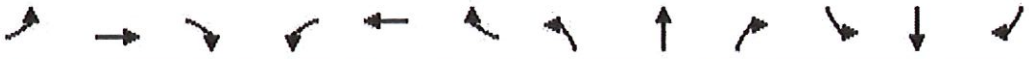


Lanes, Volumes, Timings
3: Route 163/Depot Road & Route 32

Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4 9	4 9		4 9	4 9		1	1		2	2	
Switch Phase												
Minimum Initial (s)							5.0			5.0	5.0	
Minimum Split (s)							9.5			22.5	22.5	
Total Split (s)							12.0			50.0	50.0	
Total Split (%)							10.7%			44.6%	44.6%	
Maximum Green (s)							7.5			45.5	45.5	
Yellow Time (s)							3.5			3.5	3.5	
All-Red Time (s)							1.0			1.0	1.0	
Lost Time Adjust (s)											0.0	
Total Lost Time (s)											4.5	
Lead/Lag							Lead					
Lead-Lag Optimize?							Yes					
Vehicle Extension (s)							3.0			3.0	3.0	
Recall Mode							None			Max	Max	
Walk Time (s)										7.0	7.0	
Flash Dont Walk (s)										11.0	11.0	
Pedestrian Calls (#/hr)										0	0	
Act Effct Green (s)	26.4	26.4			26.4			45.6			45.6	
Actuated g/C Ratio	0.33	0.33			0.33			0.56			0.56	
v/c Ratio	0.47	0.33			0.13			0.80			0.65	
Control Delay	25.2	5.6			18.2			17.7			16.4	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	25.2	5.6			18.2			17.7			16.4	
LOS	C	A			B			B			B	
Approach Delay		15.5			18.2			17.7			16.4	
Approach LOS		B			B			B			B	
90th %ile Green (s)							0.0			45.5	45.5	
90th %ile Term Code							Skip			MaxR	MaxR	
70th %ile Green (s)							0.0			45.5	45.5	
70th %ile Term Code							Skip			MaxR	MaxR	
50th %ile Green (s)							0.0			45.5	45.5	
50th %ile Term Code							Skip			MaxR	MaxR	
30th %ile Green (s)							0.0			45.5	45.5	
30th %ile Term Code							Skip			MaxR	MaxR	
10th %ile Green (s)							0.0			45.5	45.5	
10th %ile Term Code							Skip			MaxR	MaxR	
Stops (vph)	136	27			30			246			361	
Fuel Used(gal)	3	1			1			4			5	
CO Emissions (g/hr)	195	101			40			272			371	
NOx Emissions (g/hr)	38	20			8			53			72	
VOC Emissions (g/hr)	45	24			9			63			86	
Dilemma Vehicles (#)	0	0			0			0			0	
Queue Length 50th (ft)	86	8			25			63			213	
Queue Length 95th (ft)	134	41			37			#394			324	
Internal Link Dist (ft)		712			518			175			265	
Turn Bay Length (ft)	150											
Base Capacity (vph)	766	954			947			684			1016	
Starvation Cap Reductn	0	0			0			0			0	

Lanes, Volumes, Timings
3: Route 163/Depot Road & Route 32

Background Traffic
AM Peak Hour

Lane Group	Ø4	Ø9
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0
Minimum Split (s)	22.5	9.5
Total Split (s)	20.0	30.0
Total Split (%)	18%	27%
Maximum Green (s)	15.5	25.5
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
90th %ile Green (s)	15.5	12.1
90th %ile Term Code	Max	Gap
70th %ile Green (s)	15.5	7.5
70th %ile Term Code	Max	Gap
50th %ile Green (s)	15.5	7.3
50th %ile Term Code	Max	Gap
30th %ile Green (s)	14.4	6.1
30th %ile Term Code	Gap	Gap
10th %ile Green (s)	10.2	5.8
10th %ile Term Code	Gap	Gap
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		

Lanes, Volumes, Timings 3: Route 163/Depot Road & Route 32

Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.28	0.22			0.08			0.80			0.65	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 81

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 16.7

Intersection LOS: B

Intersection Capacity Utilization 82.3%

ICU Level of Service E

Analysis Period (min) 15

90th %ile Actuated Cycle: 86.6

70th %ile Actuated Cycle: 82

50th %ile Actuated Cycle: 81.8

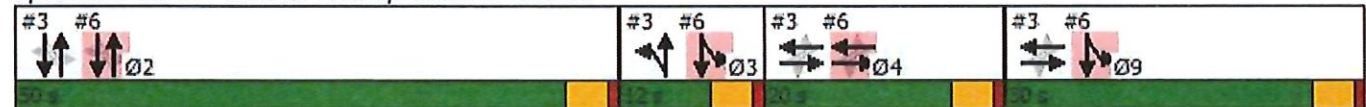
30th %ile Actuated Cycle: 79.5

10th %ile Actuated Cycle: 75

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Route 163/Depot Road & Route 32



Lane Group	Ø4	Ø9
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6: Route 32 & Maple Ave/Maple Ave Ext

Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	5	40	22	5	18	55	383	12	5	495	65
Future Volume (vph)	57	5	40	22	5	18	55	383	12	5	495	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.947			0.946			0.997			0.985	
Flt Protected		0.973			0.976			0.994				
Satd. Flow (prot)	0	1716	0	0	1720	0	0	1846	0	0	1835	0
Flt Permitted		0.811			0.863			0.866			0.998	
Satd. Flow (perm)	0	1431	0	0	1521	0	0	1608	0	0	1831	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			22			1			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		620			655			605			255	
Travel Time (s)		14.1			14.9			13.8			5.8	
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
Adj. Flow (vph)	69	6	48	27	6	22	66	461	14	6	596	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	123	0	0	55	0	0	541	0	0	680	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			4			2		3 9	2 3 9	
Permitted Phases	4	4		4	4		2	2		2 3 9	2 3 9	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0				

Lane Group	Ø3	Ø9
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	3	9
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0

Lanes, Volumes, Timings
6: Route 32 & Maple Ave/Maple Ave Ext

Background Traffic
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5				
Total Split (s)	20.0	20.0		20.0	20.0		50.0	50.0				
Total Split (%)	17.9%	17.9%		17.9%	17.9%		44.6%	44.6%				
Maximum Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5				
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.5			4.5			4.5				
Lead/Lag	Lag	Lag		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0				
Recall Mode	None	None		None	None		Max	Max				
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		14.2			14.2			45.6			53.3	
Actuated g/C Ratio		0.18			0.18			0.56			0.66	
v/c Ratio		0.46			0.19			0.60			0.56	
Control Delay		30.3			21.7			15.9			4.7	
Queue Delay		0.0			0.0			0.4			0.4	
Total Delay		30.3			21.7			16.3			5.0	
LOS		C			C			B			A	
Approach Delay		30.3			21.7			16.3			5.0	
Approach LOS		C			C			B			A	
90th %ile Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
90th %ile Term Code	Max	Max		Max	Max		MaxR	MaxR				
70th %ile Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
70th %ile Term Code	Max	Max		Max	Max		MaxR	MaxR				
50th %ile Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
50th %ile Term Code	Max	Max		Max	Max		MaxR	MaxR				
30th %ile Green (s)	14.4	14.4		14.4	14.4		45.5	45.5				
30th %ile Term Code	Gap	Gap		Gap	Gap		MaxR	MaxR				
10th %ile Green (s)	10.2	10.2		10.2	10.2		45.5	45.5				
10th %ile Term Code	Gap	Gap		Gap	Gap		MaxR	MaxR				
Stops (vph)		71			27			290			109	
Fuel Used(gal)		2			1			5			2	
CO Emissions (g/hr)		106			41			362			158	
NOx Emissions (g/hr)		21			8			70			31	
VOC Emissions (g/hr)		25			10			84			37	
Dilemma Vehicles (#)		0			0			0			0	
Queue Length 50th (ft)		45			14			171			60	
Queue Length 95th (ft)		91			43			268			99	
Internal Link Dist (ft)		540			575			525			175	
Turn Bay Length (ft)												
Base Capacity (vph)		293			309			905			1210	
Starvation Cap Reductn		0			0			0			166	
Spillback Cap Reductn		0			0			82			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.42			0.18			0.66			0.65	

Lanes, Volumes, Timings
6: Route 32 & Maple Ave/Maple Ave Ext

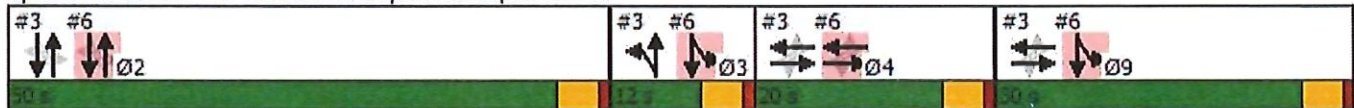
Background Traffic
AM Peak Hour

Lane Group	Ø3	Ø9
Minimum Split (s)	9.5	9.5
Total Split (s)	12.0	30.0
Total Split (%)	11%	27%
Maximum Green (s)	7.5	25.5
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
90th %ile Green (s)	0.0	12.1
90th %ile Term Code	Skip	Gap
70th %ile Green (s)	0.0	7.5
70th %ile Term Code	Skip	Gap
50th %ile Green (s)	0.0	7.3
50th %ile Term Code	Skip	Gap
30th %ile Green (s)	0.0	6.1
30th %ile Term Code	Skip	Gap
10th %ile Green (s)	0.0	5.8
10th %ile Term Code	Skip	Gap
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Area Type: Other
 Cycle Length: 112
 Actuated Cycle Length: 81
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 12.3
 Intersection LOS: B
 Intersection Capacity Utilization 73.2%
 ICU Level of Service D
 Analysis Period (min) 15
 90th %ile Actuated Cycle: 86.6
 70th %ile Actuated Cycle: 82
 50th %ile Actuated Cycle: 81.8
 30th %ile Actuated Cycle: 79.5
 10th %ile Actuated Cycle: 75

Splits and Phases: 6: Route 32 & Maple Ave/Maple Ave Ext



Lanes, Volumes, Timings
3: Route 163/Depot Road & Route 32

Combined Traffic Storm
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	45	159	10	61	8	130	322	6	7	396	150
Future Volume (vph)	180	45	159	10	61	8	130	322	6	7	396	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.883			0.986			0.998			0.963	
Flt Protected	0.950				0.994			0.986			0.999	
Satd. Flow (prot)	1770	1645	0	0	1826	0	0	1833	0	0	1792	0
Flt Permitted	0.688				0.951			0.648			0.994	
Satd. Flow (perm)	1282	1645	0	0	1747	0	0	1205	0	0	1783	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		192			6			1			20	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		792			598			255			345	
Travel Time (s)		18.0			13.6			5.8			7.8	
Peak Hour Factor	0.83	0.83	0.83	0.64	0.64	0.64	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	217	54	192	16	95	13	157	388	7	8	477	181
Shared Lane Traffic (%)												
Lane Group Flow (vph)	217	246	0	0	124	0	0	552	0	0	666	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		D.P+P	NA		Perm	NA	
Protected Phases		4 9			4 9		3	2 3			2	
Permitted Phases	4 9	4 9		4 9	4 9		2			2		

Lane Group	Ø4	Ø9
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Fr t		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	4	9
Permitted Phases		

Lanes, Volumes, Timings
3: Route 163/Depot Road & Route 32

Combined Traffic Storm
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4 9	4 9		4 9	4 9		1	1		2	2	
Switch Phase												
Minimum Initial (s)							5.0			5.0	5.0	
Minimum Split (s)							9.5			22.5	22.5	
Total Split (s)							12.0			50.0	50.0	
Total Split (%)							10.7%			44.6%	44.6%	
Maximum Green (s)							7.5			45.5	45.5	
Yellow Time (s)							3.5			3.5	3.5	
All-Red Time (s)							1.0			1.0	1.0	
Lost Time Adjust (s)											0.0	
Total Lost Time (s)											4.5	
Lead/Lag							Lead					
Lead-Lag Optimize?							Yes					
Vehicle Extension (s)							3.0			3.0	3.0	
Recall Mode							None			Max	Max	
Walk Time (s)										7.0	7.0	
Flash Dont Walk (s)										11.0	11.0	
Pedestrian Calls (#/hr)										0	0	
Act Effct Green (s)	27.3	27.3			27.3			45.6			45.6	
Actuated g/C Ratio	0.33	0.33			0.33			0.56			0.56	
v/c Ratio	0.51	0.36			0.21			0.82			0.67	
Control Delay	26.4	6.9			19.2			19.6			17.4	
Queue Delay	0.0	0.0			0.0			0.0			0.0	
Total Delay	26.4	6.9			19.2			19.6			17.4	
LOS	C	A			B			B			B	
Approach Delay		16.0			19.2			19.6			17.4	
Approach LOS		B			B			B			B	
90th %ile Green (s)							0.0			45.5	45.5	
90th %ile Term Code							Skip			MaxR	MaxR	
70th %ile Green (s)							0.0			45.5	45.5	
70th %ile Term Code							Skip			MaxR	MaxR	
50th %ile Green (s)							0.0			45.5	45.5	
50th %ile Term Code							Skip			MaxR	MaxR	
30th %ile Green (s)							0.0			45.5	45.5	
30th %ile Term Code							Skip			MaxR	MaxR	
10th %ile Green (s)							0.0			45.5	45.5	
10th %ile Term Code							Skip			MaxR	MaxR	
Stops (vph)	138	40			50			254			373	
Fuel Used(gal)	3	2			1			4			6	
CO Emissions (g/hr)	199	124			67			290			385	
NOx Emissions (g/hr)	39	24			13			56			75	
VOC Emissions (g/hr)	46	29			15			67			89	
Dilemma Vehicles (#)	0	0			0			0			0	
Queue Length 50th (ft)	88	19			43			64			217	
Queue Length 95th (ft)	137	55			54			#420			347	
Internal Link Dist (ft)		712			518			175			265	
Turn Bay Length (ft)	150											
Base Capacity (vph)	682	965			933			671			1001	
Starvation Cap Reductn	0	0			0			0			0	

Lane Group	Ø4	Ø9
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0
Minimum Split (s)	22.5	9.5
Total Split (s)	20.0	30.0
Total Split (%)	18%	27%
Maximum Green (s)	15.5	25.5
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lag	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	11.0	
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
90th %ile Green (s)	15.5	14.4
90th %ile Term Code	Max	Gap
70th %ile Green (s)	15.5	8.6
70th %ile Term Code	Max	Gap
50th %ile Green (s)	15.5	7.4
50th %ile Term Code	Max	Gap
30th %ile Green (s)	15.2	6.2
30th %ile Term Code	Gap	Gap
10th %ile Green (s)	10.7	5.9
10th %ile Term Code	Gap	Gap
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		

Lanes, Volumes, Timings
3: Route 163/Depot Road & Route 32

Combined Traffic Storm
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Spillback Cap Reductn	0	0			0			0			0	
Storage Cap Reductn	0	0			0			0			0	
Reduced v/c Ratio	0.32	0.25			0.13			0.82			0.67	

Intersection Summary

Area Type: Other

Cycle Length: 112

Actuated Cycle Length: 82

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 17.9

Intersection LOS: B

Intersection Capacity Utilization 82.7%

ICU Level of Service E

Analysis Period (min) 15

90th %ile Actuated Cycle: 88.9

70th %ile Actuated Cycle: 83.1

50th %ile Actuated Cycle: 81.9

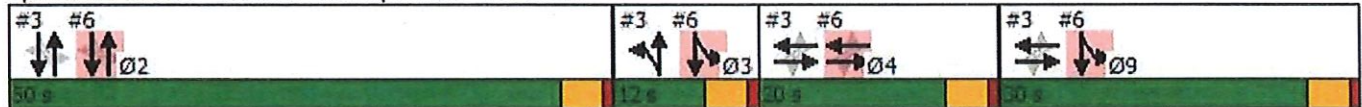
30th %ile Actuated Cycle: 80.4

10th %ile Actuated Cycle: 75.6

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Route 163/Depot Road & Route 32



Lane Group	Ø4	Ø9
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		
Intersection Summary		

Lanes, Volumes, Timings
6: Route 32 & Maple Ave/Maple Ave Ext

Combined Traffic Storm
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	5	40	22	5	18	55	383	12	5	495	65
Future Volume (vph)	57	5	40	22	5	18	55	383	12	5	495	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.947			0.946			0.997			0.985	
Flt Protected		0.973			0.976			0.994				
Satd. Flow (prot)	0	1716	0	0	1720	0	0	1846	0	0	1835	0
Flt Permitted		0.812			0.863			0.865			0.998	
Satd. Flow (perm)	0	1432	0	0	1521	0	0	1606	0	0	1831	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			22			1			14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		620			655			605			255	
Travel Time (s)		14.1			14.9			13.8			5.8	
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
Adj. Flow (vph)	69	6	48	27	6	22	66	461	14	6	596	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	123	0	0	55	0	0	541	0	0	680	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	
Protected Phases		4			4			2		3 9	2 3 9	
Permitted Phases	4	4		4	4		2	2		2 3 9	2 3 9	
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0				

Lane Group	Ø3	Ø9
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Enter Blocked Intersection		
Lane Alignment		
Median Width(ft)		
Link Offset(ft)		
Crosswalk Width(ft)		
Two way Left Turn Lane		
Headway Factor		
Turning Speed (mph)		
Number of Detectors		
Detector Template		
Leading Detector (ft)		
Trailing Detector (ft)		
Detector 1 Position(ft)		
Detector 1 Size(ft)		
Detector 1 Type		
Detector 1 Channel		
Detector 1 Extend (s)		
Detector 1 Queue (s)		
Detector 1 Delay (s)		
Detector 2 Position(ft)		
Detector 2 Size(ft)		
Detector 2 Type		
Detector 2 Channel		
Detector 2 Extend (s)		
Turn Type		
Protected Phases	3	9
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0

Lanes, Volumes, Timings
6: Route 32 & Maple Ave/Maple Ave Ext

Combined Traffic Storm
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5				
Total Split (s)	20.0	20.0		20.0	20.0		50.0	50.0				
Total Split (%)	17.9%	17.9%		17.9%	17.9%		44.6%	44.6%				
Maximum Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5				
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0				
Lost Time Adjust (s)		0.0			0.0			0.0				
Total Lost Time (s)		4.5			4.5			4.5				
Lead/Lag	Lag	Lag		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0				
Recall Mode	None	None		None	None		Max	Max				
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0				
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0				
Pedestrian Calls (#/hr)	0	0		0	0		0	0				
Act Effct Green (s)		14.4			14.4			45.6				54.0
Actuated g/C Ratio		0.18			0.18			0.56				0.66
v/c Ratio		0.45			0.19			0.61				0.56
Control Delay		30.7			22.2			16.7				4.9
Queue Delay		0.0			0.0			0.4				0.4
Total Delay		30.7			22.2			17.2				5.3
LOS		C			C			B				A
Approach Delay		30.7			22.2			17.2				5.3
Approach LOS		C			C			B				A
90th %ile Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
90th %ile Term Code	Max	Max		Max	Max		MaxR	MaxR				
70th %ile Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
70th %ile Term Code	Max	Max		Max	Max		MaxR	MaxR				
50th %ile Green (s)	15.5	15.5		15.5	15.5		45.5	45.5				
50th %ile Term Code	Max	Max		Max	Max		MaxR	MaxR				
30th %ile Green (s)	15.2	15.2		15.2	15.2		45.5	45.5				
30th %ile Term Code	Gap	Gap		Gap	Gap		MaxR	MaxR				
10th %ile Green (s)	10.7	10.7		10.7	10.7		45.5	45.5				
10th %ile Term Code	Gap	Gap		Gap	Gap		MaxR	MaxR				
Stops (vph)		71			27			295				117
Fuel Used(gal)		2			1			5				2
CO Emissions (g/hr)		106			41			369				163
NOx Emissions (g/hr)		21			8			72				32
VOC Emissions (g/hr)		25			10			85				38
Dilemma Vehicles (#)		0			0			0				0
Queue Length 50th (ft)		45			14			172				71
Queue Length 95th (ft)		93			44			284				111
Internal Link Dist (ft)		540			575			525				175
Turn Bay Length (ft)												
Base Capacity (vph)		290			306			894				1211
Starvation Cap Reductn		0			0			0				177
Spillback Cap Reductn		1			0			90				0
Storage Cap Reductn		0			0			0				0
Reduced v/c Ratio		0.43			0.18			0.67				0.66

Lane Group	Ø3	Ø9
Minimum Split (s)	9.5	9.5
Total Split (s)	12.0	30.0
Total Split (%)	11%	27%
Maximum Green (s)	7.5	25.5
Yellow Time (s)	3.5	3.5
All-Red Time (s)	1.0	1.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	
Lead-Lag Optimize?	Yes	
Vehicle Extension (s)	3.0	3.0
Recall Mode	None	None
Walk Time (s)		
Flash Dont Walk (s)		
Pedestrian Calls (#/hr)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
90th %ile Green (s)	0.0	14.4
90th %ile Term Code	Skip	Gap
70th %ile Green (s)	0.0	8.6
70th %ile Term Code	Skip	Gap
50th %ile Green (s)	0.0	7.4
50th %ile Term Code	Skip	Gap
30th %ile Green (s)	0.0	6.2
30th %ile Term Code	Skip	Gap
10th %ile Green (s)	0.0	5.9
10th %ile Term Code	Skip	Gap
Stops (vph)		
Fuel Used(gal)		
CO Emissions (g/hr)		
NOx Emissions (g/hr)		
VOC Emissions (g/hr)		
Dilemma Vehicles (#)		
Queue Length 50th (ft)		
Queue Length 95th (ft)		
Internal Link Dist (ft)		
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Lanes, Volumes, Timings
6: Route 32 & Maple Ave/Maple Ave Ext

Combined Traffic Storm
AM Peak Hour

Intersection Summary

Area Type: Other
Cycle Length: 112
Actuated Cycle Length: 82
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 12.8
Intersection LOS: B
Intersection Capacity Utilization 73.2%
ICU Level of Service D
Analysis Period (min) 15
90th %ile Actuated Cycle: 88.9
70th %ile Actuated Cycle: 83.1
50th %ile Actuated Cycle: 81.9
30th %ile Actuated Cycle: 80.4
10th %ile Actuated Cycle: 75.6

Splits and Phases: 6: Route 32 & Maple Ave/Maple Ave Ext

