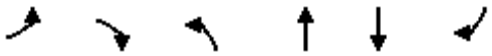
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	29	96	0
Future Volume (Veh/h)	0	0	0	29	96	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.90
Hourly flow rate (vph)	0	0	0	34	113	0
Pedestrians						
Lane Width (ft)						
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		34	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		34	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		88	100
cM capacity (veh/h)			1623		967	1085

Direction, Lane #	WB 1	NB 1
Volume Total	34	113
Volume Left	0	113
Volume Right	0	0
cSH	1700	967
Volume to Capacity	0.02	0.12
Queue Length 95th (ft)	0	10
Control Delay (s)	0.0	9.2
Lane LOS		A
Approach Delay (s)	0.0	9.2
Approach LOS		A

Intersection Summary			
Average Delay	7.1		
Intersection Capacity Utilization	15.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	203	41	1004	993
v/c Ratio	0.40	0.09	0.51	0.51
Control Delay	37.6	21.9	11.2	2.9
Queue Delay	0.0	0.0	0.1	0.1
Total Delay	37.6	21.9	11.2	3.0
Queue Length 50th (ft)	127	14	188	26
Queue Length 95th (ft)	198	42	236	33
Internal Link Dist (ft)	705		607	132
Turn Bay Length (ft)		25		
Base Capacity (vph)	511	439	1982	1944
Starvation Cap Reductn	0	0	0	149
Spillback Cap Reductn	0	0	129	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.40	0.09	0.54	0.55

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	191	39	0	944	933	0
Future Volume (vph)	191	39	0	944	933	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	0.93		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	1508		2973	2916	
Flt Permitted	0.95	1.00		1.00	1.00	
Satd. Flow (perm)	1805	1508		2973	2916	
Peak-hour factor, PHF	0.94	0.94	0.90	0.94	0.94	0.90
Adj. Flow (vph)	203	41	0	1004	993	0
RTOR Reduction (vph)	0	12	0	0	0	0
Lane Group Flow (vph)	203	29	0	1004	993	0
Confl. Peds. (#/hr)		34				
Heavy Vehicles (%)	2%	2%	2%	2%	4%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	8			2	6	
Permitted Phases		8				
Actuated Green, G (s)	32.0	32.0		78.0	78.0	
Effective Green, g (s)	34.0	34.0		80.0	80.0	
Actuated g/C Ratio	0.28	0.28		0.67	0.67	
Clearance Time (s)	5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)	511	427		1982	1944	
v/s Ratio Prot	c0.11			0.34	c0.34	
v/s Ratio Perm		0.02				
v/c Ratio	0.40	0.07		0.51	0.51	
Uniform Delay, d1	34.7	31.4		10.1	10.1	
Progression Factor	1.00	1.00		1.00	0.19	
Incremental Delay, d2	2.3	0.3		0.9	0.9	
Delay (s)	37.0	31.7		11.0	2.8	
Level of Service	D	C		B	A	
Approach Delay (s)	36.1			11.0	2.8	
Approach LOS	D			B	A	

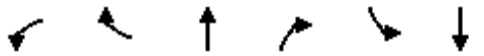
Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	NBT	SBT
Lane Group Flow (vph)	1033	1021
v/c Ratio	0.48	0.54
Control Delay	3.6	6.9
Queue Delay	0.3	0.1
Total Delay	4.0	7.1
Queue Length 50th (ft)	83	133
Queue Length 95th (ft)	m78	175
Internal Link Dist (ft)	410	607
Turn Bay Length (ft)		
Base Capacity (vph)	2155	1875
Starvation Cap Reductn	512	0
Spillback Cap Reductn	0	185
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.63	0.60

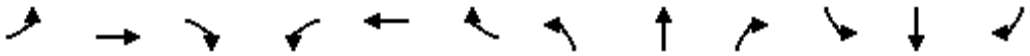
Intersection Summary

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



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	917	75	51	929
Future Volume (vph)	0	0	917	75	51	929
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			0.99			1.00
Flt Protected			1.00			1.00
Satd. Flow (prot)			2849			2984
Flt Permitted			1.00			0.83
Satd. Flow (perm)			2849			2487
Peak-hour factor, PHF	0.90	0.90	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	955	78	53	968
RTOR Reduction (vph)	0	0	5	0	0	0
Lane Group Flow (vph)	0	0	1028	0	0	1021
Heavy Vehicles (%)	2%	2%	2%	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)			2149			1876
v/s Ratio Prot			0.36			
v/s Ratio Perm						c0.41
v/c Ratio			0.48			0.54
Uniform Delay, d1			5.2			5.6
Progression Factor			0.63			1.00
Incremental Delay, d2			0.4			1.1
Delay (s)			3.7			6.8
Level of Service			A			A
Approach Delay (s)	0.0		3.7			6.8
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	5.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
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)	62	41	53	20	0	18	0	0	0	0	0	0
Future Volume (Veh/h)	62	41	53	20	0	18	0	0	0	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		-13%			-10%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.90	0.93	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	67	44	57	22	0	19	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	19	0	0	79	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	19	0	0	79	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	3.4	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	93	95	95	97	100	98	100			100		
cM capacity (veh/h)	957	896	1073	829	896	1073	1623			1623		

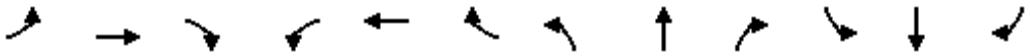
Direction, Lane #	EB 1	WB 1
Volume Total	168	41
Volume Left	67	22
Volume Right	57	19
cSH	976	927
Volume to Capacity	0.17	0.04
Queue Length 95th (ft)	16	3
Control Delay (s)	9.5	9.1
Lane LOS	A	A
Approach Delay (s)	9.5	9.1
Approach LOS	A	A

Intersection Summary				
Average Delay	9.4			
Intersection Capacity Utilization	14.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	24	105	739	388
v/c Ratio	0.16	0.58	0.65	0.31
Control Delay	27.3	41.5	7.0	6.7
Queue Delay	0.0	0.0	0.6	0.0
Total Delay	27.3	41.5	7.5	6.7
Queue Length 50th (ft)	6	43	113	89
Queue Length 95th (ft)	29	95	m172	121
Internal Link Dist (ft)	690	766	403	656
Turn Bay Length (ft)				
Base Capacity (vph)	152	181	1137	1266
Starvation Cap Reductn	0	0	126	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.58	0.73	0.31

Intersection Summary

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



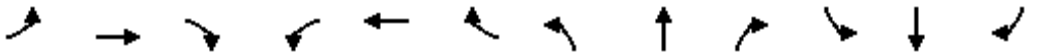
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	1	12	43	1	45	8	598	22	1	325	4
Future Volume (vph)	8	1	12	43	1	45	8	598	22	1	325	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	12	12	12	12	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		0.73			0.98			1.00			1.00	
Flpb, ped/bikes		1.00			0.79			1.00			1.00	
Frt		0.92			0.93			1.00			1.00	
Flt Protected		0.98			0.98			1.00			1.00	
Satd. Flow (prot)		1013			1124			1609			1788	
Flt Permitted		0.88			0.83			1.00			1.00	
Satd. Flow (perm)		912			960			1603			1787	
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)	9	1	14	51	1	53	9	704	26	1	382	5
RTOR Reduction (vph)	0	12	0	0	33	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	12	0	0	72	0	0	738	0	0	388	0
Confl. Peds. (#/hr)	4		108	108		4	2		14	14		2
Heavy Vehicles (%)	2%	2%	2%	5%	2%	2%	2%	2%	9%	2%	5%	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)		15.0			15.0			76.0			76.0	
Effective Green, g (s)		17.0			17.0			78.0			78.0	
Actuated g/C Ratio		0.15			0.15			0.71			0.71	
Clearance Time (s)		7.0			7.0			6.0			6.0	
Lane Grp Cap (vph)		140			148			1136			1267	
v/s Ratio Prot												
v/s Ratio Perm		0.01			c0.08			c0.46			0.22	
v/c Ratio		0.09			0.49			0.65			0.31	
Uniform Delay, d1		39.8			42.5			8.6			5.9	
Progression Factor		1.00			1.00			0.61			1.00	
Incremental Delay, d2		1.2			11.0			1.5			0.6	
Delay (s)		41.1			53.5			6.7			6.6	
Level of Service		D			D			A			A	
Approach Delay (s)		41.1			53.5			6.7			6.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	61.4%	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)	347	186	47	27	400	85	60	505
v/c Ratio	0.83	0.45	0.12	0.07	0.43	0.13	0.17	0.28
Control Delay	50.4	30.7	7.5	11.6	15.6	3.3	13.2	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	30.7	7.5	11.6	15.6	3.3	13.2	12.6
Queue Length 50th (ft)	220	98	0	8	154	2	19	90
Queue Length 95th (ft)	#386	167	25	22	227	24	43	121
Internal Link Dist (ft)	139	246			167			404
Turn Bay Length (ft)			100	110		100	95	
Base Capacity (vph)	417	413	396	387	935	654	356	1802
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	0.45	0.12	0.07	0.43	0.13	0.17	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 (vph)	142	186	5	61	117	45	26	384	82	58	453	32
Future Volume (vph)	142	186	5	61	117	45	26	384	82	58	453	32
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	0.84	1.00	1.00	0.83	1.00	1.00	
Flpb, ped/bikes		0.96			0.99	1.00	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	0.99	
Flt Protected		0.98			0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1575			1409	996	1517	1660	1099	1367	3190	
Flt Permitted		0.70			0.78	1.00	0.43	1.00	1.00	0.44	1.00	
Satd. Flow (perm)		1133			1124	996	687	1660	1099	633	3190	
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)	148	194	5	64	122	47	27	400	85	60	472	33
RTOR Reduction (vph)	0	1	0	0	0	30	0	0	35	0	5	0
Lane Group Flow (vph)	0	346	0	0	186	17	27	400	50	60	500	0
Confl. Peds. (#/hr)	51		59	59		51	26		33	33		26
Heavy Vehicles (%)	2%	2%	2%	3%	5%	9%	2%	3%	10%	7%	2%	3%
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)		38.5			38.5	38.5	60.0	60.0	60.0	60.0	60.0	
Effective Green, g (s)		40.5			40.5	40.5	62.0	62.0	62.0	62.0	62.0	
Actuated g/C Ratio		0.37			0.37	0.37	0.56	0.56	0.56	0.56	0.56	
Clearance Time (s)		6.0			6.0	6.0	5.5	5.5	5.5	5.5	5.5	
Lane Grp Cap (vph)		417			413	366	387	935	619	356	1798	
v/s Ratio Prot								c0.24			0.16	
v/s Ratio Perm		c0.31			0.17	0.02	0.04		0.05	0.09		
v/c Ratio		0.83			0.45	0.05	0.07	0.43	0.08	0.17	0.28	
Uniform Delay, d1		31.6			26.3	22.3	10.9	13.8	11.0	11.6	12.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		17.3			3.5	0.2	0.3	1.4	0.3	1.0	0.4	
Delay (s)		48.9			29.8	22.6	11.2	15.2	11.2	12.6	12.8	
Level of Service		D			C	C	B	B	B	B	B	
Approach Delay (s)		48.9			28.4			14.4			12.8	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

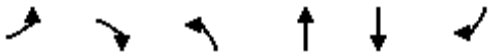
Lane Group	EBL	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	214	83	892	882	155
v/c Ratio	0.76	0.38	0.87	1.04	0.41
Control Delay	55.0	9.3	7.4	60.5	4.7
Queue Delay	0.0	0.0	3.1	0.0	0.0
Total Delay	55.0	9.3	10.5	60.5	4.7
Queue Length 50th (ft)	131	6	61	~674	4
Queue Length 95th (ft)	#250	m6	m62	#917	24
Internal Link Dist (ft)	494		293	410	
Turn Bay Length (ft)		125			
Base Capacity (vph)	282	221	1022	851	374
Starvation Cap Reductn	0	0	66	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.76	0.38	0.93	1.04	0.41

Intersection Summary

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

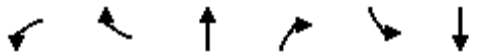
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	141	58	77	830	820	144
Future Volume (vph)	141	58	77	830	820	144
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	0.83		1.00	1.00	1.00	0.43
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	0.97		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1182		1464	1541	1588	581
Flt Permitted	0.97		0.09	1.00	1.00	1.00
Satd. Flow (perm)	1182		134	1541	1588	581
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	152	62	83	892	882	155
RTOR Reduction (vph)	13	0	0	0	0	63
Lane Group Flow (vph)	201	0	83	892	882	92
Confl. Peds. (#/hr)		259	128			128
Heavy Vehicles (%)	7%	2%	2%	2%	3%	4%
Turn Type	Prot		pm+pt	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases			2			6
Actuated Green, G (s)	23.0		71.0	71.0	57.0	57.0
Effective Green, g (s)	25.0		73.0	73.0	59.0	59.0
Actuated g/C Ratio	0.23		0.66	0.66	0.54	0.54
Clearance Time (s)	5.0		5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	268		221	1022	851	311
v/s Ratio Prot	c0.17		0.04	c0.58	c0.56	
v/s Ratio Perm			0.21			0.16
v/c Ratio	0.75		0.38	0.87	1.04	0.30
Uniform Delay, d1	39.6		37.3	14.8	25.5	14.1
Progression Factor	1.00		0.37	0.23	0.78	0.51
Incremental Delay, d2	17.4		1.2	2.8	38.7	2.1
Delay (s)	57.0		14.9	6.2	58.6	9.2
Level of Service	E		B	A	E	A
Approach Delay (s)	57.0			6.9	51.2	
Approach LOS	E			A	D	

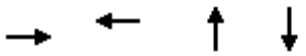
Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	35	0	0	0	27	70
Future Volume (vph)	35	0	0	0	27	70
Peak Hour Factor	0.92	0.90	0.90	0.90	0.92	0.92
Hourly flow rate (vph)	38	0	0	0	29	76

Direction, Lane #	WB 1	SB 1
Volume Total (vph)	38	105
Volume Left (vph)	38	29
Volume Right (vph)	0	0
Hadj (s)	0.23	0.11
Departure Headway (s)	4.4	4.1
Degree Utilization, x	0.05	0.12
Capacity (veh/h)	801	859
Control Delay (s)	7.6	7.7
Approach Delay (s)	7.6	7.7
Approach LOS	A	A

Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	15.8%	ICU Level of Service	A
Analysis Period (min)	15		



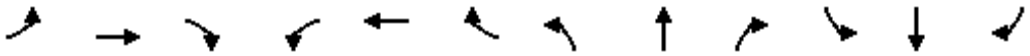
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	306	7	668	484
v/c Ratio	1.79	0.03	0.64	0.43
Control Delay	402.2	26.3	6.2	6.2
Queue Delay	0.5	0.0	0.1	0.2
Total Delay	402.8	26.3	6.3	6.4
Queue Length 50th (ft)	~299	2	124	95
Queue Length 95th (ft)	#440	13	m128	122
Internal Link Dist (ft)	696	244	287	403
Turn Bay Length (ft)				
Base Capacity (vph)	171	261	1040	1136
Starvation Cap Reductn	0	0	21	175
Spillback Cap Reductn	5	0	0	181
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.84	0.03	0.66	0.51

Intersection Summary

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

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

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)	120	1	139	2	1	3	68	498	2	1	353	58
Future Volume (vph)	120	1	139	2	1	3	68	498	2	1	353	58
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		0.61			0.84			1.00			0.92	
Flpb, ped/bikes		0.81			1.00			0.98			1.00	
Frt		0.93			0.92			1.00			0.98	
Flt Protected		0.98			0.99			0.99			1.00	
Satd. Flow (prot)		735			1287			1574			1538	
Flt Permitted		0.85			0.95			0.89			1.00	
Satd. Flow (perm)		639			1235			1412			1537	
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)	141	1	164	2	1	4	80	586	2	1	415	68
RTOR Reduction (vph)	0	38	0	0	3	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	268	0	0	4	0	0	668	0	0	479	0
Confl. Peds. (#/hr)	108		422	422		108	158		195	195		158
Heavy Vehicles (%)	4%	2%	2%	2%	2%	2%	3%	2%	2%	2%	5%	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)		21.0			21.0			79.0			79.0	
Effective Green, g (s)		23.0			23.0			81.0			81.0	
Actuated g/C Ratio		0.21			0.21			0.74			0.74	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		133			258			1039			1131	
v/s Ratio Prot												
v/s Ratio Perm		c0.42			0.00			c0.47			0.31	
v/c Ratio		2.02			0.01			0.64			0.42	
Uniform Delay, d1		43.5			34.5			7.3			5.6	
Progression Factor		1.00			1.00			0.50			0.92	
Incremental Delay, d2		482.3			0.1			2.3			1.1	
Delay (s)		525.8			34.6			5.9			6.2	
Level of Service		F			C			A			A	
Approach Delay (s)		525.8			34.6			5.9			6.2	
Approach LOS		F			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	114.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	97.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

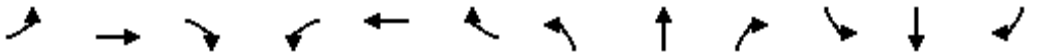
Lane Group	EBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	42	958	209	215	637
v/c Ratio	0.16	1.01	0.26	1.00	0.58
Control Delay	25.5	45.0	9.1	52.2	0.9
Queue Delay	0.0	20.6	0.0	0.0	0.9
Total Delay	25.5	65.6	9.1	52.2	1.8
Queue Length 50th (ft)	14	~644	53	~89	13
Queue Length 95th (ft)	45	m#939	m75	m85	m10
Internal Link Dist (ft)	190	279			293
Turn Bay Length (ft)			100	125	
Base Capacity (vph)	265	950	809	214	1105
Starvation Cap Reductn	0	54	0	0	219
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	1.07	0.26	1.00	0.72

Intersection Summary

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

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

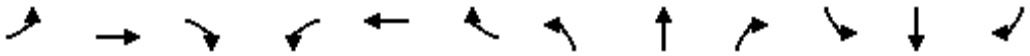
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	5	17	0	0	0	5	915	201	206	593	19
Future Volume (vph)	20	5	17	0	0	0	5	915	201	206	593	19
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		0.75						1.00	1.00	1.00	1.00	
Frt		0.95						1.00	0.85	1.00	1.00	
Flt Protected		0.98						1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1158						1519	1291	1509	1537	
Flt Permitted		0.98						1.00	1.00	0.11	1.00	
Satd. Flow (perm)		1158						1516	1291	179	1537	
Peak-hour factor, PHF	1.00	1.00	1.00	0.90	0.90	0.90	1.00	0.96	0.96	0.96	0.96	1.00
Adj. Flow (vph)	20	5	17	0	0	0	5	953	209	215	618	19
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	29	0	0	0	0	0	958	209	215	636	0
Confl. Peds. (#/hr)	259											
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	4%	4%	2%	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)		252						950	809	213	1103	
v/s Ratio Prot										c0.06	0.41	
v/s Ratio Perm		0.02						0.63	0.16	c0.66		
v/c Ratio		0.11						1.01	0.26	1.01	0.58	
Uniform Delay, d1		34.5						20.5	9.1	25.5	7.5	
Progression Factor		1.00						0.91	0.92	2.74	0.09	
Incremental Delay, d2		0.9						24.9	0.5	20.8	0.2	
Delay (s)		35.4						43.5	8.9	90.5	0.9	
Level of Service		D						D	A	F	A	
Approach Delay (s)		35.4			0.0			37.3			23.5	
Approach LOS		D			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.5	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	105.6%	ICU Level of Service	G
Analysis Period (min)	15		

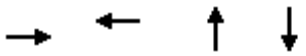
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	384	95	0	0	0	0	0	38	43	47	0
Future Volume (Veh/h)	0	384	95	0	0	0	0	0	38	43	47	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	452	112	0	0	0	0	0	45	51	55	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												
vC, conflicting volume	0			564			536	508	508	553	564	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			564			536	508	508	553	564	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	92	88	87	100
cM capacity (veh/h)	1623			1008			412	468	565	408	435	1085

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	564	45	106
Volume Left	0	0	51
Volume Right	112	45	0
cSH	1700	565	422
Volume to Capacity	0.33	0.08	0.25
Queue Length 95th (ft)	0	6	25
Control Delay (s)	0.0	11.9	16.4
Lane LOS		B	C
Approach Delay (s)	0.0	11.9	16.4
Approach LOS		B	C

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		



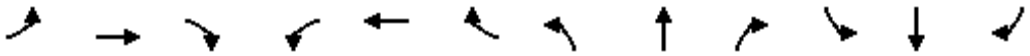
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	423	168	444	547
v/c Ratio	1.11	0.66	0.56	0.75
Control Delay	110.1	32.3	2.0	22.0
Queue Delay	0.0	0.1	0.2	2.1
Total Delay	110.1	32.3	2.2	24.1
Queue Length 50th (ft)	~345	63	0	292
Queue Length 95th (ft)	m#480	#159	0	m311
Internal Link Dist (ft)	690	359	289	287
Turn Bay Length (ft)				
Base Capacity (vph)	380	256	799	725
Starvation Cap Reductn	0	0	54	79
Spillback Cap Reductn	0	1	0	27
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.11	0.66	0.60	0.85

Intersection Summary

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

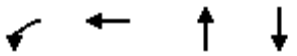
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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)	121	217	43	69	0	82	0	380	20	66	427	0
Future Volume (vph)	121	217	43	69	0	82	0	380	20	66	427	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		0.94			0.57			0.96			1.00	
Flpb, ped/bikes		0.87			1.00			1.00			1.00	
Frt		0.98			0.93			0.99			1.00	
Flt Protected		0.98			0.98			1.00			0.99	
Satd. Flow (prot)		1222			876			1514			1634	
Flt Permitted		0.83			0.67			1.00			0.84	
Satd. Flow (perm)		1033			599			1514			1375	
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)	134	241	48	77	0	91	0	422	22	73	474	0
RTOR Reduction (vph)	0	4	0	0	39	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	419	0	0	129	0	0	442	0	0	547	0
Confl. Peds. (#/hr)	422		150	150		422			253	253		
Heavy Vehicles (%)	3%	2%	6%	10%	2%	6%	2%	2%	2%	8%	4%	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)		38.0			38.0			56.0			56.0	
Effective Green, g (s)		40.0			40.0			58.0			58.0	
Actuated g/C Ratio		0.36			0.36			0.53			0.53	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Lane Grp Cap (vph)		375			217			798			725	
v/s Ratio Prot								0.29				
v/s Ratio Perm		c0.41			0.22						c0.40	
v/c Ratio		1.12			0.60			0.55			0.75	
Uniform Delay, d1		35.0			28.4			17.4			20.4	
Progression Factor		0.89			1.00			0.00			0.83	
Incremental Delay, d2		80.3			11.5			2.0			4.1	
Delay (s)		111.6			39.9			2.0			21.1	
Level of Service		F			D			A			C	
Approach Delay (s)		111.6			39.9			2.0			21.1	
Approach LOS		F			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



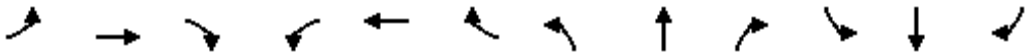
Lane Group	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	401	399	837	619
v/c Ratio	1.79	0.89	0.72	0.53
Control Delay	402.3	40.4	4.5	1.7
Queue Delay	1.1	41.3	13.7	1.0
Total Delay	403.4	81.7	18.2	2.7
Queue Length 50th (ft)	~421	82	159	8
Queue Length 95th (ft)	#616	#270	m114	13
Internal Link Dist (ft)		302	370	279
Turn Bay Length (ft)				
Base Capacity (vph)	224	449	1160	1175
Starvation Cap Reductn	0	0	315	66
Spillback Cap Reductn	16	79	260	304
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.93	1.08	0.99	0.71

Intersection Summary

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

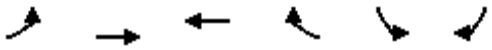
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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	381	16	364	13	783	0	0	564	25
Future Volume (vph)	0	0	0	381	16	364	13	783	0	0	564	25
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	0.92			1.00			1.00	
Flpb, ped/bikes				0.88	1.00			1.00			1.00	
Frt				1.00	0.86			1.00			0.99	
Flt Protected				0.95	1.00			1.00			1.00	
Satd. Flow (prot)				1297	1309			1526			1529	
Flt Permitted				0.95	1.00			0.99			1.00	
Satd. Flow (perm)				1297	1309			1511			1529	
Peak-hour factor, PHF	0.90	0.90	0.90	0.95	1.00	0.95	1.00	0.95	0.90	0.90	0.95	1.00
Adj. Flow (vph)	0	0	0	401	16	383	13	824	0	0	594	25
RTOR Reduction (vph)	0	0	0	0	223	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	0	0	401	176	0	0	837	0	0	618	0
Confl. Peds. (#/hr)				38		21						
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	5%	2%
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			6	
Permitted Phases				4			2					
Actuated Green, G (s)				17.0	17.0			82.5			82.5	
Effective Green, g (s)				19.0	19.0			84.5			84.5	
Actuated g/C Ratio				0.17	0.17			0.77			0.77	
Clearance Time (s)				5.0	5.0			5.5			5.5	
Lane Grp Cap (vph)				224	226			1160			1174	
v/s Ratio Prot					0.13						0.40	
v/s Ratio Perm				c0.31				c0.55				
v/c Ratio				1.79	0.78			0.72			0.53	
Uniform Delay, d1				45.5	43.5			6.6			5.0	
Progression Factor				1.04	1.24			0.57			0.06	
Incremental Delay, d2				372.7	22.4			0.4			1.4	
Delay (s)				420.1	76.2			4.2			1.7	
Level of Service				F	E			A			A	
Approach Delay (s)		0.0			248.6			4.2			1.7	
Approach LOS		A			F			A			A	

Intersection Summary			
HCM 2000 Control Delay	90.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	6.5
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	551	22	0	147
Future Volume (Veh/h)	0	0	551	22	0	147
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.85	1.00	0.90	0.85
Hourly flow rate (vph)	0	0	648	22	0	173
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	670				659	659
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	670				659	659
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	63
cM capacity (veh/h)	920				429	464

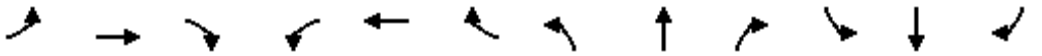
Direction, Lane #	WB 1	SB 1
Volume Total	670	173
Volume Left	0	0
Volume Right	22	173
cSH	1700	464
Volume to Capacity	0.39	0.37
Queue Length 95th (ft)	0	43
Control Delay (s)	0.0	17.3
Lane LOS		C
Approach Delay (s)	0.0	17.3
Approach LOS		C

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	NBT	SBT	SBR
Lane Group Flow (vph)	484	279	336
v/c Ratio	0.69	0.64	0.56
Control Delay	30.2	32.9	10.0
Queue Delay	0.0	2.5	0.5
Total Delay	30.2	35.3	10.6
Queue Length 50th (ft)	264	174	83
Queue Length 95th (ft)	376	m257	m125
Internal Link Dist (ft)	301	289	
Turn Bay Length (ft)			110
Base Capacity (vph)	698	438	596
Starvation Cap Reductn	0	73	62
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.69	0.76	0.63

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	7	399	20	9	237	296
Future Volume (vph)	0	0	0	0	0	0	7	399	20	9	237	296
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								0.99			1.00	0.85
Flt Protected								1.00			1.00	1.00
Satd. Flow (prot)								1532			1535	1318
Flt Permitted								1.00			0.98	1.00
Satd. Flow (perm)								1532			1507	1318
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	0	0	0	8	453	23	10	269	336
RTOR Reduction (vph)	0	0	0	0	0	0	0	2	0	0	0	213
Lane Group Flow (vph)	0	0	0	0	0	0	0	482	0	0	279	123
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	10%	2%	6%	5%
Turn Type							Split	NA		Perm	NA	Perm
Protected Phases							2	2			4	
Permitted Phases										4		4
Actuated Green, G (s)								48.0			30.0	30.0
Effective Green, g (s)								50.0			32.0	32.0
Actuated g/C Ratio								0.45			0.29	0.29
Clearance Time (s)								5.0			5.0	5.0
Lane Grp Cap (vph)								696			438	383
v/s Ratio Prot								c0.31				
v/s Ratio Perm											c0.19	0.09
v/c Ratio								0.69			0.64	0.32
Uniform Delay, d1								23.9			33.9	30.5
Progression Factor								1.00			0.82	1.35
Incremental Delay, d2								5.6			4.5	1.4
Delay (s)								29.5			32.2	42.6
Level of Service								C			C	D
Approach Delay (s)		0.0			0.0			29.5			37.9	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM 2000 Control Delay	34.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

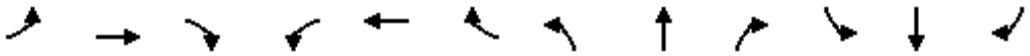
Lane Group	EBT	NBT	SBT	SBR
Lane Group Flow (vph)	263	769	783	216
v/c Ratio	0.87	1.22	0.76	0.27
Control Delay	63.5	121.0	16.6	3.1
Queue Delay	0.0	0.1	2.8	0.0
Total Delay	63.5	121.0	19.4	3.1
Queue Length 50th (ft)	160	~673	366	26
Queue Length 95th (ft)	#314	m#611	m347	m34
Internal Link Dist (ft)	191	200	370	
Turn Bay Length (ft)				150
Base Capacity (vph)	301	628	1035	800
Starvation Cap Reductn	0	6	151	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.87	1.24	0.89	0.27

Intersection Summary

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

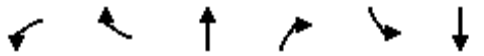
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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)	161	0	91	0	0	0	104	635	0	0	752	207
Future Volume (vph)	161	0	91	0	0	0	104	635	0	0	752	207
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						4.0			4.0	4.0
Lane Util. Factor		1.00						1.00			1.00	1.00
Frpb, ped/bikes		0.97						1.00			1.00	0.84
Flpb, ped/bikes		0.92						1.00			1.00	1.00
Frt		0.95						1.00			1.00	0.85
Flt Protected		0.97						0.99			1.00	1.00
Satd. Flow (prot)		1276						1492			1550	1104
Flt Permitted		0.81						0.63			1.00	1.00
Satd. Flow (perm)		1061						940			1550	1104
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)	168	0	95	0	0	0	108	661	0	0	783	216
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	0	0	0	63
Lane Group Flow (vph)	0	241	0	0	0	0	0	769	0	0	783	153
Confl. Peds. (#/hr)	38		16	16		38	50		157	157		50
Heavy Vehicles (%)	2%	0%	2%	0%	0%	0%	10%	5%	0%	0%	4%	4%
Turn Type	Perm	NA				Perm	Perm	NA	Perm		NA	Perm
Protected Phases		8			4			2			6	
Permitted Phases	8			4		4	2		2	6		6
Actuated Green, G (s)		27.0						71.5			71.5	71.5
Effective Green, g (s)		29.0						73.5			73.5	73.5
Actuated g/C Ratio		0.26						0.67			0.67	0.67
Clearance Time (s)		5.5						6.0			6.0	6.0
Lane Grp Cap (vph)		279						628			1035	737
v/s Ratio Prot											0.51	
v/s Ratio Perm		c0.23						c0.82				0.14
v/c Ratio		0.86						1.22			0.76	0.21
Uniform Delay, d1		38.6						18.2			12.2	7.0
Progression Factor		1.00						0.76			1.23	2.08
Incremental Delay, d2		28.0						102.4			0.5	0.1
Delay (s)		66.6						116.3			15.6	14.7
Level of Service		E						F			B	B
Approach Delay (s)		66.6			0.0			116.3			15.4	
Approach LOS		E			A			F			B	

Intersection Summary			
HCM 2000 Control Delay	60.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	120.8%	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	759	0	0	824
Future Volume (Veh/h)	0	0	759	0	0	824
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	858
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	0.82	0.68			0.68	
vC, conflicting volume	1692	807			791	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	857	482			458	
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)	259	393			758	

Direction, Lane #	NB 1	SB 1
Volume Total	791	858
Volume Left	0	0
Volume Right	0	0
cSH	1700	758
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	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

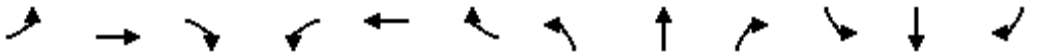
Lane Group	EBT	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	575	1085	483	363	515	63
v/c Ratio	0.57	1.06	1.06	1.05	0.61	0.11
Control Delay	28.9	78.0	94.6	87.6	20.3	5.6
Queue Delay	0.0	13.5	19.9	0.0	0.7	0.0
Total Delay	28.9	91.5	114.5	87.6	21.0	5.6
Queue Length 50th (ft)	164	~443	~376	~216	176	0
Queue Length 95th (ft)	219	#564	#572	m#371	m284	m13
Internal Link Dist (ft)	189	477	172		179	
Turn Bay Length (ft)				100		160
Base Capacity (vph)	1014	1026	456	347	839	548
Starvation Cap Reductn	0	0	0	0	107	0
Spillback Cap Reductn	0	32	169	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	1.09	1.68	1.05	0.70	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.

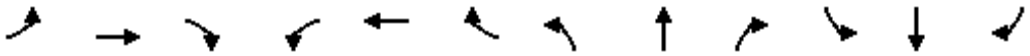
m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	432	78	3	662	301	0	424	6	323	458	56
Future Volume (vph)	2	432	78	3	662	301	0	424	6	323	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)		2726			2753			1319		1458	1565	969
Flt Permitted		0.95			0.95			1.00		0.19	1.00	1.00
Satd. Flow (perm)		2596			2626			1319		285	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)	2	485	88	3	744	338	0	476	7	363	515	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	0	0	0	29
Lane Group Flow (vph)	0	575	0	0	1085	0	0	482	0	363	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	Perm	NA		Perm	NA			NA		pm+pt	NA	Perm
Protected Phases		6			2			8		7	4	
Permitted Phases	6			2						4		4
Actuated Green, G (s)		41.0			41.0			36.0		57.0	57.0	57.0
Effective Green, g (s)		43.0			43.0			38.0		59.0	59.0	59.0
Actuated g/C Ratio		0.39			0.39			0.35		0.54	0.54	0.54
Clearance Time (s)		6.0			6.0			6.0		5.0	6.0	6.0
Lane Grp Cap (vph)		1014			1026			455		344	839	519
v/s Ratio Prot								0.37		c0.17	0.33	
v/s Ratio Perm		0.22			c0.41					c0.39		0.03
v/c Ratio		0.57			1.06			1.06		1.06	0.61	0.07
Uniform Delay, d1		26.2			33.5			36.0		25.1	17.6	12.3
Progression Factor		1.00			1.00			1.00		1.72	0.99	1.62
Incremental Delay, d2		2.3			44.6			59.0		56.0	2.4	0.2
Delay (s)		28.5			78.1			95.0		99.1	19.7	20.0
Level of Service		C			E			F		F	B	B
Approach Delay (s)		28.5			78.1			95.0			50.3	
Approach LOS		C			E			F			D	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		

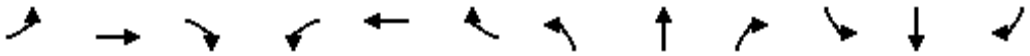
c Critical Lane Group



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	1137	0	0	763	23
Future Volume (Veh/h)	0	0	0	71	11	180	10	1137	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	1160	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	1616	1970	401	1570	1982	616	802			1160		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	732	1125	0	680	1138	122	423			779		
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	301	179	728	966			691		

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	267	397	773	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				

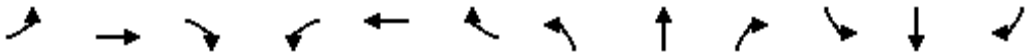
Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	68.8%	ICU Level of Service	C	
Analysis Period (min)	15			



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	

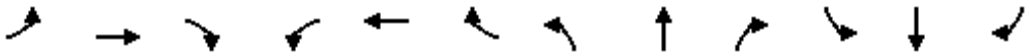
Intersection Summary				
Delay	11.0			
Level of Service	B			
Intersection Capacity Utilization	58.0%	ICU Level of Service	B	
Analysis Period (min)	15			



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

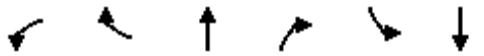
Intersection Summary				
Delay	9.6			
Level of Service	A			
Intersection Capacity Utilization	47.5%	ICU Level of Service	A	
Analysis Period (min)	15			



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	230	3
Future Volume (vph)	61	69	40	19	8	17	5	350	5	7	230	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	247	3

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	183	47	386	258
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)	5.6	5.8	5.0	5.2
Degree Utilization, x	0.28	0.08	0.54	0.37
Capacity (veh/h)	581	510	686	652
Control Delay (s)	10.8	9.3	13.6	11.3
Approach Delay (s)	10.8	9.3	13.6	11.3
Approach LOS	B	A	B	B

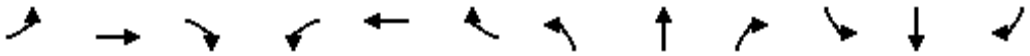
Intersection Summary				
Delay	12.1			
Level of Service	B			
Intersection Capacity Utilization	42.5%	ICU Level of Service	A	
Analysis Period (min)	15			



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		

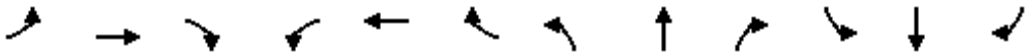
K. Intersection Capacity Analysis – Future conditions with the development + mitigations and recommendations (2030 Total Future with Mitigations and Recommendations)

Lane Group	EBL	EBT	NBT	SBT
Lane Group Flow (vph)	35	444	875	1491
v/c Ratio	0.08	0.53	0.45	1.01
Control Delay	28.1	33.7	8.3	44.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	28.1	33.7	8.3	44.7
Queue Length 50th (ft)	17	126	114	~475
Queue Length 95th (ft)	41	176	153	#665
Internal Link Dist (ft)		782	130	228
Turn Bay Length (ft)	60			
Base Capacity (vph)	413	831	1965	1475
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	0.53	0.45	1.01

Intersection Summary

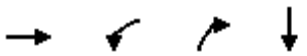
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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	391	13	0	0	0	0	608	188	127	1229	0
Future Volume (vph)	32	391	13	0	0	0	0	608	188	127	1229	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						2955			3170	
Flt Permitted	0.95	1.00						1.00			0.71	
Satd. Flow (perm)	1533	3074						2955			2253	
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	430	14	0	0	0	0	668	207	140	1351	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	29	0	0	0	0
Lane Group Flow (vph)	35	442	0	0	0	0	0	846	0	0	1491	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)	25.0	25.0						63.5			63.5	
Effective Green, g (s)	27.0	27.0						65.5			65.5	
Actuated g/C Ratio	0.27	0.27						0.66			0.66	
Clearance Time (s)	6.0	6.0						5.5			5.5	
Lane Grp Cap (vph)	413	829						1935			1475	
v/s Ratio Prot		c0.14						0.29				
v/s Ratio Perm	0.02										c0.66	
v/c Ratio	0.08	0.53						0.44			1.01	
Uniform Delay, d1	27.3	31.1						8.3			17.2	
Progression Factor	1.00	1.00						1.00			1.00	
Incremental Delay, d2	0.4	2.4						0.7			26.1	
Delay (s)	27.7	33.6						9.1			43.4	
Level of Service	C	C						A			D	
Approach Delay (s)		33.1			0.0			9.1			43.4	
Approach LOS		C			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

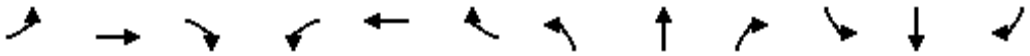


Lane Group	EBT	WBL	NBR	SBT
Lane Group Flow (vph)	765	927	254	2
v/c Ratio	0.82	1.07	0.27	0.02
Control Delay	44.2	77.8	5.4	54.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	44.2	77.8	5.4	54.0
Queue Length 50th (ft)	277	~686	22	2
Queue Length 95th (ft)	360	#1112	75	11
Internal Link Dist (ft)	649			121
Turn Bay Length (ft)				
Base Capacity (vph)	931	867	934	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	0.82	1.07	0.27	0.02

Intersection Summary

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

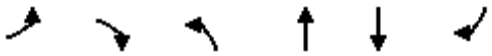
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	572	124	844	0	0	0	0	231	1	1	0
Future Volume (vph)	0	572	124	844	0	0	0	0	231	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)		2748		1540					1517		1472	
Flt Permitted		1.00		0.95					1.00		0.98	
Satd. Flow (perm)		2748		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	629	136	927	0	0	0	0	254	1	1	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	85	0	0	0
Lane Group Flow (vph)	0	750	0	927	0	0	0	0	169	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)		38.0		62.0					62.0		2.0	
Effective Green, g (s)		40.0		64.0					64.0		4.0	
Actuated g/C Ratio		0.33		0.53					0.53		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)		916		821					809		49	
v/s Ratio Prot		c0.27		c0.60					0.11			
v/s Ratio Perm											0.00	
v/c Ratio		0.82		1.13					0.21		0.04	
Uniform Delay, d1		36.7		28.0					14.7		56.1	
Progression Factor		1.00		1.00					1.00		1.00	
Incremental Delay, d2		8.1		73.3					0.6		0.1	
Delay (s)		44.7		101.3					15.3		56.3	
Level of Service		D		F					B		E	
Approach Delay (s)		44.7			101.3			15.3			56.3	
Approach LOS		D			F			B			E	

Intersection Summary			
HCM 2000 Control Delay	67.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

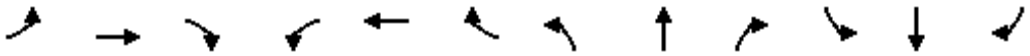
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	7	17	748	1368	76
Future Volume (Veh/h)	5	7	17	748	1368	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	787	1440	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	0.76	0.71	0.71			
vC, conflicting volume	1910	760	1520			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1014	0	915			
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)	162	751	526			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	12	280	525	960	560
Volume Left	5	18	0	0	0
Volume Right	7	0	0	0	80
cSH	298	526	1700	1700	1700
Volume to Capacity	0.04	0.03	0.31	0.56	0.33
Queue Length 95th (ft)	3	3	0	0	0
Control Delay (s)	17.6	1.2	0.0	0.0	0.0
Lane LOS	C	A			
Approach Delay (s)	17.6	0.4		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		



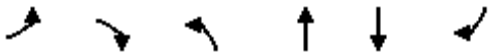
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1	1	0	0	0	1	756	7	8	1330	5
Future Volume (Veh/h)	2	1	1	0	0	0	1	756	7	8	1330	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.90	0.90	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	796	7	8	1400	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	0.78	0.78	0.73	0.78	0.78	0.90	0.73			0.90		
vC, conflicting volume	1818	2224	702	1519	2222	402	1405			803		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	932	1452	0	547	1451	128	817			572		
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)	171	100	792	321	100	813	589			902		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	399	405	708	705
Volume Left	2	1	0	8	0
Volume Right	1	0	7	0	5
cSH	174	589	1700	902	1700
Volume to Capacity	0.02	0.00	0.24	0.01	0.41
Queue Length 95th (ft)	2	0	0	1	0
Control Delay (s)	26.2	0.1	0.0	0.2	0.0
Lane LOS	D	A		A	
Approach Delay (s)	26.2	0.0		0.1	
Approach LOS	D				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	57.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	NBT	SBT
Lane Group Flow (vph)	819	1470
v/c Ratio	0.42	0.77
Control Delay	2.8	20.8
Queue Delay	0.2	0.5
Total Delay	3.0	21.3
Queue Length 50th (ft)	25	412
Queue Length 95th (ft)	32	510
Internal Link Dist (ft)	68	125
Turn Bay Length (ft)		
Base Capacity (vph)	1961	1902
Starvation Cap Reductn	384	139
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.52	0.83

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	25	753	1287	109
Future Volume (vph)	0	0	25	753	1287	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)				3090	3120	
Flt Permitted				0.87	1.00	
Satd. Flow (perm)				2692	3120	
Peak-hour factor, PHF	0.90	0.90	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	26	793	1355	115
RTOR Reduction (vph)	0	0	0	0	5	0
Lane Group Flow (vph)	0	0	0	819	1465	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)				1960	1898	
v/s Ratio Prot				c0.03	c0.47	
v/s Ratio Perm				0.27		
v/c Ratio				0.42	0.77	
Uniform Delay, d1				6.9	17.4	
Progression Factor				0.31	1.00	
Incremental Delay, d2				0.6	3.1	
Delay (s)				2.8	20.5	
Level of Service				A	C	
Approach Delay (s)	0.0			2.8	20.5	
Approach LOS	A			A	C	

Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	WBL	NBT	SBT
Lane Group Flow (vph)	76	784	1373
v/c Ratio	0.21	0.35	0.61
Control Delay	19.6	1.6	0.9
Queue Delay	0.0	0.3	0.4
Total Delay	19.6	1.9	1.3
Queue Length 50th (ft)	19	11	3
Queue Length 95th (ft)	61	24	3
Internal Link Dist (ft)	247	132	68
Turn Bay Length (ft)			
Base Capacity (vph)	358	2217	2260
Starvation Cap Reductn	0	731	402
Spillback Cap Reductn	0	19	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.21	0.53	0.74

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	29	42	737	0	0	1291
Future Volume (vph)	29	42	737	0	0	1291
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)	1413		3094			3154
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1413		3094			3154
Peak-hour factor, PHF	0.94	0.94	0.94	0.90	0.90	0.94
Adj. Flow (vph)	31	45	784	0	0	1373
RTOR Reduction (vph)	35	0	0	0	0	0
Lane Group Flow (vph)	41	0	784	0	0	1373
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)	323		2217			2260
v/s Ratio Prot	c0.03		0.25			c0.44
v/s Ratio Perm						
v/c Ratio	0.13		0.35			0.61
Uniform Delay, d1	36.7		6.5			8.5
Progression Factor	1.00		0.18			0.01
Incremental Delay, d2	0.8		0.4			0.8
Delay (s)	37.5		1.6			0.9
Level of Service	D		A			A
Approach Delay (s)	37.5		1.6			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	0.53		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

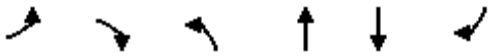
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	23	64	0
Future Volume (Veh/h)	0	0	0	23	64	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.85	0.85	0.90
Hourly flow rate (vph)	0	0	0	27	75	0
Pedestrians						
Lane Width (ft)						
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		27	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			0		27	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		968	1085

Direction, Lane #	WB 1	NB 1
Volume Total	27	75
Volume Left	0	75
Volume Right	0	0
cSH	1700	968
Volume to Capacity	0.02	0.08
Queue Length 95th (ft)	0	6
Control Delay (s)	0.0	9.0
Lane LOS		A
Approach Delay (s)	0.0	9.0
Approach LOS		A

Intersection Summary			
Average Delay	6.6		
Intersection Capacity Utilization	13.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	104	57	715	1455
v/c Ratio	0.19	0.13	0.40	0.78
Control Delay	31.6	11.3	11.1	6.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	31.6	11.3	11.1	6.6
Queue Length 50th (ft)	59	5	130	63
Queue Length 95th (ft)	104	37	167	73
Internal Link Dist (ft)	705		607	132
Turn Bay Length (ft)		25		
Base Capacity (vph)	556	438	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	0.40	0.78

Intersection Summary



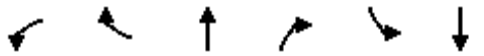
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	95	52	0	651	1324	0
Future Volume (vph)	95	52	0	651	1324	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	16	16	10	10	10	10
Total Lost time (s)	3.0	3.0		3.0	3.0	
Lane Util. Factor	1.00	1.00		0.95	0.95	
Frpb, ped/bikes	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	715	1455	0
RTOR Reduction (vph)	0	33	0	0	0	0
Lane Group Flow (vph)	104	24	0	715	1455	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			0.25	c0.50	
v/s Ratio Perm		0.02				
v/c Ratio	0.19	0.06		0.40	0.78	
Uniform Delay, d1	30.5	29.2		10.3	15.4	
Progression Factor	1.00	1.00		1.00	0.25	
Incremental Delay, d2	0.7	0.3		0.7	2.7	
Delay (s)	31.2	29.5		11.0	6.5	
Level of Service	C	C		B	A	
Approach Delay (s)	30.6			11.0	6.5	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

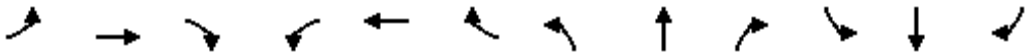
Lane Group	NBT	SBT
Lane Group Flow (vph)	748	1395
v/c Ratio	0.36	0.73
Control Delay	8.0	10.1
Queue Delay	0.0	0.9
Total Delay	8.0	11.0
Queue Length 50th (ft)	163	237
Queue Length 95th (ft)	148	315
Internal Link Dist (ft)	410	607
Turn Bay Length (ft)		
Base Capacity (vph)	2055	1921
Starvation Cap Reductn	0	145
Spillback Cap Reductn	0	252
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.36	0.84

Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	644	74	71	1268
Future Volume (vph)	0	0	644	74	71	1268
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)			2713			2984
Flt Permitted			1.00			0.85
Satd. Flow (perm)			2713			2547
Peak-hour factor, PHF	0.90	0.90	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	671	77	74	1321
RTOR Reduction (vph)	0	0	8	0	0	0
Lane Group Flow (vph)	0	0	740	0	0	1395
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)			2047			1921
v/s Ratio Prot			0.27			
v/s Ratio Perm						c0.55
v/c Ratio			0.36			0.73
Uniform Delay, d1			4.6			7.3
Progression Factor			1.73			1.00
Incremental Delay, d2			0.4			2.4
Delay (s)			8.3			9.8
Level of Service			A			A
Approach Delay (s)	0.0		8.3			9.8
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



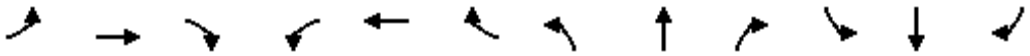
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	54	41	56	0	34	0	0	0	0	0	0
Future Volume (Veh/h)	41	54	41	56	0	34	0	0	0	0	0	0
Sign Control		Stop			Stop			Free			Free	
Grade		-13%			-10%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.90	0.89	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	46	61	46	63	0	38	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	38	0	0	76	0	0	0			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	38	0	0	76	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	93	96	92	100	96	100			100		
cM capacity (veh/h)	914	894	1079	829	896	1085	1623			1623		

Direction, Lane #	EB 1	WB 1
Volume Total	153	101
Volume Left	46	63
Volume Right	46	38
cSH	949	910
Volume to Capacity	0.16	0.11
Queue Length 95th (ft)	14	9
Control Delay (s)	9.5	9.5
Lane LOS	A	A
Approach Delay (s)	9.5	9.5
Approach LOS	A	A

Intersection Summary				
Average Delay	9.5			
Intersection Capacity Utilization	14.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	44	27	408	747
v/c Ratio	0.29	0.28	0.39	0.58
Control Delay	36.0	46.4	10.7	9.6
Queue Delay	0.0	0.0	0.3	0.0
Total Delay	36.0	46.4	11.0	9.6
Queue Length 50th (ft)	18	15	131	219
Queue Length 95th (ft)	54	44	162	313
Internal Link Dist (ft)	690	766	403	656
Turn Bay Length (ft)				
Base Capacity (vph)	153	98	1035	1290
Starvation Cap Reductn	0	0	203	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.28	0.49	0.58

Intersection Summary

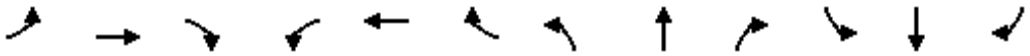


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1	14	22	1	3	32	307	44	17	633	53
Future Volume (vph)	26	1	14	22	1	3	32	307	44	17	633	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	8	8	12	12	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		0.81			1.00			0.99			1.00	
Flpb, ped/bikes		0.99			0.58			1.00			1.00	
Frt		0.95			0.98			0.98			0.99	
Flt Protected		0.97			0.96			1.00			1.00	
Satd. Flow (prot)		1157			833			1571			1815	
Flt Permitted		0.81			0.76			0.91			0.99	
Satd. Flow (perm)		966			662			1436			1793	
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)	28	1	15	23	1	3	34	327	47	18	673	56
RTOR Reduction (vph)	0	13	0	0	3	0	0	4	0	0	3	0
Lane Group Flow (vph)	0	31	0	0	24	0	0	404	0	0	744	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)		140			96			1031			1287	
v/s Ratio Prot												
v/s Ratio Perm		0.03			c0.04			0.28			c0.42	
v/c Ratio		0.22			0.25			0.39			0.58	
Uniform Delay, d1		41.5			41.7			6.1			7.5	
Progression Factor		1.00			1.00			1.62			1.00	
Incremental Delay, d2		3.6			6.3			1.0			1.9	
Delay (s)		45.2			48.0			10.8			9.4	
Level of Service		D			D			B			A	
Approach Delay (s)		45.2			48.0			10.8			9.4	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

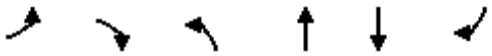
Lane Group	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	169	211	37	15	252	75	41	814
v/c Ratio	0.38	0.59	0.11	0.05	0.26	0.11	0.08	0.42
Control Delay	32.5	39.8	9.4	9.0	10.3	2.3	9.0	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.5	39.8	9.4	9.0	10.3	2.3	9.0	11.3
Queue Length 50th (ft)	93	125	0	4	75	0	11	140
Queue Length 95th (ft)	155	208	24	13	117	17	26	181
Internal Link Dist (ft)	139	246			167			404
Turn Bay Length (ft)			100	110		100	95	
Base Capacity (vph)	447	358	345	276	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	0.38	0.59	0.11	0.05	0.26	0.11	0.08	0.42

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	117	1	70	130	35	14	239	71	39	698	75
Future Volume (vph)	43	117	1	70	130	35	14	239	71	39	698	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)		1611			1348	1021	1436	1598	1087	1336	3144	
Flt Permitted		0.87			0.83	1.00	0.30	1.00	1.00	0.57	1.00	
Satd. Flow (perm)		1427			1145	1021	447	1598	1087	806	3144	
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	123	1	74	137	37	15	252	75	41	735	79
RTOR Reduction (vph)	0	0	0	0	0	25	0	0	29	0	7	0
Lane Group Flow (vph)	0	169	0	0	211	12	15	252	46	41	807	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)		447			359	320	276	987	671	498	1943	
v/s Ratio Prot								0.16			c0.26	
v/s Ratio Perm		0.12			c0.18	0.01	0.03		0.04	0.05		
v/c Ratio		0.38			0.59	0.04	0.05	0.26	0.07	0.08	0.42	
Uniform Delay, d1		29.4			31.8	26.2	8.3	9.5	8.4	8.4	10.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.4			6.9	0.2	0.4	0.6	0.2	0.3	0.7	
Delay (s)		31.8			38.7	26.4	8.7	10.1	8.6	8.8	11.4	
Level of Service		C			D	C	A	B	A	A	B	
Approach Delay (s)		31.8			36.8			9.7			11.3	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	7.5
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



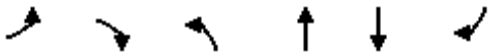
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	142	70	53	598	1076	213
v/c Ratio	0.62	0.36	0.36	0.55	1.07	0.34
Control Delay	55.9	15.2	27.0	8.1	71.6	5.3
Queue Delay	0.0	1.1	0.0	3.1	11.2	0.0
Total Delay	55.9	16.3	27.0	11.2	82.7	5.3
Queue Length 50th (ft)	94	0	12	263	~826	13
Queue Length 95th (ft)	#164	42	m15	m235	#1089	m64
Internal Link Dist (ft)	494			293	410	
Turn Bay Length (ft)		100	125			
Base Capacity (vph)	228	195	148	1078	1001	619
Starvation Cap Reductn	0	0	0	364	111	0
Spillback Cap Reductn	0	37	0	0	186	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.44	0.36	0.84	1.32	0.34

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)	139	69	52	586	1054	209
Future Volume (vph)	139	69	52	586	1054	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	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.67	1.00	1.00	1.00	0.63
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	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1399	835	1370	1483	1573	862
Flt Permitted	0.95	1.00	0.06	1.00	1.00	1.00
Satd. Flow (perm)	1399	835	92	1483	1573	862
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	142	70	53	598	1076	213
RTOR Reduction (vph)	0	59	0	0	0	71
Lane Group Flow (vph)	142	11	53	598	1076	142
Confl. Peds. (#/hr)		93	58			58
Heavy Vehicles (%)	10%	10%	9%	6%	4%	2%
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	8		5	2	6	
Permitted Phases		8	2			6
Actuated Green, G (s)	16.0	16.0	78.0	78.0	68.0	68.0
Effective Green, g (s)	18.0	18.0	80.0	80.0	70.0	70.0
Actuated g/C Ratio	0.16	0.16	0.73	0.73	0.64	0.64
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	228	136	148	1078	1001	548
v/s Ratio Prot	c0.10		0.02	c0.40	c0.68	
v/s Ratio Perm		0.01	0.24			0.16
v/c Ratio	0.62	0.08	0.36	0.55	1.07	0.26
Uniform Delay, d1	42.8	39.0	39.1	6.9	20.0	8.7
Progression Factor	1.00	1.00	1.20	0.95	1.22	2.68
Incremental Delay, d2	12.2	1.2	4.2	1.3	46.3	0.8
Delay (s)	55.0	40.2	51.1	7.8	70.8	24.1
Level of Service	E	D	D	A	E	C
Approach Delay (s)	50.1			11.3	63.0	
Approach LOS	D			B	E	

Intersection Summary			
HCM 2000 Control Delay	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
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)	53	0	0	0	15	60
Future Volume (vph)	53	0	0	0	15	60
Peak Hour Factor	0.91	0.90	0.90	0.90	0.91	0.91
Hourly flow rate (vph)	58	0	0	0	16	66

Direction, Lane #	WB 1	SB 1
Volume Total (vph)	58	82
Volume Left (vph)	58	16
Volume Right (vph)	0	0
Hadj (s)	0.27	0.11
Departure Headway (s)	4.4	4.1
Degree Utilization, x	0.07	0.09
Capacity (veh/h)	808	846
Control Delay (s)	7.7	7.6
Approach Delay (s)	7.7	7.6
Approach LOS	A	A

Intersection Summary			
Delay	7.6		
Level of Service	A		
Intersection Capacity Utilization	14.4%	ICU Level of Service	A
Analysis Period (min)	15		