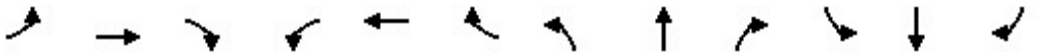
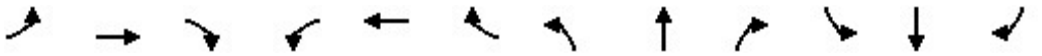


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	620	462	281	45	648	435	219	769	11	198	800	277
v/c Ratio	1.29	0.57	0.49	0.38	1.31	0.81	0.60	0.34	0.01	0.57	0.36	0.33
Control Delay	185.0	43.1	7.8	59.4	191.4	22.6	55.4	22.2	0.0	55.3	23.0	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	185.0	43.1	7.8	59.4	191.4	22.6	55.4	22.2	0.0	55.3	23.0	3.8
Queue Length 50th (ft)	~298	162	0	32	~321	49	80	134	0	72	142	0
Queue Length 95th (ft)	#412	224	73	69	#440	#209	117	176	0	107	186	52
Internal Link Dist (ft)		695			440			948			564	
Turn Bay Length (ft)	550		550	270		270	550		950	425		430
Base Capacity (vph)	481	817	576	155	496	535	572	2257	822	790	2203	828
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	1.29	0.57	0.49	0.29	1.31	0.81	0.38	0.34	0.01	0.25	0.36	0.33

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.



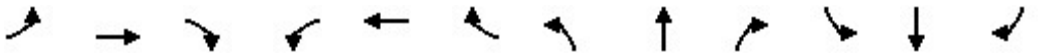
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	608	453	275	44	635	426	215	754	11	194	784	271
Future Volume (veh/h)	608	453	275	44	635	426	215	754	11	194	784	271
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1900	1900	1885	1885	1870
Adj Flow Rate, veh/h	620	462	0	45	648	435	219	769	11	198	800	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	1	2	0	0	1	1	2
Cap, veh/h	485	879		59	499	224	286	2377	737	268	2327	
Arrive On Green	0.14	0.25	0.00	0.03	0.14	0.14	0.08	0.46	0.46	0.08	0.45	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1594	3456	5187	1609	3483	5147	1585
Grp Volume(v), veh/h	620	462	0	45	648	435	219	769	11	198	800	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1594	1728	1729	1609	1742	1716	1585
Q Serve(g_s), s	16.0	12.8	0.0	2.9	16.0	16.0	7.1	10.8	0.4	6.3	11.5	0.0
Cycle Q Clear(g_c), s	16.0	12.8	0.0	2.9	16.0	16.0	7.1	10.8	0.4	6.3	11.5	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	485	879		59	499	224	286	2377	737	268	2327	
V/C Ratio(X)	1.28	0.53		0.76	1.30	1.94	0.76	0.32	0.01	0.74	0.34	
Avail Cap(c_a), veh/h	485	879		156	499	224	576	2377	737	794	2327	
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	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.0	37.1	0.0	54.6	49.0	49.0	51.2	19.6	16.8	51.5	20.3	0.0
Incr Delay (d2), s/veh	140.4	0.6	0.0	13.6	148.8	440.8	3.2	0.4	0.0	3.0	0.4	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	16.3	5.6	0.0	1.5	17.4	33.7	3.2	4.4	0.2	2.9	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	189.4	37.7	0.0	68.2	197.8	489.8	54.4	20.0	16.9	54.5	20.7	0.0
LnGrp LOS	F	D		E	F	F	D	C	B	D	C	
Approach Vol, veh/h		1082	A		1128			999			998	A
Approach Delay, s/veh		124.6			305.3			27.5			27.4	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	57.6	21.0	21.0	13.8	58.2	8.8	33.2
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	42.0	16.0	16.0	26.0	35.0	10.0	22.0
Max Q Clear Time (g_c+I1), s	9.1	13.5	18.0	18.0	8.3	12.8	4.9	14.8
Green Ext Time (p_c), s	0.4	11.1	0.0	0.0	0.4	9.5	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	126.9
HCM 6th LOS	F

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

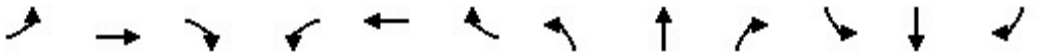


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	121	161	190	431	137	96	139	1301	346	94	1148	57
v/c Ratio	0.66	0.73	0.38	1.01	0.52	0.29	0.68	0.53	0.30	0.57	0.49	0.07
Control Delay	66.1	67.4	20.4	97.1	53.9	6.3	64.3	22.3	2.2	62.3	23.4	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.1	67.4	20.4	97.1	53.9	6.3	64.3	22.3	2.2	62.3	23.4	0.2
Queue Length 50th (ft)	86	114	63	~168	94	0	99	243	9	67	218	0
Queue Length 95th (ft)	136	173	108	#244	149	22	149	277	36	111	251	0
Internal Link Dist (ft)		380			538			1004			707	
Turn Bay Length (ft)	150		350	460			400			270		280
Base Capacity (vph)	219	245	546	425	261	328	261	2448	1156	219	2324	786
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	0.55	0.66	0.35	1.01	0.52	0.29	0.53	0.53	0.30	0.43	0.49	0.07

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	135	160	362	115	81	117	1093	291	79	964	52
Future Volume (veh/h)	102	135	160	362	115	81	117	1093	291	79	964	52
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1885	1885	1885	1856	1870	1885	1885	1870	1870
Adj Flow Rate, veh/h	121	161	190	431	137	96	139	1301	346	94	1148	57
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.92
Percent Heavy Veh, %	1	2	2	1	1	1	3	2	1	1	2	2
Cap, veh/h	148	234	348	428	312	264	167	2562	998	119	2416	750
Arrive On Green	0.08	0.13	0.13	0.12	0.17	0.17	0.09	0.50	0.50	0.07	0.47	0.47
Sat Flow, veh/h	1795	1870	1585	3483	1885	1598	1767	5106	1598	1795	5106	1585
Grp Volume(v), veh/h	121	161	190	431	137	96	139	1301	346	94	1148	57
Grp Sat Flow(s),veh/h/ln	1795	1870	1585	1742	1885	1598	1767	1702	1598	1795	1702	1585
Q Serve(g_s), s	7.6	9.4	12.1	14.0	7.5	6.1	8.8	19.4	11.8	5.9	17.4	2.2
Cycle Q Clear(g_c), s	7.6	9.4	12.1	14.0	7.5	6.1	8.8	19.4	11.8	5.9	17.4	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	148	234	348	428	312	264	167	2562	998	119	2416	750
V/C Ratio(X)	0.82	0.69	0.55	1.01	0.44	0.36	0.83	0.51	0.35	0.79	0.48	0.08
Avail Cap(c_a), veh/h	220	246	359	428	312	264	264	2562	998	220	2416	750
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	47.7	39.4	50.0	42.8	42.3	50.7	19.0	10.3	52.5	20.4	16.4
Incr Delay (d2), s/veh	11.4	7.4	1.6	45.4	1.0	0.8	9.6	0.7	1.0	8.4	0.7	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	3.9	4.9	4.9	8.8	3.6	2.5	4.3	7.7	4.2	2.9	7.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	55.1	41.0	95.4	43.8	43.1	60.3	19.7	11.2	60.9	21.1	16.6
LnGrp LOS	E	E	D	F	D	D	E	B	B	E	C	B
Approach Vol, veh/h		472			664			1786			1299	
Approach Delay, s/veh		51.4			77.2			21.2			23.8	
Approach LOS		D			E			C			C	

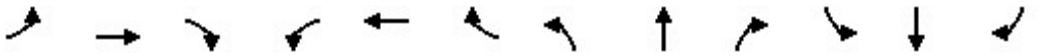
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	59.9	19.0	19.3	12.5	63.2	14.4	23.8
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	47.0	14.0	15.0	14.0	50.0	14.0	15.0
Max Q Clear Time (g_c+I1), s	10.8	19.4	16.0	14.1	7.9	21.4	9.6	9.5
Green Ext Time (p_c), s	0.1	16.5	0.0	0.2	0.1	21.2	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	7	35	260	257	149	32	1041	152	53	1663
v/c Ratio	0.08	0.15	0.73	0.72	0.32	0.29	0.38	0.12	0.42	0.57
Control Delay	54.0	1.3	55.3	54.5	5.7	57.1	17.4	0.7	59.5	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	1.3	55.3	54.5	5.7	57.1	17.4	0.7	59.5	18.6
Queue Length 50th (ft)	5	0	188	186	0	23	174	0	38	319
Queue Length 95th (ft)	20	0	#318	#313	39	54	223	10	77	389
Internal Link Dist (ft)	349			285			640			671
Turn Bay Length (ft)					160	65		215	450	
Base Capacity (vph)	191	316	356	358	471	170	2727	1262	304	2904
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	0.04	0.11	0.73	0.72	0.32	0.19	0.38	0.12	0.17	0.57

Intersection Summary

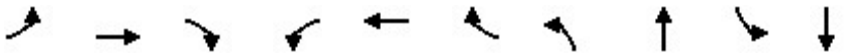
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	33	473	7	139	30	968	141	49	1526	20
Future Volume (vph)	5	2	33	473	7	139	30	968	141	49	1526	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	6.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.97	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1821	1533	1681	1689	1583	1770	5085	1568	1736	5125	
Flt Permitted		0.97	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1821	1533	1681	1689	1583	1770	5085	1568	1736	5125	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	5	2	35	509	8	149	32	1041	152	53	1641	22
RTOR Reduction (vph)	0	0	34	0	0	117	0	0	42	0	1	0
Lane Group Flow (vph)	0	7	1	260	257	32	32	1041	110	53	1662	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	1%	0%	3%	2%	0%	2%	2%	2%	3%	4%	1%	2%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	3	3		4	4		1	6	4	5	2	
Permitted Phases			3			4			6			
Actuated Green, G (s)		3.3	3.3	24.2	24.2	24.2	4.9	58.1	82.3	7.4	60.6	
Effective Green, g (s)		3.3	3.3	24.2	24.2	24.2	4.9	58.1	82.3	7.4	60.6	
Actuated g/C Ratio		0.03	0.03	0.21	0.21	0.21	0.04	0.51	0.72	0.06	0.53	
Clearance Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	6.0	
Vehicle Extension (s)		2.0	2.0	2.0	2.0	2.0	2.5	4.0	2.0	2.5	4.0	
Lane Grp Cap (vph)		52	44	356	358	336	76	2591	1131	112	2724	
v/s Ratio Prot		c0.00		c0.15	0.15		0.02	0.20	0.02	c0.03	c0.32	
v/s Ratio Perm			0.00			0.02			0.05			
v/c Ratio		0.13	0.02	0.73	0.72	0.09	0.42	0.40	0.10	0.47	0.61	
Uniform Delay, d1		54.0	53.8	41.9	41.7	36.1	53.2	17.2	4.7	51.4	18.5	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.4	0.1	6.5	5.6	0.0	2.7	0.5	0.0	2.3	1.0	
Delay (s)		54.4	53.9	48.4	47.4	36.1	55.9	17.7	4.8	53.7	19.5	
Level of Service		D	D	D	D	D	E	B	A	D	B	
Approach Delay (s)		53.9			45.2			17.1			20.6	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

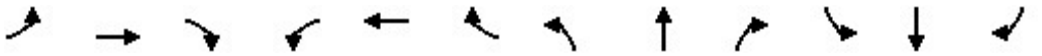


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	34	640	82	87	637	376	171	776	348	1270
v/c Ratio	0.32	0.78	0.18	0.56	0.66	0.53	0.75	0.48	0.99	0.65
Control Delay	58.8	50.0	3.0	63.1	41.5	6.8	68.0	31.3	91.1	31.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.8	50.0	3.0	63.1	41.5	6.8	68.0	31.3	91.1	31.1
Queue Length 50th (ft)	24	236	0	62	226	0	122	160	~271	280
Queue Length 95th (ft)	57	#373	15	111	303	81	193	201	#454	346
Internal Link Dist (ft)		487			952			657		412
Turn Bay Length (ft)	230		55	475		875	475		275	
Base Capacity (vph)	217	819	458	248	969	709	279	1603	353	1959
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	0.16	0.78	0.18	0.35	0.66	0.53	0.61	0.48	0.99	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

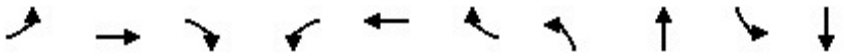
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	621	80	84	618	365	166	640	113	338	1194	38
Future Volume (veh/h)	33	621	80	84	618	365	166	640	113	338	1194	38
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1856	1870	1870	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	34	640	82	87	637	376	171	660	116	348	1231	39
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	3	2	3	2	2	1	1	2	2	2
Cap, veh/h	52	592	262	110	704	317	200	1739	302	344	2415	76
Arrive On Green	0.03	0.17	0.17	0.06	0.20	0.20	0.11	0.39	0.39	0.19	0.47	0.47
Sat Flow, veh/h	1781	3554	1572	1781	3526	1585	1781	4412	766	1781	5084	161
Grp Volume(v), veh/h	34	640	82	87	637	376	171	511	265	348	824	446
Grp Sat Flow(s),veh/h/ln	1781	1777	1572	1781	1763	1585	1781	1716	1747	1781	1702	1841
Q Serve(g_s), s	2.2	19.0	5.2	5.5	20.1	22.8	10.7	12.1	12.3	22.0	19.1	19.1
Cycle Q Clear(g_c), s	2.2	19.0	5.2	5.5	20.1	22.8	10.7	12.1	12.3	22.0	19.1	19.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		0.09
Lane Grp Cap(c), veh/h	52	592	262	110	704	317	200	1352	689	344	1617	874
V/C Ratio(X)	0.66	1.08	0.31	0.79	0.90	1.19	0.86	0.38	0.38	1.01	0.51	0.51
Avail Cap(c_a), veh/h	219	592	262	250	704	317	281	1352	689	344	1617	874
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	54.8	47.5	41.8	52.7	44.6	45.6	49.7	24.6	24.7	46.0	20.7	20.7
Incr Delay (d2), s/veh	5.3	60.6	2.4	4.6	16.7	111.7	12.5	0.8	1.6	51.7	1.2	2.1
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	13.3	2.2	2.6	10.4	18.7	5.5	5.0	5.4	14.6	7.7	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.1	108.1	44.2	57.4	61.3	157.3	62.2	25.4	26.3	97.7	21.9	22.9
LnGrp LOS	E	F	D	E	E	F	E	C	C	F	C	C
Approach Vol, veh/h		756			1100			947			1618	
Approach Delay, s/veh		99.0			93.8			32.3			38.5	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	60.1	8.3	27.8	27.0	50.9	12.1	24.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	18.0	40.0	14.0	21.0	22.0	36.0	16.0	19.0
Max Q Clear Time (g_c+I1), s	12.7	21.1	4.2	24.8	24.0	14.3	7.5	21.0
Green Ext Time (p_c), s	0.1	14.7	0.0	0.0	0.0	11.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	61.3
HCM 6th LOS	E

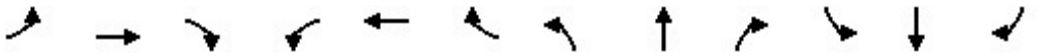


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	239	138	262	223	76	81	1138	124	1266
v/c Ratio	0.27	0.93	0.27	0.90	0.73	0.19	0.52	0.63	0.66	0.66
Control Delay	47.5	90.5	11.5	81.4	61.3	1.1	60.8	29.2	65.5	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	90.5	11.5	81.4	61.3	1.1	60.8	29.2	65.5	31.0
Queue Length 50th (ft)	43	176	21	~205	161	0	58	224	88	265
Queue Length 95th (ft)	87	#332	66	#371	#291	0	105	280	150	336
Internal Link Dist (ft)		431			703			305		418
Turn Bay Length (ft)	225		350	325			275		175	
Base Capacity (vph)	243	257	577	290	305	394	222	1831	227	1932
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	0.27	0.93	0.24	0.90	0.73	0.19	0.36	0.62	0.55	0.66

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.

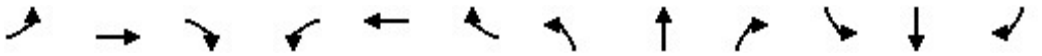


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	232	134	254	216	74	79	813	291	120	1187	41
Future Volume (vph)	63	232	134	254	216	74	79	813	291	120	1187	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.8		6.5	6.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1752	4872		1787	5062	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1752	4872		1787	5062	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	65	239	138	262	223	76	81	838	300	124	1224	42
RTOR Reduction (vph)	0	0	77	0	0	64	0	57	0	0	3	0
Lane Group Flow (vph)	65	239	61	262	223	12	81	1081	0	124	1263	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	3%	1%	2%	1%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4			3						
Actuated Green, G (s)	15.7	15.7	25.8	18.7	18.7	18.7	10.1	41.3		12.0	43.5	
Effective Green, g (s)	15.7	15.7	25.8	18.7	18.7	18.7	10.1	41.3		12.0	43.5	
Actuated g/C Ratio	0.14	0.14	0.23	0.16	0.16	0.16	0.09	0.36		0.11	0.38	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.8		6.5	6.5	
Vehicle Extension (s)	3.0	3.0	2.5	3.0	3.0	3.0	2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	243	256	448	290	305	259	155	1765		188	1931	
v/s Ratio Prot	0.04	c0.13	0.01	c0.15	0.12		0.05	0.22		c0.07	c0.25	
v/s Ratio Perm			0.03			0.01						
v/c Ratio	0.27	0.93	0.14	0.90	0.73	0.05	0.52	0.61		0.66	0.65	
Uniform Delay, d1	44.0	48.6	35.2	46.8	45.3	40.2	49.6	29.8		49.0	29.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	38.4	0.1	29.2	8.7	0.1	2.4	1.6		7.3	1.7	
Delay (s)	44.6	87.0	35.3	75.9	54.0	40.2	52.1	31.4		56.3	30.8	
Level of Service	D	F	D	E	D	D	D	C		E	C	
Approach Delay (s)		64.7			62.4			32.8			33.1	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	26.3
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	6	99	88	15	1215	106	1525
v/c Ratio	0.03	0.64	0.34	0.17	0.38	0.60	0.41
Control Delay	0.3	65.8	12.8	55.1	10.6	62.8	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	0.3	65.8	12.8	55.1	10.6	62.8	6.9
Queue Length 50th (ft)	0	70	0	11	141	76	101
Queue Length 95th (ft)	0	122	46	33	209	130	236
Internal Link Dist (ft)	239	270			271		254
Turn Bay Length (ft)			95	200		175	
Base Capacity (vph)	267	180	285	177	3276	232	3754
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	0.02	0.55	0.31	0.08	0.37	0.46	0.41

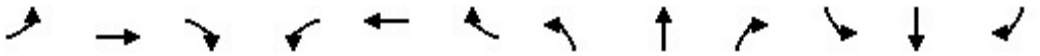
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	0	2	92	2	84	14	1119	35	101	1435	13
Future Volume (veh/h)	4	0	2	92	2	84	14	1119	35	101	1435	13
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1796	1856	1856	1870	1856	1856
Adj Flow Rate, veh/h	4	0	2	97	2	88	15	1178	37	106	1511	14
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	0	0	0	0	3	7	3	3	2	3	3
Cap, veh/h	71	10	14	185	3	139	28	3515	110	132	3905	36
Arrive On Green	0.09	0.00	0.09	0.09	0.09	0.09	0.02	0.70	0.70	0.07	0.75	0.75
Sat Flow, veh/h	203	118	160	1379	28	1572	1711	5045	158	1781	5176	48
Grp Volume(v), veh/h	6	0	0	99	0	88	15	788	427	106	986	539
Grp Sat Flow(s),veh/h/ln	481	0	0	1407	0	1572	1711	1689	1827	1781	1689	1847
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.2	1.0	10.5	10.5	6.7	11.5	11.5
Cycle Q Clear(g_c), s	8.0	0.0	0.0	7.9	0.0	6.2	1.0	10.5	10.5	6.7	11.5	11.5
Prop In Lane	0.67		0.33	0.98		1.00	1.00		0.09	1.00		0.03
Lane Grp Cap(c), veh/h	95	0	0	187	0	139	28	2353	1273	132	2548	1393
V/C Ratio(X)	0.06	0.00	0.00	0.53	0.00	0.63	0.53	0.34	0.34	0.80	0.39	0.39
Avail Cap(c_a), veh/h	143	0	0	237	0	193	180	2353	1273	234	2548	1393
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	47.7	0.0	0.0	50.9	0.0	50.1	55.6	6.8	6.8	51.9	4.9	4.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	1.7	0.0	3.5	10.9	0.4	0.7	8.1	0.4	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	0.2	0.0	0.0	2.9	0.0	2.6	0.5	3.6	4.0	3.3	3.6	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	0.0	52.7	0.0	53.6	66.5	7.2	7.5	60.1	5.3	5.7
LnGrp LOS	D	A	A	D	A	D	E	A	A	E	A	A
Approach Vol, veh/h		6			187			1230			1631	
Approach Delay, s/veh		47.9			53.1			8.1			9.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	92.0		15.1	13.5	85.4		15.1				
Change Period (Y+Rc), s	5.0	6.0		5.0	5.0	6.0		5.0				
Max Green Setting (Gmax), s	12.0	72.0		14.0	15.0	69.0		14.0				
Max Q Clear Time (g_c+I1), s	3.0	13.5		9.9	8.7	12.5		10.0				
Green Ext Time (p_c), s	0.0	25.2		0.2	0.1	17.4		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		11.4	
HCM 6th LOS		B	

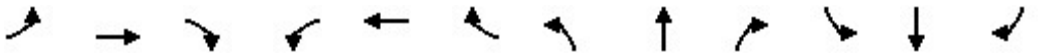


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	265	554	64	184	615	175	25	1273	207	137	1088	634
v/c Ratio	0.91	0.91	0.04	0.65	1.10	0.30	0.24	0.74	0.24	0.64	0.70	0.61
Control Delay	80.9	66.3	0.0	57.0	113.4	16.4	56.2	36.7	3.6	61.0	29.7	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.9	66.3	0.0	57.0	113.4	16.4	56.2	36.7	3.6	61.0	29.7	5.1
Queue Length 50th (ft)	210	220	0	128	~272	51	18	298	12	97	353	7
Queue Length 95th (ft)	#381	#326	0	206	#388	103	46	370	33	160	453	92
Internal Link Dist (ft)		738			586			849			590	
Turn Bay Length (ft)	650		410			230	775		425	485		
Base Capacity (vph)	293	613	1568	282	559	620	155	1715	863	258	1565	1044
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	0.90	0.90	0.04	0.65	1.10	0.28	0.16	0.74	0.24	0.53	0.70	0.61

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.

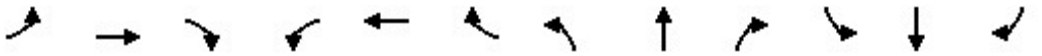


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	342	452	62	178	597	170	24	1235	201	133	1055	615
Future Volume (vph)	342	452	62	178	597	170	24	1235	201	133	1055	615
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	6.0	6.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1595	3331	1568	1770	3505	1583	1770	5036	1583	1736	3539	1583
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1595	3331	1568	1770	3505	1583	1770	5036	1583	1736	3539	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	353	466	64	184	615	175	25	1273	207	137	1088	634
RTOR Reduction (vph)	0	0	0	0	0	55	0	0	72	0	0	355
Lane Group Flow (vph)	265	554	64	184	615	120	25	1273	136	137	1088	279
Heavy Vehicles (%)	3%	3%	3%	2%	3%	2%	2%	3%	2%	4%	2%	2%
Turn Type	Split	NA	Free	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	1	6	4	5	2	
Permitted Phases			Free			4			6			2
Actuated Green, G (s)	20.8	20.8	114.0	18.2	18.2	32.4	4.6	38.8	57.0	14.2	48.4	48.4
Effective Green, g (s)	20.8	20.8	114.0	18.2	18.2	32.4	4.6	38.8	57.0	14.2	48.4	48.4
Actuated g/C Ratio	0.18	0.18	1.00	0.16	0.16	0.28	0.04	0.34	0.50	0.12	0.42	0.42
Clearance Time (s)	5.0	5.0		6.0	6.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	2.5	5.0	2.5	2.5	5.0	5.0
Lane Grp Cap (vph)	291	607	1568	282	559	449	71	1714	791	216	1502	672
v/s Ratio Prot	0.17	c0.17		0.10	c0.18	0.03	0.01	0.25	0.03	c0.08	c0.31	
v/s Ratio Perm			0.04			0.04			0.06			0.18
v/c Ratio	0.91	0.91	0.04	0.65	1.10	0.27	0.35	0.74	0.17	0.63	0.72	0.42
Uniform Delay, d1	45.7	45.7	0.0	44.9	47.9	31.6	53.2	33.2	15.6	47.4	27.3	22.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	30.6	18.1	0.0	4.8	68.4	0.2	2.2	3.0	0.1	5.2	3.1	1.9
Delay (s)	76.3	63.9	0.0	49.7	116.3	31.8	55.4	36.1	15.7	52.7	30.3	24.8
Level of Service	E	E	A	D	F	C	E	D	B	D	C	C
Approach Delay (s)		63.0			88.5			33.7			30.1	
Approach LOS		E			F			C			C	

Intersection Summary			
HCM 2000 Control Delay	47.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	67	332	525	6	493	322	509	9	60	1058	135
v/c Ratio	0.52	0.36	0.62	0.08	0.78	0.72	0.27	0.01	0.51	0.63	0.16
Control Delay	75.6	42.4	14.3	66.8	61.8	67.0	19.9	0.0	76.8	32.4	2.2
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	75.6	42.4	14.3	66.8	61.8	67.0	19.9	0.0	76.8	32.4	2.2
Queue Length 50th (ft)	60	124	142	5	222	146	133	0	54	386	0
Queue Length 95th (ft)	109	171	241	21	271	191	211	0	101	563	23
Internal Link Dist (ft)		434			495		535			418	
Turn Bay Length (ft)	275		230	200		315		115	340		240
Base Capacity (vph)	322	1108	908	193	813	601	1907	824	157	1686	851
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	0.21	0.30	0.58	0.03	0.61	0.54	0.27	0.01	0.38	0.63	0.16

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	309	488	6	403	56	299	473	8	56	984	126
Future Volume (veh/h)	62	309	488	6	403	56	299	473	8	56	984	126
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1870	1900	1841	1841	1841	1826	1648	1781	1870	1885
Adj Flow Rate, veh/h	67	332	525	6	433	60	322	509	0	60	1058	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	2	0	4	4	4	5	17	8	2	1
Cap, veh/h	86	1093	661	13	818	113	380	1709		76	1513	
Arrive On Green	0.05	0.31	0.31	0.01	0.26	0.26	0.11	0.49	0.00	0.04	0.43	0.00
Sat Flow, veh/h	1810	3582	1585	1810	3087	425	3401	3469	1397	1697	3554	1598
Grp Volume(v), veh/h	67	332	525	6	244	249	322	509	0	60	1058	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1585	1810	1749	1764	1700	1735	1397	1697	1777	1598
Q Serve(g_s), s	5.1	9.9	40.4	0.5	16.7	16.9	13.0	12.2	0.0	4.9	34.1	0.0
Cycle Q Clear(g_c), s	5.1	9.9	40.4	0.5	16.7	16.9	13.0	12.2	0.0	4.9	34.1	0.0
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	1093	661	13	463	467	380	1709		76	1513	
V/C Ratio(X)	0.78	0.30	0.79	0.45	0.53	0.53	0.85	0.30		0.79	0.70	
Avail Cap(c_a), veh/h	323	1100	664	194	463	467	607	1709		158	1513	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.9	37.3	35.6	69.2	44.0	44.0	61.0	21.1	0.0	66.2	32.9	0.0
Incr Delay (d2), s/veh	10.5	0.2	6.6	16.2	1.1	1.2	5.2	0.4	0.0	12.6	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.4	16.7	0.3	7.4	7.6	5.9	5.1	0.0	2.4	15.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.4	37.4	42.2	85.4	45.1	45.2	66.2	21.6	0.0	78.9	35.6	0.0
LnGrp LOS	E	D	D	F	D	D	E	C		E	D	
Approach Vol, veh/h		924			499			831	A		1118	A
Approach Delay, s/veh		43.0			45.6			38.8			37.9	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	75.0	6.0	47.7	20.6	65.6	11.7	42.1
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	13.0	48.0	15.0	43.0	25.0	36.0	25.0	33.0
Max Q Clear Time (g_c+I1), s	6.9	14.2	2.5	42.4	15.0	36.1	7.1	18.9
Green Ext Time (p_c), s	0.0	7.2	0.0	0.3	0.6	0.0	0.1	2.5

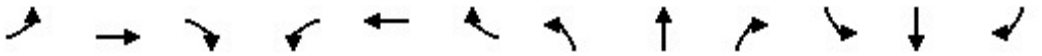
Intersection Summary	
HCM 6th Ctrl Delay	40.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	196	95	133	263	15	66	572	28	25	1137	431
v/c Ratio	0.58	0.27	0.34	0.65	0.05	0.47	0.29	0.03	0.26	0.63	0.44
Control Delay	56.6	49.6	7.8	56.5	0.3	61.0	15.6	0.0	57.9	24.0	6.0
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	56.6	49.6	7.8	56.5	0.3	61.0	15.6	0.0	57.9	24.0	6.0
Queue Length 50th (ft)	73	35	0	100	0	48	121	0	18	312	32
Queue Length 95th (ft)	108	60	46	141	0	91	189	0	47	463	119
Internal Link Dist (ft)		599		369			448			430	
Turn Bay Length (ft)	340		340		80	210			280		215
Base Capacity (vph)	508	529	469	512	349	233	1941	969	189	1801	976
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	0.39	0.18	0.28	0.51	0.04	0.28	0.29	0.03	0.13	0.63	0.44

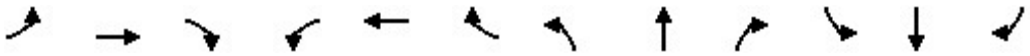
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	88	124	88	156	14	61	532	26	23	1057	401
Future Volume (vph)	182	88	124	88	156	14	61	532	26	23	1057	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.0		6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	3610	1556		3498	1615	1805	3438	1615	1687	3539	1583
Flt Permitted	0.95	1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	3610	1556		3498	1615	1805	3438	1615	1687	3539	1583
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	196	95	133	95	168	15	66	572	28	25	1137	431
RTOR Reduction (vph)	0	0	109	0	0	13	0	0	13	0	0	170
Lane Group Flow (vph)	196	95	24	0	263	2	66	572	15	25	1137	261
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	1%	0%	3%	2%	1%	0%	0%	5%	0%	7%	2%	2%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3			2			6
Actuated Green, G (s)	11.4	11.4	20.5		13.4	13.4	9.1	63.5	63.5	4.7	59.1	59.1
Effective Green, g (s)	11.4	11.4	20.5		13.4	13.4	9.1	63.5	63.5	4.7	59.1	59.1
Actuated g/C Ratio	0.10	0.10	0.18		0.12	0.12	0.08	0.55	0.55	0.04	0.51	0.51
Clearance Time (s)	6.0	6.0	5.0		6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5	6.0	6.0	2.5	6.0	6.0
Lane Grp Cap (vph)	340	354	274		404	186	141	1882	884	68	1803	806
v/s Ratio Prot	c0.06	0.03	0.01		c0.08		c0.04	c0.17		0.01	c0.32	
v/s Ratio Perm			0.01			0.00			0.01			0.17
v/c Ratio	0.58	0.27	0.09		0.65	0.01	0.47	0.30	0.02	0.37	0.63	0.32
Uniform Delay, d1	50.0	48.4	39.9		49.1	45.4	51.1	14.3	12.0	54.2	20.6	16.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9	0.3	0.1		3.3	0.0	1.8	0.4	0.0	2.4	1.7	1.1
Delay (s)	51.9	48.7	40.0		52.4	45.4	52.9	14.7	12.0	56.6	22.2	17.8
Level of Service	D	D	D		D	D	D	B	B	E	C	B
Approach Delay (s)		47.5			52.0			18.3			21.6	
Approach LOS		D			D			B			C	

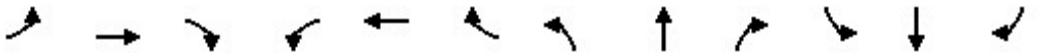
Intersection Summary			
HCM 2000 Control Delay	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	13	13	109	21	21	68	82	572	64	79	1186	86
v/c Ratio	0.14	0.13	0.28	0.22	0.21	0.27	0.38	0.28	0.06	0.53	0.56	0.09
Control Delay	54.3	53.9	9.0	57.4	57.1	2.7	56.9	13.8	0.1	63.5	16.7	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	54.3	53.9	9.0	57.4	57.1	2.7	56.9	13.8	0.1	63.5	16.7	0.2
Queue Length 50th (ft)	10	10	0	15	15	0	30	111	0	58	274	0
Queue Length 95th (ft)	30	30	46	44	44	0	56	176	0	105	396	0
Internal Link Dist (ft)		193			125			406			259	
Turn Bay Length (ft)	250		130	175		175	350			215		615
Base Capacity (vph)	150	159	380	147	150	290	299	2066	1009	171	2112	1003
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	0.09	0.08	0.29	0.14	0.14	0.23	0.27	0.28	0.06	0.46	0.56	0.09

Intersection Summary



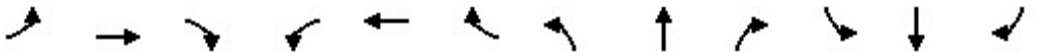
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	7	102	34	6	64	77	538	60	74	1115	81
Future Volume (vph)	18	7	102	34	6	64	77	538	60	74	1115	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3	7.3	8.0	8.0	8.0	7.6	5.9	5.9	7.8	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.98	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1633	1724	1583	1715	1743	1583	3335	3438	1553	1805	3539	1553
Flt Permitted	0.95	0.98	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1633	1724	1583	1715	1743	1583	3335	3438	1553	1805	3539	1553
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	19	7	109	36	6	68	82	572	64	79	1186	86
RTOR Reduction (vph)	0	0	89	0	0	65	0	0	27	0	0	36
Lane Group Flow (vph)	13	13	20	21	21	3	82	572	37	79	1186	50
Heavy Vehicles (%)	5%	0%	2%	0%	0%	2%	5%	5%	4%	0%	2%	4%
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	4 5	3	3		5	2		1	6	
Permitted Phases						3			2			6
Actuated Green, G (s)	6.8	6.8	21.6	5.3	5.3	5.3	7.5	66.6	66.6	8.3	67.6	67.6
Effective Green, g (s)	6.8	6.8	21.6	5.3	5.3	5.3	7.5	66.6	66.6	8.3	67.6	67.6
Actuated g/C Ratio	0.06	0.06	0.19	0.05	0.05	0.05	0.06	0.57	0.57	0.07	0.58	0.58
Clearance Time (s)	7.3	7.3		8.0	8.0	8.0	7.6	5.9	5.9	7.8	5.9	5.9
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	6.0
Lane Grp Cap (vph)	95	101	294	78	79	72	215	1973	891	129	2062	905
v/s Ratio Prot	c0.01	0.01	0.01	c0.01	0.01		0.02	0.17		c0.04	c0.34	
v/s Ratio Perm						0.00			0.02			0.03
v/c Ratio	0.14	0.13	0.07	0.27	0.27	0.04	0.38	0.29	0.04	0.61	0.58	0.06
Uniform Delay, d1	51.8	51.8	38.9	53.5	53.5	52.9	52.0	12.6	10.8	52.3	15.2	10.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.0	0.7	0.7	0.1	0.4	0.4	0.1	5.9	1.2	0.1
Delay (s)	52.1	52.0	38.9	54.2	54.1	53.0	52.4	13.0	10.9	58.2	16.4	10.6
Level of Service	D	D	D	D	D	D	D	B	B	E	B	B
Approach Delay (s)		41.5			53.4			17.3			18.4	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	110	316	48	79	691	96	89	1271
v/c Ratio	0.55	0.87	0.10	0.50	0.44	0.13	0.68	0.77
Control Delay	27.1	67.2	0.5	60.9	23.7	3.1	77.5	32.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	67.2	0.5	60.9	23.7	3.1	77.5	32.2
Queue Length 50th (ft)	18	222	0	57	192	0	65	433
Queue Length 95th (ft)	73	#375	0	105	247	24	#145	#626
Internal Link Dist (ft)	151	218			318			355
Turn Bay Length (ft)			50	150		450	250	
Base Capacity (vph)	238	389	480	248	1557	745	137	1645
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	0.46	0.81	0.10	0.32	0.44	0.13	0.65	0.77

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	23	78	284	6	44	73	636	88	82	1169	0
Future Volume (vph)	0	23	78	284	6	44	73	636	88	82	1169	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frt		0.90			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1702			1695	1524	1805	3438	1509	1671	3539	
Flt Permitted		1.00			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1702			1695	1524	1805	3438	1509	1671	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	25	85	309	7	48	79	691	96	89	1271	0
RTOR Reduction (vph)	0	79	0	0	0	38	0	0	52	0	0	0
Lane Group Flow (vph)	0	31	0	0	316	10	79	691	44	89	1271	0
Heavy Vehicles (%)	0%	0%	0%	7%	0%	6%	0%	5%	7%	8%	2%	0%
Turn Type		NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases						4			2			6
Actuated Green, G (s)		8.3			25.0	25.0	8.7	52.6	52.6	9.1	53.0	
Effective Green, g (s)		8.3			25.0	25.0	8.7	52.6	52.6	9.1	53.0	
Actuated g/C Ratio		0.07			0.22	0.22	0.07	0.45	0.45	0.08	0.46	
Clearance Time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	2.5	4.5	4.5	2.5	4.5	
Lane Grp Cap (vph)		121			365	328	135	1558	684	131	1616	
v/s Ratio Prot		c0.02			c0.19		0.04	0.20		c0.05	c0.36	
v/s Ratio Perm						0.01			0.03			
v/c Ratio		0.26			0.87	0.03	0.59	0.44	0.06	0.68	0.79	
Uniform Delay, d1		50.9			43.9	35.9	51.9	21.7	17.8	52.0	26.7	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.1			18.8	0.0	5.3	0.9	0.2	12.0	3.9	
Delay (s)		52.1			62.7	36.0	57.2	22.6	18.0	64.0	30.6	
Level of Service		D			E	D	E	C	B	E	C	
Approach Delay (s)		52.1			59.2			25.2			32.8	
Approach LOS		D			E			C			C	

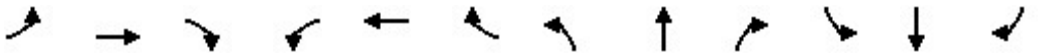
Intersection Summary			
HCM 2000 Control Delay	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	107	613	279	451	675	136	326	708	315	257	1463
v/c Ratio	0.48	0.84	0.42	1.05	0.71	0.19	0.81	0.56	0.35	0.69	0.82
Control Delay	59.6	55.2	16.5	104.9	42.6	8.8	66.6	31.9	12.7	60.0	38.3
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	59.6	55.2	16.5	104.9	42.6	8.8	66.6	31.9	12.7	60.0	38.3
Queue Length 50th (ft)	40	232	81	~188	240	21	123	223	97	95	360
Queue Length 95th (ft)	69	#312	152	#288	304	58	#184	283	157	138	415
Internal Link Dist (ft)		473			499			459			344
Turn Bay Length (ft)	280		470	200		390	320			240	
Base Capacity (vph)	239	733	676	431	957	730	414	1255	897	410	1782
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	0.45	0.84	0.41	1.05	0.71	0.19	0.79	0.56	0.35	0.63	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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	546	248	401	601	121	290	630	280	229	1184	118
Future Volume (veh/h)	95	546	248	401	601	121	290	630	280	229	1184	118
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1841	1870	1826	1841	1826	1870	1826	1870	1856	1856	1856
Adj Flow Rate, veh/h	107	613	0	451	675	136	326	708	0	257	1330	133
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	4	2	5	4	5	2	5	2	3	3	3
Cap, veh/h	174	711		436	988	580	383	1351		318	1737	174
Arrive On Green	0.05	0.20	0.00	0.13	0.28	0.28	0.11	0.39	0.00	0.09	0.37	0.37
Sat Flow, veh/h	3483	3497	1585	3374	3497	1547	3456	3469	1585	3428	4680	468
Grp Volume(v), veh/h	107	613	0	451	675	136	326	708	0	257	960	503
Grp Sat Flow(s),veh/h/ln	1742	1749	1585	1687	1749	1547	1728	1735	1585	1714	1689	1771
Q Serve(g_s), s	3.5	19.6	0.0	15.0	19.9	7.0	10.7	18.2	0.0	8.5	29.0	29.0
Cycle Q Clear(g_c), s	3.5	19.6	0.0	15.0	19.9	7.0	10.7	18.2	0.0	8.5	29.0	29.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	174	711		436	988	580	383	1351		318	1253	657
V/C Ratio(X)	0.61	0.86		1.03	0.68	0.23	0.85	0.52		0.81	0.77	0.77
Avail Cap(c_a), veh/h	240	739		436	988	580	417	1351		414	1253	657
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	54.0	44.6	0.0	50.5	37.0	24.8	50.6	27.2	0.0	51.6	32.0	32.0
Incr Delay (d2), s/veh	2.6	13.1	0.0	52.1	3.8	0.9	14.0	1.5	0.0	8.0	4.5	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.8	0.0	9.5	9.0	2.7	5.4	7.7	0.0	4.0	12.4	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.6	57.8	0.0	102.6	40.8	25.8	64.6	28.6	0.0	59.6	36.5	40.3
LnGrp LOS	E	E		F	D	C	E	C		E	D	D
Approach Vol, veh/h		720	A		1262			1034	A		1720	
Approach Delay, s/veh		57.6			61.3			40.0			41.1	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	51.2	10.8	38.3	17.9	49.1	20.0	29.1
Change Period (Y+Rc), s	5.0	6.0	5.0	5.5	5.0	6.0	5.0	5.5
Max Green Setting (Gmax), s	14.0	41.0	8.0	31.5	14.0	41.0	15.0	24.5
Max Q Clear Time (g_c+I1), s	10.5	20.2	5.5	21.9	12.7	31.0	17.0	21.6
Green Ext Time (p_c), s	0.2	13.1	0.0	6.8	0.1	9.6	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	48.7
HCM 6th LOS	D

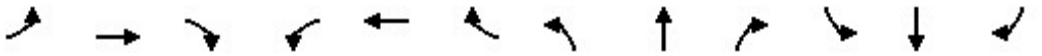
Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	238	152	13	1239	143	93	1915
v/c Ratio	0.12	0.93	0.28	0.13	0.42	0.14	0.55	0.55
Control Delay	49.1	90.7	7.5	54.8	14.0	2.1	61.6	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	90.7	7.5	54.8	14.0	2.1	61.6	10.9
Queue Length 50th (ft)	7	178	11	9	161	0	67	172
Queue Length 95th (ft)	28	#332	49	30	269	27	119	416
Internal Link Dist (ft)	192	548			450			520
Turn Bay Length (ft)			225	315		395	165	
Base Capacity (vph)	109	256	582	108	2978	991	224	3503
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	0.11	0.93	0.26	0.12	0.42	0.14	0.42	0.55

Intersection Summary

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

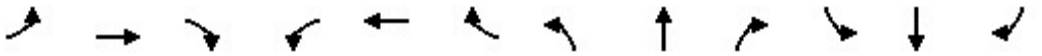


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	2	212	2	137	12	1115	129	84	1707	16
Future Volume (vph)	8	1	2	212	2	137	12	1115	129	84	1707	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frt		0.98			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.96			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1790			1741	1583	1805	4988	1553	1736	5030	
Flt Permitted		0.96			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1790			1741	1583	1805	4988	1553	1736	5030	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	9	1	2	236	2	152	13	1239	143	93	1897	18
RTOR Reduction (vph)	0	2	0	0	0	99	0	0	63	0	1	0
Lane Group Flow (vph)	0	10	0	0	238	53	13	1239	80	93	1914	0
Heavy Vehicles (%)	0%	0%	0%	4%	0%	2%	0%	4%	4%	4%	3%	0%
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases						3			2			
Actuated Green, G (s)		1.4			17.0	28.3	2.8	65.3	65.3	11.3	73.8	
Effective Green, g (s)		1.4			17.0	28.3	2.8	65.3	65.3	11.3	73.8	
Actuated g/C Ratio		0.01			0.15	0.24	0.02	0.56	0.56	0.10	0.64	
Clearance Time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)		21			255	386	43	2807	874	169	3200	
v/s Ratio Prot		c0.01			c0.14	0.01	0.01	0.25		c0.05	c0.38	
v/s Ratio Perm						0.02			0.05			
v/c Ratio		0.48			0.93	0.14	0.30	0.44	0.09	0.55	0.60	
Uniform Delay, d1		56.9			48.9	34.3	55.6	14.7	11.7	49.9	12.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		16.1			38.5	0.2	3.9	0.5	0.2	3.8	0.8	
Delay (s)		73.1			87.4	34.5	59.6	15.2	11.9	53.8	13.2	
Level of Service		E			F	C	E	B	B	D	B	
Approach Delay (s)		73.1			66.8			15.3			15.1	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	110	179	63	91	1393	22	1976	104
v/c Ratio	0.64	0.51	0.34	0.53	0.39	0.19	0.63	0.10
Control Delay	64.2	11.8	32.2	60.3	7.7	54.9	15.3	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.2	11.8	32.2	60.3	7.7	54.9	15.3	1.2
Queue Length 50th (ft)	79	0	23	66	102	16	311	0
Queue Length 95th (ft)	136	63	64	115	221	43	429	15
Internal Link Dist (ft)	312		290		483		269	
Turn Bay Length (ft)		215		415		275		1000
Base Capacity (vph)	216	394	224	282	3605	163	3159	1033
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	0.51	0.45	0.28	0.32	0.39	0.13	0.63	0.10

Intersection Summary



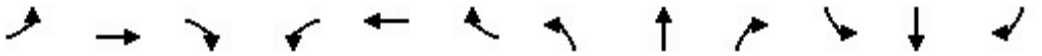
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	12	163	28	3	26	83	1234	34	20	1798	95
Future Volume (vph)	88	12	163	28	3	26	83	1234	34	20	1798	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0		5.5	6.0		5.5	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt		1.00	0.85		0.94		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1758	1568		1650		1770	4973		1805	5036	1568
Flt Permitted		0.76	1.00		0.76		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1396	1568		1287		1770	4973		1805	5036	1568
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	97	13	179	31	3	29	91	1356	37	22	1976	104
RTOR Reduction (vph)	0	0	157	0	25	0	0	2	0	0	0	39
Lane Group Flow (vph)	0	110	22	0	38	0	91	1391	0	22	1976	65
Heavy Vehicles (%)	4%	0%	3%	11%	0%	0%	2%	4%	0%	0%	3%	3%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								6
Actuated Green, G (s)		14.4	14.4		14.4		11.3	80.8		3.3	72.8	72.8
Effective Green, g (s)		14.4	14.4		14.4		11.3	80.8		3.3	72.8	72.8
Actuated g/C Ratio		0.12	0.12		0.12		0.10	0.70		0.03	0.63	0.63
Clearance Time (s)		6.0	6.0		6.0		5.5	6.0		5.5	6.0	6.0
Vehicle Extension (s)		3.5	3.5		3.5		3.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)		173	194		159		172	3463		51	3160	984
v/s Ratio Prot							c0.05	0.28		0.01	c0.39	
v/s Ratio Perm		c0.08	0.01		0.03							0.04
v/c Ratio		0.64	0.11		0.24		0.53	0.40		0.43	0.63	0.07
Uniform Delay, d1		48.3	45.1		45.8		49.8	7.4		55.4	13.2	8.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		7.8	0.3		0.9		2.9	0.3		5.8	0.9	0.1
Delay (s)		56.1	45.4		46.7		52.7	7.8		61.2	14.2	8.5
Level of Service		E	D		D		D	A		E	B	A
Approach Delay (s)		49.5			46.7			10.5			14.4	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	47	145	73	13	63	1402	43	2080
v/c Ratio	0.37	0.57	0.63	0.06	0.47	0.44	0.32	0.65
Control Delay	58.3	17.3	77.4	0.6	61.4	12.4	57.0	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.3	17.3	77.4	0.6	61.4	12.4	57.0	16.5
Queue Length 50th (ft)	34	0	54	0	46	195	31	365
Queue Length 95th (ft)	72	61	#119	0	89	265	68	494
Internal Link Dist (ft)	178		254			316		213
Turn Bay Length (ft)		115		100	315		320	
Base Capacity (vph)	179	297	119	213	209	3214	171	3203
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	0.26	0.49	0.61	0.06	0.30	0.44	0.25	0.65

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	9	136	64	5	12	59	1295	23	40	1903	53
Future Volume (vph)	35	9	136	64	5	12	59	1295	23	40	1903	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1733	1615		1735	1455	1736	4978		1805	5020	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1733	1615		1735	1455	1736	4978		1805	5020	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	37	10	145	68	5	13	63	1378	24	43	2024	56
RTOR Reduction (vph)	0	0	134	0	0	12	0	1	0	0	2	0
Lane Group Flow (vph)	0	47	11	0	73	1	63	1401	0	43	2078	0
Heavy Vehicles (%)	7%	0%	0%	5%	0%	11%	4%	4%	0%	0%	3%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		8.6	8.6		6.4	6.4	8.0	72.9		7.1	72.0	
Effective Green, g (s)		8.6	8.6		6.4	6.4	8.0	72.9		7.1	72.0	
Actuated g/C Ratio		0.07	0.07		0.06	0.06	0.07	0.63		0.06	0.62	
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	2.5	6.0		2.5	6.0	
Lane Grp Cap (vph)		128	119		95	80	119	3128		110	3115	
v/s Ratio Prot		c0.03			c0.04		c0.04	0.28		0.02	c0.41	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.37	0.09		0.77	0.01	0.53	0.45		0.39	0.67	
Uniform Delay, d1		51.1	50.1		54.1	51.8	52.2	11.1		52.4	14.2	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.8	0.3		30.4	0.0	3.2	0.5		1.7	1.1	
Delay (s)		52.9	50.4		84.4	51.8	55.4	11.6		54.0	15.4	
Level of Service		D	D		F	D	E	B		D	B	
Approach Delay (s)		51.0			79.5			13.5			16.2	
Approach LOS		D			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	WBL	WBR	NBU	NBT	SBL	SBT
Lane Group Flow (vph)	15	7	1	1493	3	2235
v/c Ratio	0.13	0.06	0.01	0.33	0.04	0.49
Control Delay	53.5	29.4	51.0	2.6	52.7	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	29.4	51.0	2.6	52.7	3.3
Queue Length 50th (ft)	11	0	1	0	2	0
Queue Length 95th (ft)	33	15	6	181	12	322
Internal Link Dist (ft)	469			187		179
Turn Bay Length (ft)			165		170	
Base Capacity (vph)	182	169	155	4509	116	4572
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	0.08	0.04	0.01	0.33	0.03	0.49

Intersection Summary

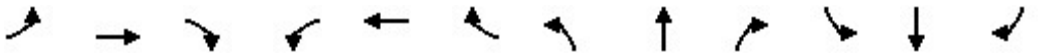
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	14	7	1	1384	20	3	2101
Future Volume (vph)	14	7	1	1384	20	3	2101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3	5.8	5.9		6.8	5.9
Lane Util. Factor	1.00	1.00	1.00	0.91		1.00	0.91
Frt	1.00	0.85	1.00	1.00		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)	1805	1615	1770	4975		1203	5036
Flt Permitted	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)	1805	1615	1770	4975		1203	5036
Peak-hour factor, PHF	0.94	0.94	0.92	0.94	0.94	0.94	0.94
Adj. Flow (vph)	15	7	1	1472	21	3	2235
RTOR Reduction (vph)	0	7	0	1	0	0	0
Lane Group Flow (vph)	15	0	1	1492	0	3	2235
Heavy Vehicles (%)	0%	0%	2%	4%	7%	50%	3%
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	4		5	2		1	6
Permitted Phases		4					
Actuated Green, G (s)	3.2	3.2	1.4	92.4		1.4	93.4
Effective Green, g (s)	3.2	3.2	1.4	92.4		1.4	93.4
Actuated g/C Ratio	0.03	0.03	0.01	0.80		0.01	0.81
Clearance Time (s)	6.3	6.3	5.8	5.9		6.8	5.9
Vehicle Extension (s)	3.5	3.5	3.0	5.5		3.0	5.5
Lane Grp Cap (vph)	49	44	21	3962		14	4054
v/s Ratio Prot	c0.01		0.00	0.30		c0.00	c0.44
v/s Ratio Perm		0.00					
v/c Ratio	0.31	0.00	0.05	0.38		0.21	0.55
Uniform Delay, d1	55.3	54.9	56.6	3.4		56.8	4.0
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	4.2	0.0	0.9	0.3		7.6	0.5
Delay (s)	59.5	54.9	57.6	3.7		64.3	4.5
Level of Service	E	D	E	A		E	A
Approach Delay (s)	58.0			3.7			4.6
Approach LOS	E			A			A

Intersection Summary			
HCM 2000 Control Delay	4.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	49	38	26	4	44	1392	13	24	2110	46
v/c Ratio	0.40	0.17	0.25	0.02	0.37	0.38	0.01	0.23	0.60	0.04
Control Delay	60.3	1.6	57.4	0.2	62.9	5.5	0.0	57.1	13.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.3	1.6	57.4	0.2	62.9	5.5	0.0	57.1	13.5	0.1
Queue Length 50th (ft)	36	0	19	0	33	101	0	18	346	0
Queue Length 95th (ft)	74	0	48	0	m50	m109	m0	45	487	0
Internal Link Dist (ft)	284		261			193			145	
Turn Bay Length (ft)		115			190		75	295		105
Base Capacity (vph)	182	276	156	216	166	3655	1213	186	3544	1146
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	0.27	0.14	0.17	0.02	0.27	0.38	0.01	0.13	0.60	0.04

Intersection Summary

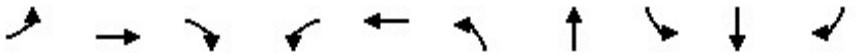
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	2	37	22	3	4	43	1350	13	23	2047	45
Future Volume (vph)	46	2	37	22	3	4	43	1350	13	23	2047	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.95	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1762	1615		1820	1214	1752	4988	1615	1805	5036	1581
Flt Permitted		0.95	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1762	1615		1820	1214	1752	4988	1615	1805	5036	1581
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	47	2	38	23	3	4	44	1392	13	24	2110	46
RTOR Reduction (vph)	0	0	36	0	0	4	0	0	4	0	0	16
Lane Group Flow (vph)	0	49	2	0	26	0	44	1392	9	24	2110	30
Confl. Peds. (#/hr)							1					1
Heavy Vehicles (%)	3%	0%	0%	0%	0%	33%	3%	4%	0%	0%	3%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)		7.1	7.1		4.6	4.6	6.9	78.8	78.8	4.5	76.4	76.4
Effective Green, g (s)		7.1	7.1		4.6	4.6	6.9	78.8	78.8	4.5	76.4	76.4
Actuated g/C Ratio		0.06	0.06		0.04	0.04	0.06	0.68	0.68	0.04	0.66	0.66
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)		2.5	2.5		2.5	2.5	2.5	4.0	4.0	2.5	4.0	4.0
Lane Grp Cap (vph)		107	98		72	48	104	3388	1097	70	3316	1041
v/s Ratio Prot		c0.03			c0.01		c0.03	0.28		0.01	c0.42	
v/s Ratio Perm			0.00			0.00			0.01			0.02
v/c Ratio		0.46	0.02		0.36	0.00	0.42	0.41	0.01	0.34	0.64	0.03
Uniform Delay, d1		52.6	51.2		54.3	53.5	52.6	8.3	6.0	54.3	11.6	6.9
Progression Factor		1.00	1.00		1.00	1.00	1.12	0.59	1.00	1.00	1.00	1.00
Incremental Delay, d2		2.3	0.1		2.2	0.0	1.3	0.2	0.0	2.1	0.9	0.1
Delay (s)		54.8	51.3		56.5	53.5	60.1	5.1	6.0	56.4	12.6	6.9
Level of Service		D	D		E	D	E	A	A	E	B	A
Approach Delay (s)		53.3			56.1			6.8			12.9	
Approach LOS		D			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

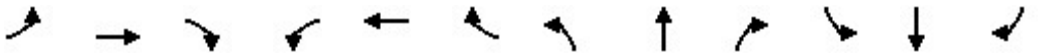


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	141	352	140	236	811	108	1282	192	1818	265
v/c Ratio	0.77	0.72	0.41	0.88	1.21	0.62	0.63	0.77	0.80	0.32
Control Delay	77.4	57.3	11.6	80.6	146.6	65.6	29.7	72.3	29.0	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.4	57.3	11.6	80.6	146.6	65.6	29.7	72.3	29.0	8.2
Queue Length 50th (ft)	103	135	0	174	~389	78	280	152	207	9
Queue Length 95th (ft)	#193	#191	58	#310	#517	137	333	#235	359	108
Internal Link Dist (ft)		762			867		276		418	
Turn Bay Length (ft)	200		215	725		280		330		245
Base Capacity (vph)	202	492	340	280	670	202	2032	280	2270	836
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	0.70	0.72	0.41	0.84	1.21	0.53	0.63	0.69	0.80	0.32

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	134	334	133	224	541	230	103	1072	146	182	1727	252
Future Volume (veh/h)	134	334	133	224	541	230	103	1072	146	182	1727	252
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	141	352	140	236	569	242	108	1128	154	192	1818	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, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	433	193	264	426	181	135	1988	271	222	2485	
Arrive On Green	0.09	0.12	0.12	0.15	0.17	0.17	0.07	0.43	0.43	0.12	0.48	0.00
Sat Flow, veh/h	1810	3610	1610	1810	2469	1048	1810	4615	630	1810	5187	1610
Grp Volume(v), veh/h	141	352	140	236	416	395	108	845	437	192	1818	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1711	1810	1729	1787	1810	1729	1610
Q Serve(g_s), s	8.9	11.0	9.7	14.9	20.0	20.0	6.8	21.4	21.4	12.1	32.6	0.0
Cycle Q Clear(g_c), s	8.9	11.0	9.7	14.9	20.0	20.0	6.8	21.4	21.4	12.1	32.6	0.0
Prop In Lane	1.00		1.00	1.00		0.61	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	169	433	193	264	311	295	135	1489	769	222	2485	
V/C Ratio(X)	0.84	0.81	0.73	0.90	1.34	1.34	0.80	0.57	0.57	0.86	0.73	
Avail Cap(c_a), veh/h	203	467	208	281	311	295	203	1489	769	281	2485	
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	0.00
Uniform Delay (d), s/veh	51.7	49.8	49.2	48.7	48.0	48.0	52.9	24.9	24.9	49.9	24.2	0.0
Incr Delay (d2), s/veh	19.0	9.9	11.0	26.4	171.4	173.9	12.7	1.6	3.0	19.7	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	5.6	4.5	8.6	23.8	22.7	3.6	9.0	9.6	6.7	13.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.8	59.7	60.2	75.1	219.4	221.9	65.6	26.5	27.9	69.7	26.2	0.0
LnGrp LOS	E	E	E	E	F	F	E	C	C	E	C	
Approach Vol, veh/h		633			1047			1390			2010	A
Approach Delay, s/veh		62.3			187.8			30.0			30.3	
Approach LOS		E			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	56.0	21.9	18.9	13.6	61.6	15.8	25.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	18.0	44.0	18.0	15.0	13.0	49.0	13.0	20.0
Max Q Clear Time (g_c+I1), s	14.1	23.4	16.9	13.0	8.8	34.6	10.9	22.0
Green Ext Time (p_c), s	0.2	11.9	0.0	0.6	0.1	12.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	66.7
HCM 6th LOS	E

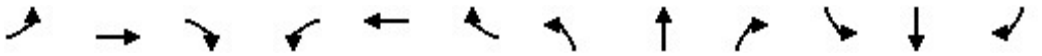
Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	126	81	33	1431	44	2068
v/c Ratio	0.72	0.56	0.20	0.43	0.16	0.59
Control Delay	55.2	60.1	8.4	11.6	6.8	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.2	60.1	8.4	11.6	6.8	13.2
Queue Length 50th (ft)	58	51	7	204	9	355
Queue Length 95th (ft)	#137	103	16	244	20	414
Internal Link Dist (ft)	218	764		385		854
Turn Bay Length (ft)			230		215	
Base Capacity (vph)	191	162	184	3363	289	3478
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	0.66	0.50	0.18	0.43	0.15	0.59

Intersection Summary

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



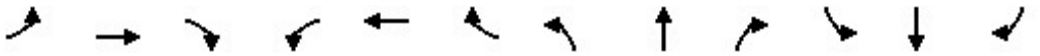
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	9	69	55	5	17	31	1303	56	42	1946	19
Future Volume (vph)	42	9	69	55	5	17	31	1303	56	42	1946	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.92			0.97		1.00	0.99		1.00	1.00	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1721			1779		1805	5155		1805	5179	
Flt Permitted		0.98			0.97		0.06	1.00		0.15	1.00	
Satd. Flow (perm)		1721			1779		116	5155		276	5179	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	44	9	73	58	5	18	33	1372	59	44	2048	20
RTOR Reduction (vph)	0	43	0	0	9	0	0	4	0	0	1	0
Lane Group Flow (vph)	0	83	0	0	72	0	33	1427	0	44	2067	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		8.9			7.7		77.2	73.6		79.6	74.8	
Effective Green, g (s)		8.9			7.7		77.2	73.6		79.6	74.8	
Actuated g/C Ratio		0.08			0.07		0.67	0.63		0.69	0.64	
Clearance Time (s)		5.0			5.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		3.0			3.0		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)		132			118		129	3270		252	3339	
v/s Ratio Prot		c0.05			c0.04		c0.01	0.28		0.01	c0.40	
v/s Ratio Perm							0.16			0.11		
v/c Ratio		0.63			0.61		0.26	0.44		0.17	0.62	
Uniform Delay, d1		51.9			52.7		9.4	10.7		6.6	12.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		8.9			8.6		0.8	0.4		0.2	0.9	
Delay (s)		60.9			61.2		10.2	11.1		6.9	13.1	
Level of Service		E			E		B	B		A	B	
Approach Delay (s)		60.9			61.2			11.1			12.9	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	7	15	946	250	1220	350	269	1876
v/c Ratio	0.08	0.16	0.86	0.27	0.68	0.44	0.93	0.66
Control Delay	53.9	39.3	47.8	4.2	34.6	4.8	85.9	19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.9	39.3	47.8	4.2	34.6	4.8	85.9	19.6
Queue Length 50th (ft)	5	5	320	9	284	0	200	344
Queue Length 95th (ft)	20	27	#537	59	336	62	#357	395
Internal Link Dist (ft)		212			241			321
Turn Bay Length (ft)				250		230	235	
Base Capacity (vph)	171	173	1096	946	1803	790	295	2861
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	0.04	0.09	0.86	0.26	0.68	0.44	0.91	0.66

Intersection Summary

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



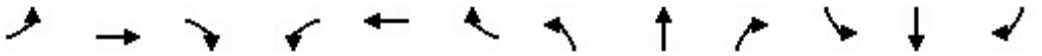
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	7	8	908	0	240	0	1171	336	258	1801	0
Future Volume (vph)	7	7	8	908	0	240	0	1171	336	258	1801	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0		5.0		6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	1.00		0.97		1.00		0.91	1.00	1.00	0.91	
Frt	1.00	0.92		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1748		3502		1615		5187	1615	1805	5187	
Flt Permitted	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1748		3502		1615		5187	1615	1805	5187	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	7	8	946	0	250	0	1220	350	269	1876	0
RTOR Reduction (vph)	0	8	0	0	0	116	0	0	237	0	0	0
Lane Group Flow (vph)	7	7	0	946	0	134	0	1220	113	269	1876	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Prot		pm+ov		NA	Perm	Prot	NA	
Protected Phases	3	3		4		1		2		1	6	
Permitted Phases						4			2			
Actuated Green, G (s)	2.7	2.7		36.3		55.0		37.3	37.3	18.7	61.0	
Effective Green, g (s)	2.7	2.7		36.3		55.0		37.3	37.3	18.7	61.0	
Actuated g/C Ratio	0.02	0.02		0.31		0.47		0.32	0.32	0.16	0.53	
Clearance Time (s)	5.0	5.0		5.0		5.0		6.0	6.0	5.0	6.0	
Vehicle Extension (s)	2.5	2.5		2.5		2.5		6.0	6.0	2.5	6.0	
Lane Grp Cap (vph)	42	40		1095		835		1667	519	290	2727	
v/s Ratio Prot	0.00	c0.00		c0.27		0.03		0.24		c0.15	c0.36	
v/s Ratio Perm						0.06			0.07			
v/c Ratio	0.17	0.18		0.86		0.16		0.73	0.22	0.93	0.69	
Uniform Delay, d1	55.5	55.6		37.5		17.4		34.9	28.7	48.0	20.4	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	1.6		7.2		0.1		2.9	1.0	34.0	1.4	
Delay (s)	56.9	57.1		44.7		17.4		37.8	29.7	81.9	21.9	
Level of Service	E	E		D		B		D	C	F	C	
Approach Delay (s)		57.1			39.0			36.0			29.4	
Approach LOS		E			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	33.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	162	164	183	24	8	15	1309	26	2834
v/c Ratio	0.70	0.71	0.49	0.23	0.04	0.16	0.40	0.25	0.84
Control Delay	63.5	63.8	10.9	57.0	0.4	55.8	13.1	57.4	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.5	63.8	10.9	57.0	0.4	55.8	13.1	57.4	21.2
Queue Length 50th (ft)	123	125	0	18	0	11	194	19	518
Queue Length 95th (ft)	192	194	61	45	0	33	277	48	#972
Internal Link Dist (ft)		248		223			466		240
Turn Bay Length (ft)			105		50	450		180	
Base Capacity (vph)	276	277	410	174	263	124	3303	202	3382
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	0.59	0.59	0.45	0.14	0.03	0.12	0.40	0.13	0.84

Intersection Summary

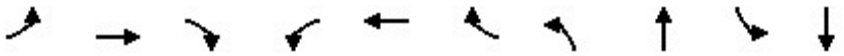
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	301	9	174	15	8	8	14	1198	46	25	2367	325
Future Volume (vph)	301	9	174	15	8	8	14	1198	46	25	2367	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected	0.95	0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1715	1724	1592		1839	1615	1805	5158		1805	5080	
Flt Permitted	0.95	0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1715	1724	1592		1839	1615	1805	5158		1805	5080	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	317	9	183	16	8	8	15	1261	48	26	2492	342
RTOR Reduction (vph)	0	0	158	0	0	8	0	2	0	0	11	0
Lane Group Flow (vph)	162	164	25	0	24	0	15	1307	0	26	2823	0
Confl. Peds. (#/hr)			1	1			1					1
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)	15.7	15.7	15.7		4.5	4.5	2.9	70.2		4.6	71.9	
Effective Green, g (s)	15.7	15.7	15.7		4.5	4.5	2.9	70.2		4.6	71.9	
Actuated g/C Ratio	0.14	0.14	0.14		0.04	0.04	0.02	0.61		0.04	0.62	
Clearance Time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5	6.0		2.5	6.0	
Lane Grp Cap (vph)	232	233	215		71	62	45	3121		71	3148	
v/s Ratio Prot	0.09	c0.10			c0.01		0.01	0.25		c0.01	c0.56	
v/s Ratio Perm			0.02			0.00						
v/c Ratio	0.70	0.70	0.12		0.34	0.01	0.33	0.42		0.37	0.90	
Uniform Delay, d1	47.9	47.9	44.0		54.3	53.6	55.6	12.1		54.3	18.9	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.2	8.6	0.2		2.1	0.0	3.2	0.4		2.3	4.5	
Delay (s)	56.1	56.6	44.2		56.4	53.6	58.8	12.5		56.6	23.4	
Level of Service	E	E	D		E	D	E	B		E	C	
Approach Delay (s)		52.0			55.7			13.0			23.7	
Approach LOS		D			E			B			C	

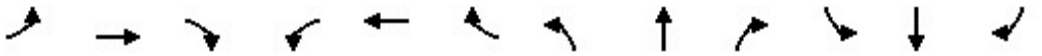
Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	175	718	95	145	827	239	118	565	358	680
v/c Ratio	0.60	0.48	0.15	0.55	0.81	0.34	0.48	0.45	0.81	0.44
Control Delay	60.1	34.8	3.8	59.5	45.7	11.3	58.8	35.2	65.5	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.1	34.8	3.8	59.5	45.7	11.3	58.8	35.2	65.5	31.2
Queue Length 50th (ft)	67	157	0	55	295	53	45	125	136	140
Queue Length 95th (ft)	94	187	23	80	349	97	69	150	176	171
Internal Link Dist (ft)		437			433			569		731
Turn Bay Length (ft)	415		350	300			400		550	
Base Capacity (vph)	370	1508	713	418	1054	717	398	1269	462	1538
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	0.47	0.48	0.13	0.35	0.78	0.33	0.30	0.45	0.77	0.44

Intersection Summary



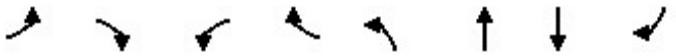
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	603	80	122	695	201	99	370	105	301	424	147
Future Volume (veh/h)	147	603	80	122	695	201	99	370	105	301	424	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1826	1633	1752	1856	1826	1781	1856	1856	1885	1856	1856
Adj Flow Rate, veh/h	175	718	95	145	827	239	118	440	125	358	505	175
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	8	5	18	10	3	5	8	3	3	1	3	3
Cap, veh/h	231	1420	474	200	974	611	191	1187	326	415	1355	455
Arrive On Green	0.07	0.28	0.28	0.06	0.28	0.28	0.06	0.30	0.30	0.12	0.36	0.36
Sat Flow, veh/h	3291	4985	1383	3237	3526	1546	3291	3952	1084	3483	3747	1258
Grp Volume(v), veh/h	175	718	95	145	827	239	118	374	191	358	453	227
Grp Sat Flow(s),veh/h/ln	1646	1662	1383	1618	1763	1546	1646	1689	1659	1742	1689	1628
Q Serve(g_s), s	6.2	14.2	5.7	5.2	26.2	13.0	4.1	10.3	10.8	11.9	11.7	12.2
Cycle Q Clear(g_c), s	6.2	14.2	5.7	5.2	26.2	13.0	4.1	10.3	10.8	11.9	11.7	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.65	1.00		0.77
Lane Grp Cap(c), veh/h	231	1420	474	200	974	611	191	1015	499	415	1221	588
V/C Ratio(X)	0.76	0.51	0.20	0.73	0.85	0.39	0.62	0.37	0.38	0.86	0.37	0.38
Avail Cap(c_a), veh/h	377	1420	474	425	1037	639	404	1015	499	458	1221	588
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	53.9	35.3	27.4	54.4	40.4	25.5	54.3	32.5	32.6	51.0	27.8	27.9
Incr Delay (d2), s/veh	1.9	0.5	0.4	1.9	7.0	0.7	1.2	1.0	2.2	13.5	0.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.8	1.9	2.2	12.2	4.9	1.7	4.4	4.6	6.0	4.9	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	35.7	27.7	56.3	47.4	26.2	55.5	33.5	34.9	64.5	28.7	29.8
LnGrp LOS	E	D	C	E	D	C	E	C	C	E	C	C
Approach Vol, veh/h		988			1211			683			1038	
Approach Delay, s/veh		38.5			44.3			37.7			41.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	42.8	13.8	40.9	13.4	50.0	14.8	39.9
Change Period (Y+Rc), s	6.5	* 7.3	6.5	* 7.3	6.5	* 7.3	6.5	7.3
Max Green Setting (Gmax), s	15.5	* 27	15.5	* 33	14.5	* 28	13.5	34.7
Max Q Clear Time (g_c+I1), s	13.9	12.8	7.2	16.2	6.1	14.2	8.2	28.2
Green Ext Time (p_c), s	0.1	6.1	0.1	7.3	0.1	5.5	0.1	4.4

Intersection Summary	
HCM 6th Ctrl Delay	40.9
HCM 6th LOS	D

Notes

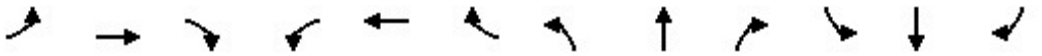
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	194	180	124	28	299	572	513	140
v/c Ratio	0.54	0.28	0.63	0.10	0.76	0.26	0.44	0.18
Control Delay	54.6	3.4	64.4	0.7	56.7	10.5	30.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	3.4	64.4	0.7	56.7	10.5	30.8	2.6
Queue Length 50th (ft)	73	0	91	0	207	94	162	0
Queue Length 95th (ft)	103	30	149	0	#404	133	192	25
Internal Link Dist (ft)						335	653	
Turn Bay Length (ft)		275		50	210			115
Base Capacity (vph)	472	699	216	293	394	2171	1255	819
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	0.41	0.26	0.57	0.10	0.76	0.26	0.41	0.17

Intersection Summary

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



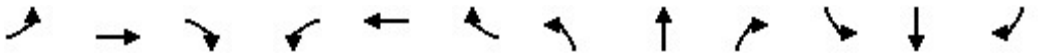
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	169	0	157	108	0	24	260	483	15	9	438	122
Future Volume (vph)	169	0	157	108	0	24	260	483	15	9	438	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5		5.5	5.5		5.5	5.5	6.0			6.0	5.5
Lane Util. Factor	0.97		1.00	1.00		1.00	1.00	0.95			0.95	1.00
Frpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00			1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00		1.00	1.00	1.00			1.00	1.00
Frt	1.00		0.85	1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	3183		1553	1805		1495	1719	3416			3459	1392
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00			0.94	1.00
Satd. Flow (perm)	3183		1553	1805		1495	1719	3416			3256	1392
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	194	0	180	124	0	28	299	555	17	10	503	140
RTOR Reduction (vph)	0	0	118	0	0	25	0	1	0	0	0	74
Lane Group Flow (vph)	194	0	62	124	0	3	299	571	0	0	513	66
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	10%	14%	4%	0%	8%	8%	5%	5%	10%	17%	4%	16%
Turn Type	Prot		pt+ov	Prot		Prot	Prot	NA		Perm	NA	pt+ov
Protected Phases	3		3 5	4		4	5	2			6	3 6
Permitted Phases										6		
Actuated Green, G (s)	13.3		40.4	12.9		12.9	27.1	74.8			42.2	61.5
Effective Green, g (s)	13.3		40.4	12.9		12.9	27.1	74.8			42.2	55.5
Actuated g/C Ratio	0.11		0.34	0.11		0.11	0.23	0.63			0.36	0.47
Clearance Time (s)	5.5			5.5		5.5	5.5	6.0			6.0	
Vehicle Extension (s)	3.5			3.5		3.5	3.0	7.0			7.0	
Lane Grp Cap (vph)	358		531	197		163	394	2165			1164	654
v/s Ratio Prot	c0.06		0.04	c0.07		0.00	c0.17	0.17				0.05
v/s Ratio Perm											c0.16	
v/c Ratio	0.54		0.12	0.63		0.02	0.76	0.26			0.44	0.10
Uniform Delay, d1	49.5		26.6	50.3		46.9	42.4	9.5			28.9	17.4
Progression Factor	1.00		1.00	1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	1.9		0.1	6.5		0.1	8.2	0.3			1.2	0.1
Delay (s)	51.3		26.7	56.7		47.0	50.6	9.8			30.1	17.5
Level of Service	D		C	E		D	D	A			C	B
Approach Delay (s)		39.5			54.9			23.8			27.4	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	118.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	48	318	176	957	544	283	68	192	268	73
v/c Ratio	0.43	0.33	0.80	0.79	0.63	0.34	0.13	0.68	0.45	0.18
Control Delay	68.4	37.9	77.7	43.8	7.8	40.7	0.5	62.0	49.6	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.4	37.9	77.7	43.8	7.8	40.7	0.5	62.0	49.6	1.0
Queue Length 50th (ft)	38	105	141	380	23	100	0	147	103	0
Queue Length 95th (ft)	80	159	210	467	130	142	0	231	148	0
Internal Link Dist (ft)		442		279		310			329	
Turn Bay Length (ft)	210		80					150		150
Base Capacity (vph)	111	952	342	1205	864	835	518	283	594	406
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	0.43	0.33	0.51	0.79	0.63	0.34	0.13	0.68	0.45	0.18

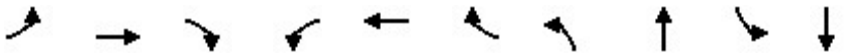
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	267	29	164	890	506	56	207	63	179	249	68
Future Volume (vph)	45	267	29	164	890	506	56	207	63	179	249	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	5.0		5.8	5.0	5.0		7.1	7.1	7.0	7.0	7.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1597	3525		1770	3505	1553		3490	1583	1687	3539	1503
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1597	3525		1770	3505	1553		3490	1583	1687	3539	1503
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	48	287	31	176	957	544	60	223	68	192	268	73
RTOR Reduction (vph)	0	6	0	0	0	330	0	0	52	0	0	61
Lane Group Flow (vph)	48	312	0	176	957	214	0	283	16	192	268	12
Confl. Peds. (#/hr)							1					1
Heavy Vehicles (%)	13%	1%	0%	2%	3%	4%	0%	3%	2%	7%	2%	6%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	3	8		7	4		1	1		2	2	
Permitted Phases						4			1			2
Actuated Green, G (s)	7.0	34.9		15.6	43.0	43.0		28.6	28.6	21.0	21.0	21.0
Effective Green, g (s)	7.0	34.9		15.6	43.0	43.0		28.6	28.6	21.0	21.0	21.0
Actuated g/C Ratio	0.06	0.28		0.12	0.34	0.34		0.23	0.23	0.17	0.17	0.17
Clearance Time (s)	6.3	5.0		5.8	5.0	5.0		7.1	7.1	7.0	7.0	7.0
Vehicle Extension (s)	2.0	0.2		0.2	2.0	2.0		4.0	4.0	5.0	5.0	5.0
Lane Grp Cap (vph)	89	984		220	1205	534		798	362	283	594	252
v/s Ratio Prot	0.03	0.09		c0.10	c0.27			c0.08		c0.11	0.08	
v/s Ratio Perm						0.14			0.01			0.01
v/c Ratio	0.54	0.32		0.80	0.79	0.40		0.35	0.04	0.68	0.45	0.05
Uniform Delay, d1	57.4	35.6		53.2	37.0	31.2		40.5	37.5	48.8	46.8	43.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	0.8		17.5	5.4	2.2		1.2	0.2	12.4	2.5	0.4
Delay (s)	60.6	36.5		70.7	42.5	33.4		41.7	37.8	61.2	49.3	44.0
Level of Service	E	D		E	D	C		D	D	E	D	D
Approach Delay (s)		39.6			42.5			40.9			52.8	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	25.4
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

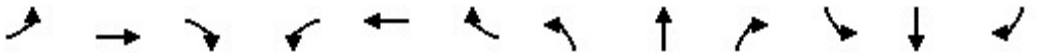
c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	122	507	63	203	753	143	70	449	125	674
v/c Ratio	0.39	0.80	0.14	0.47	0.89	0.21	0.51	0.45	0.65	0.55
Control Delay	44.9	54.9	0.7	42.1	55.7	4.2	62.8	28.8	63.9	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.9	54.9	0.7	42.1	55.7	4.2	62.8	28.8	63.9	24.0
Queue Length 50th (ft)	83	189	0	128	282	0	50	118	89	158
Queue Length 95th (ft)	156	#306	0	209	#416	38	95	163	146	207
Internal Link Dist (ft)		455			617			1015		812
Turn Bay Length (ft)	225		135	285		165	210		450	
Base Capacity (vph)	311	637	445	429	850	759	190	1032	282	1291
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	0.39	0.80	0.14	0.47	0.89	0.19	0.37	0.44	0.44	0.52

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	454	58	187	693	132	64	267	146	115	331	289
Future Volume (vph)	125	454	58	187	693	132	64	267	146	115	331	289
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1643	3355	1615	1787	3539	1538	1805	3361		1787	3307	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1643	3355	1615	1787	3539	1538	1805	3361		1787	3307	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	493	63	203	753	143	70	290	159	125	360	314
RTOR Reduction (vph)	0	0	51	0	0	93	0	65	0	0	139	0
Lane Group Flow (vph)	122	507	12	203	753	50	70	384	0	125	535	0
Heavy Vehicles (%)	0%	3%	0%	1%	2%	5%	0%	1%	3%	1%	2%	1%
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	3	3		4	4	1	5	2		1	6	
Permitted Phases			3			4						
Actuated Green, G (s)	21.5	21.5	21.5	27.4	27.4	39.7	7.7	31.8		12.3	36.4	
Effective Green, g (s)	21.5	21.5	21.5	27.4	27.4	39.7	7.7	31.8		12.3	36.4	
Actuated g/C Ratio	0.19	0.19	0.19	0.24	0.24	0.35	0.07	0.28		0.11	0.32	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	6.0		2.0	6.0	
Lane Grp Cap (vph)	309	632	304	429	850	603	121	937		192	1055	
v/s Ratio Prot	0.07	c0.15		0.11	c0.21	0.01	0.04	0.11		c0.07	c0.16	
v/s Ratio Perm			0.01			0.02						
v/c Ratio	0.39	0.80	0.04	0.47	0.89	0.08	0.58	0.41		0.65	0.51	
Uniform Delay, d1	40.5	44.2	37.8	37.1	41.8	24.9	51.6	33.5		48.8	31.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	7.3	0.1	0.8	10.9	0.0	4.1	1.3		5.9	1.7	
Delay (s)	41.4	51.5	37.9	37.9	52.7	25.0	55.7	34.8		54.7	33.3	
Level of Service	D	D	D	D	D	C	E	C		D	C	
Approach Delay (s)		48.5			46.4			37.6			36.6	
Approach LOS		D			D			D			D	

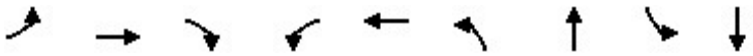
Intersection Summary			
HCM 2000 Control Delay	42.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	944	205	826	173	102
v/c Ratio	0.66	0.51	0.37	0.54	0.27
Control Delay	16.3	10.2	6.1	28.5	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	10.2	6.1	28.5	7.3
Queue Length 50th (ft)	128	25	62	57	0
Queue Length 95th (ft)	208	65	110	109	32
Internal Link Dist (ft)	202		219	505	
Turn Bay Length (ft)				90	
Base Capacity (vph)	1438	405	2228	526	546
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	0.66	0.51	0.37	0.33	0.19

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	615	254	189	760	159	94
Future Volume (vph)	615	254	189	760	159	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5		5.5	5.5	5.0	5.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3394		1787	3471	1752	1583
Flt Permitted	1.00		0.17	1.00	0.95	1.00
Satd. Flow (perm)	3394		317	3471	1752	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	668	276	205	826	173	102
RTOR Reduction (vph)	41	0	0	0	0	83
Lane Group Flow (vph)	903	0	205	826	173	19
Heavy Vehicles (%)	2%	1%	1%	4%	3%	2%
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Actuated Green, G (s)	24.8		38.5	38.5	11.1	11.1
Effective Green, g (s)	24.8		38.5	38.5	11.1	11.1
Actuated g/C Ratio	0.41		0.64	0.64	0.18	0.18
Clearance Time (s)	5.5		5.5	5.5	5.0	5.0
Vehicle Extension (s)	6.0		3.0	6.0	3.0	3.0
Lane Grp Cap (vph)	1400		403	2223	323	292
v/s Ratio Prot	c0.27		c0.07	0.24	c0.10	
v/s Ratio Perm			0.26			0.01
v/c Ratio	0.65		0.51	0.37	0.54	0.06
Uniform Delay, d1	14.1		6.7	5.1	22.2	20.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7		1.0	0.3	1.7	0.1
Delay (s)	15.8		7.8	5.4	23.9	20.3
Level of Service	B		A	A	C	C
Approach Delay (s)	15.8			5.9	22.6	
Approach LOS	B			A	C	

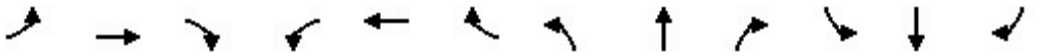
Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.1	Sum of lost time (s)	19.0
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	182	165	201	126	269	107	479	58	817
v/c Ratio	0.51	0.38	0.38	0.29	0.62	0.57	0.37	0.34	0.72
Control Delay	18.5	22.4	5.8	13.9	25.1	42.4	16.1	32.9	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	22.4	5.8	13.9	25.1	42.4	16.1	32.9	23.2
Queue Length 50th (ft)	44	52	0	29	78	38	69	20	135
Queue Length 95th (ft)	80	95	40	57	141	#107	115	53	#236
Internal Link Dist (ft)		244			266		277		252
Turn Bay Length (ft)	240			75		260		200	
Base Capacity (vph)	356	646	685	442	622	198	1371	185	1201
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	0.51	0.26	0.29	0.29	0.43	0.54	0.35	0.31	0.68

Intersection Summary

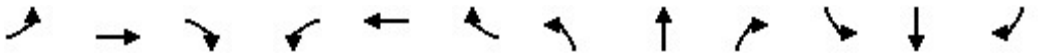
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	145	177	111	165	71	94	377	45	51	590	129
Future Volume (veh/h)	160	145	177	111	165	71	94	377	45	51	590	129
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1870	1885	1870	1811	1811	1826	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	182	165	201	126	188	81	107	428	51	58	670	147
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	2	1	2	6	6	5	2	2	3	3	3
Cap, veh/h	369	417	356	423	239	103	136	1071	127	72	854	187
Arrive On Green	0.10	0.22	0.22	0.08	0.20	0.20	0.08	0.33	0.33	0.04	0.30	0.30
Sat Flow, veh/h	1767	1870	1598	1781	1201	517	1739	3200	379	1767	2875	630
Grp Volume(v), veh/h	182	165	201	126	0	269	107	237	242	58	411	406
Grp Sat Flow(s),veh/h/ln	1767	1870	1598	1781	0	1718	1739	1777	1802	1767	1763	1742
Q Serve(g_s), s	4.3	4.1	6.0	3.0	0.0	8.0	3.3	5.5	5.6	1.8	11.5	11.6
Cycle Q Clear(g_c), s	4.3	4.1	6.0	3.0	0.0	8.0	3.3	5.5	5.6	1.8	11.5	11.6
Prop In Lane	1.00		1.00	1.00		0.30	1.00		0.21	1.00		0.36
Lane Grp Cap(c), veh/h	369	417	356	423	0	342	136	595	603	72	524	518
V/C Ratio(X)	0.49	0.40	0.56	0.30	0.00	0.79	0.79	0.40	0.40	0.81	0.78	0.79
Avail Cap(c_a), veh/h	369	623	532	464	0	572	193	608	617	180	587	580
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	15.4	17.9	18.7	15.3	0.0	20.5	24.5	13.8	13.8	25.7	17.4	17.4
Incr Delay (d2), s/veh	0.4	0.6	1.4	0.1	0.0	4.0	8.2	0.6	0.6	7.9	6.8	6.9
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	1.6	1.7	2.2	1.1	0.0	3.3	1.6	2.0	2.1	0.8	5.1	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	18.5	20.1	15.4	0.0	24.5	32.7	14.4	14.4	33.6	24.2	24.4
LnGrp LOS	B	B	C	B	A	C	C	B	B	C	C	C
Approach Vol, veh/h		548			395			586			875	
Approach Delay, s/veh		18.2			21.6			17.8			24.9	
Approach LOS		B			C			B			C	

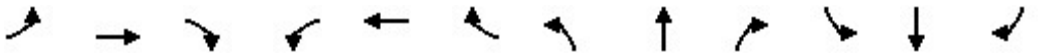
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	23.1	8.2	16.5	8.2	21.1	9.5	15.3
Change Period (Y+Rc), s	4.0	5.0	4.0	4.5	4.0	5.0	4.0	4.5
Max Green Setting (Gmax), s	5.5	18.5	5.5	18.0	6.0	18.0	5.5	18.0
Max Q Clear Time (g_c+I1), s	3.8	7.6	5.0	8.0	5.3	13.6	6.3	10.0
Green Ext Time (p_c), s	0.0	2.9	0.0	1.1	0.0	2.5	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	101	884	46	181	779	57	82	316	207	121	337	234
v/c Ratio	0.26	0.70	0.07	0.55	0.53	0.08	0.25	0.48	0.45	0.35	0.49	0.47
Control Delay	10.5	22.5	0.2	15.9	18.1	0.2	18.0	27.1	7.5	19.7	27.2	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	10.5	22.5	0.2	15.9	18.1	0.2	18.0	27.1	7.5	19.7	27.2	7.2
Queue Length 50th (ft)	19	164	0	35	134	0	24	64	0	37	69	0
Queue Length 95th (ft)	46	250	0	79	207	0	51	99	47	70	104	50
Internal Link Dist (ft)		568			685			340			433	
Turn Bay Length (ft)	225		200	400		305	230		190	330		275
Base Capacity (vph)	392	1402	694	339	1486	718	325	1252	687	341	1290	732
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	0.63	0.07	0.53	0.52	0.08	0.25	0.25	0.30	0.35	0.26	0.32

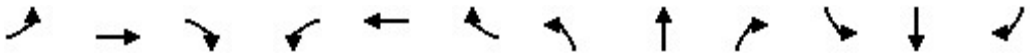
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	787	41	161	693	51	73	281	184	108	300	208
Future Volume (veh/h)	90	787	41	161	693	51	73	281	184	108	300	208
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1841	1811	1841	1781	1870	1841	1826	1900	1885	1900
Adj Flow Rate, veh/h	101	884	46	181	779	57	82	316	207	121	337	234
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	3	4	6	4	8	2	4	5	0	1	0
Cap, veh/h	354	1224	541	354	1346	581	322	678	300	352	774	348
Arrive On Green	0.06	0.35	0.35	0.09	0.38	0.38	0.05	0.19	0.19	0.07	0.22	0.22
Sat Flow, veh/h	1781	3526	1559	1725	3497	1509	1781	3497	1547	1810	3582	1610
Grp Volume(v), veh/h	101	884	46	181	779	57	82	316	207	121	337	234
Grp Sat Flow(s),veh/h/ln	1781	1763	1559	1725	1749	1509	1781	1749	1547	1810	1791	1610
Q Serve(g_s), s	2.2	13.5	1.2	4.0	10.9	1.5	2.3	5.0	7.7	3.3	5.0	8.3
Cycle Q Clear(g_c), s	2.2	13.5	1.2	4.0	10.9	1.5	2.3	5.0	7.7	3.3	5.0	8.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	354	1224	541	354	1346	581	322	678	300	352	774	348
V/C Ratio(X)	0.29	0.72	0.08	0.51	0.58	0.10	0.25	0.47	0.69	0.34	0.44	0.67
Avail Cap(c_a), veh/h	437	1450	641	414	1528	659	387	1297	574	378	1328	597
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	12.4	17.6	13.6	12.8	15.1	12.2	18.6	22.1	23.3	18.0	21.0	22.3
Incr Delay (d2), s/veh	0.4	1.9	0.1	1.1	0.7	0.1	0.4	0.5	2.8	0.6	0.4	2.3
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	0.8	5.2	0.4	1.4	4.0	0.5	0.9	2.0	2.9	1.3	2.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.8	19.5	13.7	14.0	15.8	12.3	19.0	22.6	26.1	18.6	21.4	24.6
LnGrp LOS	B	B	B	B	B	B	B	C	C	B	C	C
Approach Vol, veh/h		1031			1017			605			692	
Approach Delay, s/veh		18.6			15.3			23.3			22.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	26.5	8.6	17.0	7.5	28.9	7.2	18.4
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	8.0	25.5	5.5	23.0	6.4	27.1	5.5	23.0
Max Q Clear Time (g_c+I1), s	6.0	15.5	5.3	9.7	4.2	12.9	4.3	10.3
Green Ext Time (p_c), s	0.1	6.0	0.0	2.3	0.0	7.0	0.0	2.5

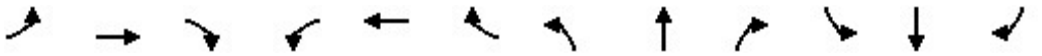
Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	289	850	93	22	900	77	29	265	39	157	377	521
v/c Ratio	0.78	0.50	0.11	0.06	0.78	0.12	0.09	0.44	0.09	0.45	0.39	0.62
Control Delay	29.6	15.9	1.9	9.4	28.4	0.4	17.6	29.5	0.4	23.0	24.3	14.0
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	29.6	15.9	1.9	9.4	28.4	0.4	17.6	29.5	0.4	23.0	24.3	14.0
Queue Length 50th (ft)	61	107	0	4	182	0	9	58	0	53	69	95
Queue Length 95th (ft)	#169	208	10	14	252	0	23	83	0	87	111	197
Internal Link Dist (ft)		299			266			659			468	
Turn Bay Length (ft)	430		75	230		245	264		55	346		95
Base Capacity (vph)	378	1693	810	344	1216	674	314	884	538	348	987	829
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	0.76	0.50	0.11	0.06	0.74	0.11	0.09	0.30	0.07	0.45	0.38	0.63

Intersection Summary

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



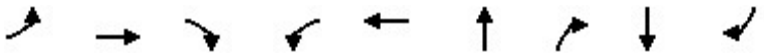
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	697	76	18	738	63	24	217	32	129	309	427
Future Volume (veh/h)	237	697	76	18	738	63	24	217	32	129	309	427
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1841	1811	1811	1841	1870	1900	1885	1841	1870	1885	1856
Adj Flow Rate, veh/h	289	850	0	22	900	0	29	265	0	157	377	521
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	3	4	6	6	4	2	0	1	4	2	1	3
Cap, veh/h	384	1524		286	1116		252	720		413	976	636
Arrive On Green	0.13	0.44	0.00	0.01	0.32	0.00	0.02	0.20	0.00	0.09	0.27	0.27
Sat Flow, veh/h	1767	3497	1535	1725	3497	1585	1810	3582	1560	1781	3582	1572
Grp Volume(v), veh/h	289	850	0	22	900	0	29	265	0	157	377	521
Grp Sat Flow(s),veh/h/ln	1767	1749	1535	1725	1749	1585	1810	1791	1560	1781	1791	1572
Q Serve(g_s), s	7.3	13.0	0.0	0.6	16.9	0.0	0.9	4.6	0.0	4.7	6.1	19.5
Cycle Q Clear(g_c), s	7.3	13.0	0.0	0.6	16.9	0.0	0.9	4.6	0.0	4.7	6.1	19.5
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	384	1524		286	1116		252	720		413	976	636
V/C Ratio(X)	0.75	0.56		0.08	0.81		0.12	0.37		0.38	0.39	0.82
Avail Cap(c_a), veh/h	423	1524		393	1246		357	901		428	976	636
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	15.0	0.0	16.2	22.3	0.0	22.2	24.7	0.0	18.6	21.2	19.0
Incr Delay (d2), s/veh	6.7	0.6	0.0	0.1	4.0	0.0	0.2	0.3	0.0	0.6	0.3	8.4
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	3.3	4.8	0.0	0.2	7.1	0.0	0.4	1.9	0.0	1.9	2.5	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.1	15.6	0.0	16.4	26.3	0.0	22.4	25.0	0.0	19.1	21.4	27.4
LnGrp LOS	C	B		B	C		C	C		B	C	C
Approach Vol, veh/h		1139	A		922	A		294	A		1055	
Approach Delay, s/veh		17.3			26.1			24.7			24.0	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	28.8	10.4	18.9	5.1	37.2	5.3	24.0
Change Period (Y+Rc), s	4.0	6.0	4.0	4.5	4.0	6.0	4.0	4.5
Max Green Setting (Gmax), s	11.0	25.5	7.0	18.0	5.5	31.0	5.5	19.5
Max Q Clear Time (g_c+I1), s	9.3	18.9	6.7	6.6	2.6	15.0	2.9	21.5
Green Ext Time (p_c), s	0.2	3.9	0.0	1.2	0.0	7.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

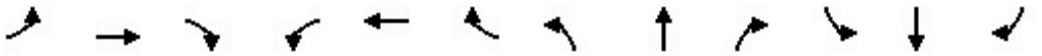
Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	62	687	87	120	910	102	71	140	113
v/c Ratio	0.29	0.71	0.17	0.54	0.66	0.52	0.22	0.75	0.18
Control Delay	21.7	33.2	3.3	29.3	29.8	43.2	3.2	54.2	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.7	33.2	3.3	29.3	29.8	43.2	3.2	54.2	4.8
Queue Length 50th (ft)	20	174	0	41	156	50	0	66	0
Queue Length 95th (ft)	47	238	16	80	203	93	7	#166	28
Internal Link Dist (ft)		521			373	430		331	
Turn Bay Length (ft)	275			250			130		610
Base Capacity (vph)	221	977	534	224	1396	332	454	189	642
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	0.28	0.70	0.16	0.54	0.65	0.31	0.16	0.74	0.18

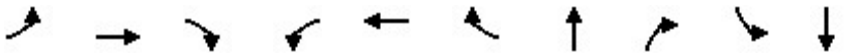
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	584	74	102	741	32	48	39	60	36	83	96
Future Volume (vph)	53	584	74	102	741	32	48	39	60	36	83	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5	4.5	4.0	4.5			4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97	1.00		0.99	1.00
Satd. Flow (prot)	1805	3539	1615	1752	5010			1819	1538		1846	1553
Flt Permitted	0.19	1.00	1.00	0.20	1.00			0.75	1.00		0.28	1.00
Satd. Flow (perm)	355	3539	1615	369	5010			1409	1538		521	1553
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	62	687	87	120	872	38	56	46	71	42	98	113
RTOR Reduction (vph)	0	0	64	0	5	0	0	0	63	0	0	73
Lane Group Flow (vph)	62	687	23	120	905	0	0	102	8	0	140	40
Heavy Vehicles (%)	0%	2%	0%	3%	3%	0%	3%	0%	5%	0%	2%	4%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			3	
Permitted Phases	6		6	2			4		4	3		3
Actuated Green, G (s)	25.5	21.4	21.4	25.7	21.5			9.2	9.2		28.3	28.3
Effective Green, g (s)	25.5	21.4	21.4	25.7	21.5			9.2	9.2		28.3	28.3
Actuated g/C Ratio	0.32	0.27	0.27	0.32	0.27			0.11	0.11		0.35	0.35
Clearance Time (s)	4.0	4.5	4.5	4.0	4.5			4.5	4.5		4.5	4.5
Vehicle Extension (s)	2.0	4.5	4.5	2.0	4.5			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	186	939	428	189	1336			160	175		182	545
v/s Ratio Prot	0.02	c0.19		c0.03	0.18							
v/s Ratio Perm	0.09		0.01	0.17				c0.07	0.01		c0.27	0.03
v/c Ratio	0.33	0.73	0.05	0.63	0.68			0.64	0.05		0.77	0.07
Uniform Delay, d1	20.0	27.0	22.1	20.9	26.4			34.1	31.8		23.2	17.4
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	3.4	0.1	5.0	1.6			8.1	0.1		17.6	0.1
Delay (s)	20.4	30.3	22.1	25.9	28.1			42.2	31.9		40.8	17.5
Level of Service	C	C	C	C	C			D	C		D	B
Approach Delay (s)		28.8			27.8			38.0			30.4	
Approach LOS		C			C			D			C	

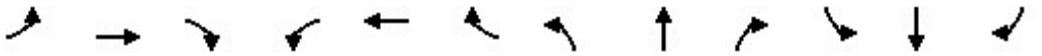
Intersection Summary			
HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	80.6	Sum of lost time (s)	17.5
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	80	611	13	20	993	534	104	40	446	220
v/c Ratio	0.83	0.46	0.02	0.21	0.94	0.64	0.53	0.13	0.95	0.44
Control Delay	105.5	26.8	0.1	53.8	51.7	6.5	53.5	0.8	70.5	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.5	26.8	0.1	53.8	51.7	6.5	53.5	0.8	70.5	23.8
Queue Length 50th (ft)	53	143	0	13	333	0	66	0	289	76
Queue Length 95th (ft)	#128	219	0	36	#418	43	108	0	#443	133
Internal Link Dist (ft)		315			426		221			272
Turn Bay Length (ft)			35	415		415		45	215	
Base Capacity (vph)	96	1335	655	94	1062	840	315	397	468	499
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	0.83	0.46	0.02	0.21	0.94	0.64	0.33	0.10	0.95	0.44

Intersection Summary

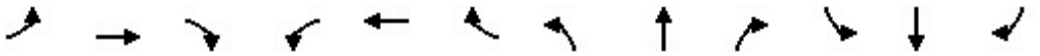
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	66	501	11	16	814	438	22	63	33	366	65	116
Future Volume (vph)	66	501	11	16	814	438	22	63	33	366	65	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	5.5	5.5	6.2	5.6	5.6		6.9	6.9	8.1	8.1	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85	1.00	0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (prot)	1656	3471	1417	1805	3471	1534		1809	1482	1770	1673	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.99	1.00	0.95	1.00	
Satd. Flow (perm)	1656	3471	1417	1805	3471	1534		1809	1482	1770	1673	
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	80	611	13	20	993	534	27	77	40	446	79	141
RTOR Reduction (vph)	0	0	8	0	0	357	0	0	36	0	58	0
Lane Group Flow (vph)	80	611	5	20	993	177	0	104	4	446	162	0
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	9%	4%	14%	0%	4%	3%	0%	5%	9%	2%	2%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		4	4	
Permitted Phases			6			2			3			
Actuated Green, G (s)	6.0	39.7	39.7	2.1	35.4	35.4		11.2	11.2	27.3	27.3	
Effective Green, g (s)	6.0	39.7	39.7	2.1	35.4	35.4		11.2	11.2	27.3	27.3	
Actuated g/C Ratio	0.06	0.37	0.37	0.02	0.33	0.33		0.10	0.10	0.26	0.26	
Clearance Time (s)	6.5	5.5	5.5	6.2	5.6	5.6		6.9	6.9	8.1	8.1	
Vehicle Extension (s)	3.0	6.0	6.0	3.0	6.0	6.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	92	1287	525	35	1148	507		189	155	451	426	
v/s Ratio Prot	c0.05	c0.18		0.01	c0.29			c0.06		c0.25	0.10	
v/s Ratio Perm			0.00			0.12			0.00			
v/c Ratio	0.87	0.47	0.01	0.57	0.86	0.35		0.55	0.03	0.99	0.38	
Uniform Delay, d1	50.1	25.7	21.2	52.0	33.6	27.1		45.5	43.0	39.7	32.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	53.1	0.8	0.0	20.6	7.9	1.2		3.4	0.1	39.0	0.6	
Delay (s)	103.2	26.5	21.3	72.6	41.5	28.3		48.9	43.1	78.7	33.4	
Level of Service	F	C	C	E	D	C		D	D	E	C	
Approach Delay (s)		35.1			37.3			47.3			63.8	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	43.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	27.1
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		

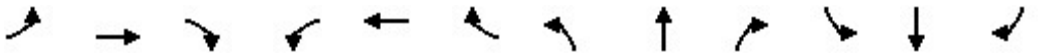
c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	196	317	455	48	365	11	450	87	45	7	150	574
v/c Ratio	0.83	0.34	0.43	0.42	0.63	0.03	0.66	0.23	0.10	0.02	0.35	0.78
Control Delay	80.5	38.6	3.1	69.4	52.8	0.1	50.5	43.6	0.4	41.0	44.4	34.3
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	80.5	38.6	3.1	69.4	52.8	0.1	50.5	43.6	0.4	41.0	44.4	34.3
Queue Length 50th (ft)	157	112	9	38	145	0	172	59	0	4	102	330
Queue Length 95th (ft)	#321	163	59	85	204	0	242	112	0	18	183	#594
Internal Link Dist (ft)		216			777			626			561	
Turn Bay Length (ft)	150		230	115		200	130		90	265		
Base Capacity (vph)	243	1150	1108	136	907	552	844	462	529	433	447	730
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	0.81	0.28	0.41	0.35	0.40	0.02	0.53	0.19	0.09	0.02	0.34	0.79

Intersection Summary

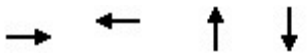
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	292	419	44	336	10	414	80	41	6	138	528
Future Volume (vph)	180	292	419	44	336	10	414	80	41	6	138	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.2	5.5	5.5	7.3	6.1	6.1	8.3	8.3	8.3	9.1	9.1	9.1
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3374	1583	1719	3374	1594	3400	1863	1455	1805	1863	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	3374	1583	1719	3374	1594	3400	1863	1455	1805	1863	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	317	455	48	365	11	450	87	45	7	150	574
RTOR Reduction (vph)	0	0	208	0	0	9	0	0	34	0	0	58
Lane Group Flow (vph)	196	317	247	48	365	2	450	87	11	7	150	516
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	3%	7%	2%	5%	7%	0%	3%	2%	11%	0%	2%	3%
Turn Type	Prot	NA	pt+ov	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	pt+ov
Protected Phases	1	6	6 3	5	2		3	3	3 5	4	4	4 1
Permitted Phases						2						
Actuated Green, G (s)	16.6	34.0	64.0	6.8	22.7	22.7	24.5	24.5	31.3	28.0	28.0	53.7
Effective Green, g (s)	16.6	34.0	64.0	6.8	22.7	22.7	24.5	24.5	31.3	28.0	28.0	53.7
Actuated g/C Ratio	0.13	0.28	0.52	0.06	0.18	0.18	0.20	0.20	0.25	0.23	0.23	0.43
Clearance Time (s)	8.2	5.5		7.3	6.1	6.1	8.3	8.3		9.1	9.1	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	235	928	820	94	620	292	674	369	368	409	422	681
v/s Ratio Prot	c0.11	0.09	0.16	0.03	c0.11		c0.13	0.05	0.01	0.00	0.08	c0.33
v/s Ratio Perm						0.00						
v/c Ratio	0.83	0.34	0.30	0.51	0.59	0.01	0.67	0.24	0.03	0.02	0.36	0.76
Uniform Delay, d1	52.1	35.8	17.0	56.7	46.1	41.2	45.7	41.6	34.7	37.1	40.2	29.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.7	0.5	0.4	4.6	2.2	0.0	2.5	0.3	0.0	0.0	0.5	4.8
Delay (s)	73.8	36.3	17.4	61.4	48.3	41.2	48.2	42.0	34.7	37.1	40.7	34.3
Level of Service	E	D	B	E	D	D	D	D	C	D	D	C
Approach Delay (s)		35.0			49.6			46.3			35.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	123.5	Sum of lost time (s)	31.7
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	617	1131	68	102
v/c Ratio	0.29	0.49	0.25	0.35
Control Delay	4.2	5.5	14.7	13.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.2	5.5	14.7	13.4
Queue Length 50th (ft)	27	61	11	12
Queue Length 95th (ft)	57	121	34	41
Internal Link Dist (ft)	196	212	242	190
Turn Bay Length (ft)				
Base Capacity (vph)	2152	2322	749	744
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	0.49	0.09	0.14

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	519	18	8	1012	20	38	11	14	35	11	48
Future Volume (vph)	30	519	18	8	1012	20	38	11	14	35	11	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.5	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.97			0.93	
Flt Protected		1.00			1.00			0.97			0.98	
Satd. Flow (prot)		3539			3523			1785			1722	
Flt Permitted		0.88			0.95			0.83			0.85	
Satd. Flow (perm)		3106			3350			1533			1489	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	564	20	9	1100	22	41	12	15	38	12	52
RTOR Reduction (vph)	0	3	0	0	2	0	0	13	0	0	39	0
Lane Group Flow (vph)	0	614	0	0	1129	0	0	55	0	0	63	0
Confl. Peds. (#/hr)			2	2			7					7
Heavy Vehicles (%)	5%	1%	0%	0%	2%	10%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		28.4			28.4			6.0			6.0	
Effective Green, g (s)		28.4			28.4			6.0			6.0	
Actuated g/C Ratio		0.65			0.65			0.14			0.14	
Clearance Time (s)		4.5			4.5			4.5			4.5	
Vehicle Extension (s)		4.0			4.0			3.0			3.0	
Lane Grp Cap (vph)		2032			2192			211			205	
v/s Ratio Prot												
v/s Ratio Perm		0.20			c0.34			0.04			c0.04	
v/c Ratio		0.30			0.52			0.26			0.31	
Uniform Delay, d1		3.2			3.9			16.7			16.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.3			0.7			0.9	
Delay (s)		3.3			4.2			17.4			17.7	
Level of Service		A			A			B			B	
Approach Delay (s)		3.3			4.2			17.4			17.7	
Approach LOS		A			A			B			B	

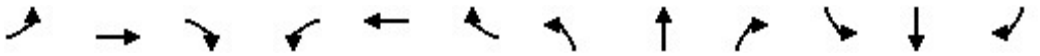
Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	43.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	360	328	1084	172	184	439	115	872
v/c Ratio	0.73	0.65	0.98	0.29	0.93	0.45	0.66	0.96
Control Delay	66.4	11.8	69.2	10.2	110.1	44.0	78.9	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.4	11.8	69.2	10.2	110.1	44.0	78.9	71.0
Queue Length 50th (ft)	167	0	514	20	169	172	102	409
Queue Length 95th (ft)	209	64	#634	67	#305	227	162	#517
Internal Link Dist (ft)	371		350			338		383
Turn Bay Length (ft)		195		300	210		265	
Base Capacity (vph)	619	548	1110	599	197	981	221	913
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	0.58	0.60	0.98	0.29	0.93	0.45	0.52	0.96

Intersection Summary

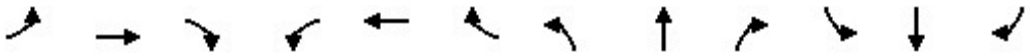
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	246	279	150	772	146	156	338	35	98	639	102
Future Volume (vph)	60	246	279	150	772	146	156	338	35	98	639	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5	5.5		5.5	5.5	5.5	6.0		5.5	6.0	
Lane Util. Factor		0.95	1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.99		1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3471	1562		3477	1577	1719	3510		1770	3450	
Flt Permitted		0.99	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		3471	1562		3477	1577	1719	3510		1770	3450	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	71	289	328	176	908	172	184	398	41	115	752	120
RTOR Reduction (vph)	0	0	281	0	0	96	0	5	0	0	9	0
Lane Group Flow (vph)	0	360	47	0	1084	76	184	434	0	115	863	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Heavy Vehicles (%)	3%	3%	2%	3%	3%	1%	5%	1%	4%	2%	2%	4%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		20.0	20.0		44.7	44.7	16.1	39.0		13.9	36.8	
Effective Green, g (s)		20.0	20.0		44.7	44.7	16.1	39.0		13.9	36.8	
Actuated g/C Ratio		0.14	0.14		0.32	0.32	0.11	0.28		0.10	0.26	
Clearance Time (s)		5.5	5.5		5.5	5.5	5.5	6.0		5.5	6.0	
Vehicle Extension (s)		2.5	2.5		2.5	2.5	3.0	6.0		3.0	6.0	
Lane Grp Cap (vph)		495	222		1109	503	197	977		175	906	
v/s Ratio Prot		c0.10			c0.31		c0.11	0.12		0.06	c0.25	
v/s Ratio Perm			0.03			0.05						
v/c Ratio		0.73	0.21		0.98	0.15	0.93	0.44		0.66	0.95	
Uniform Delay, d1		57.4	53.1		47.2	34.1	61.5	41.6		60.8	50.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.0	0.3		21.5	0.1	45.4	0.9		8.6	20.0	
Delay (s)		62.4	53.4		68.7	34.2	106.9	42.5		69.4	70.8	
Level of Service		E	D		E	C	F	D		E	E	
Approach Delay (s)		58.1			64.0			61.5			70.6	
Approach LOS		E			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	64.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	140.1	Sum of lost time (s)	22.5
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

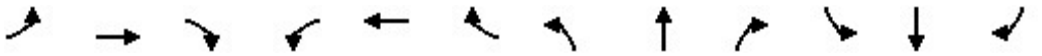


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	461	692	311	102	506	435	466	1339	85	545	1223	586
v/c Ratio	1.10	1.08	0.57	0.70	1.02	0.92	0.81	0.65	0.12	1.00	0.62	0.76
Control Delay	118.7	104.3	9.3	76.0	94.2	42.9	57.6	30.0	2.2	86.0	30.3	23.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	118.7	104.3	9.3	76.0	94.2	42.9	57.6	30.0	2.2	86.0	30.3	23.9
Queue Length 50th (ft)	~196	~306	0	74	~203	113	169	289	0	208	265	213
Queue Length 95th (ft)	#301	#427	79	#150	#317	#309	226	341	17	#324	320	374
Internal Link Dist (ft)		695			440			948			564	
Turn Bay Length (ft)	550		550	270		270	550		950	425		430
Base Capacity (vph)	421	639	541	155	496	472	632	2047	707	547	1979	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	1.10	1.08	0.57	0.66	1.02	0.92	0.74	0.65	0.12	1.00	0.62	0.76

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.



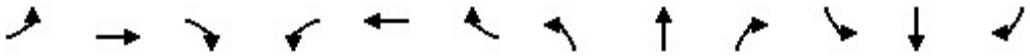
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	438	657	295	97	481	413	443	1272	81	518	1162	557
Future Volume (veh/h)	438	657	295	97	481	413	443	1272	81	518	1162	557
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1885	1870	1900	1900	1885	1885	1870
Adj Flow Rate, veh/h	461	692	0	102	506	435	466	1339	85	545	1223	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	1	2	0	0	1	1	2
Cap, veh/h	424	682		127	499	224	533	2048	636	550	2050	
Arrive On Green	0.12	0.19	0.00	0.07	0.14	0.14	0.15	0.39	0.39	0.16	0.40	0.00
Sat Flow, veh/h	3456	3554	1585	1781	3554	1598	3456	5187	1610	3483	5147	1585
Grp Volume(v), veh/h	461	692	0	102	506	435	466	1339	85	545	1223	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1781	1777	1598	1728	1729	1610	1742	1716	1585
Q Serve(g_s), s	14.0	21.9	0.0	6.4	16.0	16.0	15.0	24.0	3.8	17.8	21.4	0.0
Cycle Q Clear(g_c), s	14.0	21.9	0.0	6.4	16.0	16.0	15.0	24.0	3.8	17.8	21.4	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	424	682		127	499	224	533	2048	636	550	2050	
V/C Ratio(X)	1.09	1.01		0.80	1.01	1.94	0.87	0.65	0.13	0.99	0.60	
Avail Cap(c_a), veh/h	424	682		156	499	224	637	2048	636	550	2050	
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	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.0	46.1	0.0	52.2	49.0	49.0	47.1	28.1	22.0	47.9	27.1	0.0
Incr Delay (d2), s/veh	68.9	38.1	0.0	19.8	44.0	439.0	10.8	1.6	0.4	35.9	1.3	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	10.1	13.2	0.0	3.6	10.1	33.7	7.2	10.1	1.5	10.4	8.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	118.9	84.2	0.0	72.0	93.0	488.0	57.9	29.8	22.5	83.9	28.4	0.0
LnGrp LOS	F	F		E	F	F	E	C	C	F	C	
Approach Vol, veh/h		1153	A		1043			1890			1768	A
Approach Delay, s/veh		98.1			255.7			36.4			45.5	
Approach LOS		F			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	51.4	19.0	21.0	23.0	51.0	13.1	26.9
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	42.0	14.0	16.0	18.0	45.0	10.0	20.0
Max Q Clear Time (g_c+I1), s	17.0	23.4	16.0	18.0	19.8	26.0	8.4	23.9
Green Ext Time (p_c), s	0.6	12.8	0.0	0.0	0.0	14.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	90.4
HCM 6th LOS	F

Notes

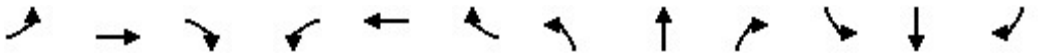
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	95	225	199	515	286	85	193	1633	509	88	1399	98
v/c Ratio	0.71	0.85	0.34	0.87	0.64	0.17	0.84	0.74	0.46	0.73	0.74	0.14
Control Delay	78.9	75.3	12.8	62.8	46.3	0.7	77.8	29.7	7.7	84.3	34.6	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	78.9	75.3	12.8	62.8	46.3	0.7	77.8	29.7	7.7	84.3	34.6	0.4
Queue Length 50th (ft)	69	162	38	190	187	0	139	367	107	64	334	0
Queue Length 95th (ft)	#147	#289	96	#274	280	0	#254	427	178	#146	393	0
Internal Link Dist (ft)		380			538			1004			707	
Turn Bay Length (ft)	150		350	460			400			270		280
Base Capacity (vph)	141	277	601	608	462	522	245	2212	1117	125	1887	720
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	0.67	0.81	0.33	0.85	0.62	0.16	0.79	0.74	0.46	0.70	0.74	0.14

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	218	193	500	277	82	187	1584	494	85	1357	95
Future Volume (veh/h)	92	218	193	500	277	82	187	1584	494	85	1357	95
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1885	1885	1885	1856	1870	1885	1885	1870	1870
Adj Flow Rate, veh/h	95	225	199	515	286	85	193	1633	509	88	1399	98
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, %	1	2	2	1	1	1	3	2	1	1	2	2
Cap, veh/h	119	259	418	574	447	378	221	2301	983	111	1978	614
Arrive On Green	0.07	0.14	0.14	0.16	0.24	0.24	0.13	0.45	0.45	0.06	0.39	0.39
Sat Flow, veh/h	1795	1870	1585	3483	1885	1598	1767	5106	1598	1795	5106	1585
Grp Volume(v), veh/h	95	225	199	515	286	85	193	1633	509	88	1399	98
Grp Sat Flow(s),veh/h/ln	1795	1870	1585	1742	1885	1598	1767	1702	1598	1795	1702	1585
Q Serve(g_s), s	5.9	13.4	12.1	16.5	15.6	4.9	12.2	29.4	20.5	5.5	26.4	4.6
Cycle Q Clear(g_c), s	5.9	13.4	12.1	16.5	15.6	4.9	12.2	29.4	20.5	5.5	26.4	4.6
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	119	259	418	574	447	378	221	2301	983	111	1978	614
V/C Ratio(X)	0.80	0.87	0.48	0.90	0.64	0.22	0.87	0.71	0.52	0.79	0.71	0.16
Avail Cap(c_a), veh/h	142	279	435	611	463	392	248	2301	983	126	1978	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	48.1	35.4	46.6	39.1	35.1	49.0	25.3	12.4	52.7	29.5	22.8
Incr Delay (d2), s/veh	21.4	23.2	0.8	15.1	2.8	0.3	24.5	1.9	1.9	24.2	2.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	7.9	4.7	8.3	7.5	1.9	6.9	12.0	7.5	3.2	11.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	71.3	36.2	61.7	42.0	35.4	73.5	27.2	14.3	76.9	31.6	23.4
LnGrp LOS	E	E	D	E	D	D	E	C	B	E	C	C
Approach Vol, veh/h		519			886			2335			1585	
Approach Delay, s/veh		58.3			52.8			28.2			33.6	
Approach LOS		E			D			C			C	

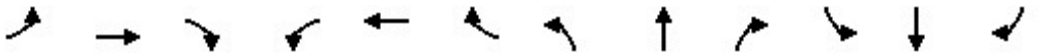
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.3	50.2	23.8	20.8	12.1	57.4	12.6	32.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	16.0	40.0	20.0	17.0	8.0	48.0	9.0	28.0
Max Q Clear Time (g_c+I1), s	14.2	28.4	18.5	15.4	7.5	31.4	7.9	17.6
Green Ext Time (p_c), s	0.1	7.5	0.3	0.3	0.0	12.2	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	36.8
HCM 6th LOS	D

Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	50	42	134	132	199	21	1910	434	228	1536
v/c Ratio	0.41	0.16	0.65	0.64	0.54	0.21	0.77	0.39	0.84	0.47
Control Delay	60.3	1.3	62.1	61.4	12.0	55.6	28.6	1.6	73.2	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.3	1.3	62.1	61.4	12.0	55.6	28.6	1.6	73.2	13.3
Queue Length 50th (ft)	36	0	98	96	0	15	456	0	159	182
Queue Length 95th (ft)	75	0	166	164	66	41	538	22	#296	328
Internal Link Dist (ft)	349			285			640			671
Turn Bay Length (ft)					160	65		215	450	
Base Capacity (vph)	177	306	243	244	399	170	2481	1151	283	3291
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	0.28	0.14	0.55	0.54	0.50	0.12	0.77	0.38	0.81	0.47

Intersection Summary

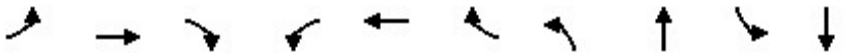
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	20	41	255	3	193	20	1853	421	221	1462	28
Future Volume (vph)	28	20	41	255	3	193	20	1853	421	221	1462	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	6.0	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.97	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1836	1568	1681	1688	1583	1770	5085	1552	1736	5118	
Flt Permitted		0.97	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1836	1568	1681	1688	1583	1770	5085	1552	1736	5118	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	29	21	42	263	3	199	21	1910	434	228	1507	29
RTOR Reduction (vph)	0	0	40	0	0	175	0	0	173	0	1	0
Lane Group Flow (vph)	0	50	2	134	132	24	21	1910	261	228	1535	0
Confl. Peds. (#/hr)									2			2
Heavy Vehicles (%)	1%	0%	3%	2%	0%	2%	2%	2%	3%	4%	1%	2%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	3	3		4	4		1	6	4	5	2	
Permitted Phases			3			4			6			
Actuated Green, G (s)		6.6	6.6	14.0	14.0	14.0	3.1	54.6	68.6	17.8	69.3	
Effective Green, g (s)		6.6	6.6	14.0	14.0	14.0	3.1	54.6	68.6	17.8	69.3	
Actuated g/C Ratio		0.06	0.06	0.12	0.12	0.12	0.03	0.48	0.60	0.16	0.61	
Clearance Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	6.0	
Vehicle Extension (s)		2.0	2.0	2.0	2.0	2.0	2.5	4.0	2.0	2.5	4.0	
Lane Grp Cap (vph)		106	90	206	207	194	48	2435	933	271	3111	
v/s Ratio Prot		c0.03		c0.08	0.08		0.01	c0.38	0.03	c0.13	0.30	
v/s Ratio Perm			0.00			0.02			0.13			
v/c Ratio		0.47	0.03	0.65	0.64	0.13	0.44	0.78	0.28	0.84	0.49	
Uniform Delay, d1		52.0	50.7	47.7	47.6	44.5	54.6	24.8	10.9	46.7	12.5	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.2	0.0	5.5	4.7	0.1	4.6	2.6	0.1	20.1	0.6	
Delay (s)		53.2	50.7	53.2	52.3	44.7	59.2	27.4	10.9	66.8	13.1	
Level of Service		D	D	D	D	D	E	C	B	E	B	
Approach Delay (s)		52.1			49.3			24.7			20.0	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

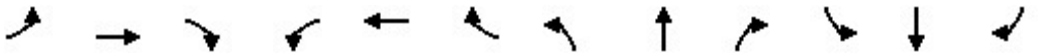


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	624	96	158	664	548	230	1502	416	1620
v/c Ratio	0.55	0.94	0.22	0.88	0.85	0.81	0.86	0.96	1.07	0.86
Control Delay	63.0	69.7	1.2	91.8	55.8	22.0	75.0	54.1	109.2	37.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.0	69.7	1.2	91.8	55.8	22.0	75.0	54.1	109.2	37.8
Queue Length 50th (ft)	60	241	0	116	254	92	163	392	~339	394
Queue Length 95th (ft)	108	#357	0	#235	#418	#311	#284	#497	#536	463
Internal Link Dist (ft)		487			952			657		412
Turn Bay Length (ft)	230		55	475		875	475		275	
Base Capacity (vph)	248	662	429	186	778	675	295	1562	388	1876
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	0.34	0.94	0.22	0.85	0.85	0.81	0.78	0.96	1.07	0.86

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

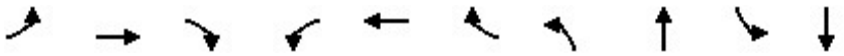
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	574	88	145	611	504	212	1256	126	383	1178	85
Future Volume (veh/h)	77	574	88	145	611	504	212	1256	126	383	1178	85
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1856	1870	1856	1870	1870	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	84	624	96	158	664	548	230	1365	137	416	1280	340
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.25
Percent Heavy Veh, %	2	2	3	2	3	2	2	1	1	2	2	2
Cap, veh/h	107	655	289	185	805	361	258	1465	147	391	1536	408
Arrive On Green	0.06	0.18	0.18	0.10	0.23	0.23	0.15	0.31	0.31	0.22	0.38	0.38
Sat Flow, veh/h	1781	3554	1570	1781	3526	1583	1781	4753	477	1781	4017	1066
Grp Volume(v), veh/h	84	624	96	158	664	548	230	985	517	416	1085	535
Grp Sat Flow(s),veh/h/ln	1781	1777	1570	1781	1763	1583	1781	1716	1799	1781	1702	1679
Q Serve(g_s), s	5.3	19.8	6.1	9.9	20.4	26.0	14.5	31.8	31.8	25.0	32.9	33.0
Cycle Q Clear(g_c), s	5.3	19.8	6.1	9.9	20.4	26.0	14.5	31.8	31.8	25.0	32.9	33.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.63
Lane Grp Cap(c), veh/h	107	655	289	185	805	361	258	1058	555	391	1302	642
V/C Ratio(X)	0.79	0.95	0.33	0.85	0.83	1.52	0.89	0.93	0.93	1.06	0.83	0.83
Avail Cap(c_a), veh/h	250	655	289	188	805	361	297	1058	555	391	1302	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	46.0	40.4	50.2	41.8	44.0	47.8	38.3	38.3	44.5	31.9	31.9
Incr Delay (d2), s/veh	4.7	25.1	2.4	28.0	8.8	246.3	22.7	15.4	24.6	63.8	6.4	12.1
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	2.5	11.0	2.5	5.9	9.8	34.8	8.0	15.4	17.6	17.8	14.4	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	71.1	42.8	78.2	50.6	290.3	70.5	53.7	62.9	108.3	38.3	44.0
LnGrp LOS	E	E	D	E	D	F	E	D	E	F	D	D
Approach Vol, veh/h		804			1370			1732			2036	
Approach Delay, s/veh		66.3			149.7			58.7			54.1	
Approach LOS		E			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	49.6	11.8	31.0	30.0	41.1	16.9	26.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	41.0	16.0	17.0	25.0	35.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	16.5	35.0	7.3	28.0	27.0	33.8	11.9	21.8
Green Ext Time (p_c), s	0.1	5.7	0.1	0.0	0.0	1.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	79.1
HCM 6th LOS	E

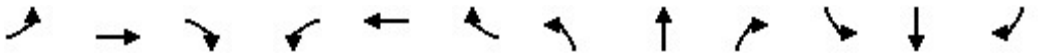


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	127	256	180	196	247	116	187	1897	19	419
v/c Ratio	0.60	1.16	0.35	0.77	0.92	0.32	0.91	0.74	0.19	0.21
Control Delay	60.8	155.5	6.5	67.3	86.6	4.7	93.2	24.4	55.4	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	60.8	155.5	6.5	67.3	86.6	4.7	93.2	24.4	55.4	22.9
Queue Length 50th (ft)	90	~223	0	140	181	0	137	330	14	72
Queue Length 95th (ft)	155	#388	52	#252	#334	21	#273	512	38	97
Internal Link Dist (ft)		431			703			305		418
Turn Bay Length (ft)	225		350	325			275		175	
Base Capacity (vph)	210	221	510	256	269	363	207	2553	164	1976
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	1.16	0.35	0.77	0.92	0.32	0.90	0.74	0.12	0.21

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	243	171	186	235	110	178	1434	369	18	377	21
Future Volume (vph)	121	243	171	186	235	110	178	1434	369	18	377	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.8		6.5	6.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1573	1770	1863	1561	1752	4905		1787	5041	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1863	1573	1770	1863	1561	1752	4905		1787	5041	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	127	256	180	196	247	116	187	1509	388	19	397	22
RTOR Reduction (vph)	0	0	138	0	0	99	0	35	0	0	5	0
Lane Group Flow (vph)	127	256	42	196	247	17	187	1862	0	19	414	0
Confl. Peds. (#/hr)	1		1	1		1	2		1	1		2
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	2%	3%	1%	2%	1%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4	1	3	3		1	6		5	2	
Permitted Phases			4			3						
Actuated Green, G (s)	13.5	13.5	26.9	16.5	16.5	16.5	13.4	54.7		3.0	44.6	
Effective Green, g (s)	13.5	13.5	26.9	16.5	16.5	16.5	13.4	54.7		3.0	44.6	
Actuated g/C Ratio	0.12	0.12	0.24	0.14	0.14	0.14	0.12	0.48		0.03	0.39	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.8		6.5	6.5	
Vehicle Extension (s)	3.0	3.0	2.5	3.0	3.0	3.0	2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	209	220	460	256	269	225	205	2353		47	1972	
v/s Ratio Prot	0.07	c0.14	0.01	0.11	c0.13		c0.11	c0.38		0.01	0.08	
v/s Ratio Perm			0.02			0.01						
v/c Ratio	0.61	1.16	0.09	0.77	0.92	0.07	0.91	0.79		0.40	0.21	
Uniform Delay, d1	47.7	50.2	34.0	46.9	48.1	42.1	49.7	24.9		54.6	23.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.9	111.9	0.1	12.8	33.6	0.1	39.2	2.8		4.1	0.2	
Delay (s)	52.7	162.2	34.1	59.7	81.7	42.3	88.9	27.7		58.7	23.3	
Level of Service	D	F	C	E	F	D	F	C		E	C	
Approach Delay (s)		96.5			65.8			33.2			24.8	
Approach LOS		F			E			C			C	

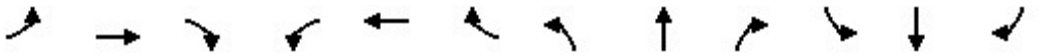
Intersection Summary			
HCM 2000 Control Delay	47.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	26.3
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	11	94	157	4	2011	160	1827
v/c Ratio	0.12	0.78	0.55	0.05	0.62	0.74	0.46
Control Delay	49.1	88.5	15.4	53.0	13.3	69.0	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	88.5	15.4	53.0	13.3	69.0	4.7
Queue Length 50th (ft)	7	68	0	3	306	114	115
Queue Length 95th (ft)	26	#155	64	14	362	#186	227
Internal Link Dist (ft)	239	270			271		254
Turn Bay Length (ft)			95	200		175	
Base Capacity (vph)	152	129	293	162	3242	248	3941
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	0.07	0.73	0.54	0.02	0.62	0.65	0.46

Intersection Summary

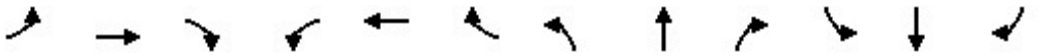
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	4	1	87	1	148	4	1807	84	150	1567	150
Future Volume (veh/h)	6	4	1	87	1	148	4	1807	84	150	1567	150
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1856	1796	1856	1856	1870	1856	1856
Adj Flow Rate, veh/h	6	4	1	93	1	157	4	1922	89	160	1667	160
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	3	7	3	3	2	3	3
Cap, veh/h	66	36	5	184	1	152	9	3260	151	189	3563	341
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.01	0.66	0.66	0.11	0.76	0.76
Sat Flow, veh/h	178	373	55	1260	14	1572	1711	4962	229	1781	4701	450
Grp Volume(v), veh/h	11	0	0	94	0	157	4	1307	704	160	1197	630
Grp Sat Flow(s),veh/h/ln	606	0	0	1273	0	1572	1711	1689	1814	1781	1689	1774
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	11.0	0.3	24.7	24.8	10.1	15.1	15.2
Cycle Q Clear(g_c), s	8.6	0.0	0.0	8.5	0.0	11.0	0.3	24.7	24.8	10.1	15.1	15.2
Prop In Lane	0.55		0.09	0.99		1.00	1.00		0.13	1.00		0.25
Lane Grp Cap(c), veh/h	107	0	0	186	0	152	9	2219	1192	189	2560	1344
V/C Ratio(X)	0.10	0.00	0.00	0.51	0.00	1.03	0.45	0.59	0.59	0.85	0.47	0.47
Avail Cap(c_a), veh/h	107	0	0	186	0	152	165	2219	1192	250	2560	1344
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	47.0	0.0	0.0	50.4	0.0	51.5	56.5	10.9	11.0	50.0	5.2	5.2
Incr Delay (d2), s/veh	0.3	0.0	0.0	1.7	0.0	82.5	23.9	1.2	2.2	16.8	0.6	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	0.3	0.0	0.0	2.7	0.0	7.8	0.2	8.9	9.9	5.4	4.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.3	0.0	0.0	52.1	0.0	134.0	80.5	12.1	13.1	66.8	5.8	6.4
LnGrp LOS	D	A	A	D	A	F	F	B	B	E	A	A
Approach Vol, veh/h		11			251			2015			1987	
Approach Delay, s/veh		47.3			103.3			12.6			10.9	
Approach LOS		D			F			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	92.4		16.0	17.1	80.9		16.0				
Change Period (Y+Rc), s	5.0	6.0		5.0	5.0	6.0		5.0				
Max Green Setting (Gmax), s	11.0	76.0		11.0	16.0	71.0		11.0				
Max Q Clear Time (g_c+I1), s	2.3	17.2		13.0	12.1	26.8		10.6				
Green Ext Time (p_c), s	0.0	33.9		0.0	0.1	31.8		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		17.2	
HCM 6th LOS		B	

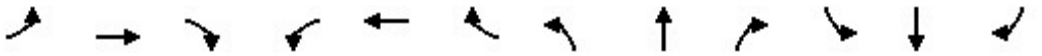


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	324	677	186	178	618	224	53	1528	372	280	1005	884
v/c Ratio	1.16	1.16	0.12	0.68	1.18	0.37	0.43	0.91	0.45	1.09	0.66	0.89
Control Delay	147.1	130.3	0.2	59.8	143.5	19.7	60.9	45.7	8.4	126.6	29.4	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	147.1	130.3	0.2	59.8	143.5	19.7	60.9	45.7	8.4	126.6	29.4	23.1
Queue Length 50th (ft)	~308	~321	0	125	~286	77	38	390	53	~230	314	252
Queue Length 95th (ft)	#505	#447	0	#213	#403	144	78	#466	89	#401	401	#586
Internal Link Dist (ft)		738			586			849			590	
Turn Bay Length (ft)	650		410			230	775		425	485		
Base Capacity (vph)	279	586	1568	263	522	605	155	1678	823	258	1521	998
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	1.16	1.16	0.12	0.68	1.18	0.37	0.34	0.91	0.45	1.09	0.66	0.89

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	370	601	180	173	599	217	51	1482	361	272	975	857
Future Volume (vph)	370	601	180	173	599	217	51	1482	361	272	975	857
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	4.0	6.0	6.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1595	3343	1568	1770	3505	1583	1770	5036	1583	1736	3539	1563
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1595	3343	1568	1770	3505	1583	1770	5036	1583	1736	3539	1563
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	381	620	186	178	618	224	53	1528	372	280	1005	884
RTOR Reduction (vph)	0	0	0	0	0	54	0	0	60	0	0	331
Lane Group Flow (vph)	324	677	186	178	618	170	53	1528	312	280	1005	553
Confl. Peds. (#/hr)							1					1
Heavy Vehicles (%)	3%	3%	3%	2%	3%	2%	2%	3%	2%	4%	2%	2%
Turn Type	Split	NA	Free	Split	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	3	3		4	4	5	1	6	4	5	2	
Permitted Phases			Free			4			6			2
Actuated Green, G (s)	20.0	20.0	114.0	17.0	17.0	34.0	7.0	38.0	55.0	17.0	48.0	48.0
Effective Green, g (s)	20.0	20.0	114.0	17.0	17.0	34.0	7.0	38.0	55.0	17.0	48.0	48.0
Actuated g/C Ratio	0.18	0.18	1.00	0.15	0.15	0.30	0.06	0.33	0.48	0.15	0.42	0.42
Clearance Time (s)	5.0	5.0		6.0	6.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	2.5	5.0	2.5	2.5	5.0	5.0
Lane Grp Cap (vph)	279	586	1568	263	522	472	108	1678	763	258	1490	658
v/s Ratio Prot	c0.20	0.20		0.10	c0.18	0.05	0.03	c0.30	0.06	c0.16	0.28	
v/s Ratio Perm			0.12			0.05			0.14			0.35
v/c Ratio	1.16	1.16	0.12	0.68	1.18	0.36	0.49	0.91	0.41	1.09	0.67	0.84
Uniform Delay, d1	47.0	47.0	0.0	45.9	48.5	31.4	51.8	36.4	19.0	48.5	26.7	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	104.8	88.0	0.2	6.1	101.0	0.3	2.5	8.9	0.3	80.6	2.5	12.3
Delay (s)	151.8	135.0	0.2	52.0	149.5	31.8	54.3	45.3	19.3	129.1	29.1	41.8
Level of Service	F	F	A	D	F	C	D	D	B	F	C	D
Approach Delay (s)		118.5			106.6			40.6			47.2	
Approach LOS		F			F			D			D	

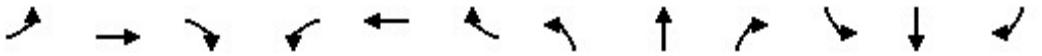
Intersection Summary			
HCM 2000 Control Delay	68.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	209	659	545	19	639	575	1229	11	95	648	224
v/c Ratio	0.81	0.56	0.54	0.23	0.90	0.86	0.80	0.01	0.64	0.58	0.34
Control Delay	82.8	42.5	11.8	72.3	71.1	69.8	41.8	0.0	82.3	45.4	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
Total Delay	82.8	42.5	11.8	72.3	71.1	69.8	41.8	0.0	82.3	45.4	6.2
Queue Length 50th (ft)	191	272	158	18	301	268	541	0	88	281	0
Queue Length 95th (ft)	277	345	263	46	#434	335	658	0	148	352	63
Internal Link Dist (ft)		434			495		535			418	
Turn Bay Length (ft)	275		230	200		315		115	340		240
Base Capacity (vph)	310	1182	1041	175	713	724	1539	762	188	1113	657
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	0.67	0.56	0.52	0.11	0.90	0.79	0.80	0.01	0.51	0.58	0.34

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	613	507	18	510	85	535	1143	10	88	603	208
Future Volume (veh/h)	194	613	507	18	510	85	535	1143	10	88	603	208
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1900	1900	1900	1900	1900	1841	1900	1900	1900	1885	1900
Adj Flow Rate, veh/h	209	659	545	19	548	91	575	1229	0	95	648	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	0	0	0	0	0	4	0	0	0	1	0
Cap, veh/h	234	1030	758	33	538	89	632	1754		117	1307	
Arrive On Green	0.13	0.29	0.29	0.02	0.17	0.17	0.19	0.49	0.00	0.06	0.36	0.00
Sat Flow, veh/h	1795	3610	1610	1810	3100	513	3401	3610	1610	1810	3582	1610
Grp Volume(v), veh/h	209	659	545	19	318	321	575	1229	0	95	648	0
Grp Sat Flow(s),veh/h/ln	1795	1805	1610	1810	1805	1808	1700	1805	1610	1810	1791	1610
Q Serve(g_s), s	16.5	23.0	39.0	1.5	25.0	25.0	23.9	38.2	0.0	7.5	20.2	0.0
Cycle Q Clear(g_c), s	16.5	23.0	39.0	1.5	25.0	25.0	23.9	38.2	0.0	7.5	20.2	0.0
Prop In Lane	1.00		1.00	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	1030	758	33	313	314	632	1754		117	1307	
V/C Ratio(X)	0.90	0.64	0.72	0.57	1.02	1.02	0.91	0.70		0.81	0.50	
Avail Cap(c_a), veh/h	312	1030	758	176	313	314	732	1754		188	1307	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	61.7	45.0	30.5	70.1	59.5	59.5	57.5	28.9	0.0	66.5	35.5	0.0
Incr Delay (d2), s/veh	20.5	1.3	3.3	10.8	54.9	56.5	13.8	2.4	0.0	9.9	1.3	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	8.9	10.6	15.7	0.8	16.2	16.4	11.5	17.0	0.0	3.8	9.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.1	46.3	33.8	80.9	114.4	116.0	71.3	31.2	0.0	76.4	36.8	0.0
LnGrp LOS	F	D	C	F	F	F	E	C		E	D	
Approach Vol, veh/h		1413			658			1804	A		743	A
Approach Delay, s/veh		46.8			114.2			44.0			41.9	
Approach LOS		D			F			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	76.0	7.7	46.1	31.7	58.5	23.7	30.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	54.0	14.0	38.0	31.0	40.0	25.0	25.0
Max Q Clear Time (g_c+I1), s	9.5	40.2	3.5	41.0	25.9	22.2	18.5	27.0
Green Ext Time (p_c), s	0.1	10.4	0.0	0.0	0.9	7.0	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.5
HCM 6th LOS	D

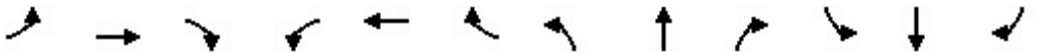
Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	501	281	139	258	56	183	1218	118	45	843	269
v/c Ratio	0.86	0.47	0.24	0.74	0.20	0.78	0.69	0.14	0.37	0.58	0.33
Control Delay	62.4	46.3	6.8	64.1	1.6	71.2	27.2	3.0	59.5	29.6	4.0
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	62.4	46.3	6.8	64.1	1.6	71.2	27.2	3.0	59.5	29.6	4.0
Queue Length 50th (ft)	188	100	8	99	0	132	381	0	33	265	0
Queue Length 95th (ft)	#267	144	49	145	0	#224	491	28	69	334	53
Internal Link Dist (ft)		599		369			448			430	
Turn Bay Length (ft)	340		340		80	210			280		215
Base Capacity (vph)	604	623	598	365	285	264	1754	852	202	1450	815
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	0.83	0.45	0.23	0.71	0.20	0.69	0.69	0.14	0.22	0.58	0.33

Intersection Summary

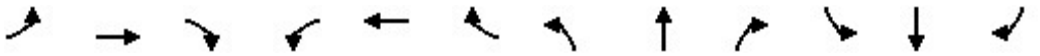
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	476	267	132	82	163	53	174	1157	112	43	801	256
Future Volume (vph)	476	267	132	82	163	53	174	1157	112	43	801	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.0		6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3502	3610	1601		3527	1615	1805	3610	1615	1805	3574	1615
Flt Permitted	0.95	1.00	1.00		0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3502	3610	1601		3527	1615	1805	3610	1615	1805	3574	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	501	281	139	86	172	56	183	1218	118	45	843	269
RTOR Reduction (vph)	0	0	87	0	0	50	0	0	62	0	0	160
Lane Group Flow (vph)	501	281	52	0	258	6	183	1218	56	45	843	109
Confl. Peds. (#/hr)			4	4								
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	5	3	3		5	2		1	6	
Permitted Phases			4			3			2			6
Actuated Green, G (s)	19.3	19.3	34.4		11.5	11.5	15.1	55.4	55.4	6.8	47.1	47.1
Effective Green, g (s)	19.3	19.3	34.4		11.5	11.5	15.1	55.4	55.4	6.8	47.1	47.1
Actuated g/C Ratio	0.17	0.17	0.30		0.10	0.10	0.13	0.48	0.48	0.06	0.41	0.41
Clearance Time (s)	6.0	6.0	5.0		6.0	6.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5	6.0	6.0	2.5	6.0	6.0
Lane Grp Cap (vph)	582	600	474		349	160	234	1724	771	105	1451	655
v/s Ratio Prot	c0.14	0.08	0.01		c0.07		c0.10	c0.34		0.02	0.24	
v/s Ratio Perm			0.02			0.00			0.03			0.07
v/c Ratio	0.86	0.47	0.11		0.74	0.03	0.78	0.71	0.07	0.43	0.58	0.17
Uniform Delay, d1	47.0	43.7	29.7		50.8	47.2	48.9	23.9	16.4	52.7	26.8	21.9
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.3	0.4	0.1		7.5	0.1	15.0	2.5	0.2	2.0	1.7	0.5
Delay (s)	59.3	44.1	29.8		58.3	47.3	63.9	26.4	16.6	54.8	28.5	22.5
Level of Service	E	D	C		E	D	E	C	B	D	C	C
Approach Delay (s)		50.2			56.4			30.1			28.1	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	36.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

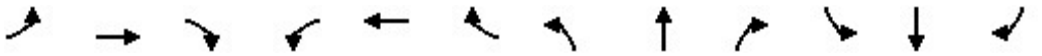
c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	69	70	265	73	75	173	277	1180	162	154	762	153
v/c Ratio	0.49	0.49	0.53	0.59	0.58	0.62	0.84	0.66	0.18	0.85	0.43	0.17
Control Delay	62.7	62.2	20.0	70.7	69.1	17.9	74.0	24.7	1.9	89.1	19.7	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.7	62.2	20.0	70.7	69.1	17.9	74.0	24.7	1.9	89.1	19.7	1.5
Queue Length 50th (ft)	51	52	69	55	57	0	107	345	0	117	191	0
Queue Length 95th (ft)	103	103	155	108	110	68	#184	423	24	#252	242	19
Internal Link Dist (ft)		193			125			406			259	
Turn Bay Length (ft)	250		130	175		175	350			215		615
Base Capacity (vph)	160	164	478	144	151	295	330	1781	882	181	1792	903
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	0.43	0.43	0.55	0.51	0.50	0.59	0.84	0.66	0.18	0.85	0.43	0.17

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	37	252	95	46	164	263	1121	154	146	724	145
Future Volume (vph)	95	37	252	95	46	164	263	1121	154	146	724	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	7.3	7.3	8.0	8.0	8.0	7.6	5.9	5.9	7.8	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00	0.95	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.98	1.00	0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1715	1766	1583	1681	1760	1589	3502	3610	1595	1805	3574	1615
Flt Permitted	0.95	0.98	1.00	0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1715	1766	1583	1681	1760	1589	3502	3610	1595	1805	3574	1615
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	39	265	100	48	173	277	1180	162	154	762	153
RTOR Reduction (vph)	0	0	116	0	0	160	0	0	82	0	0	76
Lane Group Flow (vph)	69	70	149	73	75	13	277	1180	80	154	762	77
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	1%	0%
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	4	4	4 5	3	3		5	2		1	6	
Permitted Phases						3			2			6
Actuated Green, G (s)	9.5	9.5	27.8	8.6	8.6	8.6	11.0	57.2	57.2	11.7	58.1	58.1
Effective Green, g (s)	9.5	9.5	27.8	8.6	8.6	8.6	11.0	57.2	57.2	11.7	58.1	58.1
Actuated g/C Ratio	0.08	0.08	0.24	0.07	0.07	0.07	0.09	0.49	0.49	0.10	0.50	0.50
Clearance Time (s)	7.3	7.3		8.0	8.0	8.0	7.6	5.9	5.9	7.8	5.9	5.9
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	6.0	6.0	2.0	6.0	6.0
Lane Grp Cap (vph)	140	144	379	124	130	117	332	1780	786	182	1790	808
v/s Ratio Prot	0.04	0.04	c0.09	c0.04	0.04		0.08	c0.33		c0.09	0.21	
v/s Ratio Perm						0.01			0.05			0.05
v/c Ratio	0.49	0.49	0.39	0.59	0.58	0.11	0.83	0.66	0.10	0.85	0.43	0.09
Uniform Delay, d1	50.9	50.9	37.0	52.0	51.9	50.1	51.6	22.1	15.7	51.3	18.4	15.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	0.9	0.2	4.5	3.8	0.2	15.7	2.0	0.3	27.7	0.7	0.2
Delay (s)	51.9	51.9	37.3	56.5	55.8	50.3	67.3	24.1	15.9	78.9	19.1	15.4
Level of Service	D	D	D	E	E	D	E	C	B	E	B	B
Approach Delay (s)		42.3			53.0			30.7			27.2	
Approach LOS		D			D			C			C	

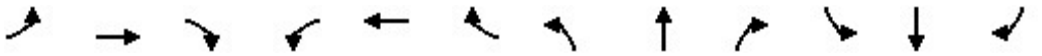
Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	29.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	79	232	82	90	1506	190	95	1033	2
v/c Ratio	0.46	0.77	0.20	0.55	0.81	0.21	0.65	0.55	0.00
Control Delay	33.0	63.0	1.1	61.9	29.8	3.2	71.9	23.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	63.0	1.1	61.9	29.8	3.2	71.9	23.2	0.0
Queue Length 50th (ft)	23	165	0	65	514	0	69	287	0
Queue Length 95th (ft)	70	#267	0	115	#710	40	#137	414	0
Internal Link Dist (ft)	151	218			318			355	
Turn Bay Length (ft)			50	150		450	250		200
Base Capacity (vph)	252	320	427	241	1862	924	158	1873	922
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	0.31	0.72	0.19	0.37	0.81	0.21	0.60	0.55	0.00

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	29	44	194	24	77	85	1416	179	89	971	2
Future Volume (vph)	1	29	44	194	24	77	85	1416	179	89	971	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.92			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00			0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1746			1793	1615	1752	3610	1615	1805	3574	1615
Flt Permitted		1.00			0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1746			1793	1615	1752	3610	1615	1805	3574	1615
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	31	47	206	26	82	90	1506	190	95	1033	2
RTOR Reduction (vph)	0	44	0	0	0	68	0	0	94	0	0	1
Lane Group Flow (vph)	0	35	0	0	232	14	90	1506	96	95	1033	1
Heavy Vehicles (%)	0%	0%	0%	1%	5%	0%	3%	0%	0%	0%	1%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases						4			2			6
Actuated Green, G (s)		7.1			19.5	19.5	9.5	58.9	58.9	9.5	58.9	58.9
Effective Green, g (s)		7.1			19.5	19.5	9.5	58.9	58.9	9.5	58.9	58.9
Actuated g/C Ratio		0.06			0.17	0.17	0.08	0.51	0.51	0.08	0.51	0.51
Clearance Time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)		3.0			3.0	3.0	2.5	4.5	4.5	2.5	4.5	4.5
Lane Grp Cap (vph)		106			301	271	143	1833	820	147	1814	820
v/s Ratio Prot		c0.02			c0.13		0.05	c0.42		c0.05	0.29	
v/s Ratio Perm						0.01			0.06			0.00
v/c Ratio		0.33			0.77	0.05	0.63	0.82	0.12	0.65	0.57	0.00
Uniform Delay, d1		52.2			46.1	40.5	51.5	24.1	14.9	51.6	19.8	14.1
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		1.8			11.5	0.1	7.3	4.3	0.3	8.3	1.3	0.0
Delay (s)		54.0			57.7	40.6	58.8	28.4	15.2	60.0	21.1	14.1
Level of Service		D			E	D	E	C	B	E	C	B
Approach Delay (s)		54.0			53.2			28.5			24.3	
Approach LOS		D			D			C			C	

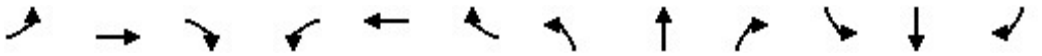
Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	155	868	282	349	634	229	229	1313	345	249	1023
v/c Ratio	0.61	0.96	0.41	0.97	0.63	0.31	0.64	1.02	0.44	0.73	0.57
Control Delay	62.5	65.7	19.3	93.9	39.5	15.6	58.1	68.7	15.7	63.5	31.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.5	65.7	19.3	93.9	39.5	15.6	58.1	68.7	15.7	63.5	31.9
Queue Length 50th (ft)	58	338	105	136	218	71	85	~557	120	93	224
Queue Length 95th (ft)	94	#470	174	#231	282	131	125	#695	192	138	276
Internal Link Dist (ft)		473			499			459			344
Turn Bay Length (ft)	280		470	200		390	320			240	
Base Capacity (vph)	268	900	712	358	1014	737	414	1282	783	362	1780
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	0.96	0.40	0.97	0.63	0.31	0.55	1.02	0.44	0.69	0.57

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	842	274	339	615	222	222	1274	335	242	915	78
Future Volume (veh/h)	150	842	274	339	615	222	222	1274	335	242	915	78
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1885	1885	1885	1870	1885	1885	1900	1870	1870
Adj Flow Rate, veh/h	155	868	0	349	634	229	229	1313	0	249	943	80
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, %	1	2	2	1	1	1	2	1	1	0	2	2
Cap, veh/h	213	904		360	1063	614	291	1321		309	1787	151
Arrive On Green	0.06	0.25	0.00	0.10	0.30	0.30	0.08	0.37	0.00	0.09	0.37	0.37
Sat Flow, veh/h	3483	3554	1585	3483	3582	1598	3456	3582	1598	3510	4795	406
Grp Volume(v), veh/h	155	868	0	349	634	229	229	1313	0	249	669	354
Grp Sat Flow(s),veh/h/ln	1742	1777	1585	1742	1791	1598	1728	1791	1598	1755	1702	1797
Q Serve(g_s), s	5.1	28.0	0.0	11.6	17.5	11.9	7.5	42.4	0.0	8.1	17.8	17.9
Cycle Q Clear(g_c), s	5.1	28.0	0.0	11.6	17.5	11.9	7.5	42.4	0.0	8.1	17.8	17.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	213	904		360	1063	614	291	1321		309	1269	670
V/C Ratio(X)	0.73	0.96		0.97	0.60	0.37	0.79	0.99		0.81	0.53	0.53
Avail Cap(c_a), veh/h	270	904		360	1063	614	417	1321		363	1269	670
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	53.5	42.7	0.0	51.8	34.9	25.6	52.1	36.5	0.0	51.9	28.4	28.4
Incr Delay (d2), s/veh	6.1	21.8	0.0	38.9	2.5	1.7	5.3	23.3	0.0	10.2	1.6	3.0
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	2.4	14.9	0.0	7.0	8.0	4.8	3.5	22.4	0.0	4.0	7.5	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.6	64.4	0.0	90.7	37.3	27.4	57.3	59.8	0.0	62.2	30.0	31.4
LnGrp LOS	E	E		F	D	C	E	E		E	C	C
Approach Vol, veh/h		1023	A		1212			1542	A		1272	
Approach Delay, s/veh		63.7			50.8			59.4			36.7	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	48.8	12.1	39.9	14.8	49.2	17.0	35.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.5	5.0	6.0	5.0	5.5
Max Green Setting (Gmax), s	12.0	41.0	9.0	32.5	14.0	39.0	12.0	29.5
Max Q Clear Time (g_c+I1), s	10.1	44.4	7.1	19.5	9.5	19.9	13.6	30.0
Green Ext Time (p_c), s	0.1	0.0	0.1	8.9	0.2	15.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

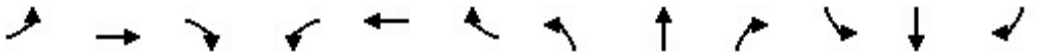
Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	30	181	143	36	1700	155	163	1493
v/c Ratio	0.28	0.77	0.29	0.35	0.62	0.17	0.76	0.45
Control Delay	50.0	69.9	10.5	62.0	20.8	2.8	71.7	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.0	69.9	10.5	62.0	20.8	2.8	71.7	12.7
Queue Length 50th (ft)	17	130	22	26	354	0	118	245
Queue Length 95th (ft)	48	#224	63	61	410	32	#211	287
Internal Link Dist (ft)	192	548			450			520
Turn Bay Length (ft)			225	315		395	165	
Base Capacity (vph)	114	260	517	107	2735	939	233	3324
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	0.26	0.70	0.28	0.34	0.62	0.17	0.70	0.45

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	6	7	170	8	140	35	1666	152	160	1443	21
Future Volume (vph)	17	6	7	170	8	140	35	1666	152	160	1443	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.97			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1789			1779	1615	1787	4988	1581	1805	5124	
Flt Permitted		0.97			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1789			1779	1615	1787	4988	1581	1805	5124	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	17	6	7	173	8	143	36	1700	155	163	1472	21
RTOR Reduction (vph)	0	7	0	0	0	69	0	0	73	0	1	0
Lane Group Flow (vph)	0	23	0	0	181	74	36	1700	82	163	1492	0
Confl. Peds. (#/hr)							2		1	1		2
Heavy Vehicles (%)	0%	0%	0%	2%	0%	0%	1%	4%	0%	0%	1%	0%
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases						3			2			
Actuated Green, G (s)		4.2			15.4	29.2	4.2	61.6	61.6	13.8	71.2	
Effective Green, g (s)		4.2			15.4	29.2	4.2	61.6	61.6	13.8	71.2	
Actuated g/C Ratio		0.04			0.13	0.25	0.04	0.53	0.53	0.12	0.61	
Clearance Time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)		64			236	406	64	2648	839	214	3145	
v/s Ratio Prot		c0.01			c0.10	0.02	0.02	c0.34		c0.09	0.29	
v/s Ratio Perm						0.02			0.05			
v/c Ratio		0.36			0.77	0.18	0.56	0.64	0.10	0.76	0.47	
Uniform Delay, d1		54.6			48.6	34.0	55.0	19.4	13.5	49.5	12.2	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.5			13.8	0.2	10.8	1.2	0.2	14.7	0.5	
Delay (s)		58.1			62.4	34.3	65.8	20.6	13.7	64.3	12.7	
Level of Service		E			E	C	E	C	B	E	B	
Approach Delay (s)		58.1			50.0			20.9			17.8	
Approach LOS		E			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	183	204	77	167	1773	15	1579	166
v/c Ratio	0.87	0.52	0.45	0.77	0.50	0.14	0.54	0.17
Control Delay	83.1	15.9	41.0	71.8	9.9	54.3	16.7	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.1	15.9	41.0	71.8	9.9	54.3	16.7	2.3
Queue Length 50th (ft)	134	24	37	121	173	11	267	0
Queue Length 95th (ft)	#257	97	87	#214	311	33	310	30
Internal Link Dist (ft)	312		290		483		269	
Turn Bay Length (ft)		215		415		275		1000
Base Capacity (vph)	221	401	179	238	3522	122	2927	982
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	0.83	0.51	0.43	0.70	0.50	0.12	0.54	0.17

Intersection Summary

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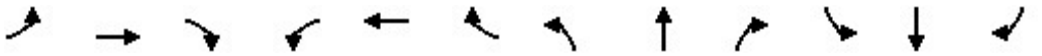


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	8	198	41	6	28	162	1699	20	15	1532	161
Future Volume (vph)	170	8	198	41	6	28	162	1699	20	15	1532	161
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0		5.5	6.0		5.5	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frt		1.00	0.85		0.95		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1813	1599		1729		1787	5076		1671	5136	1599
Flt Permitted		0.71	1.00		0.55		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1350	1599		981		1787	5076		1671	5136	1599
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	175	8	204	42	6	29	167	1752	21	15	1579	166
RTOR Reduction (vph)	0	0	141	0	19	0	0	1	0	0	0	71
Lane Group Flow (vph)	0	183	63	0	58	0	167	1772	0	15	1579	95
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	0%	0%	1%	0%	0%	4%	1%	2%	0%	8%	1%	1%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								6
Actuated Green, G (s)		18.2	18.2		18.2		14.2	77.2		3.1	66.1	66.1
Effective Green, g (s)		18.2	18.2		18.2		14.2	77.2		3.1	66.1	66.1
Actuated g/C Ratio		0.16	0.16		0.16		0.12	0.67		0.03	0.57	0.57
Clearance Time (s)		6.0	6.0		6.0		5.5	6.0		5.5	6.0	6.0
Vehicle Extension (s)		3.5	3.5		3.5		3.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)		211	250		153		218	3378		44	2926	911
v/s Ratio Prot							c0.09	c0.35		0.01	0.31	
v/s Ratio Perm		c0.14	0.04		0.06							0.06
v/c Ratio		0.87	0.25		0.38		0.77	0.52		0.34	0.54	0.10
Uniform Delay, d1		47.7	42.9		43.9		49.3	10.0		55.4	15.5	11.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		29.7	0.6		1.9		14.8	0.6		4.6	0.7	0.2
Delay (s)		77.4	43.6		45.7		64.1	10.6		60.0	16.2	11.6
Level of Service		E	D		D		E	B		E	B	B
Approach Delay (s)		59.6			45.7			15.2			16.2	
Approach LOS		E			D			B			B	

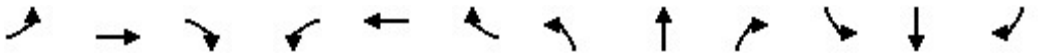
Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	102	116	64	25	118	1924	40	1788
v/c Ratio	0.69	0.48	0.48	0.11	0.71	0.58	0.30	0.60
Control Delay	75.1	15.0	62.9	1.0	73.6	14.3	56.7	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.1	15.0	62.9	1.0	73.6	14.3	56.7	17.4
Queue Length 50th (ft)	75	0	46	0	86	337	29	327
Queue Length 95th (ft)	#155	52	92	0	#161	407	64	378
Internal Link Dist (ft)	178		254			316		213
Turn Bay Length (ft)		115		100	315		320	
Base Capacity (vph)	156	248	155	244	184	3330	171	2985
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	0.65	0.47	0.41	0.10	0.64	0.58	0.23	0.60

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	14	113	48	15	24	114	1848	18	39	1659	76
Future Volume (vph)	85	14	113	48	15	24	114	1848	18	39	1659	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1775	1568		1802	1538	1787	5121		1805	5095	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1775	1568		1802	1538	1787	5121		1805	5095	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	88	14	116	49	15	25	118	1905	19	40	1710	78
RTOR Reduction (vph)	0	0	106	0	0	23	0	1	0	0	4	0
Lane Group Flow (vph)	0	102	10	0	64	2	118	1923	0	40	1784	0
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	3%	0%	3%	2%	0%	5%	1%	1%	13%	0%	1%	2%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		9.7	9.7		7.5	7.5	10.9	72.4		5.4	66.9	
Effective Green, g (s)		9.7	9.7		7.5	7.5	10.9	72.4		5.4	66.9	
Actuated g/C Ratio		0.08	0.08		0.06	0.06	0.09	0.62		0.05	0.58	
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	2.5	6.0		2.5	6.0	
Lane Grp Cap (vph)		148	131		116	99	167	3196		84	2938	
v/s Ratio Prot		c0.06			c0.04		c0.07	c0.38		0.02	0.35	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.69	0.07		0.55	0.02	0.71	0.60		0.48	0.61	
Uniform Delay, d1		51.7	49.0		52.6	50.8	51.0	13.1		53.9	16.0	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		12.6	0.2		5.6	0.1	11.9	0.8		3.1	0.9	
Delay (s)		64.3	49.3		58.2	50.9	62.9	14.0		57.0	16.9	
Level of Service		E	D		E	D	E	B		E	B	
Approach Delay (s)		56.3			56.1			16.8			17.8	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBU	NBT	SBL	SBT
Lane Group Flow (vph)	10	2	21	2050	5	1880
v/c Ratio	0.09	0.02	0.18	0.44	0.06	0.41
Control Delay	53.0	36.0	54.8	3.1	53.0	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	36.0	54.8	3.1	53.0	3.7
Queue Length 50th (ft)	7	0	15	0	4	0
Queue Length 95th (ft)	25	9	41	280	17	238
Internal Link Dist (ft)	469			187		179
Turn Bay Length (ft)			165		170	
Base Capacity (vph)	290	262	178	4653	151	4561
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	0.03	0.01	0.12	0.44	0.03	0.41

Intersection Summary

Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	10	2	20	1980	9	5	1824
Future Volume (vph)	10	2	20	1980	9	5	1824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3	4.5	5.9		6.8	5.9
Lane Util. Factor	1.00	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	1.00		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)	1805	1615	1805	5126		1444	5136
Flt Permitted	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)	1805	1615	1805	5126		1444	5136
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	2	21	2041	9	5	1880
RTOR Reduction (vph)	0	2	0	0	0	0	0
Lane Group Flow (vph)	10	0	21	2050	0	5	1880
Confl. Peds. (#/hr)					1	1	
Heavy Vehicles (%)	0%	0%	0%	1%	25%	25%	1%
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	4		5	2		1	6
Permitted Phases		4					
Actuated Green, G (s)	3.0	3.0	3.3	92.6		1.4	93.0
Effective Green, g (s)	3.0	3.0	3.3	92.6		1.4	93.0
Actuated g/C Ratio	0.03	0.03	0.03	0.80		0.01	0.80
Clearance Time (s)	6.3	6.3	4.5	5.9		6.8	5.9
Vehicle Extension (s)	3.5	3.5	3.0	5.5		3.0	5.5
Lane Grp Cap (vph)	46	41	51	4091		17	4117
v/s Ratio Prot	c0.01		c0.01	c0.40		0.00	0.37
v/s Ratio Perm		0.00					
v/c Ratio	0.22	0.00	0.41	0.50		0.29	0.46
Uniform Delay, d1	55.3	55.0	55.4	3.9		56.8	3.6
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.8	0.0	5.3	0.4		9.4	0.4
Delay (s)	58.2	55.1	60.7	4.4		66.2	4.0
Level of Service	E	E	E	A		E	A
Approach Delay (s)	57.6			4.9			4.1
Approach LOS	E			A			A

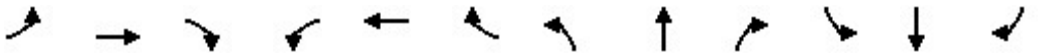
Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	154	57	55	26	73	1901	18	36	1793	69
v/c Ratio	0.70	0.19	0.42	0.11	0.49	0.60	0.02	0.32	0.60	0.07
Control Delay	65.3	1.4	60.3	1.0	59.8	7.3	0.0	58.6	20.0	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.3	1.4	60.3	1.0	59.8	7.3	0.0	58.6	20.0	0.9
Queue Length 50th (ft)	112	0	40	0	56	136	0	26	333	0
Queue Length 95th (ft)	178	0	81	0	m61	m141	m0	60	469	7
Internal Link Dist (ft)	284		261			193			145	
Turn Bay Length (ft)		115			190		75	295		105
Base Capacity (vph)	278	348	203	286	203	3155	959	233	2965	960
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	0.55	0.16	0.27	0.09	0.36	0.60	0.02	0.15	0.60	0.07

Intersection Summary

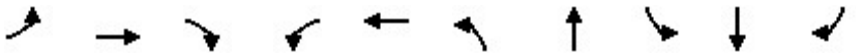
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	7	55	48	6	25	71	1844	17	35	1739	67
Future Volume (vph)	143	7	55	48	6	25	71	1844	17	35	1739	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.95	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1796	1583		1817	1588	1805	5136	1490	1805	5136	1581
Flt Permitted		0.95	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1796	1583		1817	1588	1805	5136	1490	1805	5136	1581
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	147	7	57	49	6	26	73	1901	18	36	1793	69
RTOR Reduction (vph)	0	0	50	0	0	24	0	0	7	0	0	30
Lane Group Flow (vph)	0	154	7	0	55	2	73	1901	11	36	1793	39
Confl. Peds. (#/hr)	1					1	1		1	1		1
Heavy Vehicles (%)	1%	0%	2%	0%	1%	0%	0%	1%	7%	0%	1%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)		14.2	14.2		7.4	7.4	8.4	68.3	68.3	5.1	65.0	65.0
Effective Green, g (s)		14.2	14.2		7.4	7.4	8.4	68.3	68.3	5.1	65.0	65.0
Actuated g/C Ratio		0.12	0.12		0.06	0.06	0.07	0.59	0.59	0.04	0.56	0.56
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)		2.5	2.5		2.5	2.5	2.5	4.0	4.0	2.5	4.0	4.0
Lane Grp Cap (vph)		219	193		115	101	130	3024	877	79	2877	885
v/s Ratio Prot		c0.09			c0.03		c0.04	c0.37		0.02	0.35	
v/s Ratio Perm			0.00			0.00			0.01			0.02
v/c Ratio		0.70	0.04		0.48	0.02	0.56	0.63	0.01	0.46	0.62	0.04
Uniform Delay, d1		48.9	44.9		52.4	50.9	52.0	15.6	9.9	54.1	17.2	11.5
Progression Factor		1.00	1.00		1.00	1.00	1.12	0.42	1.00	1.00	1.00	1.00
Incremental Delay, d2		9.1	0.1		2.3	0.0	1.4	0.3	0.0	3.0	1.0	0.1
Delay (s)		58.0	44.9		54.7	50.9	59.7	6.9	9.9	57.1	18.3	11.6
Level of Service		E	D		D	D	E	A	A	E	B	B
Approach Delay (s)		54.5			53.5			8.8			18.8	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

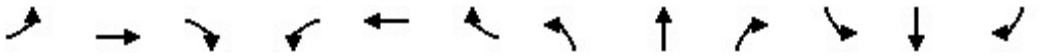


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	225	579	123	202	637	147	1764	291	1403	192
v/c Ratio	0.89	0.95	0.33	0.85	1.00	0.70	0.99	0.94	0.67	0.25
Control Delay	83.2	73.9	10.0	79.1	77.2	67.0	57.5	89.2	30.2	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.2	73.9	10.0	79.1	77.2	67.0	57.5	89.2	30.2	10.4
Queue Length 50th (ft)	166	229	0	149	~231	106	471	230	159	0
Queue Length 95th (ft)	#302	#347	53	#272	#351	175	#592	#392	317	101
Internal Link Dist (ft)		762			867		276		418	
Turn Bay Length (ft)	200		215	725		280		330		245
Base Capacity (vph)	264	611	375	248	636	241	1773	311	2102	768
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	0.85	0.95	0.33	0.81	1.00	0.61	0.99	0.94	0.67	0.25

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	579	123	202	388	249	147	1480	284	291	1403	192
Future Volume (veh/h)	225	579	123	202	388	249	147	1480	284	291	1403	192
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	225	579	123	202	388	249	147	1480	284	291	1403	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	253	591	264	230	321	204	176	1554	297	312	2255	
Arrive On Green	0.14	0.16	0.16	0.13	0.15	0.15	0.10	0.36	0.36	0.17	0.43	0.00
Sat Flow, veh/h	1810	3610	1610	1810	2120	1343	1810	4371	836	1810	5187	1610
Grp Volume(v), veh/h	225	579	123	202	330	307	147	1170	594	291	1403	0
Grp Sat Flow(s),veh/h/ln	1810	1805	1610	1810	1805	1658	1810	1729	1749	1810	1729	1610
Q Serve(g_s), s	14.2	18.5	8.0	12.7	17.6	17.6	9.3	38.2	38.4	18.4	24.3	0.0
Cycle Q Clear(g_c), s	14.2	18.5	8.0	12.7	17.6	17.6	9.3	38.2	38.4	18.4	24.3	0.0
Prop In Lane	1.00		1.00	1.00		0.81	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	253	591	264	230	274	251	176	1229	622	312	2255	
V/C Ratio(X)	0.89	0.98	0.47	0.88	1.20	1.22	0.83	0.95	0.96	0.93	0.62	
Avail Cap(c_a), veh/h	265	591	264	250	274	251	242	1229	622	312	2255	
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	0.00
Uniform Delay (d), s/veh	49.0	48.3	43.9	49.7	49.2	49.2	51.4	36.4	36.5	47.3	25.4	0.0
Incr Delay (d2), s/veh	27.0	31.6	1.3	26.4	121.5	130.7	16.3	16.5	26.6	33.8	1.3	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	8.3	10.9	3.3	7.4	17.1	16.4	5.0	18.6	20.7	11.2	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.1	80.0	45.2	76.1	170.8	179.9	67.7	52.9	63.1	81.1	26.7	0.0
LnGrp LOS	E	E	D	E	F	F	E	D	E	F	C	
Approach Vol, veh/h		927			839			1911			1694	A
Approach Delay, s/veh		74.4			151.3			57.2			36.1	
Approach LOS		E			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	47.2	19.8	24.0	15.8	56.4	21.2	22.6
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	4.5	6.0	5.0	5.0
Max Green Setting (Gmax), s	20.0	40.0	16.0	19.0	15.5	45.0	17.0	17.0
Max Q Clear Time (g_c+I1), s	20.4	40.4	14.7	20.5	11.3	26.3	16.2	19.6
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.1	12.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	68.2
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	143	178	82	2882	45	2539
v/c Ratio	0.91	0.93	0.49	0.92	0.29	0.82
Control Delay	94.5	98.2	22.6	27.5	10.8	21.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.5	98.2	22.6	27.5	10.8	21.7
Queue Length 50th (ft)	89	128	18	693	10	542
Queue Length 95th (ft)	#123	#158	29	438	15	358
Internal Link Dist (ft)	218	764		385		854
Turn Bay Length (ft)			230		215	
Base Capacity (vph)	158	192	175	3125	174	3101
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	0.93	0.47	0.92	0.26	0.82

Intersection Summary

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

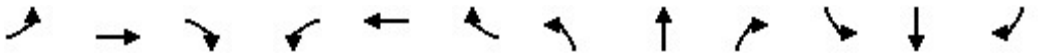
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	9	41	85	12	22	55	1886	45	30	1649	52
Future Volume (vph)	46	9	41	85	12	22	55	1886	45	30	1649	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.94			0.97		1.00	1.00		1.00	1.00	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1748			1789		1805	5169		1805	5163	
Flt Permitted		0.98			0.97		0.06	1.00		0.06	1.00	
Satd. Flow (perm)		1748			1789		110	5169		111	5163	
Peak-hour factor, PHF	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	69	13	61	127	18	33	82	2815	67	45	2461	78
RTOR Reduction (vph)	0	23	0	0	7	0	0	2	0	0	3	0
Lane Group Flow (vph)	0	120	0	0	171	0	82	2880	0	45	2536	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		9.0			12.0		74.5	69.1		73.5	68.6	
Effective Green, g (s)		9.0			12.0		74.5	69.1		73.5	68.6	
Actuated g/C Ratio		0.08			0.10		0.64	0.60		0.63	0.59	
Clearance Time (s)		5.0			5.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		3.0			3.0		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)		135			185		149	3079		141	3053	
v/s Ratio Prot		c0.07			c0.10		c0.03	c0.56		0.01	0.49	
v/s Ratio Perm							0.33			0.19		
v/c Ratio		0.89			0.92		0.55	0.94		0.32	0.83	
Uniform Delay, d1		53.0			51.5		19.6	21.4		24.3	19.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		45.2			44.6		3.5	6.8		1.0	2.8	
Delay (s)		98.2			96.1		23.1	28.3		25.3	21.8	
Level of Service		F			F		C	C		C	C	
Approach Delay (s)		98.2			96.1			28.1			21.9	
Approach LOS		F			F			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	7	10	433	280	2038	964	361	1721
v/c Ratio	0.09	0.05	0.82	0.39	0.87	0.93	0.89	0.46
Control Delay	56.0	0.6	62.3	18.7	33.9	29.3	69.1	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.0	0.6	62.3	18.7	33.9	29.3	69.1	7.5
Queue Length 50th (ft)	5	0	157	90	503	359	256	168
Queue Length 95th (ft)	20	0	#254	173	543	#648	#433	215
Internal Link Dist (ft)		123			241			150
Turn Bay Length (ft)				250		230	235	
Base Capacity (vph)	77	186	525	721	2351	1035	404	3738
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	0.09	0.05	0.82	0.39	0.87	0.93	0.89	0.46

Intersection Summary

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



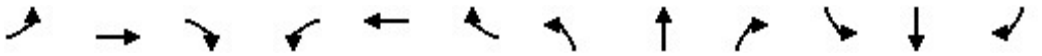
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	0	9	377	0	244	0	1773	839	314	1497	0
Future Volume (vph)	6	0	9	377	0	244	0	1773	839	314	1497	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0		5.0		6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	1.00		0.97		1.00		0.91	1.00	1.00	0.91	
Frt	1.00	0.85		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1615		3502		1615		5187	1615	1805	5187	
Flt Permitted	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1615		3502		1615		5187	1615	1805	5187	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	7	0	10	433	0	280	0	2038	964	361	1721	0
RTOR Reduction (vph)	0	10	0	0	0	51	0	0	318	0	0	0
Lane Group Flow (vph)	7	0	0	433	0	229	0	2038	646	361	1721	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Prot		pm+ov		NA	Perm	Prot	NA	
Protected Phases	3	3		4		1		2		1	6	
Permitted Phases						4			2			
Actuated Green, G (s)	2.0	2.0		17.4		43.4		49.6	49.6	26.0	80.6	
Effective Green, g (s)	2.0	2.0		17.4		43.4		49.6	49.6	26.0	80.6	
Actuated g/C Ratio	0.02	0.02		0.15		0.37		0.43	0.43	0.22	0.69	
Clearance Time (s)	5.0	5.0		5.0		5.0		6.0	6.0	5.0	6.0	
Vehicle Extension (s)	2.5	2.5		2.5		2.5		6.0	6.0	2.5	6.0	
Lane Grp Cap (vph)	31	27		525		673		2217	690	404	3604	
v/s Ratio Prot	c0.00	0.00		c0.12		0.08		0.39		c0.20	0.33	
v/s Ratio Perm						0.07			c0.40			
v/c Ratio	0.23	0.01		0.82		0.34		0.92	0.94	0.89	0.48	
Uniform Delay, d1	56.2	56.0		47.8		26.0		31.3	31.7	43.7	8.1	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7	0.1		10.0		0.2		7.6	21.8	21.3	0.5	
Delay (s)	58.9	56.1		57.8		26.3		38.9	53.5	64.9	8.5	
Level of Service	E	E		E		C		D	D	E	A	
Approach Delay (s)		57.3			45.4			43.6			18.3	
Approach LOS		E			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	34.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	365	362	399	36	33	13	2577	15	2368
v/c Ratio	0.93	0.92	0.86	0.46	0.18	0.17	0.87	0.19	0.81
Control Delay	75.1	73.2	48.7	73.2	2.1	58.6	26.8	59.6	23.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.1	73.2	48.7	73.2	2.1	58.6	26.8	59.6	23.9
Queue Length 50th (ft)	281	277	205	27	0	10	547	11	467
Queue Length 95th (ft)	#372	#364	265	55	0	27	593	30	514
Internal Link Dist (ft)		91		125			466		240
Turn Bay Length (ft)			105		50	450		180	
Base Capacity (vph)	399	400	469	78	186	77	2967	77	2937
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	0.91	0.91	0.85	0.46	0.18	0.17	0.87	0.19	0.81

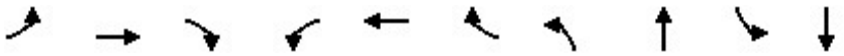
Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	566	9	315	21	7	26	10	2020	16	12	1698	173
Future Volume (vph)	566	9	315	21	7	26	10	2020	16	12	1698	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1715	1722	1615		1831	1615	1805	5181		1805	5115	
Flt Permitted	0.95	0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1715	1722	1615		1831	1615	1805	5181		1805	5115	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	716	11	399	27	9	33	13	2557	20	15	2149	219
RTOR Reduction (vph)	0	0	94	0	0	32	0	0	0	0	10	0
Lane Group Flow (vph)	365	362	305	0	36	1	13	2577	0	15	2358	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)	26.6	26.6	26.6		4.0	4.0	2.0	62.4		2.0	62.4	
Effective Green, g (s)	26.6	26.6	26.6		4.0	4.0	2.0	62.4		2.0	62.4	
Actuated g/C Ratio	0.23	0.23	0.23		0.03	0.03	0.02	0.54		0.02	0.54	
Clearance Time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5	6.0		2.5	6.0	
Lane Grp Cap (vph)	393	394	370		63	55	31	2787		31	2751	
v/s Ratio Prot	c0.21	0.21			c0.02		0.01	c0.50		c0.01	0.46	
v/s Ratio Perm			0.19			0.00						
v/c Ratio	0.93	0.92	0.82		0.57	0.02	0.42	0.92		0.48	0.86	
Uniform Delay, d1	43.8	43.6	42.5		55.2	54.1	56.4	24.6		56.5	23.0	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	27.9	25.9	13.6		9.9	0.1	6.5	6.6		8.4	3.7	
Delay (s)	71.6	69.5	56.0		65.0	54.2	63.0	31.3		64.9	26.7	
Level of Service	E	E	E		E	D	E	C		E	C	
Approach Delay (s)		65.4			59.9			31.4			26.9	
Approach LOS		E			E			C			C	

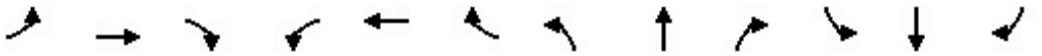
Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	246	876	132	131	676	332	240	918	396	870
v/c Ratio	0.66	0.60	0.17	0.50	0.75	0.41	0.66	0.70	0.83	0.57
Control Delay	59.0	37.5	5.4	58.6	45.9	11.7	59.6	42.2	65.1	35.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	37.5	5.4	58.6	45.9	11.7	59.6	42.2	65.1	35.4
Queue Length 50th (ft)	94	206	13	50	247	75	91	231	149	190
Queue Length 95th (ft)	132	243	43	80	310	148	131	292	#237	263
Internal Link Dist (ft)		437			433			569		731
Turn Bay Length (ft)	415		350	300			400		550	
Base Capacity (vph)	596	1612	811	360	927	818	455	1306	487	1517
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	0.41	0.54	0.16	0.36	0.73	0.41	0.53	0.70	0.81	0.57

Intersection Summary

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



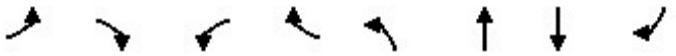
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	815	123	122	629	309	223	704	150	368	596	213
Future Volume (veh/h)	229	815	123	122	629	309	223	704	150	368	596	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1856	1870	1885	1885	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	246	876	132	131	676	332	240	757	161	396	641	229
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	3	2	1	1	2	2	1	1	1
Cap, veh/h	309	1322	547	201	810	570	301	1350	284	449	1362	477
Arrive On Green	0.09	0.26	0.26	0.06	0.23	0.23	0.09	0.32	0.32	0.13	0.36	0.36
Sat Flow, veh/h	3456	5106	1585	3428	3554	1598	3483	4223	889	3483	3759	1317
Grp Volume(v), veh/h	246	876	132	131	676	332	240	609	309	396	584	286
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1714	1777	1598	1742	1702	1708	1742	1716	1645
Q Serve(g_s), s	8.2	18.1	7.0	4.4	21.4	19.9	8.0	17.5	17.7	13.2	15.4	15.8
Cycle Q Clear(g_c), s	8.2	18.1	7.0	4.4	21.4	19.9	8.0	17.5	17.7	13.2	15.4	15.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.52	1.00		0.80
Lane Grp Cap(c), veh/h	309	1322	547	201	810	570	301	1088	546	449	1243	596
V/C Ratio(X)	0.80	0.66	0.24	0.65	0.83	0.58	0.80	0.56	0.57	0.88	0.47	0.48
Avail Cap(c_a), veh/h	600	1601	634	363	864	595	458	1088	546	458	1243	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	39.1	27.6	54.4	43.4	30.8	52.9	33.2	33.3	50.5	28.9	29.0
Incr Delay (d2), s/veh	1.8	1.1	0.4	1.3	7.4	1.9	2.9	2.1	4.2	17.0	1.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	7.7	2.7	1.9	10.2	7.9	3.6	7.5	8.0	6.8	6.6	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.4	40.3	28.0	55.7	50.9	32.7	55.8	35.3	37.5	67.5	30.2	31.8
LnGrp LOS	D	D	C	E	D	C	E	D	D	E	C	C
Approach Vol, veh/h		1254			1139			1158			1266	
Approach Delay, s/veh		41.8			46.1			40.1			42.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	45.0	13.4	37.8	16.7	50.1	17.1	34.2
Change Period (Y+Rc), s	6.5	* 7.3	6.5	* 7.3	6.5	* 7.3	6.5	7.3
Max Green Setting (Gmax), s	15.5	* 26	12.5	* 37	15.5	* 26	20.5	28.7
Max Q Clear Time (g_c+I1), s	15.2	19.7	6.4	20.1	10.0	17.8	10.2	23.4
Green Ext Time (p_c), s	0.0	4.5	0.1	9.0	0.2	4.6	0.3	3.5

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

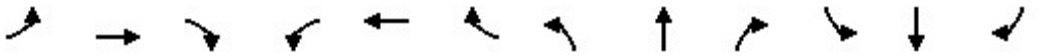
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	WBL	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	343	265	76	31	201	995	887	67
v/c Ratio	0.70	0.46	0.47	0.13	0.77	0.43	0.66	0.06
Control Delay	56.1	10.7	60.2	1.0	67.4	12.1	30.6	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	10.7	60.2	1.0	67.4	12.1	30.6	2.3
Queue Length 50th (ft)	127	46	56	0	147	200	294	0
Queue Length 95th (ft)	177	92	104	0	#231	266	396	17
Internal Link Dist (ft)						335	653	
Turn Bay Length (ft)		275		50	210			115
Base Capacity (vph)	543	618	206	280	298	2291	1354	1090
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	0.63	0.43	0.37	0.11	0.67	0.43	0.66	0.06

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	326	0	252	72	0	29	191	891	54	43	800	64
Future Volume (veh/h)	326	0	252	72	0	29	191	891	54	43	800	64
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	0	1885	1900	0	1737	1885	1885	1885	1900	1900	1900
Adj Flow Rate, veh/h	343	0	265	76	0	31	201	938	57	45	842	67
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, %	1	0	1	0	0	11	1	1	1	0	0	0
Cap, veh/h	415	0	0	216	0	0	231	2687	163	106	1916	1171
Arrive On Green	0.12	0.00	0.00	0.12	0.00	0.00	0.13	0.78	0.78	0.61	0.61	0.61
Sat Flow, veh/h	3483	343		1810	76		1795	3430	208	119	3149	1610
Grp Volume(v), veh/h	343	59.2		76	49.0		201	490	505	442	445	67
Grp Sat Flow(s),veh/h/ln	1742	E		1810	D		1795	1791	1848	1626	1643	1610
Q Serve(g_s), s	11.4			4.6			13.0	9.6	9.6	0.0	17.2	1.4
Cycle Q Clear(g_c), s	11.4			4.6			13.0	9.6	9.6	14.0	17.2	1.4
Prop In Lane	1.00			1.00			1.00		0.11	0.10		1.00
Lane Grp Cap(c), veh/h	415			216			231	1403	1448	1023	999	1171
V/C Ratio(X)	0.83			0.35			0.87	0.35	0.35	0.43	0.45	0.06
Avail Cap(c_a), veh/h	546			216			297	1403	1448	1023	999	1171
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	50.8			47.8			50.5	3.8	3.8	11.8	12.4	4.6
Incr Delay (d2), s/veh	8.4			1.2			19.5	0.7	0.7	1.3	1.4	0.1
Initial Q Delay(d3),s/veh	0.0			0.0			0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4			2.1			7.1	3.1	3.2	6.1	6.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.2			49.0			70.0	4.5	4.5	13.1	13.9	4.7
LnGrp LOS	E			D			E	A	A	B	B	A
Approach Vol, veh/h								1196			954	
Approach Delay, s/veh								15.5			12.9	
Approach LOS								B			B	

Timer - Assigned Phs	2	3	5	6	7
Phs Duration (G+Y+Rc), s	98.4	19.6	20.7	77.8	19.6
Change Period (Y+Rc), s	6.0	5.5	5.5	6.0	5.5
Max Green Setting (Gmax), s	69.0	18.5	19.5	44.0	13.5
Max Q Clear Time (g_c+I1), s	11.6	13.4	15.0	19.2	6.6
Green Ext Time (p_c), s	30.2	0.7	0.2	16.7	0.1

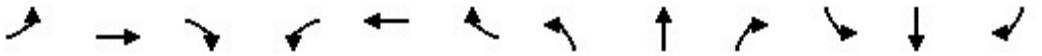
Intersection Summary	
HCM 6th Ctrl Delay	21.3
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	142	831	100	416	404	539	190	470	413	100
v/c Ratio	0.85	0.89	0.68	0.47	0.59	0.73	0.40	1.05	0.45	0.20
Control Delay	96.0	58.8	80.7	43.7	7.5	54.8	8.5	102.7	42.8	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	96.0	58.8	80.7	43.7	7.5	54.8	8.5	102.7	42.8	4.3
Queue Length 50th (ft)	119	354	83	158	0	225	0	~430	155	0
Queue Length 95th (ft)	#233	#466	#163	211	87	290	63	#644	206	28
Internal Link Dist (ft)		442		279		310			329	
Turn Bay Length (ft)	210		80					150		150
Base Capacity (vph)	176	932	149	885	689	738	474	448	915	496
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	0.81	0.89	0.67	0.47	0.59	0.73	0.40	1.05	0.45	0.20

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

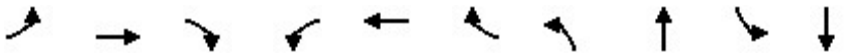
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	139	764	50	98	408	396	59	469	186	461	405	98
Future Volume (vph)	139	764	50	98	408	396	59	469	186	461	405	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	5.0		5.8	5.0	5.0		7.1	7.1	7.0	7.0	7.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1805	3541		1736	3539	1544		3558	1560	1770	3610	1589
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1805	3541		1736	3539	1544		3558	1560	1770	3610	1589
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	142	780	51	100	416	404	60	479	190	470	413	100
RTOR Reduction (vph)	0	4	0	0	0	303	0	0	151	0	0	75
Lane Group Flow (vph)	142	827	0	100	416	101	0	539	39	470	413	25
Confl. Peds. (#/hr)	2		1	1		2	3		2	2		3
Heavy Vehicles (%)	0%	1%	0%	4%	2%	3%	0%	1%	2%	2%	0%	0%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	3	8		7	4		1	1		2	2	
Permitted Phases						4			1			2
Actuated Green, G (s)	12.1	34.1		11.1	32.6	32.6		27.0	27.0	33.0	33.0	33.0
Effective Green, g (s)	12.1	34.1		11.1	32.6	32.6		27.0	27.0	33.0	33.0	33.0
Actuated g/C Ratio	0.09	0.26		0.09	0.25	0.25		0.21	0.21	0.25	0.25	0.25
Clearance Time (s)	6.3	5.0		5.8	5.0	5.0		7.1	7.1	7.0	7.0	7.0
Vehicle Extension (s)	0.2	0.2		0.2	0.2	0.2		0.2	0.2	0.2	0.2	0.2
Lane Grp Cap (vph)	167	928		148	886	386		738	323	448	915	403
v/s Ratio Prot	c0.08	c0.23		0.06	0.12			c0.15		c0.27	0.11	
v/s Ratio Perm						0.07			0.03			0.02
v/c Ratio	0.85	0.89		0.68	0.47	0.26		0.73	0.12	1.05	0.45	0.06
Uniform Delay, d1	58.1	46.2		57.8	41.4	39.1		48.1	41.9	48.5	40.9	36.8
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	30.7	12.7		9.2	1.8	1.6		6.3	0.8	56.0	1.6	0.3
Delay (s)	88.8	58.9		67.0	43.2	40.8		54.4	42.7	104.5	42.5	37.1
Level of Service	F	E		E	D	D		D	D	F	D	D
Approach Delay (s)		63.2			44.7			51.4			71.6	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	58.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	130.1	Sum of lost time (s)	25.4
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

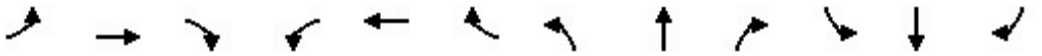


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	273	888	124	312	753	192	92	1155	249	818
v/c Ratio	0.87	1.34	0.28	0.90	1.08	0.32	0.63	1.11	0.88	0.67
Control Delay	72.3	198.1	3.5	73.7	102.1	14.8	68.9	96.5	77.8	33.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	198.1	3.5	73.7	102.1	14.8	68.9	96.5	77.8	33.7
Queue Length 50th (ft)	215	~465	0	225	~325	52	66	~473	179	258
Queue Length 95th (ft)	#380	#600	20	#388	#448	106	121	#610	#314	333
Internal Link Dist (ft)		455			617			1015		812
Turn Bay Length (ft)	225		135	285		165	210		450	
Base Capacity (vph)	313	665	450	348	696	616	174	1042	300	1229
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	0.87	1.34	0.28	0.90	1.08	0.31	0.53	1.11	0.83	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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	276	781	113	284	685	175	84	592	459	227	580	165
Future Volume (vph)	276	781	113	284	685	175	84	592	459	227	580	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	0.91	0.91	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1626	3451	1615	1805	3610	1572	1805	3374		1805	3465	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1626	3451	1615	1805	3610	1572	1805	3374		1805	3465	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	303	858	124	312	753	192	92	651	504	249	637	181
RTOR Reduction (vph)	0	0	100	0	0	52	0	121	0	0	22	0
Lane Group Flow (vph)	273	888	24	312	753	140	92	1034	0	249	796	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	1%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	2%
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA		Prot	NA	
Protected Phases	3	3		4	4	1	5	2		1	6	
Permitted Phases			3			4						
Actuated Green, G (s)	22.0	22.0	22.0	22.0	22.0	39.9	9.3	31.1		17.9	39.7	
Effective Green, g (s)	22.0	22.0	22.0	22.0	22.0	39.9	9.3	31.1		17.9	39.7	
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19	0.35	0.08	0.27		0.16	0.35	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	6.0		2.0	6.0	
Lane Grp Cap (vph)	313	665	311	348	696	619	147	920		283	1206	
v/s Ratio Prot	0.17	c0.26		0.17	c0.21	0.04	0.05	c0.31		c0.14	0.23	
v/s Ratio Perm			0.01			0.05						
v/c Ratio	0.87	1.34	0.08	0.90	1.08	0.23	0.63	1.12		0.88	0.66	
Uniform Delay, d1	44.6	46.0	37.7	44.9	46.0	26.2	50.7	41.5		47.0	31.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	22.4	161.0	0.1	24.3	58.4	0.1	5.9	70.0		24.5	2.8	
Delay (s)	67.0	207.0	37.8	69.2	104.4	26.2	56.5	111.5		71.5	34.3	
Level of Service	E	F	D	E	F	C	E	F		E	C	
Approach Delay (s)		160.9			83.7			107.4			43.0	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay	101.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	1412	289	886	430	404
v/c Ratio	0.89	0.88	0.38	0.89	0.61
Control Delay	39.2	62.6	10.9	66.4	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	39.2	62.6	10.9	66.4	13.1
Queue Length 50th (ft)	540	181	165	341	53
Queue Length 95th (ft)	650	#341	203	#529	160
Internal Link Dist (ft)	202		219	505	
Turn Bay Length (ft)				90	
Base Capacity (vph)	1590	328	2345	483	667
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	0.89	0.88	0.38	0.89	0.61

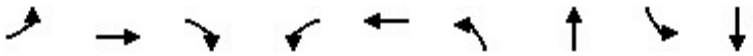
Intersection Summary

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1051	248	266	815	396	372
Future Volume (vph)	1051	248	266	815	396	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5		5.5	5.5	5.0	5.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3451		1805	3610	1805	1615
Flt Permitted	1.00		0.06	1.00	0.95	1.00
Satd. Flow (perm)	3451		119	3610	1805	1615
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1142	270	289	886	430	404
RTOR Reduction (vph)	12	0	0	0	0	235
Lane Group Flow (vph)	1400	0	289	886	430	169
Confl. Peds. (#/hr)					1	
Heavy Vehicles (%)	2%	0%	0%	0%	0%	0%
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	6	4	
Permitted Phases			6			4
Actuated Green, G (s)	58.1		82.5	82.5	34.0	34.0
Effective Green, g (s)	58.1		82.5	82.5	34.0	34.0
Actuated g/C Ratio	0.46		0.65	0.65	0.27	0.27
Clearance Time (s)	5.5		5.5	5.5	5.0	5.0
Vehicle Extension (s)	6.0		3.0	6.0	3.0	3.0
Lane Grp Cap (vph)	1578		328	2345	483	432
v/s Ratio Prot	0.41		c0.13	0.25	c0.24	
v/s Ratio Perm			c0.44			0.10
v/c Ratio	0.89		0.88	0.38	0.89	0.39
Uniform Delay, d1	31.5		40.2	10.3	44.7	38.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	7.2		23.0	0.3	18.2	0.6
Delay (s)	38.7		63.2	10.6	62.9	38.6
Level of Service	D		E	B	E	D
Approach Delay (s)	38.7			23.6	51.1	
Approach LOS	D			C	D	

Intersection Summary			
HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	127.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	383	335	215	163	441	208	930	72	851
v/c Ratio	0.96	0.53	0.32	0.42	1.01	0.91	0.89	0.32	0.80
Control Delay	69.3	36.3	5.2	24.4	89.9	91.4	50.1	51.9	41.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.3	36.3	5.2	24.4	89.9	91.4	50.1	51.9	41.5
Queue Length 50th (ft)	243	213	0	74	~349	161	351	52	295
Queue Length 95th (ft)	#442	309	54	121	#564	#302	#444	99	375
Internal Link Dist (ft)		244			266		277		252
Turn Bay Length (ft)	240			75		260		200	
Base Capacity (vph)	399	631	679	407	438	235	1055	267	1092
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	0.96	0.53	0.32	0.40	1.01	0.89	0.88	0.27	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
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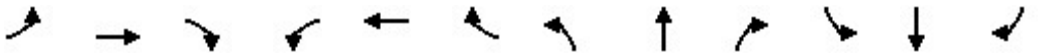
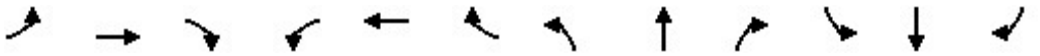


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	356	312	200	152	355	55	193	729	136	67	548	244
Future Volume (veh/h)	356	312	200	152	355	55	193	729	136	67	548	244
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1900	1900	1885	1870	1870	1900	1856	1856
Adj Flow Rate, veh/h	383	335	215	163	382	59	208	784	146	72	589	262
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	1	1	0	0	0	1	2	2	0	3	3
Cap, veh/h	404	646	547	389	382	59	235	855	159	233	694	308
Arrive On Green	0.19	0.34	0.34	0.08	0.24	0.24	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1810	1885	1598	1810	1607	248	1795	2990	557	1810	2374	1055
Grp Volume(v), veh/h	383	335	215	163	0	441	208	466	464	72	437	414
Grp Sat Flow(s),veh/h/ln	1810	1885	1598	1810	0	1855	1795	1777	1770	1810	1763	1666
Q Serve(g_s), s	20.3	16.6	11.9	7.8	0.0	27.7	13.3	29.6	29.6	4.2	27.2	27.3
Cycle Q Clear(g_c), s	20.3	16.6	11.9	7.8	0.0	27.7	13.3	29.6	29.6	4.2	27.2	27.3
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.31	1.00		0.63
Lane Grp Cap(c), veh/h	404	646	547	389	0	441	235	508	506	233	515	487
V/C Ratio(X)	0.95	0.52	0.39	0.42	0.00	1.00	0.88	0.92	0.92	0.31	0.85	0.85
Avail Cap(c_a), veh/h	404	646	547	407	0	441	242	522	520	273	561	530
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	34.5	30.6	29.1	29.5	0.0	44.4	49.8	40.3	40.3	46.1	38.8	38.8
Incr Delay (d2), s/veh	31.6	0.7	0.5	0.3	0.0	42.8	28.2	21.3	21.4	1.1	11.6	12.3
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	10.9	7.6	4.6	3.4	0.0	17.8	7.8	15.8	15.7	2.0	13.3	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.1	31.4	29.6	29.8	0.0	87.2	77.9	61.5	61.6	47.1	50.4	51.2
LnGrp LOS	E	C	C	C	A	F	E	E	E	D	D	D
Approach Vol, veh/h		933			604			1138			923	
Approach Delay, s/veh		45.2			71.7			64.6			50.5	
Approach LOS		D			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	38.3	13.8	44.4	19.3	39.0	26.0	32.2
Change Period (Y+Rc), s	5.0	5.0	4.0	4.5	4.0	5.0	4.0	4.5
Max Green Setting (Gmax), s	17.6	34.2	11.0	38.7	15.7	37.1	22.0	27.7
Max Q Clear Time (g_c+I1), s	6.2	31.6	9.8	18.6	15.3	29.3	22.3	29.7
Green Ext Time (p_c), s	0.2	1.7	0.0	2.7	0.0	4.2	0.0	0.0

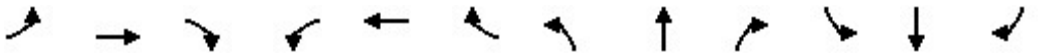
Intersection Summary	
HCM 6th Ctrl Delay	57.1
HCM 6th LOS	E



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	260	866	43	188	758	120	80	495	235	65	271	194
v/c Ratio	0.69	0.68	0.07	0.58	0.62	0.19	0.21	0.54	0.41	0.21	0.34	0.38
Control Delay	23.8	23.5	0.2	19.5	22.8	4.0	16.5	25.4	5.8	16.6	24.2	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	23.8	23.5	0.2	19.5	22.8	4.0	16.5	25.4	5.8	16.6	24.2	6.2
Queue Length 50th (ft)	62	174	0	43	148	0	24	106	0	19	54	0
Queue Length 95th (ft)	#161	267	0	#103	231	29	50	152	50	42	85	46
Internal Link Dist (ft)		568			685			340			433	
Turn Bay Length (ft)	225		200	400		305	230		190	330		275
Base Capacity (vph)	376	1421	715	328	1378	706	378	1255	704	310	1243	682
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	0.69	0.61	0.06	0.57	0.55	0.17	0.21	0.39	0.33	0.21	0.22	0.28

Intersection Summary

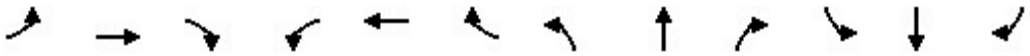
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	840	42	182	735	116	78	480	228	63	263	188
Future Volume (veh/h)	252	840	42	182	735	116	78	480	228	63	263	188
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1885	1900	1870	1900	1870	1900	1885	1885
Adj Flow Rate, veh/h	260	866	43	188	758	120	80	495	235	65	271	194
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, %	0	1	0	0	1	0	2	0	2	0	1	1
Cap, veh/h	430	1244	559	379	1145	514	344	804	353	264	764	341
Arrive On Green	0.12	0.35	0.35	0.10	0.32	0.32	0.05	0.22	0.22	0.04	0.21	0.21
Sat Flow, veh/h	1810	3582	1609	1810	3582	1609	1781	3610	1585	1810	3582	1598
Grp Volume(v), veh/h	260	866	43	188	758	120	80	495	235	65	271	194
Grp Sat Flow(s),veh/h/ln	1810	1791	1609	1810	1791	1609	1781	1805	1585	1810	1791	1598
Q Serve(g_s), s	5.7	12.8	1.1	4.2	11.2	3.4	2.1	7.6	8.3	1.7	4.0	6.7
Cycle Q Clear(g_c), s	5.7	12.8	1.1	4.2	11.2	3.4	2.1	7.6	8.3	1.7	4.0	6.7
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	1244	559	379	1145	514	344	804	353	264	764	341
V/C Ratio(X)	0.60	0.70	0.08	0.50	0.66	0.23	0.23	0.62	0.67	0.25	0.35	0.57
Avail Cap(c_a), veh/h	440	1529	687	415	1483	666	414	1348	592	352	1338	597
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	12.8	17.3	13.5	13.1	18.1	15.4	17.6	21.6	21.8	18.2	20.6	21.7
Incr Delay (d2), s/veh	2.3	1.5	0.1	1.0	1.2	0.4	0.3	0.8	2.2	0.5	0.3	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	2.3	5.0	0.4	1.6	4.4	1.2	0.8	3.1	3.1	0.7	1.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	18.8	13.6	14.1	19.3	15.8	18.0	22.3	24.0	18.7	20.9	23.2
LnGrp LOS	B	B	B	B	B	B	B	C	C	B	C	C
Approach Vol, veh/h		1169			1066			810			530	
Approach Delay, s/veh		17.8			18.0			22.4			21.5	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	26.4	6.5	18.7	11.7	24.7	7.1	18.1
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	7.2	26.3	5.5	23.0	8.0	25.5	5.5	23.0
Max Q Clear Time (g_c+I1), s	6.2	14.8	3.7	10.3	7.7	13.2	4.1	8.7
Green Ext Time (p_c), s	0.1	6.5	0.0	3.4	0.0	6.4	0.0	2.1

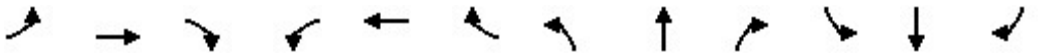
Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	523	1076	74	35	778	172	56	428	35	201	307	433
v/c Ratio	0.94	0.59	0.09	0.14	0.85	0.32	0.18	0.67	0.08	0.80	0.39	0.48
Control Delay	48.0	18.0	1.3	12.2	41.3	6.3	23.0	38.9	0.4	49.5	31.4	10.0
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	48.0	18.0	1.3	12.2	41.3	6.3	23.0	38.9	0.4	49.5	31.4	10.0
Queue Length 50th (ft)	226	233	0	7	217	0	22	117	0	86	78	87
Queue Length 95th (ft)	#436	311	10	20	#323	48	49	166	0	#154	118	162
Internal Link Dist (ft)		299			266			659			468	
Turn Bay Length (ft)	430		75	230		245	264		55	346		95
Base Capacity (vph)	580	1810	828	257	940	551	307	751	483	252	838	921
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	0.90	0.59	0.09	0.14	0.83	0.31	0.18	0.57	0.07	0.80	0.37	0.47

Intersection Summary

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



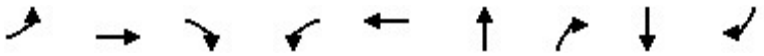
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	497	1022	70	33	739	163	53	407	33	191	292	411
Future Volume (veh/h)	497	1022	70	33	739	163	53	407	33	191	292	411
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1811	1900	1885	1900	1870	1885	1900	1870	1885	1856
Adj Flow Rate, veh/h	523	1076	0	35	778	0	56	428	0	201	307	433
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	1	6	0	1	0	2	1	0	2	1	3
Cap, veh/h	567	1736		264	922		266	644		308	824	753
Arrive On Green	0.25	0.48	0.00	0.02	0.26	0.00	0.04	0.18	0.00	0.09	0.23	0.23
Sat Flow, veh/h	1781	3582	1535	1810	3582	1610	1781	3582	1610	1781	3582	1572
Grp Volume(v), veh/h	523	1076	0	35	778	0	56	428	0	201	307	433
Grp Sat Flow(s),veh/h/ln	1781	1791	1535	1810	1791	1610	1781	1791	1610	1781	1791	1572
Q Serve(g_s), s	17.3	18.0	0.0	1.2	16.7	0.0	2.1	9.0	0.0	7.0	5.9	16.1
Cycle Q Clear(g_c), s	17.3	18.0	0.0	1.2	16.7	0.0	2.1	9.0	0.0	7.0	5.9	16.1
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	567	1736		264	922		266	644		308	824	753
V/C Ratio(X)	0.92	0.62		0.13	0.84		0.21	0.66		0.65	0.37	0.58
Avail Cap(c_a), veh/h	651	1810		349	994		323	795		308	861	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	15.4	0.0	21.5	28.6	0.0	25.8	31.0	0.0	24.4	26.3	15.2
Incr Delay (d2), s/veh	17.4	0.7	0.0	0.2	6.7	0.0	0.4	1.5	0.0	4.8	0.3	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	9.2	6.9	0.0	0.5	7.7	0.0	0.9	3.9	0.0	3.4	2.5	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	16.1	0.0	21.7	35.3	0.0	26.2	32.5	0.0	29.2	26.6	16.2
LnGrp LOS	D	B		C	D		C	C		C	C	B
Approach Vol, veh/h		1599	A		813	A		484	A		941	
Approach Delay, s/veh		22.5			34.7			31.8			22.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.2	26.9	11.0	19.1	5.7	45.3	6.9	23.2
Change Period (Y+Rc), s	4.0	6.0	4.0	4.5	4.0	6.0	4.0	4.5
Max Green Setting (Gmax), s	24.0	22.5	7.0	18.0	5.5	41.0	5.5	19.5
Max Q Clear Time (g_c+I1), s	19.3	18.7	9.0	11.0	3.2	20.0	4.1	18.1
Green Ext Time (p_c), s	0.8	2.2	0.0	1.5	0.0	10.7	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

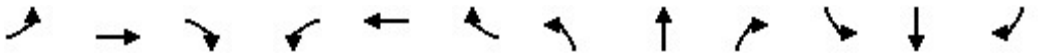


Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	146	937	85	99	776	212	118	136	69
v/c Ratio	0.58	0.92	0.15	0.45	0.59	0.72	0.29	1.74	0.14
Control Delay	27.6	44.0	2.1	22.8	26.7	43.3	5.9	411.6	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	44.0	2.1	22.8	26.7	43.3	5.9	411.6	0.8
Queue Length 50th (ft)	45	237	0	30	116	96	0	~100	0
Queue Length 95th (ft)	#95	#383	12	64	161	167	32	#214	4
Internal Link Dist (ft)		521			373	430		331	
Turn Bay Length (ft)	275			250			130		610
Base Capacity (vph)	251	1018	557	225	1395	367	480	78	500
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	0.58	0.92	0.15	0.44	0.56	0.58	0.25	1.74	0.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

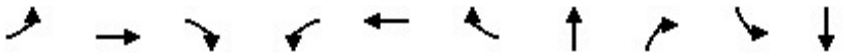
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	881	80	93	679	51	77	122	111	74	54	65
Future Volume (vph)	137	881	80	93	679	51	77	122	111	74	54	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.5	4.5	4.0	4.5			4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00			1.00	0.98		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98	1.00		0.97	1.00
Satd. Flow (prot)	1805	3574	1615	1770	5080			1853	1575		1822	1615
Flt Permitted	0.23	1.00	1.00	0.20	1.00			0.81	1.00		0.17	1.00
Satd. Flow (perm)	437	3574	1615	365	5080			1538	1575		319	1615
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	146	937	85	99	722	54	82	130	118	79	57	69
RTOR Reduction (vph)	0	0	61	0	10	0	0	0	96	0	0	52
Lane Group Flow (vph)	146	937	24	99	766	0	0	212	22	0	136	17
Confl. Peds. (#/hr)	3					3			2	2		
Heavy Vehicles (%)	0%	1%	0%	2%	1%	0%	0%	1%	1%	0%	3%	0%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	1	6		5	2			4			3	
Permitted Phases	6		6	2			4		4	3		3
Actuated Green, G (s)	27.1	21.6	21.6	24.7	20.4			14.5	14.5		18.6	18.6
Effective Green, g (s)	27.1	21.6	21.6	24.7	20.4			14.5	14.5		18.6	18.6
Actuated g/C Ratio	0.35	0.28	0.28	0.32	0.27			0.19	0.19		0.24	0.24
Clearance Time (s)	4.0	4.5	4.5	4.0	4.5			4.5	4.5		4.5	4.5
Vehicle Extension (s)	2.0	4.5	4.5	2.0	4.5			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	253	1009	456	196	1354			291	298		77	392
v/s Ratio Prot	c0.04	c0.26		0.03	0.15							
v/s Ratio Perm	0.16		0.01	0.13				c0.14	0.01		c0.43	0.01
v/c Ratio	0.58	0.93	0.05	0.51	0.57			0.73	0.08		1.77	0.04
Uniform Delay, d1	17.8	26.7	20.0	20.2	24.2			29.1	25.5		28.9	22.1
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.0	14.5	0.1	0.7	0.8			8.8	0.1		392.2	0.0
Delay (s)	19.8	41.2	20.1	20.9	25.0			37.9	25.6		421.1	22.2
Level of Service	B	D	C	C	C			D	C		F	C
Approach Delay (s)		37.0			24.5			33.5			286.9	
Approach LOS		D			C			C			F	

Intersection Summary			
HCM 2000 Control Delay	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	76.5	Sum of lost time (s)	17.5
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

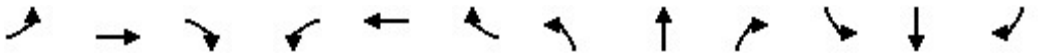
c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	130	940	52	28	667	404	178	47	382	240
v/c Ratio	0.85	0.79	0.09	0.30	0.77	0.58	0.67	0.13	0.95	0.56
Control Delay	87.4	36.4	0.3	53.8	40.8	7.0	51.6	0.7	72.5	33.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.4	36.4	0.3	53.8	40.8	7.0	51.6	0.7	72.5	33.1
Queue Length 50th (ft)	80	293	0	17	201	0	104	0	233	106
Queue Length 95th (ft)	#194	#439	0	46	278	77	174	0	#432	193
Internal Link Dist (ft)		315			426		221			272
Turn Bay Length (ft)			35	415		415		45	215	
Base Capacity (vph)	153	1192	606	93	870	695	338	426	403	425
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	0.85	0.79	0.09	0.30	0.77	0.58	0.53	0.11	0.95	0.56

Intersection Summary

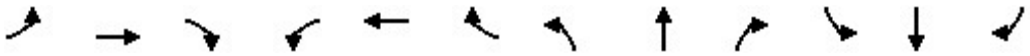
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	884	49	26	627	380	54	114	44	359	114	112
Future Volume (vph)	122	884	49	26	627	380	54	114	44	359	114	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	5.5	5.5	6.2	5.6	5.6		6.9	6.9	8.1	8.1	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	1656	3471	1386	1805	3471	1568		1809	1482	1770	1716	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	1656	3471	1386	1805	3471	1568		1809	1482	1770	1716	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	130	940	52	28	667	404	57	121	47	382	121	119
RTOR Reduction (vph)	0	0	35	0	0	295	0	0	40	0	35	0
Lane Group Flow (vph)	130	940	17	28	667	109	0	178	7	382	205	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	9%	4%	14%	0%	4%	3%	0%	5%	9%	2%	2%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	1	6		5	2		3	3		4	4	
Permitted Phases			6			2			3			
Actuated Green, G (s)	8.9	33.1	33.1	2.9	26.7	26.7		14.2	14.2	21.9	21.9	
Effective Green, g (s)	8.9	33.1	33.1	2.9	26.7	26.7		14.2	14.2	21.9	21.9	
Actuated g/C Ratio	0.09	0.34	0.34	0.03	0.27	0.27		0.14	0.14	0.22	0.22	
Clearance Time (s)	6.5	5.5	5.5	6.2	5.6	5.6		6.9	6.9	8.1	8.1	
Vehicle Extension (s)	3.0	6.0	6.0	3.0	6.0	6.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	149	1162	464	52	938	423		259	213	392	380	
v/s Ratio Prot	c0.08	c0.27		0.02	0.19			c0.10		c0.22	0.12	
v/s Ratio Perm			0.01			0.07			0.00			
v/c Ratio	0.87	0.81	0.04	0.54	0.71	0.26		0.69	0.03	0.97	0.54	
Uniform Delay, d1	44.4	30.0	22.1	47.3	32.6	28.3		40.2	36.4	38.2	34.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	39.0	5.1	0.1	10.3	3.7	0.9		7.4	0.1	38.4	1.5	
Delay (s)	83.4	35.0	22.2	57.6	36.2	29.2		47.6	36.4	76.6	35.5	
Level of Service	F	D	C	E	D	C		D	D	E	D	
Approach Delay (s)		40.0			34.2			45.2			60.7	
Approach LOS		D			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	42.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	98.8	Sum of lost time (s)	27.1
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

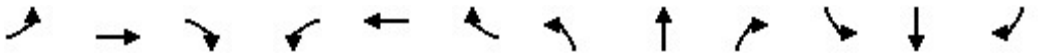
c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	310	545	465	64	239	12	458	204	82	5	207	372
v/c Ratio	0.83	0.52	0.44	0.48	0.41	0.03	0.64	0.53	0.15	0.02	0.60	0.45
Control Delay	68.0	38.1	5.7	71.3	48.9	0.1	50.8	51.1	1.3	45.4	55.8	15.0
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	68.0	38.1	5.7	71.3	48.9	0.1	50.8	51.1	1.3	45.4	55.8	15.0
Queue Length 50th (ft)	241	195	51	50	93	0	170	143	0	3	152	105
Queue Length 95th (ft)	#496	276	131	111	141	0	265	258	5	16	265	226
Internal Link Dist (ft)		216			777			626			561	
Turn Bay Length (ft)	150		230	115		200	130		90	265		
Base Capacity (vph)	375	1326	1113	172	953	570	864	469	634	435	453	821
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	0.83	0.41	0.42	0.37	0.25	0.02	0.53	0.43	0.13	0.01	0.46	0.45

Intersection Summary

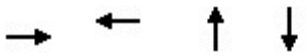
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	301	529	451	62	232	12	444	198	80	5	201	361
Future Volume (vph)	301	529	451	62	232	12	444	198	80	5	201	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	8.2	5.5	5.5	7.3	6.1	6.1	8.3	8.3	8.3	5.5	5.5	5.5
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3374	1583	1719	3574	1594	3467	1881	1615	1805	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	3374	1583	1719	3574	1594	3467	1881	1615	1805	1881	1599
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	310	545	465	64	239	12	458	204	82	5	207	372
RTOR Reduction (vph)	0	0	139	0	0	10	0	0	59	0	0	91
Lane Group Flow (vph)	310	545	326	64	239	2	458	204	23	5	207	281
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	3%	7%	2%	5%	1%	0%	1%	1%	0%	0%	1%	1%
Turn Type	Prot	NA	pt+ov	Prot	NA	Perm	Split	NA	pt+ov	Split	NA	pt+ov
Protected Phases	1	6	6 3	5	2		3	3	3 5	4	4	4 1
Permitted Phases						2						
Actuated Green, G (s)	26.4	38.5	69.3	9.6	20.2	20.2	25.3	25.3	34.9	22.5	22.5	54.4
Effective Green, g (s)	26.4	38.5	69.3	9.6	20.2	20.2	25.3	25.3	34.9	22.5	22.5	54.4
Actuated g/C Ratio	0.22	0.31	0.57	0.08	0.16	0.16	0.21	0.21	0.28	0.18	0.18	0.44
Clearance Time (s)	8.2	5.5		7.3	6.1	6.1	8.3	8.3		5.5	5.5	
Vehicle Extension (s)	3.0	5.0		3.0	5.0	5.0	3.0	3.0		5.0	5.0	
Lane Grp Cap (vph)	377	1060	895	134	589	262	716	388	460	331	345	710
v/s Ratio Prot	c0.18	c0.16	0.21	0.04	0.07		c0.13	0.11	0.01	0.00	c0.11	0.18
v/s Ratio Perm						0.00						
v/c Ratio	0.82	0.51	0.36	0.48	0.41	0.01	0.64	0.53	0.05	0.02	0.60	0.40
Uniform Delay, d1	45.8	34.4	14.6	54.0	45.8	42.8	44.4	43.3	31.8	40.9	45.9	23.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.5	0.8	0.5	2.7	1.0	0.0	1.9	1.3	0.0	0.0	4.2	0.8
Delay (s)	59.3	35.2	15.1	56.7	46.7	42.8	46.3	44.5	31.8	41.0	50.1	23.7
Level of Service	E	D	B	E	D	D	D	D	C	D	D	C
Approach Delay (s)		33.8			48.6			44.2			33.2	
Approach LOS		C			D			D			C	

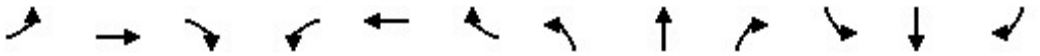
Intersection Summary			
HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	122.5	Sum of lost time (s)	28.1
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	1167	574	80	164
v/c Ratio	0.56	0.27	0.17	0.31
Control Delay	8.8	6.1	13.1	10.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	8.8	6.1	13.1	10.4
Queue Length 50th (ft)	121	44	14	19
Queue Length 95th (ft)	178	68	41	58
Internal Link Dist (ft)	196	212	242	190
Turn Bay Length (ft)				
Base Capacity (vph)	2071	2115	626	682
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	0.56	0.27	0.13	0.24

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	1020	21	14	505	26	29	26	21	40	32	84
Future Volume (vph)	67	1020	21	14	505	26	29	26	21	40	32	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.5	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.99			0.96			0.93	
Flt Protected		1.00			1.00			0.98			0.99	
Satd. Flow (prot)		3555			3495			1718			1723	
Flt Permitted		0.89			0.92			0.88			0.90	
Satd. Flow (perm)		3158			3222			1534			1573	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	71	1074	22	15	532	27	31	27	22	42	34	88
RTOR Reduction (vph)	0	2	0	0	5	0	0	17	0	0	69	0
Lane Group Flow (vph)	0	1165	0	0	569	0	0	63	0	0	95	0
Confl. Peds. (#/hr)	1		2	2		1	8					8
Heavy Vehicles (%)	0%	1%	0%	0%	2%	10%	11%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		33.1			33.1			11.3			11.3	
Effective Green, g (s)		33.1			33.1			11.3			11.3	
Actuated g/C Ratio		0.62			0.62			0.21			0.21	
Clearance Time (s)		4.5			4.5			4.5			4.5	
Vehicle Extension (s)		4.0			4.0			3.0			3.0	
Lane Grp Cap (vph)		1957			1997			324			332	
v/s Ratio Prot												
v/s Ratio Perm		c0.37			0.18			0.04			c0.06	
v/c Ratio		0.60			0.29			0.19			0.29	
Uniform Delay, d1		6.1			4.7			17.3			17.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			0.1			0.3			0.5	
Delay (s)		6.7			4.8			17.6			18.1	
Level of Service		A			A			B			B	
Approach Delay (s)		6.7			4.8			17.6			18.1	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	53.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		

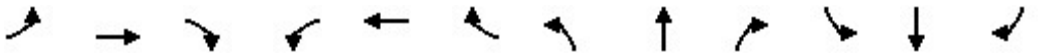
c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	832	298	447	156	159	622	172	545
v/c Ratio	0.90	0.49	0.69	0.37	1.32	0.71	1.23	0.60
Control Delay	49.9	8.8	42.7	8.2	229.8	36.9	189.0	34.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.9	8.8	42.7	8.2	229.8	36.9	189.0	34.1
Queue Length 50th (ft)	265	14	137	0	~130	173	~134	149
Queue Length 95th (ft)	#417	88	190	51	#273	254	#283	220
Internal Link Dist (ft)	371		350			338		383
Turn Bay Length (ft)		195		300	210		265	
Base Capacity (vph)	922	605	931	535	120	928	140	957
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	0.90	0.49	0.48	0.29	1.32	0.67	1.23	0.57

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.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	681	277	68	348	145	148	450	128	160	429	78
Future Volume (vph)	93	681	277	68	348	145	148	450	128	160	429	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.5	5.5		5.5	5.5	5.5	6.0		5.5	6.0	
Lane Util. Factor		0.95	1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.99		1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3549	1563		3581	1615	1787	3478		1805	3488	
Flt Permitted		0.99	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		3549	1563		3581	1615	1787	3478		1805	3488	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	100	732	298	73	374	156	159	484	138	172	461	84
RTOR Reduction (vph)	0	0	199	0	0	128	0	25	0	0	14	0
Lane Group Flow (vph)	0	832	99	0	447	28	159	597	0	172	531	0
Confl. Peds. (#/hr)			1	1			4		3	3		4
Heavy Vehicles (%)	2%	1%	2%	0%	0%	0%	1%	0%	0%	0%	1%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		25.1	25.1		17.6	17.6	6.5	23.7		7.5	24.7	
Effective Green, g (s)		25.1	25.1		17.6	17.6	6.5	23.7		7.5	24.7	
Actuated g/C Ratio		0.26	0.26		0.18	0.18	0.07	0.25		0.08	0.26	
Clearance Time (s)		5.5	5.5		5.5	5.5	5.5	6.0		5.5	6.0	
Vehicle Extension (s)		2.5	2.5		2.5	2.5	3.0	6.0		3.0	6.0	
Lane Grp Cap (vph)		924	406		653	294	120	855		140	893	
v/s Ratio Prot		c0.23			c0.12		0.09	c0.17		c0.10	0.15	
v/s Ratio Perm			0.06			0.02						
v/c Ratio		0.90	0.24		0.68	0.10	1.32	0.70		1.23	0.59	
Uniform Delay, d1		34.4	28.2		36.8	32.8	45.0	33.1		44.5	31.5	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.7	0.2		2.7	0.1	192.7	3.7		150.2	2.0	
Delay (s)		46.2	28.4		39.5	32.9	237.6	36.8		194.6	33.4	
Level of Service		D	C		D	C	F	D		F	C	
Approach Delay (s)		41.5			37.8			77.7			72.1	
Approach LOS		D			D			E			E	

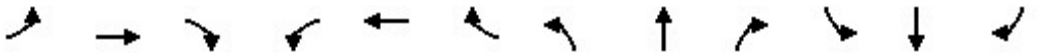
Intersection Summary			
HCM 2000 Control Delay	56.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	96.4	Sum of lost time (s)	22.5
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	148	554	155	282	605	244	251	1002	237	250	1129
v/c Ratio	0.42	0.77	0.23	0.70	0.78	0.34	0.63	0.93	0.32	0.62	0.73
Control Delay	38.1	39.1	7.2	44.8	38.8	11.0	41.9	43.8	8.4	41.8	28.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.1	39.1	7.2	44.8	38.8	11.0	41.9	43.8	8.4	41.8	28.7
Queue Length 50th (ft)	37	142	16	72	154	44	63	264	38	63	189
Queue Length 95th (ft)	64	#203	53	#112	#245	100	101	#393	81	100	239
Internal Link Dist (ft)		473			499			459			344
Turn Bay Length (ft)	280		470	200		390	320			240	
Base Capacity (vph)	427	724	684	418	779	723	427	1082	741	427	1549
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	0.35	0.77	0.23	0.67	0.78	0.34	0.59	0.93	0.32	0.59	0.73

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	521	146	265	569	229	236	942	223	235	987	74
Future Volume (veh/h)	139	521	146	265	569	229	236	942	223	235	987	74
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1870	1870	1870	1900	1900	1885	1870	1900	1885	1885
Adj Flow Rate, veh/h	148	554	0	282	605	244	251	1002	0	250	1050	79
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	1	2	2	2	0	0	1	2	0	1	1
Cap, veh/h	248	683		364	800	516	336	1241		335	1691	127
Arrive On Green	0.07	0.19	0.00	0.11	0.23	0.23	0.10	0.35	0.00	0.10	0.35	0.35
Sat Flow, veh/h	3510	3582	1585	3456	3554	1610	3510	3582	1585	3510	4883	367
Grp Volume(v), veh/h	148	554	0	282	605	244	251	1002	0	250	737	392
Grp Sat Flow(s),veh/h/ln	1755	1791	1585	1728	1777	1610	1755	1791	1585	1755	1716	1819
Q Serve(g_s), s	3.4	12.1	0.0	6.5	13.0	10.0	5.7	20.8	0.0	5.7	14.7	14.7
Cycle Q Clear(g_c), s	3.4	12.1	0.0	6.5	13.0	10.0	5.7	20.8	0.0	5.7	14.7	14.7
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	248	683		364	800	516	336	1241		335	1188	630
V/C Ratio(X)	0.60	0.81		0.78	0.76	0.47	0.75	0.81		0.75	0.62	0.62
Avail Cap(c_a), veh/h	428	721		421	800	516	428	1241		428	1188	630
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	37.0	31.8	0.0	35.7	29.7	22.3	36.1	24.3	0.0	36.1	22.3	22.3
Incr Delay (d2), s/veh	1.7	10.1	0.0	7.1	6.6	3.1	4.7	5.7	0.0	4.6	2.4	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	6.1	0.0	3.0	6.1	4.1	2.6	9.3	0.0	2.6	6.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	41.9	0.0	42.8	36.2	25.4	40.8	30.0	0.0	40.7	24.8	26.9
LnGrp LOS	D	D		D	D	C	D	C		D	C	C
Approach Vol, veh/h		702	A		1131			1253	A		1379	
Approach Delay, s/veh		41.2			35.5			32.2			28.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	34.4	10.8	24.0	12.8	34.4	13.6	21.1
Change Period (Y+Rc), s	5.0	6.0	5.0	5.5	5.0	6.0	5.0	5.5
Max Green Setting (Gmax), s	10.0	24.0	10.0	16.5	10.0	24.0	10.0	16.5
Max Q Clear Time (g_c+I1), s	7.7	22.8	5.4	15.0	7.7	16.7	8.5	14.1
Green Ext Time (p_c), s	0.2	1.1	0.1	1.2	0.2	6.6	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

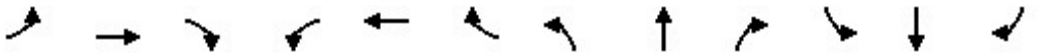
Notes

Unsignalized Delay for [NBR, EBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	23	107	154	18	1326	101	136	1473
v/c Ratio	0.14	0.54	0.29	0.13	0.47	0.11	0.66	0.42
Control Delay	30.3	45.0	5.7	37.1	14.2	0.9	51.6	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	45.0	5.7	37.1	14.2	0.9	51.6	10.3
Queue Length 50th (ft)	8	52	0	9	148	0	66	82
Queue Length 95th (ft)	30	#106	42	29	231	9	#151	252
Internal Link Dist (ft)	192	548			450			520
Turn Bay Length (ft)			225	315		395	165	
Base Capacity (vph)	221	199	534	154	2800	917	213	3480
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	0.10	0.54	0.29	0.12	0.47	0.11	0.64	0.42

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1	6	100	1	145	17	1246	95	128	1372	12
Future Volume (vph)	15	1	6	100	1	145	17	1246	95	128	1372	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00			1.00	1.00	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.96			1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1771			1775	1599	1805	5136	1550	1787	5128	
Flt Permitted		0.97			0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1771			1775	1599	1805	5136	1550	1787	5128	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	16	1	6	106	1	154	18	1326	101	136	1460	13
RTOR Reduction (vph)	0	6	0	0	0	122	0	0	51	0	1	0
Lane Group Flow (vph)	0	17	0	0	107	32	18	1326	50	136	1472	0
Confl. Peds. (#/hr)							2		1	1		2
Heavy Vehicles (%)	0%	0%	0%	2%	0%	1%	0%	1%	2%	1%	1%	0%
Turn Type	Split	NA		Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	3	3		4	4	1	5	2		1	6	
Permitted Phases						4			2			
Actuated Green, G (s)		3.0			7.8	17.3	2.8	40.7	40.7	9.5	47.4	
Effective Green, g (s)		3.0			7.8	17.3	2.8	40.7	40.7	9.5	47.4	
Actuated g/C Ratio		0.04			0.10	0.21	0.03	0.50	0.50	0.12	0.58	
Clearance Time (s)		5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)		64			168	434	61	2549	769	207	2964	
v/s Ratio Prot		c0.01			c0.06	0.01	0.01	0.26		c0.08	c0.29	
v/s Ratio Perm						0.01			0.03			
v/c Ratio		0.27			0.64	0.07	0.30	0.52	0.07	0.66	0.50	
Uniform Delay, d1		38.4			35.7	25.9	38.6	14.0	10.7	34.7	10.2	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.3			7.7	0.1	2.7	0.8	0.2	7.3	0.6	
Delay (s)		40.7			43.4	26.0	41.3	14.8	10.9	42.0	10.8	
Level of Service		D			D	C	D	B	B	D	B	
Approach Delay (s)		40.7			33.1			14.8			13.5	
Approach LOS		D			C			B			B	

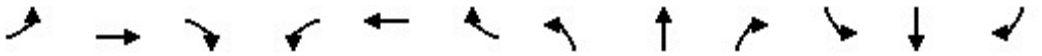
Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	120	153	25	119	1261	12	1310	115
v/c Ratio	0.67	0.44	0.11	0.58	0.36	0.08	0.47	0.13
Control Delay	52.5	10.2	21.0	45.7	6.4	35.8	12.9	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	10.2	21.0	45.7	6.4	35.8	12.9	2.6
Queue Length 50th (ft)	59	0	5	58	76	6	152	0
Queue Length 95th (ft)	#126	51	26	111	163	22	189	24
Internal Link Dist (ft)	312		290		483		269	
Turn Bay Length (ft)		215		415		275		1000
Base Capacity (vph)	197	364	237	228	3501	187	2758	912
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	0.61	0.42	0.11	0.52	0.36	0.06	0.47	0.13

Intersection Summary

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

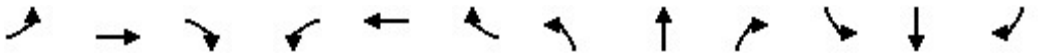


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	1	151	8	3	14	118	1238	10	12	1297	114
Future Volume (vph)	118	1	151	8	3	14	118	1238	10	12	1297	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0		5.5	6.0		5.5	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt		1.00	0.85		0.92		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1810	1599		1729		1787	5080		1805	5136	1599
Flt Permitted		0.71	1.00		0.88		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1348	1599		1542		1787	5080		1805	5136	1599
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	119	1	153	8	3	14	119	1251	10	12	1310	115
RTOR Reduction (vph)	0	0	132	0	12	0	0	1	0	0	0	53
Lane Group Flow (vph)	0	120	21	0	13	0	119	1260	0	12	1310	62
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	1%	2%	0%	0%	1%	1%
Turn Type	Perm	NA	Perm	Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			4		5	2		1	6	
Permitted Phases	4		4	4								6
Actuated Green, G (s)		11.0	11.0		11.0		9.5	52.1		1.4	44.0	44.0
Effective Green, g (s)		11.0	11.0		11.0		9.5	52.1		1.4	44.0	44.0
Actuated g/C Ratio		0.13	0.13		0.13		0.12	0.64		0.02	0.54	0.54
Clearance Time (s)		6.0	6.0		6.0		5.5	6.0		5.5	6.0	6.0
Vehicle Extension (s)		3.5	3.5		3.5		3.0	5.0		3.0	5.0	5.0
Lane Grp Cap (vph)		180	214		206		207	3227		30	2755	858
v/s Ratio Prot							c0.07	0.25		0.01	c0.26	
v/s Ratio Perm		c0.09	0.01		0.01							0.04
v/c Ratio		0.67	0.10		0.06		0.57	0.39		0.40	0.48	0.07
Uniform Delay, d1		33.8	31.1		31.0		34.3	7.3		39.9	11.8	9.2
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		9.3	0.2		0.2		3.8	0.4		8.5	0.6	0.2
Delay (s)		43.1	31.4		31.1		38.2	7.6		48.4	12.4	9.3
Level of Service		D	C		C		D	A		D	B	A
Approach Delay (s)		36.5			31.1			10.2			12.5	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	80	97	61	15	77	1398	50	1393
v/c Ratio	0.50	0.32	0.41	0.05	0.44	0.46	0.27	0.48
Control Delay	46.5	3.4	44.3	0.3	42.2	13.5	37.7	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.5	3.4	44.3	0.3	42.2	13.5	37.7	15.1
Queue Length 50th (ft)	40	0	30	0	38	185	24	185
Queue Length 95th (ft)	82	5	68	0	78	240	56	240
Internal Link Dist (ft)	178		254			316		213
Turn Bay Length (ft)		115		100	315		320	
Base Capacity (vph)	172	310	156	285	220	3071	220	2880
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	0.47	0.31	0.39	0.05	0.35	0.46	0.23	0.48

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	16	95	46	14	15	75	1363	7	49	1310	55
Future Volume (vph)	63	16	95	46	14	15	75	1363	7	49	1310	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770	1583		1830	1495	1805	5132		1805	5094	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1770	1583		1830	1495	1805	5132		1805	5094	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	64	16	97	47	14	15	77	1391	7	50	1337	56
RTOR Reduction (vph)	0	0	90	0	0	14	0	0	0	0	5	0
Lane Group Flow (vph)	0	80	7	0	61	1	77	1398	0	50	1388	0
Confl. Peds. (#/hr)							1		1	1		1
Heavy Vehicles (%)	4%	0%	2%	0%	0%	8%	0%	1%	0%	0%	1%	4%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)		6.3	6.3		5.6	5.6	7.0	43.9		5.2	42.1	
Effective Green, g (s)		6.3	6.3		5.6	5.6	7.0	43.9		5.2	42.1	
Actuated g/C Ratio		0.08	0.08		0.07	0.07	0.09	0.54		0.06	0.51	
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	2.5	6.0		2.5	6.0	
Lane Grp Cap (vph)		135	121		124	102	154	2747		114	2615	
v/s Ratio Prot		c0.05			c0.03		c0.04	0.27		0.03	c0.27	
v/s Ratio Perm			0.00			0.00						
v/c Ratio		0.59	0.06		0.49	0.01	0.50	0.51		0.44	0.53	
Uniform Delay, d1		36.6	35.1		36.8	35.6	35.8	12.2		37.0	13.3	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		6.8	0.2		3.1	0.0	1.9	0.7		2.0	0.8	
Delay (s)		43.4	35.3		39.9	35.7	37.7	12.8		39.0	14.1	
Level of Service		D	D		D	D	D	B		D	B	
Approach Delay (s)		39.0			39.0			14.1			15.0	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	WBR	NBU	NBT	SBL	SBT
Lane Group Flow (vph)	25	9	11	1586	9	1557
v/c Ratio	0.15	0.06	0.07	0.38	0.06	0.37
Control Delay	36.1	19.5	35.7	4.6	35.5	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	19.5	35.7	4.6	35.5	4.2
Queue Length 50th (ft)	12	0	5	76	4	75
Queue Length 95th (ft)	34	14	21	206	19	187
Internal Link Dist (ft)	469			187		179
Turn Bay Length (ft)			165		170	
Base Capacity (vph)	398	363	161	4194	158	4234
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	0.06	0.02	0.07	0.38	0.06	0.37

Intersection Summary

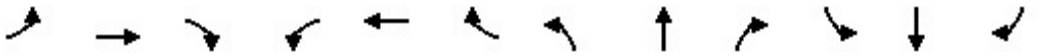
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	23	8	10	1446	29	8	1448
Future Volume (vph)	23	8	10	1446	29	8	1448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.3	6.3	4.5	5.9		6.8	5.9
Lane Util. Factor	1.00	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	1.00		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (prot)	1805	1615	1770	5120		1805	5136
Flt Permitted	0.95	1.00	0.95	1.00		0.95	1.00
Satd. Flow (perm)	1805	1615	1770	5120		1805	5136
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	25	9	11	1555	31	9	1557
RTOR Reduction (vph)	0	8	0	2	0	0	0
Lane Group Flow (vph)	25	1	11	1584	0	9	1557
Confl. Peds. (#/hr)					1	1	
Heavy Vehicles (%)	0%	0%	2%	1%	0%	0%	1%
Turn Type	Prot	Perm	Prot	NA		Prot	NA
Protected Phases	4		5	2		1	6
Permitted Phases		4					
Actuated Green, G (s)	4.7	4.7	1.4	56.9		1.4	59.2
Effective Green, g (s)	4.7	4.7	1.4	56.9		1.4	59.2
Actuated g/C Ratio	0.06	0.06	0.02	0.69		0.02	0.72
Clearance Time (s)	6.3	6.3	4.5	5.9		6.8	5.9
Vehicle Extension (s)	3.5	3.5	3.0	5.5		3.0	5.5
Lane Grp Cap (vph)	103	92	30	3552		30	3707
v/s Ratio Prot	c0.01		c0.01	c0.31		0.00	0.30
v/s Ratio Perm		0.00					
v/c Ratio	0.24	0.01	0.37	0.45		0.30	0.42
Uniform Delay, d1	36.9	36.4	39.9	5.6		39.8	4.5
Progression Factor	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.5	0.0	7.4	0.4		5.6	0.4
Delay (s)	38.4	36.5	47.3	6.0		45.4	4.9
Level of Service	D	D	D	A		D	A
Approach Delay (s)	37.9			6.3			5.1
Approach LOS	D			A			A

Intersection Summary			
HCM 2000 Control Delay	6.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	129	65	58	39	109	1435	22	46	1448	80
v/c Ratio	0.62	0.20	0.37	0.13	0.56	0.53	0.02	0.31	0.58	0.09
Control Delay	48.4	1.4	41.5	0.9	46.5	16.7	0.0	40.7	19.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.4	1.4	41.5	0.9	46.5	16.7	0.0	40.7	19.7	0.2
Queue Length 50th (ft)	65	0	29	0	55	205	0	23	222	0
Queue Length 95th (ft)	120	0	63	0	106	290	0	54	296	1
Internal Link Dist (ft)	284		261			193			145	
Turn Bay Length (ft)		115			190		75	295		105
Base Capacity (vph)	237	350	224	354	220	2723	918	208	2478	843
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	0.19	0.26	0.11	0.50	0.53	0.02	0.22	0.58	0.09

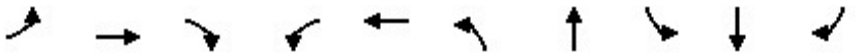
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	7	61	49	6	37	102	1349	21	43	1361	75
Future Volume (vph)	115	7	61	49	6	37	102	1349	21	43	1361	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.95	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1814	1553		1711	1584	1787	5136	1595	1752	5136	1581
Flt Permitted		0.95	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1814	1553		1711	1584	1787	5136	1595	1752	5136	1581
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	122	7	65	52	6	39	109	1435	22	46	1448	80
RTOR Reduction (vph)	0	0	57	0	0	36	0	0	11	0	0	43
Lane Group Flow (vph)	0	129	8	0	58	3	109	1435	11	46	1448	37
Confl. Peds. (#/hr)	2					2	1		1	1		1
Heavy Vehicles (%)	0%	0%	4%	7%	0%	0%	1%	1%	0%	3%	1%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	3		4	4		5	2		1	6	
Permitted Phases			3			4			2			6
Actuated Green, G (s)		9.7	9.7		6.8	6.8	8.0	41.5	41.5	5.0	38.5	38.5
Effective Green, g (s)		9.7	9.7		6.8	6.8	8.0	41.5	41.5	5.0	38.5	38.5
Actuated g/C Ratio		0.12	0.12		0.08	0.08	0.10	0.49	0.49	0.06	0.46	0.46
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)		2.5	2.5		2.5	2.5	2.5	4.0	4.0	2.5	4.0	4.0
Lane Grp Cap (vph)		209	179		138	128	170	2537	788	104	2354	724
v/s Ratio Prot		c0.07			c0.03		c0.06	c0.28		0.03	c0.28	
v/s Ratio Perm			0.00			0.00			0.01			0.02
v/c Ratio		0.62	0.04		0.42	0.02	0.64	0.57	0.01	0.44	0.62	0.05
Uniform Delay, d1		35.4	33.0		36.7	35.5	36.6	14.9	10.8	38.2	17.2	12.6
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		4.6	0.1		1.5	0.1	7.1	0.9	0.0	2.2	1.2	0.1
Delay (s)		40.0	33.1		38.2	35.6	43.7	15.8	10.9	40.3	18.4	12.7
Level of Service		D	C		D	D	D	B	B	D	B	B
Approach Delay (s)		37.7			37.2			17.7			18.7	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

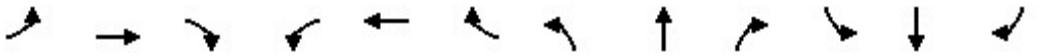
c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	170	308	111	126	559	141	1287	291	1065	214
v/c Ratio	0.87	0.58	0.29	0.73	0.98	0.62	0.79	0.90	0.55	0.30
Control Delay	76.3	37.6	3.4	61.5	63.5	46.0	28.9	64.4	22.1	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.3	37.6	3.4	61.5	63.5	46.0	28.9	64.4	22.1	4.1
Queue Length 50th (ft)	87	78	0	64	119	68	212	147	159	0
Queue Length 95th (ft)	#198	120	14	#146	#226	125	267	#286	203	43
Internal Link Dist (ft)		762			867		276		418	
Turn Bay Length (ft)	200		215	725		280		330		245
Base Capacity (vph)	196	529	378	176	568	256	1625	330	1921	713
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	0.87	0.58	0.29	0.72	0.98	0.55	0.79	0.88	0.55	0.30

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	296	107	121	335	202	135	1057	179	279	1022	205
Future Volume (veh/h)	163	296	107	121	335	202	135	1057	179	279	1022	205
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1870	1900	1900	1900	1856	1885	1885	1900	1900	1870
Adj Flow Rate, veh/h	170	308	111	126	349	210	141	1101	186	291	1065	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, %	1	1	2	0	0	0	3	1	1	0	0	2
Cap, veh/h	197	560	247	158	293	173	176	1413	238	328	2077	
Arrive On Green	0.11	0.16	0.16	0.09	0.13	0.13	0.10	0.32	0.32	0.18	0.40	0.00
Sat Flow, veh/h	1795	3582	1582	1810	2181	1288	1767	4432	748	1810	5187	1585
Grp Volume(v), veh/h	170	308	111	126	288	271	141	852	435	291	1065	0
Grp Sat Flow(s),veh/h/ln	1795	1791	1582	1810	1805	1665	1767	1716	1749	1810	1729	1585
Q Serve(g_s), s	7.6	6.5	5.2	5.6	11.0	11.0	6.4	18.5	18.5	12.9	12.7	0.0
Cycle Q Clear(g_c), s	7.6	6.5	5.2	5.6	11.0	11.0	6.4	18.5	18.5	12.9	12.7	0.0
Prop In Lane	1.00		1.00	1.00		0.77	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	197	560	247	158	242	223	176	1094	557	328	2077	
V/C Ratio(X)	0.86	0.55	0.45	0.80	1.19	1.22	0.80	0.78	0.78	0.89	0.51	
Avail Cap(c_a), veh/h	197	560	247	177	242	223	259	1094	557	331	2077	
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	0.00
Uniform Delay (d), s/veh	35.9	31.9	31.4	36.7	35.5	35.5	36.1	25.3	25.3	32.8	18.5	0.0
Incr Delay (d2), s/veh	29.1	1.2	1.3	20.0	118.2	130.6	10.6	5.5	10.4	23.8	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	2.8	2.0	3.3	12.7	12.4	3.2	8.0	8.9	7.6	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.0	33.1	32.7	56.7	153.7	166.1	46.7	30.8	35.7	56.6	19.5	0.0
LnGrp LOS	E	C	C	E	F	F	D	C	D	E	B	
Approach Vol, veh/h		589			685			1428			1356	A
Approach Delay, s/veh		42.2			140.8			33.9			27.4	
Approach LOS		D			F			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.9	32.1	12.2	17.8	13.2	38.8	14.0	16.0
Change Period (Y+Rc), s	5.0	6.0	5.0	5.0	5.0	6.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	26.0	8.0	12.0	12.0	29.0	9.0	11.0
Max Q Clear Time (g_c+I1), s	14.9	20.5	7.6	8.5	8.4	14.7	9.6	13.0
Green Ext Time (p_c), s	0.0	4.2	0.0	0.8	0.1	8.0	0.0	0.0

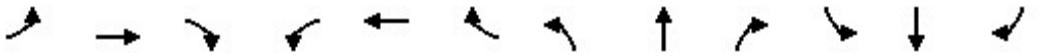
Intersection Summary	
HCM 6th Ctrl Delay	51.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	115	49	46	1364	19	1271
v/c Ratio	0.57	0.32	0.14	0.39	0.06	0.38
Control Delay	28.0	36.3	6.1	9.1	5.8	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	36.3	6.1	9.1	5.8	10.4
Queue Length 50th (ft)	21	20	8	117	3	152
Queue Length 95th (ft)	72	53	18	205	10	190
Internal Link Dist (ft)	218	764		385		854
Turn Bay Length (ft)			230		215	
Base Capacity (vph)	213	162	353	3475	350	3352
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	0.30	0.13	0.39	0.05	0.38

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	5	68	30	9	9	44	1282	28	18	1184	36
Future Volume (vph)	37	5	68	30	9	9	44	1282	28	18	1184	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0		5.0	6.0		5.0	6.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.92			0.98		1.00	1.00		1.00	1.00	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1713			1796		1752	5067		1805	5110	
Flt Permitted		0.98			0.97		0.17	1.00		0.17	1.00	
Satd. Flow (perm)		1713			1796		322	5067		317	5110	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	39	5	71	31	9	9	46	1335	29	19	1233	38
RTOR Reduction (vph)	0	66	0	0	9	0	0	2	0	0	3	0
Lane Group Flow (vph)	0	49	0	0	40	0	46	1362	0	19	1268	0
Confl. Peds. (#/hr)							5					5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	3%	2%	4%	0%	1%	0%
Turn Type	Split	NA		Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		5.5			4.2		52.8	49.0		49.8	47.5	
Effective Green, g (s)		5.5			4.2		52.8	49.0		49.8	47.5	
Actuated g/C Ratio		0.07			0.05		0.64	0.60		0.61	0.58	
Clearance Time (s)		5.0			5.0		5.0	6.0		5.0	6.0	
Vehicle Extension (s)		3.0			3.0		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)		114			91		273	3027		234	2960	
v/s Ratio Prot		c0.03			c0.02		c0.01	c0.27		0.00	0.25	
v/s Ratio Perm							0.10			0.05		
v/c Ratio		0.43			0.44		0.17	0.45		0.08	0.43	
Uniform Delay, d1		36.7			37.8		5.7	9.1		6.6	9.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.6			3.4		0.2	0.5		0.1	0.5	
Delay (s)		39.3			41.2		5.9	9.6		6.7	10.1	
Level of Service		D			D		A	A		A	B	
Approach Delay (s)		39.3			41.2			9.4			10.1	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	5	9	341	186	1207	402	178	1150
v/c Ratio	0.05	0.08	0.68	0.28	0.51	0.42	0.66	0.33
Control Delay	37.2	25.7	40.5	5.4	18.4	3.8	44.5	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.2	25.7	40.5	5.4	18.4	3.8	44.5	6.8
Queue Length 50th (ft)	3	1	85	10	143	0	87	67
Queue Length 95th (ft)	13	16	128	48	242	58	147	132
Internal Link Dist (ft)		123			241			150
Turn Bay Length (ft)				250		230	235	
Base Capacity (vph)	110	108	549	722	2347	954	330	3453
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	0.05	0.08	0.62	0.26	0.51	0.42	0.54	0.33

Intersection Summary

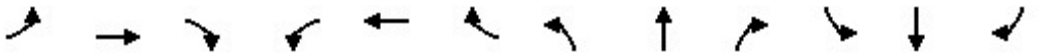
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	7	334	0	182	0	1183	394	174	1127	0
Future Volume (vph)	5	2	7	334	0	182	0	1183	394	174	1127	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0		5.0		6.0	6.0	5.0	6.0	
Lane Util. Factor	1.00	1.00		0.97		1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00		1.00		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00		1.00		1.00	1.00	1.00	1.00	
Frt	1.00	0.88		1.00		0.85		1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1678		3467		1615		5085	1599	1805	5136	
Flt Permitted	0.95	1.00		0.95		1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1678		3467		1615		5085	1599	1805	5136	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	5	2	7	341	0	186	0	1207	402	178	1150	0
RTOR Reduction (vph)	0	7	0	0	0	110	0	0	231	0	0	0
Lane Group Flow (vph)	5	2	0	341	0	76	0	1207	171	178	1150	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	0%	0%	0%	1%	0%	0%	0%	2%	1%	0%	1%	0%
Turn Type	Split	NA		Prot		pm+ov		NA	Perm	Prot	NA	
Protected Phases	3	3		4		1		2		1	6	
Permitted Phases						4			2			
Actuated Green, G (s)	2.0	2.0		11.9		24.2		34.8	34.8	12.3	52.1	
Effective Green, g (s)	2.0	2.0		11.9		24.2		34.8	34.8	12.3	52.1	
Actuated g/C Ratio	0.02	0.02		0.15		0.30		0.42	0.42	0.15	0.64	
Clearance Time (s)	5.0	5.0		5.0		5.0		6.0	6.0	5.0	6.0	
Vehicle Extension (s)	2.5	2.5		2.5		2.5		6.0	6.0	2.5	6.0	
Lane Grp Cap (vph)	44	40		503		575		2158	678	270	3263	
v/s Ratio Prot	c0.00	0.00		c0.10		0.02		c0.24		c0.10	0.22	
v/s Ratio Perm						0.03			0.11			
v/c Ratio	0.11	0.05		0.68		0.13		0.56	0.25	0.66	0.35	
Uniform Delay, d1	39.1	39.1		33.2		21.2		17.8	15.2	32.9	7.0	
Progression Factor	1.00	1.00		1.00		1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.8	0.4		3.3		0.1		1.1	0.9	5.1	0.3	
Delay (s)	40.0	39.5		36.5		21.3		18.9	16.1	38.0	7.3	
Level of Service	D	D		D		C		B	B	D	A	
Approach Delay (s)		39.7			31.1			18.2			11.4	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	107	108	51	10	2	6	1415	5	1509
v/c Ratio	0.56	0.57	0.15	0.08	0.01	0.05	0.40	0.04	0.43
Control Delay	45.6	45.9	1.0	36.8	0.0	36.5	7.4	36.4	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.6	45.9	1.0	36.8	0.0	36.5	7.4	36.4	7.5
Queue Length 50th (ft)	54	55	0	5	0	3	75	3	80
Queue Length 95th (ft)	107	108	0	20	0	15	235	13	252
Internal Link Dist (ft)		91		125			466		240
Turn Bay Length (ft)			105		50	450		180	
Base Capacity (vph)	214	214	356	156	296	176	3542	176	3544
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	0.50	0.50	0.14	0.06	0.01	0.03	0.40	0.03	0.43

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	209	0	49	8	2	2	6	1366	7	5	1349	114
Future Volume (vph)	209	0	49	8	2	2	6	1366	7	5	1349	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Lane Util. Factor	0.95	0.95	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1681	1681	1615		1827	1615	1805	5082		1805	5079	
Flt Permitted	0.95	0.95	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1681	1681	1615		1827	1615	1805	5082		1805	5079	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	215	0	51	8	2	2	6	1408	7	5	1391	118
RTOR Reduction (vph)	0	0	45	0	0	2	0	0	0	0	8	0
Lane Group Flow (vph)	107	108	6	0	10	0	6	1415	0	5	1501	0
Heavy Vehicles (%)	2%	0%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases			4			3						
Actuated Green, G (s)	9.3	9.3	9.3		1.3	1.3	1.2	49.2		1.2	49.2	
Effective Green, g (s)	9.3	9.3	9.3		1.3	1.3	1.2	49.2		1.2	49.2	
Actuated g/C Ratio	0.11	0.11	0.11		0.02	0.02	0.01	0.60		0.01	0.60	
Clearance Time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0		5.0	6.0	
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5	6.0		2.5	6.0	
Lane Grp Cap (vph)	190	190	183		28	25	26	3049		26	3047	
v/s Ratio Prot	0.06	c0.06			c0.01		c0.00	0.28		0.00	c0.30	
v/s Ratio Perm			0.00			0.00						
v/c Ratio	0.56	0.57	0.03		0.36	0.00	0.23	0.46		0.19	0.49	
Uniform Delay, d1	34.4	34.4	32.3		39.9	39.7	39.9	9.1		39.9	9.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.1	3.1	0.1		5.6	0.0	3.3	0.5		2.6	0.6	
Delay (s)	37.5	37.6	32.4		45.5	39.7	43.2	9.6		42.5	9.9	
Level of Service	D	D	C		D	D	D	A		D	A	
Approach Delay (s)		36.6			44.6			9.7			10.0	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			