Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	759	0	0	759
Future Volume (Veh/h)	0	0	759	0	0	759
Sign Control	Stop		Free			Free
Grade	0%		1%			-2%
Peak Hour Factor	0.90	0.90	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	0	791	0	0	791
Pedestrians			43			16
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			4			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			259			280
pX, platoon unblocked	0.80	0.67			0.67	
vC, conflicting volume	1625	807			791	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	957	469			446	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	219	394			757	

Direction, Lane #	NB 1	SB 1
Volume Total	791	791
Volume Left	0	0
Volume Right	0	0
cSH	1700	757
Volume to Capacity	0.47	0.00
Queue Length 95th (ft)	0	0
Control Delay (s)	0.0	0.0
Lane LOS		
Approach Delay (s)	0.0	0.0
Approach LOS		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		

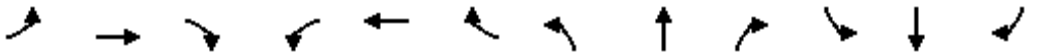
Lane Group	EBT	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	573	1082	483	290	515	63
v/c Ratio	0.51	0.96	1.03	0.92	0.64	0.12
Control Delay	26.4	51.3	86.1	57.0	21.1	4.3
Queue Delay	0.0	0.0	25.2	0.0	0.6	0.0
Total Delay	26.4	51.3	111.2	57.0	21.8	4.3
Queue Length 50th (ft)	156	384	~367	134	195	2
Queue Length 95th (ft)	207	#524	#563	m#259	m253	m11
Internal Link Dist (ft)	189	477	172		179	
Turn Bay Length (ft)				100		160
Base Capacity (vph)	1114	1126	468	316	810	531
Starvation Cap Reductn	0	0	0	0	84	0
Spillback Cap Reductn	0	0	62	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.96	1.19	0.92	0.71	0.12

Intersection Summary

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

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

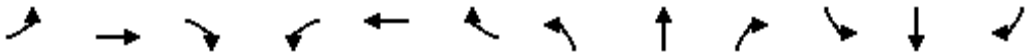
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	432	78	0	662	301	0	424	6	258	458	56
Future Volume (vph)	0	432	78	0	662	301	0	424	6	258	458	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	10	10	10	10	10
Grade (%)		1%			1%			2%			-2%	
Total Lost time (s)		4.0			4.0			4.0		3.0	4.0	4.0
Lane Util. Factor		0.95			0.95			1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.95			0.96			0.99		1.00	1.00	0.72
Flpb, ped/bikes		1.00			1.00			1.00		1.00	1.00	1.00
Frt		0.98			0.95			1.00		1.00	1.00	0.85
Flt Protected		1.00			1.00			1.00		0.95	1.00	1.00
Satd. Flow (prot)		2725			2754			1319		1458	1565	969
Flt Permitted		1.00			1.00			1.00		0.20	1.00	1.00
Satd. Flow (perm)		2725			2754			1319		302	1565	969
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	485	88	0	744	338	0	476	7	290	515	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	0	0	0	29
Lane Group Flow (vph)	0	573	0	0	1082	0	0	482	0	290	515	34
Confl. Peds. (#/hr)	43		97	97		43	165		447	447		165
Heavy Vehicles (%)	2%	7%	5%	2%	4%	2%	2%	7%	2%	5%	3%	2%
Parking (#/hr)								0	0			
Turn Type		NA			NA			NA		pm+pt	NA	Perm
Protected Phases		6			2			8		7	4	
Permitted Phases										4		4
Actuated Green, G (s)		43.0			43.0			37.0		55.0	55.0	55.0
Effective Green, g (s)		45.0			45.0			39.0		57.0	57.0	57.0
Actuated g/C Ratio		0.41			0.41			0.35		0.52	0.52	0.52
Clearance Time (s)		6.0			6.0			6.0		5.0	6.0	6.0
Lane Grp Cap (vph)		1114			1126			467		314	810	502
v/s Ratio Prot		0.21			c0.39			c0.37		c0.13	0.33	
v/s Ratio Perm										0.35		0.03
v/c Ratio		0.51			0.96			1.03		0.92	0.64	0.07
Uniform Delay, d1		24.3			31.6			35.5		20.6	19.0	13.2
Progression Factor		1.00			1.00			1.00		1.65	0.92	1.05
Incremental Delay, d2		1.7			18.9			50.4		29.0	2.9	0.2
Delay (s)		26.0			50.6			85.9		62.9	20.5	14.1
Level of Service		C			D			F		E	C	B
Approach Delay (s)		26.0			50.6			85.9			34.2	
Approach LOS		C			D			F			C	

Intersection Summary			
HCM 2000 Control Delay	46.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

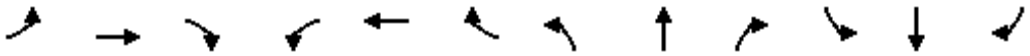
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	71	11	180	10	1134	0	0	763	23
Future Volume (Veh/h)	0	0	0	71	11	180	10	1134	0	0	763	23
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.98	0.98	0.98	0.98	0.98	0.90	0.90	0.98	0.98
Hourly flow rate (vph)	0	0	0	72	11	184	10	1157	0	0	779	23
Pedestrians											36	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											3	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								557			210	
pX, platoon unblocked	0.90	0.90	0.85	0.90	0.90	0.83	0.85			0.83		
vC, conflicting volume	1614	1968	401	1566	1979	614	802			1157		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	732	1124	0	679	1136	123	423			777		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	76	94	75	99			100		
cM capacity (veh/h)	191	182	925	302	179	728	966			692		

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	267	396	771	519	283
Volume Left	72	10	0	0	0
Volume Right	184	0	0	0	23
cSH	483	966	1700	1700	1700
Volume to Capacity	0.55	0.01	0.45	0.31	0.17
Queue Length 95th (ft)	83	1	0	0	0
Control Delay (s)	21.3	0.3	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	21.3	0.1		0.0	
Approach LOS	C				

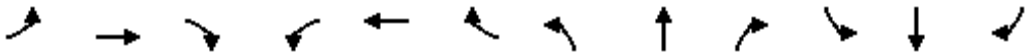
Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	68.8%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	25	40	4	4	32	127	6	157	12	266	181	14
Future Volume (vph)	25	40	4	4	32	127	6	157	12	266	181	14
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
Hourly flow rate (vph)	27	43	4	4	34	137	6	169	13	286	195	15

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	74	175	188	286	210
Volume Left (vph)	27	4	6	286	0
Volume Right (vph)	4	137	13	0	15
Hadj (s)	0.07	-0.40	0.04	0.53	0.02
Departure Headway (s)	6.0	5.3	5.4	6.0	5.5
Degree Utilization, x	0.12	0.26	0.28	0.48	0.32
Capacity (veh/h)	541	622	629	584	639
Control Delay (s)	9.8	10.1	10.5	13.1	9.8
Approach Delay (s)	9.8	10.1	10.5	11.7	
Approach LOS	A	B	B	B	

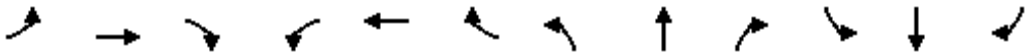
Intersection Summary				
Delay	11.0			
Level of Service	B			
Intersection Capacity Utilization	58.0%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	5	65	13	21	70	22	11	113	33	45	197	2
Future Volume (vph)	5	65	13	21	70	22	11	113	33	45	197	2
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	5	71	14	23	77	24	12	124	36	49	216	2

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	90	124	172	267
Volume Left (vph)	5	23	12	49
Volume Right (vph)	14	24	36	2
Hadj (s)	-0.03	-0.05	-0.05	0.12
Departure Headway (s)	5.1	5.1	4.8	4.8
Degree Utilization, x	0.13	0.17	0.23	0.36
Capacity (veh/h)	631	644	713	712
Control Delay (s)	8.9	9.1	9.2	10.4
Approach Delay (s)	8.9	9.1	9.2	10.4
Approach LOS	A	A	A	B

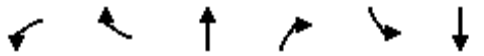
Intersection Summary				
Delay	9.6			
Level of Service	A			
Intersection Capacity Utilization	47.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	61	69	40	19	8	17	5	350	5	7	295	3
Future Volume (vph)	61	69	40	19	8	17	5	350	5	7	295	3
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
Hourly flow rate (vph)	66	74	43	20	9	18	5	376	5	8	317	3

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	183	47	386	328
Volume Left (vph)	66	20	5	8
Volume Right (vph)	43	18	5	3
Hadj (s)	-0.03	-0.09	0.05	0.10
Departure Headway (s)	5.8	6.1	5.1	5.3
Degree Utilization, x	0.29	0.08	0.55	0.48
Capacity (veh/h)	557	483	667	652
Control Delay (s)	11.2	9.6	14.2	13.0
Approach Delay (s)	11.2	9.6	14.2	13.0
Approach LOS	B	A	B	B

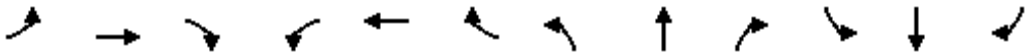
Intersection Summary				
Delay	13.0			
Level of Service	B			
Intersection Capacity Utilization	42.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	78	9	6	98
Future Volume (Veh/h)	0	0	78	9	6	98
Sign Control	Free		Stop			Stop
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	0	92	11	7	115
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		0	0	57	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		0	0	57	0
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	100		90	99	99	87
cM capacity (veh/h)	1623		896	1085	857	896

Direction, Lane #	NB 1	SB 1
Volume Total	103	122
Volume Left	0	7
Volume Right	11	0
cSH	913	894
Volume to Capacity	0.11	0.14
Queue Length 95th (ft)	10	12
Control Delay (s)	9.4	9.7
Lane LOS	A	A
Approach Delay (s)	9.4	9.7
Approach LOS	A	A

Intersection Summary			
Average Delay	9.6		
Intersection Capacity Utilization	14.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	0	0	88	0	44	0	51	17	6	18	0
Future Volume (vph)	0	0	0	88	0	44	0	51	17	6	18	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	0	0	104	0	52	0	60	20	7	21	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	0	156	80	28
Volume Left (vph)	0	104	0	7
Volume Right (vph)	0	52	20	0
Hadj (s)	0.00	-0.03	-0.12	0.08
Departure Headway (s)	4.3	4.1	4.2	4.4
Degree Utilization, x	0.00	0.18	0.09	0.03
Capacity (veh/h)	815	854	826	780
Control Delay (s)	7.3	8.0	7.6	7.6
Approach Delay (s)	0.0	8.0	7.6	7.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay	7.8			
Level of Service	A			
Intersection Capacity Utilization	21.9%	ICU Level of Service	A	
Analysis Period (min)	15			

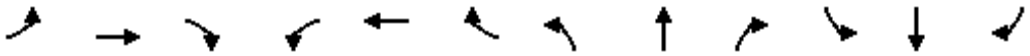
L. Intersection Capacity Analysis – Future conditions with the development + mitigations and recommendations (2035 Total Future with Mitigations and Recommendations)

Lane Group	EBL	EBT	NBT	SBT
Lane Group Flow (vph)	35	452	969	1541
v/c Ratio	0.08	0.52	0.50	1.12
Control Delay	26.9	32.3	9.7	82.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	26.9	32.3	9.7	82.6
Queue Length 50th (ft)	16	125	141	~596
Queue Length 95th (ft)	40	176	187	#732
Internal Link Dist (ft)		782	130	228
Turn Bay Length (ft)	60			
Base Capacity (vph)	436	877	1921	1382
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	0.08	0.52	0.50	1.12

Intersection Summary

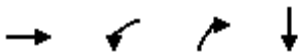
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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)	32	399	13	0	0	0	0	669	213	127	1275	0
Future Volume (vph)	32	399	13	0	0	0	0	669	213	127	1275	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						3.5			3.5	
Lane Util. Factor	1.00	0.95						0.95			0.95	
Frpb, ped/bikes	1.00	1.00						1.00			1.00	
Flpb, ped/bikes	1.00	1.00						1.00			1.00	
Frt	1.00	1.00						0.96			1.00	
Flt Protected	0.95	1.00						1.00			1.00	
Satd. Flow (prot)	1533	3074						2953			3171	
Flt Permitted	0.95	1.00						1.00			0.68	
Satd. Flow (perm)	1533	3074						2953			2161	
Peak-hour factor, PHF	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.91	0.91	0.91	0.91	0.90
Adj. Flow (vph)	35	438	14	0	0	0	0	735	234	140	1401	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	31	0	0	0	0
Lane Group Flow (vph)	35	450	0	0	0	0	0	938	0	0	1541	0
Confl. Peds. (#/hr)			22									
Heavy Vehicles (%)	6%	5%	7%	2%	2%	2%	2%	7%	3%	2%	2%	2%
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		8						2			6	
Permitted Phases	8									6		
Actuated Green, G (s)	26.5	26.5						62.0			62.0	
Effective Green, g (s)	28.5	28.5						64.0			64.0	
Actuated g/C Ratio	0.28	0.28						0.64			0.64	
Clearance Time (s)	6.0	6.0						5.5			5.5	
Lane Grp Cap (vph)	436	876						1889			1383	
v/s Ratio Prot		c0.15						0.32				
v/s Ratio Perm	0.02										c0.71	
v/c Ratio	0.08	0.51						0.50			1.11	
Uniform Delay, d1	26.2	29.9						9.5			18.0	
Progression Factor	1.00	1.00						1.00			1.00	
Incremental Delay, d2	0.4	2.1						0.9			61.9	
Delay (s)	26.5	32.1						10.4			79.9	
Level of Service	C	C						B			E	
Approach Delay (s)		31.7			0.0			10.4			79.9	
Approach LOS		C			A			B			E	

Intersection Summary			
HCM 2000 Control Delay	49.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	102.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

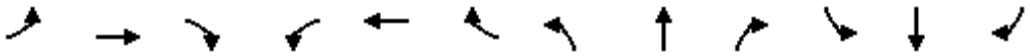


Lane Group	EBT	WBL	NBR	SBT
Lane Group Flow (vph)	803	977	305	2
v/c Ratio	0.84	1.14	0.33	0.02
Control Delay	44.8	105.5	7.6	54.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	44.8	105.5	7.6	54.0
Queue Length 50th (ft)	293	~840	42	2
Queue Length 95th (ft)	378	#1206	114	11
Internal Link Dist (ft)	649			121
Turn Bay Length (ft)				
Base Capacity (vph)	956	855	920	85
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	0.84	1.14	0.33	0.02

Intersection Summary

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

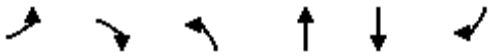
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	607	124	889	0	0	0	0	278	1	1	0
Future Volume (vph)	0	607	124	889	0	0	0	0	278	1	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	11	12	14	12	14	12	12	12
Total Lost time (s)		4.0		4.0					4.0		4.0	
Lane Util. Factor		0.95		1.00					1.00		1.00	
Frpb, ped/bikes		0.98		1.00					1.00		1.00	
Flpb, ped/bikes		1.00		1.00					1.00		1.00	
Frt		0.97		1.00					0.86		1.00	
Flt Protected		1.00		0.95					1.00		0.98	
Satd. Flow (prot)		2755		1540					1517		1472	
Flt Permitted		1.00		0.95					1.00		0.98	
Satd. Flow (perm)		2755		1540					1517		1472	
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)	0	667	136	977	0	0	0	0	305	1	1	0
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	84	0	0	0
Lane Group Flow (vph)	0	789	0	977	0	0	0	0	221	0	2	0
Confl. Peds. (#/hr)	3		32	32		3	10					10
Heavy Vehicles (%)	2%	3%	5%	2%	2%	2%	2%	2%	4%	2%	2%	2%
Parking (#/hr)	0	0									0	0
Turn Type		NA		Prot					Prot	Perm	NA	
Protected Phases		4		6					2		3	
Permitted Phases										3		
Actuated Green, G (s)		39.0		61.0					61.0		2.0	
Effective Green, g (s)		41.0		63.0					63.0		4.0	
Actuated g/C Ratio		0.34		0.52					0.52		0.03	
Clearance Time (s)		6.0		6.0					6.0		6.0	
Vehicle Extension (s)		1.0		1.0					1.0		1.0	
Lane Grp Cap (vph)		941		808					796		49	
v/s Ratio Prot		c0.29		c0.63					0.15			
v/s Ratio Perm											0.00	
v/c Ratio		0.84		1.21					0.28		0.04	
Uniform Delay, d1		36.4		28.5					15.9		56.1	
Progression Factor		1.00		1.00					1.00		1.00	
Incremental Delay, d2		8.8		105.6					0.9		0.1	
Delay (s)		45.3		134.1					16.7		56.3	
Level of Service		D		F					B		E	
Approach Delay (s)		45.3			134.1			16.7			56.3	
Approach LOS		D			F			B			E	

Intersection Summary			
HCM 2000 Control Delay	82.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

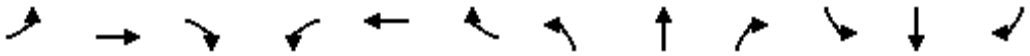
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	7	17	834	1414	76
Future Volume (Veh/h)	5	7	17	834	1414	76
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	5	7	18	878	1488	80
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				336	431	
pX, platoon unblocked	0.73	0.67	0.67			
vC, conflicting volume	2003	784	1568			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	963	0	875			
tC, single (s)	7.0	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.6	3.4	2.2			
p0 queue free %	97	99	97			
cM capacity (veh/h)	168	713	517			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	311	585	992	576
Volume Left	5	18	0	0	0
Volume Right	7	0	0	0	80
cSH	303	517	1700	1700	1700
Volume to Capacity	0.04	0.03	0.34	0.58	0.34
Queue Length 95th (ft)	3	3	0	0	0
Control Delay (s)	17.4	1.2	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	17.4	0.4		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		



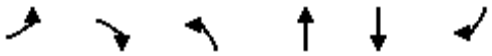
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1	1	0	0	0	1	842	7	8	1376	5
Future Volume (Veh/h)	2	1	1	0	0	0	1	842	7	8	1376	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	2	1	1	0	0	0	1	886	7	8	1448	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								205			562	
pX, platoon unblocked	0.75	0.75	0.69	0.75	0.75	0.89	0.69			0.89		
vC, conflicting volume	1912	2362	726	1633	2360	446	1453			893		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	879	1479	0	508	1478	126	772			628		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	100	100	100	100	100			99		
cM capacity (veh/h)	180	92	753	330	93	801	582			844		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	444	450	732	729
Volume Left	2	1	0	8	0
Volume Right	1	0	7	0	5
cSH	172	582	1700	844	1700
Volume to Capacity	0.02	0.00	0.26	0.01	0.43
Queue Length 95th (ft)	2	0	0	1	0
Control Delay (s)	26.4	0.1	0.0	0.3	0.0
Lane LOS	D	A		A	
Approach Delay (s)	26.4	0.0		0.1	
Approach LOS	D				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	58.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	NBT	SBT
Lane Group Flow (vph)	909	1518
v/c Ratio	0.46	0.80
Control Delay	2.8	21.8
Queue Delay	0.1	0.7
Total Delay	2.9	22.5
Queue Length 50th (ft)	25	438
Queue Length 95th (ft)	32	542
Internal Link Dist (ft)	68	125
Turn Bay Length (ft)		
Base Capacity (vph)	1965	1904
Starvation Cap Reductn	221	135
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.52	0.86

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	25	839	1333	109
Future Volume (vph)	0	0	25	839	1333	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)				3.5	3.5	
Lane Util. Factor				0.95	0.95	
Frt				1.00	0.99	
Flt Protected				1.00	1.00	
Satd. Flow (prot)				3091	3121	
Flt Permitted				0.87	1.00	
Satd. Flow (perm)				2700	3121	
Peak-hour factor, PHF	0.90	0.90	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	26	883	1403	115
RTOR Reduction (vph)	0	0	0	0	5	0
Lane Group Flow (vph)	0	0	0	909	1513	0
Heavy Vehicles (%)	2%	2%	4%	5%	3%	2%
Turn Type			pm+pt	NA	NA	
Protected Phases			5	2	6	
Permitted Phases			2			
Actuated Green, G (s)				84.0	71.0	
Effective Green, g (s)				86.0	73.0	
Actuated g/C Ratio				0.72	0.61	
Clearance Time (s)				5.5	5.5	
Lane Grp Cap (vph)				1965	1898	
v/s Ratio Prot				c0.04	c0.48	
v/s Ratio Perm				0.29		
v/c Ratio				0.46	0.80	
Uniform Delay, d1				7.2	17.9	
Progression Factor				0.28	1.00	
Incremental Delay, d2				0.7	3.6	
Delay (s)				2.8	21.5	
Level of Service				A	C	
Approach Delay (s)	0.0			2.8	21.5	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	80	876	1422
v/c Ratio	0.22	0.40	0.63
Control Delay	19.7	1.5	0.9
Queue Delay	0.0	0.2	0.5
Total Delay	19.7	1.7	1.4
Queue Length 50th (ft)	20	11	3
Queue Length 95th (ft)	63	23	3
Internal Link Dist (ft)	247	132	68
Turn Bay Length (ft)			
Base Capacity (vph)	360	2217	2260
Starvation Cap Reductn	0	576	395
Spillback Cap Reductn	0	22	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.22	0.53	0.76

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	44	823	0	0	1337
Future Volume (vph)	31	44	823	0	0	1337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		3.5			3.5
Lane Util. Factor	1.00		0.95			0.95
Frpb, ped/bikes	0.99		1.00			1.00
Flpb, ped/bikes	1.00		1.00			1.00
Frt	0.92		1.00			1.00
Flt Protected	0.98		1.00			1.00
Satd. Flow (prot)	1414		3094			3154
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1414		3094			3154
Peak-hour factor, PHF	0.94	0.94	0.94	0.90	0.90	0.94
Adj. Flow (vph)	33	47	876	0	0	1422
RTOR Reduction (vph)	36	0	0	0	0	0
Lane Group Flow (vph)	44	0	876	0	0	1422
Confl. Peds. (#/hr)		1				
Heavy Vehicles (%)	10%	7%	5%	2%	2%	3%
Turn Type	Prot		NA			NA
Protected Phases	4		2			2
Permitted Phases						
Actuated Green, G (s)	25.5		84.0			84.0
Effective Green, g (s)	27.5		86.0			86.0
Actuated g/C Ratio	0.23		0.72			0.72
Clearance Time (s)	5.0		5.5			5.5
Lane Grp Cap (vph)	324		2217			2260
v/s Ratio Prot	c0.03		0.28			c0.45
v/s Ratio Perm						
v/c Ratio	0.14		0.40			0.63
Uniform Delay, d1	36.8		6.7			8.8
Progression Factor	1.00		0.15			0.01
Incremental Delay, d2	0.9		0.5			0.8
Delay (s)	37.7		1.5			0.9
Level of Service	D		A			A
Approach Delay (s)	37.7		1.5			0.9
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay	2.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

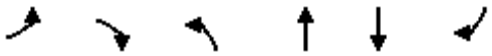
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	24	68	0
Future Volume (Veh/h)	0	0	0	24	68	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.90
Hourly flow rate (vph)	0	0	0	28	80	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	327					
pX, platoon unblocked						
vC, conflicting volume			0		28	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		28	0
tC, single (s)			4.1		6.5	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.6	3.3
p0 queue free %			100		92	100
cM capacity (veh/h)			1623		967	1085

Direction, Lane #	WB 1	NB 1
Volume Total	28	80
Volume Left	0	80
Volume Right	0	0
cSH	1700	967
Volume to Capacity	0.02	0.08
Queue Length 95th (ft)	0	7
Control Delay (s)	0.0	9.1
Lane LOS		A
Approach Delay (s)	0.0	9.1
Approach LOS		A

Intersection Summary			
Average Delay	6.7		
Intersection Capacity Utilization	14.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	104	57	810	1505
v/c Ratio	0.19	0.13	0.45	0.80
Control Delay	31.6	11.6	11.8	7.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.6	11.6	11.8	7.3
Queue Length 50th (ft)	59	5	154	65
Queue Length 95th (ft)	104	37	197	75
Internal Link Dist (ft)	705		607	132
Turn Bay Length (ft)		25		
Base Capacity (vph)	556	437	1801	1871
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	7	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.19	0.13	0.45	0.80

Intersection Summary



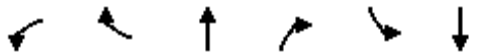
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	95	52	0	737	1370	0
Future Volume (vph)	95	52	0	737	1370	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	16	16	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frpb, ped/bikes	1.00	0.81		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	1.00	
Flt Protected	0.95	1.00		1.00	1.00	
Satd. Flow (prot)	1805	1313		2808	2916	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1805	1313		2808	2916	
Peak-hour factor, PHF	0.91	0.91	0.90	0.91	0.91	0.90
Adj. Flow (vph)	104	57	0	810	1505	0
RTOR Reduction (vph)	0	33	0	0	0	0
Lane Group Flow (vph)	104	24	0	810	1505	0
Confl. Peds. (#/hr)		109				
Heavy Vehicles (%)	2%	2%	2%	8%	4%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	8			2	6	
Permitted Phases		8				
Actuated Green, G (s)	35.0	35.0		75.0	75.0	
Effective Green, g (s)	37.0	37.0		77.0	77.0	
Actuated g/C Ratio	0.31	0.31		0.64	0.64	
Clearance Time (s)	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	556	404		1801	1871	
v/s Ratio Prot	c0.06			0.29	c0.52	
v/s Ratio Perm		0.02				
v/c Ratio	0.19	0.06		0.45	0.80	
Uniform Delay, d1	30.5	29.3		10.8	15.9	
Progression Factor	1.00	1.00		1.00	0.26	
Incremental Delay, d2	0.7	0.3		0.8	3.1	
Delay (s)	31.2	29.5		11.6	7.2	
Level of Service	C	C		B	A	
Approach Delay (s)	30.6			11.6	7.2	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

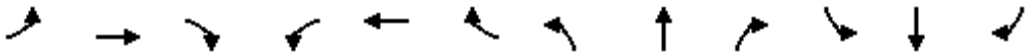
Lane Group	NBT	SBT
Lane Group Flow (vph)	869	1443
v/c Ratio	0.42	0.76
Control Delay	4.0	11.3
Queue Delay	0.2	1.0
Total Delay	4.2	12.3
Queue Length 50th (ft)	71	262
Queue Length 95th (ft)	77	353
Internal Link Dist (ft)	410	607
Turn Bay Length (ft)		
Base Capacity (vph)	2047	1887
Starvation Cap Reductn	444	122
Spillback Cap Reductn	0	211
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.54	0.86

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	730	105	71	1314
Future Volume (vph)	0	0	730	105	71	1314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	10	10	10
Grade (%)	-10%		5%			-5%
Total Lost time (s)			3.0			3.0
Lane Util. Factor			0.95			0.95
Frt			0.98			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			2702			2984
Flt Permitted			1.00			0.84
Satd. Flow (perm)			2702			2501
Peak-hour factor, PHF	0.90	0.90	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	760	109	74	1369
RTOR Reduction (vph)	0	0	10	0	0	0
Lane Group Flow (vph)	0	0	859	0	0	1443
Heavy Vehicles (%)	2%	2%	7%	10%	2%	4%
Turn Type			NA		Perm	NA
Protected Phases			2			6
Permitted Phases					6	
Actuated Green, G (s)			81.0			81.0
Effective Green, g (s)			83.0			83.0
Actuated g/C Ratio			0.75			0.75
Clearance Time (s)			5.0			5.0
Vehicle Extension (s)			1.0			1.0
Lane Grp Cap (vph)			2038			1887
v/s Ratio Prot			0.32			
v/s Ratio Perm						c0.58
v/c Ratio			0.42			0.76
Uniform Delay, d1			4.9			7.8
Progression Factor			0.76			1.00
Incremental Delay, d2			0.4			3.0
Delay (s)			4.1			10.8
Level of Service			A			B
Approach Delay (s)	0.0		4.1			10.8
Approach LOS	A		A			B

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



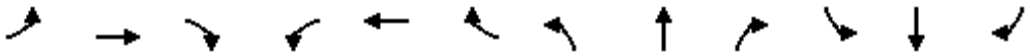
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	90	41	59	0	36	0	0	0	0	0	0
Future Volume (Veh/h)	41	90	41	59	0	36	0	0	0	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		-13%			-10%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.90	0.89	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	46	101	46	66	0	40	0	0	0	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	40	0	0	96	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	40	0	0	96	0	0	0			0		
tC, single (s)	7.2	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.6	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	89	96	91	100	96	100			100		
cM capacity (veh/h)	910	894	1079	775	896	1085	1623			1623		

Direction, Lane #	EB 1	WB 1
Volume Total	193	106
Volume Left	46	66
Volume Right	46	40
cSH	936	869
Volume to Capacity	0.21	0.12
Queue Length 95th (ft)	19	10
Control Delay (s)	9.8	9.7
Lane LOS	A	A
Approach Delay (s)	9.8	9.7
Approach LOS	A	A

Intersection Summary				
Average Delay	9.8			
Intersection Capacity Utilization	17.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	77	27	426	788
v/c Ratio	0.50	0.24	0.41	0.61
Control Delay	50.6	44.3	5.9	10.2
Queue Delay	0.0	0.0	0.3	0.0
Total Delay	50.6	44.3	6.2	10.2
Queue Length 50th (ft)	45	15	61	241
Queue Length 95th (ft)	96	44	119	345
Internal Link Dist (ft)	690	766	403	656
Turn Bay Length (ft)				
Base Capacity (vph)	153	112	1034	1290
Starvation Cap Reductn	0	0	198	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.50	0.24	0.51	0.61

Intersection Summary

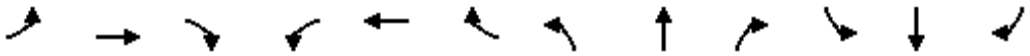


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	1	14	22	1	3	32	324	44	17	671	53
Future Volume (vph)	57	1	14	22	1	3	32	324	44	17	671	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	12	12	12	12	12	8	15	15	8
Grade (%)		-13%			6%			6%			0%	
Total Lost time (s)		5.0			5.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.89			1.00			0.99			1.00	
Flpb, ped/bikes		0.99			0.64			1.00			1.00	
Frt		0.97			0.98			0.99			0.99	
Flt Protected		0.96			0.96			1.00			1.00	
Satd. Flow (prot)		1283			924			1572			1816	
Flt Permitted		0.75			0.78			0.91			0.99	
Satd. Flow (perm)		1004			755			1435			1795	
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)	61	1	15	23	1	3	34	345	47	18	714	56
RTOR Reduction (vph)	0	8	0	0	3	0	0	4	0	0	3	0
Lane Group Flow (vph)	0	69	0	0	24	0	0	422	0	0	785	0
Confl. Peds. (#/hr)	3		158	158		3	8		10	10		8
Heavy Vehicles (%)	2%	2%	2%	9%	2%	2%	2%	3%	2%	2%	2%	2%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			6			2	
Permitted Phases	4			4			6			2		
Actuated Green, G (s)		14.0			14.0			77.0			77.0	
Effective Green, g (s)		16.0			16.0			79.0			79.0	
Actuated g/C Ratio		0.15			0.15			0.72			0.72	
Clearance Time (s)		7.0			7.0			6.0			6.0	
Lane Grp Cap (vph)		146			109			1030			1289	
v/s Ratio Prot												
v/s Ratio Perm		c0.07			0.03			0.29			c0.44	
v/c Ratio		0.47			0.22			0.41			0.61	
Uniform Delay, d1		43.1			41.5			6.2			7.8	
Progression Factor		1.00			1.00			0.79			1.00	
Incremental Delay, d2		10.7			4.7			1.0			2.2	
Delay (s)		53.8			46.2			5.9			9.9	
Level of Service		D			D			A			A	
Approach Delay (s)		53.8			46.2			5.9			9.9	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	178	214	62	15	253	75	59	817
v/c Ratio	0.40	0.60	0.17	0.05	0.26	0.11	0.12	0.42
Control Delay	32.8	40.3	8.2	9.0	10.4	2.3	9.4	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.8	40.3	8.2	9.0	10.4	2.3	9.4	11.3
Queue Length 50th (ft)	98	127	0	4	75	0	16	141
Queue Length 95th (ft)	164	212	31	13	118	17	35	182
Internal Link Dist (ft)	139	246			167			404
Turn Bay Length (ft)			100	110		100	95	
Base Capacity (vph)	450	356	362	275	987	700	498	1950
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.60	0.17	0.05	0.26	0.11	0.12	0.42

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	125	1	70	133	59	14	240	71	56	701	75
Future Volume (vph)	43	125	1	70	133	59	14	240	71	56	701	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	9	9	12	12	12	10	12	10
Grade (%)		-1%			3%			0%			-3%	
Total Lost time (s)		4.0			4.0	4.0	3.5	3.5	3.5	3.5	3.5	
Lane Util. Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	0.95	
Frpb, ped/bikes		1.00			1.00	0.85	1.00	1.00	0.82	1.00	1.00	
Flpb, ped/bikes		0.98			0.98	1.00	0.97	1.00	1.00	0.90	1.00	
Frt		1.00			1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99			0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1614			1349	1021	1437	1598	1087	1336	3145	
Flt Permitted		0.88			0.83	1.00	0.29	1.00	1.00	0.57	1.00	
Satd. Flow (perm)		1436			1138	1021	446	1598	1087	805	3145	
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)	45	132	1	74	140	62	15	253	75	59	738	79
RTOR Reduction (vph)	0	0	0	0	0	43	0	0	29	0	7	0
Lane Group Flow (vph)	0	178	0	0	214	19	15	253	46	59	810	0
Confl. Peds. (#/hr)	49		48	48		49	31		35	35		31
Heavy Vehicles (%)	2%	3%	2%	7%	9%	7%	10%	7%	10%	4%	3%	2%
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)		32.5			32.5	32.5	66.0	66.0	66.0	66.0	66.0	
Effective Green, g (s)		34.5			34.5	34.5	68.0	68.0	68.0	68.0	68.0	
Actuated g/C Ratio		0.31			0.31	0.31	0.62	0.62	0.62	0.62	0.62	
Clearance Time (s)		6.0			6.0	6.0	5.5	5.5	5.5	5.5	5.5	
Lane Grp Cap (vph)		450			356	320	275	987	671	497	1944	
v/s Ratio Prot								0.16			c0.26	
v/s Ratio Perm		0.12			c0.19	0.02	0.03		0.04	0.07		
v/c Ratio		0.40			0.60	0.06	0.05	0.26	0.07	0.12	0.42	
Uniform Delay, d1		29.6			31.9	26.4	8.3	9.5	8.4	8.7	10.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.6			7.3	0.4	0.4	0.6	0.2	0.5	0.7	
Delay (s)		32.2			39.3	26.8	8.7	10.2	8.6	9.1	11.5	
Level of Service		C			D	C	A	B	A	A	B	
Approach Delay (s)		32.2			36.4			9.7			11.3	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

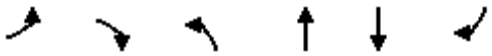
Lane Group	EBL	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	242	78	717	1122	213
v/c Ratio	0.81	0.56	0.74	1.27	0.38
Control Delay	57.2	25.1	9.1	145.6	3.0
Queue Delay	0.0	0.0	1.9	0.0	0.0
Total Delay	57.2	25.1	11.0	145.6	3.0
Queue Length 50th (ft)	146	12	112	~1007	8
Queue Length 95th (ft)	#280	m14	m130	#1247	m21
Internal Link Dist (ft)	494		293	410	
Turn Bay Length (ft)		125			
Base Capacity (vph)	299	139	970	886	554
Starvation Cap Reductn	0	0	128	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.81	0.56	0.85	1.27	0.38

Intersection Summary

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

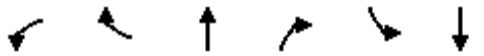
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	90	76	703	1100	209
Future Volume (vph)	147	90	76	703	1100	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	10	10	10	10
Grade (%)	4%			3%	-5%	
Total Lost time (s)	3.0		3.0	3.0	3.0	3.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frpb, ped/bikes	0.87		1.00	1.00	1.00	0.63
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.95		1.00	1.00	1.00	0.85
Flt Protected	0.97		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1183		1370	1483	1573	862
Flt Permitted	0.97		0.06	1.00	1.00	1.00
Satd. Flow (perm)	1183		89	1483	1573	862
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	150	92	78	717	1122	213
RTOR Reduction (vph)	20	0	0	0	0	69
Lane Group Flow (vph)	222	0	78	717	1122	144
Confl. Peds. (#/hr)		93	58			58
Heavy Vehicles (%)	10%	10%	9%	6%	4%	2%
Turn Type	Prot		pm+pt	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases			2			6
Actuated Green, G (s)	24.0		70.0	70.0	60.0	60.0
Effective Green, g (s)	26.0		72.0	72.0	62.0	62.0
Actuated g/C Ratio	0.24		0.65	0.65	0.56	0.56
Clearance Time (s)	5.0		5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	279		139	970	886	485
v/s Ratio Prot	c0.19		0.04	c0.48	c0.71	
v/s Ratio Perm			0.33			0.17
v/c Ratio	0.80		0.56	0.74	1.27	0.30
Uniform Delay, d1	39.5		46.6	12.7	24.0	12.6
Progression Factor	1.00		0.65	0.55	0.67	0.44
Incremental Delay, d2	20.6		5.0	1.6	125.6	1.0
Delay (s)	60.1		35.5	8.6	141.7	6.5
Level of Service	E		D	A	F	A
Approach Delay (s)	60.1			11.3	120.1	
Approach LOS	E			B	F	

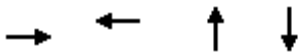
Intersection Summary			
HCM 2000 Control Delay	77.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	94.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	56	0	0	0	15	63
Future Volume (vph)	56	0	0	0	15	63
Peak Hour Factor	0.91	0.90	0.90	0.90	0.91	0.91
Hourly flow rate (vph)	62	0	0	0	16	69

Direction, Lane #	WB 1	SB 1
Volume Total (vph)	62	85
Volume Left (vph)	62	16
Volume Right (vph)	0	0
Hadj (s)	0.27	0.11
Departure Headway (s)	4.4	4.2
Degree Utilization, x	0.08	0.10
Capacity (veh/h)	806	843
Control Delay (s)	7.7	7.6
Approach Delay (s)	7.7	7.6
Approach LOS	A	A

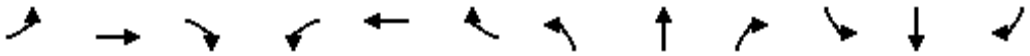
Intersection Summary			
Delay	7.7		
Level of Service	A		
Intersection Capacity Utilization	14.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	115	3	478	732
v/c Ratio	0.63	0.01	0.57	0.63
Control Delay	40.6	31.7	3.3	6.5
Queue Delay	0.0	0.0	0.8	0.1
Total Delay	40.6	31.7	4.1	6.6
Queue Length 50th (ft)	43	1	19	103
Queue Length 95th (ft)	#121	9	m6	125
Internal Link Dist (ft)	696	244	287	403
Turn Bay Length (ft)				
Base Capacity (vph)	183	233	833	1167
Starvation Cap Reductn	0	0	136	1
Spillback Cap Reductn	0	0	0	26
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.63	0.01	0.69	0.64

Intersection Summary

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	1	58	1	1	1	115	332	3	1	552	135
Future Volume (vph)	49	1	58	1	1	1	115	332	3	1	552	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			6%			-8%	
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.70			0.86			1.00			0.92	
Flpb, ped/bikes		0.76			0.88			0.98			1.00	
Frt		0.93			0.95			1.00			0.97	
Flt Protected		0.98			0.98			0.99			1.00	
Satd. Flow (prot)		811			1203			1547			1556	
Flt Permitted		0.88			0.95			0.71			1.00	
Satd. Flow (perm)		727			1164			1118			1556	
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)	52	1	62	1	1	1	122	353	3	1	587	144
RTOR Reduction (vph)	0	38	0	0	1	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	77	0	0	2	0	0	478	0	0	724	0
Confl. Peds. (#/hr)	158		191	191		158	81		112	112		81
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	4%	10%	2%	3%	2%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			6			2	
Permitted Phases	4			8			6			2		
Actuated Green, G (s)		20.0			20.0			80.0			80.0	
Effective Green, g (s)		22.0			22.0			82.0			82.0	
Actuated g/C Ratio		0.20			0.20			0.75			0.75	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		145			232			833			1159	
v/s Ratio Prot												
v/s Ratio Perm		c0.11			0.00			0.43			0.47	
v/c Ratio		0.53			0.01			0.57			0.62	
Uniform Delay, d1		39.4			35.3			6.2			6.7	
Progression Factor		1.00			1.00			0.16			0.67	
Incremental Delay, d2		13.1			0.1			2.3			2.1	
Delay (s)		52.5			35.3			3.2			6.5	
Level of Service		D			D			A			A	
Approach Delay (s)		52.5			35.3			3.2			6.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

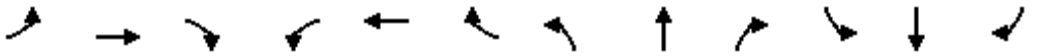
Lane Group	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	25	905	277	282	1027
v/c Ratio	0.08	0.97	0.35	1.18	0.93
Control Delay	26.0	35.2	8.8	111.9	8.1
Queue Delay	0.0	15.2	0.9	0.0	38.5
Total Delay	26.0	50.4	9.7	111.9	46.6
Queue Length 50th (ft)	9	477	56	~143	64
Queue Length 95th (ft)	32	#889	m90	m#85	m43
Internal Link Dist (ft)	265	279			293
Turn Bay Length (ft)			100	125	
Base Capacity (vph)	305	934	802	239	1107
Starvation Cap Reductn	0	57	292	0	159
Spillback Cap Reductn	0	0	0	0	7
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.08	1.03	0.54	1.18	1.08

Intersection Summary

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

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

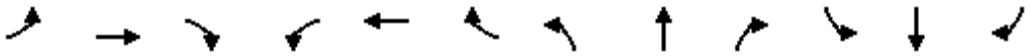
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	3	9	0	0	0	2	822	252	257	929	6
Future Volume (vph)	13	3	9	0	0	0	2	822	252	257	929	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	10	12	10	12	10	10	10	10	12
Grade (%)		0%			0%			2%			-3%	
Total Lost time (s)		3.5						3.5	3.5	3.0	3.5	
Lane Util. Factor		1.00						1.00	1.00	1.00	1.00	
Frpb, ped/bikes		1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes		0.88						1.00	1.00	1.00	1.00	
Frt		0.95						1.00	0.85	1.00	1.00	
Flt Protected		0.97						1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1367						1491	1279	1480	1542	
Flt Permitted		0.97						1.00	1.00	0.14	1.00	
Satd. Flow (perm)		1367						1489	1279	221	1542	
Peak-hour factor, PHF	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.91	0.91	0.91	0.91	1.00
Adj. Flow (vph)	13	3	9	0	0	0	2	903	277	282	1021	6
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	18	0	0	0	0	0	905	277	282	1027	0
Confl. Peds. (#/hr)	93											
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	6%	5%	4%	5%	2%
Turn Type	Perm	NA					Perm	NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4						2		2	6		
Actuated Green, G (s)		22.0						67.0	67.0	77.0	77.0	
Effective Green, g (s)		24.0						69.0	69.0	79.0	79.0	
Actuated g/C Ratio		0.22						0.63	0.63	0.72	0.72	
Clearance Time (s)		5.5						5.5	5.5	5.0	5.5	
Vehicle Extension (s)		1.0						1.0	1.0	1.0	1.0	
Lane Grp Cap (vph)		298						934	802	238	1107	
v/s Ratio Prot										c0.08	0.67	
v/s Ratio Perm		0.01						0.61	0.22	c0.77		
v/c Ratio		0.06						0.97	0.35	1.18	0.93	
Uniform Delay, d1		34.1						19.5	9.8	21.1	13.1	
Progression Factor		1.00						0.80	0.80	3.05	0.34	
Incremental Delay, d2		0.4						17.9	0.8	87.3	1.8	
Delay (s)		34.5						33.5	8.6	151.5	6.3	
Level of Service		C						C	A	F	A	
Approach Delay (s)		34.5			0.0			27.6			37.6	
Approach LOS		C			A			C			D	

Intersection Summary			
HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		

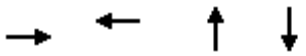
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	423	27	0	0	0	0	0	4	40	74	0
Future Volume (Veh/h)	0	423	27	0	0	0	0	0	4	40	74	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.90
Hourly flow rate (vph)	0	498	32	0	0	0	0	0	5	47	87	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		339			770							
pX, platoon unblocked				0.98			0.98	0.98	0.98	0.98	0.98	
vC, conflicting volume	0			530			558	514	514	519	530	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			515			543	499	499	504	515	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.2	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.6	4.0	3.3
p0 queue free %	100			100			100	100	99	90	81	100
cM capacity (veh/h)	1623			1035			378	466	563	459	455	1085

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	530	5	134
Volume Left	0	0	47
Volume Right	32	5	0
cSH	1700	563	456
Volume to Capacity	0.31	0.01	0.29
Queue Length 95th (ft)	0	1	30
Control Delay (s)	0.0	11.5	16.1
Lane LOS		B	C
Approach Delay (s)	0.0	11.5	16.1
Approach LOS		B	C

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		



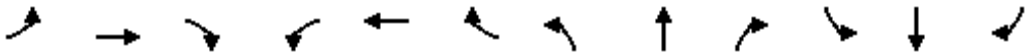
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	301	218	307	680
v/c Ratio	1.04	0.81	0.36	0.73
Control Delay	89.8	50.3	5.4	13.2
Queue Delay	0.0	0.2	6.9	1.2
Total Delay	89.8	50.5	12.3	14.5
Queue Length 50th (ft)	~222	106	0	196
Queue Length 95th (ft)	m#281	#244	m0	247
Internal Link Dist (ft)	690	359	289	287
Turn Bay Length (ft)				
Base Capacity (vph)	290	268	859	933
Starvation Cap Reductn	0	0	495	98
Spillback Cap Reductn	0	1	0	38
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.04	0.82	0.84	0.81

Intersection Summary

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

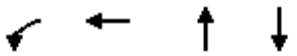
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	104	55	108	0	90	0	248	31	43	576	0
Future Volume (vph)	116	104	55	108	0	90	0	248	31	43	576	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	14	14	14	11	11	8	11	11	8
Grade (%)		0%			0%			5%			-8%	
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		0.93			0.73			0.93			1.00	
Flpb, ped/bikes		0.91			1.00			1.00			0.98	
Frt		0.97			0.94			0.99			1.00	
Flt Protected		0.98			0.97			1.00			1.00	
Satd. Flow (prot)		1201			1132			1448			1644	
Flt Permitted		0.77			0.65			1.00			0.96	
Satd. Flow (perm)		941			756			1448			1580	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.90	0.91	0.90	0.91	0.91	0.91	0.91	0.90
Adj. Flow (vph)	127	114	60	119	0	99	0	273	34	47	633	0
RTOR Reduction (vph)	0	8	0	0	42	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	293	0	0	176	0	0	303	0	0	680	0
Confl. Peds. (#/hr)	191		75	75		191			159	159		
Heavy Vehicles (%)	10%	3%	6%	10%	2%	6%	2%	2%	5%	8%	2%	2%
Turn Type	Perm	NA		Perm	NA			NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4						2		
Actuated Green, G (s)		31.0			31.0			63.0			63.0	
Effective Green, g (s)		33.0			33.0			65.0			65.0	
Actuated g/C Ratio		0.30			0.30			0.59			0.59	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		282			226			855			933	
v/s Ratio Prot								0.21				
v/s Ratio Perm		c0.31			0.23						c0.43	
v/c Ratio		1.04			0.78			0.35			0.73	
Uniform Delay, d1		38.5			35.2			11.6			16.2	
Progression Factor		0.91			1.00			0.40			0.54	
Incremental Delay, d2		55.4			22.8			0.8			4.0	
Delay (s)		90.5			58.0			5.4			12.8	
Level of Service		F			E			A			B	
Approach Delay (s)		90.5			58.0			5.4			12.8	
Approach LOS		F			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



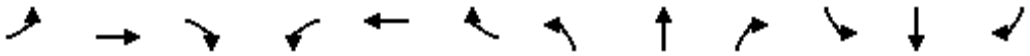
Lane Group	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	280	321	827	972
v/c Ratio	1.08	0.68	0.77	0.87
Control Delay	121.1	21.0	12.3	6.9
Queue Delay	0.0	1.0	50.8	49.1
Total Delay	121.1	22.0	63.1	56.0
Queue Length 50th (ft)	~222	57	290	66
Queue Length 95th (ft)	m#393	160	m176	m70
Internal Link Dist (ft)		302	370	279
Turn Bay Length (ft)				
Base Capacity (vph)	260	475	1069	1119
Starvation Cap Reductn	0	0	393	44
Spillback Cap Reductn	0	38	231	398
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.08	0.73	1.22	1.35

Intersection Summary

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

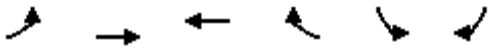
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	269	7	301	4	790	0	0	921	13
Future Volume (vph)	0	0	0	269	7	301	4	790	0	0	921	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	10	12	10	12	10	10	10	10	12
Grade (%)		0%			1%			1%			-2%	
Total Lost time (s)				3.0	3.0			3.5			3.5	
Lane Util. Factor				1.00	1.00			1.00			1.00	
Frpb, ped/bikes				1.00	0.93			1.00			1.00	
Flpb, ped/bikes				0.84	1.00			1.00			1.00	
Frt				1.00	0.85			1.00			1.00	
Flt Protected				0.95	1.00			1.00			1.00	
Satd. Flow (prot)				1193	1296			1484			1548	
Flt Permitted				0.95	1.00			1.00			1.00	
Satd. Flow (perm)				1193	1296			1480			1548	
Peak-hour factor, PHF	0.90	0.90	0.90	0.96	1.00	0.96	1.00	0.96	0.90	0.90	0.96	1.00
Adj. Flow (vph)	0	0	0	280	7	314	4	823	0	0	959	13
RTOR Reduction (vph)	0	0	0	0	193	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	280	128	0	0	827	0	0	971	0
Confl. Peds. (#/hr)				50		17						
Heavy Vehicles (%)	2%	2%	2%	6%	0%	4%	0%	7%	2%	2%	4%	0%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			6	
Permitted Phases				4			2					
Actuated Green, G (s)				22.0	22.0			77.5			77.5	
Effective Green, g (s)				24.0	24.0			79.5			79.5	
Actuated g/C Ratio				0.22	0.22			0.72			0.72	
Clearance Time (s)				5.0	5.0			5.5			5.5	
Lane Grp Cap (vph)				260	282			1069			1118	
v/s Ratio Prot					0.10						c0.63	
v/s Ratio Perm				c0.23				0.56				
v/c Ratio				1.08	0.45			0.77			0.87	
Uniform Delay, d1				43.0	37.3			9.6			11.4	
Progression Factor				1.06	1.30			1.12			0.18	
Incremental Delay, d2				77.3	5.1			0.5			3.8	
Delay (s)				122.8	53.5			11.2			5.8	
Level of Service				F	D			B			A	
Approach Delay (s)		0.0			85.8			11.2			5.8	
Approach LOS		A			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.5
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	441	3	0	100
Future Volume (Veh/h)	0	0	441	3	0	100
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.87	1.00	0.90	0.87
Hourly flow rate (vph)	0	0	507	3	0	115
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		382	771			
pX, platoon unblocked						
vC, conflicting volume	510				508	508
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	510				508	508
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	79
cM capacity (veh/h)	1055				524	559

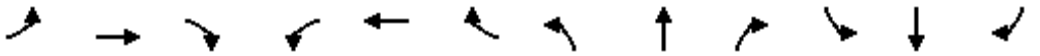
Direction, Lane #	WB 1	SB 1
Volume Total	510	115
Volume Left	0	0
Volume Right	3	115
cSH	1700	559
Volume to Capacity	0.30	0.21
Queue Length 95th (ft)	0	19
Control Delay (s)	0.0	13.1
Lane LOS		B
Approach Delay (s)	0.0	13.1
Approach LOS		B

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	NBT	SBT	SBR
Lane Group Flow (vph)	324	465	315
v/c Ratio	0.72	0.66	0.44
Control Delay	45.7	17.6	2.1
Queue Delay	0.9	3.3	0.6
Total Delay	46.6	20.9	2.7
Queue Length 50th (ft)	205	207	2
Queue Length 95th (ft)	312	m266	m10
Internal Link Dist (ft)	301	289	
Turn Bay Length (ft)			110
Base Capacity (vph)	447	705	724
Starvation Cap Reductn	0	151	155
Spillback Cap Reductn	24	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.77	0.84	0.55

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)	0	0	0	0	0	0	12	287	9	16	426	299
Future Volume (vph)	0	0	0	0	0	0	12	287	9	16	426	299
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	14	14	14	14	14	14	10	10	8	10	10	10
Grade (%)		0%			0%			2%			-4%	
Total Lost time (s)								3.0			3.0	3.0
Lane Util. Factor								1.00			1.00	1.00
Frt								1.00			1.00	0.85
Flt Protected								1.00			1.00	1.00
Satd. Flow (prot)								1536			1576	1331
Flt Permitted								1.00			0.98	1.00
Satd. Flow (perm)								1536			1552	1331
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	0	0	13	302	9	17	448	315
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	0	0	0	119
Lane Group Flow (vph)	0	0	0	0	0	0	0	323	0	0	465	196
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	4%	2%	10%	6%	3%	4%
Turn Type							Split	NA		Perm	NA	Perm
Protected Phases							2	2			4	
Permitted Phases										4		4
Actuated Green, G (s)								30.0			48.0	48.0
Effective Green, g (s)								32.0			50.0	50.0
Actuated g/C Ratio								0.29			0.45	0.45
Clearance Time (s)								5.0			5.0	5.0
Lane Grp Cap (vph)								446			705	605
v/s Ratio Prot								c0.21				
v/s Ratio Perm											c0.30	0.15
v/c Ratio								0.72			0.66	0.32
Uniform Delay, d1								35.0			23.4	19.2
Progression Factor								1.00			0.60	0.15
Incremental Delay, d2								9.8			3.0	0.9
Delay (s)								44.9			17.1	3.7
Level of Service								D			B	A
Approach Delay (s)		0.0			0.0			44.9			11.7	
Approach LOS		A			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

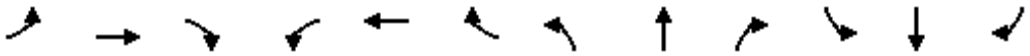
Lane Group	EBT	WBT	WBR	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	142	69	120	731	27	1091	191
v/c Ratio	0.45	0.24	0.30	2.08	0.04	1.21	0.23
Control Delay	28.6	32.6	7.5	512.4	3.8	122.4	3.7
Queue Delay	1.3	0.0	0.3	0.0	0.0	0.4	0.0
Total Delay	29.9	32.6	7.8	512.4	3.8	122.8	3.7
Queue Length 50th (ft)	60	37	0	~778	1	~972	11
Queue Length 95th (ft)	123	76	44	m#774	m2	m#1141	m19
Internal Link Dist (ft)	191	145		200		370	
Turn Bay Length (ft)					115		150
Base Capacity (vph)	314	287	402	351	649	899	815
Starvation Cap Reductn	0	0	0	0	0	66	0
Spillback Cap Reductn	61	0	68	0	0	30	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.24	0.36	2.08	0.04	1.31	0.23

Intersection Summary

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

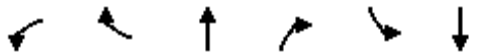
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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)	72	0	57	63	0	109	56	609	25	40	953	174
Future Volume (vph)	72	0	57	63	0	109	56	609	25	40	953	174
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	10	10	10	10	10	10
Grade (%)		3%			-1%			1%			-2%	
Total Lost time (s)		3.5			3.5	3.5		4.0	4.0		4.0	4.0
Lane Util. Factor		1.00			1.00	1.00		1.00	1.00		1.00	1.00
Frpb, ped/bikes		0.97			1.00	0.82		1.00	0.81		1.00	0.92
Flpb, ped/bikes		0.92			0.97	1.00		1.00	1.00		1.00	1.00
Frt		0.94			1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		0.97			0.95	1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)		1192			1444	1091		1494	1000		1532	1209
Flt Permitted		0.81			0.65	1.00		0.37	1.00		0.91	1.00
Satd. Flow (perm)		993			987	1091		550	1000		1403	1209
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)	79	0	63	69	0	120	62	669	27	44	1047	191
RTOR Reduction (vph)	0	26	0	0	0	85	0	0	9	0	0	40
Lane Group Flow (vph)	0	116	0	0	69	35	0	731	18	0	1091	151
Confl. Peds. (#/hr)	50		13	13		50	22		46	46		22
Heavy Vehicles (%)	6%	0%	10%	10%	0%	10%	4%	6%	10%	5%	5%	4%
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases		8			4			2			6	
Permitted Phases	8			4		4	2		2	6		6
Actuated Green, G (s)		30.0			30.0	30.0		68.5	68.5		68.5	68.5
Effective Green, g (s)		32.0			32.0	32.0		70.5	70.5		70.5	70.5
Actuated g/C Ratio		0.29			0.29	0.29		0.64	0.64		0.64	0.64
Clearance Time (s)		5.5			5.5	5.5		6.0	6.0		6.0	6.0
Lane Grp Cap (vph)		288			287	317		352	640		899	774
v/s Ratio Prot												
v/s Ratio Perm		c0.12			0.07	0.03		c1.33	0.02		0.78	0.12
v/c Ratio		0.40			0.24	0.11		2.08	0.03		1.21	0.19
Uniform Delay, d1		31.3			29.7	28.6		19.8	7.2		19.8	8.1
Progression Factor		1.00			1.00	1.00		1.37	1.26		0.95	0.97
Incremental Delay, d2		4.1			2.0	0.7		488.5	0.0		100.9	0.2
Delay (s)		35.5			31.7	29.3		515.6	9.1		119.6	8.1
Level of Service		D			C	C		F	A		F	A
Approach Delay (s)		35.5			30.2			497.6			102.9	
Approach LOS		D			C			F			F	

Intersection Summary			
HCM 2000 Control Delay	219.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.55		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	114.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	690	16	23	1050
Future Volume (Veh/h)	0	0	690	16	23	1050
Sign Control	Stop		Free			Free
Grade	0%		1%			-2%
Peak Hour Factor	0.90	0.90	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	726	17	24	1105
Pedestrians			13			13
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			1			1
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			259			280
pX, platoon unblocked	0.49	0.76			0.76	
vC, conflicting volume	1900	748			743	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1226	512			506	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			97	
cM capacity (veh/h)	93	423			806	

Direction, Lane #	NB 1	SB 1
Volume Total	743	1129
Volume Left	0	24
Volume Right	17	0
cSH	1700	806
Volume to Capacity	0.44	0.03
Queue Length 95th (ft)	0	2
Control Delay (s)	0.0	1.0
Lane LOS		A
Approach Delay (s)	0.0	1.0
Approach LOS		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

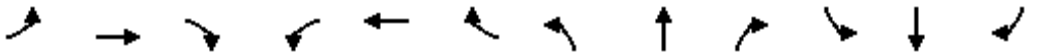
Lane Group	EBT	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	464	1034	384	380	599	65
v/c Ratio	0.39	0.89	1.10	0.95	0.80	0.11
Control Delay	22.8	40.7	116.9	39.9	22.0	6.5
Queue Delay	0.0	0.0	0.0	0.0	3.6	0.0
Total Delay	22.8	40.7	116.9	39.9	25.7	6.5
Queue Length 50th (ft)	115	348	~308	181	232	5
Queue Length 95th (ft)	158	#484	#495	m145	m175	m5
Internal Link Dist (ft)	189	477	172		179	
Turn Bay Length (ft)				100		160
Base Capacity (vph)	1198	1156	349	401	753	615
Starvation Cap Reductn	0	0	0	0	87	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.89	1.10	0.95	0.90	0.11

Intersection Summary

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

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

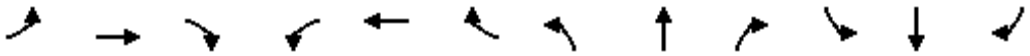
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	402	53	0	708	306	0	374	2	372	587	64
Future Volume (vph)	0	402	53	0	708	306	0	374	2	372	587	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11	10	10	10	10	10	10
Grade (%)		1%			1%			2%			-2%	
Total Lost time (s)		4.0			4.0			4.0		3.0	4.0	4.0
Lane Util. Factor		0.95			0.95			1.00		1.00	1.00	1.00
Frpb, ped/bikes		0.99			0.98			1.00		1.00	1.00	0.88
Flpb, ped/bikes		1.00			1.00			1.00		1.00	1.00	1.00
Frt		0.98			0.95			1.00		1.00	1.00	0.85
Flt Protected		1.00			1.00			1.00		0.95	1.00	1.00
Satd. Flow (prot)		2805			2705			1326		1501	1507	1177
Flt Permitted		1.00			1.00			1.00		0.18	1.00	1.00
Satd. Flow (perm)		2805			2705			1326		291	1507	1177
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)	0	410	54	0	722	312	0	382	2	380	599	65
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	27
Lane Group Flow (vph)	0	464	0	0	1034	0	0	384	0	380	599	39
Confl. Peds. (#/hr)	13		26	26		13	64		251	251		64
Heavy Vehicles (%)	2%	8%	10%	2%	9%	7%	2%	7%	10%	2%	7%	3%
Parking (#/hr)								0	0			
Turn Type		NA			NA			NA		pm+pt	NA	Perm
Protected Phases		6			2			8		7	4	
Permitted Phases										4		4
Actuated Green, G (s)		45.0			45.0			27.0		53.0	53.0	53.0
Effective Green, g (s)		47.0			47.0			29.0		55.0	55.0	55.0
Actuated g/C Ratio		0.43			0.43			0.26		0.50	0.50	0.50
Clearance Time (s)		6.0			6.0			6.0		5.0	6.0	6.0
Lane Grp Cap (vph)		1198			1155			349		398	753	588
v/s Ratio Prot		0.17			c0.38			c0.29		c0.20	0.40	
v/s Ratio Perm										0.28		0.03
v/c Ratio		0.39			0.90			1.10		0.95	0.80	0.07
Uniform Delay, d1		21.6			29.2			40.5		26.9	22.8	14.2
Progression Factor		1.00			1.00			1.00		1.39	0.88	1.23
Incremental Delay, d2		0.9			10.8			77.9		6.5	0.8	0.0
Delay (s)		22.6			40.0			118.4		43.9	21.0	17.5
Level of Service		C			D			F		D	C	B
Approach Delay (s)		22.6			40.0			118.4			29.1	
Approach LOS		C			D			F			C	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

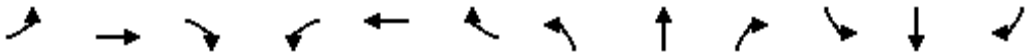
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	172	49	62	2	825	0	0	1283	13
Future Volume (Veh/h)	0	0	0	172	49	62	2	825	0	0	1283	13
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.94	0.94	0.94	0.94	0.94	0.90	0.90	0.94	0.94
Hourly flow rate (vph)	0	0	0	183	52	66	2	878	0	0	1365	14
Pedestrians											22	
Lane Width (ft)											12.0	
Walking Speed (ft/s)											4.0	
Percent Blockage											2	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								557			210	
pX, platoon unblocked	0.72	0.72	0.67	0.72	0.72	0.90	0.67			0.90		
vC, conflicting volume	1929	2254	690	1564	2261	461	1379			878		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	884	1338	0	374	1347	183	568			646		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	54	51	91	100			100		
cM capacity (veh/h)	95	108	723	398	107	733	667			843		

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	301	295	585	910	469
Volume Left	183	2	0	0	0
Volume Right	66	0	0	0	14
cSH	291	667	1700	1700	1700
Volume to Capacity	1.04	0.00	0.34	0.54	0.28
Queue Length 95th (ft)	282	0	0	0	0
Control Delay (s)	101.9	0.1	0.0	0.0	0.0
Lane LOS	F	A			
Approach Delay (s)	101.9	0.0		0.0	
Approach LOS	F				

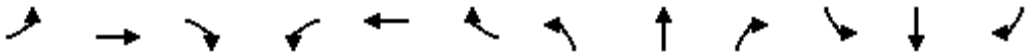
Intersection Summary				
Average Delay	12.0			
Intersection Capacity Utilization	64.6%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	14	33	4	10	48	158	5	161	8	108	192	11
Future Volume (vph)	14	33	4	10	48	158	5	161	8	108	192	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	36	4	11	52	172	5	175	9	117	209	12

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	55	235	189	117	221
Volume Left (vph)	15	11	5	117	0
Volume Right (vph)	4	172	9	0	12
Hadj (s)	0.04	-0.35	0.08	0.53	0.12
Departure Headway (s)	5.7	5.0	5.4	6.1	5.6
Degree Utilization, x	0.09	0.33	0.28	0.20	0.35
Capacity (veh/h)	559	666	633	567	612
Control Delay (s)	9.3	10.4	10.4	9.3	10.4
Approach Delay (s)	9.3	10.4	10.4	10.0	
Approach LOS	A	B	B	B	

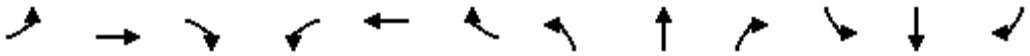
Intersection Summary				
Delay	10.2			
Level of Service	B			
Intersection Capacity Utilization	50.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	2	79	7	11	74	24	4	209	48	16	110	3
Future Volume (vph)	2	79	7	11	74	24	4	209	48	16	110	3
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
Hourly flow rate (vph)	2	85	8	12	80	26	4	225	52	17	118	3

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	95	118	281	138
Volume Left (vph)	2	12	4	17
Volume Right (vph)	8	26	52	3
Hadj (s)	0.00	-0.08	0.01	0.16
Departure Headway (s)	5.1	5.0	4.6	5.0
Degree Utilization, x	0.13	0.16	0.36	0.19
Capacity (veh/h)	638	655	741	678
Control Delay (s)	8.9	9.0	10.3	9.1
Approach Delay (s)	8.9	9.0	10.3	9.1
Approach LOS	A	A	B	A

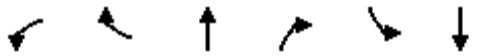
Intersection Summary				
Delay	9.6			
Level of Service	A			
Intersection Capacity Utilization	36.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	41	7	5	19	116	23	67	257	2	6	309	108
Future Volume (vph)	41	7	5	19	116	23	67	257	2	6	309	108
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
Hourly flow rate (vph)	44	8	5	20	125	25	72	276	2	6	332	116

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	57	170	350	454
Volume Left (vph)	44	20	72	6
Volume Right (vph)	5	25	2	116
Hadj (s)	0.15	-0.02	0.09	-0.08
Departure Headway (s)	6.6	6.1	5.4	5.1
Degree Utilization, x	0.10	0.29	0.52	0.64
Capacity (veh/h)	448	525	633	684
Control Delay (s)	10.3	11.5	14.1	16.7
Approach Delay (s)	10.3	11.5	14.1	16.7
Approach LOS	B	B	B	C

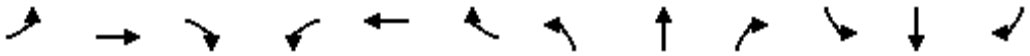
Intersection Summary				
Delay	14.6			
Level of Service	B			
Intersection Capacity Utilization	69.0%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	176	4	11	57
Future Volume (Veh/h)	0	0	176	4	11	57
Sign Control	Free		Stop			Stop
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	189	4	12	61
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0		0	0	98	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0		0	0	98	0
tC, single (s)	4.1		6.5	6.2	7.1	6.5
tC, 2 stage (s)						
tF (s)	2.2		4.0	3.3	3.5	4.0
p0 queue free %	100		79	100	98	93
cM capacity (veh/h)	1623		896	1085	737	896

Direction, Lane #	NB 1	SB 1
Volume Total	193	73
Volume Left	0	12
Volume Right	4	0
cSH	899	865
Volume to Capacity	0.21	0.08
Queue Length 95th (ft)	20	7
Control Delay (s)	10.1	9.5
Lane LOS	B	A
Approach Delay (s)	10.1	9.5
Approach LOS	B	A

Intersection Summary			
Average Delay	9.9		
Intersection Capacity Utilization	17.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	37	15	23	46	49	9	80	95	40	35	0
Future Volume (vph)	0	37	15	23	46	49	9	80	95	40	35	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	41	17	26	51	54	10	89	106	44	39	0

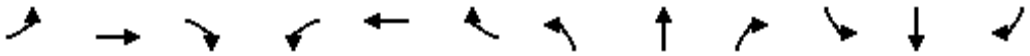
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	58	131	205	83
Volume Left (vph)	0	26	10	44
Volume Right (vph)	17	54	106	0
Hadj (s)	-0.14	-0.15	-0.27	0.15
Departure Headway (s)	4.6	4.5	4.2	4.7
Degree Utilization, x	0.07	0.16	0.24	0.11
Capacity (veh/h)	722	748	821	716
Control Delay (s)	7.9	8.3	8.5	8.3
Approach Delay (s)	7.9	8.3	8.5	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.3			
Level of Service	A			
Intersection Capacity Utilization	40.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBT	NBT	SBT
Lane Group Flow (vph)	53	589	1467	893
v/c Ratio	0.09	0.49	0.88	1.25dl
Control Delay	20.2	24.4	26.7	36.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	20.2	24.4	26.7	36.1
Queue Length 50th (ft)	21	143	393	256
Queue Length 95th (ft)	47	195	511	#406
Internal Link Dist (ft)		782	130	228
Turn Bay Length (ft)	60			
Base Capacity (vph)	613	1198	1671	980
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	0.09	0.49	0.88	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

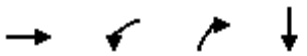


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	521	62	0	0	0	0	1096	356	84	800	0
Future Volume (vph)	52	521	62	0	0	0	0	1096	356	84	800	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						3.5			3.5	
Lane Util. Factor	1.00	0.95						0.95			0.95	
Frpb, ped/bikes	1.00	0.99						1.00			1.00	
Flpb, ped/bikes	1.00	1.00						1.00			1.00	
Frt	1.00	0.98						0.96			1.00	
Flt Protected	0.95	1.00						1.00			1.00	
Satd. Flow (prot)	1593	3089						3038			3115	
Flt Permitted	0.95	1.00						1.00			0.58	
Satd. Flow (perm)	1593	3089						3038			1815	
Peak-hour factor, PHF	0.99	0.99	0.99	0.90	0.90	0.90	0.90	0.99	0.99	0.99	0.99	0.90
Adj. Flow (vph)	53	526	63	0	0	0	0	1107	360	85	808	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	31	0	0	0	0
Lane Group Flow (vph)	53	580	0	0	0	0	0	1436	0	0	893	0
Confl. Peds. (#/hr)			36									
Heavy Vehicles (%)	2%	3%	2%	2%	2%	2%	2%	3%	3%	2%	4%	2%
Turn Type	Perm	NA						NA		Perm	NA	
Protected Phases		8						2			6	
Permitted Phases	8									6		
Actuated Green, G (s)	36.5	36.5						52.0			52.0	
Effective Green, g (s)	38.5	38.5						54.0			54.0	
Actuated g/C Ratio	0.38	0.38						0.54			0.54	
Clearance Time (s)	6.0	6.0						5.5			5.5	
Lane Grp Cap (vph)	613	1189						1640			980	
v/s Ratio Prot		c0.19						0.47				
v/s Ratio Perm	0.03										c0.49	
v/c Ratio	0.09	0.49						0.88			1.25dl	
Uniform Delay, d1	19.6	23.3						20.1			20.8	
Progression Factor	1.00	1.00						1.00			1.00	
Incremental Delay, d2	0.3	1.4						6.9			14.0	
Delay (s)	19.8	24.7						26.9			34.8	
Level of Service	B	C						C			C	
Approach Delay (s)		24.3			0.0			26.9			34.8	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	104.4%	ICU Level of Service	G
Analysis Period (min)	15		

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

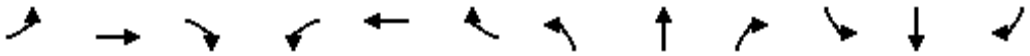
c Critical Lane Group



Lane Group	EBT	WBL	NBR	SBT
Lane Group Flow (vph)	996	481	609	2
v/c Ratio	0.96	0.59	0.67	0.02
Control Delay	56.1	24.2	19.1	54.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	56.1	24.2	19.1	54.0
Queue Length 50th (ft)	388	224	211	2
Queue Length 95th (ft)	#533	401	416	11
Internal Link Dist (ft)	649			121
Turn Bay Length (ft)				
Base Capacity (vph)	1042	816	907	110
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	0.96	0.59	0.67	0.02

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	802	105	438	0	0	0	0	554	1	1	0
Future Volume (vph)	0	802	105	438	0	0	0	0	554	1	1	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	11	11	11	12	14	12	14	12	12	12
Total Lost time (s)		4.0		4.0					4.0		4.0	
Lane Util. Factor		0.95		1.00					1.00		1.00	
Frpb, ped/bikes		0.99		1.00					1.00		1.00	
Flpb, ped/bikes		1.00		1.00					1.00		1.00	
Frt		0.98		1.00					0.86		1.00	
Flt Protected		1.00		0.95					1.00		0.98	
Satd. Flow (prot)		2820		1540					1547		1472	
Flt Permitted		1.00		0.95					1.00		0.98	
Satd. Flow (perm)		2820		1540					1547		1472	
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)	0	881	115	481	0	0	0	0	609	1	1	0
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	93	0	0	0
Lane Group Flow (vph)	0	988	0	481	0	0	0	0	516	0	2	0
Confl. Peds. (#/hr)	1		13	13		1	16					16
Heavy Vehicles (%)	2%	3%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)	0	0									0	0
Turn Type		NA		Prot					Prot	Perm	NA	
Protected Phases		4		6					2		3	
Permitted Phases										3		
Actuated Green, G (s)		42.0		58.0					58.0		2.0	
Effective Green, g (s)		44.0		60.0					60.0		4.0	
Actuated g/C Ratio		0.37		0.50					0.50		0.03	
Clearance Time (s)		6.0		6.0					6.0		6.0	
Vehicle Extension (s)		1.0		1.0					1.0		1.0	
Lane Grp Cap (vph)		1034		770					773		49	
v/s Ratio Prot		c0.35		0.31					c0.33			
v/s Ratio Perm											0.00	
v/c Ratio		0.96		0.62					0.67		0.04	
Uniform Delay, d1		37.0		21.8					22.5		56.1	
Progression Factor		1.00		1.00					1.00		1.00	
Incremental Delay, d2		19.1		3.8					4.5		0.1	
Delay (s)		56.1		25.6					27.1		56.3	
Level of Service		E		C					C		E	
Approach Delay (s)		56.1			25.6			27.1			56.3	
Approach LOS		E			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	40.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group