CAPACITY AND QUEUE ANALYSIS WORKSHEETS

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	956	35	96	756	64	316
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	1006	37	101	796	67	333
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		2023	1025
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1043		2023	1025
tC, single (s)			4.2		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.3		3.5	3.3
p0 queue free %			84		0	0
cM capacity (veh/h)			637		54	285

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1043	897	400
Volume Left	0	101	67
Volume Right	37	0	333
cSH	1700	637	165
Volume to Capacity	0.61	0.16	2.42
Queue Length (ft)	0	14	845
Control Delay (s)	0.0	4.4	702.0
Lane LOS		A	F
Approach Delay (s)	0.0	4.4	702.0
Approach LOS			F

Intersection Summary			
Average Delay	121.7		
Intersection Capacity Utilization	136.9%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	135	1137	805	78	80	47
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	142	1197	847	82	84	49
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				2369	888
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	929				2369	888
tC, single (s)	4.1				6.4	6.3
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.4
p0 queue free %	81				0	85
cM capacity (veh/h)	736				31	332

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1339	929	134
Volume Left	142	0	84
Volume Right	0	82	49
cSH	736	1700	47
Volume to Capacity	0.19	0.55	2.85
Queue Length (ft)	18	0	358
Control Delay (s)	7.6	0.0	1016.8
Lane LOS	A		F
Approach Delay (s)	7.6	0.0	1016.8
Approach LOS			F

Intersection Summary

Average Delay	60.8		
Intersection Capacity Utilization	138.1%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	73	978	811	9	13	48
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (veh/h)	78	1040	863	10	14	51
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	872				2063	868
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	872				2063	868
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				75	85
cM capacity (veh/h)	769				55	349

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1118	872	65
Volume Left	78	0	14
Volume Right	0	10	51
cSH	769	1700	163
Volume to Capacity	0.10	0.51	0.40
Queue Length (ft)	8	0	44
Control Delay (s)	3.2	0.0	41.1
Lane LOS	A		E
Approach Delay (s)	3.2	0.0	41.1
Approach LOS			E

Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	119.0%	ICU Level of Service	G

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	475	2	3	352	34	3	5	10	3	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	2	500	2	3	371	36	3	5	11	3	2	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	406			502			901	918	501	913	901	388
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	406			502			901	918	501	913	901	388
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.4	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.8	4.0	3.3
p0 queue free %	100			100			99	98	98	99	99	100
cM capacity (veh/h)	1163			1073			259	272	574	216	279	664

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	504	409	19	5
Volume Left	2	3	3	3
Volume Right	2	36	11	0
cSH	1163	1073	380	237
Volume to Capacity	0.00	0.00	0.05	0.02
Queue Length (ft)	0	0	4	2
Control Delay (s)	0.1	0.1	15.0	20.5
Lane LOS	A	A	B	C
Approach Delay (s)	0.1	0.1	15.0	20.5
Approach LOS			B	C

Intersection Summary

Average Delay	0.5		
Intersection Capacity Utilization	37.4%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	696	0	5	562	2	19	1	21	2	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	8	733	0	5	592	2	20	1	22	2	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	594			733			1353	1354	733	1375	1353	593
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	594			733			1353	1354	733	1375	1353	593
tC, single (s)	4.2			4.3			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.4			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	99			99			84	99	95	98	100	100
cM capacity (veh/h)	935			795			127	149	408	115	149	510

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	741	599	43	2
Volume Left	8	5	20	2
Volume Right	0	2	22	0
cSH	935	795	197	115
Volume to Capacity	0.01	0.01	0.22	0.02
Queue Length (ft)	1	0	20	1
Control Delay (s)	0.2	0.2	28.3	36.9
Lane LOS	A	A	D	E
Approach Delay (s)	0.2	0.2	28.3	36.9
Approach LOS			D	E

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	54.9%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	120	50	8	205	78	7
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (veh/h)	148	62	10	253	96	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			210		452	179
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			210		452	179
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		83	99
cM capacity (veh/h)			1373		556	869

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	210	263	105
Volume Left	0	10	96
Volume Right	62	0	9
cSH	1700	1373	573
Volume to Capacity	0.12	0.01	0.18
Queue Length (ft)	0	1	17
Control Delay (s)	0.0	0.3	12.7
Lane LOS		A	B
Approach Delay (s)	0.0	0.3	12.7
Approach LOS			B

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	28.5%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	8	1	19	63	7	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	8	1	20	66	7	56
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	124	53			86	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	124	53			86	
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)	867	1014			1510	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	9	86	63
Volume Left	8	0	7
Volume Right	1	66	0
cSH	881	1700	1510
Volume to Capacity	0.01	0.05	0.00
Queue Length (ft)	1	0	0
Control Delay (s)	9.1	0.0	0.9
Lane LOS	A		A
Approach Delay (s)	9.1	0.0	0.9
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	15.1%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	942	65	259	876	69	162
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (veh/h)	981	68	270	912	72	169
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			1049		2467	1015
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1049		2467	1015
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			60		0	41
cM capacity (veh/h)			667		20	288

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1049	1182	241
Volume Left	0	270	72
Volume Right	68	0	169
cSH	1700	667	57
Volume to Capacity	0.62	0.40	4.24
Queue Length (ft)	0	49	Err
Control Delay (s)	0.0	12.6	Err
Lane LOS		B	F
Approach Delay (s)	0.0	12.6	Err
Approach LOS			F

Intersection Summary			
Average Delay	979.4		
Intersection Capacity Utilization	143.1%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	31	1073	1037	123	96	98
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (veh/h)	31	1084	1047	124	97	99
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	1172				2256	1110
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1172				2256	1110
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	94				0	61
cM capacity (veh/h)	552				43	256

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1115	1172	196
Volume Left	31	0	97
Volume Right	0	124	99
cSH	552	1700	74
Volume to Capacity	0.06	0.69	2.65
Queue Length (ft)	4	0	478
Control Delay (s)	2.1	0.0	868.7
Lane LOS	A		F
Approach Delay (s)	2.1	0.0	868.7
Approach LOS			F

Intersection Summary			
Average Delay	69.5		
Intersection Capacity Utilization	137.4%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	49	1000	936	9	7	77
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (veh/h)	49	1010	945	9	7	78
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	955				2059	950
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	955				2059	950
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				88	76
cM capacity (veh/h)	712				57	318

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1060	955	85
Volume Left	49	0	7
Volume Right	0	9	78
cSH	712	1700	230
Volume to Capacity	0.07	0.56	0.37
Queue Length (ft)	6	0	40
Control Delay (s)	2.2	0.0	29.5
Lane LOS	A		D
Approach Delay (s)	2.2	0.0	29.5
Approach LOS			D

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	121.4%	ICU Level of Service	H

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	558	15	13	391	6	2	6	10	20	5	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	1	587	16	14	412	6	2	6	11	21	5	1
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	418			603			1043	1043	595	1053	1047	415
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	418			603			1043	1043	595	1053	1047	415
tC, single (s)	4.1			4.2			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			99			99	97	98	89	98	100
cM capacity (veh/h)	1152			946			203	228	489	195	226	642

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	604	432	19	27
Volume Left	1	14	2	21
Volume Right	16	6	11	1
cSH	1152	946	318	206
Volume to Capacity	0.00	0.01	0.06	0.13
Queue Length (ft)	0	1	5	11
Control Delay (s)	0.0	0.4	17.0	25.1
Lane LOS	A	A	C	D
Approach Delay (s)	0.0	0.4	17.0	25.1
Approach LOS			C	D

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	42.4%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	581	8	15	691	0	4	0	9	4	3	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	2	612	8	16	727	0	4	0	9	4	3	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	727			620			1390	1379	616	1388	1383	727
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	727			620			1390	1379	616	1388	1383	727
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			96	100	98	96	98	98
cM capacity (veh/h)	885			970			115	143	494	117	142	427

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	622	743	14	17
Volume Left	2	16	4	4
Volume Right	8	0	9	9
cSH	885	970	245	210
Volume to Capacity	0.00	0.02	0.06	0.08
Queue Length (ft)	0	1	4	6
Control Delay (s)	0.1	0.4	20.6	23.7
Lane LOS	A	A	C	C
Approach Delay (s)	0.1	0.4	20.6	23.7
Approach LOS			C	C

Intersection Summary

Average Delay	0.7		
Intersection Capacity Utilization	62.0%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	187	89	2	152	54	7
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (veh/h)	210	100	2	171	61	8
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			310		435	260
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			310		435	260
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		90	99
cM capacity (veh/h)			1262		581	783

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	310	173	69
Volume Left	0	2	61
Volume Right	100	0	8
cSH	1700	1262	599
Volume to Capacity	0.18	0.00	0.11
Queue Length (ft)	0	0	10
Control Delay (s)	0.0	0.1	11.8
Lane LOS		A	B
Approach Delay (s)	0.0	0.1	11.8
Approach LOS			B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	27.7%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	68	7	49	9	1	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	72	7	52	9	1	17
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	75	56			61	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	75	56			61	
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	99			100	
cM capacity (veh/h)	927	1010			1542	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	79	61	18
Volume Left	72	0	1
Volume Right	7	9	0
cSH	935	1700	1542
Volume to Capacity	0.08	0.04	0.00
Queue Length (ft)	7	0	0
Control Delay (s)	9.2	0.0	0.4
Lane LOS	A		A
Approach Delay (s)	9.2	0.0	0.4
Approach LOS	A		

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	14.4%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1022	37	107	809	67	336
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	1076	39	113	852	71	354
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			1115		2172	1095
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1115		2172	1095
tC, single (s)			4.2		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.3		3.5	3.3
p0 queue free %			81		0	0
cM capacity (veh/h)			598		42	260

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1115	964	424
Volume Left	0	113	71
Volume Right	39	0	354
cSH	1700	598	139
Volume to Capacity	0.66	0.19	3.06
Queue Length (ft)	0	17	Err
Control Delay (s)	0.0	5.6	Err
Lane LOS		A	F
Approach Delay (s)	0.0	5.6	Err
Approach LOS			F

Intersection Summary

Average Delay	1696.7		
Intersection Capacity Utilization	145.8%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	143	1203	877	85	85	52
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	151	1266	923	89	89	55
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	1013				2535	968
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1013				2535	968
tC, single (s)	4.1				6.4	6.3
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.4
p0 queue free %	78				0	82
cM capacity (veh/h)	685				24	299

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1417	1013	144
Volume Left	151	0	89
Volume Right	0	89	55
cSH	685	1700	36
Volume to Capacity	0.22	0.60	3.96
Queue Length (ft)	21	0	Err
Control Delay (s)	10.3	0.0	Err
Lane LOS	B		F
Approach Delay (s)	10.3	0.0	Err
Approach LOS			F

Intersection Summary			
Average Delay	565.9		
Intersection Capacity Utilization	147.3%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	77	1045	866	10	14	50
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (veh/h)	82	1112	921	11	15	53
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	932				2202	927
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	932				2202	927
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				66	84
cM capacity (veh/h)	730				44	323

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1194	932	68
Volume Left	82	0	15
Volume Right	0	11	53
cSH	730	1700	136
Volume to Capacity	0.11	0.55	0.50
Queue Length (ft)	9	0	59
Control Delay (s)	3.9	0.0	55.7
Lane LOS	A		F
Approach Delay (s)	3.9	0.0	55.7
Approach LOS			F

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	126.3%	ICU Level of Service	H

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	501	2	3	375	36	3	5	11	3	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	2	527	2	3	395	38	3	5	12	3	2	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	433			529			954	972	528	967	954	414
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	433			529			954	972	528	967	954	414
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.4	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.8	4.0	3.3
p0 queue free %	100			100			99	98	98	98	99	100
cM capacity (veh/h)	1138			1048			238	253	554	197	260	643

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	532	436	20	5
Volume Left	2	3	3	3
Volume Right	2	38	12	0
cSH	1138	1048	364	218
Volume to Capacity	0.00	0.00	0.05	0.02
Queue Length (ft)	0	0	4	2
Control Delay (s)	0.1	0.1	15.5	21.9
Lane LOS	A	A	C	C
Approach Delay (s)	0.1	0.1	15.5	21.9
Approach LOS			C	C

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	38.9%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	739	0	5	620	2	20	1	22	2	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	8	778	0	5	653	2	21	1	23	2	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	655			778			1459	1460	778	1483	1459	654
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	655			778			1459	1460	778	1483	1459	654
tC, single (s)	4.2			4.3			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.4			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	99			99			80	99	94	98	100	100
cM capacity (veh/h)	887			764			107	128	384	96	128	470

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	786	660	45	2
Volume Left	8	5	21	2
Volume Right	0	2	23	0
cSH	887	764	171	96
Volume to Capacity	0.01	0.01	0.27	0.02
Queue Length (ft)	1	1	25	2
Control Delay (s)	0.3	0.2	33.6	43.3
Lane LOS	A	A	D	E
Approach Delay (s)	0.3	0.2	33.6	43.3
Approach LOS			D	E

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	57.6%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	130	53	9	219	82	7
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (veh/h)	160	65	11	270	101	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			226		486	193
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			226		486	193
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		81	99
cM capacity (veh/h)			1354		531	853

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	226	281	110
Volume Left	0	11	101
Volume Right	65	0	9
cSH	1700	1354	547
Volume to Capacity	0.13	0.01	0.20
Queue Length (ft)	0	1	19
Control Delay (s)	0.0	0.4	13.2
Lane LOS		A	B
Approach Delay (s)	0.0	0.4	13.2
Approach LOS			B

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	30.3%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	9	1	20	67	7	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	9	1	21	71	7	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	130	56			92	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130	56			92	
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)	860	1010			1503	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	11	92	66
Volume Left	9	0	7
Volume Right	1	71	0
cSH	873	1700	1503
Volume to Capacity	0.01	0.05	0.00
Queue Length (ft)	1	0	0
Control Delay (s)	9.2	0.0	0.9
Lane LOS	A		A
Approach Delay (s)	9.2	0.0	0.9
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	15.4%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	1009	68	278	940	73	177
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (veh/h)	1051	71	290	979	76	184
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			1122		2645	1086
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1122		2645	1086
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			54		0	30
cM capacity (veh/h)			626		14	262

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1122	1269	260
Volume Left	0	290	76
Volume Right	71	0	184
cSH	1700	626	41
Volume to Capacity	0.66	0.46	6.28
Queue Length (ft)	0	61	Err
Control Delay (s)	0.0	16.7	Err
Lane LOS		C	F
Approach Delay (s)	0.0	16.7	Err
Approach LOS			F

Intersection Summary			
Average Delay	990.2		
Intersection Capacity Utilization	152.7%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	36	1160	1104	130	104	104
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (veh/h)	36	1172	1115	131	105	105
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	1246				2425	1181
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1246				2425	1181
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	93				0	55
cM capacity (veh/h)	516				33	233

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1208	1246	210
Volume Left	36	0	105
Volume Right	0	131	105
cSH	516	1700	58
Volume to Capacity	0.07	0.73	3.64
Queue Length (ft)	6	0	Err
Control Delay (s)	3.1	0.0	Err
Lane LOS	A		F
Approach Delay (s)	3.1	0.0	Err
Approach LOS			F

Intersection Summary			
Average Delay	789.8		
Intersection Capacity Utilization	152.6%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	51	1070	1003	10	7	81
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (veh/h)	52	1081	1013	10	7	82
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	1023				2202	1018
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1023				2202	1018
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				85	72
cM capacity (veh/h)	671				46	291

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1132	1023	89
Volume Left	52	0	7
Volume Right	0	10	82
cSH	671	1700	204
Volume to Capacity	0.08	0.60	0.44
Queue Length (ft)	6	0	51
Control Delay (s)	2.7	0.0	35.6
Lane LOS	A		E
Approach Delay (s)	2.7	0.0	35.6
Approach LOS			E

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	129.1%	ICU Level of Service	H

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	591	16	14	413	7	2	6	11	21	6	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	1	622	17	15	435	7	2	6	12	22	6	1
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	442			639			1105	1104	631	1115	1109	438
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	442			639			1105	1104	631	1115	1109	438
tC, single (s)	4.1			4.2			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			98			99	97	98	87	97	100
cM capacity (veh/h)	1129			917			183	209	467	176	208	623

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	640	457	20	29
Volume Left	1	15	2	22
Volume Right	17	7	12	1
cSH	1129	917	301	187
Volume to Capacity	0.00	0.02	0.07	0.16
Queue Length (ft)	0	1	5	14
Control Delay (s)	0.0	0.5	17.8	27.9
Lane LOS	A	A	C	D
Approach Delay (s)	0.0	0.5	17.8	27.9
Approach LOS			C	D

Intersection Summary

Average Delay	1.2		
Intersection Capacity Utilization	44.4%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	641	9	16	741	0	4	0	10	4	3	9
Peak Hour Factor	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	2	675	9	17	780	0	4	0	11	4	3	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	780			684			1509	1498	679	1508	1502	780
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	780			684			1509	1498	679	1508	1502	780
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			96	100	98	96	97	98
cM capacity (veh/h)	846			919			94	121	455	96	120	399

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	686	797	15	17
Volume Left	2	17	4	4
Volume Right	9	0	11	9
cSH	846	919	217	180
Volume to Capacity	0.00	0.02	0.07	0.09
Queue Length (ft)	0	1	5	8
Control Delay (s)	0.1	0.5	22.8	27.1
Lane LOS	A	A	C	D
Approach Delay (s)	0.1	0.5	22.8	27.1
Approach LOS			C	D

Intersection Summary

Average Delay	0.8		
Intersection Capacity Utilization	67.1%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	201	94	2	164	57	7
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (veh/h)	226	106	2	184	64	8
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			331		467	279
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			331		467	279
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		88	99
cM capacity (veh/h)			1239		557	765

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	331	187	72
Volume Left	0	2	64
Volume Right	106	0	8
cSH	1700	1239	574
Volume to Capacity	0.19	0.00	0.13
Queue Length (ft)	0	0	11
Control Delay (s)	0.0	0.1	12.2
Lane LOS		A	B
Approach Delay (s)	0.0	0.1	12.2
Approach LOS			B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	29.0%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	71	7	51	10	1	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	75	7	54	11	1	18
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	79	59			64	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	59			64	
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	99			100	
cM capacity (veh/h)	923	1007			1538	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	82	64	19
Volume Left	75	0	1
Volume Right	7	11	0
cSH	930	1700	1538
Volume to Capacity	0.09	0.04	0.00
Queue Length (ft)	7	0	0
Control Delay (s)	9.2	0.0	0.4
Lane LOS	A		A
Approach Delay (s)	9.2	0.0	0.4
Approach LOS	A		

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	14.7%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↰	↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	16	1012	37	106	811	19	67	4	333	16	8	19
Peak Hour Factor	0.92	0.95	0.95	0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Hourly flow rate (veh/h)	17	1065	39	112	854	21	71	4	351	17	9	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	874			1104			2232	2217	1085	2559	2226	864
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	874			1104			2232	2217	1085	2559	2226	864
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			82			0	88	0	0	75	94
cM capacity (veh/h)	772			603			20	35	263	0	34	354

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	1122	986	425	17	29
Volume Left	17	112	71	17	0
Volume Right	39	21	351	0	21
cSH	772	603	84	0	94
Volume to Capacity	0.02	0.18	5.05	Err	0.31
Queue Length (ft)	2	17	Err	Err	30
Control Delay (s)	0.8	5.6	Err	Err	59.7
Lane LOS	A	A	F	F	F
Approach Delay (s)	0.8	5.6	Err	Err	
Approach LOS			F	F	

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	154.2%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	143	1218	881	87	99	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	151	1282	927	92	104	56
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	1019				2556	973
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1019				2556	973
tC, single (s)	4.1				6.4	6.3
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.4
p0 queue free %	78				0	81
cM capacity (veh/h)	681				23	297

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1433	1019	160
Volume Left	151	0	104
Volume Right	0	92	56
cSH	681	1700	34
Volume to Capacity	0.22	0.60	4.74
Queue Length (ft)	21	0	Err
Control Delay (s)	10.7	0.0	Err
Lane LOS	B		F
Approach Delay (s)	10.7	0.0	Err
Approach LOS			F

Intersection Summary			
Average Delay	618.5		
Intersection Capacity Utilization	149.3%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		Y	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	78	1050	886	11	15	61
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (veh/h)	83	1117	943	12	16	65
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	954				2231	948
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	954				2231	948
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	88				62	79
cM capacity (veh/h)	716				42	313

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1200	954	81
Volume Left	83	0	16
Volume Right	0	12	65
cSH	716	1700	138
Volume to Capacity	0.12	0.56	0.59
Queue Length (ft)	10	0	75
Control Delay (s)	4.1	0.0	62.6
Lane LOS	A		F
Approach Delay (s)	4.1	0.0	62.6
Approach LOS			F

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	128.6%	ICU Level of Service	H

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	512	2	3	377	36	3	5	11	3	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	2	539	2	3	397	38	3	5	12	3	2	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	435			541			967	985	540	981	967	416
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	435			541			967	985	540	981	967	416
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.4	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.8	4.0	3.3
p0 queue free %	100			100			99	98	98	98	99	100
cM capacity (veh/h)	1136			1038			233	249	546	193	255	641

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	543	438	20	5
Volume Left	2	3	3	3
Volume Right	2	38	12	0
cSH	1136	1038	358	214
Volume to Capacity	0.00	0.00	0.06	0.02
Queue Length (ft)	0	0	4	2
Control Delay (s)	0.1	0.1	15.7	22.3
Lane LOS	A	A	C	C
Approach Delay (s)	0.1	0.1	15.7	22.3
Approach LOS			C	C

Intersection Summary

Average Delay	0.5		
Intersection Capacity Utilization	39.5%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	757	0	5	624	2	20	1	22	2	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	8	797	0	5	657	2	21	1	23	2	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	659			797			1482	1483	797	1506	1482	658
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	659			797			1482	1483	797	1506	1482	658
tC, single (s)	4.2			4.3			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.3			2.4			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	99			99			80	99	94	98	100	100
cM capacity (veh/h)	883			751			103	124	374	93	124	468

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	805	664	45	2
Volume Left	8	5	21	2
Volume Right	0	2	23	0
cSH	883	751	165	93
Volume to Capacity	0.01	0.01	0.27	0.02
Queue Length (ft)	1	1	27	2
Control Delay (s)	0.3	0.2	34.9	44.8
Lane LOS	A	A	D	E
Approach Delay (s)	0.3	0.2	34.9	44.8
Approach LOS			D	E

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	58.8%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	131	54	9	223	86	7
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Hourly flow rate (veh/h)	162	67	11	275	106	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			228		493	195
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			228		493	195
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		80	99
cM capacity (veh/h)			1352		526	851

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	228	286	115
Volume Left	0	11	106
Volume Right	67	0	9
cSH	1700	1352	541
Volume to Capacity	0.13	0.01	0.21
Queue Length (ft)	0	1	20
Control Delay (s)	0.0	0.4	13.4
Lane LOS		A	B
Approach Delay (s)	0.0	0.4	13.4
Approach LOS			B

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	21	5	20	69	8	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	22	5	21	73	8	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	133	57			94	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	57			94	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	99			99	
cM capacity (veh/h)	856	1009			1501	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	27	94	67
Volume Left	22	0	8
Volume Right	5	73	0
cSH	882	1700	1501
Volume to Capacity	0.03	0.06	0.01
Queue Length (ft)	2	0	0
Control Delay (s)	9.2	0.0	1.0
Lane LOS	A		A
Approach Delay (s)	9.2	0.0	1.0
Approach LOS	A		

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	15.6%	ICU Level of Service	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	5	15	3	227	137	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	5	16	3	239	144	1
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	390	145	145			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	390	145	145			
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	98	100			
cM capacity (veh/h)	613	903	1437			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	21	242	145
Volume Left	5	3	0
Volume Right	16	0	1
cSH	807	1437	1700
Volume to Capacity	0.03	0.00	0.09
Queue Length (ft)	2	0	0
Control Delay (s)	9.6	0.1	0.0
Lane LOS	A	A	
Approach Delay (s)	9.6	0.1	0.0
Approach LOS	A		

Intersection Summary

Average Delay	0.6		
Intersection Capacity Utilization	23.3%	ICU Level of Service	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	4	8	13	164	208	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	4	8	14	173	219	4
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	421	221	223			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	421	221	223			
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	99	99			
cM capacity (veh/h)	583	819	1346			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	13	186	223
Volume Left	4	14	0
Volume Right	8	0	4
cSH	721	1346	1700
Volume to Capacity	0.02	0.01	0.13
Queue Length (ft)	1	1	0
Control Delay (s)	10.1	0.6	0.0
Lane LOS	B	A	
Approach Delay (s)	10.1	0.6	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	21.8%	ICU Level of Service	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	77	8	51	14	4	17
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	81	8	54	15	4	18
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	87	61			68	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	87	61			68	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	91	99			100	
cM capacity (veh/h)	911	1004			1533	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	89	68	22
Volume Left	81	0	4
Volume Right	8	15	0
cSH	919	1700	1533
Volume to Capacity	0.10	0.04	0.00
Queue Length (ft)	8	0	0
Control Delay (s)	9.3	0.0	1.4
Lane LOS	A		A
Approach Delay (s)	9.3	0.0	1.4
Approach LOS	A		

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	15.4%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔		↰	↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	27	1010	68	275	933	18	73	8	176	18	6	19
Peak Hour Factor	0.92	0.96	0.96	0.96	0.96	0.92	0.96	0.92	0.96	0.92	0.92	0.92
Hourly flow rate (veh/h)	29	1052	71	286	972	20	76	9	183	20	7	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	991			1123			2725	2711	1088	2888	2736	982
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	991			1123			2725	2711	1088	2888	2736	982
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			54			0	20	30	0	38	93
cM capacity (veh/h)	697			626			4	11	261	1	11	302

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total	1152	1278	268	20	27
Volume Left	29	286	76	20	0
Volume Right	71	20	183	0	21
cSH	697	626	13	1	39
Volume to Capacity	0.04	0.46	19.98	28.14	0.69
Queue Length (ft)	3	60	Err	Err	63
Control Delay (s)	1.5	16.7	Err	Err	208.5
Lane LOS	A	C	F	F	F
Approach Delay (s)	1.5	16.7	Err	4306.9	
Approach LOS			F	F	

Intersection Summary			
Average Delay	1058.2		
Intersection Capacity Utilization	162.1%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	37	1167	1121	140	111	105
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (veh/h)	37	1179	1132	141	112	106
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	1274				2457	1203
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1274				2457	1203
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.3				3.5	3.3
p0 queue free %	93				0	53
cM capacity (veh/h)	504				31	226

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1216	1274	218
Volume Left	37	0	112
Volume Right	0	141	106
cSH	504	1700	54
Volume to Capacity	0.07	0.75	4.05
Queue Length (ft)	6	0	Err
Control Delay (s)	3.4	0.0	Err
Lane LOS	A		F
Approach Delay (s)	3.4	0.0	Err
Approach LOS			F

Intersection Summary			
Average Delay	807.1		
Intersection Capacity Utilization	155.0%	ICU Level of Service	H

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑		Y	
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	52	1097	1012	13	8	86
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (veh/h)	53	1108	1022	13	8	87
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	1035				2242	1029
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1035				2242	1029
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	92				81	70
cM capacity (veh/h)	664				43	286

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1161	1035	95
Volume Left	53	0	8
Volume Right	0	13	87
cSH	664	1700	194
Volume to Capacity	0.08	0.61	0.49
Queue Length (ft)	6	0	60
Control Delay (s)	2.9	0.0	40.2
Lane LOS	A		E
Approach Delay (s)	2.9	0.0	40.2
Approach LOS			E

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	131.6%	ICU Level of Service	H

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	1	596	16	14	422	7	2	6	11	21	6	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	1	627	17	15	444	7	2	6	12	22	6	1
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	452			644			1119	1119	636	1130	1124	448
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	452			644			1119	1119	636	1130	1124	448
tC, single (s)	4.1			4.2			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			98			99	97	98	87	97	100
cM capacity (veh/h)	1120			913			179	205	464	172	204	615

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	645	466	20	29
Volume Left	1	15	2	22
Volume Right	17	7	12	1
cSH	1120	913	296	182
Volume to Capacity	0.00	0.02	0.07	0.16
Queue Length (ft)	0	1	5	14
Control Delay (s)	0.0	0.5	18.0	28.5
Lane LOS	A	A	C	D
Approach Delay (s)	0.0	0.5	18.0	28.5
Approach LOS			C	D

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	44.6%	ICU Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	650	9	16	758	0	4	0	10	4	3	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (veh/h)	2	684	9	17	798	0	4	0	11	4	3	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	798			694			1536	1525	689	1535	1529	798
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	798			694			1536	1525	689	1535	1529	798
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			95	100	98	95	97	98
cM capacity (veh/h)	833			911			90	117	449	92	116	389

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	696	815	15	17
Volume Left	2	17	4	4
Volume Right	9	0	11	9
cSH	833	911	210	173
Volume to Capacity	0.00	0.02	0.07	0.10
Queue Length (ft)	0	1	6	8
Control Delay (s)	0.1	0.5	23.4	28.0
Lane LOS	A	A	C	D
Approach Delay (s)	0.1	0.5	23.4	28.0
Approach LOS			C	D

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	68.4%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	205	97	2	166	58	7
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (veh/h)	230	109	2	187	65	8
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			339		476	285
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			339		476	285
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		88	99
cM capacity (veh/h)			1231		550	759

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	339	189	73
Volume Left	0	2	65
Volume Right	109	0	8
cSH	1700	1231	567
Volume to Capacity	0.20	0.00	0.13
Queue Length (ft)	0	0	11
Control Delay (s)	0.0	0.1	12.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.1	12.3
Approach LOS			B

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	29.5%	ICU Level of Service	A

Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	17	1104	112	875	75	351	17	30
Queue Length 50th (ft)	4	644	42	100	51	230	11	19
Queue Length 95th (ft)	14	#1071	m68	163	95	324	31	47
Internal Link Dist (ft)		1139		496	240			264
50th Up Block Time (%)						3%		
95th Up Block Time (%)						22%		
Turn Bay Length (ft)								
50th Bay Block Time %								
95th Bay Block Time %								
Queuing Penalty (veh)								

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	1.00		1.00	1.00			1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85	1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1799		1641	1740			1779	1583	1770	1667	
Flt Permitted	0.34	1.00		0.06	1.00			0.72	1.00	0.69	1.00	
Satd. Flow (perm)	631	1799		112	1740			1333	1583	1283	1667	
Volume (vph)	16	1012	37	106	811	19	67	4	333	16	8	19
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Adj. Flow (vph)	17	1065	39	112	854	21	71	4	351	17	9	21
Lane Group Flow (vph)	17	1104	0	112	875	0	0	75	351	17	30	0
Heavy Vehicles (%)	2%	5%	6%	10%	9%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm			pm+pt			Perm		pm+ov	Perm		
Protected Phases		2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	72.0	72.0		90.0	90.0			10.0	23.0	10.0	10.0	
Effective Green, g (s)	73.0	73.0		91.0	91.0			11.0	25.0	11.0	11.0	
Actuated g/C Ratio	0.66	0.66		0.83	0.83			0.10	0.23	0.10	0.10	
Clearance Time (s)	5.0	5.0		5.0	5.0			5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	419	1194		287	1439			133	417	128	167	
v/s Ratio Prot		c0.61		0.05	0.50				c0.11		0.02	
v/s Ratio Perm	0.03			0.27				0.06	0.11	0.01		
v/c Ratio	0.04	0.92		0.39	0.61			0.56	0.84	0.13	0.18	
Uniform Delay, d1	6.4	16.1		22.3	3.3			47.2	40.6	45.1	45.4	
Progression Factor	1.00	1.00		1.85	0.59			1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	13.3		0.6	1.2			5.4	14.2	0.5	0.5	
Delay (s)	6.6	29.4		41.7	3.2			52.6	54.8	45.6	45.9	
Level of Service	A	C		D	A			D	D	D	D	
Approach Delay (s)		29.0			7.5			54.4			45.8	
Approach LOS		C			A			D			D	

Intersection Summary

HCM Average Control Delay	25.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	E

c Critical Lane Group

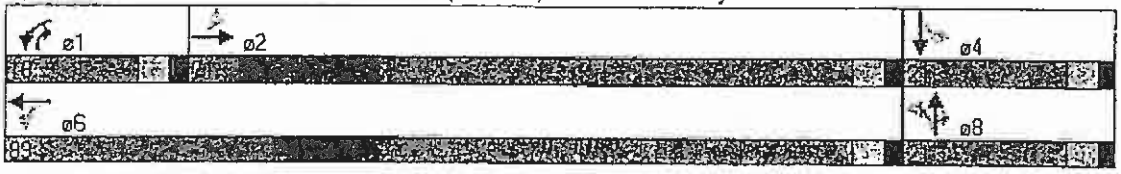
Phase Number	1	2	4	6	8
Movement	WBL	EBTL	SBTL	WBTL	NBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize					
Recall Mode	None	Coord	None	Coord	None
Maximum Split (s)	18	71	21	89	21
Maximum Split (%)	16%	65%	19%	81%	19%
Minimum Split (s)	9	15	15	15	15
Yellow Time (s)	3	3	3	3	3
All-Red Time (s)	2	2	2	2	2
Minimum Initial (s)	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)					
Flash Dont Walk (s)					

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection

Splits and Phases: 1: Central Street (Rte. 27) & Site Driveway



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	151	1282	929	92	104	56
Queue Length 50th (ft)	102	303	429	11	71	30
Queue Length 95th (ft)	m116	m339	633	21	#130	64
Internal Link Dist (ft)		496	397		452	
50th Up Block Time (%)			8%			
95th Up Block Time (%)			16%			
Turn Bay Length (ft)						
50th Bay Block Time %						
95th Bay Block Time %						
Queuing Penalty (veh)			109			

Intersection Summary

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

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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1792	1743	1495	1787	1482
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1792	1743	1495	1787	1482
Volume (vph)	143	1218	883	87	99	53
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	151	1282	929	92	104	56
Lane Group Flow (vph)	151	1282	929	92	104	56
Heavy Vehicles (%)	2%	6%	9%	8%	1%	9%
Turn Type	Prot			pm+ov		pm+ov
Protected Phases	5	2	6	4	4	5
Permitted Phases				6		4
Actuated Green, G (s)	12.2	90.0	72.8	82.8	10.0	22.2
Effective Green, g (s)	13.2	91.0	73.8	84.8	11.0	24.2
Actuated g/C Ratio	0.12	0.83	0.67	0.77	0.10	0.22
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	212	1482	1169	1207	179	380
v/s Ratio Prot	0.09	c0.72	0.53	0.01	c0.06	0.02
v/s Ratio Perm				0.05		0.02
v/c Ratio	0.71	0.87	0.79	0.08	0.58	0.15
Uniform Delay, d1	46.6	5.8	12.8	3.1	47.3	34.6
Progression Factor	0.98	0.62	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	3.2	5.6	0.0	4.7	0.2
Delay (s)	50.5	6.7	18.4	3.1	52.0	34.8
Level of Service	D	A	B	A	D	C
Approach Delay (s)		11.4	17.0		46.0	
Approach LOS		B	B		D	

Intersection Summary

HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	D

c Critical Lane Group

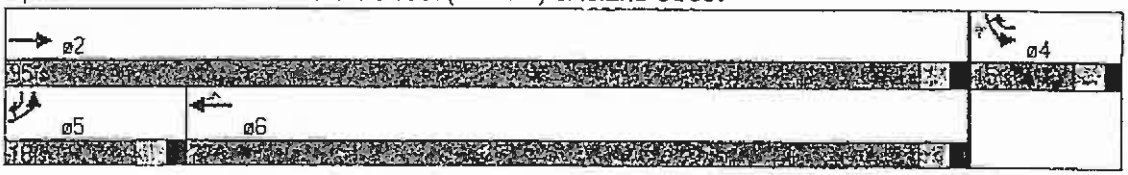
Phase Number	2	4	5	6
Movement	EBT	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize				
Recall Mode	Coord	Min	None	Coord
Maximum Split (s)	95	15	18	77
Maximum Split (%)	86%	14%	16%	70%
Minimum Split (s)	15	15	12	15
Yellow Time (s)	3	3	3	3
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	10	10	7	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				

Intersection Summary

Cycle Length	110
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 1 (1%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Splits and Phases: 2: Central Street (Rte. 27) & Island Street



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	29	1123	286	992	85	183	20	28
Queue Length 50th (ft)	8	800	168	215	63	110	14	20
Queue Length 95th (ft)	24	#1195	m231	467	115	169	38	48
Internal Link Dist (ft)		1140		489	240			315
50th Up Block Time (%)								
95th Up Block Time (%)		9%						
Turn Bay Length (ft)								
50th Bay Block Time %								
95th Bay Block Time %								
Queuing Penalty (veh)		53						

Intersection Summary

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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	1.00		1.00	1.00			1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85	1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1831		1787	1857			1768	1568	1770	1653	
Flt Permitted	0.30	1.00		0.05	1.00			0.73	1.00	0.62	1.00	
Satd. Flow (perm)	565	1831		92	1857			1345	1568	1156	1653	
Volume (vph)	27	1010	68	275	933	18	73	8	176	18	6	19
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.96	0.92	0.96	0.92	0.96	0.92	0.92	0.92
Adj. Flow (vph)	29	1052	71	286	972	20	76	9	183	20	7	21
Lane Group Flow (vph)	29	1123	0	286	992	0	0	85	183	20	28	0
Heavy Vehicles (%)	2%	3%	0%	1%	2%	2%	3%	2%	3%	2%	2%	2%
Turn Type	Perm			pm+pt			Perm		pm+ov	Perm		
Protected Phases		2		1	6			8	1		4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	77.1	77.1		99.2	99.2			10.8	27.9	10.8	10.8	
Effective Green, g (s)	78.1	78.1		100.2	100.2			11.8	29.9	11.8	11.8	
Actuated g/C Ratio	0.65	0.65		0.84	0.84			0.10	0.25	0.10	0.10	
Clearance Time (s)	5.0	5.0		5.0	5.0			5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	368	1192		332	1551			132	443	114	163	
v/s Ratio Prot		c0.61		c0.13	0.53				0.06		0.02	
v/s Ratio Perm	0.05			0.59				c0.06	0.05	0.02		
v/c Ratio	0.08	0.94		0.86	0.64			0.64	0.41	0.18	0.17	
Uniform Delay, d1	7.7	18.9		42.1	3.5			52.1	37.7	49.6	49.6	
Progression Factor	1.00	1.00		0.88	1.22			1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	15.4		13.3	1.3			10.3	0.6	0.7	0.5	
Delay (s)	8.1	34.3		50.3	5.5			62.4	38.3	50.4	50.1	
Level of Service	A	C		D	A			E	D	D	D	
Approach Delay (s)		33.7			15.6			46.0			50.2	
Approach LOS		C			B			D			D	

Intersection Summary

HCM Average Control Delay	26.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.9%	ICU Level of Service	E

c Critical Lane Group

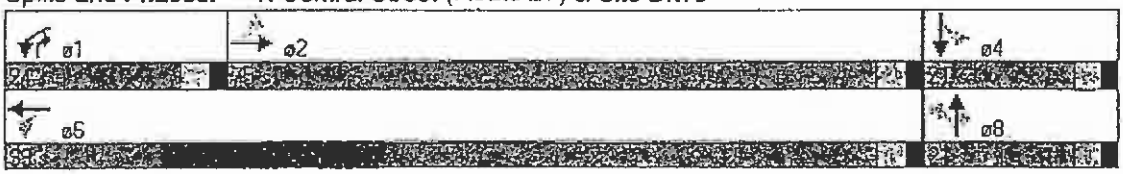
Phase Number	1	2	4	6	8
Movement	WBL	EBTL	SBTL	WBTL	NBTL
Lead/Lag	Lead	Lag			
Lead-Lag Optimize					
Recall Mode	None	Coord	None	Coord	None
Maximum Split (s)	24	75	21	99	21
Maximum Split (%)	20%	63%	18%	83%	18%
Minimum Split (s)	9	15	15	15	15
Yellow Time (s)	3	3	3	3	3
All-Red Time (s)	2	2	2	2	2
Minimum Initial (s)	4	4	4	4	4
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)					
Flash Dont Walk (s)					

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow, Master Intersection

Splits and Phases: 1: Central Street (Route 27) & Site Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	37	1179	1132	141	112	106
Queue Length 50th (ft)	31	0	548	11	83	70
Queue Length 95th (ft)	m38	m61	860	18	142	120
Internal Link Dist (ft)		489	412		452	
50th Up Block Time (%)			11%			
95th Up Block Time (%)			18%			
Turn Bay Length (ft)						
50th Bay Block Time %						
95th Bay Block Time %						
Queuing Penalty (veh)			162			

Intersection Summary

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

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1570	1827	1881	1583	1770	1599
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1570	1827	1881	1583	1770	1599
Volume (vph)	37	1167	1121	140	111	105
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	37	1179	1132	141	112	106
Lane Group Flow (vph)	37	1179	1132	141	112	106
Heavy Vehicles (%)	15%	4%	1%	2%	2%	1%
Turn Type	Prot			pm+ov		pm+ov
Protected Phases	5	2	6	4	4	5
Permitted Phases				6		4
Actuated Green, G (s)	7.0	97.3	85.3	98.0	12.7	19.7
Effective Green, g (s)	8.0	98.3	86.3	100.0	13.7	21.7
Actuated g/C Ratio	0.07	0.82	0.72	0.83	0.11	0.18
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	105	1497	1353	1372	202	342
v/s Ratio Prot	0.02	c0.65	c0.60	0.01	c0.06	0.02
v/s Ratio Perm				0.08		0.05
v/c Ratio	0.35	0.79	0.84	0.10	0.55	0.31
Uniform Delay, d1	53.5	5.5	11.9	1.8	50.3	42.7
Progression Factor	1.28	0.29	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	2.2	6.3	0.0	3.3	0.5
Delay (s)	69.7	3.8	18.2	1.9	53.5	43.2
Level of Service	E	A	B	A	D	D
Approach Delay (s)		5.9	16.4		48.5	
Approach LOS		A	B		D	

Intersection Summary

HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	C

c Critical Lane Group

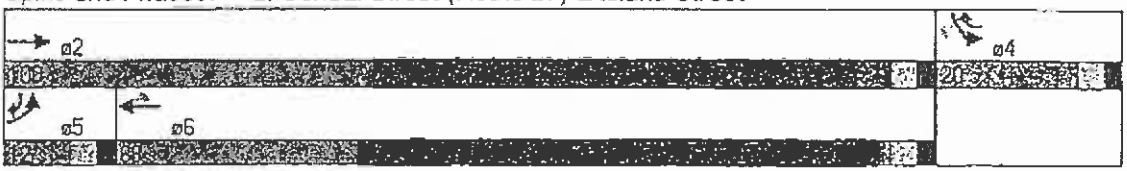
Phase Number	2	4	5	6
Movement	EBT	SBL	EBL	WBT
Lead/Lag			Lead	Lag
Lead-Lag Optimize				
Recall Mode	Coord	Min	None	Coord
Maximum Split (s)	100	20	12	88
Maximum Split (%)	83%	17%	10%	73%
Minimum Split (s)	15	15	12	15
Yellow Time (s)	3	3	3	3
All-Red Time (s)	2	2	2	2
Minimum Initial (s)	10	10	7	10
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)				
Flash Dont Walk (s)				

Intersection Summary

Cycle Length	120
Control Type	Actuated-Coordinated
Natural Cycle	90

Offset: 27 (23%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow

Splits and Phases: 2: Central Street (Route 27) & Island Street



Movement Summary

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Central St. at Canton St and Tosca Drive

Two-way stop

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost ($/h)
Canton St. (Rte. 27)										
32	L	358	120	3.117	1028.1	LOS F	2828	1.99	1.4	2355
32	T	16	120	3.117	1028.1	LOS F	2828	1.99	1.4	2355
33	R	1	1	1.000	1028.1	LOS F	2828	2.15	1.4	6
Approach		**375**	**120**	**3.125**	**1028.1**	**LOS F**	**2828**	**1.99**	**1.4**	**2361**
Central Street										
22	L	1	1012	0.552	3.7	LOS A	148	0.50	36.0	130
22	T	558	1012	0.552	3.7	LOS A	148	0.50	36.0	130
23	R	53	96	0.552	13.2	LOS B	148	0.76	29.6	17
Approach		**612**	**1108**	**0.552**	**4.5**	**LOS A**	**148**	**0.52**	**35.3**	**147**
Tosca Driveoach										
42	L	7	42	0.405	104.2	LOS F	70	1.05	10.7	14
42	T	9	42	0.405	104.2	LOS F	70	1.05	10.7	14
43	R	14	34	0.412	104.6	LOS F	70	1.06	10.7	12
Approach		**31**	**76**	**0.409**	**104.4**	**LOS F**	**70**	**1.05**	**10.7**	**26**
Central St. (Rte. 27)										
12	L	54	1047	0.753	0.7	LOS A	0	0.05	39.3	187
12	T	734	1047	0.753	0.7	LOS A	0	0.05	39.3	187
13	R	494	656	0.753	9.6	LOS A	0	0.71	31.9	144
Approach		**1282**	**1703**	**0.753**	**4.1**	**LOS A**		**0.30**	**36.1**	**331**
All Vehicles		**2300**	**3006**	**3.117**	**172.5**	**LOS F**	**2828**	**0.65**	**7.1**	**2865**

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Movement Summary

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Central St. at Canton St and Tosca Drive

Two-way stop

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost ($/h)
Canton St. (Rte. 27)										
32	L	398	119	3.462	1182.2	LOS F	3334	1.71	1.2	2960
32	T	14	119	3.462	1182.2	LOS F	3334	1.71	1.2	2960
33	R	3	1	3.000	1182.4	LOS F	3334	1.87	1.2	22
Approach		**415**	**120**	**3.458**	**1182.2**	**LOS F**	**3334**	**1.71**	**1.2**	**2982**
Central Street										
22	L	1	925	0.774	8.3	LOS A	292	0.98	32.8	178
22	T	716	925	0.774	8.3	LOS A	292	0.98	32.8	178
23	R	24	31	0.774	17.9	LOS C	292	1.25	27.1	9
Approach		**740**	**956**	**0.774**	**8.6**	**LOS A**	**292**	**0.99**	**32.6**	**187**
Tosca Driveoach										
42	L	13	36	1.278	241.7	LOS F	621	1.51	5.4	76
42	T	34	36	1.278	241.7	LOS F	621	1.51	5.4	76
43	R	107	84	1.274	241.8	LOS F	621	1.61	5.4	177
Approach		**153**	**120**	**1.275**	**241.8**	**LOS F**	**621**	**1.58**	**5.4**	**253**
Central St. (Rte. 27)										
12	L	55	922	0.717	0.8	LOS A	0	0.06	39.2	157
12	T	606	922	0.717	0.8	LOS A	0	0.06	39.2	157
13	R	569	794	0.717	9.5	LOS A	0	0.71	31.9	165
Approach		**1230**	**1716**	**0.717**	**4.8**	**LOS A**		**0.36**	**35.4**	**322**
All Vehicles		**2538**	**2912**	**3.462**	**212.7**	**LOS F**	**3334**	**0.84**	**6.0**	**3744**

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Movement Summary

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Central St. at Canton St and Tosca Drive

wo-way stop

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost ($/h)
anton St. (Rte. 27)										
32	L	383	120	3.342	1135.0	LOS F	3419	1.70	1.3	2774
32	T	17	120	3.342	1135.0	LOS F	3419	1.70	1.3	2774
33	R	1	1	1.000	1134.9	LOS F	3419	1.81	1.3	7
pproach		402	120	3.350	1135.0	LOS F	3419	1.70	1.3	2781
entral Street										
22	L	1	994	0.626	16.0	LOS C	193	1.11	28.8	202
22	T	621	994	0.626	16.0	LOS C	193	1.11	28.8	202
23	R	56	89	0.629	16.4	LOS C	193	1.11	28.5	19
pproach		678	1083	0.626	16.1	LOS C	193	1.11	28.8	220
osca Driveoach										
42	L	7	28	0.607	195.6	LOS F	120	1.08	6.4	24
42	T	11	28	0.607	195.6	LOS F	120	1.08	6.4	24
43	R	15	24	0.625	196.0	LOS F	120	1.09	6.5	21
pproach		32	52	0.614	195.8	LOS F	120	1.08	6.4	44
entral St. (Rte. 27)										
12	L	57	1050	0.814	0.6	LOS A	0	0.05	39.3	203
12	T	798	1050	0.814	0.6	LOS A	0	0.05	39.3	203
13	R	532	653	0.815	9.6	LOS A	0	0.71	31.9	155
pproach		1387	1703	0.814	4.1	LOS A		0.30	36.1	358
ll Vehicles		2499	2959	3.342	191.7	LOS F	3419	0.76	6.5	3404

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Movement Summary

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Central St. at Canton St and Tosca Drive

Two-way stop

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost ($/h)
Canton St. (Rte. 27)										
32	L	420	119	3.655	1274.2	LOS F	3915	1.54	1.1	3359
32	T	15	119	3.655	1274.2	LOS F	3915	1.54	1.1	3359
33	R	3	1	3.000	1274.4	LOS F	3915	1.65	1.1	23
Approach		**438**	**120**	**3.650**	**1274.2**	**LOS F**	**3915**	**1.54**	**1.1**	**3382**
Central Street										
22	L	1	896	0.857	11.7	LOS B	398	1.24	30.5	206
22	T	767	896	0.857	11.7	LOS B	398	1.24	30.5	206
23	R	25	29	0.862	21.3	LOS C	398	1.64	25.5	11
Approach		**793**	**925**	**0.857**	**12.0**	**LOS B**	**398**	**1.25**	**30.3**	**217**
Tosca Driveoach										
42	L	14	37	1.351	285.9	LOS F	802	1.44	4.6	96
42	T	36	37	1.351	285.9	LOS F	802	1.44	4.6	96
43	R	113	83	1.361	286.1	LOS F	802	1.52	4.6	216
Approach		**163**	**120**	**1.358**	**286.0**	**LOS F**	**802**	**1.50**	**4.6**	**312**
Central St. (Rte. 27)										
12	L	58	939	0.774	0.8	LOS A	0	0.06	39.2	173
12	T	669	939	0.774	0.8	LOS A	0	0.06	39.2	173
13	R	603	779	0.774	9.5	LOS A	0	0.71	31.9	175
Approach		**1330**	**1718**	**0.774**	**4.7**	**LOS A**		**0.35**	**35.5**	**347**
All Vehicles		**2724**	**2883**	**3.655**	**227.8**	**LOS F**	**3915**	**0.87**	**5.6**	**4258**

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Movement Summary

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Central St. at Canton St and Tosca Drive

wo-way stop

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (mi/h)	Oper Cost ($/h)
anton St. (Rte. 27)										
32	L	381	120	3.317	1122.6	LOS F	3325	1.74	1.3	2725
32	T	17	120	3.317	1122.6	LOS F	3325	1.74	1.3	2725
33	R	1	1	1.000	1122.6	LOS F	3325	1.86	1.3	7
pproach		399	120	3.325	1122.6	LOS F	3325	1.74	1.3	2732
entral Street										
22	L	1	996	0.620	16.0	LOS C	190	1.11	28.9	200
22	T	617	996	0.620	16.0	LOS C	190	1.11	28.9	200
23	R	56	90	0.622	16.3	LOS C	190	1.11	28.5	18
pproach		674	1087	0.620	16.0	LOS C	190	1.11	28.8	219
osca Driveoach										
42	L	7	29	0.586	178.7	LOS F	111	1.07	6.9	22
42	T	11	29	0.586	178.7	LOS F	111	1.07	6.9	22
43	R	15	26	0.577	179.1	LOS F	111	1.09	7.0	19
pproach		32	55	0.585	178.9	LOS F	111	1.08	7.0	41
entral St. (Rte. 27)										
12	L	57	1050	0.796	0.7	LOS A	0	0.05	39.3	198
12	T	779	1050	0.796	0.7	LOS A	0	0.05	39.3	198
13	R	520	653	0.796	9.6	LOS A	0	0.71	31.9	152
pproach		1356	1704	0.796	4.1	LOS A		0.30	36.1	350
ll Vehicles		2461	2965	3.317	191.0	LOS F	3325	0.77	6.5	3341

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Movement Summary

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Central St. at Canton St and Tosca Drive

Two-way stop

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	Cap (veh/h)	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (ft)	Eff. Stop Rate	Aver Speed (ml/h)	Oper Cost ($/h)
Canton St. (Rte. 27)										
32	L	432	119	3.748	1316.6	LOS F	4131	1.51	1.1	3555
32	T	15	119	3.748	1316.6	LOS F	4131	1.51	1.1	3555
33	R	3	1	3.000	1316.8	LOS F	4131	1.62	1.1	24
Approach		**449**	**120**	**3.742**	**1316.6**	**LOS F**	**4131**	**1.51**	**1.1**	**3579**
Central Street										
22	L	1	887	0.887	13.6	LOS B	452	1.35	29.4	221
22	T	785	887	0.887	13.6	LOS B	452	1.35	29.4	221
23	R	25	28	0.893	23.2	LOS C	452	1.84	24.7	11
Approach		**812**	**915**	**0.887**	**13.9**	**LOS B**	**452**	**1.37**	**29.2**	**232**
Tosca Driveoach										
42	L	14	37	1.351	289.8	LOS F	832	1.41	4.6	97
42	T	36	37	1.351	289.8	LOS F	832	1.41	4.6	97
43	R	113	83	1.361	289.9	LOS F	832	1.49	4.6	219
Approach		**163**	**120**	**1.358**	**289.9**	**LOS F**	**832**	**1.47**	**4.6**	**315**
Central St. (Rte. 27)										
12	L	58	942	0.782	0.8	LOS A	0	0.06	39.2	175
12	T	679	942	0.782	0.8	LOS A	0	0.06	39.2	175
13	R	608	777	0.782	9.5	LOS A	0	0.71	31.9	176
Approach		**1345**	**1718**	**0.783**	**4.7**	**LOS A**		**0.35**	**35.5**	**351**
All Vehicles		**2769**	**2874**	**3.748**	**236.9**	**LOS F**	**4131**	**0.90**	**5.5**	**4478**

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SIGNAL WARRANT ANALYSIS WORKSHEET

Traffic Control Signal Warrant Analyses

(Based on MUTCD-2000 Edition)

Print Date: 12/01/05
Print Time: 1:52 PM

Intersection: Route 27 (Central Street) at West Street

Pop. <10,000? (Y/N): N
Speed (in mph): 35 mph
Count Date: 10/8/2003
Analysis Year: 2003 Existing
Adjustment Factor: 1
Raw counts
Analysis Date: 11/17/03
Analyst: HLM

	Is Major?* (Y/N)	#Lanes* (one way)
EB	Y	1
WB	Y	1
NB	N	1
SB		

Major Lanes: 1
Minor Lanes: 1

*Note: If intersection is a "T" intersection, leave calls blank for the non-existant approach

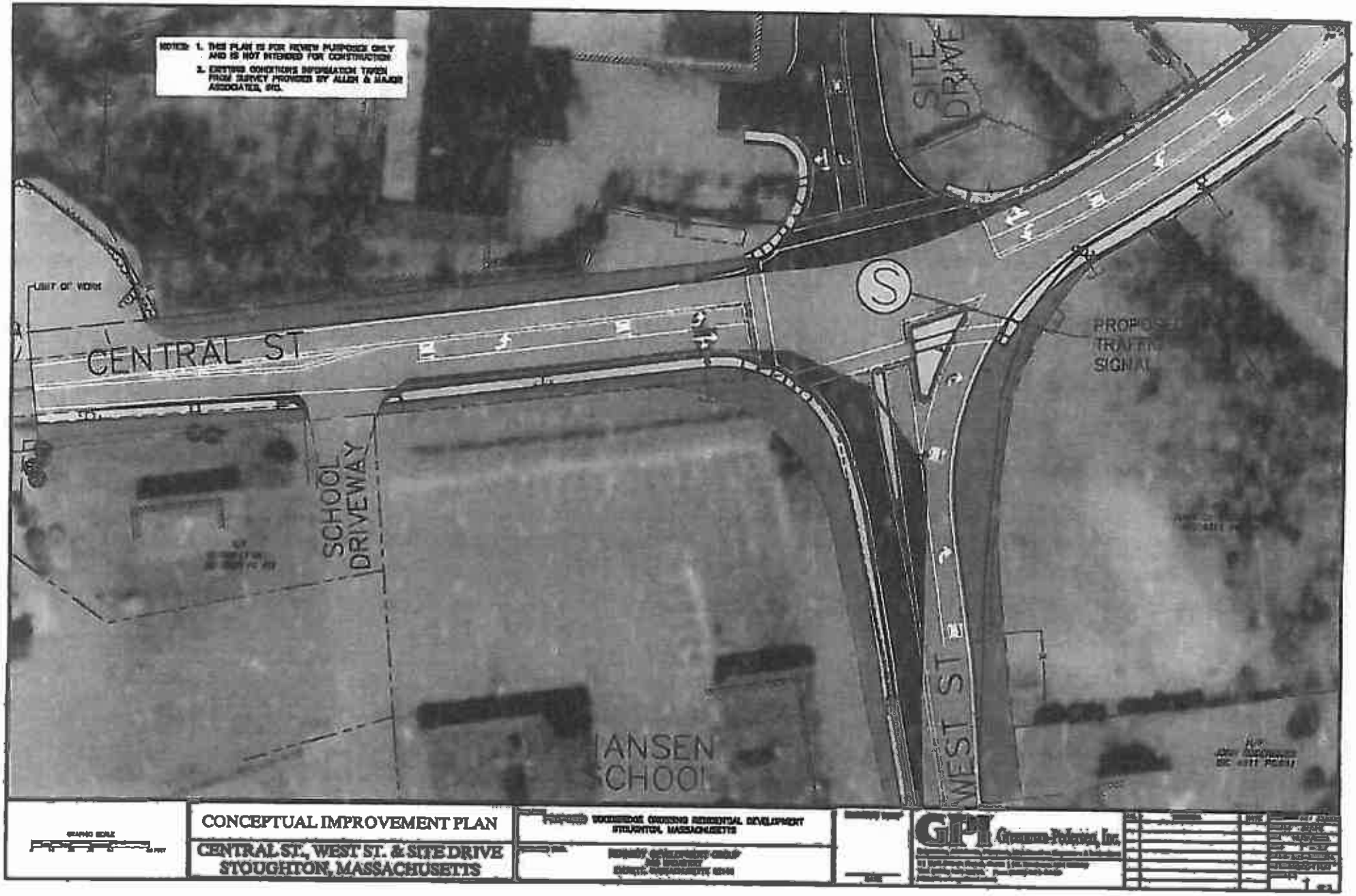
Time	EB LT	EB TH	EB RT	WB LT	WB TH	WB RT	NB LT	NB TH	NB RT	SB LT	SB TH	SB RT
7:00	0	993	0	0	673	0	55	0	254	0	0	0
8:00	0	1,064	0	0	661	0	61	0	245	0	0	0
9:00	0	720	0	0	558	0	0	0	0	0	0	0
10:00	0	617	0	0	603	0	0	0	0	0	0	0
11:00	0	724	0	0	615	0	0	0	0	0	0	0
12:00	0	718	0	0	708	0	0	0	0	0	0	0
13:00	0	646	0	0	608	0	0	0	0	0	0	0
14:00	0	799	0	0	793	0	0	0	0	0	0	0
15:00	0	876	0	0	809	0	0	0	0	0	0	0
16:00	0	912	0	0	873	0	32	0	121	0	0	0
17:00	0	926	0	0	956	0	63	0	146	0	0	0
18:00	0	799	0	0	793	0	0	0	0	0	0	0
19:00	0	529	0	0	568	0	0	0	0	0	0	0

Time	Σ EB	Σ WB	Σ NB	Σ SB	Σ Major	Σ Minor	Σ Max Minor	W1 A	W1 B	W1combo	W2	W3
7:00	993	673	309	0	1666	309	309	Y	Y	Y	Y	Y
8:00	1064	661	305	0	1725	305	305	Y	Y	Y	Y	Y
9:00	720	558	0	0	1278	0	0	N	N	N	N	N
10:00	617	603	0	0	1220	0	0	N	N	N	N	N
11:00	724	615	0	0	1340	0	0	N	N	N	N	N
12:00	718	708	0	0	1426	0	0	N	N	N	N	N
13:00	646	608	0	0	1254	0	0	N	N	N	N	N
14:00	799	793	0	0	1592	0	0	N	N	N	N	N
15:00	876	809	0	0	1685	0	0	N	N	N	N	N
16:00	912	873	154	0	1785	154	154	Y	Y	Y	Y	Y
17:00	926	956	209	0	1882	209	209	Y	Y	Y	Y	Y
18:00	799	793	0	0	1592	0	0	N	N	N	N	N
19:00	529	568	0	0	1097	0	0	N	N	N	N	N
								4 of 8	4 of 8	4 of 8	4 of 4	4 of 1

Warrant Analyses

Warrant 1: **Condition A Minimum Vehicular** Volume Warrant Is Not Met
Warrant 1: **Condition B Interruption of Continuous Traffic Warrant Is Not Met**
Warrant 1: **Combination of Warrants 1A and 1B Is Not Met**
Warrant 2: **Four-Hour Warrant Is Met**
Warrant 3: One-Hour Warrant Is Met

CONCEPT PLANS


NOTES: 1. THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION.
2. EXISTING CONDITIONS INFORMATION TAKEN FROM SURVEY PROVIDED BY ALLEN & MAJOR ASSOCIATES, INC.
SITE DRIVE
LIMIT OF WORK
CENTRAL ST
PROPOSED TRAFFIC SIGNAL
SCHOOL DRIVEWAY
WEST ST
ANSEN
CHOOL
CONCEPTUAL IMPROVEMENT PLAN
CENTRAL ST., WEST ST. & SITE DRIVE
STOUGHTON, MASSACHUSETTS
Proposed Woodridge Crossing Residential Development
Stoughton, Massachusetts
GPI Greenman-Pedersen, Inc.

CONCEPTUAL IMPROVEMENT PLAN

CENTRAL ST. AT ISLAND ST.
STOUGHTON, MASSACHUSETTS

PROJECT: PROPOSED WOODBRIDGE CROSSING RESIDENTIAL DEVELOPMENT
STOUGHTON, MASSACHUSETTS

PREPARED FOR: KENNEDY DEVELOPMENT GROUP
500 BROADWAY
EVERETT, MASSACHUSETTS 02149

GPI Greenman-Pedersen, Inc.

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