Alternatives 1 and 3 - Summer

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	387	149	28		**210**	0%	100%	1,632
Condo/Hotel	313	120	23		**170**	0%	100%	1,324
Penthouse Condos	111	40	8		**63**	0%	100%	489
Timeshare	116	45	8		**63**	0%	100%	486
Residential Condos	885	345	64		**476**	100%	0%	2,104
Apartments (Employee)	87	34	6		**47**	100%	0%	206
Retail (Commercial)	1,074	382	78	208	**406**	85%	15%	2,000
Recreational	40	6	3		**31**	50%	50%	190
							Alternatives 1 and 3 VMT	8,431

Alternative 1A - Summer

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	387	149	28		**210**	0%	100%	1,630
Condo/Hotel	313	120	23		**170**	0%	100%	1,322
Penthouse Condos	111	40	8		**63**	0%	100%	489
Timeshare	116	45	8		**63**	0%	100%	486
Residential Condos	862	336	63		**463**	100%	0%	2,047
Apartments (Employee)	87	34	6		**47**	100%	0%	206
Retail (Commercial)	1,074	376	78	208	**412**	85%	15%	2,027
Recreational	40	6	3		**31**	50%	50%	189
							Alternatives 1 and 3 VMT	8,396

Alternative 4 - Summer

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Residential Lots	160	44	7	0	**109**	100%	0%	481
Retail (Commercial)	644	37	29	196	**382**	85%	15%	1,881
							Alternative 4 VMT	2,362

Alternative 5 - Summer

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	387	149	29		**209**	0%	100%	1,626
Residential Condos	1,319	514	98		**707**	100%	0%	3,126
Residential Lots	160	62	12		**86**	100%	0%	381
Retail (Commercial)	1,074	406	80	200	**388**	85%	15%	1,912
							Alternative 5 VMT	7,045

Alternative 6 - Summer

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	261	100	19		**142**	0%	100%	1,102
Condo/Hotel	127	48	9		**70**	0%	100%	541
Residential Condos	1,143	445	84		**614**	100%	0%	2,713
Residential Lots	140	55	10		**75**	100%	0%	330
Employee Housing	81	42	6		**33**	100%	0%	146
Retail (Commercial)	1,074	380	89	206	**399**	85%	15%	1,964
							Alternative 6 VMT	6,796

Alternatives 1 and 3 - Winter

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	387	182	35		**170**	0%	100%	1,324
Condo/Hotel	313	147	28		**138**	0%	100%	1,073
Penthouse Condos	111	48	10		**53**	0%	100%	412
Timeshare	116	56	10		**50**	0%	100%	386
Residential Condos	885	345	79		**461**	100%	0%	2,037
Apartments (Employee)	87	45	8		**34**	100%	0%	151
Retail (Commercial)	1,074	382	96	205	**391**	85%	15%	1,925
Recreation (Skiers)	1,000	0	89		**911**	75%	25%	4,788
							Total VMT	12,096
							Existing HMR VMT	13,328
							Alternatives 1 and 3 VMT	**-1,232**

Alternative 1A - Winter

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	387	182	35		**170**	0%	100%	1,323
Condo/Hotel	313	147	28		**138**	0%	100%	1,071
Penthouse Condos	111	48	10		**53**	0%	100%	412
Timeshare	116	56	10		**50**	0%	100%	385
Residential Condos	862	336	77		**449**	100%	0%	1,982
Apartments (Employee)	87	45	8		**34**	100%	0%	151
Retail (Commercial)	1,074	376	97	205	**396**	85%	15%	1,952
Recreation (Skiers)	1,000	0	90		**910**	75%	25%	4,785
							Total VMT	12,061
							Existing HMR VMT	13,328
							Alternatives 1 and 3 VMT	**-1,266**

Alternative 4 - Winter

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Residential Lots	160	44	7	0	**109**	100%	0%	481
Retail (Commercial)	644	37	29	196	**382**	85%	15%	1,881
							Alternative 4 VMT	2,362
							Existing HMR VMT	13,328
							Alternative 4 VMT	**-10,966**

Alternative 5 - Winter

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	387	182	34		**171**	0%	100%	1,327
Residential Condos	1,319	514	116		**689**	100%	0%	3,043
Residential Lots	160	62	14		**84**	100%	0%	371
Apartments (Employee)	81	42	7		**32**	100%	0%	141
Retail (Commercial)	1,074	425	95	192	**362**	85%	15%	1,783
Recreation (Skiers)	1,000	0	88		**912**	75%	25%	4,793
							Alternative 5 VMT	11,458
							Existing HMR VMT	13,328
							Alternative 5 VMT	**-1,869**

Alternative 6 - Winter

Residential Trip Length	4.42
Visitor Trip Length	7.77

	Daily Trips	Internal Capture	Alt. Mode	Pass-By	Total Ext. Trips	Residential Trips	Visitor Trips	VMT
Hotel	261	123	22		**116**	0%	100%	901
Condo/Hotel	127	59	11		**57**	0%	100%	445
Residential Condos	1,143	445	97		**601**	100%	0%	2,657
Residential Lots	140	55	12		**73**	100%	0%	323
Employee Housing	81	42	7		**32**	100%	0%	142
Retail (Commercial)	1,074	361	122	210	**381**	85%	15%	1,875
Recreation (Skiers)	1,000	0	85		**915**	75%	25%	4,812
							Alternative 6 VMT	11,156
							Existing HMR VMT	13,328
							Alternative 6 VMT	**-2,172**

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.86			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (prot)	1770	3291		3433	3473		1681	1523			1814	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3291		3433	3473		1681	1523			1814	1583
Volume (vph)	55	346	304	413	335	48	375	30	385	54	46	54
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	398	349	475	385	55	431	34	443	62	53	62
RTOR Reduction (vph)	0	177	0	0	12	0	0	303	0	0	0	46
Lane Group Flow (vph)	63	570	0	475	428	0	431	174	0	0	115	16
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	18.6		12.3	27.1		25.6	25.6			8.7	8.7
Effective Green, g (s)	3.8	18.6		12.3	27.1		25.6	25.6			8.7	8.7
Actuated g/C Ratio	0.05	0.23		0.15	0.33		0.32	0.32			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	83	754		520	1159		530	480			194	170
v/s Ratio Prot	0.04	c0.17		c0.14	0.12		c0.26	0.11			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.76		0.91	0.37		0.81	0.36			0.59	0.09
Uniform Delay, d1	38.2	29.2		33.9	20.6		25.6	21.5			34.6	32.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	4.3		20.5	0.2		12.8	2.1			4.8	0.2
Delay (s)	70.4	33.5		54.4	20.8		38.4	23.6			39.4	32.9
Level of Service	E	C		D	C		D	C			D	C
Approach Delay (s)		36.4			38.2			30.6			37.1	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	35.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	81.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	794	0	0	771	0
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	0	0	0	0	923	0	0	897	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	923	0	0	897	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								102.4			102.4	
Effective Green, g (s)								102.4			102.4	
Actuated g/C Ratio								0.85			0.85	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1579			1579	
v/s Ratio Prot								c0.50			0.48	
v/s Ratio Perm												
v/c Ratio								0.58			0.57	
Uniform Delay, d1								2.8			2.7	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.6			1.5	
Delay (s)								4.4			4.2	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			4.4			4.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	24	7	0	18	19	713	3	13	648	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	29	8	0	22	23	859	4	16	781	117
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	1799	1779	839	1806	1836	861	898			863		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1799	1779	839	1806	1836	861	898			863		
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 %	0	100	92	84	100	94	97			98		
cM capacity (veh/h)	56	78	366	54	72	355	756			780		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	29	30	886	913
Volume Left	93	0	8	23	16
Volume Right	0	29	22	4	117
cSH	56	366	139	756	780
Volume to Capacity	1.66	0.08	0.22	0.03	0.02
Queue Length 95th (ft)	216	6	20	2	2
Control Delay (s)	481.6	15.7	37.9	0.8	0.6
Lane LOS	F	C	E	A	A
Approach Delay (s)	370.9		37.9	0.8	0.6
Approach LOS	F		E		

Intersection Summary			
Average Delay	24.4		
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	553	26	7	592	8
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	3	0	3	10	0	13	3	700	33	9	749	10
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1520	1524	768	1510	1513	730	766			740		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1520	1524	768	1510	1513	730	766			740		
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	99	89	100	97	100			99		
cM capacity (veh/h)	91	115	397	95	117	417	842			862		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	23	735	768
Volume Left	3	10	3	9
Volume Right	3	13	33	10
cSH	149	167	842	862
Volume to Capacity	0.03	0.14	0.00	0.01
Queue Length 95th (ft)	3	12	0	1
Control Delay (s)	30.1	30.0	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	30.1	30.0	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	544	572	45
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	30	10	7	611	643	51
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1326	685	710			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1326	685	710			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	82	98	99			
cM capacity (veh/h)	166	442	876			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	618	693
Volume Left	30	7	0
Volume Right	10	0	51
cSH	196	876	1700
Volume to Capacity	0.21	0.01	0.41
Queue Length 95th (ft)	19	1	0
Control Delay (s)	28.0	0.2	0.0
Lane LOS	D	A	
Approach Delay (s)	28.0	0.2	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	517	2	4	523	9
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)	4	2	7	8	1	5	3	562	2	4	568	10
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	1158	1153	573	1159	1157	563	578			564		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1158	1153	573	1159	1157	563	578			564		
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	99	95	99	99	100			100		
cM capacity (veh/h)	170	196	519	168	195	526	995			1007		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	567	583
Volume Left	4	8	3	4
Volume Right	7	5	2	10
cSH	265	231	995	1007
Volume to Capacity	0.05	0.06	0.00	0.00
Queue Length 95th (ft)	4	5	0	0
Control Delay (s)	19.3	21.6	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	19.3	21.6	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	519	528	8
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	4	1	1	618	629	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1254	633	638			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1254	633	638			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	190	480	946			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	618	638
Volume Left	4	1	0	0
Volume Right	1	0	0	10
cSH	223	946	1700	1700
Volume to Capacity	0.02	0.00	0.36	0.38
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	21.5	8.8	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	21.5	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	38.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	1	0	0	0	2	505	0	0	546	3
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)	0	0	1	0	0	0	2	549	0	0	593	3
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	1148	1148	595	1149	1150	549	597			549		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1148	1148	595	1149	1150	549	597			549		
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 %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	175	198	504	175	198	536	980			1021		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	0	551	597
Volume Left	0	0	2	0
Volume Right	1	0	0	3
cSH	504	1700	980	1021
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	12.2	0.0	0.1	0.0
Lane LOS	B	A	A	
Approach Delay (s)	12.2	0.0	0.1	0.0
Approach LOS	B	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	0	6	5	0	12	4	486	10	7	534	5
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	6	0	8	6	0	15	5	615	13	9	676	6
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	1344	1335	679	1336	1332	622	682			628		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1344	1335	679	1336	1332	622	682			628		
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	98	95	100	97	99			99		
cM capacity (veh/h)	123	151	452	127	152	487	911			954		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	6	8	6	15	633	691
Volume Left	6	0	6	0	5	9
Volume Right	0	8	0	15	13	6
cSH	123	452	127	487	911	954
Volume to Capacity	0.05	0.02	0.05	0.03	0.01	0.01
Queue Length 95th (ft)	4	1	4	2	0	1
Control Delay (s)	35.7	13.1	34.9	12.6	0.2	0.2
Lane LOS	E	B	D	B	A	A
Approach Delay (s)	23.4		19.2		0.2	0.2
Approach LOS	C		C			

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	0	5	3	0	5	1	509	1	2	553	5
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	4	0	5	3	0	5	1	559	1	2	608	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1182	1177	610	1182	1180	560	613			560		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1182	1177	610	1182	1180	560	613			560		
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	99	98	100	99	100			100		
cM capacity (veh/h)	164	190	494	164	190	528	966			1011		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	9	562	615
Volume Left	4	3	1	2
Volume Right	5	5	1	5
cSH	261	288	966	1011
Volume to Capacity	0.04	0.03	0.00	0.00
Queue Length 95th (ft)	3	2	0	0
Control Delay (s)	19.3	17.9	0.0	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	19.3	17.9	0.0	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	42	19	11	509	557	39
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	47	21	12	566	619	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1231	641	662			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1231	641	662			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	76	96	99			
cM capacity (veh/h)	193	475	926			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	68	578	662
Volume Left	47	12	0
Volume Right	21	0	43
cSH	237	926	1700
Volume to Capacity	0.29	0.01	0.39
Queue Length 95th (ft)	28	1	0
Control Delay (s)	26.1	0.4	0.0
Lane LOS	D	A	
Approach Delay (s)	26.1	0.4	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	566	37	13	409	16	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	602	39	14	435	17	12
Pedestrians	8			6		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			641		1093	628
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			641		1093	628
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		93	98
cM capacity (veh/h)			943		232	481

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	641	449	29
Volume Left	0	14	17
Volume Right	39	0	12
cSH	1700	943	294
Volume to Capacity	0.38	0.01	0.10
Queue Length 95th (ft)	0	1	8
Control Delay (s)	0.0	0.4	18.6
Lane LOS		A	C
Approach Delay (s)	0.0	0.4	18.6
Approach LOS			C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	7	0	2	6	0	4	3	426	0	1	573	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	0	2	7	0	4	3	473	0	1	637	14
Pedestrians		21			30			30			30	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1182	1177	695	1188	1184	533	672			503		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1182	1177	695	1188	1184	533	672			503		
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	99	96	100	99	100			100		
cM capacity (veh/h)	153	182	424	150	180	520	902			1035		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	11	477	652
Volume Left	8	7	3	1
Volume Right	2	4	0	14
cSH	178	210	902	1035
Volume to Capacity	0.06	0.05	0.00	0.00
Queue Length 95th (ft)	4	4	0	0
Control Delay (s)	26.4	23.1	0.1	0.0
Lane LOS	D	C	A	A
Approach Delay (s)	26.4	23.1	0.1	0.0
Approach LOS	D	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.87			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (prot)	1770	3291		3433	3454		1681	1540			1814	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3291		3433	3454		1681	1540			1814	1583
Volume (vph)	55	260	228	310	251	48	281	30	289	54	46	54
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	289	253	344	279	53	312	33	321	60	51	60
RTOR Reduction (vph)	0	190	0	0	18	0	0	201	0	0	0	47
Lane Group Flow (vph)	61	352	0	344	314	0	287	178	0	0	111	13
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	14.2		10.5	20.9		25.9	25.9			8.2	8.2
Effective Green, g (s)	3.8	14.2		10.5	20.9		25.9	25.9			8.2	8.2
Actuated g/C Ratio	0.05	0.19		0.14	0.28		0.35	0.35			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	90	625		482	965		582	533			199	174
v/s Ratio Prot	0.03	c0.11		c0.10	0.09		c0.17	0.12			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.68	0.56		0.71	0.33		0.49	0.33			0.56	0.07
Uniform Delay, d1	34.9	27.5		30.7	21.4		19.3	18.1			31.6	29.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	18.4	1.2		5.0	0.2		3.0	1.7			3.4	0.2
Delay (s)	53.3	28.6		35.7	21.6		22.2	19.8			34.9	30.1
Level of Service	D	C		D	C		C	B			C	C
Approach Delay (s)		31.1			28.7			20.8			33.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	74.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	596	0	0	578	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	0	0	0	662	0	0	642	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	662	0	0	642	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								105.8			105.8	
Effective Green, g (s)								105.8			105.8	
Actuated g/C Ratio								0.87			0.87	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1621			1621	
v/s Ratio Prot								c0.36			0.34	
v/s Ratio Perm												
v/c Ratio								0.41			0.40	
Uniform Delay, d1								1.6			1.6	
Progression Factor								1.00			1.00	
Incremental Delay, d2								0.8			0.7	
Delay (s)								2.4			2.3	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			2.4			2.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	2.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	15.8
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	24	7	0	18	19	535	3	13	476	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	27	8	0	20	21	594	3	14	529	108
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	1270	1252	583	1277	1304	596	637			598		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1270	1252	583	1277	1304	596	637			598		
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 %	37	100	95	94	100	96	98			99		
cM capacity (veh/h)	135	166	512	132	154	503	947			979		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	27	28	619	651
Volume Left	86	0	8	21	14
Volume Right	0	27	20	3	108
cSH	135	512	282	947	979
Volume to Capacity	0.63	0.05	0.10	0.02	0.01
Queue Length 95th (ft)	84	4	8	2	1
Control Delay (s)	69.0	12.4	19.2	0.6	0.4
Lane LOS	F	B	C	A	A
Approach Delay (s)	55.5		19.2	0.6	0.4
Approach LOS	F		C		

Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	55.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	445	26	7	454	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	2	9	0	11	2	494	29	8	504	9
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1063	1066	523	1054	1056	523	520			530		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1063	1066	523	1054	1056	523	520			530		
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 %	99	100	100	95	100	98	100			99		
cM capacity (veh/h)	192	217	548	197	220	548	1040			1031		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	20	526	521
Volume Left	2	9	2	8
Volume Right	2	11	29	9
cSH	284	306	1040	1031
Volume to Capacity	0.02	0.07	0.00	0.01
Queue Length 95th (ft)	1	5	0	1
Control Delay (s)	17.9	17.6	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	17.9	17.6	0.1	0.2
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	438	429	45
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	30	10	7	487	477	50
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1035	519	544			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1035	519	544			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	98	99			
cM capacity (veh/h)	248	549	1011			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	493	527
Volume Left	30	7	0
Volume Right	10	0	50
cSH	288	1011	1700
Volume to Capacity	0.14	0.01	0.31
Queue Length 95th (ft)	12	0	0
Control Delay (s)	19.5	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	19.5	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	453	2	4	392	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	2	7	8	1	6	3	503	2	4	436	10
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	967	962	441	968	966	504	446			506		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	967	962	441	968	966	504	446			506		
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 %	98	99	99	97	100	99	100			100		
cM capacity (veh/h)	229	254	617	228	253	567	1115			1059		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	509	450
Volume Left	4	8	3	4
Volume Right	7	6	2	10
cSH	343	299	1115	1059
Volume to Capacity	0.04	0.05	0.00	0.00
Queue Length 95th (ft)	3	4	0	0
Control Delay (s)	15.9	17.7	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	15.9	17.7	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	454	397	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	1	1	504	441	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	952	446	450			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	952	446	450			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	287	613	1110			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	4	1	504	450
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	331	1110	1700	1700
Volume to Capacity	0.01	0.00	0.30	0.26
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	16.0	8.2	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	16.0	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	0	5	0	0	0	6	469	0	0	410	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	0	6	0	0	0	7	521	0	0	456	7
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	993	993	459	999	997	521	462			521		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	993	993	459	999	997	521	462			521		
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 %	98	100	99	100	100	100	99			100		
cM capacity (veh/h)	223	244	602	219	243	555	1099			1045		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	0	528	462
Volume Left	4	0	7	0
Volume Right	6	0	0	7
cSH	343	1700	1099	1045
Volume to Capacity	0.03	0.00	0.01	0.00
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	15.8	0.0	0.2	0.0
Lane LOS	C	A	A	
Approach Delay (s)	15.8	0.0	0.2	0.0
Approach LOS	C	A		

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	39.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	80	0	48	5	0	12	19	400	10	7	381	29
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	89	0	53	6	0	13	21	444	11	8	423	32
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	961	953	439	1001	963	450	456			456		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	961	953	439	1001	963	450	456			456		
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 %	61	100	91	97	100	98	98			99		
cM capacity (veh/h)	226	252	618	199	249	609	1105			1105		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	89	53	6	13	477	463
Volume Left	89	0	6	0	21	8
Volume Right	0	53	0	13	11	32
cSH	226	618	199	609	1105	1105
Volume to Capacity	0.39	0.09	0.03	0.02	0.02	0.01
Queue Length 95th (ft)	44	7	2	2	1	1
Control Delay (s)	30.8	11.4	23.7	11.0	0.6	0.2
Lane LOS	D	B	C	B	A	A
Approach Delay (s)	23.5		14.8		0.6	0.2
Approach LOS	C		B			

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	56	0	67	3	0	5	7	369	1	2	425	7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	62	0	74	3	0	6	8	410	1	2	472	8
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	912	907	476	981	911	411	480			411		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	912	907	476	981	911	411	480			411		
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	87	98	100	99	99			100		
cM capacity (veh/h)	251	273	589	198	272	641	1082			1148		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	137	9	419	482
Volume Left	62	3	8	2
Volume Right	74	6	1	8
cSH	365	349	1082	1148
Volume to Capacity	0.37	0.03	0.01	0.00
Queue Length 95th (ft)	42	2	1	0
Control Delay (s)	20.7	15.6	0.2	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	20.7	15.6	0.2	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	101	59	22	313	438	72
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	112	66	24	348	487	80
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	923	527	567			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	923	527	567			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	62	88	98			
cM capacity (veh/h)	292	551	1005			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	178	372	567
Volume Left	112	24	0
Volume Right	66	0	80
cSH	353	1005	1700
Volume to Capacity	0.50	0.02	0.33
Queue Length 95th (ft)	68	2	0
Control Delay (s)	25.1	0.8	0.0
Lane LOS	D	A	
Approach Delay (s)	25.1	0.8	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.92		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (prot)	1770	3273		3433	3473		1681	1546			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (perm)	1770	3273		3433	3473		1681	1546			1811	1583
Volume (vph)	55	346	347	436	335	48	380	26	394	54	40	54
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	398	399	501	385	55	437	30	453	62	46	62
RTOR Reduction (vph)	0	202	0	0	12	0	0	154	0	0	0	50
Lane Group Flow (vph)	63	595	0	501	428	0	355	411	0	0	108	12
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	19.1		13.3	28.6		24.5	24.5			8.5	8.5
Effective Green, g (s)	3.8	19.1		13.3	28.6		24.5	24.5			8.5	8.5
Actuated g/C Ratio	0.05	0.23		0.16	0.35		0.30	0.30			0.10	0.10
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	83	768		561	1220		506	465			189	165
v/s Ratio Prot	0.04	c0.18		c0.15	0.12		0.21	c0.27			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.77		0.89	0.35		0.70	0.88			0.57	0.07
Uniform Delay, d1	38.3	29.1		33.4	19.5		25.2	27.1			34.7	32.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	4.9		16.5	0.2		7.9	20.9			4.1	0.2
Delay (s)	70.5	34.0		49.8	19.7		33.1	48.0			38.8	33.1
Level of Service	E	C		D	B		C	D			D	C
Approach Delay (s)		36.7			35.7			42.2			36.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	38.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	81.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.9%	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												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	804	0	0	831	0
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	0	0	0	0	935	0	0	966	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	935	0	0	966	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								102.4			102.4	
Effective Green, g (s)								102.4			102.4	
Actuated g/C Ratio								0.85			0.85	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1579			1579	
v/s Ratio Prot								0.50			c0.52	
v/s Ratio Perm												
v/c Ratio								0.59			0.61	
Uniform Delay, d1								2.8			2.9	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.6			1.8	
Delay (s)								4.5			4.7	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			4.5			4.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	27	7	0	18	22	723	3	13	708	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	33	8	0	22	27	871	4	16	853	117
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	1890	1870	911	1901	1927	873	970			875		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1890	1870	911	1901	1927	873	970			875		
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 %	0	100	90	81	100	94	96			98		
cM capacity (veh/h)	48	68	332	45	63	350	711			772		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	33	30	901	986
Volume Left	93	0	8	27	16
Volume Right	0	33	22	4	117
cSH	48	332	121	711	772
Volume to Capacity	1.94	0.10	0.25	0.04	0.02
Queue Length 95th (ft)	233	8	23	3	2
Control Delay (s)	622.7	17.0	44.2	1.1	0.6
Lane LOS	F	C	E	A	A
Approach Delay (s)	465.4		44.2	1.1	0.6
Approach LOS	F		E		

Intersection Summary			
Average Delay	30.0		
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	561	26	7	648	8
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	3	0	3	10	0	13	3	710	33	9	820	10
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1601	1605	839	1591	1594	741	837			750		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1601	1605	839	1591	1594	741	837			750		
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	99	88	100	97	100			99		
cM capacity (veh/h)	80	103	361	83	104	412	792			854		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	23	746	839
Volume Left	3	10	3	9
Volume Right	3	13	33	10
cSH	131	150	792	854
Volume to Capacity	0.04	0.15	0.00	0.01
Queue Length 95th (ft)	3	13	0	1
Control Delay (s)	33.5	33.3	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	33.5	33.3	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	559	634	45
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	30	10	7	628	712	51
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1412	755	780			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1412	755	780			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	79	97	99			
cM capacity (veh/h)	147	403	825			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	635	763
Volume Left	30	7	0
Volume Right	10	0	51
cSH	174	825	1700
Volume to Capacity	0.23	0.01	0.45
Queue Length 95th (ft)	22	1	0
Control Delay (s)	31.8	0.2	0.0
Lane LOS	D	A	
Approach Delay (s)	31.8	0.2	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	536	2	4	590	9
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)	4	2	7	8	1	5	3	583	2	4	641	10
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	1251	1246	646	1253	1250	584	651			585		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1251	1246	646	1253	1250	584	651			585		
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	99	95	99	99	100			100		
cM capacity (veh/h)	146	172	471	145	171	512	935			990		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	588	655
Volume Left	4	8	3	4
Volume Right	7	5	2	10
cSH	232	203	935	990
Volume to Capacity	0.06	0.07	0.00	0.00
Queue Length 95th (ft)	4	6	0	0
Control Delay (s)	21.4	24.0	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	21.4	24.0	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	538	595	8
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	4	1	1	640	708	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1356	713	718			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1356	713	718			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	164	432	883			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	640	718
Volume Left	4	1	0	0
Volume Right	1	0	0	10
cSH	194	883	1700	1700
Volume to Capacity	0.02	0.00	0.38	0.42
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	24.0	9.1	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	24.0	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	3	0	3	0	0	0	13	525	0	0	600	21
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)	3	0	3	0	0	0	14	571	0	0	652	23
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	1262	1262	664	1266	1274	571	675			571		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1262	1262	664	1266	1274	571	675			571		
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 %	98	100	99	100	100	100	98			100		
cM capacity (veh/h)	145	167	461	143	165	521	916			1002		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	7	0	585	675
Volume Left	3	0	14	0
Volume Right	3	0	0	23
cSH	221	1700	916	1002
Volume to Capacity	0.03	0.00	0.02	0.00
Queue Length 95th (ft)	2	0	1	0
Control Delay (s)	21.8	0.0	0.4	0.0
Lane LOS	C	A	A	
Approach Delay (s)	21.8	0.0	0.4	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	15	0	13	5	0	12	15	507	10	7	571	24
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	19	0	16	6	0	15	19	642	13	9	723	30
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	1457	1448	738	1458	1457	648	753			654		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1457	1448	738	1458	1457	648	753			654		
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 %	81	100	96	94	100	97	98			99		
cM capacity (veh/h)	102	127	418	101	126	470	857			933		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	19	16	6	15	673	762
Volume Left	19	0	6	0	19	9
Volume Right	0	16	0	15	13	30
cSH	102	418	101	470	857	933
Volume to Capacity	0.19	0.04	0.06	0.03	0.02	0.01
Queue Length 95th (ft)	16	3	5	2	2	1
Control Delay (s)	48.4	14.0	43.2	12.9	0.6	0.3
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	32.4		21.8		0.6	0.3
Approach LOS	D		C			

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	16	0	19	3	0	5	20	529	1	2	564	38
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	18	0	21	3	0	5	22	581	1	2	620	42
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	1276	1271	641	1292	1292	582	662			582		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1276	1271	641	1292	1292	582	662			582		
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 %	87	100	96	97	100	99	98			100		
cM capacity (veh/h)	139	163	475	131	159	513	927			992		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	38	9	604	664
Volume Left	18	3	22	2
Volume Right	21	5	1	42
cSH	226	245	927	992
Volume to Capacity	0.17	0.04	0.02	0.00
Queue Length 95th (ft)	15	3	2	0
Control Delay (s)	24.2	20.2	0.6	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	24.2	20.2	0.6	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	47	23	19	544	570	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	52	26	21	604	633	59
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1309	663	692			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1309	663	692			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	70	94	98			
cM capacity (veh/h)	171	461	903			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	78	626	692
Volume Left	52	21	0
Volume Right	26	0	59
cSH	216	903	1700
Volume to Capacity	0.36	0.02	0.41
Queue Length 95th (ft)	39	2	0
Control Delay (s)	30.7	0.6	0.0
Lane LOS	D	A	
Approach Delay (s)	30.7	0.6	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	577	40	13	448	18	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	614	43	14	477	19	12
Pedestrians	8			6		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			656		1147	641
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			656		1147	641
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		91	98
cM capacity (veh/h)			931		215	472

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	656	490	31
Volume Left	0	14	19
Volume Right	43	0	12
cSH	1700	931	271
Volume to Capacity	0.39	0.01	0.11
Queue Length 95th (ft)	0	1	10
Control Delay (s)	0.0	0.4	20.0
Lane LOS		A	C
Approach Delay (s)	0.0	0.4	20.0
Approach LOS			C

Intersection Summary			
Average Delay	0.7		
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												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	9	0	2	6	0	4	3	464	0	1	580	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	0	2	7	0	4	3	516	0	1	644	19
Pedestrians		21			30			30			30	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1234	1229	705	1241	1239	576	684			546		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1234	1229	705	1241	1239	576	684			546		
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 %	93	100	99	95	100	99	100			100		
cM capacity (veh/h)	141	169	418	138	167	492	893			998		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	11	519	664
Volume Left	10	7	3	1
Volume Right	2	4	0	19
cSH	160	194	893	998
Volume to Capacity	0.08	0.06	0.00	0.00
Queue Length 95th (ft)	6	5	0	0
Control Delay (s)	29.4	24.6	0.1	0.0
Lane LOS	D	C	A	A
Approach Delay (s)	29.4	24.6	0.1	0.0
Approach LOS	D	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	27	7	0	18	22	723	3	13	708	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	33	8	0	22	27	871	4	16	853	117
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1890	1870	911	1901	1927	873	970			875		
vC1, stage 1 conf vol	943	943										
vC2, stage 2 conf vol	948	928										
vCu, unblocked vol	1890	1870	911	1901	1927	873	970			875		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5										
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	54	100	90	81	100	94	96			98		
cM capacity (veh/h)	202	234	332	45	63	350	711			772		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	33	30	901	986
Volume Left	93	0	8	27	16
Volume Right	0	33	22	4	117
cSH	202	332	121	711	772
Volume to Capacity	0.46	0.10	0.25	0.04	0.02
Queue Length 95th (ft)	55	8	23	3	2
Control Delay (s)	37.2	17.0	44.2	1.1	0.6
Lane LOS	E	C	E	A	A
Approach Delay (s)	32.0		44.2	1.1	0.6
Approach LOS	D		E		

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (prot)	1770	3291		3433	3473		1681	1545			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (perm)	1770	3291		3433	3473		1681	1545			1811	1583
Volume (vph)	55	346	304	415	335	48	374	26	385	54	41	54
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	398	349	477	385	55	430	30	443	62	47	62
RTOR Reduction (vph)	0	177	0	0	12	0	0	159	0	0	0	49
Lane Group Flow (vph)	63	570	0	477	428	0	354	390	0	0	109	13
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	18.6		13.1	27.9		24.6	24.6			8.5	8.5
Effective Green, g (s)	3.8	18.6		13.1	27.9		24.6	24.6			8.5	8.5
Actuated g/C Ratio	0.05	0.23		0.16	0.35		0.30	0.30			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	83	758		557	1199		512	470			191	167
v/s Ratio Prot	0.04	c0.17		c0.14	0.12		0.21	c0.25			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.75		0.86	0.36		0.69	0.83			0.57	0.08
Uniform Delay, d1	38.0	29.0		32.9	19.8		24.8	26.2			34.4	32.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	4.2		12.3	0.2		7.5	15.6			4.1	0.2
Delay (s)	70.2	33.2		45.2	19.9		32.2	41.8			38.5	32.8
Level of Service	E	C		D	B		C	D			D	C
Approach Delay (s)		36.1			33.1			38.0			36.4	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	35.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑			↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	789	0	0	768	0
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	0	0	0	0	917	0	0	893	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	917	0	0	893	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								102.4			102.4	
Effective Green, g (s)								102.4			102.4	
Actuated g/C Ratio								0.85			0.85	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1579			1579	
v/s Ratio Prot								c0.49			0.48	
v/s Ratio Perm												
v/c Ratio								0.58			0.57	
Uniform Delay, d1								2.8			2.7	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.6			1.5	
Delay (s)								4.3			4.2	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			4.3			4.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	26	7	0	18	22	708	3	13	645	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	31	8	0	22	27	853	4	16	777	117
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	1796	1777	836	1806	1833	855	894			857		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1796	1777	836	1806	1833	855	894			857		
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 %	0	100	91	84	100	94	97			98		
cM capacity (veh/h)	56	78	367	54	72	358	759			784		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	31	30	883	910
Volume Left	93	0	8	27	16
Volume Right	0	31	22	4	117
cSH	56	367	138	759	784
Volume to Capacity	1.66	0.09	0.22	0.03	0.02
Queue Length 95th (ft)	216	7	20	3	2
Control Delay (s)	480.9	15.7	38.1	1.0	0.6
Lane LOS	F	C	E	A	A
Approach Delay (s)	363.5		38.1	1.0	0.6
Approach LOS	F		E		

Intersection Summary			
Average Delay	24.5		
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	566	26	7	585	8
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	3	0	3	10	0	13	3	716	33	9	741	10
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1528	1532	760	1518	1520	747	758			756		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1528	1532	760	1518	1520	747	758			756		
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	99	89	100	97	100			99		
cM capacity (veh/h)	90	114	401	94	116	408	849			849		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	23	752	759
Volume Left	3	10	3	9
Volume Right	3	13	33	10
cSH	147	164	849	849
Volume to Capacity	0.03	0.14	0.00	0.01
Queue Length 95th (ft)	3	12	0	1
Control Delay (s)	30.3	30.4	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	30.3	30.4	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	540	570	45
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	30	10	7	607	640	51
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1319	683	708			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1319	683	708			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	82	98	99			
cM capacity (veh/h)	167	443	878			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	613	691
Volume Left	30	7	0
Volume Right	10	0	51
cSH	198	878	1700
Volume to Capacity	0.20	0.01	0.41
Queue Length 95th (ft)	19	1	0
Control Delay (s)	27.8	0.2	0.0
Lane LOS	D	A	
Approach Delay (s)	27.8	0.2	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	517	2	4	525	9
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)	4	2	7	8	1	5	3	562	2	4	571	10
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	1160	1155	576	1161	1159	563	580			564		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1160	1155	576	1161	1159	563	580			564		
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	99	95	99	99	100			100		
cM capacity (veh/h)	169	195	517	168	194	526	994			1007		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	567	585
Volume Left	4	8	3	4
Volume Right	7	5	2	10
cSH	264	230	994	1007
Volume to Capacity	0.05	0.06	0.00	0.00
Queue Length 95th (ft)	4	5	0	0
Control Delay (s)	19.4	21.6	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	19.4	21.6	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	519	530	8
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	4	1	1	618	631	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1256	636	640			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1256	636	640			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	189	478	944			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	618	640
Volume Left	4	1	0	0
Volume Right	1	0	0	10
cSH	223	944	1700	1700
Volume to Capacity	0.02	0.00	0.36	0.38
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	21.5	8.8	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	21.5	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	38.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	1	0	0	0	2	510	0	0	551	3
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)	0	0	1	0	0	0	2	554	0	0	599	3
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	1159	1159	601	1160	1161	554	602			554		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1159	1159	601	1160	1161	554	602			554		
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 %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	172	195	501	172	195	532	975			1016		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	0	557	602
Volume Left	0	0	2	0
Volume Right	1	0	0	3
cSH	501	1700	975	1016
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	12.2	0.0	0.1	0.0
Lane LOS	B	A	A	
Approach Delay (s)	12.2	0.0	0.1	0.0
Approach LOS	B	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	11	0	13	5	0	12	11	485	10	7	534	10
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	14	0	16	6	0	15	14	614	13	9	676	13
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	1363	1354	682	1365	1354	620	689			627		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1363	1354	682	1365	1354	620	689			627		
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 %	88	100	96	95	100	97	98			99		
cM capacity (veh/h)	119	146	450	118	146	488	906			955		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	14	16	6	15	641	697
Volume Left	14	0	6	0	14	9
Volume Right	0	16	0	15	13	13
cSH	119	450	118	488	906	955
Volume to Capacity	0.12	0.04	0.05	0.03	0.02	0.01
Queue Length 95th (ft)	10	3	4	2	1	1
Control Delay (s)	39.3	13.3	37.3	12.6	0.4	0.2
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	25.2		19.9		0.4	0.2
Approach LOS	D		C			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	11	0	13	3	0	5	6	509	1	2	554	11
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	12	0	14	3	0	5	7	559	1	2	609	12
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	1198	1193	615	1207	1198	560	621			560		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1198	1193	615	1207	1198	560	621			560		
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 %	92	100	97	98	100	99	99			100		
cM capacity (veh/h)	160	185	491	155	184	528	960			1011		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	26	9	567	623
Volume Left	12	3	7	2
Volume Right	14	5	1	12
cSH	252	277	960	1011
Volume to Capacity	0.10	0.03	0.01	0.00
Queue Length 95th (ft)	9	2	1	0
Control Delay (s)	21.0	18.4	0.2	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	21.0	18.4	0.2	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	44	21	15	513	565	42
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	49	23	17	570	628	47
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1254	651	674			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1254	651	674			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	74	95	98			
cM capacity (veh/h)	186	468	917			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	72	587	674
Volume Left	49	17	0
Volume Right	23	0	47
cSH	231	917	1700
Volume to Capacity	0.31	0.02	0.40
Queue Length 95th (ft)	32	1	0
Control Delay (s)	27.5	0.5	0.0
Lane LOS	D	A	
Approach Delay (s)	27.5	0.5	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	571	40	13	411	18	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	607	43	14	437	19	12
Pedestrians	8			6		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			650		1102	635
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			650		1102	635
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		92	98
cM capacity (veh/h)			936		229	476

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	650	451	31
Volume Left	0	14	19
Volume Right	43	0	12
cSH	1700	936	285
Volume to Capacity	0.38	0.01	0.11
Queue Length 95th (ft)	0	1	9
Control Delay (s)	0.0	0.4	19.1
Lane LOS		A	C
Approach Delay (s)	0.0	0.4	19.1
Approach LOS			C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	0	2	6	0	4	3	428	0	1	574	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	0	2	7	0	4	3	476	0	1	638	18
Pedestrians		21			30			30			30	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1187	1182	698	1193	1191	536	677			506		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1187	1182	698	1193	1191	536	677			506		
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	99	96	100	99	100			100		
cM capacity (veh/h)	151	181	422	149	179	518	899			1033		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	11	11	479	657
Volume Left	9	7	3	1
Volume Right	2	4	0	18
cSH	174	209	899	1033
Volume to Capacity	0.06	0.05	0.00	0.00
Queue Length 95th (ft)	5	4	0	0
Control Delay (s)	27.1	23.2	0.1	0.0
Lane LOS	D	C	A	A
Approach Delay (s)	27.1	23.2	0.1	0.0
Approach LOS	D	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	26	7	0	18	22	708	3	13	645	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	31	8	0	22	27	853	4	16	777	117
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1796	1777	836	1806	1833	855	894			857		
vC1, stage 1 conf vol	867	867										
vC2, stage 2 conf vol	930	910										
vCu, unblocked vol	1796	1777	836	1806	1833	855	894			857		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5										
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	57	100	91	84	100	94	97			98		
cM capacity (veh/h)	215	248	367	54	72	358	759			784		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	31	30	883	910
Volume Left	93	0	8	27	16
Volume Right	0	31	22	4	117
cSH	215	367	138	759	784
Volume to Capacity	0.43	0.09	0.22	0.03	0.02
Queue Length 95th (ft)	50	7	20	3	2
Control Delay (s)	33.9	15.7	38.1	1.0	0.6
Lane LOS	D	C	E	A	A
Approach Delay (s)	29.3		38.1	1.0	0.6
Approach LOS	D		E		

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	66.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (prot)	1770	3282		3433	3473		1681	1546			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (perm)	1770	3282		3433	3473		1681	1546			1811	1583
Volume (vph)	55	346	326	433	335	48	379	27	393	54	40	54
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	398	375	498	385	55	436	31	452	62	46	62
RTOR Reduction (vph)	0	190	0	0	12	0	0	155	0	0	0	50
Lane Group Flow (vph)	63	583	0	498	428	0	356	408	0	0	108	12
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	18.9		13.3	28.4		24.5	24.5			8.5	8.5
Effective Green, g (s)	3.8	18.9		13.3	28.4		24.5	24.5			8.5	8.5
Actuated g/C Ratio	0.05	0.23		0.16	0.35		0.30	0.30			0.10	0.10
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	83	764		562	1215		507	466			190	166
v/s Ratio Prot	0.04	c0.18		c0.15	0.12		0.21	c0.26			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.76		0.89	0.35		0.70	0.88			0.57	0.07
Uniform Delay, d1	38.2	29.1		33.2	19.6		25.1	26.9			34.6	32.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	4.5		15.5	0.2		7.9	20.0			3.9	0.2
Delay (s)	70.4	33.6		48.7	19.8		33.0	46.9			38.5	33.0
Level of Service	E	C		D	B		C	D			D	C
Approach Delay (s)		36.4			35.1			41.5			36.5	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	37.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	81.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.1%	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		↑			↑			↑			↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	803	0	0	807	0
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	0	0	0	0	934	0	0	938	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	934	0	0	938	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								102.4			102.4	
Effective Green, g (s)								102.4			102.4	
Actuated g/C Ratio								0.85			0.85	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1579			1579	
v/s Ratio Prot								0.50			c0.50	
v/s Ratio Perm												
v/c Ratio								0.59			0.59	
Uniform Delay, d1								2.8			2.8	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.6			1.7	
Delay (s)								4.4			4.5	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			4.4			4.5	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	25	7	0	18	22	723	3	13	684	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	30	8	0	22	27	871	4	16	824	117
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	1861	1842	883	1870	1898	873	941			875		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1861	1842	883	1870	1898	873	941			875		
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 %	0	100	91	83	100	94	96			98		
cM capacity (veh/h)	50	71	345	48	65	350	729			772		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	30	30	901	957
Volume Left	93	0	8	27	16
Volume Right	0	30	22	4	117
cSH	50	345	127	729	772
Volume to Capacity	1.85	0.09	0.24	0.04	0.02
Queue Length 95th (ft)	228	7	22	3	2
Control Delay (s)	576.7	16.4	41.9	1.0	0.6
Lane LOS	F	C	E	A	A
Approach Delay (s)	439.4		41.9	1.0	0.6
Approach LOS	F		E		

Intersection Summary			
Average Delay	28.2		
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	561	26	7	622	8
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	3	0	3	10	0	13	3	710	33	9	787	10
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1568	1572	806	1558	1561	741	804			750		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1568	1572	806	1558	1561	741	804			750		
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	99	88	100	97	100			99		
cM capacity (veh/h)	85	107	377	88	109	412	815			854		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	23	746	806
Volume Left	3	10	3	9
Volume Right	3	13	33	10
cSH	138	156	815	854
Volume to Capacity	0.04	0.15	0.00	0.01
Queue Length 95th (ft)	3	12	0	1
Control Delay (s)	32.1	31.9	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	32.1	31.9	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	561	609	45
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	30	10	7	630	684	51
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1386	727	752			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1386	727	752			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	80	98	99			
cM capacity (veh/h)	152	418	846			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	637	735
Volume Left	30	7	0
Volume Right	10	0	51
cSH	181	846	1700
Volume to Capacity	0.22	0.01	0.43
Queue Length 95th (ft)	21	1	0
Control Delay (s)	30.5	0.2	0.0
Lane LOS	D	A	
Approach Delay (s)	30.5	0.2	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	44.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	537	2	4	565	9
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)	4	2	7	8	1	5	3	584	2	4	614	10
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	1225	1220	619	1227	1224	585	624			586		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1225	1220	619	1227	1224	585	624			586		
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	99	95	99	99	100			100		
cM capacity (veh/h)	152	179	489	151	178	511	957			989		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	589	628
Volume Left	4	8	3	4
Volume Right	7	5	2	10
cSH	241	210	957	989
Volume to Capacity	0.05	0.07	0.00	0.00
Queue Length 95th (ft)	4	5	0	0
Control Delay (s)	20.8	23.3	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	20.8	23.3	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	539	570	8
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	4	1	1	642	679	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1327	683	688			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1327	683	688			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	171	449	906			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	642	688
Volume Left	4	1	0	0
Volume Right	1	0	0	10
cSH	202	906	1700	1700
Volume to Capacity	0.02	0.00	0.38	0.40
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	23.2	9.0	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	23.2	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	7	0	8	0	0	0	14	522	0	0	576	20
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)	8	0	9	0	0	0	15	567	0	0	626	22
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	1235	1235	637	1243	1246	567	648			567		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1235	1235	637	1243	1246	567	648			567		
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	98	100	100	100	98			100		
cM capacity (veh/h)	151	174	477	147	171	523	938			1005		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	16	0	583	648
Volume Left	8	0	15	0
Volume Right	9	0	0	22
cSH	238	1700	938	1005
Volume to Capacity	0.07	0.00	0.02	0.00
Queue Length 95th (ft)	5	0	1	0
Control Delay (s)	21.2	0.0	0.4	0.0
Lane LOS	C	A	A	
Approach Delay (s)	21.2	0.0	0.4	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	14	0	14	5	0	12	16	506	10	7	548	24
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	18	0	18	6	0	15	20	641	13	9	694	30
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	1429	1420	709	1432	1429	647	724			653		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1429	1420	709	1432	1429	647	724			653		
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 %	83	100	96	94	100	97	98			99		
cM capacity (veh/h)	106	132	434	105	130	471	879			934		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	18	18	6	15	673	733
Volume Left	18	0	6	0	20	9
Volume Right	0	18	0	15	13	30
cSH	106	434	105	471	879	934
Volume to Capacity	0.17	0.04	0.06	0.03	0.02	0.01
Queue Length 95th (ft)	14	3	5	2	2	1
Control Delay (s)	45.6	13.6	41.6	12.9	0.6	0.3
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	29.6		21.3		0.6	0.3
Approach LOS	D		C			

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	16	0	17	3	0	5	13	529	1	2	555	25
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	18	0	19	3	0	5	14	581	1	2	610	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	1244	1239	624	1257	1252	582	637			582		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1244	1239	624	1257	1252	582	637			582		
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 %	88	100	96	98	100	99	98			100		
cM capacity (veh/h)	147	172	486	140	169	513	946			992		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	36	9	597	640
Volume Left	18	3	14	2
Volume Right	19	5	1	27
cSH	230	257	946	992
Volume to Capacity	0.16	0.03	0.02	0.00
Queue Length 95th (ft)	14	3	1	0
Control Delay (s)	23.6	19.5	0.4	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	23.6	19.5	0.4	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	44	21	13	541	571	41
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	49	23	14	601	634	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1287	657	680			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1287	657	680			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	73	95	98			
cM capacity (veh/h)	178	465	912			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	72	616	680
Volume Left	49	14	0
Volume Right	23	0	46
cSH	223	912	1700
Volume to Capacity	0.32	0.02	0.40
Queue Length 95th (ft)	34	1	0
Control Delay (s)	28.8	0.4	0.0
Lane LOS	D	A	
Approach Delay (s)	28.8	0.4	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	49.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	577	41	13	435	17	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	614	44	14	463	18	12
Pedestrians	8			6		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			657		1134	642
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			657		1134	642
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		92	98
cM capacity (veh/h)			930		219	472

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	657	477	30
Volume Left	0	14	18
Volume Right	44	0	12
cSH	1700	930	278
Volume to Capacity	0.39	0.01	0.11
Queue Length 95th (ft)	0	1	9
Control Delay (s)	0.0	0.4	19.5
Lane LOS		A	C
Approach Delay (s)	0.0	0.4	19.5
Approach LOS			C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	0	2	6	0	4	3	452	0	1	580	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	0	2	7	0	4	3	502	0	1	644	19
Pedestrians		21			30			30			30	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1220	1216	705	1227	1225	562	684			532		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1220	1216	705	1227	1225	562	684			532		
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	99	95	100	99	100			100		
cM capacity (veh/h)	144	173	418	141	170	500	893			1009		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	11	11	506	664
Volume Left	9	7	3	1
Volume Right	2	4	0	19
cSH	165	198	893	1009
Volume to Capacity	0.07	0.06	0.00	0.00
Queue Length 95th (ft)	5	4	0	0
Control Delay (s)	28.4	24.2	0.1	0.0
Lane LOS	D	C	A	A
Approach Delay (s)	28.4	24.2	0.1	0.0
Approach LOS	D	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	25	7	0	18	22	723	3	13	684	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	30	8	0	22	27	871	4	16	824	117
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1861	1842	883	1870	1898	873	941			875		
vC1, stage 1 conf vol	914	914										
vC2, stage 2 conf vol	948	928										
vCu, unblocked vol	1861	1842	883	1870	1898	873	941			875		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5										
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	55	100	91	83	100	94	96			98		
cM capacity (veh/h)	205	238	345	48	65	350	729			772		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	30	30	901	957
Volume Left	93	0	8	27	16
Volume Right	0	30	22	4	117
cSH	205	345	127	729	772
Volume to Capacity	0.45	0.09	0.24	0.04	0.02
Queue Length 95th (ft)	54	7	22	3	2
Control Delay (s)	36.2	16.4	41.9	1.0	0.6
Lane LOS	E	C	E	A	A
Approach Delay (s)	31.4		41.9	1.0	0.6
Approach LOS	D		E		

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (prot)	1770	3283		3433	3473		1681	1543			1810	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (perm)	1770	3283		3433	3473		1681	1543			1810	1583
Volume (vph)	55	346	323	425	335	48	379	27	390	54	39	54
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	398	371	489	385	55	436	31	448	62	45	62
RTOR Reduction (vph)	0	188	0	0	12	0	0	170	0	0	0	50
Lane Group Flow (vph)	63	581	0	489	428	0	367	378	0	0	107	12
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	18.8		13.3	28.3		24.5	24.5			8.4	8.4
Effective Green, g (s)	3.8	18.8		13.3	28.3		24.5	24.5			8.4	8.4
Actuated g/C Ratio	0.05	0.23		0.16	0.35		0.30	0.30			0.10	0.10
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	83	762		564	1213		508	467			188	164
v/s Ratio Prot	0.04	c0.18		c0.14	0.12		0.22	c0.24			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.76		0.87	0.35		0.72	0.81			0.57	0.07
Uniform Delay, d1	38.1	29.0		33.0	19.6		25.2	26.1			34.6	32.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	4.5		13.2	0.2		8.6	14.0			3.9	0.2
Delay (s)	70.3	33.5		46.2	19.7		33.8	40.1			38.5	33.0
Level of Service	E	C		D	B		C	D			D	C
Approach Delay (s)		36.3			33.7			37.6			36.5	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	35.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	81.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.6%	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												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	800	0	0	795	0
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	0	0	0	0	930	0	0	924	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	930	0	0	924	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								102.4			102.4	
Effective Green, g (s)								102.4			102.4	
Actuated g/C Ratio								0.85			0.85	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1579			1579	
v/s Ratio Prot								c0.50			0.50	
v/s Ratio Perm												
v/c Ratio								0.59			0.59	
Uniform Delay, d1								2.8			2.8	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.6			1.6	
Delay (s)								4.4			4.4	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			4.4			4.4	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	4.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	26	7	0	18	21	719	3	13	672	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	31	8	0	22	25	866	4	16	810	117
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	1840	1820	868	1849	1877	868	927			870		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1840	1820	868	1849	1877	868	927			870		
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 %	0	100	91	83	100	94	97			98		
cM capacity (veh/h)	52	73	352	50	68	352	738			775		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	31	30	895	942
Volume Left	93	0	8	25	16
Volume Right	0	31	22	4	117
cSH	52	352	130	738	775
Volume to Capacity	1.78	0.09	0.23	0.03	0.02
Queue Length 95th (ft)	224	7	21	3	2
Control Delay (s)	542.4	16.2	40.7	1.0	0.6
Lane LOS	F	C	E	A	A
Approach Delay (s)	409.6		40.7	1.0	0.6
Approach LOS	F		E		

Intersection Summary			
Average Delay	26.9		
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	558	26	7	624	8
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	3	0	3	10	0	13	3	706	33	9	790	10
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1567	1571	809	1557	1560	737	807			746		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1567	1571	809	1557	1560	737	807			746		
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	99	89	100	97	100			99		
cM capacity (veh/h)	85	108	376	88	109	414	813			857		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	23	742	809
Volume Left	3	10	3	9
Volume Right	3	13	33	10
cSH	138	157	813	857
Volume to Capacity	0.04	0.15	0.00	0.01
Queue Length 95th (ft)	3	12	0	1
Control Delay (s)	32.0	31.8	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	32.0	31.8	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	557	611	45
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	30	10	7	626	687	51
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1384	729	754			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1384	729	754			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	80	98	99			
cM capacity (veh/h)	153	417	844			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	633	737
Volume Left	30	7	0
Volume Right	10	0	51
cSH	181	844	1700
Volume to Capacity	0.22	0.01	0.43
Queue Length 95th (ft)	21	1	0
Control Delay (s)	30.5	0.2	0.0
Lane LOS	D	A	
Approach Delay (s)	30.5	0.2	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.0		
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												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	533	2	4	563	9
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)	4	2	7	8	1	5	3	579	2	4	612	10
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	1218	1214	617	1220	1217	580	622			582		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1218	1214	617	1220	1217	580	622			582		
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	99	95	99	99	100			100		
cM capacity (veh/h)	154	180	490	152	179	514	959			993		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	585	626
Volume Left	4	8	3	4
Volume Right	7	5	2	10
cSH	243	212	959	993
Volume to Capacity	0.05	0.07	0.00	0.00
Queue Length 95th (ft)	4	5	0	0
Control Delay (s)	20.6	23.2	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	20.6	23.2	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	535	568	8
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	4	1	1	637	676	10
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1320	681	686			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1320	681	686			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	173	450	908			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	637	686
Volume Left	4	1	0	0
Volume Right	1	0	0	10
cSH	204	908	1700	1700
Volume to Capacity	0.02	0.00	0.37	0.40
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	23.0	9.0	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	23.0	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	0	0	0	8	520	0	0	578	14
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)	2	0	2	0	0	0	9	565	0	0	628	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	1218	1218	636	1221	1226	565	643			565		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1218	1218	636	1221	1226	565	643			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 %	99	100	100	100	100	100	99			100		
cM capacity (veh/h)	156	179	478	155	177	524	941			1007		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	0	574	643
Volume Left	2	0	9	0
Volume Right	2	0	0	15
cSH	235	1700	941	1007
Volume to Capacity	0.02	0.00	0.01	0.00
Queue Length 95th (ft)	1	0	1	0
Control Delay (s)	20.6	0.0	0.3	0.0
Lane LOS	C	A	A	
Approach Delay (s)	20.6	0.0	0.3	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	0	9	5	0	12	12	505	10	7	555	18
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Hourly flow rate (vph)	10	0	11	6	0	15	15	639	13	9	703	23
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	1423	1414	714	1419	1419	646	725			652		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1423	1414	714	1419	1419	646	725			652		
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	97	94	100	97	98			99		
cM capacity (veh/h)	108	134	431	109	133	472	878			935		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	10	11	6	15	667	734
Volume Left	10	0	6	0	15	9
Volume Right	0	11	0	15	13	23
cSH	108	431	109	472	878	935
Volume to Capacity	0.09	0.03	0.06	0.03	0.02	0.01
Queue Length 95th (ft)	8	2	5	2	1	1
Control Delay (s)	41.9	13.6	40.0	12.9	0.5	0.3
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	26.9		20.9		0.5	0.3
Approach LOS	D		C			

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	24	0	22	3	0	5	18	516	1	2	554	28
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	26	0	24	3	0	5	20	567	1	2	609	31
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	1241	1236	624	1260	1251	568	640			568		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1241	1236	624	1260	1251	568	640			568		
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 %	82	100	95	98	100	99	98			100		
cM capacity (veh/h)	147	172	485	137	168	523	945			1004		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	51	9	588	642
Volume Left	26	3	20	2
Volume Right	24	5	1	31
cSH	221	255	945	1004
Volume to Capacity	0.23	0.03	0.02	0.00
Queue Length 95th (ft)	21	3	2	0
Control Delay (s)	26.0	19.6	0.6	0.1
Lane LOS	D	C	A	A
Approach Delay (s)	26.0	19.6	0.6	0.1
Approach LOS	D	C		

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	46	23	17	529	567	47
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	51	26	19	588	630	52
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1282	656	682			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1282	656	682			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	71	95	98			
cM capacity (veh/h)	179	465	911			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	77	607	682
Volume Left	51	19	0
Volume Right	26	0	52
cSH	225	911	1700
Volume to Capacity	0.34	0.02	0.40
Queue Length 95th (ft)	36	2	0
Control Delay (s)	29.1	0.6	0.0
Lane LOS	D	A	
Approach Delay (s)	29.1	0.6	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	578	41	13	434	18	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	615	44	14	462	19	12
Pedestrians	8			6		
Lane Width (ft)	12.0			12.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	1			0		
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			659		1134	643
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			659		1134	643
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		91	98
cM capacity (veh/h)			929		219	471

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	659	476	31
Volume Left	0	14	19
Volume Right	44	0	12
cSH	1700	929	275
Volume to Capacity	0.39	0.01	0.11
Queue Length 95th (ft)	0	1	9
Control Delay (s)	0.0	0.4	19.7
Lane LOS		A	C
Approach Delay (s)	0.0	0.4	19.7
Approach LOS			C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	7	0	2	6	0	4	3	451	0	1	581	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	0	2	7	0	4	3	501	0	1	646	19
Pedestrians		21			30			30			30	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			2	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1220	1216	706	1227	1225	561	685			531		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1220	1216	706	1227	1225	561	685			531		
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	99	95	100	99	100			100		
cM capacity (veh/h)	144	173	418	141	170	501	892			1010		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	11	504	666
Volume Left	8	7	3	1
Volume Right	2	4	0	19
cSH	168	198	892	1010
Volume to Capacity	0.06	0.06	0.00	0.00
Queue Length 95th (ft)	5	4	0	0
Control Delay (s)	27.8	24.2	0.1	0.0
Lane LOS	D	C	A	A
Approach Delay (s)	27.8	24.2	0.1	0.0
Approach LOS	D	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	26	7	0	18	21	719	3	13	672	97
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	93	0	31	8	0	22	25	866	4	16	810	117
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1840	1820	868	1849	1877	868	927			870		
vC1, stage 1 conf vol	899	899										
vC2, stage 2 conf vol	940	920										
vCu, unblocked vol	1840	1820	868	1849	1877	868	927			870		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5										
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	56	100	91	83	100	94	97			98		
cM capacity (veh/h)	209	242	352	50	68	352	738			775		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	93	31	30	895	942
Volume Left	93	0	8	25	16
Volume Right	0	31	22	4	117
cSH	209	352	130	738	775
Volume to Capacity	0.44	0.09	0.23	0.03	0.02
Queue Length 95th (ft)	52	7	21	3	2
Control Delay (s)	35.4	16.2	40.7	1.0	0.6
Lane LOS	E	C	E	A	A
Approach Delay (s)	30.5		40.7	1.0	0.6
Approach LOS	D		E		

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.92		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (prot)	1770	3271		3433	3454		1681	1544			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3271		3433	3454		1681	1544			1811	1583
Volume (vph)	55	260	266	321	251	48	265	26	260	54	40	54
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	289	296	357	279	53	294	29	289	60	44	60
RTOR Reduction (vph)	0	219	0	0	18	0	0	169	0	0	0	50
Lane Group Flow (vph)	61	366	0	357	314	0	261	182	0	0	104	10
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.7	14.2		11.5	22.0		24.9	24.9			7.9	7.9
Effective Green, g (s)	3.7	14.2		11.5	22.0		24.9	24.9			7.9	7.9
Actuated g/C Ratio	0.05	0.19		0.15	0.30		0.33	0.33			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	88	623		530	1020		562	516			192	168
v/s Ratio Prot	0.03	c0.11		c0.10	0.09		c0.16	0.12			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.69	0.59		0.67	0.31		0.46	0.35			0.54	0.06
Uniform Delay, d1	34.8	27.5		29.7	20.3		19.5	18.7			31.6	30.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	21.0	1.4		3.4	0.2		2.7	1.9			3.1	0.1
Delay (s)	55.9	28.9		33.1	20.5		22.3	20.6			34.7	30.1
Level of Service	E	C		C	C		C	C			C	C
Approach Delay (s)		31.4			27.0			21.3			33.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	547	0	0	621	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	0	0	0	608	0	0	690	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	608	0	0	690	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								102.4			102.4	
Effective Green, g (s)								102.4			102.4	
Actuated g/C Ratio								0.85			0.85	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1579			1579	
v/s Ratio Prot								0.33			c0.37	
v/s Ratio Perm												
v/c Ratio								0.39			0.44	
Uniform Delay, d1								2.1			2.2	
Progression Factor								1.00			1.00	
Incremental Delay, d2								0.7			0.9	
Delay (s)								2.8			3.1	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			2.8			3.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	3.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	17	7	0	18	34	496	3	13	519	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	19	8	0	20	38	551	3	14	577	108
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	1308	1289	631	1307	1342	553	684			554		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1308	1289	631	1307	1342	553	684			554		
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 %	32	100	96	94	100	96	96			99		
cM capacity (veh/h)	126	155	481	126	144	533	909			1016		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	19	28	592	699
Volume Left	86	0	8	38	14
Volume Right	0	19	20	3	108
cSH	126	481	280	909	1016
Volume to Capacity	0.68	0.04	0.10	0.04	0.01
Queue Length 95th (ft)	92	3	8	3	1
Control Delay (s)	79.7	12.8	19.3	1.1	0.4
Lane LOS	F	B	C	A	A
Approach Delay (s)	67.6		19.3	1.1	0.4
Approach LOS	F		C		

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	406	26	7	480	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	2	9	0	11	2	451	29	8	533	9
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1048	1052	552	1040	1042	480	549			487		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1048	1052	552	1040	1042	480	549			487		
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 %	99	100	100	96	100	98	100			99		
cM capacity (veh/h)	196	222	527	202	225	579	1014			1070		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	20	482	550
Volume Left	2	9	2	8
Volume Right	2	11	29	9
cSH	286	316	1014	1070
Volume to Capacity	0.02	0.06	0.00	0.01
Queue Length 95th (ft)	1	5	0	1
Control Delay (s)	17.8	17.1	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	17.8	17.1	0.1	0.2
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	395	452	45
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	30	10	7	439	502	50
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1012	544	569			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1012	544	569			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	98	99			
cM capacity (veh/h)	256	531	989			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	446	552
Volume Left	30	7	0
Volume Right	10	0	50
cSH	294	989	1700
Volume to Capacity	0.14	0.01	0.32
Queue Length 95th (ft)	12	1	0
Control Delay (s)	19.2	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	19.2	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	419	2	4	420	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	2	7	8	1	6	3	466	2	4	467	10
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	960	955	472	962	959	467	477			468		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	960	955	472	962	959	467	477			468		
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 %	98	99	99	97	100	99	100			100		
cM capacity (veh/h)	232	257	592	230	255	596	1086			1094		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	471	481
Volume Left	4	8	3	4
Volume Right	7	6	2	10
cSH	341	304	1086	1094
Volume to Capacity	0.04	0.05	0.00	0.00
Queue Length 95th (ft)	3	4	0	0
Control Delay (s)	16.0	17.4	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	16.0	17.4	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	420	425	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	1	1	467	472	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	946	477	481			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	946	477	481			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	290	588	1081			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	4	1	467	481
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	332	1081	1700	1700
Volume to Capacity	0.01	0.00	0.27	0.28
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	16.0	8.3	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	16.0	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	32.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	0	1	0	0	0	6	442	0	0	430	19
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	1	0	0	0	7	491	0	0	478	21
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	993	993	488	994	1003	491	499			491		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	993	993	488	994	1003	491	499			491		
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 %	100	100	100	100	100	100	99			100		
cM capacity (veh/h)	223	244	580	223	240	577	1065			1072		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	2	0	498	499
Volume Left	1	0	7	0
Volume Right	1	0	0	21
cSH	322	1700	1065	1072
Volume to Capacity	0.01	0.00	0.01	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	16.2	0.0	0.2	0.0
Lane LOS	C	A	A	
Approach Delay (s)	16.2	0.0	0.2	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	38.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	22	0	11	5	0	12	8	431	10	7	404	22
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	24	0	12	6	0	13	9	479	11	8	449	24
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	992	984	461	991	991	484	473			490		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	992	984	461	991	991	484	473			490		
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 %	89	100	98	97	100	98	99			99		
cM capacity (veh/h)	217	244	600	218	242	582	1089			1073		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	24	12	6	13	499	481
Volume Left	24	0	6	0	9	8
Volume Right	0	12	0	13	11	24
cSH	217	600	218	582	1089	1073
Volume to Capacity	0.11	0.02	0.03	0.02	0.01	0.01
Queue Length 95th (ft)	9	2	2	2	1	1
Control Delay (s)	23.7	11.1	22.0	11.3	0.2	0.2
Lane LOS	C	B	C	B	A	A
Approach Delay (s)	19.5		14.5		0.2	0.2
Approach LOS	C		B			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	164	0	66	3	0	5	23	281	1	2	344	74
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	182	0	73	3	0	6	26	312	1	2	382	82
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	797	792	423	865	833	313	464			313		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	797	792	423	865	833	313	464			313		
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 %	39	100	88	99	100	99	98			100		
cM capacity (veh/h)	296	313	631	237	297	727	1097			1247		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	256	9	339	467
Volume Left	182	3	26	2
Volume Right	73	6	1	82
cSH	349	410	1097	1247
Volume to Capacity	0.73	0.02	0.02	0.00
Queue Length 95th (ft)	139	2	2	0
Control Delay (s)	38.8	14.0	0.9	0.1
Lane LOS	E	B	A	A
Approach Delay (s)	38.8	14.0	0.9	0.1
Approach LOS	E	B		

Intersection Summary			
Average Delay	9.7		
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	33	15	11	310	388	42
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	37	17	12	344	431	47
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	823	454	478			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	823	454	478			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	97	99			
cM capacity (veh/h)	339	606	1084			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	53	357	478
Volume Left	37	12	0
Volume Right	17	0	47
cSH	393	1084	1700
Volume to Capacity	0.14	0.01	0.28
Queue Length 95th (ft)	12	1	0
Control Delay (s)	15.6	0.4	0.0
Lane LOS	C	A	
Approach Delay (s)	15.6	0.4	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	35.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	17	7	0	18	34	496	3	13	519	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	19	8	0	20	38	551	3	14	577	108
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1308	1289	631	1307	1342	553	684			554		
vC1, stage 1 conf vol	659	659										
vC2, stage 2 conf vol	648	630										
vCu, unblocked vol	1308	1289	631	1307	1342	553	684			554		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5										
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	73	100	96	94	100	96	96			99		
cM capacity (veh/h)	318	341	481	126	144	533	909			1016		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	19	28	592	699
Volume Left	86	0	8	38	14
Volume Right	0	19	20	3	108
cSH	318	481	280	909	1016
Volume to Capacity	0.27	0.04	0.10	0.04	0.01
Queue Length 95th (ft)	27	3	8	3	1
Control Delay (s)	20.4	12.8	19.3	1.1	0.4
Lane LOS	C	B	C	A	A
Approach Delay (s)	19.0		19.3	1.1	0.4
Approach LOS	C		C		

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (prot)	1770	3295		3433	3454		1681	1548			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99			0.97	1.00
Satd. Flow (perm)	1770	3295		3433	3454		1681	1548			1811	1583
Volume (vph)	55	260	221	294	251	48	255	26	235	54	41	54
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	289	246	327	279	53	283	29	261	60	46	60
RTOR Reduction (vph)	0	183	0	0	17	0	0	150	0	0	0	49
Lane Group Flow (vph)	61	352	0	327	315	0	249	174	0	0	106	11
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.2	14.7		10.8	22.3		24.9	24.9			7.9	7.9
Effective Green, g (s)	3.2	14.7		10.8	22.3		24.9	24.9			7.9	7.9
Actuated g/C Ratio	0.04	0.20		0.15	0.30		0.34	0.34			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	76	652		499	1037		563	519			193	168
v/s Ratio Prot	0.03	c0.11		c0.10	0.09		c0.15	0.11			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.80	0.54		0.66	0.30		0.44	0.33			0.55	0.06
Uniform Delay, d1	35.2	26.8		30.0	20.0		19.3	18.5			31.5	29.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	43.8	0.9		3.1	0.2		2.5	1.7			3.2	0.2
Delay (s)	79.1	27.7		33.1	20.2		21.8	20.2			34.7	30.0
Level of Service	E	C		C	C		C	C			C	C
Approach Delay (s)		32.9			26.6			20.9			33.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	74.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	512	0	0	550	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	0	0	0	569	0	0	611	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	569	0	0	611	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								105.8			105.8	
Effective Green, g (s)								105.8			105.8	
Actuated g/C Ratio								0.87			0.87	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1621			1621	
v/s Ratio Prot								0.31			c0.33	
v/s Ratio Perm												
v/c Ratio								0.35			0.38	
Uniform Delay, d1								1.5			1.5	
Progression Factor								1.00			1.00	
Incremental Delay, d2								0.6			0.7	
Delay (s)								2.1			2.2	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			2.1			2.2	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	2.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	15.8
Intersection Capacity Utilization	32.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	11	7	0	18	7	461	3	13	448	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	12	8	0	20	8	512	3	14	498	108
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	1130	1112	552	1122	1164	514	606			516		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1130	1112	552	1122	1164	514	606			516		
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 %	50	100	98	96	100	96	99			99		
cM capacity (veh/h)	172	204	534	176	190	561	972			1050		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	12	28	523	620
Volume Left	86	0	8	8	14
Volume Right	0	12	20	3	108
cSH	172	534	348	972	1050
Volume to Capacity	0.50	0.02	0.08	0.01	0.01
Queue Length 95th (ft)	61	2	6	1	1
Control Delay (s)	45.2	11.9	16.2	0.2	0.4
Lane LOS	E	B	C	A	A
Approach Delay (s)	41.1		16.2	0.2	0.4
Approach LOS	E		C		

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	329	26	7	397	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	2	9	0	11	2	366	29	8	441	9
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	871	874	460	862	864	394	457			401		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	871	874	460	862	864	394	457			401		
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 %	99	100	100	97	100	98	100			99		
cM capacity (veh/h)	260	282	595	267	286	647	1097			1150		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	20	397	458
Volume Left	2	9	2	8
Volume Right	2	11	29	9
cSH	362	396	1097	1150
Volume to Capacity	0.01	0.05	0.00	0.01
Queue Length 95th (ft)	1	4	0	1
Control Delay (s)	15.1	14.6	0.1	0.2
Lane LOS	C	B	A	A
Approach Delay (s)	15.1	14.6	0.1	0.2
Approach LOS	C	B		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	266	362	45
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	30	10	7	296	402	50
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	769	444	469			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	769	444	469			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	98	99			
cM capacity (veh/h)	357	605	1077			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	302	452
Volume Left	30	7	0
Volume Right	10	0	50
cSH	398	1077	1700
Volume to Capacity	0.10	0.01	0.27
Queue Length 95th (ft)	8	0	0
Control Delay (s)	15.1	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	15.1	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	32.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	253	2	4	320	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	2	7	8	1	6	3	281	2	4	356	10
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	664	659	361	666	663	282	366			283		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	664	659	361	666	663	282	366			283		
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 %	99	99	99	98	100	99	100			100		
cM capacity (veh/h)	368	381	684	366	379	757	1193			1279		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	287	370
Volume Left	4	8	3	4
Volume Right	7	6	2	10
cSH	482	458	1193	1279
Volume to Capacity	0.03	0.03	0.00	0.00
Queue Length 95th (ft)	2	2	0	0
Control Delay (s)	12.7	13.1	0.1	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	12.7	13.1	0.1	0.1
Approach LOS	B	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	254	325	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	1	1	282	361	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	650	366	370			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	650	366	370			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	433	680	1189			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	4	1	282	370
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	477	1189	1700	1700
Volume to Capacity	0.01	0.00	0.17	0.22
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	12.6	8.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	12.6	0.0		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	1	0	0	0	2	277	0	0	345	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	1	0	0	0	2	308	0	0	383	2
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	697	697	384	698	698	308	386			308		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	697	697	384	698	698	308	386			308		
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 %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	355	364	663	354	364	732	1173			1253		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	0	310	386
Volume Left	0	0	2	0
Volume Right	1	0	0	2
cSH	663	1700	1173	1253
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	10.4	0.0	0.1	0.0
Lane LOS	B	A	A	
Approach Delay (s)	10.4	0.0	0.1	0.0
Approach LOS	B	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	28.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	0	12	5	0	12	11	274	10	7	333	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	11	0	13	6	0	13	12	304	11	8	370	9
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	738	730	374	738	729	310	379			316		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	738	730	374	738	729	310	379			316		
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	98	98	100	98	99			99		
cM capacity (veh/h)	324	343	672	323	344	730	1180			1245		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	11	13	6	13	328	387
Volume Left	11	0	6	0	12	8
Volume Right	0	13	0	13	11	9
cSH	324	672	323	730	1180	1245
Volume to Capacity	0.03	0.02	0.02	0.02	0.01	0.01
Queue Length 95th (ft)	3	2	1	1	1	0
Control Delay (s)	16.5	10.5	16.3	10.0	0.4	0.2
Lane LOS	C	B	C	B	A	A
Approach Delay (s)	13.2		11.9		0.4	0.2
Approach LOS	B		B			

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	9	0	13	3	0	5	7	282	1	2	339	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	0	14	3	0	6	8	313	1	2	377	10
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	721	716	382	730	721	314	387			314		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	721	716	382	730	721	314	387			314		
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	98	99	100	99	99			100		
cM capacity (veh/h)	338	353	666	328	351	726	1172			1246		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	24	9	322	389
Volume Left	10	3	8	2
Volume Right	14	6	1	10
cSH	476	499	1172	1246
Volume to Capacity	0.05	0.02	0.01	0.00
Queue Length 95th (ft)	4	1	1	0
Control Delay (s)	13.0	12.3	0.3	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	13.0	12.3	0.3	0.1
Approach LOS	B	B		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	29.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	35	14	9	293	337	35
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	16	10	326	374	39
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	739	394	413			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	739	394	413			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	90	98	99			
cM capacity (veh/h)	381	655	1146			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	54	336	413
Volume Left	39	10	0
Volume Right	16	0	39
cSH	433	1146	1700
Volume to Capacity	0.13	0.01	0.24
Queue Length 95th (ft)	11	1	0
Control Delay (s)	14.5	0.3	0.0
Lane LOS	B	A	
Approach Delay (s)	14.5	0.3	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (prot)	1770	3283		3433	3454		1681	1545			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3283		3433	3454		1681	1545			1811	1583
Volume (vph)	55	260	242	315	251	48	267	27	263	54	40	54
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	289	269	350	279	53	297	30	292	60	44	60
RTOR Reduction (vph)	0	202	0	0	18	0	0	165	0	0	0	50
Lane Group Flow (vph)	61	356	0	350	314	0	263	191	0	0	104	10
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	14.2		10.6	21.0		25.8	25.8			7.9	7.9
Effective Green, g (s)	3.8	14.2		10.6	21.0		25.8	25.8			7.9	7.9
Actuated g/C Ratio	0.05	0.19		0.14	0.28		0.35	0.35			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	90	626		488	974		582	535			192	168
v/s Ratio Prot	0.03	c0.11		c0.10	0.09		c0.16	0.12			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.68	0.57		0.72	0.32		0.45	0.36			0.54	0.06
Uniform Delay, d1	34.7	27.4		30.5	21.1		18.9	18.2			31.6	30.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	18.4	1.2		5.0	0.2		2.5	1.9			3.1	0.1
Delay (s)	53.1	28.6		35.5	21.3		21.4	20.0			34.7	30.1
Level of Service	D	C		D	C		C	C			C	C
Approach Delay (s)		31.0			28.6			20.6			33.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	553	0	0	591	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	0	0	0	614	0	0	657	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	614	0	0	657	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								105.8			105.8	
Effective Green, g (s)								105.8			105.8	
Actuated g/C Ratio								0.87			0.87	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1621			1621	
v/s Ratio Prot								0.33			c0.35	
v/s Ratio Perm												
v/c Ratio								0.38			0.41	
Uniform Delay, d1								1.5			1.6	
Progression Factor								1.00			1.00	
Incremental Delay, d2								0.7			0.8	
Delay (s)								2.2			2.3	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			2.2			2.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	2.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	15.8
Intersection Capacity Utilization	34.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	16	7	0	18	38	502	3	13	489	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	18	8	0	20	42	558	3	14	543	108
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	1290	1272	597	1288	1324	559	651			561		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1290	1272	597	1288	1324	559	651			561		
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 %	34	100	96	94	100	96	95			99		
cM capacity (veh/h)	129	158	503	130	147	528	935			1010		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	18	28	603	666
Volume Left	86	0	8	42	14
Volume Right	0	18	20	3	108
cSH	129	503	284	935	1010
Volume to Capacity	0.66	0.04	0.10	0.05	0.01
Queue Length 95th (ft)	89	3	8	4	1
Control Delay (s)	75.7	12.4	19.0	1.2	0.4
Lane LOS	F	B	C	A	A
Approach Delay (s)	64.9		19.0	1.2	0.4
Approach LOS	F		C		

Intersection Summary			
Average Delay	5.9		
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	416	26	7	442	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	2	9	0	11	2	462	29	8	491	9
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1017	1021	510	1008	1011	491	507			498		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1017	1021	510	1008	1011	491	507			498		
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 %	99	100	100	96	100	98	100			99		
cM capacity (veh/h)	206	231	557	212	235	571	1052			1060		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	20	493	508
Volume Left	2	9	2	8
Volume Right	2	11	29	9
cSH	301	326	1052	1060
Volume to Capacity	0.01	0.06	0.00	0.01
Queue Length 95th (ft)	1	5	0	1
Control Delay (s)	17.2	16.8	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	17.2	16.8	0.1	0.2
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	406	412	45
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	30	10	7	451	458	50
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	980	500	525			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	980	500	525			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	98	99			
cM capacity (veh/h)	268	563	1027			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	458	508
Volume Left	30	7	0
Volume Right	10	0	50
cSH	308	1027	1700
Volume to Capacity	0.13	0.01	0.30
Queue Length 95th (ft)	11	0	0
Control Delay (s)	18.4	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	18.4	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	428	2	4	390	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	2	7	8	1	6	3	476	2	4	433	10
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	937	932	438	938	936	477	443			478		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	937	932	438	938	936	477	443			478		
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 %	98	99	99	97	100	99	100			100		
cM capacity (veh/h)	241	265	618	239	263	588	1117			1084		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	481	448
Volume Left	4	8	3	4
Volume Right	7	6	2	10
cSH	354	313	1117	1084
Volume to Capacity	0.04	0.05	0.00	0.00
Queue Length 95th (ft)	3	4	0	0
Control Delay (s)	15.6	17.1	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	15.6	17.1	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	34.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	429	395	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	1	1	477	439	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	922	443	448			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	922	443	448			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	300	614	1113			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	4	1	477	448
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	344	1113	1700	1700
Volume to Capacity	0.01	0.00	0.28	0.26
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	15.6	8.2	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	15.6	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	32.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	0	2	0	0	0	5	451	0	0	405	14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	2	0	0	0	6	501	0	0	450	16
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	970	970	458	972	978	501	466			501		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	970	970	458	972	978	501	466			501		
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 %	100	100	100	100	100	100	99			100		
cM capacity (veh/h)	232	252	603	230	249	570	1096			1063		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	3	0	507	466
Volume Left	1	0	6	0
Volume Right	2	0	0	16
cSH	393	1700	1096	1063
Volume to Capacity	0.01	0.00	0.01	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	14.2	0.0	0.2	0.0
Lane LOS	B	A	A	
Approach Delay (s)	14.2	0.0	0.2	0.0
Approach LOS	B	A		

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	37.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	28	0	15	5	0	12	14	433	10	7	362	40
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	31	0	17	6	0	13	16	481	11	8	402	44
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	971	963	424	974	980	487	447			492		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	971	963	424	974	980	487	447			492		
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 %	86	100	97	97	100	98	99			99		
cM capacity (veh/h)	223	250	630	221	244	581	1114			1071		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	31	17	6	13	508	454
Volume Left	31	0	6	0	16	8
Volume Right	0	17	0	13	11	44
cSH	223	630	221	581	1114	1071
Volume to Capacity	0.14	0.03	0.03	0.02	0.01	0.01
Queue Length 95th (ft)	12	2	2	2	1	1
Control Delay (s)	23.7	10.9	21.7	11.3	0.4	0.2
Lane LOS	C	B	C	B	A	A
Approach Delay (s)	19.2		14.4		0.4	0.2
Approach LOS	C		B			

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	41.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	161	0	59	3	0	5	12	292	1	2	340	40
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	179	0	66	3	0	6	13	324	1	2	378	44
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	762	757	400	822	778	325	422			326		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	762	757	400	822	778	325	422			326		
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 %	43	100	90	99	100	99	99			100		
cM capacity (veh/h)	316	332	650	261	323	716	1137			1234		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	244	9	339	424
Volume Left	179	3	13	2
Volume Right	66	6	1	44
cSH	366	433	1137	1234
Volume to Capacity	0.67	0.02	0.01	0.00
Queue Length 95th (ft)	115	2	1	0
Control Delay (s)	32.4	13.5	0.4	0.1
Lane LOS	D	B	A	A
Approach Delay (s)	32.4	13.5	0.4	0.1
Approach LOS	D	B		

Intersection Summary				
Average Delay	8.1			
Intersection Capacity Utilization	49.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	35	15	9	309	385	34
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	39	17	10	343	428	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	810	447	466			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	810	447	466			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	97	99			
cM capacity (veh/h)	346	612	1096			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	56	353	466
Volume Left	39	10	0
Volume Right	17	0	38
cSH	398	1096	1700
Volume to Capacity	0.14	0.01	0.27
Queue Length 95th (ft)	12	1	0
Control Delay (s)	15.5	0.3	0.0
Lane LOS	C	A	
Approach Delay (s)	15.5	0.3	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	16	7	0	18	38	502	3	13	489	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	18	8	0	20	42	558	3	14	543	108
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1290	1272	597	1288	1324	559	651			561		
vC1, stage 1 conf vol	626	626										
vC2, stage 2 conf vol	664	646										
vCu, unblocked vol	1290	1272	597	1288	1324	559	651			561		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5										
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	73	100	96	94	100	96	95			99		
cM capacity (veh/h)	320	344	503	130	147	528	935			1010		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	18	28	603	666
Volume Left	86	0	8	42	14
Volume Right	0	18	20	3	108
cSH	320	503	284	935	1010
Volume to Capacity	0.27	0.04	0.10	0.05	0.01
Queue Length 95th (ft)	26	3	8	4	1
Control Delay (s)	20.3	12.4	19.0	1.2	0.4
Lane LOS	C	B	C	A	A
Approach Delay (s)	18.9		19.0	1.2	0.4
Approach LOS	C		C		

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.88			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (prot)	1770	3284		3433	3454		1681	1545			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3284		3433	3454		1681	1545			1811	1583
Volume (vph)	55	260	240	311	251	48	265	27	259	54	40	54
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	289	267	346	279	53	294	30	288	60	44	60
RTOR Reduction (vph)	0	201	0	0	18	0	0	165	0	0	0	50
Lane Group Flow (vph)	61	355	0	346	314	0	261	186	0	0	104	10
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	3.8	14.1		10.6	20.9		25.8	25.8			7.9	7.9
Effective Green, g (s)	3.8	14.1		10.6	20.9		25.8	25.8			7.9	7.9
Actuated g/C Ratio	0.05	0.19		0.14	0.28		0.35	0.35			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	90	622		489	970		583	536			192	168
v/s Ratio Prot	0.03	c0.11		c0.10	0.09		c0.16	0.12			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.68	0.57		0.71	0.32		0.45	0.35			0.54	0.06
Uniform Delay, d1	34.7	27.4		30.4	21.2		18.8	18.0			31.5	29.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	18.4	1.3		4.6	0.2		2.5	1.8			3.1	0.1
Delay (s)	53.1	28.7		35.1	21.4		21.3	19.8			34.6	30.1
Level of Service	D	C		D	C		C	B			C	C
Approach Delay (s)		31.1			28.4			20.4			33.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	27.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	74.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	547	0	0	585	0
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	0	0	0	608	0	0	650	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	608	0	0	650	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								105.8			105.8	
Effective Green, g (s)								105.8			105.8	
Actuated g/C Ratio								0.87			0.87	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1621			1621	
v/s Ratio Prot								0.33			c0.35	
v/s Ratio Perm												
v/c Ratio								0.38			0.40	
Uniform Delay, d1								1.5			1.6	
Progression Factor								1.00			1.00	
Incremental Delay, d2								0.7			0.7	
Delay (s)								2.2			2.3	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			2.2			2.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	2.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	15.8
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	18	7	0	18	39	496	3	13	483	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	20	8	0	20	43	551	3	14	537	108
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	1279	1261	591	1279	1313	553	644			554		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1279	1261	591	1279	1313	553	644			554		
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 %	35	100	96	94	100	96	95			99		
cM capacity (veh/h)	131	160	507	131	149	533	941			1016		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	20	28	598	659
Volume Left	86	0	8	43	14
Volume Right	0	20	20	3	108
cSH	131	507	287	941	1016
Volume to Capacity	0.65	0.04	0.10	0.05	0.01
Queue Length 95th (ft)	87	3	8	4	1
Control Delay (s)	73.2	12.4	18.9	1.2	0.4
Lane LOS	F	B	C	A	A
Approach Delay (s)	61.7		18.9	1.2	0.4
Approach LOS	F		C		

Intersection Summary			
Average Delay	5.8		
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	411	26	7	445	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	0	2	9	0	11	2	457	29	8	494	9
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1015	1018	513	1006	1008	485	510			493		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1015	1018	513	1006	1008	485	510			493		
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 %	99	100	100	96	100	98	100			99		
cM capacity (veh/h)	207	232	555	213	235	575	1049			1065		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	4	20	488	511
Volume Left	2	9	2	8
Volume Right	2	11	29	9
cSH	301	327	1049	1065
Volume to Capacity	0.01	0.06	0.00	0.01
Queue Length 95th (ft)	1	5	0	1
Control Delay (s)	17.1	16.7	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	17.1	16.7	0.1	0.2
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	400	415	45
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	30	10	7	444	461	50
Pedestrians	17				16	
Lane Width (ft)	12.0				12.0	
Walking Speed (ft/s)	4.0				4.0	
Percent Blockage	1				1	
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	977	503	528			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	977	503	528			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	98	99			
cM capacity (veh/h)	269	560	1024			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	40	451	511
Volume Left	30	7	0
Volume Right	10	0	50
cSH	309	1024	1700
Volume to Capacity	0.13	0.01	0.30
Queue Length 95th (ft)	11	0	0
Control Delay (s)	18.4	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	18.4	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	2	6	7	1	5	3	420	2	4	383	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	2	7	8	1	6	3	467	2	4	426	10
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	920	915	431	922	919	468	436			469		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	920	915	431	922	919	468	436			469		
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 %	98	99	99	97	100	99	100			100		
cM capacity (veh/h)	247	271	625	245	269	595	1124			1093		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	14	472	440
Volume Left	4	8	3	4
Volume Right	7	6	2	10
cSH	362	320	1124	1093
Volume to Capacity	0.04	0.05	0.00	0.00
Queue Length 95th (ft)	3	4	0	0
Control Delay (s)	15.3	16.8	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	15.3	16.8	0.1	0.1
Approach LOS	C	C		

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	34.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	3	1	1	421	388	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	1	1	468	431	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	906	436	440			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	906	436	440			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	306	621	1120			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	4	1	468	440
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	351	1120	1700	1700
Volume to Capacity	0.01	0.00	0.28	0.26
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	15.4	8.2	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	15.4	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	0	1	0	0	0	4	444	0	0	402	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	1	0	0	0	4	493	0	0	447	11
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	954	954	452	956	960	493	458			493		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	954	954	452	956	960	493	458			493		
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 %	100	100	100	100	100	100	100			100		
cM capacity (veh/h)	238	258	607	237	256	576	1103			1070		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	2	0	498	458
Volume Left	1	0	4	0
Volume Right	1	0	0	11
cSH	342	1700	1103	1070
Volume to Capacity	0.01	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	15.6	0.0	0.1	0.0
Lane LOS	C	A	A	
Approach Delay (s)	15.6	0.0	0.1	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	23	0	11	5	0	12	12	430	10	7	366	32
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	26	0	12	6	0	13	13	478	11	8	407	36
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	963	956	424	962	968	483	442			489		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	963	956	424	962	968	483	442			489		
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 %	89	100	98	98	100	98	99			99		
cM capacity (veh/h)	226	253	630	227	249	583	1118			1074		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	26	12	6	13	502	450
Volume Left	26	0	6	0	13	8
Volume Right	0	12	0	13	11	36
cSH	226	630	227	583	1118	1074
Volume to Capacity	0.11	0.02	0.02	0.02	0.01	0.01
Queue Length 95th (ft)	9	1	2	2	1	1
Control Delay (s)	22.9	10.8	21.2	11.3	0.4	0.2
Lane LOS	C	B	C	B	A	A
Approach Delay (s)	19.0		14.2		0.4	0.2
Approach LOS	C		B			

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	163	0	65	3	0	5	16	285	1	2	338	42
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	181	0	72	3	0	6	18	317	1	2	376	47
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	762	757	399	828	779	317	422			318		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	762	757	399	828	779	317	422			318		
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 %	43	100	89	99	100	99	98			100		
cM capacity (veh/h)	315	331	651	254	321	723	1137			1242		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	253	9	336	424
Volume Left	181	3	18	2
Volume Right	72	6	1	47
cSH	369	428	1137	1242
Volume to Capacity	0.69	0.02	0.02	0.00
Queue Length 95th (ft)	122	2	1	0
Control Delay (s)	33.5	13.6	0.6	0.1
Lane LOS	D	B	A	A
Approach Delay (s)	33.5	13.6	0.6	0.1
Approach LOS	D	B		

Intersection Summary				
Average Delay	8.6			
Intersection Capacity Utilization	52.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	33	14	10	308	388	35
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	37	16	11	342	431	39
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	815	451	470			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	815	451	470			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	97	99			
cM capacity (veh/h)	343	609	1092			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	52	353	470
Volume Left	37	11	0
Volume Right	16	0	39
cSH	395	1092	1700
Volume to Capacity	0.13	0.01	0.28
Queue Length 95th (ft)	11	1	0
Control Delay (s)	15.5	0.4	0.0
Lane LOS	C	A	
Approach Delay (s)	15.5	0.4	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	77	0	18	7	0	18	39	496	3	13	483	97
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	86	0	20	8	0	20	43	551	3	14	537	108
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1279	1261	591	1279	1313	553	644			554		
vC1, stage 1 conf vol	619	619										
vC2, stage 2 conf vol	659	641										
vCu, unblocked vol	1279	1261	591	1279	1313	553	644			554		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)	6.1	5.5										
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	73	100	96	94	100	96	95			99		
cM capacity (veh/h)	323	346	507	131	149	533	941			1016		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	86	20	28	598	659
Volume Left	86	0	8	43	14
Volume Right	0	20	20	3	108
cSH	323	507	287	941	1016
Volume to Capacity	0.27	0.04	0.10	0.05	0.01
Queue Length 95th (ft)	26	3	8	4	1
Control Delay (s)	20.1	12.4	18.9	1.2	0.4
Lane LOS	C	B	C	A	A
Approach Delay (s)	18.7		18.9	1.2	0.4
Approach LOS	C		C		

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Summer Conditions **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	272	Yes		115	--	
	T	305	272	--		89	--	
	R	305	272	--		89	--	
SB	L	224	199	--		82	--	
	T	224	199	--		82	--	
	R	25	66	Yes		38	Yes	
EB	L	200	139	--		48	--	
	T	169	187	Yes		103	--	
	R	169	187	Yes		93	--	
WB	L	150	202	Yes		142	--	
	T	450	417	--		166	--	
	R	450	211	--		76	--	

Intersection: 2: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	578	--		232	--	
SB	T	51	125	Yes		110	Yes	

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SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Summer Plus Alternatives 1 and 3 **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	312	Yes		117	--	
	T	289	312	Yes		99	--	
	R	289	312	Yes		99	--	
SB	L	224	180	--		74	--	
	T	224	180	--		74	--	
	R	25	73	Yes		39	Yes	
EB	L	200	115	--		44	--	
	T	170	213	Yes		106	--	
	R	170	213	Yes		97	--	
WB	L	150	194	Yes		133	--	
	T	416	388	--		157	--	
	R	416	192	--		74	--	

Intersection: 2: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	686	--		238	--	
SB	T	70	144	Yes		125	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Summer Plus Alternative 4 **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	334	Yes		117	--	
	T	296	334	Yes		97	--	
	R	296	334	Yes		97	--	
SB	L	224	160	--		74	--	
	T	224	160	--		74	--	
	R	25	72	Yes		38	Yes	
EB	L	200	145	--		46	--	
	T	170	198	Yes		103	--	
	R	170	197	Yes		90	--	
WB	L	150	194	Yes		129	--	
	T	420	383	--		136	--	
	R	420	165	--		67	--	

Intersection: 41: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	545	--		204	--	
SB	T	64	137	Yes		115	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Summer Plus Alternative 5 **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	273	Yes		117	--	
	T	285	273	--		94	--	
	R	285	273	--		94	--	
SB	L	223	177	--		78	--	
	T	223	177	--		78	--	
	R	25	65	Yes		37	Yes	
EB	L	200	144	--		44	--	
	T	169	202	Yes		107	--	
	R	169	202	Yes		92	--	
WB	L	150	198	Yes		139	--	
	T	400	404	Yes		149	--	
	R	400	164	--		70	--	

Intersection: 41: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	521	--		212	--	
SB	T	70	145	Yes		129	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Summer Plus Alternative 6 **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	328	Yes		120	--	
	T	285	328	Yes		111	--	
	R	285	328	Yes		111	--	
SB	L	223	160	--		74	--	
	T	223	160	--		74	--	
	R	25	77	Yes		36	Yes	
EB	L	200	117	--		44	--	
	T	169	201	Yes		99	--	
	R	169	201	Yes		88	--	
WB	L	150	198	Yes		128	--	
	T	400	381	--		140	--	
	R	400	172	--		62	--	

Intersection: 41: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	482	--		211	--	
SB	T	70	145	Yes		124	Yes	

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SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Winter Conditions **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	147	Yes		91	--	
	T	280	144	--		55	--	
	R	280	144	--		55	--	
SB	L	224	175	--		78	--	
	T	224	175	--		78	--	
	R	25	62	Yes		36	Yes	
EB	L	200	112	--		42	--	
	T	170	146	--		77	--	
	R	170	134	--		65	--	
WB	L	150	163	Yes		96	--	
	T	416	166	--		88	--	
	R	416	130	--		50	--	

Intersection: 41: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	382	--		163	--	
SB	T	79	153	Yes		119	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Winter Plus Alternatives 1 and 3 **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	146	Yes		89	--	
	T	307	140	--		49	--	
	R	307	140	--		49	--	
SB	L	224	173	--		73	--	
	T	224	173	--		73	--	
	R	25	66	Yes		38	Yes	
EB	L	200	104	--		42	--	
	T	170	144	--		78	--	
	R	170	135	--		67	--	
WB	L	150	174	Yes		95	--	
	T	428	189	--		89	--	
	R	428	141	--		49	--	

Intersection: 2: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	344	--		120	--	
SB	T	53	126	Yes		104	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Winter Plus Alternative 4 **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	174	Yes		87	--	
	T	304	174	--		50	--	
	R	304	174	--		50	--	
SB	L	224	164	--		72	--	
	T	224	164	--		72	--	
	R	25	71	Yes		38	Yes	
EB	L	200	106	--		42	--	
	T	169	144	--		74	--	
	R	169	132	--		62	--	
WB	L	150	170	Yes		90	--	
	T	420	190	--		87	--	
	R	420	120	--		48	--	

Intersection: 41: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	314	--		126	--	
SB	T	52	126	Yes		101	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Existing Winter Plus Alternative 5 **PHF:** 1
TOD: Fri PM Peak **Analysis Period:** 15 Minutes **# of Runs:** 10

Intersection: 1: SR 28 & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	L	125	149	Yes		87	--	
	T	316	149	--		46	--	
	R	316	149	--		46	--	
SB	L	224	180	--		74	--	
	T	224	180	--		74	--	
	R	25	67	Yes		36	Yes	
EB	L	200	113	--		41	--	
	T	170	150	--		75	--	
	R	170	141	--		64	--	
WB	L	150	173	Yes		92	--	
	T	402	199	--		87	--	
	R	402	136	--		47	--	

Intersection: 41: Pedestrian Crossing & SR 89 **Type:** Signalized

Approach	Movement	Storage Length	Maximum Queue (ft)			Average Queue (ft)		
			Avg	> Storage	Std Dev	Avg	> Storage	Std Dev
NB	T	2754	331	--		137	--	
SB	T	44	118	Yes		95	Yes	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		0.97	0.95		0.95	0.95			1.00	1.00
Frt	1.00	0.93		1.00	0.98		1.00	0.86			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (prot)	1770	3296		3433	3482		1681	1528			1814	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3296		3433	3482		1681	1528			1814	1583
Volume (vph)	55	412	350	467	407	49	440	34	443	56	47	54
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	474	402	537	468	56	506	39	509	64	54	62
RTOR Reduction (vph)	0	137	0	0	8	0	0	293	0	0	0	36
Lane Group Flow (vph)	63	739	0	537	516	0	489	272	0	0	118	26
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	6.9	24.9		17.0	35.0		37.0	37.0			11.9	11.9
Effective Green, g (s)	6.9	24.9		17.0	35.0		37.0	37.0			11.9	11.9
Actuated g/C Ratio	0.06	0.23		0.16	0.33		0.35	0.35			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	114	768		546	1141		582	529			202	176
v/s Ratio Prot	0.04	c0.22		c0.16	0.15		c0.29	0.18			c0.07	
v/s Ratio Perm												0.02
v/c Ratio	0.55	0.96		0.98	0.45		0.84	0.51			0.58	0.15
Uniform Delay, d1	48.5	40.5		44.8	28.3		32.2	27.8			45.1	42.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	5.7	23.4		34.1	0.3		13.7	3.5			4.3	0.4
Delay (s)	54.1	63.9		78.8	28.6		45.8	31.3			49.4	43.3
Level of Service	D	E		E	C		D	C			D	D
Approach Delay (s)		63.2			54.0			38.0			47.3	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM Average Control Delay	51.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	106.8	Sum of lost time (s)	16.0
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												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)								4.0			4.0	
Lane Util. Factor								1.00			1.00	
Frt								1.00			1.00	
Flt Protected								1.00			1.00	
Satd. Flow (prot)								1863			1863	
Flt Permitted								1.00			1.00	
Satd. Flow (perm)								1863			1863	
Volume (vph)	0	0	0	0	0	0	0	924	0	0	878	0
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	0	0	0	0	1062	0	0	1009	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	1062	0	0	1009	0
Turn Type												
Protected Phases		4			8			2			6	
Permitted Phases												
Actuated Green, G (s)								102.4			102.4	
Effective Green, g (s)								102.4			102.4	
Actuated g/C Ratio								0.85			0.85	
Clearance Time (s)								4.0			4.0	
Vehicle Extension (s)								3.0			3.0	
Lane Grp Cap (vph)								1579			1579	
v/s Ratio Prot								c0.57			0.54	
v/s Ratio Perm												
v/c Ratio								0.67			0.64	
Uniform Delay, d1								3.3			3.1	
Progression Factor								1.00			1.00	
Incremental Delay, d2								2.3			2.0	
Delay (s)								5.6			5.1	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			5.6			5.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	79	0	25	7	0	18	19	822	3	13	760	99
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	91	0	29	8	0	21	22	945	3	15	874	114
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	1971	1952	930	1979	2007	947	987			948		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1971	1952	930	1979	2007	947	987			948		
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 %	0	100	91	80	100	93	97			98		
cM capacity (veh/h)	42	61	324	40	56	317	700			724		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	29	29	970	1002
Volume Left	91	0	8	22	15
Volume Right	0	29	21	3	114
cSH	42	324	109	700	724
Volume to Capacity	2.16	0.09	0.26	0.03	0.02
Queue Length 95th (ft)	241	7	25	2	2
Control Delay (s)	741.6	17.2	49.6	0.9	0.6
Lane LOS	F	C	E	A	A
Approach Delay (s)	567.5		49.6	0.9	0.6
Approach LOS	F		E		

Intersection Summary			
Average Delay	33.4		
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	625	26	7	672	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	2	0	2	9	0	11	2	718	30	8	772	9
Pedestrians		7			7			7			7	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			1			1			1	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1557	1560	791	1547	1550	747	789			755		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1557	1560	791	1547	1550	747	789			755		
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	99	90	100	97	100			99		
cM capacity (veh/h)	86	109	385	90	111	408	826			850		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	751	790
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	141	158	826	850
Volume to Capacity	0.03	0.13	0.00	0.01
Queue Length 95th (ft)	3	11	0	1
Control Delay (s)	31.3	31.1	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	31.3	31.1	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		