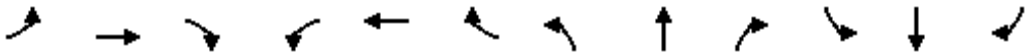
Appendix D
Traffic Data

ESA

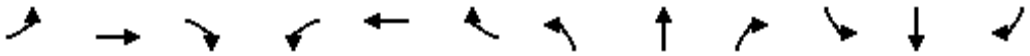
Trip Generation			10th Edition																			
95	units	220	Multifamily Housing (Low-Rise)	7.32	695	0.56	53	28	0.16	15	72	0.40	38	0.67	64	59	0.40	38	41	0.27	26
2.4	ksf	931	Quality Restaurant	83.84	201	4.47	11	80	3.58	9	20	0.89	2	8.28	20	61	5.05	12	59	4.89	8
3.48	ksf	820	Shopping Center	37.75	131	3.00	10	54	1.62	6	46	1.38	4	4.21	15	50	2.11	7	50	2.11	8
			Total		**1027**		**74**			**30**			**44**		**99**			**57**			**42**
			Internal Trip Capture (8% am, 15% pm)																		
		220				-	4		-	1.19		-	3.05	-	10		-	5.66		-	3.94
		931				-	1		-	0.70		-	0.18	-	3		-	1.83		-	1.77
		820				-	1		-	0.43		-	0.37	-	2		-	1.13		-	1.13
			Internal Capture			-	6		-	2		-	4	-	15		-	9		-	6
			Total				**68**			**28**			**40**		**84**			**48**			**36**



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	15	285	50	45	3	231	781	16	1	1788	154
Future Volume (vph)	103	15	285	50	45	3	231	781	16	1	1788	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1846		1770	3528		1770	3497	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1846		1770	3528		1770	3497	
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)	108	16	300	53	47	3	243	822	17	1	1882	162
RTOR Reduction (vph)	0	0	172	0	2	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	124	128	53	48	0	243	838	0	1	2041	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Effective Green, g (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Actuated g/C Ratio		0.09	0.09	0.07	0.07		0.13	0.69		0.02	0.57	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		160	142	116	121		236	2438		27	2005	
v/s Ratio Prot		0.07		c0.03	0.03		c0.14	0.24		0.00	c0.58	
v/s Ratio Perm			c0.08									
v/c Ratio		0.78	0.90	0.46	0.40		1.03	0.34		0.04	1.02	
Uniform Delay, d1		59.4	60.1	60.0	59.8		57.8	8.3		64.7	28.5	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		18.9	46.4	1.0	0.8		66.5	0.4		0.2	24.7	
Delay (s)		78.3	106.6	61.0	60.5		124.3	8.7		64.9	53.1	
Level of Service		E	F	E	E		F	A		E	D	
Approach Delay (s)		98.3			60.8			34.7			53.1	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	53.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	133.4	Sum of lost time (s)	18.3
Intersection Capacity Utilization	92.9%	ICU Level of Service	F
Analysis Period (min)	15		

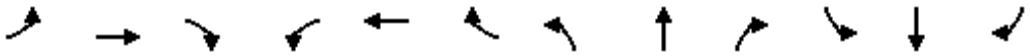
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	73	12	2	4	47	1032	4	3	2113	40
Future Volume (Veh/h)	8	0	73	12	2	4	47	1032	4	3	2113	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	9	0	78	13	2	4	50	1098	4	3	2248	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2926	3478	1146	2408	3497	551	2291			1102		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2926	3478	1146	2408	3497	551	2291			1102		
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 %	0	100	60	0	58	99	77			100		
cM capacity (veh/h)	4	5	193	8	5	478	217			629		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	9	78	13	6	50	732	370	3	1499	792
Volume Left	9	0	13	0	50	0	0	3	0	0
Volume Right	0	78	0	4	0	0	4	0	0	43
cSH	4	193	8	14	217	1700	1700	629	1700	1700
Volume to Capacity	2.39	0.40	1.55	0.42	0.23	0.43	0.22	0.00	0.88	0.47
Queue Length 95th (ft)	55	45	63	27	22	0	0	0	0	0
Control Delay (s)	2338.9	35.8	1119.5	385.5	26.5	0.0	0.0	10.7	0.0	0.0
Lane LOS	F	E	F	F	D			B		
Approach Delay (s)	274.0		887.7		1.1			0.0		
Approach LOS	F		F							

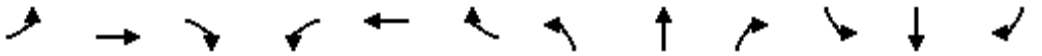
Intersection Summary					
Average Delay	11.8				
Intersection Capacity Utilization	73.7%	ICU Level of Service		D	
Analysis Period (min)	15				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	152	373	411	71	309	128	687	219	258	1854	13
Future Volume (vph)	11	152	373	411	71	309	128	687	219	258	1854	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.94	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1656	1504	3433	1863	1583	1770	5085	1583	3433	5080	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1656	1504	3433	1863	1583	1770	5085	1583	3433	5080	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	12	160	393	433	75	325	135	723	231	272	1952	14
RTOR Reduction (vph)	0	16	189	0	0	244	0	0	116	0	1	0
Lane Group Flow (vph)	0	278	82	433	75	81	135	723	115	272	1965	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		20.0	20.0	22.9	22.9	38.5	22.5	79.9	79.9	15.6	74.1	
Effective Green, g (s)		20.0	20.0	22.9	22.9	38.5	22.5	79.9	79.9	15.6	74.1	
Actuated g/C Ratio		0.12	0.12	0.14	0.14	0.24	0.14	0.50	0.50	0.10	0.46	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		207	188	491	266	380	248	2539	790	334	2352	
v/s Ratio Prot		c0.17		c0.13	0.04	0.02	c0.08	0.14		0.08	c0.39	
v/s Ratio Perm			0.05			0.03			0.07			
v/c Ratio		1.34	0.44	0.88	0.28	0.21	0.54	0.28	0.15	0.81	0.84	
Uniform Delay, d1		70.0	64.8	67.2	61.2	48.6	64.0	23.4	21.6	70.8	37.6	
Progression Factor		1.00	1.00	1.00	1.00	1.00	0.83	0.63	0.65	1.00	1.00	
Incremental Delay, d2		183.5	0.6	16.4	0.2	0.1	1.3	0.3	0.4	13.4	3.7	
Delay (s)		253.5	65.4	83.6	61.4	48.7	54.3	15.0	14.4	84.2	41.3	
Level of Service		F	E	F	E	D	D	B	B	F	D	
Approach Delay (s)		163.3			68.0			19.7			46.5	
Approach LOS		F			E			B			D	

Intersection Summary			
HCM 2000 Control Delay	58.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
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 (vph)	494	0	207	7	5	2	301	625	2	2	1776	1263
Future Volume (vph)	494	0	207	7	5	2	301	625	2	2	1776	1263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1782		1770	5083		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1782		1770	5083		1770	5085	1583
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)	515	0	216	7	5	2	314	651	2	2	1850	1316
RTOR Reduction (vph)	0	0	147	0	2	0	0	0	0	0	0	149
Lane Group Flow (vph)	257	258	69	0	12	0	314	653	0	2	1850	1167
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Effective Green, g (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Actuated g/C Ratio	0.32	0.32	0.32		0.03		0.21	0.52		0.01	0.32	0.64
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	533	533	502		53		368	2624		19	1624	1058
v/s Ratio Prot	0.15	0.15			c0.01		c0.18	0.13		0.00	c0.36	c0.35
v/s Ratio Perm			0.04									0.39
v/c Ratio	0.48	0.48	0.14		0.23		0.85	0.25		0.11	1.14	1.10
Uniform Delay, d1	44.0	44.0	39.0		75.8		61.0	21.5		78.3	54.5	29.0
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.28	0.82	1.67
Incremental Delay, d2	0.9	0.9	0.2		0.8		16.6	0.2		0.6	68.3	56.5
Delay (s)	44.9	45.0	39.1		76.6		77.6	21.7		100.5	112.9	105.1
Level of Service	D	D	D		E		E	C		F	F	F
Approach Delay (s)		43.2			76.6			39.9			109.6	
Approach LOS		D			E			D			F	

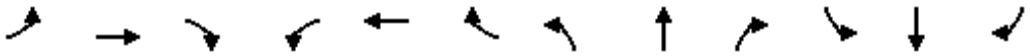
Intersection Summary			
HCM 2000 Control Delay	85.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	116.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	1	122	2	320	0	238	79	319	477	1
Future Volume (vph)	0	1	1	122	2	320	0	238	79	319	477	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6			5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00			0.95		1.00	1.00	
Frt		0.93			0.90			0.96		1.00	1.00	
Flt Protected		1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)		1737			1659			3407		1770	1862	
Flt Permitted		1.00			0.91			1.00		0.95	1.00	
Satd. Flow (perm)		1737			1524			3407		1770	1862	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	0	1	1	154	3	405	0	301	100	404	604	1
RTOR Reduction (vph)	0	1	0	0	81	0	0	44	0	0	0	0
Lane Group Flow (vph)	0	1	0	0	481	0	0	357	0	404	605	0
Turn Type		NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		25.4			25.4			13.7		20.5	38.7	
Effective Green, g (s)		25.4			25.4			13.7		20.5	38.7	
Actuated g/C Ratio		0.34			0.34			0.19		0.28	0.53	
Clearance Time (s)		4.6			4.6			5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0			4.0		1.0	4.0	
Lane Grp Cap (vph)		598			525			633		492	977	
v/s Ratio Prot		0.00						0.10		c0.23	c0.32	
v/s Ratio Perm					c0.32							
v/c Ratio		0.00			0.92			0.56		0.82	0.62	
Uniform Delay, d1		15.8			23.1			27.3		24.9	12.3	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.0			20.3			1.4		10.1	1.3	
Delay (s)		15.8			43.4			28.7		35.0	13.7	
Level of Service		B			D			C		C	B	
Approach Delay (s)		15.8			43.4			28.7			22.2	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	73.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

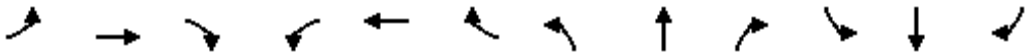
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	4	21	2	65	3	168	14	110	451	2
Future Volume (Veh/h)	6	1	4	21	2	65	3	168	14	110	451	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	1	4	23	2	71	3	183	15	120	490	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	964	935	491	932	928	190	492			198		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	964	935	491	932	928	190	492			198		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	96	100	99	90	99	92	100			91		
cM capacity (veh/h)	199	242	578	228	244	851	1071			1375		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	96	201	612
Volume Left	7	23	3	120
Volume Right	4	71	15	2
cSH	260	879	1071	1375
Volume to Capacity	0.05	0.11	0.00	0.09
Queue Length 95th (ft)	4	9	0	7
Control Delay (s)	19.5	13.0	0.2	2.3
Lane LOS	C	B	A	A
Approach Delay (s)	19.5	13.0	0.2	2.3
Approach LOS	C	B		

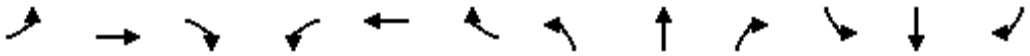
Intersection Summary				
Average Delay	3.2			
Intersection Capacity Utilization	55.7%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	80	1	0	0	32	173	1	1	492	14
Future Volume (Veh/h)	15	0	80	1	0	0	32	173	1	1	492	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	16	0	87	1	0	0	35	188	1	1	535	15
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	803	804	542	890	810	188	550			189		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	803	804	542	890	810	188	550			189		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	95	100	84	100	100	100	97			100		
cM capacity (veh/h)	294	306	540	215	303	853	1020			1385		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	103	1	224	551
Volume Left	16	1	35	1
Volume Right	87	0	1	15
cSH	478	215	1020	1385
Volume to Capacity	0.22	0.00	0.03	0.00
Queue Length 95th (ft)	20	0	3	0
Control Delay (s)	14.6	21.8	1.6	0.0
Lane LOS	B	C	A	A
Approach Delay (s)	14.6	21.8	1.6	0.0
Approach LOS	B	C		

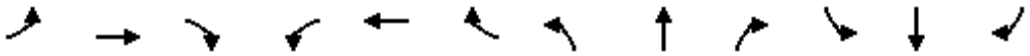
Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	47.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	23	412	20	13	0	361	1760	31	1	849	91
Future Volume (vph)	118	23	412	20	13	0	361	1760	31	1	849	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1788	1583	1770	1863		1770	3530		1770	3488	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1788	1583	1770	1863		1770	3530		1770	3488	
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)	124	24	434	21	14	0	380	1853	33	1	894	96
RTOR Reduction (vph)	0	0	204	0	0	0	0	1	0	0	5	0
Lane Group Flow (vph)	0	148	230	21	14	0	380	1885	0	1	985	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		20.8	20.8	6.1	6.1		32.7	84.7		2.2	54.2	
Effective Green, g (s)		20.8	20.8	6.1	6.1		32.7	84.7		2.2	54.2	
Actuated g/C Ratio		0.16	0.16	0.05	0.05		0.25	0.64		0.02	0.41	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		281	249	81	86		438	2263		29	1431	
v/s Ratio Prot		0.08		c0.01	0.01		0.21	c0.53		0.00	c0.28	
v/s Ratio Perm			c0.15									
v/c Ratio		0.53	0.92	0.26	0.16		0.87	0.83		0.03	0.69	
Uniform Delay, d1		51.1	54.9	60.8	60.5		47.6	18.3		63.9	32.0	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.8	36.4	0.6	0.3		15.9	3.8		0.2	2.7	
Delay (s)		52.0	91.3	61.4	60.9		63.5	22.0		64.1	34.7	
Level of Service		D	F	E	E		E	C		E	C	
Approach Delay (s)		81.3			61.2			29.0			34.8	
Approach LOS		F			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	132.1	Sum of lost time (s)	18.3
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

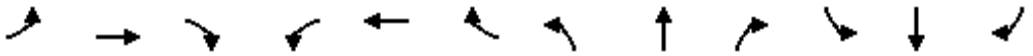
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	75	4	1	5	92	2149	35	4	1233	32
Future Volume (Veh/h)	9	0	75	4	1	5	92	2149	35	4	1233	32
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	10	0	80	4	1	5	98	2286	37	4	1312	34
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2676	3856	673	3244	3854	1162	1346			2323		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2676	3856	673	3244	3854	1162	1346			2323		
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 %	0	100	80	0	64	97	81			98		
cM capacity (veh/h)	6	3	398	3	3	188	508			211		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	10	80	4	6	98	1524	799	4	875	471
Volume Left	10	0	4	0	98	0	0	4	0	0
Volume Right	0	80	0	5	0	0	37	0	0	34
cSH	6	398	3	17	508	1700	1700	211	1700	1700
Volume to Capacity	1.57	0.20	1.57	0.36	0.19	0.90	0.47	0.02	0.51	0.28
Queue Length 95th (ft)	54	19	33	24	18	0	0	1	0	0
Control Delay (s)	1347.0	16.3	2560.6	289.6	13.8	0.0	0.0	22.4	0.0	0.0
Lane LOS	F	C	F	F	B			C		
Approach Delay (s)	164.2		1198.0		0.6			0.1		
Approach LOS	F		F							

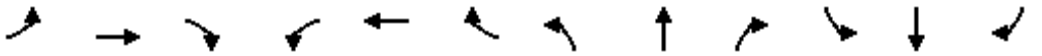
Intersection Summary				
Average Delay	7.3			
Intersection Capacity Utilization	81.0%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	152	111	252	62	333	229	1851	676	512	779	16
Future Volume (vph)	7	152	111	252	62	333	229	1851	676	512	779	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.99	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1748	1504	3433	1863	1583	1770	5085	1583	3433	5070	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1748	1504	3433	1863	1583	1770	5085	1583	3433	5070	
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)	7	160	117	265	65	351	241	1948	712	539	820	17
RTOR Reduction (vph)	0	2	95	0	0	113	0	0	193	0	1	0
Lane Group Flow (vph)	0	177	10	265	65	238	241	1948	519	539	836	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		15.0	15.0	15.6	15.6	38.6	20.0	90.0	90.0	23.0	94.1	
Effective Green, g (s)		15.0	15.0	15.6	15.6	38.6	20.0	90.0	90.0	23.0	94.1	
Actuated g/C Ratio		0.09	0.09	0.09	0.09	0.23	0.12	0.54	0.54	0.14	0.57	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		158	136	324	175	369	214	2770	862	477	2887	
v/s Ratio Prot		c0.10		c0.08	0.03	0.09	0.14	c0.38		c0.16	c0.16	
v/s Ratio Perm			0.01			0.06			0.33			
v/c Ratio		1.12	0.07	0.82	0.37	0.65	1.13	0.70	0.60	1.13	0.29	
Uniform Delay, d1		75.1	68.7	73.4	70.2	57.1	72.6	27.7	25.5	71.1	18.3	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		107.9	0.1	14.0	0.5	2.9	99.6	1.5	3.1	81.9	0.3	
Delay (s)		183.0	68.8	87.4	70.7	60.0	172.2	29.3	28.6	153.0	18.6	
Level of Service		F	E	F	E	E	F	C	C	F	B	
Approach Delay (s)		140.8			71.7			41.0			71.2	
Approach LOS		F			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	58.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	165.2	Sum of lost time (s)	21.6
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		

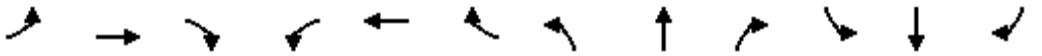
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	889	0	126	3	3	1	212	1798	4	4	630	585
Future Volume (vph)	889	0	126	3	3	1	212	1798	4	4	630	585
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1788		1770	5084		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1788		1770	5084		1770	5085	1583
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)	926	0	131	3	3	1	221	1873	4	4	656	609
RTOR Reduction (vph)	0	0	86	0	1	0	0	0	0	0	0	235
Lane Group Flow (vph)	463	463	45	0	6	0	221	1877	0	4	656	374
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	37.3	37.3	37.3		1.9		28.0	47.7		1.4	21.1	58.4
Effective Green, g (s)	37.3	37.3	37.3		1.9		28.0	47.7		1.4	21.1	58.4
Actuated g/C Ratio	0.34	0.34	0.34		0.02		0.26	0.44		0.01	0.19	0.54
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	578	578	545		31		457	2239		22	990	928
v/s Ratio Prot	c0.28	0.28			c0.00		0.12	c0.37		0.00	0.13	c0.14
v/s Ratio Perm			0.03									0.10
v/c Ratio	0.80	0.80	0.08		0.19		0.48	0.84		0.18	0.66	0.40
Uniform Delay, d1	32.1	32.1	24.0		52.4		34.0	26.9		52.9	40.3	14.7
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.3	8.3	0.1		1.1		0.3	3.0		1.4	1.8	0.4
Delay (s)	40.4	40.4	24.0		53.6		34.3	29.9		54.3	42.2	15.1
Level of Service	D	D	C		D		C	C		D	D	B
Approach Delay (s)		38.4			53.6			30.4			29.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	108.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

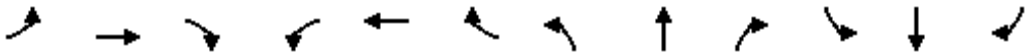
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1	4	30	3	439	2	245	65	481	331	1
Future Volume (vph)	2	1	4	30	3	439	2	245	65	481	331	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	1.00	
Frt		0.93			0.87		1.00	0.97		1.00	1.00	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1695			1624		1770	3428		1770	1862	
Flt Permitted		0.80			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1380			1594		1770	3428		1770	1862	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	3	1	5	38	4	556	3	310	82	609	419	1
RTOR Reduction (vph)	0	4	0	0	454	0	0	29	0	0	0	0
Lane Group Flow (vph)	0	5	0	0	144	0	3	363	0	609	420	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		11.6			11.6		1.1	16.6		20.9	36.4	
Effective Green, g (s)		11.6			11.6		1.1	16.6		20.9	36.4	
Actuated g/C Ratio		0.18			0.18		0.02	0.26		0.33	0.58	
Clearance Time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)		253			292		30	900		585	1072	
v/s Ratio Prot							0.00	0.11		c0.34	c0.23	
v/s Ratio Perm		0.00			c0.09							
v/c Ratio		0.02			0.49		0.10	0.40		1.04	0.39	
Uniform Delay, d1		21.1			23.2		30.6	19.2		21.2	7.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.5		0.5	0.4		48.3	0.3	
Delay (s)		21.2			23.6		31.1	19.6		69.5	7.7	
Level of Service		C			C		C	B		E	A	
Approach Delay (s)		21.2			23.6			19.7			44.2	
Approach LOS		C			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	14.1
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

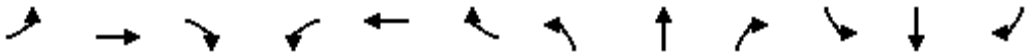
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	4	3	42	6	77	4	214	21	86	296	4
Future Volume (Veh/h)	6	4	3	42	6	77	4	214	21	86	296	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	4	3	46	7	84	4	233	23	93	322	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	808	774	324	768	764	244	326			256		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	808	774	324	768	764	244	326			256		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	97	99	100	84	98	89	100			93		
cM capacity (veh/h)	248	305	717	297	309	794	1234			1309		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	137	260	419
Volume Left	7	46	4	93
Volume Right	3	84	23	4
cSH	308	771	1234	1309
Volume to Capacity	0.05	0.18	0.00	0.07
Queue Length 95th (ft)	4	16	0	6
Control Delay (s)	17.3	13.8	0.2	2.3
Lane LOS	C	B	A	A
Approach Delay (s)	17.3	13.8	0.2	2.3
Approach LOS	C	B		

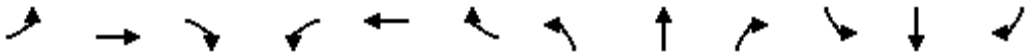
Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1	42	9	2	11	62	224	14	14	249	27
Future Volume (Veh/h)	10	1	42	9	2	11	62	224	14	14	249	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	11	1	46	10	2	12	67	243	15	15	271	29
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	713	708	286	746	714	250	300			258		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	713	708	286	746	714	250	300			258		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	97	100	94	97	99	98	95			99		
cM capacity (veh/h)	323	337	754	293	334	788	1261			1307		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	58	24	325	315
Volume Left	11	10	67	15
Volume Right	46	12	15	29
cSH	592	434	1261	1307
Volume to Capacity	0.10	0.06	0.05	0.01
Queue Length 95th (ft)	8	4	4	1
Control Delay (s)	11.7	13.8	2.1	0.5
Lane LOS	B	B	A	A
Approach Delay (s)	11.7	13.8	2.1	0.5
Approach LOS	B	B		

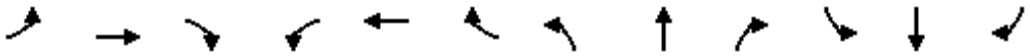
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	45.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	15	290	50	45	3	234	824	16	1	1816	154
Future Volume (vph)	103	15	290	50	45	3	234	824	16	1	1816	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1846		1770	3529		1770	3498	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1846		1770	3529		1770	3498	
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)	108	16	305	53	47	3	246	867	17	1	1912	162
RTOR Reduction (vph)	0	0	175	0	2	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	124	130	53	48	0	246	883	0	1	2071	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Effective Green, g (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Actuated g/C Ratio		0.09	0.09	0.07	0.07		0.13	0.69		0.02	0.57	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		160	142	116	121		236	2439		27	2005	
v/s Ratio Prot		0.07		c0.03	0.03		c0.14	0.25		0.00	c0.59	
v/s Ratio Perm			c0.08									
v/c Ratio		0.78	0.92	0.46	0.40		1.04	0.36		0.04	1.03	
Uniform Delay, d1		59.4	60.2	60.0	59.8		57.8	8.5		64.7	28.5	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		18.9	50.2	1.0	0.8		70.1	0.4		0.2	29.1	
Delay (s)		78.3	110.4	61.0	60.5		127.9	8.9		64.9	57.5	
Level of Service		E	F	E	E		F	A		E	E	
Approach Delay (s)		101.1			60.8			34.8			57.5	
Approach LOS		F			E			C			E	

Intersection Summary			
HCM 2000 Control Delay	55.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	133.4	Sum of lost time (s)	18.3
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

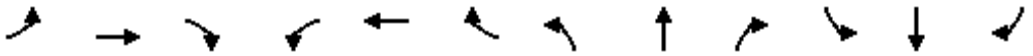
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	73	12	2	4	47	1078	4	3	2146	40
Future Volume (Veh/h)	8	0	73	12	2	4	47	1078	4	3	2146	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	9	0	78	13	2	4	50	1147	4	3	2283	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2985	3562	1163	2474	3581	576	2326			1151		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2985	3562	1163	2474	3581	576	2326			1151		
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 %	0	100	58	0	52	99	76			100		
cM capacity (veh/h)	3	4	188	7	4	461	210			603		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	9	78	13	6	50	765	386	3	1522	804
Volume Left	9	0	13	0	50	0	0	3	0	0
Volume Right	0	78	0	4	0	0	4	0	0	43
cSH	3	188	7	12	210	1700	1700	603	1700	1700
Volume to Capacity	2.90	0.42	1.79	0.49	0.24	0.45	0.23	0.00	0.90	0.47
Queue Length 95th (ft)	56	47	65	29	22	0	0	0	0	0
Control Delay (s)	2895.7	37.1	1336.6	460.7	27.4	0.0	0.0	11.0	0.0	0.0
Lane LOS	F	E	F	F	D			B		
Approach Delay (s)	332.8		1060.0		1.1			0.0		
Approach LOS	F		F							

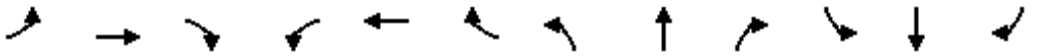
Intersection Summary				
Average Delay	13.9			
Intersection Capacity Utilization	74.6%	ICU Level of Service		D
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	159	373	434	73	315	149	727	242	302	1866	13
Future Volume (vph)	11	159	373	434	73	315	149	727	242	302	1866	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.94	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1659	1504	3433	1863	1583	1770	5085	1583	3433	5080	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1659	1504	3433	1863	1583	1770	5085	1583	3433	5080	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	12	167	393	457	77	332	157	765	255	318	1964	14
RTOR Reduction (vph)	0	16	187	0	0	230	0	0	132	0	1	0
Lane Group Flow (vph)	0	285	84	457	77	102	157	765	123	318	1977	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		20.0	20.0	24.0	24.0	41.5	22.5	76.9	76.9	17.5	73.0	
Effective Green, g (s)		20.0	20.0	24.0	24.0	41.5	22.5	76.9	76.9	17.5	73.0	
Actuated g/C Ratio		0.12	0.12	0.15	0.15	0.26	0.14	0.48	0.48	0.11	0.46	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		207	188	514	279	410	248	2443	760	375	2317	
v/s Ratio Prot		c0.17		c0.13	0.04	0.03	c0.09	0.15		0.09	c0.39	
v/s Ratio Perm			0.06			0.04			0.08			
v/c Ratio		1.38	0.45	0.89	0.28	0.25	0.63	0.31	0.16	0.85	0.85	
Uniform Delay, d1		70.0	64.9	66.7	60.3	46.9	64.9	25.4	23.4	69.9	38.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00	0.83	0.65	0.77	1.00	1.00	
Incremental Delay, d2		197.4	0.6	16.5	0.2	0.1	3.7	0.3	0.4	15.5	4.3	
Delay (s)		267.4	65.5	83.2	60.5	47.0	57.2	16.7	18.3	85.5	43.0	
Level of Service		F	E	F	E	D	E	B	B	F	D	
Approach Delay (s)		171.7			67.3			22.5			48.9	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	60.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
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 (vph)	522	0	207	7	5	2	301	678	2	2	1798	1272
Future Volume (vph)	522	0	207	7	5	2	301	678	2	2	1798	1272
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1782		1770	5083		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1782		1770	5083		1770	5085	1583
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)	544	0	216	7	5	2	314	706	2	2	1873	1325
RTOR Reduction (vph)	0	0	147	0	2	0	0	0	0	0	0	149
Lane Group Flow (vph)	272	272	69	0	12	0	314	708	0	2	1873	1176
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Effective Green, g (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Actuated g/C Ratio	0.32	0.32	0.32		0.03		0.21	0.52		0.01	0.32	0.64
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	533	533	502		53		368	2624		19	1624	1058
v/s Ratio Prot	0.16	0.16			c0.01		c0.18	0.14		0.00	c0.37	c0.35
v/s Ratio Perm			0.04									0.39
v/c Ratio	0.51	0.51	0.14		0.23		0.85	0.27		0.11	1.15	1.11
Uniform Delay, d1	44.5	44.5	39.0		75.8		61.0	21.8		78.3	54.5	29.0
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.28	0.83	1.67
Incremental Delay, d2	1.1	1.1	0.2		0.8		16.6	0.3		0.6	74.1	59.6
Delay (s)	45.6	45.6	39.1		76.6		77.6	22.0		100.5	119.5	108.3
Level of Service	D	D	D		E		E	C		F	F	F
Approach Delay (s)		43.7			76.6			39.1			114.8	
Approach LOS		D			E			D			F	

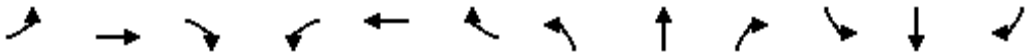
Intersection Summary			
HCM 2000 Control Delay	88.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	117.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	1	122	2	320	0	238	79	319	477	1
Future Volume (vph)	0	1	1	122	2	320	0	238	79	319	477	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6			5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00			0.95		1.00	1.00	
Frt		0.93			0.90			0.96		1.00	1.00	
Flt Protected		1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)		1737			1659			3407		1770	1862	
Flt Permitted		1.00			0.91			1.00		0.95	1.00	
Satd. Flow (perm)		1737			1524			3407		1770	1862	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	0	1	1	154	3	405	0	301	100	404	604	1
RTOR Reduction (vph)	0	1	0	0	81	0	0	44	0	0	0	0
Lane Group Flow (vph)	0	1	0	0	481	0	0	357	0	404	605	0
Turn Type		NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		25.4			25.4			13.7		20.5	38.7	
Effective Green, g (s)		25.4			25.4			13.7		20.5	38.7	
Actuated g/C Ratio		0.34			0.34			0.19		0.28	0.53	
Clearance Time (s)		4.6			4.6			5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0			4.0		1.0	4.0	
Lane Grp Cap (vph)		598			525			633		492	977	
v/s Ratio Prot		0.00						0.10		c0.23	c0.32	
v/s Ratio Perm					c0.32							
v/c Ratio		0.00			0.92			0.56		0.82	0.62	
Uniform Delay, d1		15.8			23.1			27.3		24.9	12.3	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.0			20.3			1.4		10.1	1.3	
Delay (s)		15.8			43.4			28.7		35.0	13.7	
Level of Service		B			D			C		C	B	
Approach Delay (s)		15.8			43.4			28.7			22.2	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	73.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

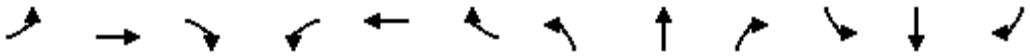
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	4	21	2	65	3	168	14	110	451	2
Future Volume (Veh/h)	6	1	4	21	2	65	3	168	14	110	451	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	1	4	23	2	71	3	183	15	120	490	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	964	935	491	932	928	190	492			198		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	964	935	491	932	928	190	492			198		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	96	100	99	90	99	92	100			91		
cM capacity (veh/h)	199	242	578	228	244	851	1071			1375		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	96	201	612
Volume Left	7	23	3	120
Volume Right	4	71	15	2
cSH	260	879	1071	1375
Volume to Capacity	0.05	0.11	0.00	0.09
Queue Length 95th (ft)	4	9	0	7
Control Delay (s)	19.5	13.0	0.2	2.3
Lane LOS	C	B	A	A
Approach Delay (s)	19.5	13.0	0.2	2.3
Approach LOS	C	B		

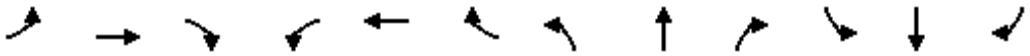
Intersection Summary				
Average Delay	3.2			
Intersection Capacity Utilization	55.7%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	80	1	0	0	32	173	1	1	492	14
Future Volume (Veh/h)	15	0	80	1	0	0	32	173	1	1	492	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	16	0	87	1	0	0	35	188	1	1	535	15
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	803	804	542	890	810	188	550			189		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	803	804	542	890	810	188	550			189		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	95	100	84	100	100	100	97			100		
cM capacity (veh/h)	294	306	540	215	303	853	1020			1385		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	103	1	224	551
Volume Left	16	1	35	1
Volume Right	87	0	1	15
cSH	478	215	1020	1385
Volume to Capacity	0.22	0.00	0.03	0.00
Queue Length 95th (ft)	20	0	3	0
Control Delay (s)	14.6	21.8	1.6	0.0
Lane LOS	B	C	A	A
Approach Delay (s)	14.6	21.8	1.6	0.0
Approach LOS	B	C		

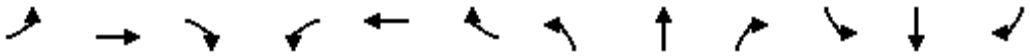
Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	47.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	23	452	20	13	0	400	1792	31	1	891	123
Future Volume (vph)	151	23	452	20	13	0	400	1792	31	1	891	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1863		1770	3530		1770	3475	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1863		1770	3530		1770	3475	
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)	159	24	476	21	14	0	421	1886	33	1	938	129
RTOR Reduction (vph)	0	0	183	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	0	183	293	21	14	0	421	1918	0	1	1060	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		19.9	19.9	6.3	6.3		33.7	84.5		2.1	52.9	
Effective Green, g (s)		19.9	19.9	6.3	6.3		33.7	84.5		2.1	52.9	
Actuated g/C Ratio		0.15	0.15	0.05	0.05		0.26	0.64		0.02	0.40	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		270	240	85	89		454	2275		28	1402	
v/s Ratio Prot		0.10		c0.01	0.01		c0.24	c0.54		0.00	0.31	
v/s Ratio Perm			c0.18									
v/c Ratio		0.68	1.22	0.25	0.16		0.93	0.84		0.04	0.76	
Uniform Delay, d1		52.6	55.6	60.1	59.9		47.5	18.1		63.5	33.6	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.2	130.5	0.6	0.3		24.7	4.0		0.2	3.9	
Delay (s)		57.8	186.1	60.7	60.2		72.2	22.2		63.7	37.4	
Level of Service		E	F	E	E		E	C		E	D	
Approach Delay (s)		150.5			60.5			31.2			37.4	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	18.3
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

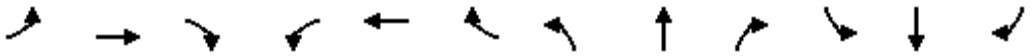
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	87	4	1	5	104	2220	35	4	1315	32
Future Volume (Veh/h)	9	0	87	4	1	5	104	2220	35	4	1315	32
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	10	0	93	4	1	5	111	2362	37	4	1399	34
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2828	4045	716	3403	4044	1200	1433			2399		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2828	4045	716	3403	4044	1200	1433			2399		
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 %	0	100	75	0	49	97	76			98		
cM capacity (veh/h)	4	2	372	2	2	178	470			197		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	10	93	4	6	111	1575	824	4	933	500
Volume Left	10	0	4	0	111	0	0	4	0	0
Volume Right	0	93	0	5	0	0	37	0	0	34
cSH	4	372	2	12	470	1700	1700	197	1700	1700
Volume to Capacity	2.57	0.25	2.34	0.52	0.24	0.93	0.48	0.02	0.55	0.29
Queue Length 95th (ft)	59	24	34	30	23	0	0	2	0	0
Control Delay (s)	2377.0	17.9	3923.1	500.2	15.0	0.0	0.0	23.7	0.0	0.0
Lane LOS	F	C	F	F	C			C		
Approach Delay (s)	246.9		1869.4		0.7			0.1		
Approach LOS	F		F							

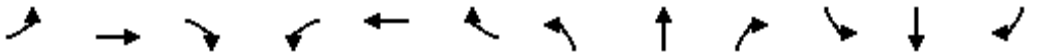
Intersection Summary				
Average Delay	11.3			
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	158	111	290	64	349	253	1918	690	561	846	16
Future Volume (vph)	7	158	111	290	64	349	253	1918	690	561	846	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.99	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1749	1504	3433	1863	1583	1770	5085	1583	3433	5071	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1749	1504	3433	1863	1583	1770	5085	1583	3433	5071	
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)	7	166	117	305	67	367	266	2019	726	591	891	17
RTOR Reduction (vph)	0	2	96	0	0	111	0	0	192	0	1	0
Lane Group Flow (vph)	0	183	9	305	67	256	266	2019	534	591	907	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		15.0	15.0	16.9	16.9	39.9	20.0	90.0	90.0	23.0	94.1	
Effective Green, g (s)		15.0	15.0	16.9	16.9	39.9	20.0	90.0	90.0	23.0	94.1	
Actuated g/C Ratio		0.09	0.09	0.10	0.10	0.24	0.12	0.54	0.54	0.14	0.57	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		157	135	348	189	379	212	2748	855	474	2865	
v/s Ratio Prot		c0.10		c0.09	0.04	0.09	0.15	c0.40		c0.17	c0.18	
v/s Ratio Perm			0.01			0.07			0.34			
v/c Ratio		1.17	0.07	0.88	0.35	0.68	1.25	0.73	0.63	1.25	0.32	
Uniform Delay, d1		75.8	69.4	73.8	69.7	57.4	73.2	29.2	26.5	71.8	19.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		123.7	0.1	20.5	0.4	3.7	147.2	1.8	3.4	127.8	0.3	
Delay (s)		199.5	69.4	94.3	70.1	61.1	220.4	30.9	30.0	199.5	19.5	
Level of Service		F	E	F	E	E	F	C	C	F	B	
Approach Delay (s)		152.4			75.6			47.4			90.4	
Approach LOS		F			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	68.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	166.5	Sum of lost time (s)	21.6
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

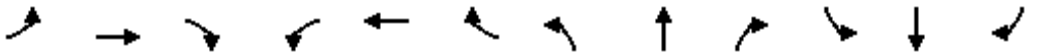
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	922	0	126	3	3	1	212	1857	4	4	705	624
Future Volume (vph)	922	0	126	3	3	1	212	1857	4	4	705	624
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1788		1770	5084		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1788		1770	5084		1770	5085	1583
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)	960	0	131	3	3	1	221	1934	4	4	734	650
RTOR Reduction (vph)	0	0	87	0	1	0	0	0	0	0	0	231
Lane Group Flow (vph)	480	480	44	0	6	0	221	1938	0	4	734	419
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	37.6	37.6	37.6		1.9		28.1	49.8		1.4	23.1	60.7
Effective Green, g (s)	37.6	37.6	37.6		1.9		28.1	49.8		1.4	23.1	60.7
Actuated g/C Ratio	0.34	0.34	0.34		0.02		0.25	0.45		0.01	0.21	0.55
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	570	570	537		30		449	2287		22	1061	940
v/s Ratio Prot	c0.29	0.29			c0.00		0.12	c0.38		0.00	0.14	c0.15
v/s Ratio Perm			0.03									0.11
v/c Ratio	0.84	0.84	0.08		0.20		0.49	0.85		0.18	0.69	0.45
Uniform Delay, d1	33.8	33.8	24.8		53.7		35.2	27.1		54.1	40.5	14.9
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	11.3	11.3	0.1		1.2		0.3	3.2		1.4	2.1	0.5
Delay (s)	45.1	45.1	24.9		54.9		35.5	30.3		55.5	42.6	15.4
Level of Service	D	D	C		D		D	C		E	D	B
Approach Delay (s)		42.7			54.9			30.8			29.9	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	110.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

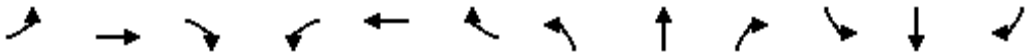
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	60	9	38	62	439	7	256	73	481	342	34
Future Volume (vph)	35	60	9	38	62	439	7	256	73	481	342	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	1.00	
Frt		0.99			0.89		1.00	0.97		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1811			1652		1770	3422		1770	1838	
Flt Permitted		0.58			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1072			1608		1770	3422		1770	1838	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	44	76	11	48	78	556	9	324	92	609	433	43
RTOR Reduction (vph)	0	3	0	0	144	0	0	33	0	0	3	0
Lane Group Flow (vph)	0	128	0	0	538	0	9	383	0	609	473	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		25.4			25.4		1.3	18.3		20.5	37.5	
Effective Green, g (s)		25.4			25.4		1.3	18.3		20.5	37.5	
Actuated g/C Ratio		0.32			0.32		0.02	0.23		0.26	0.48	
Clearance Time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)		347			521		29	799		463	880	
v/s Ratio Prot							0.01	0.11		c0.34	c0.26	
v/s Ratio Perm		0.12			c0.33							
v/c Ratio		0.37			1.03		0.31	0.48		1.32	0.54	
Uniform Delay, d1		20.3			26.4		38.1	25.9		28.9	14.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			48.1		2.2	0.6		156.6	0.8	
Delay (s)		20.5			74.6		40.3	26.5		185.5	15.1	
Level of Service		C			E		D	C		F	B	
Approach Delay (s)		20.5			74.6			26.8			110.8	
Approach LOS		C			E			C			F	

Intersection Summary			
HCM 2000 Control Delay	79.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	78.3	Sum of lost time (s)	14.1
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

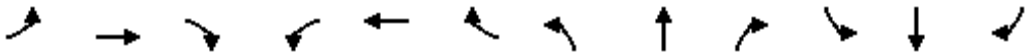
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	4	3	42	6	89	4	220	21	98	303	4
Future Volume (Veh/h)	6	4	3	42	6	89	4	220	21	98	303	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	4	3	46	7	97	4	239	23	107	329	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	856	815	331	808	806	250	333			262		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	856	815	331	808	806	250	333			262		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	97	99	100	83	98	88	100			92		
cM capacity (veh/h)	224	285	711	276	289	788	1226			1302		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	150	266	440
Volume Left	7	46	4	107
Volume Right	3	97	23	4
cSH	283	785	1226	1302
Volume to Capacity	0.05	0.19	0.00	0.08
Queue Length 95th (ft)	4	18	0	7
Control Delay (s)	18.4	14.0	0.1	2.6
Lane LOS	C	B	A	A
Approach Delay (s)	18.4	14.0	0.1	2.6
Approach LOS	C	B		

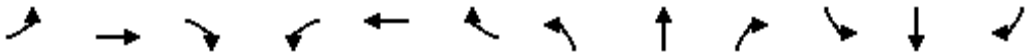
Intersection Summary				
Average Delay	4.1			
Intersection Capacity Utilization	50.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1	42	9	2	11	62	230	14	14	256	27
Future Volume (Veh/h)	10	1	42	9	2	11	62	230	14	14	256	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	11	1	46	10	2	12	67	250	15	15	278	29
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	727	722	292	760	728	258	307			265		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	727	722	292	760	728	258	307			265		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	97	100	94	97	99	98	95			99		
cM capacity (veh/h)	316	330	747	287	327	781	1254			1299		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	58	24	332	322
Volume Left	11	10	67	15
Volume Right	46	12	15	29
cSH	583	426	1254	1299
Volume to Capacity	0.10	0.06	0.05	0.01
Queue Length 95th (ft)	8	4	4	1
Control Delay (s)	11.8	14.0	2.0	0.5
Lane LOS	B	B	A	A
Approach Delay (s)	11.8	14.0	2.0	0.5
Approach LOS	B	B		

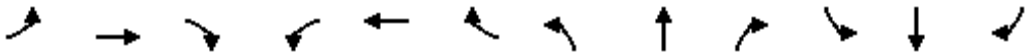
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	45.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	23	403	85	125	5	412	1465	75	3	2865	248
Future Volume (vph)	158	23	403	85	125	5	412	1465	75	3	2865	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1852		1770	3513		1770	3497	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1852		1770	3513		1770	3497	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	158	23	403	85	125	5	412	1465	75	3	2865	248
RTOR Reduction (vph)	0	0	120	0	1	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	181	283	85	129	0	412	1539	0	3	3110	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		19.8	19.8	18.3	18.3		38.5	141.4		2.2	105.1	
Effective Green, g (s)		19.8	19.8	18.3	18.3		38.5	141.4		2.2	105.1	
Actuated g/C Ratio		0.10	0.10	0.09	0.09		0.19	0.71		0.01	0.53	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		176	156	161	169		340	2483		19	1837	
v/s Ratio Prot		0.10		0.05	c0.07		c0.23	0.44		0.00	c0.89	
v/s Ratio Perm			c0.18									
v/c Ratio		1.03	1.82	0.53	0.76		1.21	0.62		0.16	1.69	
Uniform Delay, d1		90.1	90.1	86.7	88.7		80.8	15.3		98.0	47.5	
Progression Factor		1.00	1.00	1.00	1.00		0.92	1.50		1.00	1.00	
Incremental Delay, d2		75.5	390.9	1.4	16.7		97.9	0.1		1.4	314.1	
Delay (s)		165.6	481.0	88.2	105.4		172.1	23.0		99.4	361.6	
Level of Service		F	F	F	F		F	C		F	F	
Approach Delay (s)		383.3			98.6			54.4			361.3	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	251.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	200.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	144.3%	ICU Level of Service	H
Analysis Period (min)	15		

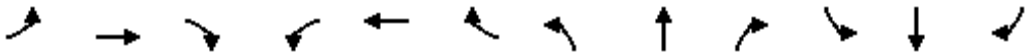
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	10	95	12	0	10	78	1944	10	5	3221	115
Future Volume (Veh/h)	8	10	95	12	0	10	78	1944	10	5	3221	115
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	8	10	95	12	0	10	78	1944	10	5	3221	115
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4416	5398	1668	3826	5451	977	3336			1954		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4416	5398	1668	3826	5451	977	3336			1954		
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 %	0	0	0	0	100	96	5			98		
cM capacity (veh/h)	0	0	85	0	0	250	83			295		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	8	105	12	10	78	1296	658	5	2147	1189
Volume Left	8	0	12	0	78	0	0	5	0	0
Volume Right	0	95	0	10	0	0	10	0	0	115
cSH	0	0	0	188	83	1700	1700	295	1700	1700
Volume to Capacity	123.90	626.28	Err	0.05	0.95	0.76	0.39	0.02	1.26	0.70
Queue Length 95th (ft)	Err	Err	Err	4	128	0	0	1	0	0
Control Delay (s)	Err	Err	Err	25.3	173.1	0.0	0.0	17.4	0.0	0.0
Lane LOS	F	F	F	D	F			C		
Approach Delay (s)	Err		Err		6.6			0.0		
Approach LOS	F		F							

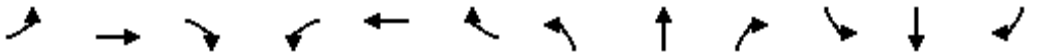
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	106.7%	ICU Level of Service	G	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	330	409	334	121	776	336	2662	722	768	2448	56
Future Volume (vph)	45	330	409	334	121	776	336	2662	722	768	2448	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1732	1504	3433	1863	1583	1770	5085	1583	3433	5068	
Flt Permitted		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1732	1504	3433	1863	1583	1770	5085	1583	3433	5068	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	45	330	409	334	121	776	336	2662	722	768	2448	56
RTOR Reduction (vph)	0	3	192	0	0	168	0	0	107	0	1	0
Lane Group Flow (vph)	0	417	172	334	121	608	336	2662	615	768	2503	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		32.3	32.3	22.3	22.3	53.0	26.8	93.1	93.1	30.7	98.1	
Effective Green, g (s)		32.3	32.3	22.3	22.3	53.0	26.8	93.1	93.1	30.7	98.1	
Actuated g/C Ratio		0.16	0.16	0.11	0.11	0.26	0.13	0.47	0.47	0.15	0.49	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		279	242	382	207	419	237	2367	736	526	2485	
v/s Ratio Prot		c0.24		0.10	0.06	c0.22	0.19	c0.52		c0.22	0.49	
v/s Ratio Perm			0.11			0.16			0.39			
v/c Ratio		1.50	0.71	0.87	0.58	1.45	1.42	1.12	0.84	1.46	1.01	
Uniform Delay, d1		83.8	79.4	87.5	84.4	73.5	86.6	53.5	46.7	84.7	51.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.05	0.93	1.00	0.80	0.36	
Incremental Delay, d2		241.4	7.9	18.8	2.7	215.6	197.2	58.6	4.4	208.0	7.3	
Delay (s)		325.2	87.3	106.3	87.1	289.1	288.6	108.5	51.3	275.7	25.5	
Level of Service		F	F	F	F	F	F	F	D	F	C	
Approach Delay (s)		214.8			219.7			113.6			84.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	126.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	200.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	140.8%	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 (vph)	1165	2	327	6	7	11	681	2462	6	2	1650	1626
Future Volume (vph)	1165	2	327	6	7	11	681	2462	6	2	1650	1626
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Lane Util. Factor	0.97	1.00			1.00		1.00	0.91		1.00	0.81	
Frt	1.00	0.85			0.94		1.00	1.00		1.00	0.93	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1585			1726		1770	5083		1770	6982	
Flt Permitted	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1585			1726		1770	5083		1770	6982	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1165	2	327	6	7	11	681	2462	6	2	1650	1626
RTOR Reduction (vph)	0	241	0	0	11	0	0	0	0	0	88	0
Lane Group Flow (vph)	1165	88	0	0	13	0	681	2468	0	2	3188	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	52.9	52.9			7.2		53.1	118.1		1.8	66.8	
Effective Green, g (s)	52.9	52.9			7.2		53.1	118.1		1.8	66.8	
Actuated g/C Ratio	0.26	0.26			0.04		0.27	0.59		0.01	0.33	
Clearance Time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Vehicle Extension (s)	4.0	4.0			2.0		2.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	908	419			62		469	3001		15	2331	
v/s Ratio Prot	c0.34	0.06			c0.01		c0.38	0.49		0.00	c0.46	
v/s Ratio Perm												
v/c Ratio	1.28	0.21			0.22		1.45	0.82		0.13	2.47dr	
Uniform Delay, d1	73.5	57.3			93.7		73.5	32.6		98.3	66.6	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.15	0.46	
Incremental Delay, d2	135.8	0.3			0.6		215.1	2.7		0.6	166.6	
Delay (s)	209.3	57.6			94.3		288.5	35.3		113.3	197.4	
Level of Service	F	E			F		F	D		F	F	
Approach Delay (s)		175.9			94.3			90.1			197.3	
Approach LOS		F			F			F			F	

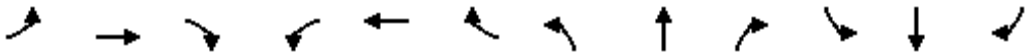
Intersection Summary			
HCM 2000 Control Delay	150.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	200.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	131.7%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	315	5	464	0	410	115	466	824	2
Future Volume (vph)	0	2	2	315	5	464	0	410	115	466	824	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6			5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00			0.95		1.00	1.00	
Frt		0.93			0.92			0.97		1.00	1.00	
Flt Protected		1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)		1737			1680			3423		1770	1862	
Flt Permitted		1.00			0.98			1.00		0.95	1.00	
Satd. Flow (perm)		1737			1680			3423		1770	1862	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	2	2	315	5	464	0	410	115	466	824	2
RTOR Reduction (vph)	0	2	0	0	32	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	752	0	0	507	0	466	826	0
Turn Type		NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		4.0			46.1			22.3		27.9	54.7	
Effective Green, g (s)		4.0			46.1			22.3		27.9	54.7	
Actuated g/C Ratio		0.03			0.39			0.19		0.23	0.46	
Clearance Time (s)		4.6			4.6			5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0			4.0		1.0	4.0	
Lane Grp Cap (vph)		58			650			641		414	855	
v/s Ratio Prot		c0.00			c0.45			0.15		c0.26	c0.44	
v/s Ratio Perm												
v/c Ratio		0.04			1.16			0.79		1.13	0.97	
Uniform Delay, d1		55.6			36.5			46.1		45.5	31.2	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.1			87.2			7.0		83.0	22.7	
Delay (s)		55.7			123.7			53.1		128.6	54.0	
Level of Service		E			F			D		F	D	
Approach Delay (s)		55.7			123.7			53.1			80.9	
Approach LOS		E			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	88.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	119.0	Sum of lost time (s)	18.7
Intersection Capacity Utilization	114.0%	ICU Level of Service	H
Analysis Period (min)	15		

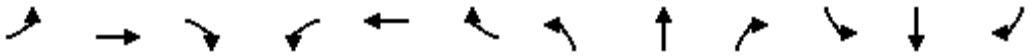
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	7	139	9	45	13	292	5	100	791	4
Future Volume (Veh/h)	10	0	7	139	9	45	13	292	5	100	791	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	10	0	7	139	9	45	13	292	5	100	791	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1340	1316	793	1320	1316	294	795			297		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1340	1316	793	1320	1316	294	795			297		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	91	100	98	0	94	94	98			92		
cM capacity (veh/h)	108	143	389	122	143	745	826			1264		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	17	193	310	895
Volume Left	10	139	13	100
Volume Right	7	45	5	4
cSH	153	154	826	1264
Volume to Capacity	0.11	1.25	0.02	0.08
Queue Length 95th (ft)	9	281	1	6
Control Delay (s)	31.4	212.3	0.6	2.0
Lane LOS	D	F	A	A
Approach Delay (s)	31.4	212.3	0.6	2.0
Approach LOS	D	F		

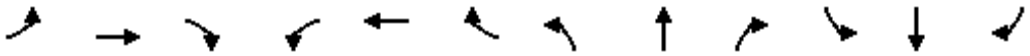
Intersection Summary				
Average Delay	30.7			
Intersection Capacity Utilization	85.9%	ICU Level of Service	E	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	80	1	0	0	32	294	1	1	789	14
Future Volume (Veh/h)	15	0	80	1	0	0	32	294	1	1	789	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	0	80	1	0	0	32	294	1	1	789	14
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	1156	1157	796	1236	1164	294	803			295		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1156	1157	796	1236	1164	294	803			295		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	91	100	79	99	100	100	96			100		
cM capacity (veh/h)	168	188	387	118	187	745	821			1266		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	95	1	327	804
Volume Left	15	1	32	1
Volume Right	80	0	1	14
cSH	321	118	821	1266
Volume to Capacity	0.30	0.01	0.04	0.00
Queue Length 95th (ft)	30	1	3	0
Control Delay (s)	20.9	35.9	1.3	0.0
Lane LOS	C	E	A	A
Approach Delay (s)	20.9	35.9	1.3	0.0
Approach LOS	C	E		

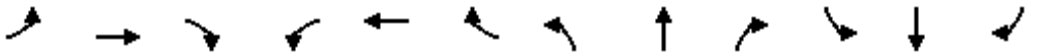
Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	40	764	37	17	0	572	2414	22	2	1480	152
Future Volume (vph)	210	40	764	37	17	0	572	2414	22	2	1480	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1788	1583	1770	1863		1770	3534		1770	3490	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1788	1583	1770	1863		1770	3534		1770	3490	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	210	40	764	37	17	0	572	2414	22	2	1480	152
RTOR Reduction (vph)	0	0	215	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	250	549	37	17	0	572	2436	0	2	1627	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		23.9	23.9	8.6	8.6		27.9	80.3		2.1	54.5	
Effective Green, g (s)		23.9	23.9	8.6	8.6		27.9	80.3		2.1	54.5	
Actuated g/C Ratio		0.18	0.18	0.06	0.06		0.21	0.60		0.02	0.41	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		320	284	114	120		370	2130		27	1427	
v/s Ratio Prot		0.14		c0.02	0.01		c0.32	c0.69		0.00	0.47	
v/s Ratio Perm			c0.35									
v/c Ratio		0.78	1.93	0.32	0.14		1.55	1.14		0.07	1.14	
Uniform Delay, d1		52.2	54.6	59.5	58.8		52.6	26.4		64.6	39.3	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		10.9	432.7	0.6	0.2		258.8	70.7		0.4	72.1	
Delay (s)		63.0	487.3	60.1	59.0		311.4	97.2		65.0	111.5	
Level of Service		E	F	E	E		F	F		E	F	
Approach Delay (s)		382.7			59.8			137.9			111.4	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	173.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	133.2	Sum of lost time (s)	18.3
Intersection Capacity Utilization	114.0%	ICU Level of Service	H
Analysis Period (min)	15		

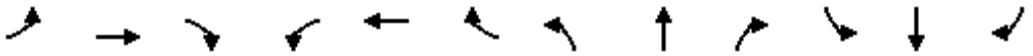
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	183	2	0	5	88	3047	27	5	2171	57
Future Volume (Veh/h)	15	0	183	2	0	5	88	3047	27	5	2171	57
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	0	183	2	0	5	88	3047	27	5	2171	57
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3909	5460	1114	4515	5474	1537	2228			3074		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3909	5460	1114	4515	5474	1537	2228			3074		
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 %	0	100	10	0	100	95	62			95		
cM capacity (veh/h)	1	0	203	0	0	105	230			105		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	15	183	2	5	88	2031	1043	5	1447	781
Volume Left	15	0	2	0	88	0	0	5	0	0
Volume Right	0	183	0	5	0	0	27	0	0	57
cSH	1	203	0	79	230	1700	1700	105	1700	1700
Volume to Capacity	20.88	0.90	85.23	0.06	0.38	1.19	0.61	0.05	0.85	0.46
Queue Length 95th (ft)	Err	179	Err	5	42	0	0	4	0	0
Control Delay (s)	Err	88.7	Err	53.9	30.0	0.0	0.0	40.8	0.0	0.0
Lane LOS	F	F	F	F	D			E		
Approach Delay (s)	839.5		2895.3		0.8			0.1		
Approach LOS	F		F							

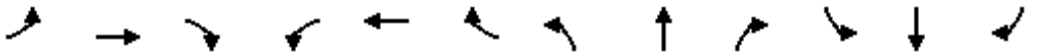
Intersection Summary					
Average Delay	33.8				
Intersection Capacity Utilization	103.1%	ICU Level of Service		G	
Analysis Period (min)	15				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	152	248	954	231	843	307	1858	421	941	2628	29
Future Volume (vph)	8	152	248	954	231	843	307	1858	421	941	2628	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.96	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1697	1504	3433	1863	1583	1770	5085	1583	3433	5077	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1697	1504	3433	1863	1583	1770	5085	1583	3433	5077	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	152	248	954	231	843	307	1858	421	941	2628	29
RTOR Reduction (vph)	0	7	172	0	0	128	0	0	116	0	1	0
Lane Group Flow (vph)	0	210	19	954	231	715	307	1858	305	941	2656	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		18.3	18.3	44.2	44.2	79.9	24.8	60.2	60.2	35.7	72.2	
Effective Green, g (s)		18.3	18.3	44.2	44.2	79.9	24.8	60.2	60.2	35.7	72.2	
Actuated g/C Ratio		0.10	0.10	0.25	0.25	0.44	0.14	0.33	0.33	0.20	0.40	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		172	152	842	457	702	243	1700	529	680	2036	
v/s Ratio Prot		c0.12		c0.28	0.12	0.20	0.17	0.37		c0.27	c0.52	
v/s Ratio Perm			0.01			0.25			0.19			
v/c Ratio		1.22	0.13	1.13	0.51	1.02	1.26	1.09	0.58	1.38	1.30	
Uniform Delay, d1		80.8	73.6	67.9	58.5	50.0	77.6	59.9	49.4	72.2	53.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00	0.94	0.74	0.56	1.00	1.00	
Incremental Delay, d2		140.0	0.1	74.5	0.3	38.7	121.6	42.9	0.4	181.8	140.8	
Delay (s)		220.8	73.7	142.4	58.8	88.8	194.3	87.3	27.8	253.9	194.7	
Level of Service		F	E	F	E	F	F	F	C	F	F	
Approach Delay (s)		152.0			110.6			90.3			210.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	148.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	126.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

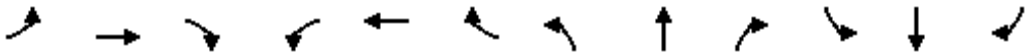


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1726	4	434	9	11	6	316	1071	5	21	2161	1537
Future Volume (vph)	1726	4	434	9	11	6	316	1071	5	21	2161	1537
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Lane Util. Factor	0.97	1.00			1.00		1.00	0.95		1.00	0.81	
Frt	1.00	0.85			0.97		1.00	1.00		1.00	0.94	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1586			1774		1770	3537		1770	7074	
Flt Permitted	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1586			1774		1770	3537		1770	7074	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1726	4	434	9	11	6	316	1071	5	21	2161	1537
RTOR Reduction (vph)	0	244	0	0	6	0	0	0	0	0	69	0
Lane Group Flow (vph)	1726	194	0	0	20	0	316	1076	0	21	3629	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	63.9	63.9			7.2		24.1	83.5		5.4	64.8	
Effective Green, g (s)	63.9	63.9			7.2		24.1	83.5		5.4	64.8	
Actuated g/C Ratio	0.35	0.35			0.04		0.13	0.46		0.03	0.36	
Clearance Time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Vehicle Extension (s)	4.0	4.0			2.0		2.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	1218	563			70		236	1640		53	2546	
v/s Ratio Prot	c0.50	0.12			c0.01		c0.18	0.30		0.01	c0.51	
v/s Ratio Perm												
v/c Ratio	1.42	0.34			0.29		1.34	0.66		0.40	2.30dr	
Uniform Delay, d1	58.0	42.7			83.9		78.0	37.2		85.7	57.6	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.13	0.39	
Incremental Delay, d2	192.6	0.5			0.8		178.3	2.1		0.2	191.6	
Delay (s)	250.6	43.2			84.7		256.3	39.3		97.1	214.2	
Level of Service	F	D			F		F	D		F	F	
Approach Delay (s)		208.6			84.7			88.5			213.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	187.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	132.2%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

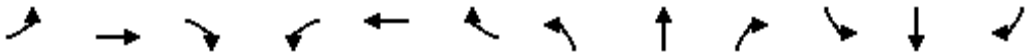
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	2	3	56	2	683	3	443	131	881	703	5
Future Volume (vph)	10	2	3	56	2	683	3	443	131	881	703	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	1.00	
Frt		0.97			0.88		1.00	0.97		1.00	1.00	
Flt Protected		0.97			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1754			1625		1770	3418		1770	1861	
Flt Permitted		0.97			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1754			1625		1770	3418		1770	1861	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	10	2	3	56	2	683	3	443	131	881	703	5
RTOR Reduction (vph)	0	3	0	0	284	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	12	0	0	457	0	3	556	0	881	708	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		5.8			27.6		1.2	27.4		50.9	77.1	
Effective Green, g (s)		5.8			27.6		1.2	27.4		50.9	77.1	
Actuated g/C Ratio		0.04			0.21		0.01	0.21		0.39	0.59	
Clearance Time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)		78			343		16	718		690	1100	
v/s Ratio Prot		c0.01			c0.28		0.00	c0.16		c0.50	0.38	
v/s Ratio Perm												
v/c Ratio		0.16			1.33		0.19	0.77		1.28	0.64	
Uniform Delay, d1		59.9			51.4		64.1	48.6		39.8	17.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			168.5		2.1	5.5		135.6	1.5	
Delay (s)		60.3			219.9		66.2	54.1		175.4	19.0	
Level of Service		E			F		E	D		F	B	
Approach Delay (s)		60.3			219.9			54.2			105.7	
Approach LOS		E			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	124.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	130.4	Sum of lost time (s)	18.7
Intersection Capacity Utilization	121.7%	ICU Level of Service	H
Analysis Period (min)	15		

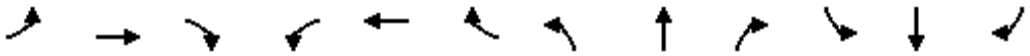
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	10	51	3	91	12	498	61	137	658	9
Future Volume (Veh/h)	17	0	10	51	3	91	12	498	61	137	658	9
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	17	0	10	51	3	91	12	498	61	137	658	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1536	1520	662	1499	1494	528	667			559		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1536	1520	662	1499	1494	528	667			559		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	75	100	98	42	97	83	99			86		
cM capacity (veh/h)	69	101	462	87	105	550	923			1012		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	27	145	571	804
Volume Left	17	51	12	137
Volume Right	10	91	61	9
cSH	100	237	923	1012
Volume to Capacity	0.27	0.61	0.01	0.14
Queue Length 95th (ft)	25	90	1	12
Control Delay (s)	53.6	43.7	0.4	3.2
Lane LOS	F	E	A	A
Approach Delay (s)	53.6	43.7	0.4	3.2
Approach LOS	F	E		

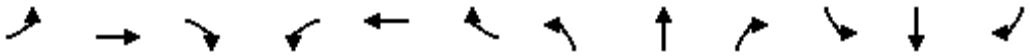
Intersection Summary				
Average Delay	6.8			
Intersection Capacity Utilization	91.5%	ICU Level of Service	F	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1	42	9	2	11	62	392	14	14	435	27
Future Volume (Veh/h)	10	1	42	9	2	11	62	392	14	14	435	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	10	1	42	9	2	11	62	392	14	14	435	27
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	1012	1006	448	1042	1013	399	462			406		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1012	1006	448	1042	1013	399	462			406		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	95	100	93	95	99	98	94			99		
cM capacity (veh/h)	202	225	610	183	223	651	1099			1153		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	53	22	468	476
Volume Left	10	9	62	14
Volume Right	42	11	14	27
cSH	431	293	1099	1153
Volume to Capacity	0.12	0.08	0.06	0.01
Queue Length 95th (ft)	10	6	4	1
Control Delay (s)	14.5	18.3	1.7	0.4
Lane LOS	B	C	A	A
Approach Delay (s)	14.5	18.3	1.7	0.4
Approach LOS	B	C		

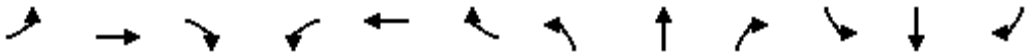
Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	61.2%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	15	285	50	45	3	231	787	16	1	1792	154
Future Volume (vph)	103	15	285	50	45	3	231	787	16	1	1792	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1846		1770	3529		1770	3497	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1846		1770	3529		1770	3497	
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)	108	16	300	53	47	3	243	828	17	1	1886	162
RTOR Reduction (vph)	0	0	172	0	2	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	124	128	53	48	0	243	844	0	1	2045	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Effective Green, g (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Actuated g/C Ratio		0.09	0.09	0.07	0.07		0.13	0.69		0.02	0.57	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		160	142	116	121		236	2439		27	2005	
v/s Ratio Prot		0.07		c0.03	0.03		c0.14	0.24		0.00	c0.58	
v/s Ratio Perm			c0.08									
v/c Ratio		0.78	0.90	0.46	0.40		1.03	0.35		0.04	1.02	
Uniform Delay, d1		59.4	60.1	60.0	59.8		57.8	8.4		64.7	28.5	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		18.9	46.4	1.0	0.8		66.5	0.4		0.2	25.2	
Delay (s)		78.3	106.6	61.0	60.5		124.3	8.8		64.9	53.7	
Level of Service		E	F	E	E		F	A		E	D	
Approach Delay (s)		98.3			60.8			34.6			53.7	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	53.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	133.4	Sum of lost time (s)	18.3
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		

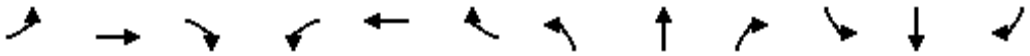
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	73	12	2	4	47	1038	4	3	2117	40
Future Volume (Veh/h)	8	0	73	12	2	4	47	1038	4	3	2117	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	9	0	78	13	2	4	50	1104	4	3	2252	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2932	3488	1148	2416	3507	554	2295			1108		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2932	3488	1148	2416	3507	554	2295			1108		
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 %	0	100	59	0	57	99	77			100		
cM capacity (veh/h)	4	5	192	8	5	476	216			626		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	9	78	13	6	50	736	372	3	1501	794
Volume Left	9	0	13	0	50	0	0	3	0	0
Volume Right	0	78	0	4	0	0	4	0	0	43
cSH	4	192	8	14	216	1700	1700	626	1700	1700
Volume to Capacity	2.45	0.41	1.58	0.43	0.23	0.43	0.22	0.00	0.88	0.47
Queue Length 95th (ft)	55	45	63	27	22	0	0	0	0	0
Control Delay (s)	2396.5	35.9	1143.5	393.7	26.6	0.0	0.0	10.8	0.0	0.0
Lane LOS	F	E	F	F	D			B		
Approach Delay (s)	280.1		906.8		1.1			0.0		
Approach LOS	F		F							

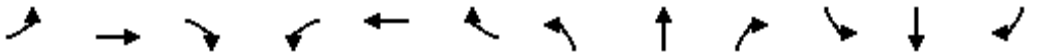
Intersection Summary				
Average Delay	12.1			
Intersection Capacity Utilization	73.8%	ICU Level of Service		D
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	154	397	411	72	309	145	687	219	258	1854	17
Future Volume (vph)	17	154	397	411	72	309	145	687	219	258	1854	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.94	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1652	1504	3433	1863	1583	1770	5085	1583	3433	5078	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1652	1504	3433	1863	1583	1770	5085	1583	3433	5078	
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)	18	162	418	433	76	325	153	723	231	272	1952	18
RTOR Reduction (vph)	0	17	189	0	0	233	0	0	116	0	1	0
Lane Group Flow (vph)	0	297	95	433	76	92	153	723	115	272	1969	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		20.0	20.0	22.9	22.9	38.5	22.5	79.9	79.9	15.6	74.1	
Effective Green, g (s)		20.0	20.0	22.9	22.9	38.5	22.5	79.9	79.9	15.6	74.1	
Actuated g/C Ratio		0.12	0.12	0.14	0.14	0.24	0.14	0.50	0.50	0.10	0.46	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		206	188	491	266	380	248	2539	790	334	2351	
v/s Ratio Prot		c0.18		c0.13	0.04	0.02	c0.09	0.14		0.08	c0.39	
v/s Ratio Perm			0.06			0.03			0.07			
v/c Ratio		1.44	0.51	0.88	0.29	0.24	0.62	0.28	0.15	0.81	0.84	
Uniform Delay, d1		70.0	65.4	67.2	61.2	49.0	64.7	23.4	21.6	70.8	37.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00	0.83	0.63	0.64	1.00	1.00	
Incremental Delay, d2		224.8	0.8	16.4	0.2	0.1	3.0	0.3	0.4	13.4	3.8	
Delay (s)		294.8	66.2	83.6	61.5	49.1	56.9	14.9	14.2	84.2	41.4	
Level of Service		F	E	F	E	D	E	B	B	F	D	
Approach Delay (s)		186.2			68.2			20.6			46.6	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	61.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

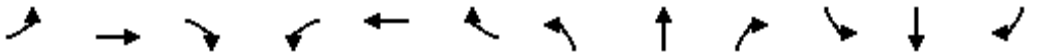
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	501	0	207	7	5	2	301	635	2	2	1790	1273
Future Volume (vph)	501	0	207	7	5	2	301	635	2	2	1790	1273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1782		1770	5083		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1782		1770	5083		1770	5085	1583
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)	522	0	216	7	5	2	314	661	2	2	1865	1326
RTOR Reduction (vph)	0	0	147	0	2	0	0	0	0	0	0	149
Lane Group Flow (vph)	261	261	69	0	12	0	314	663	0	2	1865	1177
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Effective Green, g (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Actuated g/C Ratio	0.32	0.32	0.32		0.03		0.21	0.52		0.01	0.32	0.64
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	533	533	502		53		368	2624		19	1624	1058
v/s Ratio Prot	0.16	0.16			c0.01		c0.18	0.13		0.00	c0.37	c0.35
v/s Ratio Perm			0.04									0.39
v/c Ratio	0.49	0.49	0.14		0.23		0.85	0.25		0.11	1.15	1.11
Uniform Delay, d1	44.1	44.1	39.0		75.8		61.0	21.5		78.3	54.5	29.0
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.20	0.82	1.64
Incremental Delay, d2	1.0	1.0	0.2		0.8		16.6	0.2		0.6	72.1	60.1
Delay (s)	45.1	45.1	39.1		76.6		77.6	21.8		94.9	116.7	107.8
Level of Service	D	D	D		E		E	C		F	F	F
Approach Delay (s)		43.3			76.6			39.7			113.0	
Approach LOS		D			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	87.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	117.3%	ICU Level of Service	H
Analysis Period (min)	15		

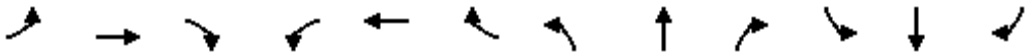
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	1	122	2	320	0	245	79	319	482	1
Future Volume (vph)	0	1	1	122	2	320	0	245	79	319	482	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6			5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00			0.95		1.00	1.00	
Frt		0.93			0.90			0.96		1.00	1.00	
Flt Protected		1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)		1737			1659			3410		1770	1862	
Flt Permitted		1.00			0.91			1.00		0.95	1.00	
Satd. Flow (perm)		1737			1524			3410		1770	1862	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	0	1	1	154	3	405	0	310	100	404	610	1
RTOR Reduction (vph)	0	1	0	0	82	0	0	42	0	0	0	0
Lane Group Flow (vph)	0	1	0	0	480	0	0	368	0	404	611	0
Turn Type		NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		25.4			25.4			14.2		20.5	39.2	
Effective Green, g (s)		25.4			25.4			14.2		20.5	39.2	
Actuated g/C Ratio		0.34			0.34			0.19		0.28	0.53	
Clearance Time (s)		4.6			4.6			5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0			4.0		1.0	4.0	
Lane Grp Cap (vph)		594			521			652		489	983	
v/s Ratio Prot		0.00						0.11		c0.23	c0.33	
v/s Ratio Perm					c0.32							
v/c Ratio		0.00			0.92			0.56		0.83	0.62	
Uniform Delay, d1		16.1			23.4			27.2		25.2	12.3	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.0			21.7			1.4		10.4	1.4	
Delay (s)		16.1			45.1			28.6		35.6	13.7	
Level of Service		B			D			C		D	B	
Approach Delay (s)		16.1			45.1			28.6			22.4	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	74.2	Sum of lost time (s)	14.1
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

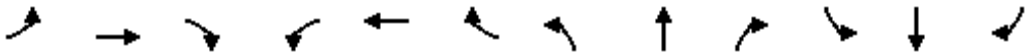
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	4	21	2	65	3	175	14	110	456	2
Future Volume (Veh/h)	6	1	4	21	2	65	3	175	14	110	456	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	1	4	23	2	71	3	190	15	120	496	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	977	948	497	945	942	198	498			205		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	977	948	497	945	942	198	498			205		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	96	100	99	90	99	92	100			91		
cM capacity (veh/h)	195	237	573	223	239	844	1066			1366		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	96	208	618
Volume Left	7	23	3	120
Volume Right	4	71	15	2
cSH	255	861	1066	1366
Volume to Capacity	0.05	0.11	0.00	0.09
Queue Length 95th (ft)	4	9	0	7
Control Delay (s)	19.8	13.2	0.1	2.3
Lane LOS	C	B	A	A
Approach Delay (s)	19.8	13.2	0.1	2.3
Approach LOS	C	B		

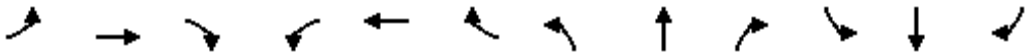
Intersection Summary				
Average Delay	3.2			
Intersection Capacity Utilization	56.4%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	80	1	0	0	32	181	1	1	498	14
Future Volume (Veh/h)	15	0	80	1	0	0	32	181	1	1	498	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	16	0	87	1	0	0	35	197	1	1	541	15
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	818	818	548	905	826	198	556			198		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	818	818	548	905	826	198	556			198		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	94	100	84	100	100	100	97			100		
cM capacity (veh/h)	287	299	536	210	297	844	1015			1375		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	103	1	233	557
Volume Left	16	1	35	1
Volume Right	87	0	1	15
cSH	472	210	1015	1375
Volume to Capacity	0.22	0.00	0.03	0.00
Queue Length 95th (ft)	21	0	3	0
Control Delay (s)	14.7	22.2	1.6	0.0
Lane LOS	B	C	A	A
Approach Delay (s)	14.7	22.2	1.6	0.0
Approach LOS	B	C		

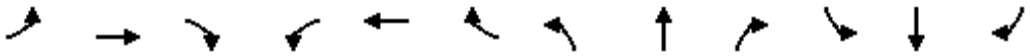
Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	47.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	23	412	20	13	0	361	1766	31	1	857	91
Future Volume (vph)	118	23	412	20	13	0	361	1766	31	1	857	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1788	1583	1770	1863		1770	3530		1770	3488	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1788	1583	1770	1863		1770	3530		1770	3488	
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)	124	24	434	21	14	0	380	1859	33	1	902	96
RTOR Reduction (vph)	0	0	205	0	0	0	0	1	0	0	5	0
Lane Group Flow (vph)	0	148	229	21	14	0	380	1891	0	1	993	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		19.9	19.9	6.2	6.2		31.3	82.3		2.1	53.1	
Effective Green, g (s)		19.9	19.9	6.2	6.2		31.3	82.3		2.1	53.1	
Actuated g/C Ratio		0.15	0.15	0.05	0.05		0.24	0.64		0.02	0.41	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		276	244	85	89		430	2255		28	1437	
v/s Ratio Prot		0.08		c0.01	0.01		c0.21	c0.54		0.00	0.28	
v/s Ratio Perm			c0.14									
v/c Ratio		0.54	0.94	0.25	0.16		0.88	0.84		0.04	0.69	
Uniform Delay, d1		50.2	53.8	59.1	58.8		47.0	18.1		62.4	31.1	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.0	39.8	0.6	0.3		18.4	3.9		0.2	2.7	
Delay (s)		51.2	93.6	59.6	59.1		65.4	22.0		62.5	33.9	
Level of Service		D	F	E	E		E	C		E	C	
Approach Delay (s)		82.8			59.4			29.3			33.9	
Approach LOS		F			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	128.8	Sum of lost time (s)	18.3
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		

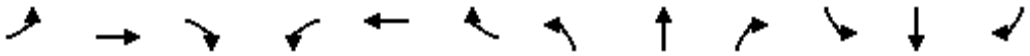
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	75	4	1	5	92	2155	35	4	1241	32
Future Volume (Veh/h)	9	0	75	4	1	5	92	2155	35	4	1241	32
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	10	0	80	4	1	5	98	2293	37	4	1320	34
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2688	3871	677	3256	3870	1165	1354			2330		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2688	3871	677	3256	3870	1165	1354			2330		
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 %	0	100	80	0	64	97	81			98		
cM capacity (veh/h)	6	3	395	2	3	187	504			210		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	10	80	4	6	98	1529	801	4	880	474
Volume Left	10	0	4	0	98	0	0	4	0	0
Volume Right	0	80	0	5	0	0	37	0	0	34
cSH	6	395	2	16	504	1700	1700	210	1700	1700
Volume to Capacity	1.62	0.20	1.61	0.36	0.19	0.90	0.47	0.02	0.52	0.28
Queue Length 95th (ft)	55	19	33	25	18	0	0	1	0	0
Control Delay (s)	1399.2	16.4	2626.0	297.2	13.9	0.0	0.0	22.5	0.0	0.0
Lane LOS	F	C	F	F	B			C		
Approach Delay (s)	170.0		1228.7		0.6			0.1		
Approach LOS	F		F							

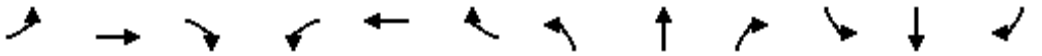
Intersection Summary				
Average Delay	7.5			
Intersection Capacity Utilization	81.2%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	153	133	252	64	333	258	1851	676	512	779	24
Future Volume (vph)	13	153	133	252	64	333	258	1851	676	512	779	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.99	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1743	1504	3433	1863	1583	1770	5085	1583	3433	5063	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1743	1504	3433	1863	1583	1770	5085	1583	3433	5063	
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)	14	161	140	265	67	351	272	1948	712	539	820	25
RTOR Reduction (vph)	0	2	115	0	0	102	0	0	193	0	2	0
Lane Group Flow (vph)	0	187	11	265	67	249	272	1948	519	539	843	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		15.0	15.0	15.6	15.6	38.6	20.0	90.0	90.0	23.0	94.1	
Effective Green, g (s)		15.0	15.0	15.6	15.6	38.6	20.0	90.0	90.0	23.0	94.1	
Actuated g/C Ratio		0.09	0.09	0.09	0.09	0.23	0.12	0.54	0.54	0.14	0.57	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		158	136	324	175	369	214	2770	862	477	2883	
v/s Ratio Prot		c0.11		c0.08	0.04	0.09	c0.15	c0.38		0.16	c0.17	
v/s Ratio Perm			0.01			0.06			0.33			
v/c Ratio		1.18	0.08	0.82	0.38	0.68	1.27	0.70	0.60	1.13	0.29	
Uniform Delay, d1		75.1	68.8	73.4	70.3	57.6	72.6	27.7	25.5	71.1	18.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		129.9	0.1	14.0	0.5	3.8	153.3	1.5	3.1	81.9	0.3	
Delay (s)		205.0	68.9	87.4	70.8	61.4	225.9	29.3	28.6	153.0	18.6	
Level of Service		F	E	F	E	E	F	C	C	F	B	
Approach Delay (s)		150.5			72.4			47.3			71.0	
Approach LOS		F			E			D			E	

Intersection Summary			
HCM 2000 Control Delay	62.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	165.2	Sum of lost time (s)	21.6
Intersection Capacity Utilization	89.8%	ICU Level of Service	E
Analysis Period (min)	15		

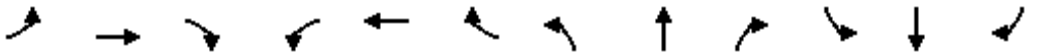
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	901	0	126	3	3	1	212	1815	4	4	644	595
Future Volume (vph)	901	0	126	3	3	1	212	1815	4	4	644	595
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1788		1770	5084		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1788		1770	5084		1770	5085	1583
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)	939	0	131	3	3	1	221	1891	4	4	671	620
RTOR Reduction (vph)	0	0	86	0	1	0	0	0	0	0	0	235
Lane Group Flow (vph)	469	470	45	0	6	0	221	1895	0	4	671	385
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	37.7	37.7	37.7		1.9		28.3	48.2		1.4	21.3	59.0
Effective Green, g (s)	37.7	37.7	37.7		1.9		28.3	48.2		1.4	21.3	59.0
Actuated g/C Ratio	0.35	0.35	0.35		0.02		0.26	0.44		0.01	0.20	0.54
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	580	580	546		31		458	2244		22	991	929
v/s Ratio Prot	0.28	c0.28			c0.00		0.12	c0.37		0.00	0.13	c0.14
v/s Ratio Perm			0.03									0.10
v/c Ratio	0.81	0.81	0.08		0.19		0.48	0.84		0.18	0.68	0.41
Uniform Delay, d1	32.5	32.5	24.1		52.9		34.3	27.2		53.3	40.8	14.9
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.6	8.8	0.1		1.1		0.3	3.2		1.4	2.0	0.4
Delay (s)	41.1	41.3	24.2		54.0		34.5	30.4		54.8	42.8	15.3
Level of Service	D	D	C		D		C	C		D	D	B
Approach Delay (s)		39.1			54.0			30.8			29.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	109.2	Sum of lost time (s)	20.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

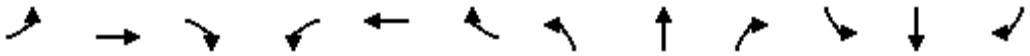
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1	4	30	3	439	2	251	65	481	339	1
Future Volume (vph)	2	1	4	30	3	439	2	251	65	481	339	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	1.00	
Frt		0.93			0.87		1.00	0.97		1.00	1.00	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1695			1624		1770	3430		1770	1862	
Flt Permitted		0.80			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1380			1594		1770	3430		1770	1862	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	3	1	5	38	4	556	3	318	82	609	429	1
RTOR Reduction (vph)	0	4	0	0	454	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	5	0	0	144	0	3	372	0	609	430	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		11.6			11.6		1.1	16.6		20.9	36.4	
Effective Green, g (s)		11.6			11.6		1.1	16.6		20.9	36.4	
Actuated g/C Ratio		0.18			0.18		0.02	0.26		0.33	0.58	
Clearance Time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)		253			292		30	900		585	1072	
v/s Ratio Prot							0.00	0.11		c0.34	c0.23	
v/s Ratio Perm		0.00			c0.09							
v/c Ratio		0.02			0.49		0.10	0.41		1.04	0.40	
Uniform Delay, d1		21.1			23.2		30.6	19.3		21.2	7.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			0.5		0.5	0.4		48.3	0.3	
Delay (s)		21.2			23.6		31.1	19.7		69.5	7.7	
Level of Service		C			C		C	B		E	A	
Approach Delay (s)		21.2			23.6			19.8			43.9	
Approach LOS		C			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	14.1
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

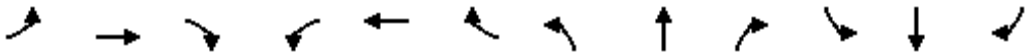
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	4	3	42	6	77	4	220	21	86	304	4
Future Volume (Veh/h)	6	4	3	42	6	77	4	220	21	86	304	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	4	3	46	7	84	4	239	23	93	330	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	822	788	332	782	778	250	334			262		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	822	788	332	782	778	250	334			262		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	97	99	100	84	98	89	100			93		
cM capacity (veh/h)	243	299	710	290	303	788	1225			1302		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	137	266	427
Volume Left	7	46	4	93
Volume Right	3	84	23	4
cSH	301	754	1225	1302
Volume to Capacity	0.05	0.18	0.00	0.07
Queue Length 95th (ft)	4	17	0	6
Control Delay (s)	17.5	14.0	0.1	2.3
Lane LOS	C	B	A	A
Approach Delay (s)	17.5	14.0	0.1	2.3
Approach LOS	C	B		

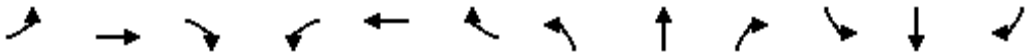
Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	50.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1	42	9	2	11	62	231	14	14	258	27
Future Volume (Veh/h)	10	1	42	9	2	11	62	231	14	14	258	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	11	1	46	10	2	12	67	251	15	15	280	29
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	730	724	294	764	732	258	309			266		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	730	724	294	764	732	258	309			266		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	97	100	94	96	99	98	95			99		
cM capacity (veh/h)	315	329	745	285	326	780	1252			1298		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	58	24	333	324
Volume Left	11	10	67	15
Volume Right	46	12	15	29
cSH	581	424	1252	1298
Volume to Capacity	0.10	0.06	0.05	0.01
Queue Length 95th (ft)	8	4	4	1
Control Delay (s)	11.9	14.0	2.0	0.5
Lane LOS	B	B	A	A
Approach Delay (s)	11.9	14.0	2.0	0.5
Approach LOS	B	B		

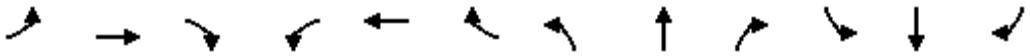
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	15	290	50	45	3	234	830	16	1	1820	154
Future Volume (vph)	103	15	290	50	45	3	234	830	16	1	1820	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1846		1770	3529		1770	3498	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1846		1770	3529		1770	3498	
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)	108	16	305	53	47	3	246	874	17	1	1916	162
RTOR Reduction (vph)	0	0	175	0	2	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	124	130	53	48	0	246	890	0	1	2075	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Effective Green, g (s)		12.0	12.0	8.8	8.8		17.8	92.2		2.1	76.5	
Actuated g/C Ratio		0.09	0.09	0.07	0.07		0.13	0.69		0.02	0.57	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		160	142	116	121		236	2439		27	2005	
v/s Ratio Prot		0.07		c0.03	0.03		c0.14	0.25		0.00	c0.59	
v/s Ratio Perm			c0.08									
v/c Ratio		0.78	0.92	0.46	0.40		1.04	0.37		0.04	1.03	
Uniform Delay, d1		59.4	60.2	60.0	59.8		57.8	8.5		64.7	28.5	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		18.9	50.2	1.0	0.8		70.1	0.4		0.2	29.7	
Delay (s)		78.3	110.4	61.0	60.5		127.9	8.9		64.9	58.1	
Level of Service		E	F	E	E		F	A		E	E	
Approach Delay (s)		101.1			60.8			34.7			58.1	
Approach LOS		F			E			C			E	

Intersection Summary			
HCM 2000 Control Delay	56.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	133.4	Sum of lost time (s)	18.3
Intersection Capacity Utilization	94.1%	ICU Level of Service	F
Analysis Period (min)	15		

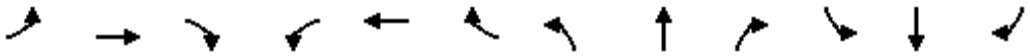
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	0	73	12	2	4	47	1084	4	3	2150	40
Future Volume (Veh/h)	8	0	73	12	2	4	47	1084	4	3	2150	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	9	0	78	13	2	4	50	1153	4	3	2287	43
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2992	3572	1165	2482	3591	578	2330			1157		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2992	3572	1165	2482	3591	578	2330			1157		
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 %	0	100	58	0	51	99	76			99		
cM capacity (veh/h)	3	4	187	7	4	459	210			600		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	9	78	13	6	50	769	388	3	1525	805
Volume Left	9	0	13	0	50	0	0	3	0	0
Volume Right	0	78	0	4	0	0	4	0	0	43
cSH	3	187	7	12	210	1700	1700	600	1700	1700
Volume to Capacity	2.97	0.42	1.82	0.50	0.24	0.45	0.23	0.01	0.90	0.47
Queue Length 95th (ft)	56	47	65	29	22	0	0	0	0	0
Control Delay (s)	2973.3	37.3	1364.9	470.6	27.5	0.0	0.0	11.0	0.0	0.0
Lane LOS	F	E	F	F	D			B		
Approach Delay (s)	341.0		1082.5		1.1			0.0		
Approach LOS	F		F							

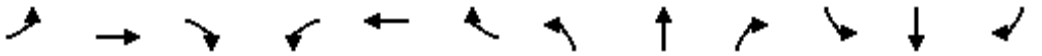
Intersection Summary				
Average Delay	14.2			
Intersection Capacity Utilization	74.7%	ICU Level of Service		D
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	161	397	434	74	315	166	727	242	302	1866	17
Future Volume (vph)	17	161	397	434	74	315	166	727	242	302	1866	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.94	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1656	1504	3433	1863	1583	1770	5085	1583	3433	5078	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1656	1504	3433	1863	1583	1770	5085	1583	3433	5078	
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)	18	169	418	457	78	332	175	765	255	318	1964	18
RTOR Reduction (vph)	0	16	187	0	0	219	0	0	132	0	1	0
Lane Group Flow (vph)	0	301	101	457	78	113	175	765	123	318	1981	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		20.0	20.0	24.0	24.0	41.5	22.5	76.9	76.9	17.5	73.0	
Effective Green, g (s)		20.0	20.0	24.0	24.0	41.5	22.5	76.9	76.9	17.5	73.0	
Actuated g/C Ratio		0.12	0.12	0.15	0.15	0.26	0.14	0.48	0.48	0.11	0.46	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		207	188	514	279	410	248	2443	760	375	2316	
v/s Ratio Prot		c0.18		c0.13	0.04	0.03	c0.10	0.15		0.09	c0.39	
v/s Ratio Perm			0.07			0.04			0.08			
v/c Ratio		1.46	0.54	0.89	0.28	0.28	0.71	0.31	0.16	0.85	0.86	
Uniform Delay, d1		70.0	65.6	66.7	60.3	47.3	65.6	25.4	23.4	69.9	38.8	
Progression Factor		1.00	1.00	1.00	1.00	1.00	0.83	0.64	0.75	1.00	1.00	
Incremental Delay, d2		229.7	1.5	16.5	0.2	0.1	6.9	0.3	0.4	15.5	4.3	
Delay (s)		299.7	67.1	83.2	60.5	47.4	61.3	16.7	17.9	85.5	43.1	
Level of Service		F	E	F	E	D	E	B	B	F	D	
Approach Delay (s)		189.0			67.5			23.5			49.0	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	63.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		

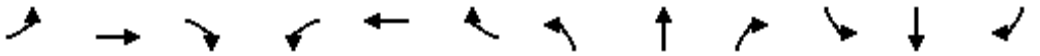
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	529	0	207	7	5	2	301	688	2	2	1812	1282
Future Volume (vph)	529	0	207	7	5	2	301	688	2	2	1812	1282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1782		1770	5083		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1782		1770	5083		1770	5085	1583
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)	551	0	216	7	5	2	314	717	2	2	1888	1335
RTOR Reduction (vph)	0	0	147	0	2	0	0	0	0	0	0	149
Lane Group Flow (vph)	275	276	69	0	12	0	314	719	0	2	1888	1186
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Effective Green, g (s)	50.8	50.8	50.8		4.8		33.3	82.6		1.8	51.1	101.9
Actuated g/C Ratio	0.32	0.32	0.32		0.03		0.21	0.52		0.01	0.32	0.64
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	533	533	502		53		368	2624		19	1624	1058
v/s Ratio Prot	0.16	0.16			c0.01		c0.18	0.14		0.00	c0.37	c0.36
v/s Ratio Perm			0.04									0.39
v/c Ratio	0.52	0.52	0.14		0.23		0.85	0.27		0.11	1.16	1.12
Uniform Delay, d1	44.6	44.6	39.0		75.8		61.0	21.8		78.3	54.5	29.0
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.28	0.84	1.65
Incremental Delay, d2	1.1	1.1	0.2		0.8		16.6	0.3		0.6	77.9	63.2
Delay (s)	45.7	45.7	39.1		76.6		77.6	22.1		100.4	123.4	111.0
Level of Service	D	D	D		E		E	C		F	F	F
Approach Delay (s)		43.9			76.6			38.9			118.3	
Approach LOS		D			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	90.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	117.9%	ICU Level of Service	H
Analysis Period (min)	15		

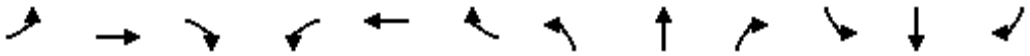
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1	1	122	2	320	0	245	79	319	482	1
Future Volume (vph)	0	1	1	122	2	320	0	245	79	319	482	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6			5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00			0.95		1.00	1.00	
Frt		0.93			0.90			0.96		1.00	1.00	
Flt Protected		1.00			0.99			1.00		0.95	1.00	
Satd. Flow (prot)		1737			1659			3410		1770	1862	
Flt Permitted		1.00			0.91			1.00		0.95	1.00	
Satd. Flow (perm)		1737			1524			3410		1770	1862	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	0	1	1	154	3	405	0	310	100	404	610	1
RTOR Reduction (vph)	0	1	0	0	81	0	0	42	0	0	0	0
Lane Group Flow (vph)	0	1	0	0	481	0	0	368	0	404	611	0
Turn Type		NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		25.4			25.4			14.0		20.5	39.0	
Effective Green, g (s)		25.4			25.4			14.0		20.5	39.0	
Actuated g/C Ratio		0.34			0.34			0.19		0.28	0.53	
Clearance Time (s)		4.6			4.6			5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0			4.0		1.0	4.0	
Lane Grp Cap (vph)		596			523			645		490	981	
v/s Ratio Prot		0.00						0.11		c0.23	c0.33	
v/s Ratio Perm					c0.32							
v/c Ratio		0.00			0.92			0.57		0.82	0.62	
Uniform Delay, d1		16.0			23.3			27.3		25.1	12.3	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.0			20.8			1.5		10.3	1.4	
Delay (s)		16.0			44.1			28.7		35.4	13.7	
Level of Service		B			D			C		D	B	
Approach Delay (s)		16.0			44.1			28.7			22.3	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	14.1
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

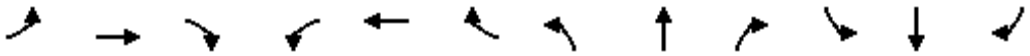
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1	4	21	2	65	3	175	14	110	456	2
Future Volume (Veh/h)	6	1	4	21	2	65	3	175	14	110	456	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	1	4	23	2	71	3	190	15	120	496	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	977	948	497	945	942	198	498			205		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	977	948	497	945	942	198	498			205		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	96	100	99	90	99	92	100			91		
cM capacity (veh/h)	195	237	573	223	239	844	1066			1366		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	96	208	618
Volume Left	7	23	3	120
Volume Right	4	71	15	2
cSH	255	861	1066	1366
Volume to Capacity	0.05	0.11	0.00	0.09
Queue Length 95th (ft)	4	9	0	7
Control Delay (s)	19.8	13.2	0.1	2.3
Lane LOS	C	B	A	A
Approach Delay (s)	19.8	13.2	0.1	2.3
Approach LOS	C	B		

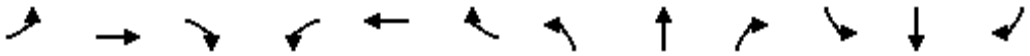
Intersection Summary				
Average Delay	3.2			
Intersection Capacity Utilization	56.4%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	80	1	0	0	32	181	1	1	498	14
Future Volume (Veh/h)	15	0	80	1	0	0	32	181	1	1	498	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	16	0	87	1	0	0	35	197	1	1	541	15
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	818	818	548	905	826	198	556			198		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	818	818	548	905	826	198	556			198		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	94	100	84	100	100	100	97			100		
cM capacity (veh/h)	287	299	536	210	297	844	1015			1375		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	103	1	233	557
Volume Left	16	1	35	1
Volume Right	87	0	1	15
cSH	472	210	1015	1375
Volume to Capacity	0.22	0.00	0.03	0.00
Queue Length 95th (ft)	21	0	3	0
Control Delay (s)	14.7	22.2	1.6	0.0
Lane LOS	B	C	A	A
Approach Delay (s)	14.7	22.2	1.6	0.0
Approach LOS	B	C		

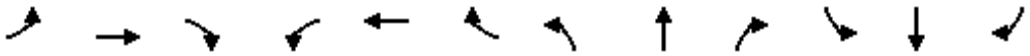
Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	47.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	151	23	452	20	13	0	400	1798	31	1	899	123
Future Volume (vph)	151	23	452	20	13	0	400	1798	31	1	899	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00		1.00	0.98	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1863		1770	3530		1770	3476	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1863		1770	3530		1770	3476	
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)	159	24	476	21	14	0	421	1893	33	1	946	129
RTOR Reduction (vph)	0	0	183	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	0	183	293	21	14	0	421	1925	0	1	1068	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		19.9	19.9	6.3	6.3		33.7	84.5		2.1	52.9	
Effective Green, g (s)		19.9	19.9	6.3	6.3		33.7	84.5		2.1	52.9	
Actuated g/C Ratio		0.15	0.15	0.05	0.05		0.26	0.64		0.02	0.40	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		270	240	85	89		454	2275		28	1402	
v/s Ratio Prot		0.10		c0.01	0.01		c0.24	c0.55		0.00	0.31	
v/s Ratio Perm			c0.18									
v/c Ratio		0.68	1.22	0.25	0.16		0.93	0.85		0.04	0.76	
Uniform Delay, d1		52.6	55.6	60.1	59.9		47.5	18.2		63.5	33.7	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.2	130.5	0.6	0.3		24.7	4.1		0.2	4.0	
Delay (s)		57.8	186.1	60.7	60.2		72.2	22.3		63.7	37.6	
Level of Service		E	F	E	E		E	C		E	D	
Approach Delay (s)		150.5			60.5			31.3			37.7	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	52.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	18.3
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

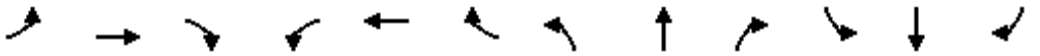
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	87	4	1	5	104	2226	35	4	1323	32
Future Volume (Veh/h)	9	0	87	4	1	5	104	2226	35	4	1323	32
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	10	0	93	4	1	5	111	2368	37	4	1407	34
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2838	4059	720	3413	4058	1202	1441			2405		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2838	4059	720	3413	4058	1202	1441			2405		
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 %	0	100	75	0	48	97	76			98		
cM capacity (veh/h)	4	2	370	2	2	177	467			196		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	10	93	4	6	111	1579	826	4	938	503
Volume Left	10	0	4	0	111	0	0	4	0	0
Volume Right	0	93	0	5	0	0	37	0	0	34
cSH	4	370	2	11	467	1700	1700	196	1700	1700
Volume to Capacity	2.67	0.25	2.39	0.53	0.24	0.93	0.49	0.02	0.55	0.30
Queue Length 95th (ft)	59	24	34	30	23	0	0	2	0	0
Control Delay (s)	2481.5	18.0	4016.6	515.7	15.1	0.0	0.0	23.8	0.0	0.0
Lane LOS	F	C	F	F	C			C		
Approach Delay (s)	257.1		1916.1		0.7			0.1		
Approach LOS	F		F							

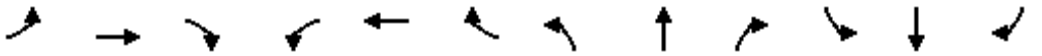
Intersection Summary				
Average Delay	11.6			
Intersection Capacity Utilization	83.1%	ICU Level of Service	E	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	159	133	290	66	349	282	1918	690	561	846	24
Future Volume (vph)	13	159	133	290	66	349	282	1918	690	561	846	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.99	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1744	1504	3433	1863	1583	1770	5085	1583	3433	5064	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1744	1504	3433	1863	1583	1770	5085	1583	3433	5064	
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)	14	167	140	305	69	367	297	2019	726	591	891	25
RTOR Reduction (vph)	0	2	115	0	0	100	0	0	192	0	2	0
Lane Group Flow (vph)	0	193	11	305	69	267	297	2019	534	591	914	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		15.0	15.0	16.9	16.9	39.9	20.0	90.0	90.0	23.0	94.1	
Effective Green, g (s)		15.0	15.0	16.9	16.9	39.9	20.0	90.0	90.0	23.0	94.1	
Actuated g/C Ratio		0.09	0.09	0.10	0.10	0.24	0.12	0.54	0.54	0.14	0.57	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		157	135	348	189	379	212	2748	855	474	2861	
v/s Ratio Prot		c0.11		c0.09	0.04	0.10	c0.17	c0.40		0.17	c0.18	
v/s Ratio Perm			0.01			0.07			0.34			
v/c Ratio		1.23	0.08	0.88	0.37	0.70	1.40	0.73	0.63	1.25	0.32	
Uniform Delay, d1		75.8	69.5	73.8	69.8	57.9	73.2	29.2	26.5	71.8	19.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		146.9	0.1	20.5	0.4	4.8	206.4	1.8	3.4	127.8	0.3	
Delay (s)		222.7	69.5	94.3	70.2	62.7	279.6	30.9	30.0	199.5	19.5	
Level of Service		F	E	F	E	E	F	C	C	F	B	
Approach Delay (s)		162.6			76.4			55.0			90.1	
Approach LOS		F			E			D			F	

Intersection Summary			
HCM 2000 Control Delay	73.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	166.5	Sum of lost time (s)	21.6
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		

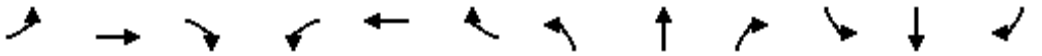
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	934	0	126	3	3	1	212	1874	4	4	719	634
Future Volume (vph)	934	0	126	3	3	1	212	1874	4	4	719	634
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.91		1.00	0.91	1.00
Frt	1.00	1.00	0.85		0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1681	1583		1788		1770	5084		1770	5085	1583
Flt Permitted	0.95	0.95	1.00		0.98		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1681	1583		1788		1770	5084		1770	5085	1583
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)	973	0	131	3	3	1	221	1952	4	4	749	660
RTOR Reduction (vph)	0	0	87	0	1	0	0	0	0	0	0	231
Lane Group Flow (vph)	486	487	44	0	6	0	221	1956	0	4	749	429
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	4	4		3	3		5	2		1	6	4
Permitted Phases			4									6
Actuated Green, G (s)	37.5	37.5	37.5		1.9		28.4	50.3		1.4	23.3	60.8
Effective Green, g (s)	37.5	37.5	37.5		1.9		28.4	50.3		1.4	23.3	60.8
Actuated g/C Ratio	0.34	0.34	0.34		0.02		0.26	0.45		0.01	0.21	0.55
Clearance Time (s)	5.1	5.1	5.1		4.3		4.8	5.8		4.8	5.8	5.1
Vehicle Extension (s)	4.0	4.0	4.0		2.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	567	567	534		30		452	2301		22	1066	938
v/s Ratio Prot	0.29	c0.29			c0.00		0.12	c0.38		0.00	0.15	c0.15
v/s Ratio Perm			0.03									0.12
v/c Ratio	0.86	0.86	0.08		0.20		0.49	0.85		0.18	0.70	0.46
Uniform Delay, d1	34.3	34.3	25.1		53.9		35.2	27.0		54.3	40.7	15.2
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.6	12.7	0.1		1.2		0.3	3.3		1.4	2.3	0.5
Delay (s)	46.9	47.1	25.2		55.1		35.5	30.4		55.7	43.0	15.7
Level of Service	D	D	C		E		D	C		E	D	B
Approach Delay (s)		44.4			55.1			30.9			30.3	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	33.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		

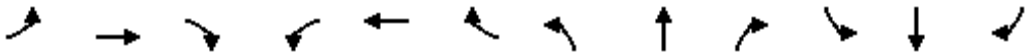
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	60	9	38	62	439	7	262	73	481	350	34
Future Volume (vph)	35	60	9	38	62	439	7	262	73	481	350	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	1.00	
Frt		0.99			0.89		1.00	0.97		1.00	0.99	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1811			1652		1770	3424		1770	1838	
Flt Permitted		0.58			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1069			1608		1770	3424		1770	1838	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	44	76	11	48	78	556	9	332	92	609	443	43
RTOR Reduction (vph)	0	3	0	0	144	0	0	32	0	0	3	0
Lane Group Flow (vph)	0	128	0	0	538	0	9	392	0	609	483	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4								
Actuated Green, G (s)		25.5			25.5		1.3	18.6		20.5	37.8	
Effective Green, g (s)		25.5			25.5		1.3	18.6		20.5	37.8	
Actuated g/C Ratio		0.32			0.32		0.02	0.24		0.26	0.48	
Clearance Time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)		346			521		29	809		461	882	
v/s Ratio Prot							0.01	0.11		c0.34	c0.26	
v/s Ratio Perm		0.12			c0.33							
v/c Ratio		0.37			1.03		0.31	0.48		1.32	0.55	
Uniform Delay, d1		20.4			26.6		38.3	25.9		29.1	14.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			48.1		2.2	0.6		159.1	0.9	
Delay (s)		20.7			74.7		40.5	26.5		188.2	15.3	
Level of Service		C			E		D	C		F	B	
Approach Delay (s)		20.7			74.7			26.8			111.4	
Approach LOS		C			E			C			F	

Intersection Summary			
HCM 2000 Control Delay	80.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	14.1
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		

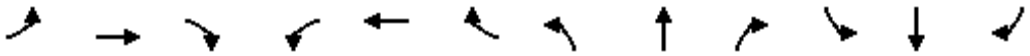
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	4	3	42	6	89	4	226	21	98	311	4
Future Volume (Veh/h)	6	4	3	42	6	89	4	226	21	98	311	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	7	4	3	46	7	97	4	246	23	107	338	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	872	831	340	824	822	258	342			269		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	872	831	340	824	822	258	342			269		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	97	99	100	83	98	88	100			92		
cM capacity (veh/h)	218	279	702	269	283	781	1217			1295		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	150	273	449
Volume Left	7	46	4	107
Volume Right	3	97	23	4
cSH	276	765	1217	1295
Volume to Capacity	0.05	0.20	0.00	0.08
Queue Length 95th (ft)	4	18	0	7
Control Delay (s)	18.7	14.2	0.1	2.5
Lane LOS	C	B	A	A
Approach Delay (s)	18.7	14.2	0.1	2.5
Approach LOS	C	B		

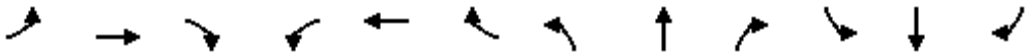
Intersection Summary				
Average Delay	4.0			
Intersection Capacity Utilization	51.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1	42	9	2	11	62	237	14	14	265	27
Future Volume (Veh/h)	10	1	42	9	2	11	62	237	14	14	265	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
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)	11	1	46	10	2	12	67	258	15	15	288	29
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	745	740	302	778	746	266	317			273		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	745	740	302	778	746	266	317			273		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	96	100	94	96	99	98	95			99		
cM capacity (veh/h)	307	322	737	279	319	773	1243			1290		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	58	24	340	332
Volume Left	11	10	67	15
Volume Right	46	12	15	29
cSH	573	416	1243	1290
Volume to Capacity	0.10	0.06	0.05	0.01
Queue Length 95th (ft)	8	5	4	1
Control Delay (s)	12.0	14.2	2.0	0.5
Lane LOS	B	B	A	A
Approach Delay (s)	12.0	14.2	2.0	0.5
Approach LOS	B	B		

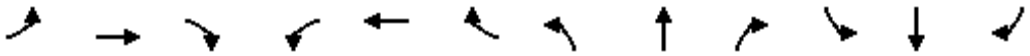
Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	46.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	23	403	85	125	5	412	1471	75	3	2869	248
Future Volume (vph)	158	23	403	85	125	5	412	1471	75	3	2869	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1785	1583	1770	1852		1770	3513		1770	3497	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1785	1583	1770	1852		1770	3513		1770	3497	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	158	23	403	85	125	5	412	1471	75	3	2869	248
RTOR Reduction (vph)	0	0	120	0	1	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	181	283	85	129	0	412	1545	0	3	3114	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		19.8	19.8	18.3	18.3		38.5	141.4		2.2	105.1	
Effective Green, g (s)		19.8	19.8	18.3	18.3		38.5	141.4		2.2	105.1	
Actuated g/C Ratio		0.10	0.10	0.09	0.09		0.19	0.71		0.01	0.53	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		176	156	161	169		340	2483		19	1837	
v/s Ratio Prot		0.10		0.05	c0.07		c0.23	0.44		0.00	c0.89	
v/s Ratio Perm			c0.18									
v/c Ratio		1.03	1.82	0.53	0.76		1.21	0.62		0.16	1.69	
Uniform Delay, d1		90.1	90.1	86.7	88.7		80.8	15.3		98.0	47.5	
Progression Factor		1.00	1.00	1.00	1.00		0.92	1.49		1.00	1.00	
Incremental Delay, d2		75.5	390.9	1.4	16.7		97.9	0.1		1.4	315.1	
Delay (s)		165.6	481.0	88.2	105.4		172.2	22.9		99.4	362.6	
Level of Service		F	F	F	F		F	C		F	F	
Approach Delay (s)		383.3			98.6			54.3			362.3	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	252.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	200.0	Sum of lost time (s)	18.3
Intersection Capacity Utilization	144.4%	ICU Level of Service	H
Analysis Period (min)	15		

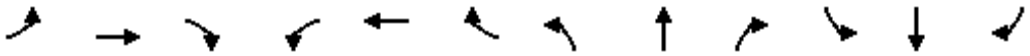
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	10	95	12	0	10	78	1950	10	5	3225	115
Future Volume (Veh/h)	8	10	95	12	0	10	78	1950	10	5	3225	115
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	8	10	95	12	0	10	78	1950	10	5	3225	115
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4424	5408	1670	3834	5461	980	3340			1960		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4424	5408	1670	3834	5461	980	3340			1960		
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 %	0	0	0	0	100	96	5			98		
cM capacity (veh/h)	0	0	85	0	0	249	82			293		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	8	105	12	10	78	1300	660	5	2150	1190
Volume Left	8	0	12	0	78	0	0	5	0	0
Volume Right	0	95	0	10	0	0	10	0	0	115
cSH	0	0	0	187	82	1700	1700	293	1700	1700
Volume to Capacity	130.38	681.01	Err	0.05	0.95	0.76	0.39	0.02	1.26	0.70
Queue Length 95th (ft)	Err	Err	Err	4	129	0	0	1	0	0
Control Delay (s)	Err	Err	Err	25.4	174.5	0.0	0.0	17.5	0.0	0.0
Lane LOS	F	F	F	D	F			C		
Approach Delay (s)	Err		Err		6.7			0.0		
Approach LOS	F		F							

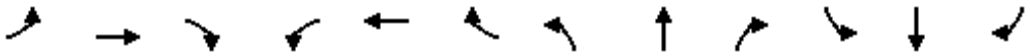
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	106.8%	ICU Level of Service	G	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	332	433	334	122	776	353	2662	722	768	2448	60
Future Volume (vph)	51	332	433	334	122	776	353	2662	722	768	2448	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1728	1504	3433	1863	1583	1770	5085	1583	3433	5067	
Flt Permitted		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1728	1504	3433	1863	1583	1770	5085	1583	3433	5067	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	332	433	334	122	776	353	2662	722	768	2448	60
RTOR Reduction (vph)	0	3	195	0	0	160	0	0	107	0	1	0
Lane Group Flow (vph)	0	432	186	334	122	616	353	2662	615	768	2507	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		32.3	32.3	22.3	22.3	53.0	26.8	93.1	93.1	30.7	98.1	
Effective Green, g (s)		32.3	32.3	22.3	22.3	53.0	26.8	93.1	93.1	30.7	98.1	
Actuated g/C Ratio		0.16	0.16	0.11	0.11	0.26	0.13	0.47	0.47	0.15	0.49	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		279	242	382	207	419	237	2367	736	526	2485	
v/s Ratio Prot		c0.25		0.10	0.07	c0.23	0.20	c0.52		0.22	0.49	
v/s Ratio Perm			0.12			0.16			0.39			
v/c Ratio		1.55	0.77	0.87	0.59	1.47	1.49	1.12	0.84	1.46	1.01	
Uniform Delay, d1		83.8	80.2	87.5	84.5	73.5	86.6	53.5	46.7	84.7	51.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.06	0.93	1.00	0.80	0.36	
Incremental Delay, d2		264.6	12.3	18.8	2.8	224.0	228.4	58.5	4.3	208.0	7.8	
Delay (s)		348.4	92.5	106.3	87.3	297.5	319.8	108.3	51.1	275.7	25.9	
Level of Service		F	F	F	F	F	F	F	D	F	C	
Approach Delay (s)		228.9			224.9			117.2			84.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	130.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	200.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	141.7%	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 (vph)	1172	2	327	6	7	11	681	2472	6	2	1664	1636
Future Volume (vph)	1172	2	327	6	7	11	681	2472	6	2	1664	1636
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Lane Util. Factor	0.97	1.00			1.00		1.00	0.91		1.00	0.81	
Frt	1.00	0.85			0.94		1.00	1.00		1.00	0.93	
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1585			1726		1770	5083		1770	6983	
Flt Permitted	0.95	1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1585			1726		1770	5083		1770	6983	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1172	2	327	6	7	11	681	2472	6	2	1664	1636
RTOR Reduction (vph)	0	241	0	0	11	0	0	0	0	0	88	0
Lane Group Flow (vph)	1172	88	0	0	13	0	681	2478	0	2	3212	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	52.9	52.9			7.2		53.1	118.1		1.8	66.8	
Effective Green, g (s)	52.9	52.9			7.2		53.1	118.1		1.8	66.8	
Actuated g/C Ratio	0.26	0.26			0.04		0.27	0.59		0.01	0.33	
Clearance Time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Vehicle Extension (s)	4.0	4.0			2.0		2.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	908	419			62		469	3001		15	2332	
v/s Ratio Prot	c0.34	0.06			c0.01		c0.38	0.49		0.00	c0.46	
v/s Ratio Perm												
v/c Ratio	1.29	0.21			0.22		1.45	0.83		0.13	2.49dr	
Uniform Delay, d1	73.5	57.3			93.7		73.5	32.7		98.3	66.6	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.15	0.47	
Incremental Delay, d2	139.1	0.3			0.6		215.1	2.7		0.6	170.9	
Delay (s)	212.7	57.6			94.3		288.5	35.5		113.3	202.2	
Level of Service	F	E			F		F	D		F	F	
Approach Delay (s)		178.7			94.3			90.0			202.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	153.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	200.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	132.2%	ICU Level of Service	H
Analysis Period (min)	15		

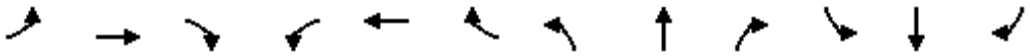
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2	2	315	5	464	0	417	115	466	829	2
Future Volume (vph)	0	2	2	315	5	464	0	417	115	466	829	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6			5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00			0.95		1.00	1.00	
Frt		0.93			0.92			0.97		1.00	1.00	
Flt Protected		1.00			0.98			1.00		0.95	1.00	
Satd. Flow (prot)		1737			1680			3424		1770	1862	
Flt Permitted		1.00			0.98			1.00		0.95	1.00	
Satd. Flow (perm)		1737			1680			3424		1770	1862	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	2	2	315	5	464	0	417	115	466	829	2
RTOR Reduction (vph)	0	2	0	0	32	0	0	18	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	752	0	0	514	0	466	831	0
Turn Type		NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		4.0			46.1			22.5		27.9	54.9	
Effective Green, g (s)		4.0			46.1			22.5		27.9	54.9	
Actuated g/C Ratio		0.03			0.39			0.19		0.23	0.46	
Clearance Time (s)		4.6			4.6			5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0			4.0		1.0	4.0	
Lane Grp Cap (vph)		58			649			646		414	857	
v/s Ratio Prot		c0.00			c0.45			0.15		c0.26	c0.45	
v/s Ratio Perm												
v/c Ratio		0.04			1.16			0.80		1.13	0.97	
Uniform Delay, d1		55.7			36.5			46.2		45.7	31.3	
Progression Factor		1.00			1.00			1.00		1.00	1.00	
Incremental Delay, d2		0.1			87.9			7.1		83.0	23.4	
Delay (s)		55.8			124.5			53.3		128.7	54.7	
Level of Service		E			F			D		F	D	
Approach Delay (s)		55.8			124.5			53.3			81.3	
Approach LOS		E			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	88.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	18.7
Intersection Capacity Utilization	114.2%	ICU Level of Service	H
Analysis Period (min)	15		

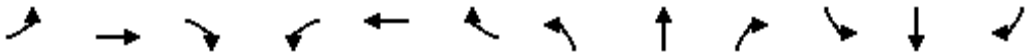
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	7	139	9	45	13	299	5	100	796	4
Future Volume (Veh/h)	10	0	7	139	9	45	13	299	5	100	796	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	10	0	7	139	9	45	13	299	5	100	796	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1352	1328	798	1332	1328	302	800			304		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1352	1328	798	1332	1328	302	800			304		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	91	100	98	0	94	94	98			92		
cM capacity (veh/h)	105	140	386	120	141	738	823			1257		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	17	193	317	900
Volume Left	10	139	13	100
Volume Right	7	45	5	4
cSH	150	151	823	1257
Volume to Capacity	0.11	1.27	0.02	0.08
Queue Length 95th (ft)	9	287	1	6
Control Delay (s)	32.0	222.7	0.6	2.0
Lane LOS	D	F	A	A
Approach Delay (s)	32.0	222.7	0.6	2.0
Approach LOS	D	F		

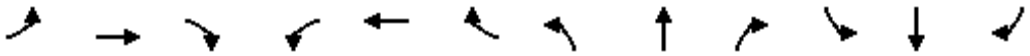
Intersection Summary				
Average Delay	31.9			
Intersection Capacity Utilization	86.5%	ICU Level of Service	E	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	80	1	0	0	32	302	1	1	795	14
Future Volume (Veh/h)	15	0	80	1	0	0	32	302	1	1	795	14
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	0	80	1	0	0	32	302	1	1	795	14
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	1170	1171	802	1250	1178	302	809			303		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1170	1171	802	1250	1178	302	809			303		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	91	100	79	99	100	100	96			100		
cM capacity (veh/h)	164	185	384	115	183	737	817			1258		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	95	1	335	810
Volume Left	15	1	32	1
Volume Right	80	0	1	14
cSH	317	115	817	1258
Volume to Capacity	0.30	0.01	0.04	0.00
Queue Length 95th (ft)	31	1	3	0
Control Delay (s)	21.1	36.7	1.3	0.0
Lane LOS	C	E	A	A
Approach Delay (s)	21.1	36.7	1.3	0.0
Approach LOS	C	E		

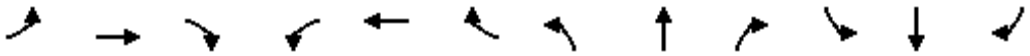
Intersection Summary				
Average Delay	2.0			
Intersection Capacity Utilization	55.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	40	764	37	17	0	572	2420	22	2	1488	152
Future Volume (vph)	210	40	764	37	17	0	572	2420	22	2	1488	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85	1.00	1.00		1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1788	1583	1770	1863		1770	3534		1770	3490	
Flt Permitted		0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1788	1583	1770	1863		1770	3534		1770	3490	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	210	40	764	37	17	0	572	2420	22	2	1488	152
RTOR Reduction (vph)	0	0	215	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	250	549	37	17	0	572	2442	0	2	1635	0
Turn Type	Split	NA	Perm	Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		5	2		1	6	
Permitted Phases			7									
Actuated Green, G (s)		23.9	23.9	8.6	8.6		27.9	80.3		2.1	54.5	
Effective Green, g (s)		23.9	23.9	8.6	8.6		27.9	80.3		2.1	54.5	
Actuated g/C Ratio		0.18	0.18	0.06	0.06		0.21	0.60		0.02	0.41	
Clearance Time (s)		4.2	4.2	4.2	4.2		4.2	5.7		4.2	5.7	
Vehicle Extension (s)		2.0	2.0	2.0	2.0		2.0	4.5		2.0	4.5	
Lane Grp Cap (vph)		320	284	114	120		370	2130		27	1427	
v/s Ratio Prot		0.14		c0.02	0.01		c0.32	c0.69		0.00	0.47	
v/s Ratio Perm			c0.35									
v/c Ratio		0.78	1.93	0.32	0.14		1.55	1.15		0.07	1.15	
Uniform Delay, d1		52.2	54.6	59.5	58.8		52.6	26.4		64.6	39.3	
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		10.9	432.7	0.6	0.2		258.8	71.9		0.4	74.4	
Delay (s)		63.0	487.3	60.1	59.0		311.4	98.3		65.0	113.8	
Level of Service		E	F	E	E		F	F		E	F	
Approach Delay (s)		382.7			59.8			138.8			113.7	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	174.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	133.2	Sum of lost time (s)	18.3
Intersection Capacity Utilization	114.2%	ICU Level of Service	H
Analysis Period (min)	15		

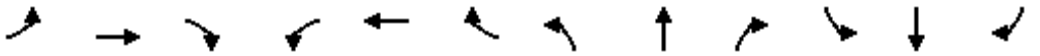
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	0	183	2	0	5	88	3053	27	5	2179	57
Future Volume (Veh/h)	15	0	183	2	0	5	88	3053	27	5	2179	57
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	0	183	2	0	5	88	3053	27	5	2179	57
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3920	5474	1118	4525	5488	1540	2236			3080		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3920	5474	1118	4525	5488	1540	2236			3080		
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 %	0	100	9	0	100	95	61			95		
cM capacity (veh/h)	1	0	201	0	0	104	228			105		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	15	183	2	5	88	2035	1045	5	1453	783
Volume Left	15	0	2	0	88	0	0	5	0	0
Volume Right	0	183	0	5	0	0	27	0	0	57
cSH	1	201	0	78	228	1700	1700	105	1700	1700
Volume to Capacity	21.39	0.91	92.50	0.06	0.39	1.20	0.61	0.05	0.85	0.46
Queue Length 95th (ft)	Err	180	Err	5	43	0	0	4	0	0
Control Delay (s)	Err	90.3	Err	54.1	30.3	0.0	0.0	41.0	0.0	0.0
Lane LOS	F	F	F	F	D			E		
Approach Delay (s)	841.0		2895.5		0.8			0.1		
Approach LOS	F		F							

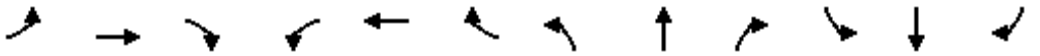
Intersection Summary					
Average Delay	33.8				
Intersection Capacity Utilization	103.2%	ICU Level of Service		G	
Analysis Period (min)	15				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	153	270	954	233	843	336	1858	421	941	2628	37
Future Volume (vph)	14	153	270	954	233	843	336	1858	421	941	2628	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Lane Util. Factor		0.95	0.95	0.97	1.00	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.96	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1690	1504	3433	1863	1583	1770	5085	1583	3433	5075	
Flt Permitted		1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1690	1504	3433	1863	1583	1770	5085	1583	3433	5075	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	14	153	270	954	233	843	336	1858	421	941	2628	37
RTOR Reduction (vph)	0	8	174	0	0	119	0	0	116	0	1	0
Lane Group Flow (vph)	0	224	31	954	233	724	336	1858	305	941	2664	0
Turn Type	Split	NA	Perm	Split	NA	pm+ov	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		3	3	1	5	2		1	6	
Permitted Phases			4			3			2			
Actuated Green, G (s)		18.3	18.3	44.2	44.2	79.9	24.8	60.2	60.2	35.7	72.2	
Effective Green, g (s)		18.3	18.3	44.2	44.2	79.9	24.8	60.2	60.2	35.7	72.2	
Actuated g/C Ratio		0.10	0.10	0.25	0.25	0.44	0.14	0.33	0.33	0.20	0.40	
Clearance Time (s)		4.7	4.7	5.8	5.8	5.3	4.2	5.8	5.8	5.3	5.8	
Vehicle Extension (s)		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		171	152	842	457	702	243	1700	529	680	2035	
v/s Ratio Prot		c0.13		c0.28	0.13	0.20	0.19	0.37		c0.27	c0.53	
v/s Ratio Perm			0.02			0.25			0.19			
v/c Ratio		1.31	0.20	1.13	0.51	1.03	1.38	1.09	0.58	1.38	1.31	
Uniform Delay, d1		80.8	74.2	67.9	58.6	50.0	77.6	59.9	49.4	72.2	53.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00	0.93	0.74	0.56	1.00	1.00	
Incremental Delay, d2		174.7	0.2	74.5	0.3	42.3	174.6	42.9	0.4	181.8	142.8	
Delay (s)		255.6	74.4	142.4	58.9	92.3	247.1	87.4	27.8	253.9	196.7	
Level of Service		F	E	F	E	F	F	F	C	F	F	
Approach Delay (s)		170.6			112.0			98.3			211.7	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	152.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	21.6
Intersection Capacity Utilization	128.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

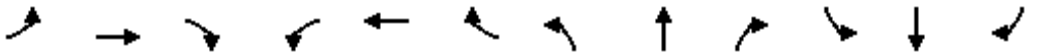


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1738	4	434	9	11	6	316	1088	5	21	2175	1547
Future Volume (vph)	1738	4	434	9	11	6	316	1088	5	21	2175	1547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Lane Util. Factor	0.97	1.00			1.00		1.00	0.95		1.00	0.81	
Frt	1.00	0.85			0.97		1.00	1.00		1.00	0.94	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3433	1586			1774		1770	3537		1770	7074	
Flt Permitted	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3433	1586			1774		1770	3537		1770	7074	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1738	4	434	9	11	6	316	1088	5	21	2175	1547
RTOR Reduction (vph)	0	244	0	0	6	0	0	0	0	0	69	0
Lane Group Flow (vph)	1738	194	0	0	20	0	316	1093	0	21	3653	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	63.9	63.9			7.2		24.1	83.5		5.4	64.8	
Effective Green, g (s)	63.9	63.9			7.2		24.1	83.5		5.4	64.8	
Actuated g/C Ratio	0.35	0.35			0.04		0.13	0.46		0.03	0.36	
Clearance Time (s)	5.1	5.1			4.3		4.8	5.8		4.8	5.8	
Vehicle Extension (s)	4.0	4.0			2.0		2.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	1218	563			70		236	1640		53	2546	
v/s Ratio Prot	c0.51	0.12			c0.01		c0.18	0.31		0.01	c0.52	
v/s Ratio Perm												
v/c Ratio	1.43	0.34			0.29		1.34	0.67		0.40	2.32dr	
Uniform Delay, d1	58.0	42.7			83.9		78.0	37.4		85.7	57.6	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.13	0.40	
Incremental Delay, d2	196.9	0.5			0.8		178.3	2.2		0.2	195.8	
Delay (s)	255.0	43.2			84.7		256.3	39.6		96.6	218.8	
Level of Service	F	D			F		F	D		F	F	
Approach Delay (s)		212.4			84.7			88.2			218.1	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	191.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	132.9%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

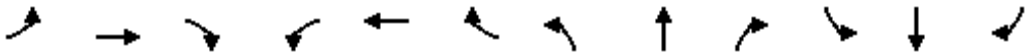
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	2	3	56	2	683	3	449	131	881	711	5
Future Volume (vph)	10	2	3	56	2	683	3	449	131	881	711	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	1.00	
Frt		0.97			0.88		1.00	0.97		1.00	1.00	
Flt Protected		0.97			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1754			1625		1770	3419		1770	1861	
Flt Permitted		0.97			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1754			1625		1770	3419		1770	1861	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	10	2	3	56	2	683	3	449	131	881	711	5
RTOR Reduction (vph)	0	3	0	0	284	0	0	17	0	0	0	0
Lane Group Flow (vph)	0	12	0	0	457	0	3	563	0	881	716	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		5.8			27.6		1.2	27.4		50.9	77.1	
Effective Green, g (s)		5.8			27.6		1.2	27.4		50.9	77.1	
Actuated g/C Ratio		0.04			0.21		0.01	0.21		0.39	0.59	
Clearance Time (s)		4.6			4.6		4.5	5.0		4.5	5.0	
Vehicle Extension (s)		2.0			2.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)		78			343		16	718		690	1100	
v/s Ratio Prot		c0.01			c0.28		0.00	c0.16		c0.50	0.38	
v/s Ratio Perm												
v/c Ratio		0.16			1.33		0.19	0.78		1.28	0.65	
Uniform Delay, d1		59.9			51.4		64.1	48.7		39.8	17.7	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			168.5		2.1	5.9		135.6	1.5	
Delay (s)		60.3			219.9		66.2	54.6		175.4	19.2	
Level of Service		E			F		E	D		F	B	
Approach Delay (s)		60.3			219.9			54.7			105.4	
Approach LOS		E			F			D			F	

Intersection Summary			
HCM 2000 Control Delay	124.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	130.4	Sum of lost time (s)	18.7
Intersection Capacity Utilization	121.9%	ICU Level of Service	H
Analysis Period (min)	15		

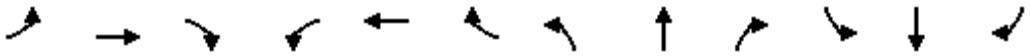
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	10	51	3	91	12	504	61	137	666	9
Future Volume (Veh/h)	17	0	10	51	3	91	12	504	61	137	666	9
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	17	0	10	51	3	91	12	504	61	137	666	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)						2						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1550	1534	670	1513	1508	534	675			565		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1550	1534	670	1513	1508	534	675			565		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	75	100	98	40	97	83	99			86		
cM capacity (veh/h)	67	99	457	85	103	546	916			1007		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	27	145	577	812
Volume Left	17	51	12	137
Volume Right	10	91	61	9
cSH	98	232	916	1007
Volume to Capacity	0.28	0.63	0.01	0.14
Queue Length 95th (ft)	26	93	1	12
Control Delay (s)	55.2	45.3	0.4	3.3
Lane LOS	F	E	A	A
Approach Delay (s)	55.2	45.3	0.4	3.3
Approach LOS	F	E		

Intersection Summary				
Average Delay	7.0			
Intersection Capacity Utilization	92.3%	ICU Level of Service	F	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1	42	9	2	11	62	399	14	14	445	27
Future Volume (Veh/h)	10	1	42	9	2	11	62	399	14	14	445	27
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	10	1	42	9	2	11	62	399	14	14	445	27
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	1028	1024	458	1059	1030	406	472			413		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1028	1024	458	1059	1030	406	472			413		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	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 %	95	100	93	95	99	98	94			99		
cM capacity (veh/h)	196	219	602	178	217	645	1090			1146		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	53	22	475	486
Volume Left	10	9	62	14
Volume Right	42	11	14	27
cSH	423	286	1090	1146
Volume to Capacity	0.13	0.08	0.06	0.01
Queue Length 95th (ft)	11	6	5	1
Control Delay (s)	14.7	18.6	1.7	0.4
Lane LOS	B	C	A	A
Approach Delay (s)	14.7	18.6	1.7	0.4
Approach LOS	B	C		

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	61.8%	ICU Level of Service	B	
Analysis Period (min)	15			

Intersection: 101: South Driveway & Niles Blvd

Movement	NB
Directions Served	TR
Maximum Queue (ft)	34
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 105: Niles Blvd & North Driveway

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	42	28
Average Queue (ft)	17	2
95th Queue (ft)	43	13
Link Distance (ft)	297	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Intersection: 101: Niles Blvd

Movement	NB
Directions Served	TR
Maximum Queue (ft)	35
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	615
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 105: Niles Blvd

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	46	22
Average Queue (ft)	18	1
95th Queue (ft)	45	11
Link Distance (ft)	297	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Warrant 3: Peak-Hour Volumes and Delay

Mission Blvd & Sullivan Underpass
City of Fremont

Project Name: FRM038

Intersection: 2

	Major Street	Minor Street
Street Name	Mission Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: AM Existing

Warrant 3 Met?: Met when either Condition A or B is met — **Yes**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 81 vph

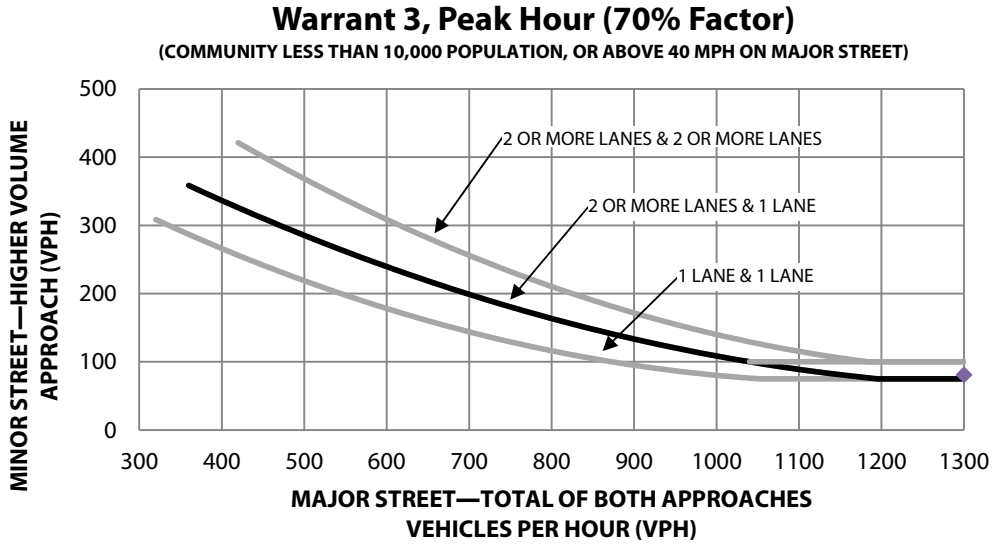
Condition A3 — Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 3338 vph

Condition B — Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & Sullivan Underpass
City of Fremont

Project Name: FRM038

Intersection: 6

	Major Street	Minor Street
Street Name	Niles Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: AM Existing

Warrant 3 Met?: Met when either Condition A or B is met — **No**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 88 vph

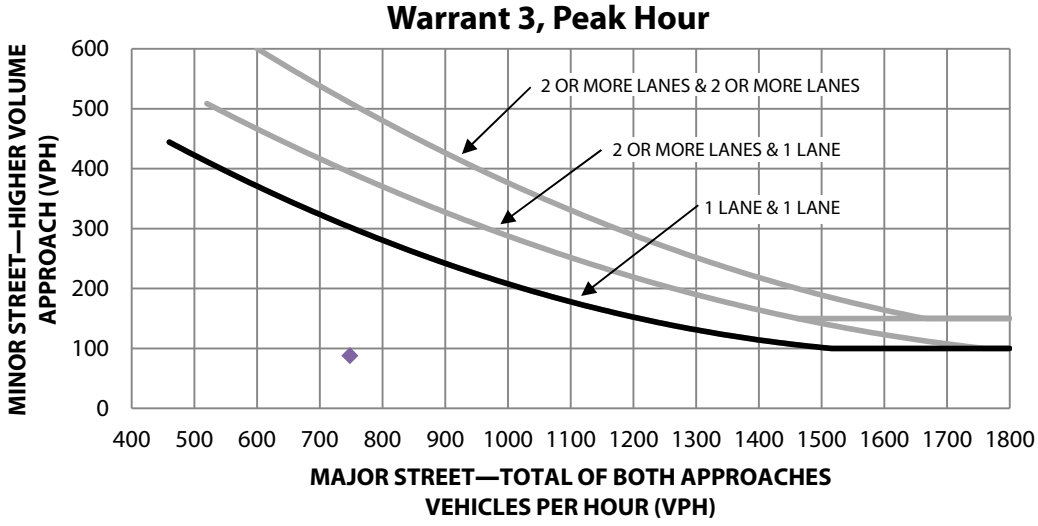
Condition A3 — Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 847 vph

Condition B — Not Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & J St
City of Fremont

Project Name: FRM038

Intersection: 6

	Major Street	Minor Street
Street Name	Niles Blvd	J St
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: AM Existing

Warrant 3 Met?: Met when either Condition A or B is met — **No**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 95 vph

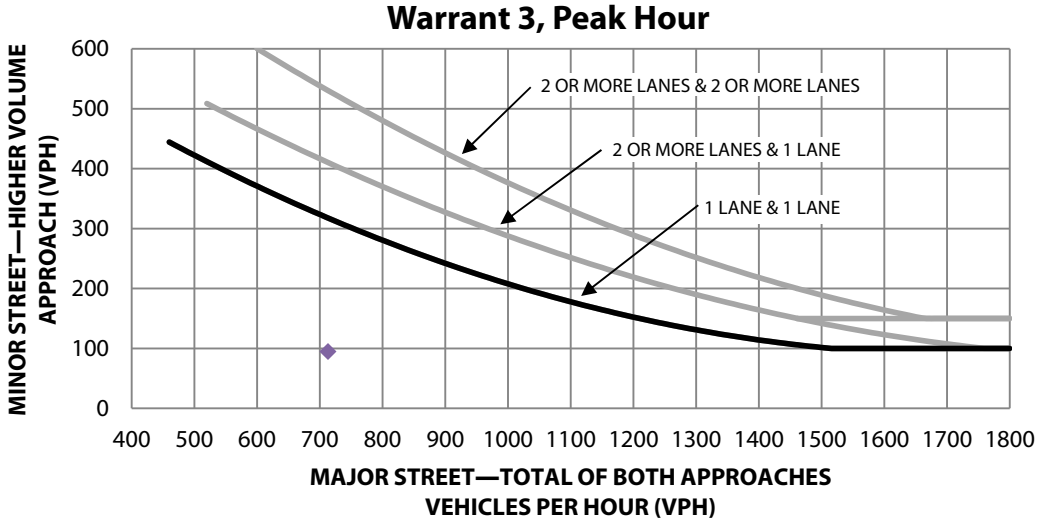
Condition A3 — Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 809 vph

Condition B — Not Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Mission Blvd & Sullivan Underpass
City of Fremont

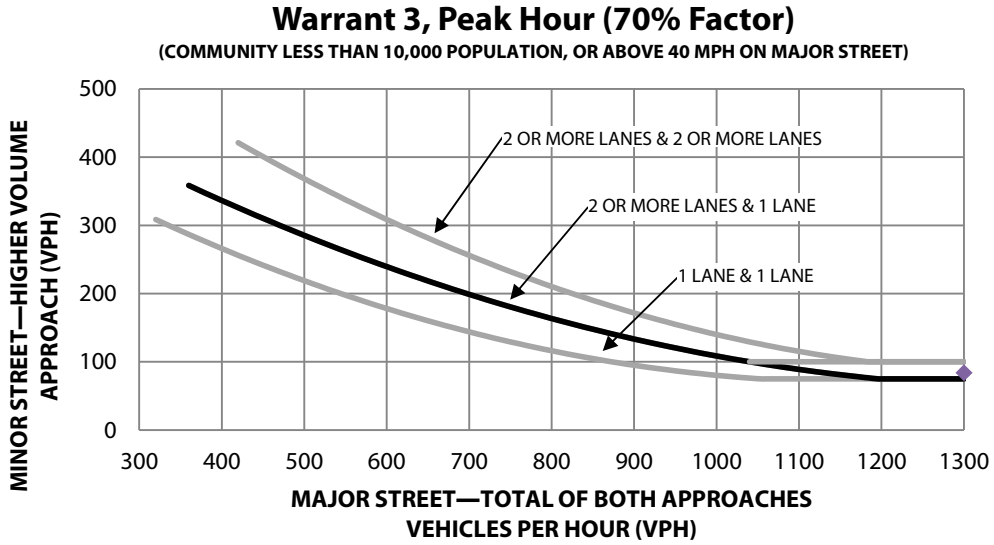
Project Name: FRM038

Intersection: 2

	Major Street	Minor Street
Street Name	Mission Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: PM Existing

Warrant 3 Met?: Met when either Condition A or B is met	**Yes**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met
The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach	
Minor Approach Delay: 0 vehicle-hours	
Condition A2	Not Met
The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes	
Minor Approach Volume: 84 vph	
Condition A3	Met
The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches	
Total Entering Volume: 3639 vph	
Condition B	Met
The plotted point falls above the curve	



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & Sullivan Underpass
City of Fremont

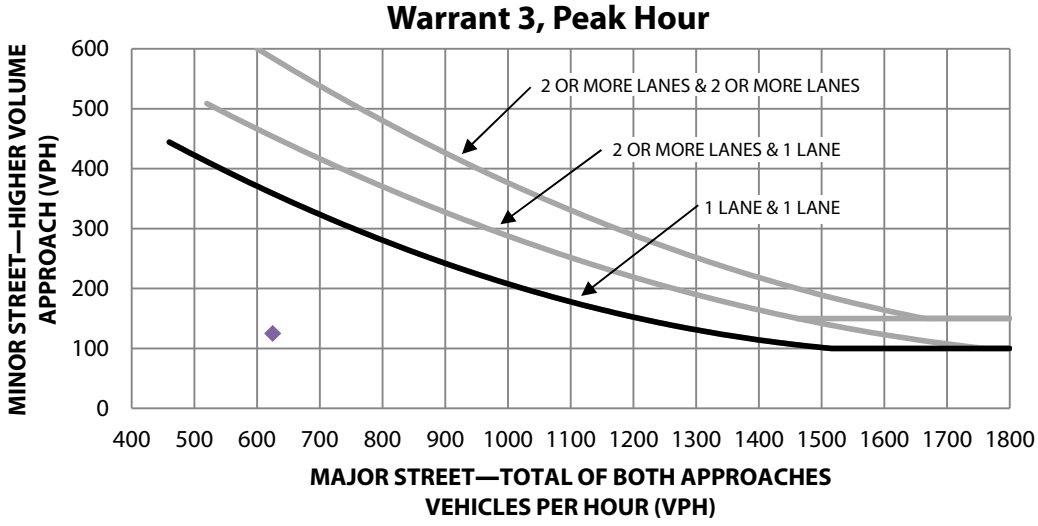
Project Name: FRM038

Intersection: 2

	Major Street	Minor Street
Street Name	Niles Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: PM Existing

Warrant 3 Met?: Met when either Condition A or B is met	**No**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met
The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach	
Minor Approach Delay: 0 vehicle-hours	
Condition A2	Met
The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes	
Minor Approach Volume: 125 vph	
Condition A3	Not Met
The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches	
Total Entering Volume: 763 vph	
Condition B	Not Met
The plotted point falls above the curve	



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & J St
City of Fremont

Project Name: FRM038

Intersection: 7

	Major Street	Minor Street
Street Name	Niles Blvd	J St
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: PM Existing

Warrant 3 Met?: Met when either Condition A or B is met — **No**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 53 vph

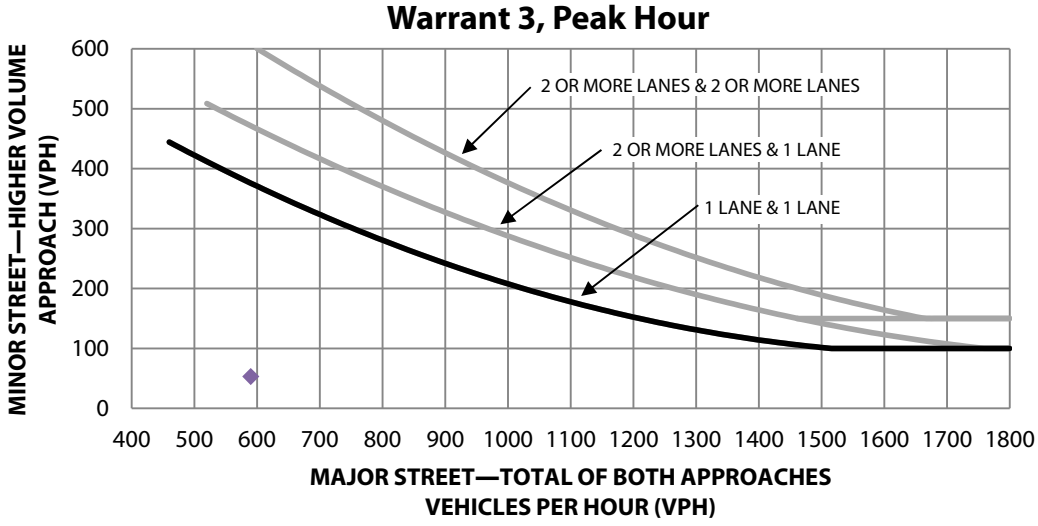
Condition A3 — Not Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 665 vph

Condition B — Not Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Mission Blvd & Sullivan Underpass
City of Fremont

Project Name: FRM038

Intersection: 2

	Major Street	Minor Street
Street Name	Mission Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: AM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met — **Yes**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 81 vph

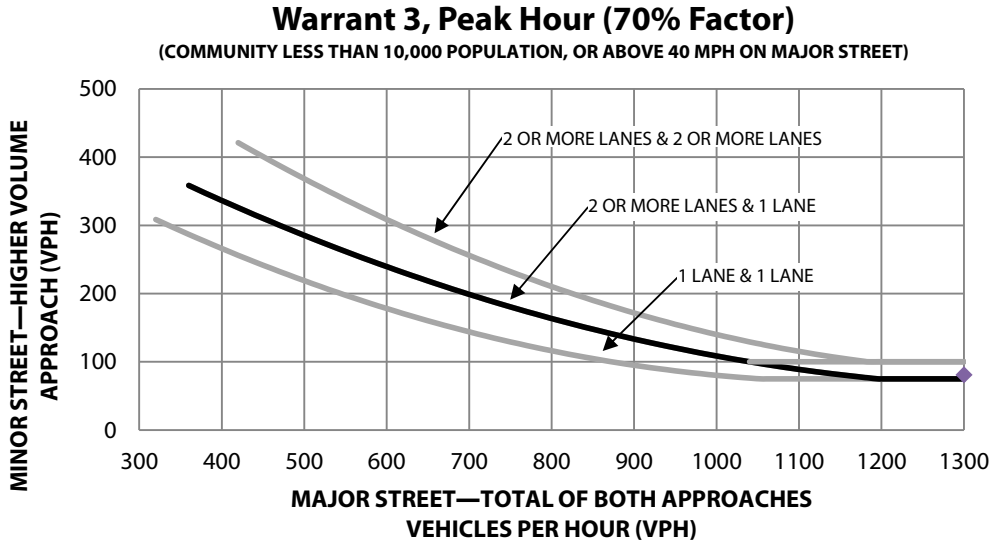
Condition A3 — Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 3348 vph

Condition B — Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & Sullivan Underpass
City of Fremont

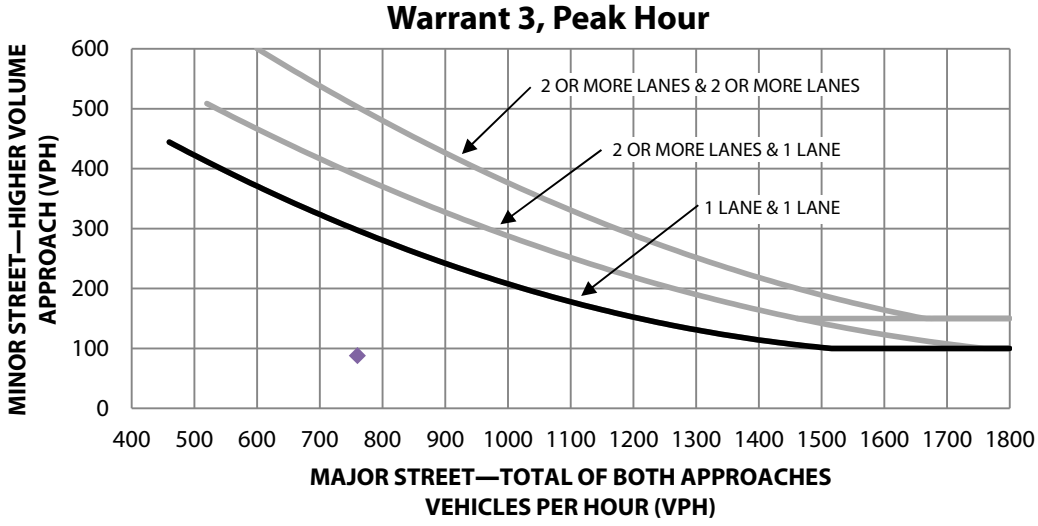
Project Name: FRM038

Intersection: 6

	Major Street	Minor Street
Street Name	Niles Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: AM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met	**No**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met
The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach	
Minor Approach Delay: 0 vehicle-hours	
Condition A2	Not Met
The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes	
Minor Approach Volume: 88 vph	
Condition A3	Met
The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches	
Total Entering Volume: 859 vph	
Condition B	Not Met
The plotted point falls above the curve	



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & J St
City of Fremont

Project Name: FRM038

Intersection: 6

	Major Street	Minor Street
Street Name	Niles Blvd	J St
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: AM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met	**No**
Condition A: Met when conditions A1, A2, and A3 are met	Not Met
Condition A1	Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 95 vph

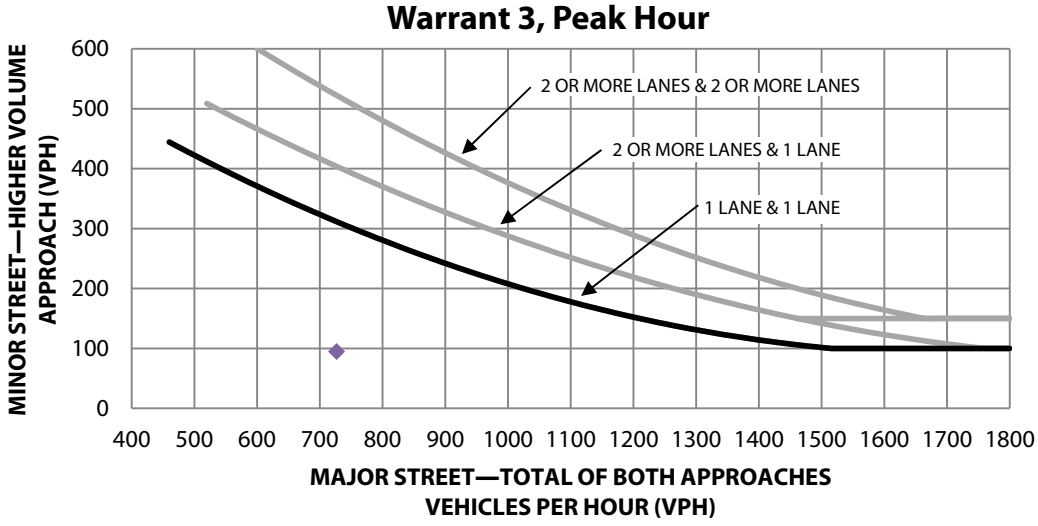
Condition A3 — Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 823 vph

Condition B — Not Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Mission Blvd & Sullivan Underpass
City of Fremont

Project Name: FRM038

Intersection: 2

	Major Street	Minor Street
Street Name	Mission Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	2	1
Approach Speed	45	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: PM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met — **Yes**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 84 vph

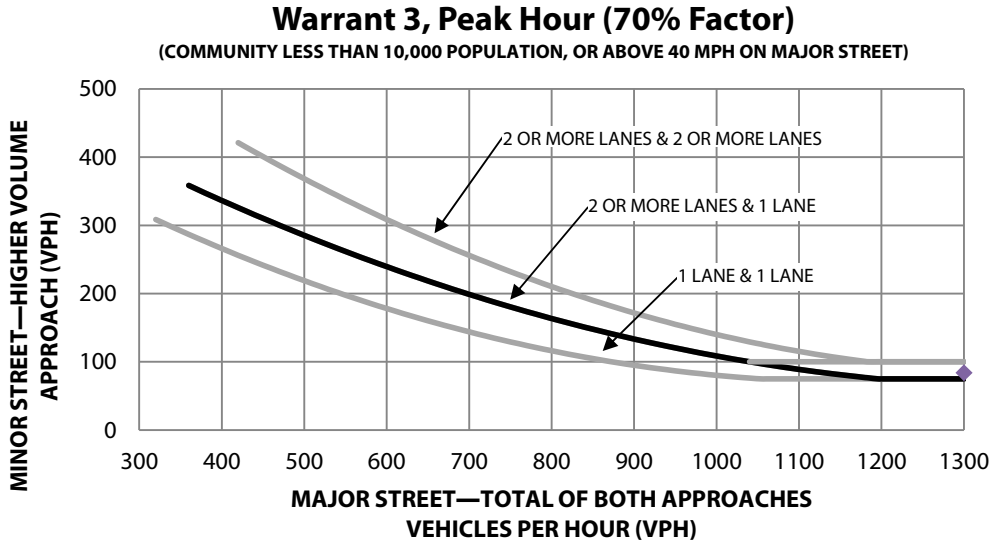
Condition A3 — Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 3653 vph

Condition B — Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & Sullivan Underpass
City of Fremont

Project Name: FRM038

Intersection: 2

	Major Street	Minor Street
Street Name	Niles Blvd	Sullivan Underpass
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: PM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met — **No**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 125 vph

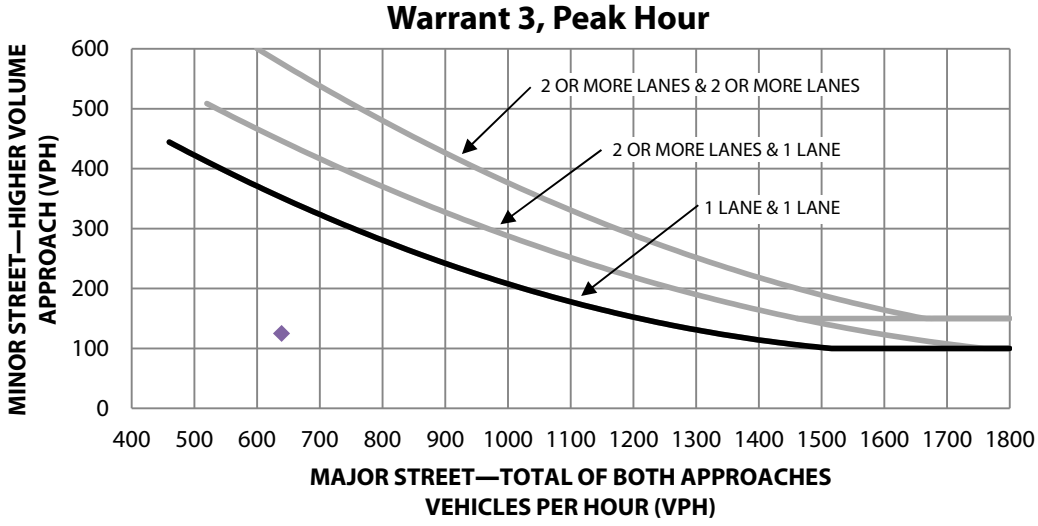
Condition A3 — Not Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 777 vph

Condition B — Not Met

The plotted point falls above the curve



Warrant 3: Peak-Hour Volumes and Delay

Niles Blvd & J St
City of Fremont

Project Name: FRM038

Intersection: 7

	Major Street	Minor Street
Street Name	Niles Blvd	J St
Direction	N-S	E-W
Number of Lanes	1	1
Approach Speed	25	25

Population less than 10,000? No
Date of Count: Thursday, May 04, 2017
Scenario: PM Existing plus Project

Warrant 3 Met?: Met when either Condition A or B is met — **No**

Condition A: Met when conditions A1, A2, and A3 are met — Not Met

Condition A1 — Not Met

The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one lane approach, or five vehicle-hours for a two-lane approach

Minor Approach Delay: 0 vehicle-hours

Condition A2 — Not Met

The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic of 150 vph for two moving lanes

Minor Approach Volume: 53 vph

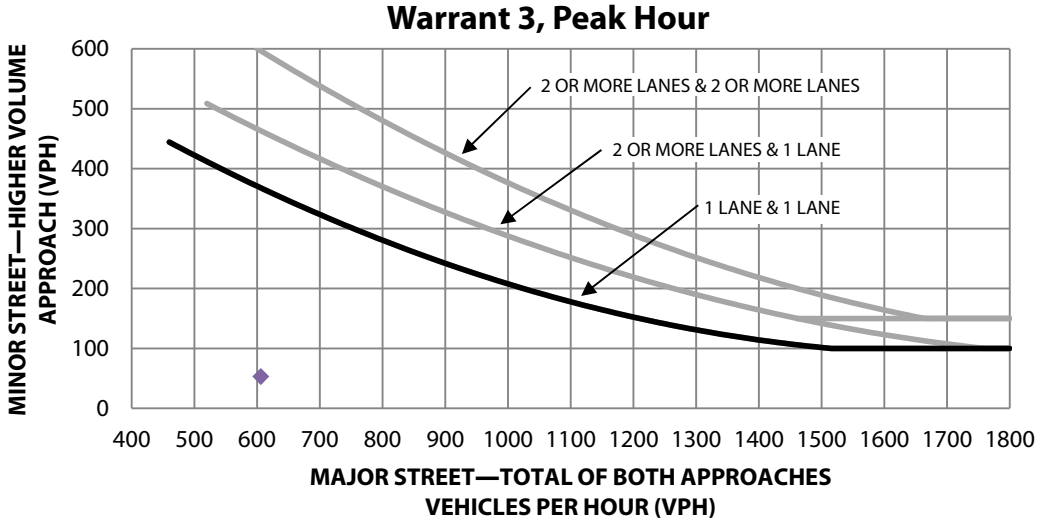
Condition A3 — Not Met

The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more appraches or 650 vph for intersections with three approaches

Total Entering Volume: 681 vph

Condition B — Not Met

The plotted point falls above the curve



Intersection Collision Rate Calculations

Niles Gateway

Intersection # 1: Mission Blvd & Nursery Ave
Date of Count: Thursday, May 04, 2017

Number of Collisions: 5
Number of Injuries: 4
Number of Fatalities: 0
ADT: 43400
Start Date: June 30, 2012
End Date: July 1, 2017
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{5 \times 1{,}000{,}000}{43{,}400 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.06 c/mve**	**0.0%**	**80.0%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**37.9%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 2: Misssion Blvd & Sullivan Underpass
Date of Count: Thursday, May 04, 2017

Number of Collisions: 4
Number of Injuries: 4
Number of Fatalities: 0
ADT: 41700
Start Date: June 30, 2012
End Date: July 1, 2017
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{4 \times 1{,}000{,}000}{41{,}700 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.05 c/mve**	**0.0%**	**100.0%**
Statewide Average*	**0.14 c/mve**	**0.7%**	**38.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Niles Gateway

Intersection # 3: Mission Blvd & Niles Blvd/Niles Canyon Rd

Date of Count: Saturday, January 00, 1900

Number of Collisions: 11
Number of Injuries: 8
Number of Fatalities: 0
ADT: 56100
Start Date: June 30, 2012
End Date: July 1, 2017
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{11 \times 1{,}000{,}000}{56{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.11 c/mve**	**0.0%**	**72.7%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**37.9%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 4: Mission Blvd & Mowry Ave

Date of Count: Thursday, May 04, 2017

Number of Collisions: 1
Number of Injuries: 0
Number of Fatalities: 0
ADT: 14100
Start Date: June 30, 2012
End Date: July 1, 2017
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{1 \times 1{,}000{,}000}{14{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.04 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**37.9%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Niles Gateway

Intersection # 5: Niles Blvd & Nursery Ave

Date of Count: Thursday, May 04, 2017

Number of Collisions: 2
Number of Injuries: 1
Number of Fatalities: 0
ADT: 19500
Start Date: June 30, 2012
End Date: July 1, 2017
Number of Years: 5

Intersection Type: Four-Legged
Control Type: Signals
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{2 \times 1{,}000{,}000}{19{,}500 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.06 c/mve**	**0.0%**	**50.0%**
Statewide Average*	**0.43 c/mve**	**0.4%**	**37.9%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection # 6: Niles Blvd & Sullivan Underpass

Date of Count: Thursday, May 04, 2017

Number of Collisions: 0
Number of Injuries: 0
Number of Fatalities: 0
ADT: 10600
Start Date: June 30, 2012
End Date: July 1, 2017
Number of Years: 5

Intersection Type: Y
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions x 1 Million}}{\text{ADT x 365 Days per Year x Number of Years}}$$

$$\text{collision rate} = \frac{0 \times 1{,}000{,}000}{10{,}600 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.00 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.14 c/mve**	**0.7%**	**38.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans

Intersection Collision Rate Calculaions

Niles Gateway

Intersection # 7: Niles Blvd & J St

Date of Count: Thursday, May 04, 2017

Number of Collisions: 1
Number of Injuries: 0
Number of Fatalities: 0
ADT: 10100
Start Date: June 30, 2012
End Date: July 1, 2017
Number of Years: 5

Intersection Type: Tee
Control Type: Stop & Yield Controls
Area: Suburban

$$\text{collision rate} = \frac{\text{Number of Collisions} \times 1 \text{ Million}}{\text{ADT} \times 365 \text{ Days per Year} \times \text{Number of Years}}$$

$$\text{collision rate} = \frac{1 \times 1{,}000{,}000}{10{,}100 \times 365 \times 5}$$

	Collision Rate	Fatality Rate	Injury Rate
Study Intersection	**0.05 c/mve**	**0.0%**	**0.0%**
Statewide Average*	**0.14 c/mve**	**0.7%**	**38.0%**

ADT = average daily total vehicles entering intersection
c/mve = collisions per million vehicles entering intersection
* 2013 Collision Data on California State Highways, Caltrans