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 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 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	

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	

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		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	27	9	6	613	649	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	705	746	52
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	1523	789	815			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1523	789	815			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	75	97	99			
cM capacity (veh/h)	125	385	801			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	711	798
Volume Left	31	7	0
Volume Right	10	0	52
cSH	151	801	1700
Volume to Capacity	0.27	0.01	0.47
Queue Length 95th (ft)	26	1	0
Control Delay (s)	37.6	0.2	0.0
Lane LOS	E	A	
Approach Delay (s)	37.6	0.2	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	47.0%	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	564	2	4	570	9
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)	5	2	7	8	1	6	3	648	2	5	655	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	1332	1327	660	1334	1331	649	666			651		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1332	1327	660	1334	1331	649	666			651		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	99	99	94	99	99	100			100		
cM capacity (veh/h)	128	154	463	127	153	469	924			936		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	654	670
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	210	179	924	936
Volume to Capacity	0.07	0.08	0.00	0.00
Queue Length 95th (ft)	5	7	0	0
Control Delay (s)	23.4	26.9	0.1	0.1
Lane LOS	C	D	A	A
Approach Delay (s)	23.4	26.9	0.1	0.1
Approach LOS	C	D		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	43.3%	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	566	576	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	651	662	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	1320	667	671			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1320	667	671			
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	459	919			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	651	671
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	205	919	1700	1700
Volume to Capacity	0.02	0.00	0.38	0.39
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	23.0	8.9	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	40.8%	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)	0	0	1	0	0	0	2	551	0	0	595	3
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)	0	0	1	0	0	0	2	633	0	0	684	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	1324	1324	686	1325	1325	633	687			633		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1324	1324	686	1325	1325	633	687			633		
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)	133	156	448	132	155	480	907			950		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	0	636	687
Volume Left	0	0	2	0
Volume Right	1	0	0	3
cSH	448	1700	907	950
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	13.1	0.0	0.1	0.0
Lane LOS	B	A	A	
Approach Delay (s)	13.1	0.0	0.1	0.0
Approach LOS	B	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	41.5%	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)	5	0	6	5	0	12	4	530	10	7	582	5
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)	6	0	7	6	0	14	5	609	11	8	669	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	1326	1318	672	1319	1315	615	675			621		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1326	1318	672	1319	1315	615	675			621		
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	96	100	97	99			99		
cM capacity (veh/h)	128	155	456	131	156	491	917			960		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	6	7	6	14	625	683
Volume Left	6	0	6	0	5	8
Volume Right	0	7	0	14	11	6
cSH	128	456	131	491	917	960
Volume to Capacity	0.05	0.02	0.04	0.03	0.01	0.01
Queue Length 95th (ft)	4	1	3	2	0	1
Control Delay (s)	34.5	13.0	33.8	12.5	0.1	0.2
Lane LOS	D	B	D	B	A	A
Approach Delay (s)	22.8		18.8		0.1	0.2
Approach LOS	C		C			

Intersection Summary			
Average Delay	0.7		
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												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	4	0	5	3	0	5	1	555	1	2	603	5
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)	5	0	6	3	0	6	1	638	1	2	693	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	1347	1342	696	1347	1344	639	699			639		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1347	1342	696	1347	1344	639	699			639		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	99	97	100	99	100			100		
cM capacity (veh/h)	126	152	442	126	151	476	898			945		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	9	640	701
Volume Left	5	3	1	2
Volume Right	6	6	1	6
cSH	209	233	898	945
Volume to Capacity	0.05	0.04	0.00	0.00
Queue Length 95th (ft)	4	3	0	0
Control Delay (s)	23.1	21.1	0.0	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	23.1	21.1	0.0	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	43.5%	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)	42	19	11	555	607	39
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	48	22	13	638	698	45
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	1383	720	743			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1383	720	743			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	69	95	99			
cM capacity (veh/h)	156	428	865			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	70	651	743
Volume Left	48	13	0
Volume Right	22	0	45
cSH	195	865	1700
Volume to Capacity	0.36	0.01	0.44
Queue Length 95th (ft)	38	1	0
Control Delay (s)	33.6	0.4	0.0
Lane LOS	D	A	
Approach Delay (s)	33.6	0.4	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	1.8		
Intersection Capacity Utilization	48.2%	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)	617	37	13	446	16	11
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	709	43	15	513	18	13
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			752		1281	736
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			752		1281	736
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		90	97
cM capacity (veh/h)			858		178	417

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	752	528	31
Volume Left	0	15	18
Volume Right	43	0	13
cSH	1700	858	232
Volume to Capacity	0.44	0.02	0.13
Queue Length 95th (ft)	0	1	11
Control Delay (s)	0.0	0.5	22.9
Lane LOS		A	C
Approach Delay (s)	0.0	0.5	22.9
Approach LOS			C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	46.5%	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	2	6	0	4	3	464	0	1	625	13
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)	8	0	2	7	0	5	3	533	0	1	718	15
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	1324	1319	777	1331	1327	593	754			563		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1324	1319	777	1331	1327	593	754			563		
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	94	100	99	100			100		
cM capacity (veh/h)	122	150	380	120	148	480	841			983		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	11	537	734
Volume Left	8	7	3	1
Volume Right	2	5	0	15
cSH	143	171	841	983
Volume to Capacity	0.07	0.07	0.00	0.00
Queue Length 95th (ft)	6	5	0	0
Control Delay (s)	32.1	27.5	0.1	0.0
Lane LOS	D	D	A	A
Approach Delay (s)	32.1	27.5	0.1	0.0
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	50.7%	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	0.87			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	3295		3433	3468		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	3295		3433	3468		1681	1540			1814	1583
Volume (vph)	55	314	268	354	313	49	338	34	335	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	361	308	407	360	56	389	39	385	64	54	62
RTOR Reduction (vph)	0	170	0	0	14	0	0	207	0	0	0	45
Lane Group Flow (vph)	63	499	0	407	402	0	358	248	0	0	118	17
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	17.0		13.2	26.5		26.9	26.9			8.7	8.7
Effective Green, g (s)	3.7	17.0		13.2	26.5		26.9	26.9			8.7	8.7
Actuated g/C Ratio	0.05	0.21		0.16	0.32		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)	80	685		554	1123		553	506			193	168
v/s Ratio Prot	0.04	c0.15		c0.12	0.12		c0.21	0.16			c0.07	
v/s Ratio Perm												0.01
v/c Ratio	0.79	0.73		0.73	0.36		0.65	0.49			0.61	0.10
Uniform Delay, d1	38.7	30.3		32.6	21.1		23.4	22.0			34.9	33.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	38.7	3.9		5.0	0.2		5.8	3.4			5.6	0.3
Delay (s)	77.4	34.1		37.7	21.3		29.2	25.3			40.6	33.3
Level of Service	E	C		D	C		C	C			D	C
Approach Delay (s)		37.9			29.4			27.0			38.1	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	81.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.8%	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	704	0	0	666	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	809	0	0	766	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	809	0	0	766	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								c0.43			0.41	
v/s Ratio Perm												
v/c Ratio								0.51			0.49	
Uniform Delay, d1								2.5			2.4	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.2			1.1	
Delay (s)								3.7			3.4	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			3.7			3.4	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	3.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	40.4%	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)	79	0	25	7	0	18	19	625	3	13	572	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	718	3	15	657	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	1529	1510	714	1537	1565	720	771			722		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1529	1510	714	1537	1565	720	771			722		
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	93	91	100	95	97			98		
cM capacity (veh/h)	88	115	431	85	107	428	844			880		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	29	29	744	786
Volume Left	91	0	8	22	15
Volume Right	0	29	21	3	114
cSH	88	431	202	844	880
Volume to Capacity	1.03	0.07	0.14	0.03	0.02
Queue Length 95th (ft)	150	5	12	2	1
Control Delay (s)	189.8	13.9	25.8	0.7	0.5
Lane LOS	F	B	D	A	A
Approach Delay (s)	147.5		25.8	0.7	0.5
Approach LOS	F		D		

Intersection Summary			
Average Delay	11.5		
Intersection Capacity Utilization	60.7%	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	506	26	7	521	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	582	30	8	599	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	1246	1250	617	1237	1239	611	615			618		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1246	1250	617	1237	1239	611	615			618		
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	100	94	100	98	100			99		
cM capacity (veh/h)	143	169	484	148	171	488	959			956		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	614	616
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	220	241	959	956
Volume to Capacity	0.02	0.09	0.00	0.01
Queue Length 95th (ft)	2	7	0	1
Control Delay (s)	21.7	21.3	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	21.7	21.3	0.1	0.2
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)	27	9	6	498	492	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	572	566	52
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	1211	608	634			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1211	608	634			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	84	98	99			
cM capacity (veh/h)	195	488	935			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	579	617
Volume Left	31	7	0
Volume Right	10	0	52
cSH	229	935	1700
Volume to Capacity	0.18	0.01	0.36
Queue Length 95th (ft)	16	1	0
Control Delay (s)	24.2	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	24.2	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.9		
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)	4	2	6	7	1	5	3	494	2	4	428	9
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)	5	2	7	8	1	6	3	568	2	5	492	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	1089	1083	497	1090	1087	569	502			570		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1089	1083	497	1090	1087	569	502			570		
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	96	99	99	100			100		
cM capacity (veh/h)	189	215	573	188	214	522	1062			1002		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	574	507
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	293	252	1062	1002
Volume to Capacity	0.05	0.06	0.00	0.00
Queue Length 95th (ft)	4	5	0	0
Control Delay (s)	17.9	20.2	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	17.9	20.2	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	38.0%	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	495	433	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	569	498	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	1074	502	507			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1074	502	507			
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)	243	569	1058			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	569	507
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	284	1058	1700	1700
Volume to Capacity	0.02	0.00	0.33	0.30
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	17.9	8.4	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	17.9	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	36.1%	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)	4	0	5	0	0	0	6	511	0	0	446	6
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)	5	0	6	0	0	0	7	587	0	0	513	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	1117	1117	516	1123	1121	587	520			587		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1117	1117	516	1123	1121	587	520			587		
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	100	100	100	99			100		
cM capacity (veh/h)	184	206	559	180	205	509	1047			988		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	0	594	520
Volume Left	5	0	7	0
Volume Right	6	0	0	7
cSH	293	1700	1047	988
Volume to Capacity	0.04	0.00	0.01	0.00
Queue Length 95th (ft)	3	0	0	0
Control Delay (s)	17.7	0.0	0.2	0.0
Lane LOS	C	A	A	
Approach Delay (s)	17.7	0.0	0.2	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	41.7%	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)	80	0	48	5	0	12	19	436	10	7	415	29
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)	92	0	55	6	0	14	22	501	11	8	477	33
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	1074	1066	494	1116	1077	507	510			513		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1074	1066	494	1116	1077	507	510			513		
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 %	51	100	90	96	100	98	98			99		
cM capacity (veh/h)	189	216	576	164	213	566	1055			1053		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	92	55	6	14	534	518
Volume Left	92	0	6	0	22	8
Volume Right	0	55	0	14	11	33
cSH	189	576	164	566	1055	1053
Volume to Capacity	0.49	0.10	0.04	0.02	0.02	0.01
Queue Length 95th (ft)	60	8	3	2	2	1
Control Delay (s)	41.0	11.9	27.8	11.5	0.6	0.2
Lane LOS	E	B	D	B	A	A
Approach Delay (s)	30.1		16.3		0.6	0.2
Approach LOS	D		C			

Intersection Summary			
Average Delay	4.2		
Intersection Capacity Utilization	45.4%	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)	56	0	67	3	0	5	7	402	1	2	463	7
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)	64	0	77	3	0	6	8	462	1	2	532	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	1025	1020	536	1097	1024	463	540			463		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1025	1020	536	1097	1024	463	540			463		
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 %	69	100	86	98	100	99	99			100		
cM capacity (veh/h)	210	234	544	162	233	599	1028			1098		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	141	9	471	543
Volume Left	64	3	8	2
Volume Right	77	6	1	8
cSH	315	298	1028	1098
Volume to Capacity	0.45	0.03	0.01	0.00
Queue Length 95th (ft)	55	2	1	0
Control Delay (s)	25.4	17.4	0.2	0.1
Lane LOS	D	C	A	A
Approach Delay (s)	25.4	17.4	0.2	0.1
Approach LOS	D	C		

Intersection Summary			
Average Delay	3.3		
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)	101	59	22	341	477	72
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	116	68	25	392	548	83
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	1032	590	631			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1032	590	631			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	54	87	97			
cM capacity (veh/h)	251	508	951			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	184	417	631
Volume Left	116	25	0
Volume Right	68	0	83
cSH	309	951	1700
Volume to Capacity	0.60	0.03	0.37
Queue Length 95th (ft)	90	2	0
Control Delay (s)	32.5	0.8	0.0
Lane LOS	D	A	
Approach Delay (s)	32.5	0.8	0.0
Approach LOS	D		

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	3280		3433	3482		1681	1526			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3280		3433	3482		1681	1526			1811	1583
Volume (vph)	55	412	393	490	407	49	445	30	452	56	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	474	452	563	468	56	511	34	520	64	47	62
RTOR Reduction (vph)	0	155	0	0	8	0	0	322	0	0	0	38
Lane Group Flow (vph)	63	771	0	563	516	0	493	250	0	0	111	24
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	6.8	25.8		18.0	37.0		35.0	35.0			11.6	11.6
Effective Green, g (s)	6.8	25.8		18.0	37.0		35.0	35.0			11.6	11.6
Actuated g/C Ratio	0.06	0.24		0.17	0.35		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)	113	795		581	1211		553	502			197	173
v/s Ratio Prot	0.04	c0.24		c0.16	0.15		c0.29	0.16			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.56	0.97		0.97	0.43		0.89	0.50			0.56	0.14
Uniform Delay, d1	48.3	39.9		43.9	26.6		33.9	28.6			45.0	42.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	5.8	24.7		29.3	0.2		19.2	3.5			3.7	0.4
Delay (s)	54.2	64.7		73.2	26.8		53.1	32.1			48.7	43.2
Level of Service	D	E		E	C		D	C			D	D
Approach Delay (s)		64.0			50.8			41.8			46.7	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM Average Control Delay	51.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	106.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	934	0	0	938	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	1074	0	0	1078	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	1074	0	0	1078	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								0.58			c0.58	
v/s Ratio Perm												
v/c Ratio								0.68			0.68	
Uniform Delay, d1								3.3			3.3	
Progression Factor								1.00			1.00	
Incremental Delay, d2								2.4			2.4	
Delay (s)								5.7			5.7	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			5.7			5.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	52.7%	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)	79	0	28	7	0	18	22	832	3	13	820	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	32	8	0	21	25	956	3	15	943	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	2059	2040	999	2070	2095	958	1056			960		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2059	2040	999	2070	2095	958	1056			960		
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	89	76	100	93	96			98		
cM capacity (veh/h)	36	53	295	34	49	312	659			717		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	32	29	985	1071
Volume Left	91	0	8	25	15
Volume Right	0	32	21	3	114
cSH	36	295	95	659	717
Volume to Capacity	2.51	0.11	0.30	0.04	0.02
Queue Length 95th (ft)	254	9	29	3	2
Control Delay (s)	922.6	18.7	58.9	1.2	0.7
Lane LOS	F	C	F	A	A
Approach Delay (s)	686.1		58.9	1.2	0.7
Approach LOS	F		F		

Intersection Summary			
Average Delay	39.8		
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
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	633	26	7	728	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	728	30	8	837	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	1630	1634	855	1621	1623	757	853			764		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1630	1634	855	1621	1623	757	853			764		
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)	77	99	354	80	100	403	782			844		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	760	854
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	126	144	782	844
Volume to Capacity	0.04	0.14	0.00	0.01
Queue Length 95th (ft)	3	12	0	1
Control Delay (s)	34.6	34.2	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	34.6	34.2	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	53.9%	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	628	711	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	722	817	52
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	1612	860	886			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1612	860	886			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	72	97	99			
cM capacity (veh/h)	111	350	753			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	729	869
Volume Left	31	7	0
Volume Right	10	0	52
cSH	133	753	1700
Volume to Capacity	0.31	0.01	0.51
Queue Length 95th (ft)	30	1	0
Control Delay (s)	43.7	0.2	0.0
Lane LOS	E	A	
Approach Delay (s)	43.7	0.2	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	50.2%	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	583	2	4	637	9
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)	5	2	7	8	1	6	3	670	2	5	732	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	1431	1426	737	1433	1430	671	743			672		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1431	1426	737	1433	1430	671	743			672		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	98	93	99	99	100			99		
cM capacity (veh/h)	109	134	418	108	133	456	865			918		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	676	747
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	182	156	865	918
Volume to Capacity	0.08	0.10	0.00	0.01
Queue Length 95th (ft)	6	8	0	0
Control Delay (s)	26.4	30.5	0.1	0.1
Lane LOS	D	D	A	A
Approach Delay (s)	26.4	30.5	0.1	0.1
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	46.8%	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	585	643	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	672	739	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	1418	744	748			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1418	744	748			
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)	151	415	860			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	672	748
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	179	860	1700	1700
Volume to Capacity	0.03	0.00	0.40	0.44
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	25.6	9.2	0.0	0.0
Lane LOS	D	A		
Approach Delay (s)	25.6	0.0		0.0
Approach LOS	D			

Intersection Summary			
Average Delay	0.1		
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)	3	0	3	0	0	0	13	571	0	0	649	21
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)	3	0	3	0	0	0	15	656	0	0	746	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	1444	1444	758	1448	1456	656	770			656		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1444	1444	758	1448	1456	656	770			656		
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	100	100	100	98			100		
cM capacity (veh/h)	108	130	407	107	127	465	844			931		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	7	0	671	770
Volume Left	3	0	15	0
Volume Right	3	0	0	24
cSH	171	1700	844	931
Volume to Capacity	0.04	0.00	0.02	0.00
Queue Length 95th (ft)	3	0	1	0
Control Delay (s)	26.9	0.0	0.5	0.0
Lane LOS	D	A	A	
Approach Delay (s)	26.9	0.0	0.5	0.0
Approach LOS	D	A		

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	50.5%	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)	15	0	13	5	0	12	15	551	10	7	619	24
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)	17	0	15	6	0	14	17	633	11	8	711	28
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	1421	725	1430	1429	639	739			645		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1429	1421	725	1430	1429	639	739			645		
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 %	84	100	96	95	100	97	98			99		
cM capacity (veh/h)	107	132	425	106	131	476	867			940		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	17	15	6	14	662	747
Volume Left	17	0	6	0	17	8
Volume Right	0	15	0	14	11	28
cSH	107	425	106	476	867	940
Volume to Capacity	0.16	0.04	0.05	0.03	0.02	0.01
Queue Length 95th (ft)	14	3	4	2	2	1
Control Delay (s)	45.0	13.8	40.9	12.8	0.5	0.2
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	30.5		21.1		0.5	0.2
Approach LOS	D		C			

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	51.1%	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)	16	0	19	3	0	5	20	575	1	2	614	38
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)	18	0	22	3	0	6	23	661	1	2	706	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	1445	1440	728	1461	1461	661	749			662		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1445	1440	728	1461	1461	661	749			662		
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	95	97	100	99	97			100		
cM capacity (veh/h)	106	129	424	99	125	462	860			926		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	40	9	685	752
Volume Left	18	3	23	2
Volume Right	22	6	1	44
cSH	178	195	860	926
Volume to Capacity	0.23	0.05	0.03	0.00
Queue Length 95th (ft)	21	4	2	0
Control Delay (s)	30.9	24.4	0.7	0.1
Lane LOS	D	C	A	A
Approach Delay (s)	30.9	24.4	0.7	0.1
Approach LOS	D	C		

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	55.2%	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)	47	23	19	590	620	53
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	54	26	22	678	713	61
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1465	743	774			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1465	743	774			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	61	94	97			
cM capacity (veh/h)	138	415	842			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	80	700	774
Volume Left	54	22	0
Volume Right	26	0	61
cSH	176	842	1700
Volume to Capacity	0.46	0.03	0.46
Queue Length 95th (ft)	53	2	0
Control Delay (s)	41.5	0.7	0.0
Lane LOS	E	A	
Approach Delay (s)	41.5	0.7	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
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)	628	40	13	485	18	11
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	722	46	15	557	21	13
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			768		1340	751
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			768		1340	751
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		87	97
cM capacity (veh/h)			846		164	409

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	768	572	33
Volume Left	0	15	21
Volume Right	46	0	13
cSH	1700	846	212
Volume to Capacity	0.45	0.02	0.16
Queue Length 95th (ft)	0	1	14
Control Delay (s)	0.0	0.5	25.1
Lane LOS		A	D
Approach Delay (s)	0.0	0.5	25.1
Approach LOS			D

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	47.8%	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)	9	0	2	6	0	4	3	502	0	1	632	17
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)	10	0	2	7	0	5	3	577	0	1	726	20
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	1378	1373	787	1385	1383	637	767			607		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1378	1373	787	1385	1383	637	767			607		
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	99	94	100	99	100			100		
cM capacity (veh/h)	112	139	375	110	137	454	832			947		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	13	11	580	747
Volume Left	10	7	3	1
Volume Right	2	5	0	20
cSH	128	158	832	947
Volume to Capacity	0.10	0.07	0.00	0.00
Queue Length 95th (ft)	8	6	0	0
Control Delay (s)	36.2	29.6	0.1	0.0
Lane LOS	E	D	A	A
Approach Delay (s)	36.2	29.6	0.1	0.0
Approach LOS	E	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	79	0	28	7	0	18	22	832	3	13	820	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	32	8	0	21	25	956	3	15	943	114
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	2059	2040	999	2070	2095	958	1056			960		
vC1, stage 1 conf vol	1029	1029										
vC2, stage 2 conf vol	1029	1010										
vCu, unblocked vol	2059	2040	999	2070	2095	958	1056			960		
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 %	49	100	89	76	100	93	96			98		
cM capacity (veh/h)	178	211	295	34	49	312	659			717		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	32	29	985	1071
Volume Left	91	0	8	25	15
Volume Right	0	32	21	3	114
cSH	178	295	95	659	717
Volume to Capacity	0.51	0.11	0.30	0.04	0.02
Queue Length 95th (ft)	63	9	29	3	2
Control Delay (s)	44.7	18.7	58.9	1.2	0.7
Lane LOS	E	C	F	A	A
Approach Delay (s)	37.9		58.9	1.2	0.7
Approach LOS	E		F		

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
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	0.86			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	1527			1811	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	1527			1811	1583
Volume (vph)	55	412	350	469	407	49	439	30	443	56	42	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	539	468	56	505	34	509	64	48	62
RTOR Reduction (vph)	0	137	0	0	8	0	0	303	0	0	0	37
Lane Group Flow (vph)	63	739	0	539	516	0	485	260	0	0	112	25
Turn Type	Prot			Prot			Split			Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases												6
Actuated Green, G (s)	6.8	24.8		17.0	35.0		37.0	37.0			11.6	11.6
Effective Green, g (s)	6.8	24.8		17.0	35.0		37.0	37.0			11.6	11.6
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)	113	768		549	1145		585	531			197	173
v/s Ratio Prot	0.04	c0.22		c0.16	0.15		c0.29	0.17			c0.06	
v/s Ratio Perm												0.02
v/c Ratio	0.56	0.96		0.98	0.45		0.83	0.49			0.57	0.14
Uniform Delay, d1	48.3	40.3		44.5	28.1		31.8	27.3			45.0	42.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	5.8	23.4		33.6	0.3		12.8	3.2			3.7	0.4
Delay (s)	54.2	63.7		78.1	28.4		44.6	30.5			48.8	43.3
Level of Service	D	E		E	C		D	C			D	D
Approach Delay (s)		63.1			53.6			37.0			46.8	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM Average Control Delay	50.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	106.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	919	0	0	875	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	1056	0	0	1006	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	1056	0	0	1006	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								3.2			3.0	
Progression Factor								1.00			1.00	
Incremental Delay, d2								2.3			2.0	
Delay (s)								5.5			5.0	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			5.5			5.0	
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	51.7%	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)	79	0	27	7	0	18	22	817	3	13	757	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	31	8	0	21	25	939	3	15	870	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	1969	1950	927	1979	2005	941	984			943		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1969	1950	927	1979	2005	941	984			943		
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	80	100	94	96			98		
cM capacity (veh/h)	42	61	325	40	56	319	702			728		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	31	29	968	999
Volume Left	91	0	8	25	15
Volume Right	0	31	21	3	114
cSH	42	325	108	702	728
Volume to Capacity	2.16	0.10	0.27	0.04	0.02
Queue Length 95th (ft)	241	8	25	3	2
Control Delay (s)	741.0	17.2	50.0	1.1	0.6
Lane LOS	F	C	F	A	A
Approach Delay (s)	556.6		50.0	1.1	0.6
Approach LOS	F		F		

Intersection Summary			
Average Delay	33.5		
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	638	26	7	665	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	733	30	8	764	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	1563	1567	783	1554	1557	762	781			770		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1563	1567	783	1554	1557	762	781			770		
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)	85	108	389	89	110	400	832			839		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	766	782
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	140	156	832	839
Volume to Capacity	0.03	0.13	0.00	0.01
Queue Length 95th (ft)	3	11	0	1
Control Delay (s)	31.6	31.5	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	31.6	31.5	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	50.6%	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	609	647	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	700	744	52
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	1516	787	812			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1516	787	812			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	75	97	99			
cM capacity (veh/h)	127	386	803			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	707	795
Volume Left	31	7	0
Volume Right	10	0	52
cSH	152	803	1700
Volume to Capacity	0.27	0.01	0.47
Queue Length 95th (ft)	26	1	0
Control Delay (s)	37.3	0.2	0.0
Lane LOS	E	A	
Approach Delay (s)	37.3	0.2	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	46.9%	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	564	2	4	572	9
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)	5	2	7	8	1	6	3	648	2	5	657	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	1334	1329	663	1336	1333	649	668			651		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1334	1329	663	1336	1333	649	668			651		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	99	99	94	99	99	100			100		
cM capacity (veh/h)	128	153	461	126	153	469	922			936		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	654	672
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	209	179	922	936
Volume to Capacity	0.07	0.08	0.00	0.00
Queue Length 95th (ft)	5	7	0	0
Control Delay (s)	23.4	27.0	0.1	0.1
Lane LOS	C	D	A	A
Approach Delay (s)	23.4	27.0	0.1	0.1
Approach LOS	C	D		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	43.4%	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)	3	1	1	566	578	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	651	664	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	1322	669	674			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1322	669	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 %	98	100	100			
cM capacity (veh/h)	172	458	917			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	651	674
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	204	917	1700	1700
Volume to Capacity	0.02	0.00	0.38	0.40
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	23.0	8.9	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	40.9%	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)	0	0	1	0	0	0	2	556	0	0	600	3
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)	0	0	1	0	0	0	2	639	0	0	690	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	1335	1335	691	1336	1337	639	693			639		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1335	1335	691	1336	1337	639	693			639		
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)	130	153	444	130	153	476	902			945		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	0	641	693
Volume Left	0	0	2	0
Volume Right	1	0	0	3
cSH	444	1700	902	945
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	13.1	0.0	0.1	0.0
Lane LOS	B	A	A	
Approach Delay (s)	13.1	0.0	0.1	0.0
Approach LOS	B	A		

Intersection Summary			
Average Delay	0.0		
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)	11	0	13	5	0	12	11	529	10	7	582	10
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)	13	0	15	6	0	14	13	608	11	8	669	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	1344	1336	675	1345	1336	614	680			620		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1344	1336	675	1345	1336	614	680			620		
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 %	90	100	97	95	100	97	99			99		
cM capacity (veh/h)	123	150	454	122	150	492	912			961		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	13	15	6	14	632	689
Volume Left	13	0	6	0	13	8
Volume Right	0	15	0	14	11	11
cSH	123	454	122	492	912	961
Volume to Capacity	0.10	0.03	0.05	0.03	0.01	0.01
Queue Length 95th (ft)	8	3	4	2	1	1
Control Delay (s)	37.5	13.2	35.9	12.5	0.4	0.2
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	24.4		19.4		0.4	0.2
Approach LOS	C		C			

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	48.3%	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	13	3	0	5	6	555	1	2	604	11
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)	11	0	15	3	0	6	7	638	1	2	694	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	1358	701	1372	1364	639	707			639		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1363	1358	701	1372	1364	639	707			639		
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	97	100	99	99			100		
cM capacity (veh/h)	122	147	439	118	146	476	892			945		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	26	9	646	709
Volume Left	11	3	7	2
Volume Right	15	6	1	13
cSH	207	223	892	945
Volume to Capacity	0.13	0.04	0.01	0.00
Queue Length 95th (ft)	11	3	1	0
Control Delay (s)	25.0	21.9	0.2	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	25.0	21.9	0.2	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	43.7%	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)	44	21	15	559	615	42
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	51	24	17	643	707	48
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	1408	731	755			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1408	731	755			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	66	94	98			
cM capacity (veh/h)	150	422	855			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	75	660	755
Volume Left	51	17	0
Volume Right	24	0	48
cSH	189	855	1700
Volume to Capacity	0.39	0.02	0.44
Queue Length 95th (ft)	44	2	0
Control Delay (s)	35.9	0.5	0.0
Lane LOS	E	A	
Approach Delay (s)	35.9	0.5	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	51.9%	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)	622	40	13	448	18	11
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	715	46	15	515	21	13
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			761		1291	744
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			761		1291	744
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		88	97
cM capacity (veh/h)			851		176	413

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	761	530	33
Volume Left	0	15	21
Volume Right	46	0	13
cSH	1700	851	225
Volume to Capacity	0.45	0.02	0.15
Queue Length 95th (ft)	0	1	13
Control Delay (s)	0.0	0.5	23.8
Lane LOS		A	C
Approach Delay (s)	0.0	0.5	23.8
Approach LOS			C

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	47.0%	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)	8	0	2	6	0	4	3	466	0	1	626	16
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)	9	0	2	7	0	5	3	536	0	1	720	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	1329	1325	780	1336	1334	596	759			566		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1329	1325	780	1336	1334	596	759			566		
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	99	94	100	99	100			100		
cM capacity (veh/h)	121	148	379	119	147	479	838			981		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	11	11	539	739
Volume Left	9	7	3	1
Volume Right	2	5	0	18
cSH	140	170	838	981
Volume to Capacity	0.08	0.07	0.00	0.00
Queue Length 95th (ft)	7	5	0	0
Control Delay (s)	33.1	27.7	0.1	0.0
Lane LOS	D	D	A	A
Approach Delay (s)	33.1	27.7	0.1	0.0
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	51.0%	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	0.86			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	3287		3433	3482		1681	1528			1811	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3287		3433	3482		1681	1528			1811	1583
Volume (vph)	55	412	372	487	407	49	444	31	451	56	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	474	428	560	468	56	510	36	518	64	47	62
RTOR Reduction (vph)	0	139	0	0	7	0	0	278	0	0	0	37
Lane Group Flow (vph)	63	763	0	560	517	0	489	297	0	0	111	25
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	26.9		18.0	38.0		37.0	37.0			11.9	11.9
Effective Green, g (s)	6.9	26.9		18.0	38.0		37.0	37.0			11.9	11.9
Actuated g/C Ratio	0.06	0.24		0.16	0.35		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)	111	805		563	1205		566	515			196	172
v/s Ratio Prot	0.04	c0.23		c0.16	0.15		c0.29	0.19			c0.06	
v/s Ratio Perm												0.02
v/c Ratio	0.57	0.95		0.99	0.43		0.86	0.58			0.57	0.15
Uniform Delay, d1	50.0	40.8		45.9	27.6		34.0	30.0			46.5	44.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	6.5	19.9		36.3	0.2		16.0	4.7			3.7	0.4
Delay (s)	56.5	60.7		82.2	27.8		50.1	34.6			50.2	44.8
Level of Service	E	E		F	C		D	C			D	D
Approach Delay (s)		60.4			55.9			41.7			48.3	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM Average Control Delay	52.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	109.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	933	0	0	914	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	1072	0	0	1051	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	1072	0	0	1051	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								c0.58			0.56	
v/s Ratio Perm												
v/c Ratio								0.68			0.67	
Uniform Delay, d1								3.3			3.2	
Progression Factor								1.00			1.00	
Incremental Delay, d2								2.4			2.2	
Delay (s)								5.7			5.5	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			5.7			5.5	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	52.4%	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)	79	0	26	7	0	18	22	832	3	13	796	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	30	8	0	21	25	956	3	15	915	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	2031	2012	972	2040	2067	958	1029			960		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2031	2012	972	2040	2067	958	1029			960		
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	78	100	93	96			98		
cM capacity (veh/h)	38	55	306	36	51	312	675			717		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	30	29	985	1044
Volume Left	91	0	8	25	15
Volume Right	0	30	21	3	114
cSH	38	306	99	675	717
Volume to Capacity	2.40	0.10	0.29	0.04	0.02
Queue Length 95th (ft)	250	8	27	3	2
Control Delay (s)	864.1	18.0	55.4	1.2	0.7
Lane LOS	F	C	F	A	A
Approach Delay (s)	654.6		55.4	1.2	0.7
Approach LOS	F		F		

Intersection Summary			
Average Delay	37.8		
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	633	26	7	702	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	728	30	8	807	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	1600	1604	825	1591	1593	757	823			764		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1600	1604	825	1591	1593	757	823			764		
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)	81	103	368	84	104	403	802			844		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	760	824
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	132	149	802	844
Volume to Capacity	0.03	0.14	0.00	0.01
Queue Length 95th (ft)	3	12	0	1
Control Delay (s)	33.2	32.9	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	33.2	32.9	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	52.6%	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	630	686	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	724	789	52
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	1585	831	857			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1585	831	857			
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	97	99			
cM capacity (veh/h)	115	364	772			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	731	840
Volume Left	31	7	0
Volume Right	10	0	52
cSH	139	772	1700
Volume to Capacity	0.30	0.01	0.49
Queue Length 95th (ft)	29	1	0
Control Delay (s)	41.7	0.2	0.0
Lane LOS	E	A	
Approach Delay (s)	41.7	0.2	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	48.9%	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	584	2	4	612	9
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)	5	2	7	8	1	6	3	671	2	5	703	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	1403	1398	709	1405	1402	672	714			674		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1403	1398	709	1405	1402	672	714			674		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	98	93	99	99	100			99		
cM capacity (veh/h)	114	139	434	113	139	456	886			917		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	677	718
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	190	162	886	917
Volume to Capacity	0.07	0.09	0.00	0.01
Queue Length 95th (ft)	6	7	0	0
Control Delay (s)	25.4	29.5	0.1	0.1
Lane LOS	D	D	A	A
Approach Delay (s)	25.4	29.5	0.1	0.1
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	45.5%	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	586	618	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	674	710	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	1391	715	720			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1391	715	720			
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)	156	431	882			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	674	720
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	186	882	1700	1700
Volume to Capacity	0.02	0.00	0.40	0.42
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	24.8	9.1	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	24.8	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	43.0%	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)	7	0	8	0	0	0	14	568	0	0	625	20
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)	8	0	9	0	0	0	16	653	0	0	718	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	1415	1415	730	1424	1426	653	741			653		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1415	1415	730	1424	1426	653	741			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 %	93	100	98	100	100	100	98			100		
cM capacity (veh/h)	113	135	422	109	133	467	866			934		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	17	0	669	741
Volume Left	8	0	16	0
Volume Right	9	0	0	23
cSH	186	1700	866	934
Volume to Capacity	0.09	0.00	0.02	0.00
Queue Length 95th (ft)	8	0	1	0
Control Delay (s)	26.3	0.0	0.5	0.0
Lane LOS	D	A	A	
Approach Delay (s)	26.3	0.0	0.5	0.0
Approach LOS	D	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	51.1%	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)	14	0	14	5	0	12	16	550	10	7	596	24
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)	16	0	16	6	0	14	18	632	11	8	685	28
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	1403	1395	699	1406	1403	638	713			644		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1403	1395	699	1406	1403	638	713			644		
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	96	95	100	97	98			99		
cM capacity (veh/h)	111	137	440	110	136	477	887			941		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	16	16	6	14	662	721
Volume Left	16	0	6	0	18	8
Volume Right	0	16	0	14	11	28
cSH	111	440	110	477	887	941
Volume to Capacity	0.14	0.04	0.05	0.03	0.02	0.01
Queue Length 95th (ft)	12	3	4	2	2	1
Control Delay (s)	42.8	13.5	39.5	12.8	0.6	0.2
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	28.1		20.6		0.6	0.2
Approach LOS	D		C			

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	49.9%	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)	16	0	17	3	0	5	13	575	1	2	605	25
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)	18	0	20	3	0	6	15	661	1	2	695	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1411	1406	710	1425	1420	661	724			662		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1411	1406	710	1425	1420	661	724			662		
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 %	84	100	95	97	100	99	98			100		
cM capacity (veh/h)	113	136	434	106	134	462	878			926		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	38	9	677	726
Volume Left	18	3	15	2
Volume Right	20	6	1	29
cSH	182	205	878	926
Volume to Capacity	0.21	0.04	0.02	0.00
Queue Length 95th (ft)	19	4	1	0
Control Delay (s)	29.9	23.4	0.5	0.1
Lane LOS	D	C	A	A
Approach Delay (s)	29.9	23.4	0.5	0.1
Approach LOS	D	C		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	49.9%	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)	44	21	13	587	621	41
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	51	24	15	675	714	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	1442	737	761			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1442	737	761			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	65	94	98			
cM capacity (veh/h)	143	418	851			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	75	690	761
Volume Left	51	15	0
Volume Right	24	0	47
cSH	182	851	1700
Volume to Capacity	0.41	0.02	0.45
Queue Length 95th (ft)	46	1	0
Control Delay (s)	37.9	0.5	0.0
Lane LOS	E	A	
Approach Delay (s)	37.9	0.5	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	51.7%	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)	628	41	13	472	17	11
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	722	47	15	543	20	13
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			769		1326	751
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			769		1326	751
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		88	97
cM capacity (veh/h)			845		167	408

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	769	557	32
Volume Left	0	15	20
Volume Right	47	0	13
cSH	1700	845	218
Volume to Capacity	0.45	0.02	0.15
Queue Length 95th (ft)	0	1	13
Control Delay (s)	0.0	0.5	24.4
Lane LOS		A	C
Approach Delay (s)	0.0	0.5	24.4
Approach LOS			C

Intersection Summary			
Average Delay	0.8		
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)	8	0	2	6	0	4	3	490	0	1	632	17
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)	9	0	2	7	0	5	3	563	0	1	726	20
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	1364	1360	787	1371	1369	623	767			593		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1364	1360	787	1371	1369	623	767			593		
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	99	94	100	99	100			100		
cM capacity (veh/h)	114	141	375	112	140	462	832			958		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	11	11	567	747
Volume Left	9	7	3	1
Volume Right	2	5	0	20
cSH	132	161	832	958
Volume to Capacity	0.09	0.07	0.00	0.00
Queue Length 95th (ft)	7	6	0	0
Control Delay (s)	34.7	29.0	0.1	0.0
Lane LOS	D	D	A	A
Approach Delay (s)	34.7	29.0	0.1	0.0
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	79	0	26	7	0	18	22	832	3	13	796	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	30	8	0	21	25	956	3	15	915	114
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	2031	2012	972	2040	2067	958	1029			960		
vC1, stage 1 conf vol	1002	1002										
vC2, stage 2 conf vol	1029	1010										
vCu, unblocked vol	2031	2012	972	2040	2067	958	1029			960		
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 %	50	100	90	78	100	93	96			98		
cM capacity (veh/h)	181	214	306	36	51	312	675			717		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	30	29	985	1044
Volume Left	91	0	8	25	15
Volume Right	0	30	21	3	114
cSH	181	306	99	675	717
Volume to Capacity	0.50	0.10	0.29	0.04	0.02
Queue Length 95th (ft)	62	8	27	3	2
Control Delay (s)	43.4	18.0	55.4	1.2	0.7
Lane LOS	E	C	F	A	A
Approach Delay (s)	37.1		55.4	1.2	0.7
Approach LOS	E		F		

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	3289		3433	3482		1681	1531			1810	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.97	1.00
Satd. Flow (perm)	1770	3289		3433	3482		1681	1531			1810	1583
Volume (vph)	55	412	369	479	407	49	444	31	448	56	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	474	424	551	468	56	510	36	515	64	46	62
RTOR Reduction (vph)	0	137	0	0	7	0	0	225	0	0	0	37
Lane Group Flow (vph)	63	761	0	551	517	0	476	360	0	0	110	25
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	26.9		18.0	38.0		37.0	37.0			11.9	11.9
Effective Green, g (s)	6.9	26.9		18.0	38.0		37.0	37.0			11.9	11.9
Actuated g/C Ratio	0.06	0.24		0.16	0.35		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)	111	806		563	1205		566	516			196	172
v/s Ratio Prot	0.04	c0.23		c0.16	0.15		c0.28	0.23			c0.06	
v/s Ratio Perm												0.02
v/c Ratio	0.57	0.94		0.98	0.43		0.84	0.70			0.56	0.14
Uniform Delay, d1	50.0	40.7		45.7	27.6		33.7	31.5			46.5	44.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	6.5	19.2		32.1	0.2		14.1	7.6			3.6	0.4
Delay (s)	56.5	59.9		77.8	27.8		47.7	39.1			50.1	44.7
Level of Service	E	E		E	C		D	D			D	D
Approach Delay (s)		59.7			53.5			43.0			48.2	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM Average Control Delay	51.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	109.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑			↑			↑			↑	
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	930	0	0	902	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	1069	0	0	1037	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	1069	0	0	1037	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			0.56	
v/s Ratio Perm												
v/c Ratio								0.68			0.66	
Uniform Delay, d1								3.3			3.2	
Progression Factor								1.00			1.00	
Incremental Delay, d2								2.4			2.2	
Delay (s)								5.6			5.3	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			5.6			5.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	52.3%	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)	79	0	27	7	0	18	21	828	3	13	784	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	31	8	0	21	24	952	3	15	901	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	2010	1991	958	2021	2047	953	1015			955		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2010	1991	958	2021	2047	953	1015			955		
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	78	100	93	96			98		
cM capacity (veh/h)	39	57	312	37	53	314	683			720		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	31	29	979	1030
Volume Left	91	0	8	24	15
Volume Right	0	31	21	3	114
cSH	39	312	102	683	720
Volume to Capacity	2.31	0.10	0.28	0.04	0.02
Queue Length 95th (ft)	247	8	26	3	2
Control Delay (s)	820.1	17.8	53.7	1.1	0.7
Lane LOS	F	C	F	A	A
Approach Delay (s)	615.7		53.7	1.1	0.7
Approach LOS	F		F		

Intersection Summary			
Average Delay	36.3		
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
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	630	26	7	704	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	724	30	8	809	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	1599	1603	828	1590	1592	753	825			761		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1599	1603	828	1590	1592	753	825			761		
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)	81	103	367	84	105	405	800			846		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	756	826
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	132	150	800	846
Volume to Capacity	0.03	0.14	0.00	0.01
Queue Length 95th (ft)	3	12	0	1
Control Delay (s)	33.2	32.9	0.1	0.3
Lane LOS	D	D	A	A
Approach Delay (s)	33.2	32.9	0.1	0.3
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
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)	27	9	6	626	688	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	720	791	52
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	1583	834	860			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1583	834	860			
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	97	99			
cM capacity (veh/h)	115	363	771			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	726	843
Volume Left	31	7	0
Volume Right	10	0	52
cSH	139	771	1700
Volume to Capacity	0.30	0.01	0.50
Queue Length 95th (ft)	29	1	0
Control Delay (s)	41.6	0.2	0.0
Lane LOS	E	A	
Approach Delay (s)	41.6	0.2	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	49.0%	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	580	2	4	610	9
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)	5	2	7	8	1	6	3	667	2	5	701	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	1397	1391	706	1398	1395	668	711			669		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1397	1391	706	1398	1395	668	711			669		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	98	98	93	99	99	100			100		
cM capacity (veh/h)	115	141	436	114	140	458	888			921		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	672	716
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	192	164	888	921
Volume to Capacity	0.07	0.09	0.00	0.00
Queue Length 95th (ft)	6	7	0	0
Control Delay (s)	25.2	29.2	0.1	0.1
Lane LOS	D	D	A	A
Approach Delay (s)	25.2	29.2	0.1	0.1
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	45.4%	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)	3	1	1	582	616	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	669	708	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	1384	713	717			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1384	713	717			
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)	158	432	884			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	669	717
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	188	884	1700	1700
Volume to Capacity	0.02	0.00	0.39	0.42
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	24.7	9.1	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	24.7	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	42.9%	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)	2	0	2	0	0	0	8	566	0	0	627	14
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	0	0	0	9	651	0	0	721	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	1398	1398	729	1400	1406	651	737			651		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1398	1398	729	1400	1406	651	737			651		
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)	117	139	423	116	138	469	869			936		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	0	660	737
Volume Left	2	0	9	0
Volume Right	2	0	0	16
cSH	184	1700	869	936
Volume to Capacity	0.03	0.00	0.01	0.00
Queue Length 95th (ft)	2	0	1	0
Control Delay (s)	25.1	0.0	0.3	0.0
Lane LOS	D	A	A	
Approach Delay (s)	25.1	0.0	0.3	0.0
Approach LOS	D	A		

Intersection Summary			
Average Delay	0.2		
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)	8	0	9	5	0	12	12	549	10	7	603	18
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)	9	0	10	6	0	14	14	631	11	8	693	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	1398	1390	703	1394	1394	637	714			643		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1398	1390	703	1394	1394	637	714			643		
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	98	95	100	97	98			99		
cM capacity (veh/h)	113	139	437	114	138	477	886			942		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	9	10	6	14	656	722
Volume Left	9	0	6	0	14	8
Volume Right	0	10	0	14	11	21
cSH	113	437	114	477	886	942
Volume to Capacity	0.08	0.02	0.05	0.03	0.02	0.01
Queue Length 95th (ft)	7	2	4	2	1	1
Control Delay (s)	39.7	13.4	38.3	12.8	0.4	0.2
Lane LOS	E	B	E	B	A	A
Approach Delay (s)	25.8		20.3		0.4	0.2
Approach LOS	D		C			

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	49.9%	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)	24	0	22	3	0	5	18	562	1	2	604	28
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)	28	0	25	3	0	6	21	646	1	2	694	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	1409	1403	710	1428	1419	647	726			647		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1409	1403	710	1428	1419	647	726			647		
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	94	97	100	99	98			100		
cM capacity (veh/h)	113	136	433	104	133	471	877			938		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	53	9	668	729
Volume Left	28	3	21	2
Volume Right	25	6	1	32
cSH	174	203	877	938
Volume to Capacity	0.30	0.05	0.02	0.00
Queue Length 95th (ft)	30	4	2	0
Control Delay (s)	34.4	23.6	0.6	0.1
Lane LOS	D	C	A	A
Approach Delay (s)	34.4	23.6	0.6	0.1
Approach LOS	D	C		

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	53.6%	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	575	617	47
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	53	26	20	661	709	54
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	1436	736	763			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1436	736	763			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	63	94	98			
cM capacity (veh/h)	144	419	849			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	79	680	763
Volume Left	53	20	0
Volume Right	26	0	54
cSH	184	849	1700
Volume to Capacity	0.43	0.02	0.45
Queue Length 95th (ft)	49	2	0
Control Delay (s)	38.6	0.6	0.0
Lane LOS	E	A	
Approach Delay (s)	38.6	0.6	0.0
Approach LOS	E		

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	54.6%	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)	629	41	13	471	18	11
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	723	47	15	541	21	13
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			770		1326	753
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			770		1326	753
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		88	97
cM capacity (veh/h)			844		167	408

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	770	556	33
Volume Left	0	15	21
Volume Right	47	0	13
cSH	1700	844	216
Volume to Capacity	0.45	0.02	0.15
Queue Length 95th (ft)	0	1	13
Control Delay (s)	0.0	0.5	24.7
Lane LOS		A	C
Approach Delay (s)	0.0	0.5	24.7
Approach LOS			C

Intersection Summary			
Average Delay	0.8		
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)	7	0	2	6	0	4	3	489	0	1	633	17
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)	8	0	2	7	0	5	3	562	0	1	728	20
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	1364	1360	788	1371	1369	622	768			592		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1364	1360	788	1371	1369	622	768			592		
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	94	100	99	100			100		
cM capacity (veh/h)	114	141	375	112	140	463	831			959		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	10	11	566	748
Volume Left	8	7	3	1
Volume Right	2	5	0	20
cSH	135	161	831	959
Volume to Capacity	0.08	0.07	0.00	0.00
Queue Length 95th (ft)	6	6	0	0
Control Delay (s)	33.9	29.0	0.1	0.0
Lane LOS	D	D	A	A
Approach Delay (s)	33.9	29.0	0.1	0.0
Approach LOS	D	D		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	51.4%	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)	79	0	27	7	0	18	21	828	3	13	784	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	31	8	0	21	24	952	3	15	901	114
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	2010	1991	958	2021	2047	953	1015			955		
vC1, stage 1 conf vol	988	988										
vC2, stage 2 conf vol	1022	1003										
vCu, unblocked vol	2010	1991	958	2021	2047	953	1015			955		
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 %	51	100	90	78	100	93	96			98		
cM capacity (veh/h)	184	217	312	37	53	314	683			720		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	31	29	979	1030
Volume Left	91	0	8	24	15
Volume Right	0	31	21	3	114
cSH	184	312	102	683	720
Volume to Capacity	0.49	0.10	0.28	0.04	0.02
Queue Length 95th (ft)	61	8	26	3	2
Control Delay (s)	42.3	17.8	53.7	1.1	0.7
Lane LOS	E	C	F	A	A
Approach Delay (s)	36.1		53.7	1.1	0.7
Approach LOS	E		F		

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
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	3277		3433	3468		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	3277		3433	3468		1681	1545			1811	1583
Volume (vph)	55	314	306	365	313	49	322	30	306	56	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	361	352	420	360	56	370	34	352	64	47	62
RTOR Reduction (vph)	0	199	0	0	13	0	0	167	0	0	0	48
Lane Group Flow (vph)	63	514	0	420	403	0	325	264	0	0	111	14
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	17.3		12.3	25.9		24.8	24.8			8.4	8.4
Effective Green, g (s)	3.7	17.3		12.3	25.9		24.8	24.8			8.4	8.4
Actuated g/C Ratio	0.05	0.22		0.16	0.33		0.31	0.31			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	719		536	1140		529	486			193	169
v/s Ratio Prot	0.04	c0.16		c0.12	0.12		c0.19	0.17			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.71		0.78	0.35		0.61	0.54			0.58	0.08
Uniform Delay, d1	37.1	28.5		32.0	20.1		22.9	22.3			33.5	31.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	3.4		7.4	0.2		5.3	4.3			4.1	0.2
Delay (s)	69.3	31.9		39.3	20.3		28.2	26.7			37.6	31.9
Level of Service	E	C		D	C		C	C			D	C
Approach Delay (s)		34.9			29.9			27.3			35.6	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.6%	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	655	0	0	709	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	753	0	0	815	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	753	0	0	815	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								0.40			c0.44	
v/s Ratio Perm												
v/c Ratio								0.48			0.52	
Uniform Delay, d1								2.4			2.5	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.0			1.2	
Delay (s)								3.4			3.7	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			3.4			3.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	3.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	40.6%	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	18	7	0	18	34	586	3	13	615	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	21	8	0	21	39	674	3	15	707	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	1568	1549	764	1568	1604	675	821			677		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1568	1549	764	1568	1604	675	821			677		
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	95	90	100	95	95			98		
cM capacity (veh/h)	82	107	404	81	99	454	808			915		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	21	29	716	836
Volume Left	91	0	8	39	15
Volume Right	0	21	21	3	114
cSH	82	404	199	808	915
Volume to Capacity	1.11	0.05	0.14	0.05	0.02
Queue Length 95th (ft)	161	4	12	4	1
Control Delay (s)	224.5	14.4	26.2	1.3	0.4
Lane LOS	F	B	D	A	A
Approach Delay (s)	185.5		26.2	1.3	0.4
Approach LOS	F		D		

Intersection Summary			
Average Delay	13.4		
Intersection Capacity Utilization	67.2%	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	467	26	7	547	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	537	30	8	629	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	1231	1235	647	1222	1224	566	645			574		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1231	1235	647	1222	1224	566	645			574		
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	100	94	100	98	100			99		
cM capacity (veh/h)	146	173	465	151	175	518	935			993		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	569	646
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	223	249	935	993
Volume to Capacity	0.02	0.08	0.00	0.01
Queue Length 95th (ft)	2	7	0	1
Control Delay (s)	21.5	20.7	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	21.5	20.7	0.1	0.2
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)	27	9	6	455	515	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	523	592	52
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	1188	635	661			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1188	635	661			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	85	98	99			
cM capacity (veh/h)	201	472	914			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	530	644
Volume Left	31	7	0
Volume Right	10	0	52
cSH	234	914	1700
Volume to Capacity	0.18	0.01	0.38
Queue Length 95th (ft)	16	1	0
Control Delay (s)	23.6	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	23.6	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	40.0%	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	460	2	4	456	9
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)	5	2	7	8	1	6	3	529	2	5	524	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	1082	1076	529	1083	1080	530	534			531		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1082	1076	529	1083	1080	530	534			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 %	98	99	99	96	99	99	100			100		
cM capacity (veh/h)	191	217	549	190	216	549	1033			1036		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	534	539
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	292	257	1033	1036
Volume to Capacity	0.05	0.06	0.00	0.00
Queue Length 95th (ft)	4	5	0	0
Control Delay (s)	17.9	19.9	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	17.9	19.9	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	37.2%	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)	3	1	1	461	461	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	530	530	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	1067	534	539			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1067	534	539			
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)	246	546	1029			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	530	539
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	285	1029	1700	1700
Volume to Capacity	0.02	0.00	0.31	0.32
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	17.8	8.5	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	17.8	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	34.7%	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)	1	0	1	0	0	0	6	484	0	0	466	19
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)	1	0	1	0	0	0	7	556	0	0	536	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	1117	1117	547	1118	1128	556	557			556		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1117	1117	547	1118	1128	556	557			556		
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)	184	206	537	183	203	530	1013			1014		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	2	0	563	557
Volume Left	1	0	7	0
Volume Right	1	0	0	22
cSH	274	1700	1013	1014
Volume to Capacity	0.01	0.00	0.01	0.00
Queue Length 95th (ft)	1	0	1	0
Control Delay (s)	18.3	0.0	0.2	0.0
Lane LOS	C	A	A	
Approach Delay (s)	18.3	0.0	0.2	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.3%	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)	22	0	11	5	0	12	8	467	10	7	438	22
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)	25	0	13	6	0	14	9	537	11	8	503	25
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	1107	1099	516	1106	1106	543	529			548		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1107	1099	516	1106	1106	543	529			548		
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	98	97	100	97	99			99		
cM capacity (veh/h)	180	209	559	181	207	540	1038			1021		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	25	13	6	14	557	537
Volume Left	25	0	6	0	9	8
Volume Right	0	13	0	14	11	25
cSH	180	559	181	540	1038	1021
Volume to Capacity	0.14	0.02	0.03	0.03	0.01	0.01
Queue Length 95th (ft)	12	2	2	2	1	1
Control Delay (s)	28.2	11.6	25.5	11.8	0.2	0.2
Lane LOS	D	B	D	B	A	A
Approach Delay (s)	22.6		15.9		0.2	0.2
Approach LOS	C		C			

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	42.3%	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)	164	0	66	3	0	5	23	314	1	2	382	74
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)	189	0	76	3	0	6	26	361	1	2	439	85
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	906	901	482	976	943	361	524			362		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	906	901	482	976	943	361	524			362		
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 %	24	100	87	98	100	99	97			100		
cM capacity (veh/h)	249	270	585	196	255	683	1042			1197		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	264	9	389	526
Volume Left	189	3	26	2
Volume Right	76	6	1	85
cSH	299	354	1042	1197
Volume to Capacity	0.89	0.03	0.03	0.00
Queue Length 95th (ft)	201	2	2	0
Control Delay (s)	65.2	15.4	0.8	0.1
Lane LOS	F	C	A	A
Approach Delay (s)	65.2	15.4	0.8	0.1
Approach LOS	F	C		

Intersection Summary			
Average Delay	14.9		
Intersection Capacity Utilization	59.9%	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	338	427	42
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	38	17	13	389	491	48
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	929	515	539			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	929	515	539			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	97	99			
cM capacity (veh/h)	294	560	1029			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	55	401	539
Volume Left	38	13	0
Volume Right	17	0	48
cSH	345	1029	1700
Volume to Capacity	0.16	0.01	0.32
Queue Length 95th (ft)	14	1	0
Control Delay (s)	17.4	0.4	0.0
Lane LOS	C	A	
Approach Delay (s)	17.4	0.4	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.1		
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)	79	0	18	7	0	18	34	586	3	13	615	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	21	8	0	21	39	674	3	15	707	114
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	1568	1549	764	1568	1604	675	821			677		
vC1, stage 1 conf vol	794	794										
vC2, stage 2 conf vol	774	755										
vCu, unblocked vol	1568	1549	764	1568	1604	675	821			677		
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 %	65	100	95	90	100	95	95			98		
cM capacity (veh/h)	259	287	404	81	99	454	808			915		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	21	29	716	836
Volume Left	91	0	8	39	15
Volume Right	0	21	21	3	114
cSH	259	404	199	808	915
Volume to Capacity	0.35	0.05	0.14	0.05	0.02
Queue Length 95th (ft)	38	4	12	4	1
Control Delay (s)	26.3	14.4	26.2	1.3	0.4
Lane LOS	D	B	D	A	A
Approach Delay (s)	24.1		26.2	1.3	0.4
Approach LOS	C		D		

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	67.2%	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)	164	0	66	3	0	5	23	314	1	2	382	74
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)	189	0	76	3	0	6	26	361	1	2	439	85
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	906	901	482	976	943	361	524			362		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	906	901	482	976	943	361	524			362		
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 %	24	100	87	98	100	99	97			100		
cM capacity (veh/h)	249	270	585	196	255	683	1042			1197		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	189	76	9	389	526
Volume Left	189	0	3	26	2
Volume Right	0	76	6	1	85
cSH	249	585	354	1042	1197
Volume to Capacity	0.76	0.13	0.03	0.03	0.00
Queue Length 95th (ft)	136	11	2	2	0
Control Delay (s)	53.5	12.1	15.4	0.8	0.1
Lane LOS	F	B	C	A	A
Approach Delay (s)	41.6		15.4	0.8	0.1
Approach LOS	E		C		

Intersection Summary			
Average Delay	9.7		
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	3298		3433	3468		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	3298		3433	3468		1681	1548			1811	1583
Volume (vph)	55	314	261	338	313	49	312	30	281	56	42	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	361	300	389	360	56	359	34	323	64	48	62
RTOR Reduction (vph)	0	173	0	0	14	0	0	148	0	0	0	48
Lane Group Flow (vph)	63	488	0	389	402	0	312	256	0	0	112	14
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	16.9		11.5	24.7		24.8	24.8			8.4	8.4
Effective Green, g (s)	3.7	16.9		11.5	24.7		24.8	24.8			8.4	8.4
Actuated g/C Ratio	0.05	0.22		0.15	0.32		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)	84	718		509	1104		537	495			196	171
v/s Ratio Prot	0.04	c0.15		c0.11	0.12		c0.19	0.17			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.75	0.68		0.76	0.36		0.58	0.52			0.57	0.08
Uniform Delay, d1	36.5	27.9		31.7	20.4		22.1	21.5			32.9	31.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	30.8	2.6		6.7	0.2		4.5	3.8			4.0	0.2
Delay (s)	67.3	30.4		38.5	20.6		26.6	25.3			36.9	31.3
Level of Service	E	C		D	C		C	C			D	C
Approach Delay (s)		33.6			29.2			25.9			34.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	30.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	77.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.4%	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	620	0	0	638	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	713	0	0	733	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	713	0	0	733	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								0.38			c0.39	
v/s Ratio Perm												
v/c Ratio								0.45			0.46	
Uniform Delay, d1								2.3			2.3	
Progression Factor								1.00			1.00	
Incremental Delay, d2								0.9			1.0	
Delay (s)								3.2			3.3	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			3.2			3.3	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	3.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	36.9%	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)	79	0	12	7	0	18	7	551	3	13	544	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	14	8	0	21	8	633	3	15	625	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	1384	1365	682	1377	1420	635	739			637		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1384	1365	682	1377	1420	635	739			637		
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 %	20	100	97	93	100	96	99			98		
cM capacity (veh/h)	113	144	450	116	133	478	867			947		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	14	29	645	754
Volume Left	91	0	8	8	15
Volume Right	0	14	21	3	114
cSH	113	450	255	867	947
Volume to Capacity	0.80	0.03	0.11	0.01	0.02
Queue Length 95th (ft)	115	2	9	1	1
Control Delay (s)	107.8	13.3	20.9	0.2	0.4
Lane LOS	F	B	C	A	A
Approach Delay (s)	95.3		20.9	0.2	0.4
Approach LOS	F		C		

Intersection Summary			
Average Delay	7.2		
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	0	2	8	0	10	2	390	26	7	464	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	448	30	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	1047	1051	552	1038	1040	477	550			485		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1047	1051	552	1038	1040	477	550			485		
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)	196	222	527	202	225	581	1014			1071		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	480	551
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	286	317	1014	1071
Volume to Capacity	0.02	0.07	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	0.6		
Intersection Capacity Utilization	39.8%	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)	27	9	6	325	425	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	374	489	52
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	935	531	557			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	935	531	557			
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)	285	540	999			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	380	540
Volume Left	31	7	0
Volume Right	10	0	52
cSH	323	999	1700
Volume to Capacity	0.13	0.01	0.32
Queue Length 95th (ft)	11	1	0
Control Delay (s)	17.8	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	17.8	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	35.3%	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)	4	2	6	7	1	5	3	294	2	4	356	9
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)	5	2	7	8	1	6	3	338	2	5	409	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	776	771	414	778	775	339	420			340		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	776	771	414	778	775	339	420			340		
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	97	100	99	100			100		
cM capacity (veh/h)	310	329	638	307	327	703	1140			1219		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	344	424
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	422	394	1140	1219
Volume to Capacity	0.03	0.04	0.00	0.00
Queue Length 95th (ft)	3	3	0	0
Control Delay (s)	13.8	14.5	0.1	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	13.8	14.5	0.1	0.1
Approach LOS	B	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	31.8%	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	295	361	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	339	415	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	761	420	424			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	761	420	424			
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)	373	634	1135			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	339	424
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	416	1135	1700	1700
Volume to Capacity	0.01	0.00	0.20	0.25
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	13.8	8.2	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	13.8	0.0		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	29.5%	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)	0	0	1	0	0	0	2	319	0	0	381	2
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)	0	0	1	0	0	0	2	367	0	0	438	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	810	810	439	811	811	367	440			367		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	810	810	439	811	811	367	440			367		
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)	298	313	618	297	313	679	1120			1192		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1	0	369	440
Volume Left	0	0	2	0
Volume Right	1	0	0	2
cSH	618	1700	1120	1192
Volume to Capacity	0.00	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	10.8	0.0	0.1	0.0
Lane LOS	B	A	A	
Approach Delay (s)	10.8	0.0	0.1	0.0
Approach LOS	B	A		

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	30.2%	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)	10	0	12	5	0	12	11	310	10	7	367	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)	11	0	14	6	0	14	13	356	11	8	422	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	844	836	426	844	834	362	431			368		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	844	836	426	844	834	362	431			368		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	98	98	100	98	99			99		
cM capacity (veh/h)	274	298	628	273	298	683	1128			1191		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	11	14	6	14	380	439
Volume Left	11	0	6	0	13	8
Volume Right	0	14	0	14	11	9
cSH	274	628	273	683	1128	1191
Volume to Capacity	0.04	0.02	0.02	0.02	0.01	0.01
Queue Length 95th (ft)	3	2	2	2	1	1
Control Delay (s)	18.7	10.9	18.5	10.4	0.4	0.2
Lane LOS	C	B	C	B	A	A
Approach Delay (s)	14.4		12.8		0.4	0.2
Approach LOS	B		B			

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	36.9%	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	13	3	0	5	7	315	1	2	377	9
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)	10	0	15	3	0	6	8	362	1	2	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	828	822	439	837	827	363	444			363		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	828	822	439	837	827	363	444			363		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	98	99	100	99	99			100		
cM capacity (veh/h)	286	306	618	277	304	682	1116			1195		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	25	9	371	446
Volume Left	10	3	8	2
Volume Right	15	6	1	10
cSH	419	441	1116	1195
Volume to Capacity	0.06	0.02	0.01	0.00
Queue Length 95th (ft)	5	2	1	0
Control Delay (s)	14.1	13.3	0.3	0.1
Lane LOS	B	B	A	A
Approach Delay (s)	14.1	13.3	0.3	0.1
Approach LOS	B	B		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	31.5%	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)	35	14	9	321	376	35
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	40	16	10	369	432	40
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	842	452	472			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	842	452	472			
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	97	99			
cM capacity (veh/h)	331	607	1089			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	56	379	472
Volume Left	40	10	0
Volume Right	16	0	40
cSH	381	1089	1700
Volume to Capacity	0.15	0.01	0.28
Queue Length 95th (ft)	13	1	0
Control Delay (s)	16.1	0.3	0.0
Lane LOS	C	A	
Approach Delay (s)	16.1	0.3	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	3288		3433	3468		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	3288		3433	3468		1681	1546			1811	1583
Volume (vph)	55	314	282	359	313	49	324	31	309	56	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	361	324	413	360	56	372	36	355	64	47	62
RTOR Reduction (vph)	0	184	0	0	13	0	0	164	0	0	0	48
Lane Group Flow (vph)	63	501	0	413	403	0	327	272	0	0	111	14
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	17.1		12.3	25.7		24.8	24.8			8.4	8.4
Effective Green, g (s)	3.7	17.1		12.3	25.7		24.8	24.8			8.4	8.4
Actuated g/C Ratio	0.05	0.22		0.16	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	715		537	1134		530	488			194	169
v/s Ratio Prot	0.04	c0.15		c0.12	0.12		c0.19	0.18			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.70		0.77	0.35		0.62	0.56			0.57	0.08
Uniform Delay, d1	37.0	28.4		31.8	20.1		22.9	22.3			33.4	31.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	3.1		6.6	0.2		5.3	4.6			4.0	0.2
Delay (s)	69.2	31.5		38.3	20.3		28.2	26.9			37.4	31.8
Level of Service	E	C		D	C		C	C			D	C
Approach Delay (s)		34.7			29.3			27.4			35.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	30.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.8%	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	661	0	0	679	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	760	0	0	780	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	760	0	0	780	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								0.41			c0.42	
v/s Ratio Perm												
v/c Ratio								0.48			0.49	
Uniform Delay, d1								2.4			2.4	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.1			1.1	
Delay (s)								3.4			3.5	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			3.4			3.5	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	3.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	39.1%	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)	79	0	17	7	0	18	38	592	3	13	585	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	20	8	0	21	44	680	3	15	672	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	1549	1530	729	1548	1586	682	786			684		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1549	1530	729	1548	1586	682	786			684		
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	95	90	100	95	95			98		
cM capacity (veh/h)	84	109	423	84	101	450	833			909		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	20	29	728	801
Volume Left	91	0	8	44	15
Volume Right	0	20	21	3	114
cSH	84	423	203	833	909
Volume to Capacity	1.08	0.05	0.14	0.05	0.02
Queue Length 95th (ft)	157	4	12	4	1
Control Delay (s)	212.4	13.9	25.7	1.4	0.4
Lane LOS	F	B	D	A	A
Approach Delay (s)	177.2		25.7	1.4	0.4
Approach LOS	F		D		

Intersection Summary			
Average Delay	13.0		
Intersection Capacity Utilization	69.5%	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	477	26	7	509	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	548	30	8	585	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	1199	1203	604	1190	1192	577	601			585		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1199	1203	604	1190	1192	577	601			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 %	99	100	100	94	100	98	100			99		
cM capacity (veh/h)	154	180	493	159	183	510	970			984		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	580	602
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	235	258	970	984
Volume to Capacity	0.02	0.08	0.00	0.01
Queue Length 95th (ft)	1	6	0	1
Control Delay (s)	20.6	20.2	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	20.6	20.2	0.1	0.2
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	42.3%	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	466	475	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	536	546	52
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	1154	589	615			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1154	589	615			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	85	98	99			
cM capacity (veh/h)	210	501	951			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	543	598
Volume Left	31	7	0
Volume Right	10	0	52
cSH	246	951	1700
Volume to Capacity	0.17	0.01	0.35
Queue Length 95th (ft)	15	1	0
Control Delay (s)	22.6	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	22.6	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	39.3%	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)	4	2	6	7	1	5	3	469	2	4	426	9
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)	5	2	7	8	1	6	3	539	2	5	490	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	1057	1052	495	1059	1056	540	500			541		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1057	1052	495	1059	1056	540	500			541		
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	96	99	99	100			100		
cM capacity (veh/h)	199	225	575	197	223	542	1064			1027		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	545	505
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	304	264	1064	1027
Volume to Capacity	0.05	0.06	0.00	0.00
Queue Length 95th (ft)	4	4	0	0
Control Delay (s)	17.4	19.4	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	17.4	19.4	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	36.7%	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)	3	1	1	470	431	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	540	495	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	1043	500	505			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1043	500	505			
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)	254	571	1060			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	540	505
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	295	1060	1700	1700
Volume to Capacity	0.02	0.00	0.32	0.30
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	17.4	8.4	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	17.4	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	34.7%	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)	1	0	2	0	0	0	5	493	0	0	441	14
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)	1	0	2	0	0	0	6	567	0	0	507	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	1093	1093	515	1095	1101	567	523			567		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1093	1093	515	1095	1101	567	523			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 %	99	100	100	100	100	100	99			100		
cM capacity (veh/h)	191	213	560	189	211	523	1044			1005		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	3	0	572	523
Volume Left	1	0	6	0
Volume Right	2	0	0	16
cSH	340	1700	1044	1005
Volume to Capacity	0.01	0.00	0.01	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	15.7	0.0	0.2	0.0
Lane LOS	C	A	A	
Approach Delay (s)	15.7	0.0	0.2	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	39.9%	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)	28	0	15	5	0	12	14	469	10	7	396	40
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)	32	0	17	6	0	14	16	539	11	8	455	46
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	1085	1077	478	1089	1094	545	501			551		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1085	1077	478	1089	1094	545	501			551		
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	97	97	100	97	98			99		
cM capacity (veh/h)	186	214	587	184	209	538	1063			1019		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	32	17	6	14	567	509
Volume Left	32	0	6	0	16	8
Volume Right	0	17	0	14	11	46
cSH	186	587	184	538	1063	1019
Volume to Capacity	0.17	0.03	0.03	0.03	0.02	0.01
Queue Length 95th (ft)	15	2	2	2	1	1
Control Delay (s)	28.4	11.3	25.2	11.9	0.4	0.2
Lane LOS	D	B	D	B	A	A
Approach Delay (s)	22.4		15.8		0.4	0.2
Approach LOS	C		C			

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	43.0%	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	325	1	2	378	40
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)	185	0	68	3	0	6	14	374	1	2	434	46
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	870	864	457	932	887	374	480			375		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	870	864	457	932	887	374	480			375		
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 %	31	100	89	98	100	99	99			100		
cM capacity (veh/h)	267	288	603	217	279	672	1082			1184		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	253	9	389	483
Volume Left	185	3	14	2
Volume Right	68	6	1	46
cSH	314	376	1082	1184
Volume to Capacity	0.81	0.02	0.01	0.00
Queue Length 95th (ft)	166	2	1	0
Control Delay (s)	50.8	14.8	0.4	0.1
Lane LOS	F	B	A	A
Approach Delay (s)	50.8	14.8	0.4	0.1
Approach LOS	F	B		

Intersection Summary			
Average Delay	11.6		
Intersection Capacity Utilization	51.6%	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	337	424	34
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	40	17	10	387	487	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	915	507	526			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	915	507	526			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	97	99			
cM capacity (veh/h)	300	566	1040			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	57	398	526
Volume Left	40	10	0
Volume Right	17	0	39
cSH	349	1040	1700
Volume to Capacity	0.16	0.01	0.31
Queue Length 95th (ft)	15	1	0
Control Delay (s)	17.3	0.3	0.0
Lane LOS	C	A	
Approach Delay (s)	17.3	0.3	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	35.0%	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)	79	0	17	7	0	18	38	592	3	13	585	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	20	8	0	21	44	680	3	15	672	114
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	1549	1530	729	1548	1586	682	786			684		
vC1, stage 1 conf vol	759	759										
vC2, stage 2 conf vol	790	771										
vCu, unblocked vol	1549	1530	729	1548	1586	682	786			684		
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 %	65	100	95	90	100	95	95			98		
cM capacity (veh/h)	260	289	423	84	101	450	833			909		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	20	29	728	801
Volume Left	91	0	8	44	15
Volume Right	0	20	21	3	114
cSH	260	423	203	833	909
Volume to Capacity	0.35	0.05	0.14	0.05	0.02
Queue Length 95th (ft)	38	4	12	4	1
Control Delay (s)	26.1	13.9	25.7	1.4	0.4
Lane LOS	D	B	D	A	A
Approach Delay (s)	23.9		25.7	1.4	0.4
Approach LOS	C		D		

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	69.5%	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)	161	0	59	3	0	5	12	325	1	2	378	40
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)	185	0	68	3	0	6	14	374	1	2	434	46
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	870	864	457	932	887	374	480			375		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	870	864	457	932	887	374	480			375		
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 %	31	100	89	98	100	99	99			100		
cM capacity (veh/h)	267	288	603	217	279	672	1082			1184		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	185	68	9	389	483
Volume Left	185	0	3	14	2
Volume Right	0	68	6	1	46
cSH	267	603	376	1082	1184
Volume to Capacity	0.69	0.11	0.02	0.01	0.00
Queue Length 95th (ft)	117	9	2	1	0
Control Delay (s)	44.3	11.7	14.8	0.4	0.1
Lane LOS	E	B	B	A	A
Approach Delay (s)	35.5		14.8	0.4	0.1
Approach LOS	E		B		

Intersection Summary			
Average Delay	8.2		
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	0.88			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	3289		3433	3468		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	3289		3433	3468		1681	1546			1811	1583
Volume (vph)	55	314	280	355	313	49	322	31	305	56	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	361	322	408	360	56	370	36	351	64	47	62
RTOR Reduction (vph)	0	182	0	0	13	0	0	162	0	0	0	48
Lane Group Flow (vph)	63	501	0	408	403	0	325	270	0	0	111	14
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	17.1		12.3	25.7		24.8	24.8			8.4	8.4
Effective Green, g (s)	3.7	17.1		12.3	25.7		24.8	24.8			8.4	8.4
Actuated g/C Ratio	0.05	0.22		0.16	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	716		537	1134		530	488			194	169
v/s Ratio Prot	0.04	c0.15		c0.12	0.12		c0.19	0.17			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.76	0.70		0.76	0.35		0.61	0.55			0.57	0.08
Uniform Delay, d1	37.0	28.4		31.7	20.1		22.8	22.3			33.4	31.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	32.1	3.0		6.1	0.2		5.2	4.5			4.0	0.2
Delay (s)	69.2	31.4		37.9	20.3		28.1	26.8			37.4	31.8
Level of Service	E	C		D	C		C	C			D	C
Approach Delay (s)		34.6			29.0			27.3			35.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.5%	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	655	0	0	673	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	753	0	0	774	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	753	0	0	774	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								0.40			c0.42	
v/s Ratio Perm												
v/c Ratio								0.48			0.49	
Uniform Delay, d1								2.4			2.4	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.0			1.1	
Delay (s)								3.4			3.5	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			3.4			3.5	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	3.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	18.4
Intersection Capacity Utilization	38.8%	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)	79	0	19	7	0	18	39	586	3	13	579	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	22	8	0	21	45	674	3	15	666	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	1538	1519	722	1539	1574	675	779			677		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1538	1519	722	1539	1574	675	779			677		
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	95	91	100	95	95			98		
cM capacity (veh/h)	85	111	427	85	102	454	838			915		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	22	29	722	794
Volume Left	91	0	8	45	15
Volume Right	0	22	21	3	114
cSH	85	427	204	838	915
Volume to Capacity	1.06	0.05	0.14	0.05	0.02
Queue Length 95th (ft)	155	4	12	4	1
Control Delay (s)	204.1	13.9	25.5	1.4	0.4
Lane LOS	F	B	D	A	A
Approach Delay (s)	167.3		25.5	1.4	0.4
Approach LOS	F		D		

Intersection Summary			
Average Delay	12.6		
Intersection Capacity Utilization	69.7%	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	472	26	7	512	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	543	30	8	589	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	1197	1200	607	1188	1190	571	605			579		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1197	1200	607	1188	1190	571	605			579		
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	94	100	98	100			99		
cM capacity (veh/h)	155	181	491	160	184	514	967			989		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	5	21	575	606
Volume Left	2	9	2	8
Volume Right	2	11	30	9
cSH	235	259	967	989
Volume to Capacity	0.02	0.08	0.00	0.01
Queue Length 95th (ft)	1	6	0	1
Control Delay (s)	20.6	20.1	0.1	0.2
Lane LOS	C	C	A	A
Approach Delay (s)	20.6	20.1	0.1	0.2
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	42.4%	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	460	478	45
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	31	10	7	529	549	52
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	1151	592	618			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1151	592	618			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	85	98	99			
cM capacity (veh/h)	211	499	948			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	41	536	601
Volume Left	31	7	0
Volume Right	10	0	52
cSH	247	948	1700
Volume to Capacity	0.17	0.01	0.35
Queue Length 95th (ft)	15	1	0
Control Delay (s)	22.5	0.2	0.0
Lane LOS	C	A	
Approach Delay (s)	22.5	0.2	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	39.0%	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	461	2	4	419	9
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)	5	2	7	8	1	6	3	530	2	5	482	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	1040	1035	487	1042	1039	531	492			532		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1040	1035	487	1042	1039	531	492			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 %	98	99	99	96	99	99	100			100		
cM capacity (veh/h)	204	230	581	203	229	548	1071			1035		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	14	15	536	497
Volume Left	5	8	3	5
Volume Right	7	6	2	10
cSH	311	271	1071	1035
Volume to Capacity	0.04	0.06	0.00	0.00
Queue Length 95th (ft)	3	4	0	0
Control Delay (s)	17.1	19.1	0.1	0.1
Lane LOS	C	C	A	A
Approach Delay (s)	17.1	19.1	0.1	0.1
Approach LOS	C	C		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	36.3%	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	462	424	8
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	3	1	1	531	487	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	1025	492	497			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1025	492	497			
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)	260	577	1067			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	5	1	531	497
Volume Left	3	1	0	0
Volume Right	1	0	0	9
cSH	301	1067	1700	1700
Volume to Capacity	0.02	0.00	0.31	0.29
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	17.1	8.4	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	17.1	0.0		0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
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)	1	0	1	0	0	0	4	486	0	0	438	10
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)	1	0	1	0	0	0	5	559	0	0	503	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	1077	1077	509	1078	1083	559	515			559		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1077	1077	509	1078	1083	559	515			559		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	100	100	100	100	100			100		
cM capacity (veh/h)	196	218	564	195	216	529	1051			1012		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	2	0	563	515
Volume Left	1	0	5	0
Volume Right	1	0	0	11
cSH	291	1700	1051	1012
Volume to Capacity	0.01	0.00	0.00	0.00
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	17.5	0.0	0.1	0.0
Lane LOS	C	A	A	
Approach Delay (s)	17.5	0.0	0.1	0.0
Approach LOS	C	A		

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	38.8%	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)	23	0	11	5	0	12	12	466	10	7	400	32
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)	26	0	13	6	0	14	14	536	11	8	460	37
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	1077	1069	478	1076	1082	541	497			547		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1077	1069	478	1076	1082	541	497			547		
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	98	97	100	97	99			99		
cM capacity (veh/h)	189	217	587	190	213	541	1067			1022		

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	26	13	6	14	561	505
Volume Left	26	0	6	0	14	8
Volume Right	0	13	0	14	11	37
cSH	189	587	190	541	1067	1022
Volume to Capacity	0.14	0.02	0.03	0.03	0.01	0.01
Queue Length 95th (ft)	12	2	2	2	1	1
Control Delay (s)	27.2	11.3	24.6	11.8	0.4	0.2
Lane LOS	D	B	C	B	A	A
Approach Delay (s)	22.0		15.6		0.4	0.2
Approach LOS	C		C			

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	42.5%	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)	163	0	65	3	0	5	16	318	1	2	376	42
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)	187	0	75	3	0	6	18	366	1	2	432	48
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	870	864	456	939	888	366	480			367		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	870	864	456	939	888	366	480			367		
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 %	30	100	88	98	100	99	98			100		
cM capacity (veh/h)	266	286	604	211	277	679	1082			1192		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	262	9	385	483
Volume Left	187	3	18	2
Volume Right	75	6	1	48
cSH	316	371	1082	1192
Volume to Capacity	0.83	0.02	0.02	0.00
Queue Length 95th (ft)	177	2	1	0
Control Delay (s)	53.5	15.0	0.6	0.1
Lane LOS	F	B	A	A
Approach Delay (s)	53.5	15.0	0.6	0.1
Approach LOS	F	B		

Intersection Summary			
Average Delay	12.6		
Intersection Capacity Utilization	54.6%	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	336	427	35
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	38	16	11	386	491	40
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	920	511	531			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	920	511	531			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	97	99			
cM capacity (veh/h)	297	563	1036			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	54	398	531
Volume Left	38	11	0
Volume Right	16	0	40
cSH	346	1036	1700
Volume to Capacity	0.16	0.01	0.31
Queue Length 95th (ft)	14	1	0
Control Delay (s)	17.3	0.4	0.0
Lane LOS	C	A	
Approach Delay (s)	17.3	0.4	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	35.7%	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)	79	0	19	7	0	18	39	586	3	13	579	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	22	8	0	21	45	674	3	15	666	114
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	1538	1519	722	1539	1574	675	779			677		
vC1, stage 1 conf vol	752	752										
vC2, stage 2 conf vol	786	767										
vCu, unblocked vol	1538	1519	722	1539	1574	675	779			677		
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 %	65	100	95	91	100	95	95			98		
cM capacity (veh/h)	262	291	427	85	102	454	838			915		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	91	22	29	722	794
Volume Left	91	0	8	45	15
Volume Right	0	22	21	3	114
cSH	262	427	204	838	915
Volume to Capacity	0.35	0.05	0.14	0.05	0.02
Queue Length 95th (ft)	37	4	12	4	1
Control Delay (s)	25.9	13.9	25.5	1.4	0.4
Lane LOS	D	B	D	A	A
Approach Delay (s)	23.5		25.5	1.4	0.4
Approach LOS	C		D		

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	69.7%	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)	163	0	65	3	0	5	16	318	1	2	376	42
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)	187	0	75	3	0	6	18	366	1	2	432	48
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	870	864	456	939	888	366	480			367		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	870	864	456	939	888	366	480			367		
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 %	30	100	88	98	100	99	98			100		
cM capacity (veh/h)	266	286	604	211	277	679	1082			1192		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	187	75	9	385	483
Volume Left	187	0	3	18	2
Volume Right	0	75	6	1	48
cSH	266	604	371	1082	1192
Volume to Capacity	0.70	0.12	0.02	0.02	0.00
Queue Length 95th (ft)	120	11	2	1	0
Control Delay (s)	45.4	11.8	15.0	0.6	0.1
Lane LOS	E	B	B	A	A
Approach Delay (s)	35.8		15.0	0.6	0.1
Approach LOS	E		B		

Intersection Summary			
Average Delay	8.6		
Intersection Capacity Utilization	50.6%	ICU Level of Service	A
Analysis Period (min)	15		

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 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	296	Yes		146	Yes	
	T	222	296	Yes		146	--	
	R	222	296	Yes		146	--	
SB	L	223	219	--		103	--	
	T	223	219	--		103	--	
	R	25	63	Yes		37	Yes	
EB	L	200	148	--		53	--	
	T	170	245	Yes		186	Yes	
	R	170	245	Yes		186	Yes	
WB	L	150	212	Yes		177	Yes	
	T	404	478	Yes		365	--	
	R	404	420	Yes		158	--	

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	882	--		306	--	
SB	T	136	210	Yes		164	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS
Scenario: 2030 Summer Plus Alternatives 1 and 3
TOD: Fri PM Peak **Analysis Period:** 15 Minutes

HCM: 2000
PHF: 1
# 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	296	Yes		162	Yes	
	T	222	296	Yes		162	--	
	R	222	296	Yes		162	--	
SB	L	223	208	--		98	--	
	T	223	208	--		98	--	
	R	25	66	Yes		37	Yes	
EB	L	200	161	--		63	--	
	T	170	251	Yes		179	Yes	
	R	170	251	Yes		179	Yes	
WB	L	150	215	Yes		186	Yes	
	T	404	478	Yes		439	Yes	
	R	404	439	Yes		159	--	

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	1084	--		387	--	
SB	T	136	210	Yes		178	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 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	294	Yes		137	Yes	
	T	222	294	Yes		137	--	
	R	222	294	Yes		137	--	
SB	L	223	211	--		91	--	
	T	223	211	--		91	--	
	R	25	64	Yes		37	Yes	
EB	L	200	145	--		62	--	
	T	170	243	Yes		183	Yes	
	R	170	243	Yes		183	Yes	
WB	L	150	204	Yes		175	Yes	
	T	404	476	Yes		340	--	
	R	404	445	Yes		156	--	

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	763	--		278	--	
SB	T	136	210	Yes		168	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 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	295	Yes		150	Yes	
	T	222	295	Yes		150	--	
	R	222	295	Yes		150	--	
SB	L	223	196	--		95	--	
	T	223	196	--		95	--	
	R	25	68	Yes		37	Yes	
EB	L	200	145	--		59	--	
	T	170	245	Yes		176	Yes	
	R	170	245	Yes		176	Yes	
WB	L	150	204	Yes		178	Yes	
	T	404	463	Yes		400	--	
	R	404	437	Yes		145	--	

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	878	--		327	--	
SB	T	136	211	Yes		166	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: Cumulative 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	297	Yes		167	Yes	
	T	222	297	Yes		167	--	
	R	222	297	Yes		167	--	
SB	L	223	199	--		93	--	
	T	223	199	--		93	--	
	R	25	76	Yes		37	Yes	
EB	L	200	161	--		68	--	
	T	170	246	Yes		195	Yes	
	R	170	246	Yes		195	Yes	
WB	L	150	211	Yes		178	Yes	
	T	404	476	Yes		362	--	
	R	404	463	Yes		150	--	

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	919	--		395	--	
SB	T	136	210	Yes		172	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 Cumulative Conditions Winter **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	229	Yes		106	--	
	T	222	229	Yes		70	--	
	R	222	229	Yes		70	--	
SB	L	224	190	--		79	--	
	T	224	190	--		79	--	
	R	25	72	Yes		37	Yes	
EB	L	200	114	--		40	--	
	T	170	197	Yes		98	--	
	R	170	197	Yes		98	--	
WB	L	150	184	Yes		119	--	
	T	416	249	--		106	--	
	R	416	141	--		59	--	

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	457	--		182	--	
SB	T	136	209	Yes		137	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 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	212	Yes		99	--	
	T	307	212	--		70	--	
	R	307	212	--		70	--	
SB	L	224	173	--		74	--	
	T	224	173	--		74	--	
	R	25	73	Yes		36	Yes	
EB	L	200	122	--		43	--	
	T	170	210	Yes		97	--	
	R	170	210	Yes		88	--	
WB	L	150	191	Yes		109	--	
	T	428	290	--		110	--	
	R	428	152	--		63	--	

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	451	--		160	--	
SB	T	53	128	Yes		110	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 Plus Alternative 4 Conditions Winter **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	188	Yes		103	--	
	T	222	188	--		66	--	
	R	222	188	--		66	--	
SB	L	224	192	--		80	--	
	T	224	192	--		80	--	
	R	25	67	Yes		37	Yes	
EB	L	200	121	--		40	--	
	T	170	216	Yes		103	--	
	R	170	216	Yes		103	--	
WB	L	150	183	Yes		112	--	
	T	416	244	--		103	--	
	R	416	151	--		61	--	

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	447	--		169	--	
SB	T	136	210	Yes		145	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 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	283	Yes		103	--	
	T	316	283	--		74	--	
	R	316	283	--		74	--	
SB	L	224	164	--		73	--	
	T	224	164	--		73	--	
	R	25	70	Yes		37	Yes	
EB	L	200	114	--		43	--	
	T	170	181	Yes		93	--	
	R	170	177	Yes		79	--	
WB	L	150	190	Yes		108	--	
	T	402	273	--		110	--	
	R	402	157	--		64	--	

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	460	--		186	--	
SB	T	44	117	Yes		102	Yes	

SIMTRAFFIC QUEUING REPORT

Project: Homewood EIR/EIS **HCM:** 2000
Scenario: 2030 Winter 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	205	Yes		99	--	
	T	316	205	--		67	--	
	R	316	205	--		67	--	
SB	L	224	194	--		73	--	
	T	224	194	--		73	--	
	R	25	69	Yes		38	Yes	
EB	L	200	108	--		40	--	
	T	170	169	--		92	--	
	R	170	169	--		80	--	
WB	L	150	197	Yes		117	--	
	T	402	324	--		124	--	
	R	402	178	--		66	--	

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	411	--		170	--	
SB	T	44	117	Yes		101	Yes	