	357	~683
Queue Length 95th (ft)	#552	#549	#798	#502	496	#822
Internal Link Dist (ft)	760		133			344
Turn Bay Length (ft)						
Base Capacity (vph)	356	313	574	722	637	1274
Starvation Cap Reductn	0	0	280	161	194	326
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.06	1.14	2.08	1.16	1.09	1.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

26: I-15 SB Ramps & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	582	2112	857	357	1755	459	1184	990
v/c Ratio	1.22	0.92	0.85	1.22	1.01	0.30	1.48	0.67
Control Delay	156.2	39.1	18.7	169.4	63.6	0.5	254.8	18.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	156.2	39.1	18.7	169.4	63.6	0.5	254.8	18.8
Queue Length 50th (ft)	~554	551	207	~340	~505	0	~693	251
Queue Length 95th (ft)	#775	627	#473	#529	#620	0	#835	323
Internal Link Dist (ft)		737			1071			
Turn Bay Length (ft)							600	600
Base Capacity (vph)	476	2288	1003	292	1737	1536	802	1485
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.92	0.85	1.22	1.01	0.30	1.48	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

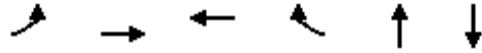
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

27: I-15 NB Ramps & Friar Roads

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBT	SBT
Lane Group Flow (vph)	786	2510	1674	530	1051	1184
v/c Ratio	2.03	0.75	0.92	1.02	2.20	1.65
Control Delay	497.9	16.5	46.5	84.3	571.6	321.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	497.9	16.5	46.5	84.3	571.6	321.4
Queue Length 50th (ft)	~1036	479	513	~550	~1397	~1199
Queue Length 95th (ft)	#1281	535	589	#806	#1660	#1466
Internal Link Dist (ft)		1071	878		682	773
Turn Bay Length (ft)	520					
Base Capacity (vph)	388	3363	1827	519	477	717
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	2.03	0.75	0.92	1.02	2.20	1.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

28: Rancho Mission Road & Friar Roads

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	2969	629	216	1670	586	332
v/c Ratio	1.05	0.54	0.89	0.36	0.86	0.77
Control Delay	62.6	6.5	95.5	7.9	68.8	34.9
Queue Delay	13.3	0.0	0.0	0.0	0.0	0.0
Total Delay	75.9	6.5	95.5	7.9	68.8	34.9
Queue Length 50th (ft)	~1119	146	204	159	274	139
Queue Length 95th (ft)	#1194	185	#385	188	339	271
Internal Link Dist (ft)	878			425	699	
Turn Bay Length (ft)		400	160		160	
Base Capacity (vph)	2835	1191	243	4641	757	455
Starvation Cap Reductn	84	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.53	0.89	0.36	0.77	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

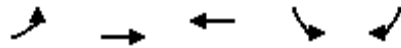
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

29: Friar Roads & Santo Road

10/17/2018



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	402	2928	1763	216	474
v/c Ratio	0.61	0.82	0.60	0.32	0.78
Control Delay	44.0	17.5	22.5	35.1	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	44.0	17.5	22.5	35.1	34.4
Queue Length 50th (ft)	118	281	218	72	268
Queue Length 95th (ft)	187	#884	343	78	287
Internal Link Dist (ft)		589	1602	1556	
Turn Bay Length (ft)	200			200	
Base Capacity (vph)	657	3564	2961	1209	605
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.82	0.60	0.18	0.78

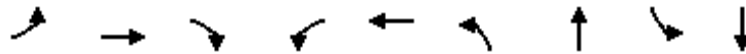
Intersection Summary

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

Queues

30: Riverdale Street & Friar Roads

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	295	2589	326	95	1337	347	221	168	274
v/c Ratio	0.68	1.05	0.38	0.85	0.88	1.30	0.38	0.54	0.41
Control Delay	51.5	63.1	5.0	117.1	34.7	196.2	24.6	41.0	8.2
Queue Delay	0.0	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	85.2	5.0	117.1	34.7	196.2	24.6	41.0	8.2
Queue Length 50th (ft)	210	~799	21	76	243	~344	94	106	22
Queue Length 95th (ft)	#349	#889	76	m#146	m269	#533	165	183	89
Internal Link Dist (ft)		1602			513		932		815
Turn Bay Length (ft)	220		315	190		150		130	
Base Capacity (vph)	431	2470	855	112	1676	266	584	310	671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	485	0	0	0	0	5	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	1.30	0.38	0.85	0.80	1.30	0.38	0.54	0.41

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues

31: Mission Gorge Road & Friar Roads

10/17/2018



Lane Group	EBT	EBR	WBL	NBL	NBR
Lane Group Flow (vph)	2398	398	316	378	684
v/c Ratio	0.98	0.26	0.47	1.07	0.63
Control Delay	19.6	0.1	45.2	112.8	29.1
Queue Delay	42.4	0.0	0.0	0.0	0.0
Total Delay	61.9	0.1	45.2	112.8	29.1
Queue Length 50th (ft)	711	0	111	~341	222
Queue Length 95th (ft)	m693	m0	156	#534	289
Internal Link Dist (ft)	513			1532	
Turn Bay Length (ft)		90	190	140	
Base Capacity (vph)	2466	1555	703	354	1111
Starvation Cap Reductn	433	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.18	0.26	0.45	1.07	0.62

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

32: Mission Center Road & Mission Center Ct

10/17/2018



Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	147	147	158	221	137	937	116	211	842	168
v/c Ratio	0.73	0.35	0.72	0.50	0.49	0.55	0.15	0.78	0.50	0.21
Control Delay	69.2	4.3	65.9	9.2	54.7	26.8	5.0	65.8	20.1	3.0
Queue Delay	3.0	0.0	0.0	0.8	0.0	0.4	0.0	6.6	1.0	0.7
Total Delay	72.3	4.3	65.9	10.0	54.7	27.1	5.0	72.4	21.2	3.7
Queue Length 50th (ft)	116	0	124	0	103	268	0	162	164	6
Queue Length 95th (ft)	177	24	186	64	167	420	40	m228	381	m35
Internal Link Dist (ft)	291		308			999			170	
Turn Bay Length (ft)		200		200	120			120		
Base Capacity (vph)	276	502	304	524	277	1710	757	351	1720	799
Starvation Cap Reductn	0	0	0	0	0	0	0	95	580	375
Spillback Cap Reductn	61	0	0	114	0	290	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.29	0.52	0.54	0.49	0.66	0.15	0.82	0.74	0.40

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

33: Qualcomm Way & Rio San Diego Drive

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	381	278	485	763	330	402	330	1108	237	196	845	268
v/c Ratio	0.84	0.78	0.78	0.96	0.32	0.58	0.83	0.77	0.26	0.68	0.66	0.35
Control Delay	76.2	68.4	36.4	76.5	39.1	24.2	78.7	51.4	7.7	73.9	51.0	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.2	68.4	36.4	76.5	39.1	24.2	78.7	51.4	7.7	73.9	51.0	9.8
Queue Length 50th (ft)	175	234	265	356	120	192	152	357	44	90	268	47
Queue Length 95th (ft)	#234	333	396	#481	162	279	#224	#449	93	132	320	113
Internal Link Dist (ft)		1252			1355			1284			608	
Turn Bay Length (ft)	140		120	120		160	335		200	180		200
Base Capacity (vph)	487	421	627	803	1122	713	414	1438	904	334	1285	772
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.66	0.77	0.95	0.29	0.56	0.80	0.77	0.26	0.59	0.66	0.35

Intersection Summary

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

Queues

35: Fenton Parkway & Rio San Diego Drive

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	153	388	194	209	551	153	490	184	429	327	112
v/c Ratio	0.54	0.69	0.33	0.69	1.00	1.01	0.79	0.45	0.94	0.42	0.27
Control Delay	59.2	50.9	7.7	65.6	84.3	138.1	65.4	10.8	88.3	48.8	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.2	50.9	7.7	65.6	84.3	138.1	65.4	10.8	88.3	48.8	8.3
Queue Length 50th (ft)	127	328	7	179	~553	~160	237	0	212	142	0
Queue Length 95th (ft)	199	451	67	267	#787	#309	#308	71	#326	192	46
Internal Link Dist (ft)		1071			1444		453			660	
Turn Bay Length (ft)	250					160		200	300		200
Base Capacity (vph)	454	580	600	454	549	151	635	411	458	802	423
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.67	0.32	0.46	1.00	1.01	0.77	0.45	0.94	0.41	0.26

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

36: Northside Drive & Rio San Diego Drive

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	356	202	74	284	21	263	11	126	253	358
v/c Ratio	0.79	0.45	0.22	0.65	0.21	0.48	0.03	0.59	0.44	0.34
Control Delay	43.0	29.8	29.2	18.9	50.8	36.1	0.2	52.2	30.6	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.0	29.8	29.2	18.9	50.8	36.1	0.2	52.2	30.6	2.4
Queue Length 50th (ft)	141	69	29	39	9	55	0	51	81	0
Queue Length 95th (ft)	#384	190	73	130	40	124	0	#183	237	41
Internal Link Dist (ft)		1444	569			544			692	
Turn Bay Length (ft)	130			200	70		200	100		
Base Capacity (vph)	663	659	776	754	99	912	494	239	628	1190
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.31	0.10	0.38	0.21	0.29	0.02	0.53	0.40	0.30

Intersection Summary

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

Queues

37: Rancho Mission Road & San Diego Mission Road

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	200	1084	137	126	189	158	368	126	179	295	200
v/c Ratio	0.77	0.93	0.88	0.13	0.36	0.83	0.88	0.26	0.89	0.70	0.42
Control Delay	66.5	44.6	98.6	34.6	7.5	83.3	66.2	2.9	91.5	50.4	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.5	44.6	98.6	34.6	7.5	83.3	66.2	2.9	91.5	50.4	10.5
Queue Length 50th (ft)	150	354	107	38	0	121	270	0	139	207	14
Queue Length 95th (ft)	225	#491	#233	68	60	#239	#421	16	#281	306	77
Internal Link Dist (ft)		1694		1560			1721			574	
Turn Bay Length (ft)	80		200		200	70			120		120
Base Capacity (vph)	345	1257	156	935	523	203	480	522	203	477	519
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.86	0.88	0.13	0.36	0.78	0.77	0.24	0.88	0.62	0.39

Intersection Summary

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

Queues

38: Mission Center Road & Harzard Center Drive

10/17/2018



Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	159	122	750	135	52	479	865	21	63	1021
v/c Ratio	0.59	0.45	0.94	0.78	0.17	0.49	0.47	0.03	0.53	0.85
Control Delay	61.0	56.0	41.9	88.5	1.3	41.5	22.5	0.1	79.5	54.4
Queue Delay	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	56.0	44.0	88.5	1.3	41.5	22.5	0.1	79.5	54.4
Queue Length 50th (ft)	137	103	364	123	0	189	274	0	57	325
Queue Length 95th (ft)	224	176	#676	#247	0	251	340	0	109	387
Internal Link Dist (ft)		357		605			887			999
Turn Bay Length (ft)	230				200	200		200	240	
Base Capacity (vph)	434	438	865	189	310	1136	2048	855	157	1492
Starvation Cap Reductn	0	0	43	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.28	0.91	0.71	0.17	0.42	0.42	0.02	0.40	0.68

Intersection Summary

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

Queues

39: Camino De La Reina & Avenida Del Rio

10/17/2018



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	411	516	305	516	516	295
v/c Ratio	0.88	0.51	0.67	0.69	0.92	0.26
Control Delay	49.3	6.4	34.1	7.8	50.7	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.3	6.4	34.1	7.8	50.7	7.4
Queue Length 50th (ft)	191	60	132	0	244	59
Queue Length 95th (ft)	#359	129	213	77	#448	95
Internal Link Dist (ft)	612		631			319
Turn Bay Length (ft)		175				
Base Capacity (vph)	498	1010	549	804	569	1248
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.51	0.56	0.64	0.91	0.24

Intersection Summary

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

Queues

40: Mission Center Road & Camino De La Reina

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	274	905	316	631	263	1021	484	968	305
v/c Ratio	0.67	0.86	0.72	0.57	1.38	0.84	1.73	0.70	0.50
Control Delay	60.1	44.9	60.5	27.8	239.5	48.8	378.9	43.7	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	44.9	60.5	27.8	239.5	48.8	378.9	43.7	8.8
Queue Length 50th (ft)	104	316	121	162	~137	260	~282	244	9
Queue Length 95th (ft)	165	420	187	232	#262	#410	#456	353	96
Internal Link Dist (ft)		2153		1856		444		887	
Turn Bay Length (ft)	290		140		160		320		
Base Capacity (vph)	1354	1767	604	1175	191	1219	279	1381	604
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.51	0.52	0.54	1.38	0.84	1.73	0.70	0.50

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

41: Camino Del Este & Camino De La Reina

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	221	663	189	253	621	53	158	179	168	158	347	232
v/c Ratio	0.70	0.74	0.36	0.72	0.64	0.11	0.68	0.22	0.35	0.58	0.42	0.43
Control Delay	47.1	35.4	6.9	45.8	31.3	0.5	45.7	27.0	6.8	38.6	29.0	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.1	35.4	6.9	45.8	31.3	0.5	45.7	27.0	6.8	38.6	29.0	6.7
Queue Length 50th (ft)	103	157	0	117	141	0	72	38	0	70	77	0
Queue Length 95th (ft)	224	283	54	248	253	0	162	76	49	155	140	56
Internal Link Dist (ft)		1214			1167			627			1301	
Turn Bay Length (ft)	120		200	260		200	160		200	160		200
Base Capacity (vph)	470	1282	670	538	1415	660	438	1551	763	512	1551	800
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.52	0.28	0.47	0.44	0.08	0.36	0.12	0.22	0.31	0.22	0.29

Intersection Summary

Queues

42: Qualcomm Way & Camino De La Reina/Camino Del Rio North

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	291	416	268	82	337	255	255	1449	306	301	1832	255
v/c Ratio	1.16	0.45	0.46	0.51	0.52	0.58	0.95	0.99	0.43	0.90	0.81	0.34
Control Delay	159.7	40.9	24.4	78.4	55.4	17.6	109.9	64.3	18.5	93.5	40.2	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	19.2	39.6	6.5	0.0	0.0	0.0
Total Delay	159.7	40.9	24.4	78.4	55.4	17.6	129.0	103.9	25.1	93.5	40.2	14.5
Queue Length 50th (ft)	~324	155	135	39	143	42	125	~806	111	~165	603	73
Queue Length 95th (ft)	#514	207	214	68	192	129	#209	#947	200	#264	675	148
Internal Link Dist (ft)		1167			1022			145			1284	
Turn Bay Length (ft)	250		325	250		200			200	250		200
Base Capacity (vph)	251	1092	584	172	829	509	279	1458	711	333	2256	752
Starvation Cap Reductn	0	0	0	0	0	0	27	615	347	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.38	0.46	0.48	0.41	0.50	1.01	1.72	0.84	0.90	0.81	0.34

Intersection Summary

Description: Loss time adjust of 3 seconds to the NBL movement to account for the transit crossing

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

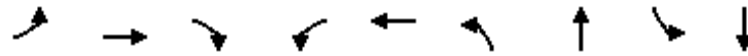
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

43: Fenton Parkway & Camino Del Rio North

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	158	316	358	242	358	189	495	126	568
v/c Ratio	0.73	0.78	0.57	0.91	0.79	0.88	0.80	0.81	0.98
Control Delay	65.4	51.4	17.0	80.7	48.0	84.5	40.2	83.7	67.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.4	51.4	17.0	80.7	48.0	84.5	40.2	83.7	67.2
Queue Length 50th (ft)	101	197	98	160	217	126	277	84	360
Queue Length 95th (ft)	#202	294	179	#329	323	#273	#488	#200	#640
Internal Link Dist (ft)		1226			476		964		611
Turn Bay Length (ft)				70		80			
Base Capacity (vph)	236	530	630	267	550	214	620	156	581
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.60	0.57	0.91	0.65	0.88	0.80	0.81	0.98

Intersection Summary

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

Queues

44: Camino Del Rio North & Rancho Mission Road

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	284	516	221	305	695	305
v/c Ratio	0.94	0.34	0.42	0.63	0.95	0.29
Control Delay	79.7	18.8	38.8	10.6	52.4	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.7	18.8	38.8	10.6	52.4	3.3
Queue Length 50th (ft)	166	106	64	0	380	19
Queue Length 95th (ft)	#348	145	99	73	#681	57
Internal Link Dist (ft)		1474	1627		1721	
Turn Bay Length (ft)	95			80		
Base Capacity (vph)	302	1708	725	552	730	1037
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.30	0.30	0.55	0.95	0.29

Intersection Summary

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

Queues

45: Mission Gorge Road & Camino Del Rio North/I-8 WB Off Ramps

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	102	145	629	463	340	269	351	1000	227	52	1567	93
v/c Ratio	1.12	1.51	1.41	1.13	0.44	0.57	1.07	0.55	0.26	0.45	1.21	0.15
Control Delay	189.8	319.0	226.5	133.7	46.6	30.6	124.2	25.0	4.2	81.1	143.5	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	189.8	319.0	226.5	133.7	46.6	30.6	124.2	25.0	4.2	81.1	143.5	6.2
Queue Length 50th (ft)	~115	~200	~650	~556	154	125	~366	326	13	25	~950	0
Queue Length 95th (ft)	#249	#354	#1002	#796	209	212	#570	390	56	49	#1089	39
Internal Link Dist (ft)		1010			920			738			884	
Turn Bay Length (ft)	130			520		140	220		200	90		150
Base Capacity (vph)	91	96	447	409	780	468	328	1828	888	116	1291	617
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	1.51	1.41	1.13	0.44	0.57	1.07	0.55	0.26	0.45	1.21	0.15

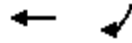
Intersection Summary

Description: min green reduce to match split
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Queues

46: Hotel Circle North & Hotel Circle Place

10/17/2018



Lane Group	WBT	SBR
Lane Group Flow (vph)	316	95
v/c Ratio	0.14	0.14
Control Delay	3.5	0.5
Queue Delay	0.0	0.0
Total Delay	3.5	0.5
Queue Length 50th (ft)	11	0
Queue Length 95th (ft)	24	0
Internal Link Dist (ft)	302	
Turn Bay Length (ft)		
Base Capacity (vph)	2319	783
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.14	0.12
Intersection Summary		

Queues

48: Hotel Circle North/Camino De La Reina & Fashion Valley Road

10/17/2018



Lane Group	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	579	463	1	484
v/c Ratio	0.67	0.64	0.00	0.28
Control Delay	34.5	7.1	13.0	7.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	34.5	7.1	13.0	7.5
Queue Length 50th (ft)	157	0	0	70
Queue Length 95th (ft)	194	69	m1	107
Internal Link Dist (ft)	598		723	
Turn Bay Length (ft)		150		
Base Capacity (vph)	1930	1039	1048	1740
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.45	0.00	0.28

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

49: Mission Center Road & Camino Del Rio N

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	144	216	268	289	289	505	247	608	691	423	1010	134
v/c Ratio	0.80	0.24	0.17	0.66	0.71	0.88	0.77	0.67	0.44	0.77	0.88	0.21
Control Delay	74.4	28.8	0.2	47.0	43.8	32.1	60.0	36.1	0.9	48.8	41.0	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.4	28.8	0.2	47.0	43.8	32.1	60.0	36.1	0.9	48.8	41.0	0.7
Queue Length 50th (ft)	88	54	0	88	162	122	78	177	0	129	304	0
Queue Length 95th (ft)	#202	87	0	133	249	#301	#147	247	0	#202	#442	0
Internal Link Dist (ft)		650			381			678			444	
Turn Bay Length (ft)	70		70	160			190		190	150		
Base Capacity (vph)	186	1043	1555	536	532	655	324	961	1554	592	1237	676
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.21	0.17	0.54	0.54	0.77	0.76	0.63	0.44	0.71	0.82	0.20

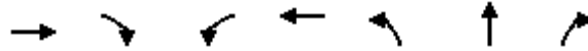
Intersection Summary

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

Queues

50: I-8 WB Ramps/Mission Valley Mall Driveway & Camino Del Rio N

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	351	979	299	320	420	539	278
v/c Ratio	0.32	0.64	0.85	0.17	0.66	0.84	0.18
Control Delay	40.5	2.0	79.8	18.5	43.7	54.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.5	2.0	79.8	18.5	43.7	54.3	0.3
Queue Length 50th (ft)	139	0	287	82	351	493	0
Queue Length 95th (ft)	185	0	#520	121	449	616	0
Internal Link Dist (ft)	381			779		361	
Turn Bay Length (ft)			110		560		560
Base Capacity (vph)	1110	1536	351	1925	717	731	1536
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.64	0.85	0.17	0.59	0.74	0.18

Intersection Summary

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

Queues

51: Camino Del Rio N & Camino Del Este

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	284	453	368	242	484	347
v/c Ratio	0.99	0.41	0.27	0.33	0.94	0.50
Control Delay	86.4	10.1	17.7	3.8	56.8	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.4	10.1	17.7	3.8	56.8	5.5
Queue Length 50th (ft)	143	110	65	0	234	0
Queue Length 95th (ft)	#295	171	97	43	#416	59
Internal Link Dist (ft)		1771	694		627	
Turn Bay Length (ft)	200			90		
Base Capacity (vph)	288	1109	1353	737	521	696
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.41	0.27	0.33	0.93	0.50

Intersection Summary

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

Queues

52: Qualcomm Way & Camino Del Rio N/I-8 WB Ramps

10/17/2018



Lane Group	EBL	EBR	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	316	500	388	383	296	1311	255	1505	765
v/c Ratio	0.93	0.84	1.04	1.01	1.18	0.50	0.17	1.20	1.06
Control Delay	113.5	57.7	130.9	106.9	184.0	31.9	0.2	151.1	86.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	18.4
Total Delay	113.5	57.7	130.9	106.9	184.0	31.9	0.2	154.5	104.5
Queue Length 50th (ft)	409	457	~584	~457	~465	404	0	~1257	~834
Queue Length 95th (ft)	#584	618	#816	#691	#677	446	0	#1391	#1101
Internal Link Dist (ft)			350			965		145	
Turn Bay Length (ft)				200	100				
Base Capacity (vph)	362	595	372	378	250	2641	1536	1254	723
Starvation Cap Reductn	0	0	0	0	0	0	0	596	202
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.84	1.04	1.01	1.18	0.50	0.17	2.29	1.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

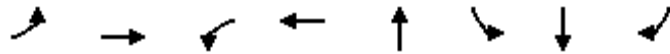
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

53: Morena Boulevard & Taylor Street

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	547	569	21	327	53	164	131	474
v/c Ratio	1.26	0.41	0.16	0.40	0.29	0.35	0.28	0.51
Control Delay	164.8	18.3	38.7	18.4	20.4	20.6	19.7	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	164.8	18.3	38.7	18.4	20.4	20.6	19.7	3.0
Queue Length 50th (ft)	~114	61	6	36	3	46	35	0
Queue Length 95th (ft)	#335	183	34	93	40	114	93	33
Internal Link Dist (ft)		1165		492	202		357	
Turn Bay Length (ft)	190		90			140		
Base Capacity (vph)	434	1703	135	1502	222	965	976	928
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.33	0.16	0.22	0.24	0.17	0.13	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

55: Taylor Street/Hotel Circle South & Hotel Circle North

10/17/2018



Lane Group	EBT	SBL	SBR
Lane Group Flow (vph)	200	105	200
v/c Ratio	0.40	0.10	0.25
Control Delay	13.9	0.2	2.8
Queue Delay	0.0	0.0	0.0
Total Delay	13.9	0.2	2.8
Queue Length 50th (ft)	23	0	0
Queue Length 95th (ft)	92	0	27
Internal Link Dist (ft)	719	273	
Turn Bay Length (ft)			
Base Capacity (vph)	1252	1385	1140
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.16	0.08	0.18
Intersection Summary			

Queues

56: Hotel Circle South & I-8 EB On-Ramp

10/17/2018



Lane Group	EBL	EBT
Lane Group Flow (vph)	1305	1316
v/c Ratio	0.75	0.37
Control Delay	3.0	0.3
Queue Delay	0.0	0.0
Total Delay	3.0	0.3
Queue Length 50th (ft)	0	0
Queue Length 95th (ft)	0	0
Internal Link Dist (ft)		726
Turn Bay Length (ft)		
Base Capacity (vph)	1747	3539
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.75	0.37
Intersection Summary		

Queues

57: Bachman Place & Hotel Circle South

10/17/2018



Lane Group	EBT	NBR
Lane Group Flow (vph)	1316	947
v/c Ratio	0.79	0.77
Control Delay	7.7	10.5
Queue Delay	0.0	0.0
Total Delay	7.7	10.5
Queue Length 50th (ft)	28	40
Queue Length 95th (ft)	103	122
Internal Link Dist (ft)	1023	
Turn Bay Length (ft)		
Base Capacity (vph)	2059	1741
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.64	0.54
Intersection Summary		

Queues

58: Mission Center Road & I-8 EB Ramp

10/17/2018



Lane Group	EBL	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	884	389	558	284	750	850
v/c Ratio	0.74	0.44	0.87	0.18	1.30	0.71
Control Delay	47.9	1.6	59.8	0.2	186.9	46.3
Queue Delay	0.0	0.0	2.0	0.0	0.0	0.7
Total Delay	47.9	1.6	61.8	0.2	186.9	47.1
Queue Length 50th (ft)	392	0	233	0	~1029	393
Queue Length 95th (ft)	473	0	283	m0	#1380	508
Internal Link Dist (ft)		711	193			678
Turn Bay Length (ft)				80	330	
Base Capacity (vph)	1187	883	872	1555	576	1193
Starvation Cap Reductn	0	0	178	0	0	0
Spillback Cap Reductn	0	18	0	0	0	118
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.45	0.80	0.18	1.30	0.79

Intersection Summary

Description: Set to pretime to mimic field phasing

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

59: Mission Center Road & Camino Del Rio South

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	173	574	211	453	74	32	365	220	363
v/c Ratio	0.55	0.89	0.91	0.47	0.59	0.16	0.43	0.26	0.38
Control Delay	61.4	75.5	108.2	12.2	86.3	1.8	17.9	13.1	3.9
Queue Delay	3.8	8.4	0.0	0.2	0.0	0.0	3.6	2.0	1.2
Total Delay	65.2	83.9	108.2	12.3	86.3	1.8	21.5	15.1	5.1
Queue Length 50th (ft)	168	300	110	151	71	0	313	134	95
Queue Length 95th (ft)	254	371	#190	241	127	0	412	165	68
Internal Link Dist (ft)		393	464		304			193	
Turn Bay Length (ft)	280			220		100			
Base Capacity (vph)	342	706	232	967	144	209	854	862	946
Starvation Cap Reductn	0	0	0	0	0	0	390	498	369
Spillback Cap Reductn	100	103	0	94	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.95	0.91	0.52	0.51	0.15	0.79	0.60	0.63

Intersection Summary

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

Queues

60: Qualcomm Way & I-8 EB Ramp

10/17/2018



Lane Group	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	474	1321	1663	542
v/c Ratio	0.86	0.50	0.63	0.45
Control Delay	64.1	6.4	11.1	1.8
Queue Delay	0.2	1.9	1.6	0.0
Total Delay	64.3	8.3	12.8	1.8
Queue Length 50th (ft)	215	198	361	0
Queue Length 95th (ft)	272	m220	517	35
Internal Link Dist (ft)		396	965	
Turn Bay Length (ft)				
Base Capacity (vph)	691	2626	2626	1211
Starvation Cap Reductn	0	1088	345	0
Spillback Cap Reductn	14	0	732	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.70	0.86	0.88	0.45

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues

61: Texas Street/Qualcomm Way & Camino Del Rio South

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	305	232	284	232	84	653	95	1042	337	1358	442
v/c Ratio	0.94	0.68	0.61	0.76	0.26	1.04	0.82	0.97	1.04	0.86	0.58
Control Delay	95.7	66.5	22.5	72.2	52.2	71.4	111.0	69.8	112.2	44.4	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	24.8	1.0
Total Delay	95.7	66.5	22.5	72.2	52.2	71.4	111.0	70.8	112.2	69.2	21.7
Queue Length 50th (ft)	287	206	89	202	67	289	91	~581	~349	675	233
Queue Length 95th (ft)	#467	302	151	297	117	#612	#201	#721	#546	#797	285
Internal Link Dist (ft)		351			536			1138		396	
Turn Bay Length (ft)	80		35	60		60	100				160
Base Capacity (vph)	329	346	466	366	385	625	117	1071	324	1572	762
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	271	129
Spillback Cap Reductn	0	0	0	0	0	0	0	7	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.67	0.61	0.63	0.22	1.04	0.81	0.98	1.04	1.04	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

62: Camino Del Rio South & Fenton Parkway

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	263	611	337	421	684	295
v/c Ratio	0.83	0.70	0.77	0.40	0.93	0.38
Control Delay	57.8	22.9	43.0	4.5	45.3	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.8	22.9	43.0	4.5	45.3	3.8
Queue Length 50th (ft)	141	253	173	50	348	0
Queue Length 95th (ft)	#277	374	268	86	#598	48
Internal Link Dist (ft)		1605	2056		964	
Turn Bay Length (ft)	160			230	75	
Base Capacity (vph)	347	1004	539	1077	793	822
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.61	0.63	0.39	0.86	0.36

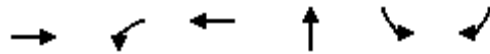
Intersection Summary

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

Queues

63: I-15 SB Ramps & Camino Del Rio South

10/17/2018



Lane Group	EBT	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	1863	42	305	63	305	168
v/c Ratio	0.93	0.43	0.26	0.32	0.90	0.40
Control Delay	31.0	59.6	9.2	4.3	69.4	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.0	59.6	9.2	4.3	69.4	9.0
Queue Length 50th (ft)	~597	27	81	0	193	0
Queue Length 95th (ft)	#795	#66	124	3	#354	55
Internal Link Dist (ft)	1169		1	255		
Turn Bay Length (ft)		80				
Base Capacity (vph)	2033	98	1262	201	356	429
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.43	0.24	0.31	0.86	0.39

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

64: I-15 SB Ramps & Camino Del Rio South

10/17/2018



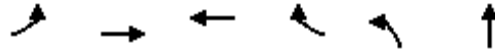
Lane Group	EBT	WBL	WBT
Lane Group Flow (vph)	2190	105	347
v/c Ratio	0.80	0.53	0.10
Control Delay	8.1	46.2	0.1
Queue Delay	0.0	0.0	0.0
Total Delay	8.1	46.2	0.1
Queue Length 50th (ft)	233	44	0
Queue Length 95th (ft)	428	118	0
Internal Link Dist (ft)	1		1248
Turn Bay Length (ft)		350	
Base Capacity (vph)	3103	314	3539
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.71	0.33	0.10

Intersection Summary

Queues

65: I-15 NB Ramps & Camino Del Rio South

10/17/2018



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	474	1021	242	84	211	95
v/c Ratio	0.91	0.50	0.66	0.19	0.90	0.48
Control Delay	53.4	11.3	40.3	0.9	76.5	43.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.4	11.3	40.3	0.9	76.5	43.6
Queue Length 50th (ft)	230	152	118	0	109	46
Queue Length 95th (ft)	#451	197	193	0	#257	100
Internal Link Dist (ft)		1248	1726			753
Turn Bay Length (ft)	115			180	190	
Base Capacity (vph)	536	2350	510	550	235	197
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.43	0.47	0.15	0.90	0.48

Intersection Summary

Description: 3 seconds of all red was added to all phase plus an additional 1.5 seconds to each of the two yellow phase to mimic the time loss to the bike phase.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

66: Mission Gorge Road & I-8 EB Off Ramps

10/17/2018



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	1000	2263	95	684	1621
v/c Ratio	0.89	0.65	0.75	0.34	0.72
Control Delay	38.8	0.9	75.0	9.8	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	38.8	0.9	75.0	9.8	20.7
Queue Length 50th (ft)	254	0	51	93	247
Queue Length 95th (ft)	#405	0	#139	125	300
Internal Link Dist (ft)	658			1165	738
Turn Bay Length (ft)			180		
Base Capacity (vph)	1197	3502	133	2354	2703
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.84	0.65	0.71	0.29	0.60

Intersection Summary

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

Queues

67: Texas Street & Madison Avenue

10/17/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	232	95	63	84	74	305	158	600	168	221	1653
v/c Ratio	0.89	0.35	0.20	0.46	0.38	0.71	0.89	0.71	0.23	0.84	0.96
Control Delay	90.7	58.3	1.4	65.8	63.0	15.9	105.2	36.6	9.2	82.8	45.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.7	58.3	1.4	65.8	63.0	15.9	105.2	36.6	9.2	82.8	45.5
Queue Length 50th (ft)	220	82	0	73	64	0	152	462	28	204	758
Queue Length 95th (ft)	#386	142	0	130	117	95	#302	614	76	#332	#941
Internal Link Dist (ft)		920			701			1175			1055
Turn Bay Length (ft)				110		110	85		200	190	
Base Capacity (vph)	272	287	329	256	270	477	177	901	756	306	1913
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.85	0.33	0.19	0.33	0.27	0.64	0.89	0.67	0.22	0.72	0.86

Intersection Summary

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

Queues

68: Franklin Ridge Road & Phyllis Place

10/17/2018



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	231	1579	116	53	1347
v/c Ratio	0.49	0.77	0.08	0.26	0.66
Control Delay	38.0	17.9	2.9	46.1	6.3
Queue Delay	0.0	0.5	0.0	0.0	0.2
Total Delay	38.0	18.4	2.9	46.1	6.5
Queue Length 50th (ft)	55	285	10	29	98
Queue Length 95th (ft)	113	552	31	76	201
Internal Link Dist (ft)	928		365	360	
Turn Bay Length (ft)					
Base Capacity (vph)	710	2635	1695	359	2408
Starvation Cap Reductn	0	572	0	0	346
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.33	0.77	0.07	0.15	0.65

Intersection Summary

Queues

69: Franklin Ridge Road & Via Alta

10/17/2018



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	495	105	43	89	937	21	937	600
v/c Ratio	1.08	0.18	0.08	0.96	0.93	0.26	0.99	0.65
Control Delay	106.4	10.1	24.7	145.0	45.2	70.0	58.9	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	39.3	2.3
Total Delay	106.4	10.1	24.7	145.0	45.2	70.0	98.3	13.9
Queue Length 50th (ft)	~482	12	19	79	786	18	787	128
Queue Length 95th (ft)	#703	55	48	#192	#1098	47	#1095	258
Internal Link Dist (ft)		713	111		622		360	
Turn Bay Length (ft)								
Base Capacity (vph)	460	583	563	93	1009	85	950	920
Starvation Cap Reductn	0	0	0	0	0	0	265	195
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.18	0.08	0.96	0.93	0.25	1.37	0.83

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

70: Qualcomm Way & Civita Boulevard

10/17/2018



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	395	326	674	379	605	700
v/c Ratio	0.68	0.63	0.68	0.41	0.53	0.68
Control Delay	48.9	10.3	37.8	18.1	33.9	12.4
Queue Delay	0.0	0.0	0.8	1.2	0.0	0.0
Total Delay	48.9	10.3	38.6	19.3	33.9	12.4
Queue Length 50th (ft)	137	0	213	156	182	218
Queue Length 95th (ft)	187	80	258	200	260	344
Internal Link Dist (ft)	871			304	424	
Turn Bay Length (ft)					150	
Base Capacity (vph)	667	545	1173	1064	1153	1074
Starvation Cap Reductn	0	0	226	461	0	5
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.60	0.71	0.63	0.52	0.65

Intersection Summary

Queues

71: Franklin Ridge Road & Civita Boulevard

10/17/2018



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	963	132	116	84	538	525
v/c Ratio	0.98	0.15	0.83	0.13	1.19	0.73
Control Delay	44.7	2.2	85.8	21.4	128.2	9.8
Queue Delay	42.9	0.0	0.0	0.0	0.0	0.0
Total Delay	87.6	2.2	85.8	21.4	128.2	9.8
Queue Length 50th (ft)	492	0	66	33	~309	0
Queue Length 95th (ft)	#789	24	#163	65	#518	103
Internal Link Dist (ft)	304			65	1294	
Turn Bay Length (ft)						
Base Capacity (vph)	1004	893	139	638	454	720
Starvation Cap Reductn	209	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.21	0.15	0.83	0.13	1.19	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

72: Fenton Parkway & Street "I"

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	295	337	537	126	400
v/c Ratio	0.58	0.50	0.53	0.36	0.23
Control Delay	21.4	5.2	16.4	24.0	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	21.4	5.2	16.4	24.0	6.8
Queue Length 50th (ft)	73	0	63	32	27
Queue Length 95th (ft)	156	50	117	86	54
Internal Link Dist (ft)	646		611		592
Turn Bay Length (ft)					
Base Capacity (vph)	778	863	1553	419	2512
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.38	0.39	0.35	0.30	0.16
Intersection Summary					

Queues

73: Via Las Cumbres & Riverwalk Drive

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	158	84	1200	137	1032
v/c Ratio	0.46	0.23	0.71	0.59	0.41
Control Delay	25.0	6.9	21.9	38.0	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	6.9	21.9	38.0	5.7
Queue Length 50th (ft)	49	0	200	45	71
Queue Length 95th (ft)	95	28	#402	#127	154
Internal Link Dist (ft)	1499		980		859
Turn Bay Length (ft)	250			250	
Base Capacity (vph)	575	554	1682	238	2528
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.15	0.71	0.58	0.41

Intersection Summary

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

Queues

74: Fashion Valley Road & Riverwalk Drive/Avenida Del Rio

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	147	337	158	747	200	769	105	484
v/c Ratio	0.69	0.61	0.70	1.32	1.46	0.75	0.64	0.57
Control Delay	59.5	29.2	60.0	186.6	273.9	28.1	57.9	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.5	29.2	60.0	186.6	273.9	28.1	57.9	25.2
Queue Length 50th (ft)	82	145	88	~563	~161	128	58	96
Queue Length 95th (ft)	#212	236	#228	#785	#298	210	#126	137
Internal Link Dist (ft)		1066		876		637		1292
Turn Bay Length (ft)	250		250		250		250	
Base Capacity (vph)	214	553	225	564	137	1091	171	1026
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.61	0.70	1.32	1.46	0.70	0.61	0.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

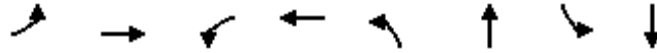
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

75: Avenida Del Rio & Harzard Center Drive & Fashion Valley Mall

10/17/2018



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	53	579	253	537	211	610	74	348
v/c Ratio	0.51	1.09	0.92	0.71	0.83	1.04	0.71	0.78
Control Delay	72.2	102.0	87.7	35.9	75.2	85.0	89.9	53.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	24.1	0.0	0.0
Total Delay	72.2	102.0	87.7	35.9	75.2	109.1	89.9	53.7
Queue Length 50th (ft)	41	~478	195	348	159	~494	57	246
Queue Length 95th (ft)	#86	#703	#349	487	#274	#724	#136	#395
Internal Link Dist (ft)		637		648		319		139
Turn Bay Length (ft)	250		250					
Base Capacity (vph)	104	532	279	757	276	587	104	448
Starvation Cap Reductn	0	0	0	0	0	126	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	1.09	0.91	0.71	0.76	1.32	0.71	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

76: Via Las Cumbres & Levi Cushman Street "B"

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	305	189	1064	126	1063
v/c Ratio	0.62	0.34	0.76	0.52	0.55
Control Delay	25.0	4.8	21.4	37.4	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	25.0	4.8	21.4	37.4	9.8
Queue Length 50th (ft)	100	0	166	44	102
Queue Length 95th (ft)	168	37	#336	#129	211
Internal Link Dist (ft)	3409		547		980
Turn Bay Length (ft)	250			250	
Base Capacity (vph)	852	839	1625	248	2347
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.23	0.65	0.51	0.45

Intersection Summary

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

Queues

77: Fashion Valley Road & Levi Cushman Street "B"

10/17/2018



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	158	137	368	842	610
v/c Ratio	0.49	0.35	0.86	0.36	0.46
Control Delay	36.2	7.3	53.2	7.8	21.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	7.3	53.2	7.8	21.6
Queue Length 50th (ft)	85	0	192	85	73
Queue Length 95th (ft)	125	42	#349	150	193
Internal Link Dist (ft)	3409			723	637
Turn Bay Length (ft)	250		250		
Base Capacity (vph)	491	524	450	2338	1324
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.26	0.82	0.36	0.46

Intersection Summary

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

Queues

78: Via Las Cumbres & Hotel Circle North

10/17/2018



Lane Group	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	1221	684	105	379	989	379
v/c Ratio	0.86	0.81	0.55	0.23	0.93	0.73
Control Delay	37.3	21.8	57.0	17.9	51.7	31.7
Queue Delay	0.0	0.0	0.2	0.8	0.0	0.0
Total Delay	37.3	21.8	57.2	18.7	51.7	31.7
Queue Length 50th (ft)	396	196	71	84	374	180
Queue Length 95th (ft)	#569	#460	123	106	#520	314
Internal Link Dist (ft)	1234			164	547	
Turn Bay Length (ft)		250				
Base Capacity (vph)	1425	841	289	1804	1069	521
Starvation Cap Reductn	0	0	20	1108	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.81	0.39	0.54	0.93	0.73

Intersection Summary

Description: 300 car are expected to make the texas u-turn thus not entering the intersection

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

79: Via Las Cumbres & Hotel Circle South

10/17/2018



Lane Group	EBL	EBT	NBT	SBL	SBT
Lane Group Flow (vph)	358	1095	63	1147	63
v/c Ratio	0.63	0.97	0.25	0.82	0.08
Control Delay	44.4	64.9	40.9	41.9	27.5
Queue Delay	0.0	0.0	0.0	49.4	0.0
Total Delay	44.4	64.9	40.9	91.3	27.5
Queue Length 50th (ft)	263	~516	38	487	36
Queue Length 95th (ft)	376	#655	80	#633	70
Internal Link Dist (ft)		1870	317		164
Turn Bay Length (ft)	250				
Base Capacity (vph)	567	1126	349	1398	758
Starvation Cap Reductn	0	0	0	551	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.63	0.97	0.18	1.35	0.08

Intersection Summary

Description: 100 cars are expected to make the texas u turn thus not entering the intersection

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

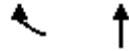
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

80: Hotel Circle South & Camino De La Reina

10/17/2018



Lane Group	WBR	NBT
Lane Group Flow (vph)	368	1263
v/c Ratio	0.72	0.78
Control Delay	20.6	13.8
Queue Delay	0.0	0.0
Total Delay	20.6	13.8
Queue Length 50th (ft)	74	102
Queue Length 95th (ft)	149	#272
Internal Link Dist (ft)		594
Turn Bay Length (ft)		
Base Capacity (vph)	767	1723
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.48	0.73

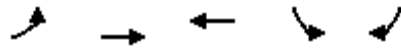
Intersection Summary

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

Queues

81: Harzard Center Drive & Frazee Road

10/17/2018



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	189	853	621	189	126
v/c Ratio	0.66	0.42	0.69	0.55	0.33
Control Delay	38.9	8.5	23.5	29.4	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	8.5	23.5	29.4	7.4
Queue Length 50th (ft)	69	82	97	67	0
Queue Length 95th (ft)	#166	143	164	123	37
Internal Link Dist (ft)		1709	357	693	
Turn Bay Length (ft)	150				
Base Capacity (vph)	310	2246	1057	532	529
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.38	0.59	0.36	0.24

Intersection Summary

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

Queues

84: Frazee Road & Murray Canyon Road

10/17/2018

Lane Group

Lane Group Flow (vph)

v/c Ratio

Control Delay

Queue Delay

Total Delay

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

Reduced v/c Ratio

Intersection Summary



Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	337	1584	2205
v/c Ratio	no cap	0.85	0.62
Control Delay		6.7	0.8
Queue Delay		0.0	0.0
Total Delay	Error	6.7	0.8
Queue Length 50th (ft)	0	0	0
Queue Length 95th (ft)	0	#27	0
Internal Link Dist (ft)	395	209	707
Turn Bay Length (ft)			
Base Capacity (vph)	1	1863	3539
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	337.00	0.85	0.62

Intersection Summary

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

Queues

122: Westside Drive/Via Alta & Civita Boulevard

10/17/2018

Lane Group

Lane Group Flow (vph)

v/c Ratio

Control Delay

Queue Delay

Total Delay

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

Reduced v/c Ratio

Intersection Summary

Queues

170: Camino Del Este & Rio San Diego Drive

10/17/2018

Lane Group

Lane Group Flow (vph)

v/c Ratio

Control Delay

Queue Delay

Total Delay

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

Reduced v/c Ratio

Intersection Summary

Queues

175: Phyllis Place & Mission Center Road

10/17/2018



Lane Group	EBL	EBT
Lane Group Flow (vph)	158	579
v/c Ratio	0.36	0.74
Control Delay	11.4	9.7
Queue Delay	0.0	0.0
Total Delay	11.4	9.7
Queue Length 50th (ft)	22	25
Queue Length 95th (ft)	52	87
Internal Link Dist (ft)		968
Turn Bay Length (ft)		
Base Capacity (vph)	627	959
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.25	0.60
Intersection Summary		

Queues

181: I-8 WB On-Ramp & Hotel Circle North

10/17/2018



Lane Group	WBT
Lane Group Flow (vph)	1484
v/c Ratio	0.43
Control Delay	0.4
Queue Delay	0.0
Total Delay	0.4
Queue Length 50th (ft)	0
Queue Length 95th (ft)	0
Internal Link Dist (ft)	1497
Turn Bay Length (ft)	
Base Capacity (vph)	3412
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.43
Intersection Summary	

Queues

186: Metropolitan Drive & Civita Boulevard & Mission Valley Road

10/17/2018



Lane Group	WBL
Lane Group Flow (vph)	366
v/c Ratio	no cap
Control Delay	
Queue Delay	
Total Delay	Error
Queue Length 50th (ft)	0
Queue Length 95th (ft)	0
Internal Link Dist (ft)	371
Turn Bay Length (ft)	
Base Capacity (vph)	1
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	366.00
Intersection Summary	

Queues

237: Harzard Center Drive

10/17/2018



Lane Group	EBL	EBT	WBT	SBL
Lane Group Flow (vph)	53	642	821	295
v/c Ratio	0.29	0.86	1.11	0.42
Control Delay	13.2	27.1	84.7	8.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	13.2	27.1	84.7	8.3
Queue Length 50th (ft)	8	123	~224	30
Queue Length 95th (ft)	28	#281	#393	72
Internal Link Dist (ft)		648	609	572
Turn Bay Length (ft)	250			
Base Capacity (vph)	185	745	741	696
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.86	1.11	0.42

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

251: Mission Village Drive & San Diego Mission Road

10/17/2018



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	595	237	1126	394	1342
v/c Ratio	1.58	0.48	0.73	7.16	6.93dl
Control Delay	306.4	8.5	29.3	2819.3	1094.3
Queue Delay	0.0	0.0	0.0	0.0	0.7
Total Delay	306.4	8.5	29.3	2819.3	1095.0
Queue Length 50th (ft)	~656	0	355	~626	~1029
Queue Length 95th (ft)	#885	73	439	#846	#1174
Internal Link Dist (ft)	318		256		133
Turn Bay Length (ft)					
Base Capacity (vph)	376	494	1534	55	397
Starvation Cap Reductn	0	0	0	0	27
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.58	0.48	0.73	7.16	3.63

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

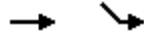
Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Queues

263: Hotel Circle South & I-8 EB Off-Ramp

10/17/2018



Lane Group	EBT	SEL
Lane Group Flow (vph)	305	1253
v/c Ratio	0.41	1.36
Control Delay	10.7	184.8
Queue Delay	0.0	0.0
Total Delay	10.7	184.8
Queue Length 50th (ft)	46	~346
Queue Length 95th (ft)	90	#543
Internal Link Dist (ft)	385	676
Turn Bay Length (ft)		
Base Capacity (vph)	745	922
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.41	1.36

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group
Lane Group Flow (vph)
v/c Ratio
Control Delay
Queue Delay
Total Delay
Queue Length 50th (ft)
Queue Length 95th (ft)
Internal Link Dist (ft)
Turn Bay Length (ft)
Base Capacity (vph)
Starvation Cap Reductn
Spillback Cap Reductn
Storage Cap Reductn
Reduced v/c Ratio
Intersection Summary

Queues

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Lane Group	WBT	SWR
Lane Group Flow (vph)	1158	1063
v/c Ratio	1.55	0.98
Control Delay	274.8	38.8
Queue Delay	0.0	0.0
Total Delay	274.8	38.8
Queue Length 50th (ft)	~393	121
Queue Length 95th (ft)	#575	#250
Internal Link Dist (ft)	585	
Turn Bay Length (ft)		
Base Capacity (vph)	745	1084
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	1.55	0.98

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.