

APPENDIX F:

Detailed Queueing Analyses

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	2663	2771	2812	2749
Vehs Exited	2652	2787	2800	2746
Starting Vehs	112	107	101	106
Ending Vehs	123	91	113	109
Travel Distance (km)	4591	4822	4912	4775
Travel Time (hr)	99.8	108.5	108.9	105.7
Total Delay (hr)	25.8	30.7	29.6	28.7
Total Stops	2317	2581	2493	2466
Fuel Used (l)	366.0	389.0	394.2	383.1

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	2663	2771	2812	2749
Vehs Exited	2652	2787	2800	2746
Starting Vehs	112	107	101	106
Ending Vehs	123	91	113	109
Travel Distance (km)	4591	4822	4912	4775
Travel Time (hr)	99.8	108.5	108.9	105.7
Total Delay (hr)	25.8	30.7	29.6	28.7
Total Stops	2317	2581	2493	2466
Fuel Used (l)	366.0	389.0	394.2	383.1

Intersection: 1: Regional Rd 25 & 5 Side Rd

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	L	T	T	R	L	T	TR
Maximum Queue (m)	45.7	32.6	76.8	42.6	9.7	28.2	14.4	11.7	8.6	49.9	47.7
Average Queue (m)	18.8	11.1	24.3	7.8	1.9	4.2	0.7	0.9	2.0	20.8	16.6
95th Queue (m)	35.8	24.8	56.7	24.6	7.0	14.8	6.9	6.2	7.1	38.8	37.8
Link Distance (m)		663.8		292.2		953.8	953.8			204.7	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	75.0		105.0		80.0			75.0	90.0		85.0
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	L	T	T	R	UL	T	T	R
Maximum Queue (m)	21.2	53.8	46.9	85.0	48.5	50.7	46.0	41.8	88.5	105.4	77.1	30.0
Average Queue (m)	3.8	20.3	22.1	37.0	21.7	22.3	12.7	8.5	47.1	31.6	18.6	7.4
95th Queue (m)	13.4	39.5	39.3	67.3	42.5	41.7	32.9	25.3	85.3	78.1	48.2	20.6
Link Distance (m)		854.2	854.2			252.2	252.2			268.4	268.4	268.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	40.0			
Storage Blk Time (%)							2		14	2		
Queuing Penalty (veh)							1		26	5		

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	SB	SB	SB
Directions Served	UL	T	TR
Maximum Queue (m)	36.4	78.9	105.7
Average Queue (m)	15.5	42.4	48.3
95th Queue (m)	30.5	75.8	89.7
Link Distance (m)		953.8	953.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	125.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	R	L	R
Maximum Queue (m)	42.6	52.1	52.8	45.4	43.6	10.3	14.1	25.5
Average Queue (m)	18.8	25.5	26.5	23.6	24.5	2.4	3.0	11.0
95th Queue (m)	34.9	44.4	46.9	40.1	40.4	8.6	10.1	21.1
Link Distance (m)		452.3	452.3	429.5	429.5			467.9
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	30.0					50.0	30.0	
Storage Blk Time (%)	2	4			0			0
Queuing Penalty (veh)	4	6			0			0

Network Summary

Network wide Queuing Penalty: 42

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	3344	3396	3353	3365
Vehs Exited	3348	3413	3386	3382
Starting Vehs	135	159	164	153
Ending Vehs	131	142	131	134
Travel Distance (km)	5842	5872	5875	5863
Travel Time (hr)	140.0	149.8	142.9	144.2
Total Delay (hr)	46.2	55.2	48.5	50.0
Total Stops	3585	3726	3747	3688
Fuel Used (l)	498.4	506.8	501.6	502.3

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	3344	3396	3353	3365
Vehs Exited	3348	3413	3386	3382
Starting Vehs	135	159	164	153
Ending Vehs	131	142	131	134
Travel Distance (km)	5842	5872	5875	5863
Travel Time (hr)	140.0	149.8	142.9	144.2
Total Delay (hr)	46.2	55.2	48.5	50.0
Total Stops	3585	3726	3747	3688
Fuel Used (l)	498.4	506.8	501.6	502.3

Intersection: 1: Regional Rd 25 & 5 Side Rd

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	TR
Maximum Queue (m)	72.1	30.4	43.7	34.8	16.4	97.6	86.3	26.3	8.1	35.8	35.4
Average Queue (m)	34.8	12.9	19.8	15.7	4.5	46.2	27.7	6.9	0.6	13.9	12.3
95th Queue (m)	60.0	26.4	38.0	28.9	12.3	81.3	66.8	19.1	5.1	28.1	28.1
Link Distance (m)		663.8		292.2		953.8	953.8			204.7	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	75.0		105.0		80.0			75.0	90.0		85.0
Storage Blk Time (%)	0					1	0				
Queuing Penalty (veh)	0					0	0				

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	UL	T	T	R	UL	T	T	R
Maximum Queue (m)	22.4	33.0	163.1	49.2	129.5	128.5	126.7	77.4	54.8	66.3	70.8	18.4
Average Queue (m)	5.9	14.7	15.3	25.1	81.4	69.9	57.3	33.9	28.8	35.2	31.4	4.2
95th Queue (m)	15.9	26.4	88.5	43.4	145.0	144.9	125.5	62.6	50.0	63.8	61.4	11.9
Link Distance (m)		854.2	854.2			252.2	252.2			268.4	268.4	268.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	40.0			
Storage Blk Time (%)					21	2	20	8	3	6		
Queuing Penalty (veh)					41	4	56	16	12	15		

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (m)	34.3	74.4	72.8
Average Queue (m)	13.8	38.0	41.0
95th Queue (m)	28.7	68.2	72.0
Link Distance (m)		953.8	953.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	125.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	R	L	R
Maximum Queue (m)	53.9	29.2	21.4	87.5	91.2	19.3	11.5	41.3
Average Queue (m)	23.4	9.3	8.8	42.4	45.9	3.5	1.4	16.8
95th Queue (m)	41.4	20.8	19.1	74.2	77.6	12.9	7.0	31.5
Link Distance (m)		452.3	452.3	429.5	429.5			467.9
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	30.0					50.0	30.0	
Storage Blk Time (%)	3	0			8			1
Queuing Penalty (veh)	2	0			2			0

Intersection: 15: Bend

Movement	NB	NB
Directions Served	T	
Maximum Queue (m)	79.6	8.0
Average Queue (m)	5.6	0.3
95th Queue (m)	59.4	4.4
Link Distance (m)	204.7	204.7
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 149

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	4101	4161	4164	4140
Vehs Exited	4077	4153	4149	4127
Starting Vehs	150	156	151	152
Ending Vehs	174	164	166	168
Travel Distance (km)	6675	6803	6794	6757
Travel Time (hr)	155.9	159.3	159.0	158.1
Total Delay (hr)	46.5	47.9	47.9	47.5
Total Stops	3721	3719	3792	3743
Fuel Used (l)	546.2	558.1	552.9	552.4

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	4101	4161	4164	4140
Vehs Exited	4077	4153	4149	4127
Starting Vehs	150	156	151	152
Ending Vehs	174	164	166	168
Travel Distance (km)	6675	6803	6794	6757
Travel Time (hr)	155.9	159.3	159.0	158.1
Total Delay (hr)	46.5	47.9	47.9	47.5
Total Stops	3721	3719	3792	3743
Fuel Used (l)	546.2	558.1	552.9	552.4

Intersection: 1: Regional Rd 25 & 5 Side Rd

Movement	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	L	TR	UL	T	T	R	L	T	TR
Maximum Queue (m)	40.6	42.5	32.7	52.7	17.9	59.2	51.6	11.9	8.7	36.8	37.2
Average Queue (m)	19.2	17.6	13.3	23.5	5.5	15.9	6.4	1.1	2.0	14.2	14.0
95th Queue (m)	35.3	32.4	26.4	42.8	12.2	42.0	29.1	5.7	6.9	30.6	29.3
Link Distance (m)		663.8		292.2		953.8	953.8			204.7	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	75.0		105.0		80.0			75.0	90.0		85.0
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	L	T	T	R	UL	T	T	R
Maximum Queue (m)	15.5	29.3	36.4	53.7	121.8	133.0	79.9	30.8	99.8	122.4	67.7	16.2
Average Queue (m)	4.9	11.3	12.5	20.8	62.3	55.4	41.7	14.1	56.8	38.4	31.1	4.2
95th Queue (m)	13.3	24.5	28.1	39.0	108.6	96.6	66.5	25.6	92.3	83.7	54.0	11.9
Link Distance (m)		854.2	854.2			252.2	252.2			268.4	268.4	268.4
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	40.0			
Storage Blk Time (%)					8	0	15	0	22	4		
Queuing Penalty (veh)					19	1	25	0	72	18		

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	SB	SB	SB
Directions Served	UL	T	TR
Maximum Queue (m)	25.2	62.2	71.3
Average Queue (m)	9.3	31.7	35.9
95th Queue (m)	19.8	52.8	59.4
Link Distance (m)		953.8	953.8
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	125.0		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	UL	T	T	T	T	R	L	R
Maximum Queue (m)	43.7	69.9	73.2	51.9	52.6	12.4	13.9	33.6
Average Queue (m)	20.8	46.3	45.6	28.1	31.4	1.3	1.3	13.0
95th Queue (m)	37.8	65.2	66.1	46.9	49.5	6.7	6.9	23.9
Link Distance (m)		452.3	452.3	429.5	429.5			467.9
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	30.0					50.0	30.0	
Storage Blk Time (%)	3	19			0			0
Queuing Penalty (veh)	14	35			0			0

Network Summary

Network wide Queuing Penalty: 182

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	4911	4839	4859	4867
Vehs Exited	4905	4849	4863	4871
Starting Vehs	113	124	132	125
Ending Vehs	119	114	128	118
Travel Distance (km)	5211	5145	5235	5197
Travel Time (hr)	114.5	114.2	115.4	114.7
Total Delay (hr)	30.5	31.0	31.0	30.8
Total Stops	2542	2541	2521	2535
Fuel Used (l)	415.3	411.8	417.9	415.0

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	4911	4839	4859	4867
Vehs Exited	4905	4849	4863	4871
Starting Vehs	113	124	132	125
Ending Vehs	119	114	128	118
Travel Distance (km)	5211	5145	5235	5197
Travel Time (hr)	114.5	114.2	115.4	114.7
Total Delay (hr)	30.5	31.0	31.0	30.8
Total Stops	2542	2541	2521	2535
Fuel Used (l)	415.3	411.8	417.9	415.0

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	L	T	T	R	UL	T	T	T
Maximum Queue (m)	21.2	72.5	77.8	71.4	80.6	65.5	49.8	25.8	103.5	58.3	51.1	31.3
Average Queue (m)	3.7	28.6	31.3	33.9	36.7	26.4	15.6	9.4	53.6	26.4	18.3	3.5
95th Queue (m)	14.4	54.4	58.8	61.5	69.9	49.1	37.0	20.3	87.9	49.0	38.8	15.2
Link Distance (m)		848.4	848.4			248.4	248.4			268.2	268.2	268.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	120.0			
Storage Blk Time (%)		0			1		1		0			
Queuing Penalty (veh)		0			1		1		0			

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	UL	T	T	T	R
Maximum Queue (m)	40.4	45.6	85.8	77.0	63.7	18.7
Average Queue (m)	14.0	19.5	48.8	43.7	26.7	3.6
95th Queue (m)	32.0	37.2	77.4	71.5	57.0	12.2
Link Distance (m)			515.2	515.2	515.2	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	65.0	125.0				15.0
Storage Blk Time (%)					12	0
Queuing Penalty (veh)					5	1

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	LTR	L	TR
Maximum Queue (m)	34.0	48.3	59.2	5.6	55.0	64.2	15.5	16.4	14.4	31.5
Average Queue (m)	15.7	24.4	25.8	0.3	25.3	30.4	2.3	2.6	3.7	14.5
95th Queue (m)	29.0	44.4	50.0	2.9	46.1	55.8	9.7	10.1	11.6	27.8
Link Distance (m)		452.3	452.3		428.8	428.8		80.0		467.9
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	30.0			30.0			50.0		30.0	
Storage Blk Time (%)	1	3			5	1				1
Queuing Penalty (veh)	2	5			0	0				0

Intersection: 5: Regional Rd 25 & Site Access

Movement

Directions Served

Maximum Queue (m)

Average Queue (m)

95th Queue (m)

Link Distance (m)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (m)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement

Directions Served

Maximum Queue (m)

Average Queue (m)

95th Queue (m)

Link Distance (m)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (m)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 7: 5 Side Rd & Site Access

Movement

Directions Served

Maximum Queue (m)

Average Queue (m)

95th Queue (m)

Link Distance (m)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (m)

Storage Blk Time (%)

Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 17

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6024	6112	6170	6102
Vehs Exited	5983	6108	6172	6086
Starting Vehs	137	143	167	150
Ending Vehs	178	147	165	162
Travel Distance (km)	6106	6143	6219	6156
Travel Time (hr)	177.2	149.8	158.6	161.9
Total Delay (hr)	78.9	51.1	58.4	62.8
Total Stops	3778	3670	3827	3759
Fuel Used (l)	526.6	509.5	522.3	519.5

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	6024	6112	6170	6102
Vehs Exited	5983	6108	6172	6086
Starting Vehs	137	143	167	150
Ending Vehs	178	147	165	162
Travel Distance (km)	6106	6143	6219	6156
Travel Time (hr)	177.2	149.8	158.6	161.9
Total Delay (hr)	78.9	51.1	58.4	62.8
Total Stops	3778	3670	3827	3759
Fuel Used (l)	526.6	509.5	522.3	519.5

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	UL	T	T	R	UL	T	T	T
Maximum Queue (m)	23.2	51.3	41.6	49.2	159.9	259.0	254.4	85.0	93.8	95.2	78.8	66.2
Average Queue (m)	8.0	23.2	18.9	22.8	122.3	141.7	119.4	30.5	37.1	46.0	39.6	23.9
95th Queue (m)	18.3	39.6	35.5	39.3	186.3	296.5	270.9	66.0	74.6	83.4	73.4	56.8
Link Distance (m)		848.4	848.4			248.4	248.4			268.2	268.2	268.2
Upstream Blk Time (%)						16	3					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	120.0			
Storage Blk Time (%)					43	5	28	4	0	0		0
Queuing Penalty (veh)					114	19	84	10	0	0		0

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	T	T	T	R
Maximum Queue (m)	27.1	48.8	78.1	70.5	62.1	31.7
Average Queue (m)	7.5	17.6	47.5	42.3	24.4	4.3
95th Queue (m)	19.9	38.3	79.1	71.9	57.3	16.7
Link Distance (m)			515.2	515.2	515.2	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	65.0	125.0				15.0
Storage Blk Time (%)					10	1
Queuing Penalty (veh)					4	3

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	LTR	L	TR
Maximum Queue (m)	44.1	24.0	22.5	5.8	113.6	118.3	17.8	23.5	11.8	38.2
Average Queue (m)	21.8	8.2	7.7	0.4	54.3	56.9	3.0	4.7	2.0	18.0
95th Queue (m)	37.5	19.2	17.7	3.2	94.0	99.6	11.0	15.7	8.0	30.9
Link Distance (m)		452.3	452.3		428.8	428.8		80.0		467.9
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	30.0			30.0			50.0		30.0	
Storage Blk Time (%)	2	0			25	13				1
Queuing Penalty (veh)	2	0			1	3				0

Intersection: 5: Regional Rd 25 & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: 5 Side Rd & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 239

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6395	6522	6276	6395
Vehs Exited	6327	6511	6244	6360
Starting Vehs	137	159	154	149
Ending Vehs	205	170	186	188
Travel Distance (km)	7142	7295	7022	7153
Travel Time (hr)	161.4	166.3	163.0	163.6
Total Delay (hr)	45.0	47.4	48.6	47.0
Total Stops	3410	3502	3457	3457
Fuel Used (l)	561.1	575.4	556.1	564.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	6395	6522	6276	6395
Vehs Exited	6327	6511	6244	6360
Starting Vehs	137	159	154	149
Ending Vehs	205	170	186	188
Travel Distance (km)	7142	7295	7022	7153
Travel Time (hr)	161.4	166.3	163.0	163.6
Total Delay (hr)	45.0	47.4	48.6	47.0
Total Stops	3410	3502	3457	3457
Fuel Used (l)	561.1	575.4	556.1	564.2

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	L	T	T	R	UL	T	T	T
Maximum Queue (m)	17.2	51.6	50.1	36.0	142.4	154.3	156.2	85.0	111.4	49.3	50.8	42.3
Average Queue (m)	4.9	12.9	17.5	16.3	64.1	68.2	61.7	21.3	64.9	30.5	29.8	15.0
95th Queue (m)	13.8	31.2	33.8	28.3	109.8	115.7	110.3	57.5	96.1	48.4	46.6	33.1
Link Distance (m)		848.4	848.4			248.4	248.4			268.2	268.2	268.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	120.0			
Storage Blk Time (%)					8	6	32	0	0			
Queuing Penalty (veh)					23	18	52	0	0			

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	UL	T	T	T	R
Maximum Queue (m)	22.5	30.6	61.0	61.8	48.5	27.5
Average Queue (m)	3.8	9.9	39.2	33.6	13.5	7.7
95th Queue (m)	14.9	22.5	56.1	56.3	38.6	19.1
Link Distance (m)			515.2	515.2	515.2	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	65.0	125.0			15.0	
Storage Blk Time (%)					2	2
Queuing Penalty (veh)					1	3

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	UL	T	TR	L	T	T	R	LTR	L	TR
Maximum Queue (m)	34.2	65.0	72.0	2.5	64.9	69.3	15.2	15.3	9.7	28.6
Average Queue (m)	17.8	38.8	38.8	0.1	35.1	38.7	2.3	1.2	1.5	13.2
95th Queue (m)	31.0	61.3	62.9	1.7	57.8	62.5	9.9	7.1	6.5	24.5
Link Distance (m)		452.3	452.3		428.8	428.8		80.0		467.9
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	30.0			30.0			50.0		30.0	
Storage Blk Time (%)	1	9			12	3				0
Queuing Penalty (veh)	6	17			0	0				0

Intersection: 5: Regional Rd 25 & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: 5 Side Rd & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 123

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	5242	5166	5243	5218
Vehs Exited	5236	5175	5249	5220
Starting Vehs	114	131	139	130
Ending Vehs	120	122	133	127
Travel Distance (km)	5617	5572	5567	5585
Travel Time (hr)	124.0	122.9	122.3	123.1
Total Delay (hr)	33.5	33.0	32.7	33.1
Total Stops	2716	2690	2651	2689
Fuel Used (l)	446.9	442.8	441.2	443.6

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	5242	5166	5243	5218
Vehs Exited	5236	5175	5249	5220
Starting Vehs	114	131	139	130
Ending Vehs	120	122	133	127
Travel Distance (km)	5617	5572	5567	5585
Travel Time (hr)	124.0	122.9	122.3	123.1
Total Delay (hr)	33.5	33.0	32.7	33.1
Total Stops	2716	2690	2651	2689
Fuel Used (l)	446.9	442.8	441.2	443.6

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	UL	T	T	T	R	L	T	T	T	R	UL	T
Maximum Queue (m)	17.1	49.0	52.0	47.4	87.6	79.4	73.6	56.2	40.7	27.0	115.6	56.8
Average Queue (m)	4.3	21.8	25.0	21.4	33.3	34.2	29.6	17.4	4.4	8.9	58.4	28.7
95th Queue (m)	13.7	38.1	41.6	39.9	64.4	63.1	54.3	41.3	20.8	19.1	95.4	49.1
Link Distance (m)		848.7	848.7	848.7			248.4	248.4	248.4			264.5
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0				115.0	85.0				35.0	120.0	
Storage Blk Time (%)						0	0		1	0	0	
Queuing Penalty (veh)						0	0		0	0	1	

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	T	R
Maximum Queue (m)	60.1	24.1	34.2	44.9	83.7	76.1	67.3	21.4
Average Queue (m)	24.0	4.9	11.2	17.9	51.8	48.2	30.0	5.0
95th Queue (m)	47.4	17.3	24.4	35.3	76.6	73.8	62.3	14.7
Link Distance (m)	264.5	264.5			511.5	511.5	511.5	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			65.0	125.0				15.0
Storage Blk Time (%)						11	1	
Queuing Penalty (veh)						5	2	

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	T	R	LTR	L	TR
Maximum Queue (m)	43.8	43.0	49.2	48.9	8.4	40.9	44.5	53.0	16.0	18.7	17.6	32.9
Average Queue (m)	14.7	22.6	19.9	14.8	0.5	21.5	24.8	25.2	2.4	2.7	3.4	13.3
95th Queue (m)	31.0	39.2	38.6	34.3	3.8	35.9	41.9	44.4	9.7	10.9	11.1	24.7
Link Distance (m)		452.1	452.1	452.1		428.7	428.7	428.7		76.3		464.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	30.0				30.0				50.0		30.0	
Storage Blk Time (%)	1	2				3		0				1
Queuing Penalty (veh)	2	3				0		0				0

Intersection: 5: Regional Rd 25 & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: 5 Side Rd & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 13

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6610	6668	6499	6591
Vehs Exited	6600	6605	6508	6570
Starting Vehs	157	162	167	163
Ending Vehs	167	225	158	182
Travel Distance (km)	6695	6741	6622	6686
Travel Time (hr)	159.6	178.1	153.3	163.7
Total Delay (hr)	51.9	70.0	46.7	56.2
Total Stops	3792	4053	3700	3848
Fuel Used (l)	552.3	567.0	539.6	553.0

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	6610	6668	6499	6591
Vehs Exited	6600	6605	6508	6570
Starting Vehs	157	162	167	163
Ending Vehs	167	225	158	182
Travel Distance (km)	6695	6741	6622	6686
Travel Time (hr)	159.6	178.1	153.3	163.7
Total Delay (hr)	51.9	70.0	46.7	56.2
Total Stops	3792	4053	3700	3848
Fuel Used (l)	552.3	567.0	539.6	553.0

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	UL	T	T	T	R	UL	T	T	T	R	UL	T
Maximum Queue (m)	20.7	45.1	48.0	37.4	49.8	155.2	199.8	168.9	112.1	70.0	121.2	98.0
Average Queue (m)	8.4	23.4	19.5	11.0	23.0	104.6	102.6	87.0	32.6	28.0	42.4	53.3
95th Queue (m)	16.7	38.5	35.7	26.9	43.1	169.7	241.4	212.5	89.1	51.9	85.2	92.6
Link Distance (m)		848.7	848.7	848.7			248.4	248.4	248.4			264.5
Upstream Blk Time (%)							9	0				
Queuing Penalty (veh)							0	0				
Storage Bay Dist (m)	85.0				115.0	85.0				35.0	120.0	
Storage Blk Time (%)						28	1		7	4	0	
Queuing Penalty (veh)						57	4		20	9	1	

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	T	R
Maximum Queue (m)	82.6	68.6	20.4	43.4	98.0	87.0	72.6	19.0
Average Queue (m)	48.1	27.9	7.0	17.2	51.9	46.0	29.8	5.7
95th Queue (m)	83.0	64.0	18.8	34.8	85.3	78.9	64.4	15.6
Link Distance (m)	264.5	264.5			511.5	511.5	511.5	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			65.0	125.0				15.0
Storage Blk Time (%)		0				12	1	
Queuing Penalty (veh)		0				5	2	

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	T	R	LTR	L	TR
Maximum Queue (m)	49.7	29.8	20.4	18.3	7.8	72.1	73.6	77.7	16.9	18.3	16.6	49.6
Average Queue (m)	20.6	8.3	6.5	4.9	0.6	36.8	40.2	41.6	3.3	5.1	2.5	19.2
95th Queue (m)	35.1	20.6	16.0	14.4	4.5	58.8	65.1	66.5	11.1	14.5	9.7	37.2
Link Distance (m)		452.1	452.1	452.1		428.7	428.7	428.7		76.3		464.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	30.0				30.0				50.0		30.0	
Storage Blk Time (%)	1	0				11		4				2
Queuing Penalty (veh)	1	1				0		1				0

Intersection: 5: Regional Rd 25 & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: 5 Side Rd & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 102

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6902	6953	6879	6914
Vehs Exited	6867	6927	6867	6888
Starting Vehs	184	161	172	171
Ending Vehs	219	187	184	197
Travel Distance (km)	7778	7856	7825	7819
Travel Time (hr)	178.3	177.2	177.0	177.5
Total Delay (hr)	51.4	48.9	49.6	50.0
Total Stops	3703	3744	3758	3735
Fuel Used (l)	612.2	618.7	613.4	614.8

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	6902	6953	6879	6914
Vehs Exited	6867	6927	6867	6888
Starting Vehs	184	161	172	171
Ending Vehs	219	187	184	197
Travel Distance (km)	7778	7856	7825	7819
Travel Time (hr)	178.3	177.2	177.0	177.5
Total Delay (hr)	51.4	48.9	49.6	50.0
Total Stops	3703	3744	3758	3735
Fuel Used (l)	612.2	618.7	613.4	614.8

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	UL	T	T	T	R	L	T	T	T	R	UL	T
Maximum Queue (m)	36.2	27.0	32.3	29.3	42.4	137.4	140.4	101.3	83.4	44.3	125.1	61.5
Average Queue (m)	8.6	9.9	12.2	12.5	15.9	67.2	66.0	57.0	38.0	14.2	69.1	32.6
95th Queue (m)	25.4	21.2	24.4	25.6	29.5	119.7	107.9	84.8	69.4	28.5	108.2	54.4
Link Distance (m)		848.7	848.7	848.7			248.4	248.4	248.4			264.5
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0				115.0	85.0				35.0	120.0	
Storage Blk Time (%)						10	3		8		0	
Queuing Penalty (veh)						24	9		14		1	

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	T	R
Maximum Queue (m)	60.3	43.7	17.9	22.6	71.3	68.3	48.9	19.3
Average Queue (m)	34.6	13.2	2.9	10.6	41.9	35.0	14.3	5.1
95th Queue (m)	54.7	34.4	10.1	19.7	63.0	59.4	40.0	11.7
Link Distance (m)	264.5	264.5			511.5	511.5	511.5	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			65.0	125.0				15.0
Storage Blk Time (%)						4	0	
Queuing Penalty (veh)						3	1	

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB	SB
Directions Served	UL	T	T	TR	L	T	T	T	R	LTR	L	TR
Maximum Queue (m)	42.8	61.5	56.7	46.7	5.7	45.5	61.4	58.2	10.0	13.3	7.8	31.0
Average Queue (m)	16.8	35.8	32.0	21.9	0.3	25.0	31.7	33.2	2.4	1.8	0.9	12.9
95th Queue (m)	30.9	51.2	49.9	40.7	2.9	42.8	52.3	52.5	8.7	8.3	4.7	23.6
Link Distance (m)		452.1	452.1	452.1		428.7	428.7	428.7		76.3		464.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	30.0				30.0				50.0		30.0	
Storage Blk Time (%)	1	8				4		1				0
Queuing Penalty (veh)	5	15				0		0				0

Intersection: 5: Regional Rd 25 & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 7: 5 Side Rd & Site Access

Movement

Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 71

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6242	6319	6111	6223
Vehs Exited	6229	6344	6127	6233
Starting Vehs	149	185	155	162
Ending Vehs	162	160	139	150
Travel Distance (km)	6273	6397	6078	6249
Travel Time (hr)	160.0	165.0	153.2	159.4
Total Delay (hr)	56.4	59.7	53.7	56.6
Total Stops	4386	4543	4143	4358
Fuel Used (l)	556.9	568.0	537.7	554.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	6242	6319	6111	6223
Vehs Exited	6229	6344	6127	6233
Starting Vehs	149	185	155	162
Ending Vehs	162	160	139	150
Travel Distance (km)	6273	6397	6078	6249
Travel Time (hr)	160.0	165.0	153.2	159.4
Total Delay (hr)	56.4	59.7	53.7	56.6
Total Stops	4386	4543	4143	4358
Fuel Used (l)	556.9	568.0	537.7	554.2

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	L	T	T	R	UL	T	T	T
Maximum Queue (m)	35.7	73.1	76.4	78.5	113.9	104.2	88.8	54.8	125.8	71.8	69.9	47.6
Average Queue (m)	10.4	32.5	35.6	35.5	49.8	37.1	23.7	16.3	54.8	34.0	30.0	10.0
95th Queue (m)	25.5	59.3	61.6	63.9	101.2	74.6	58.1	33.7	103.6	61.6	56.5	32.5
Link Distance (m)		848.4	848.4			248.4	248.4			268.2	268.2	268.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	120.0			
Storage Blk Time (%)					8	0	9	0	1			
Queuing Penalty (veh)					8	0	14	0	2			

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	UL	T	T	T	R
Maximum Queue (m)	36.6	73.1	90.2	82.6	80.9	17.9
Average Queue (m)	15.8	30.7	50.5	46.6	31.7	5.5
95th Queue (m)	32.1	54.7	82.8	77.3	65.8	14.0
Link Distance (m)			515.2	515.2	515.2	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	65.0	125.0			15.0	
Storage Blk Time (%)					16	0
Queuing Penalty (veh)					13	1

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	LTR	L	TR
Maximum Queue (m)	48.5	53.9	58.7	5.9	57.0	64.8	11.9	15.6	14.5	43.1
Average Queue (m)	20.8	28.0	29.3	0.4	28.2	32.6	1.9	1.7	3.2	15.6
95th Queue (m)	36.5	47.8	51.7	3.2	48.7	56.3	7.9	8.7	10.6	31.8
Link Distance (m)		452.3	452.3		428.8	428.8		80.0		467.9
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	30.0			30.0			50.0		30.0	
Storage Blk Time (%)	1	4			8	1				1
Queuing Penalty (veh)	5	10			0	0				0

Intersection: 5: Regional Rd 25 & Site Access

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	TR
Maximum Queue (m)	22.5	52.4	39.5	80.3	247.3	35.0
Average Queue (m)	15.0	21.6	24.2	22.2	128.2	31.3
95th Queue (m)	25.1	43.4	38.9	55.9	244.0	47.6
Link Distance (m)		159.9		142.0	252.0	
Upstream Blk Time (%)					3	
Queuing Penalty (veh)					0	
Storage Bay Dist (m)	15.0		25.0			20.0
Storage Blk Time (%)	26	7	12	2	27	7
Queuing Penalty (veh)	21	6	49	3	168	37

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement	EB
Directions Served	R
Maximum Queue (m)	18.1
Average Queue (m)	8.6
95th Queue (m)	15.1
Link Distance (m)	155.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: 5 Side Rd & Site Access

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (m)	13.8	4.9	12.1	7.4
Average Queue (m)	4.2	0.2	6.1	3.5
95th Queue (m)	12.3	1.9	11.1	7.4
Link Distance (m)				169.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	25.0	20.0	15.0	
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Network Summary

Network wide Queuing Penalty: 338

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	7742	7932	7890	7851
Vehs Exited	7774	7945	7888	7869
Starting Vehs	275	272	258	270
Ending Vehs	243	259	260	252
Travel Distance (km)	7305	7580	7434	7439
Travel Time (hr)	500.1	623.7	489.9	537.9
Total Delay (hr)	377.5	495.9	364.9	412.8
Total Stops	7607	8013	8112	7909
Fuel Used (l)	939.7	1065.5	944.4	983.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	7742	7932	7890	7851
Vehs Exited	7774	7945	7888	7869
Starting Vehs	275	272	258	270
Ending Vehs	243	259	260	252
Travel Distance (km)	7305	7580	7434	7439
Travel Time (hr)	500.1	623.7	489.9	537.9
Total Delay (hr)	377.5	495.9	364.9	412.8
Total Stops	7607	8013	8112	7909
Fuel Used (l)	939.7	1065.5	944.4	983.2

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	UL	T	T	R	UL	T	T	T
Maximum Queue (m)	55.4	55.4	52.0	54.1	159.9	264.2	257.4	85.0	99.2	101.1	100.6	87.0
Average Queue (m)	18.4	25.5	23.5	25.3	125.1	141.3	126.7	61.5	42.0	63.0	56.8	37.5
95th Queue (m)	40.7	51.0	47.4	44.3	188.3	295.3	280.6	98.9	78.5	108.1	101.1	77.3
Link Distance (m)		848.4	848.4			248.4	248.4			268.2	268.2	268.2
Upstream Blk Time (%)						19	5					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	120.0			
Storage Blk Time (%)					47	6	33	24				1
Queuing Penalty (veh)					124	25	145	63				1

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	L	T	T	T	R
Maximum Queue (m)	38.6	91.2	104.6	89.9	77.7	36.7
Average Queue (m)	8.3	46.4	57.6	52.8	38.3	11.1
95th Queue (m)	24.0	78.6	98.0	91.2	73.2	27.0
Link Distance (m)			515.2	515.2	515.2	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	65.0	125.0			15.0	
Storage Blk Time (%)					21	5
Queuing Penalty (veh)					21	14

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	WB	B8	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	T	LTR	L	TR
Maximum Queue (m)	66.4	27.0	35.4	5.7	111.4	114.4	14.0	1.7	13.3	18.0	60.0
Average Queue (m)	32.1	10.1	10.6	0.3	55.8	57.2	3.1	0.1	4.5	3.2	26.2
95th Queue (m)	55.2	22.4	24.1	2.8	91.4	95.3	10.9	1.0	12.4	12.6	46.9
Link Distance (m)		452.3	452.3		428.8	428.8		848.4	80.0		467.9
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	30.0			30.0			50.0			30.0	
Storage Blk Time (%)	10	0			28	13					5
Queuing Penalty (veh)	13	0			1	3					1

Intersection: 5: Regional Rd 25 & Site Access

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	TR
Maximum Queue (m)	22.4	140.7	39.9	146.3	100.4	35.0
Average Queue (m)	21.3	76.7	36.3	144.3	39.7	20.4
95th Queue (m)	23.5	134.3	47.5	146.0	74.8	41.8
Link Distance (m)		159.9		142.0	252.0	
Upstream Blk Time (%)		0		22		
Queuing Penalty (veh)		0		324		
Storage Bay Dist (m)	15.0		25.0			20.0
Storage Blk Time (%)	58	4	32	30	15	1
Queuing Penalty (veh)	98	10	358	105	62	3

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement	EB	NB
Directions Served	R	T
Maximum Queue (m)	28.2	296.0
Average Queue (m)	12.5	281.4
95th Queue (m)	21.3	324.3
Link Distance (m)	155.3	277.9
Upstream Blk Time (%)		53
Queuing Penalty (veh)		0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: 5 Side Rd & Site Access

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (m)	22.3	9.2	22.1	35.5
Average Queue (m)	8.3	1.6	12.1	9.3
95th Queue (m)	18.1	6.7	20.6	24.2
Link Distance (m)				169.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	25.0	20.0	15.0	
Storage Blk Time (%)	0		6	0
Queuing Penalty (veh)	0		7	1

Network Summary

Network wide Queuing Penalty: 1378

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	9003	9049	8955	9005
Vehs Exited	9021	9034	8994	9015
Starting Vehs	316	345	311	327
Ending Vehs	298	360	272	312
Travel Distance (km)	9129	9084	9011	9075
Travel Time (hr)	448.9	441.1	434.6	441.5
Total Delay (hr)	294.2	287.3	282.3	287.9
Total Stops	8865	9678	8413	8985
Fuel Used (l)	998.4	992.9	979.2	990.2

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	9003	9049	8955	9005
Vehs Exited	9021	9034	8994	9015
Starting Vehs	316	345	311	327
Ending Vehs	298	360	272	312
Travel Distance (km)	9129	9084	9011	9075
Travel Time (hr)	448.9	441.1	434.6	441.5
Total Delay (hr)	294.2	287.3	282.3	287.9
Total Stops	8865	9678	8413	8985
Fuel Used (l)	998.4	992.9	979.2	990.2

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	UL	T	T	R	L	T	T	R	UL	T	T	T
Maximum Queue (m)	73.8	33.2	34.2	44.8	147.2	209.3	210.1	85.0	117.1	95.4	95.5	70.9
Average Queue (m)	27.5	13.2	16.7	17.6	99.8	141.4	138.3	54.2	72.0	51.3	50.1	32.3
95th Queue (m)	56.9	26.8	30.2	34.0	181.9	286.1	287.4	100.3	107.1	77.7	76.6	61.4
Link Distance (m)		848.4	848.4			248.4	248.4			268.2	268.2	268.2
Upstream Blk Time (%)						10	13					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (m)	85.0			115.0	85.0			35.0	120.0			
Storage Blk Time (%)	0				36	28	54	22	0			0
Queuing Penalty (veh)	0				111	85	200	69	0			0

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	UL	T	T	T	R
Maximum Queue (m)	17.9	74.2	86.4	83.1	69.5	41.2
Average Queue (m)	3.9	37.2	50.9	46.4	33.3	13.0
95th Queue (m)	12.0	61.2	74.0	72.1	63.9	28.7
Link Distance (m)			515.2	515.2	515.2	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)	65.0	125.0				15.0
Storage Blk Time (%)					13	6
Queuing Penalty (veh)					19	14

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	UL	T	TR	L	T	T	R	LTR	L	TR
Maximum Queue (m)	60.7	75.7	81.5	2.9	72.2	73.7	17.0	11.2	9.4	51.7
Average Queue (m)	27.9	41.2	41.7	0.1	43.9	46.4	2.0	1.2	0.9	18.8
95th Queue (m)	47.2	62.4	64.6	1.6	69.9	72.7	9.4	6.5	5.5	36.1
Link Distance (m)		452.3	452.3		428.8	428.8		80.0		467.9
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (m)	30.0			30.0			50.0		30.0	
Storage Blk Time (%)	5	11			19	7				1
Queuing Penalty (veh)	34	34			0	1				0

Intersection: 5: Regional Rd 25 & Site Access

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	TR
Maximum Queue (m)	22.4	166.9	39.9	146.5	190.8	35.0
Average Queue (m)	21.9	115.5	39.3	144.1	90.1	32.6
95th Queue (m)	23.0	181.3	41.6	146.0	148.7	43.0
Link Distance (m)		159.9		142.0	252.0	
Upstream Blk Time (%)		10		24		
Queuing Penalty (veh)		0		304		
Storage Bay Dist (m)	15.0		25.0			20.0
Storage Blk Time (%)	66	6	53	23	38	13
Queuing Penalty (veh)	130	19	430	103	160	39

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement	EB	NB
Directions Served	R	T
Maximum Queue (m)	30.6	295.6
Average Queue (m)	14.1	283.9
95th Queue (m)	24.3	301.1
Link Distance (m)	155.3	277.9
Upstream Blk Time (%)		60
Queuing Penalty (veh)		0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: 5 Side Rd & Site Access

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (m)	33.7	14.2	22.0	45.5
Average Queue (m)	12.0	3.6	13.9	9.6
95th Queue (m)	25.2	11.2	22.9	26.9
Link Distance (m)				169.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	25.0	20.0	15.0	
Storage Blk Time (%)	1	0	13	1
Queuing Penalty (veh)	1	0	16	2

Network Summary

Network wide Queuing Penalty: 1772

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	6427	6536	6414	6460
Vehs Exited	6456	6543	6417	6472
Starting Vehs	187	170	144	165
Ending Vehs	158	163	141	150
Travel Distance (km)	6568	6608	6514	6563
Travel Time (hr)	174.9	164.6	161.2	166.9
Total Delay (hr)	66.9	56.0	54.2	59.1
Total Stops	4806	4537	4402	4580
Fuel Used (l)	590.8	583.1	572.2	582.0

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	6427	6536	6414	6460
Vehs Exited	6456	6543	6417	6472
Starting Vehs	187	170	144	165
Ending Vehs	158	163	141	150
Travel Distance (km)	6568	6608	6514	6563
Travel Time (hr)	174.9	164.6	161.2	166.9
Total Delay (hr)	66.9	56.0	54.2	59.1
Total Stops	4806	4537	4402	4580
Fuel Used (l)	590.8	583.1	572.2	582.0

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	UL	T	T	T	R	L	T	T	T	R	UL	T
Maximum Queue (m)	43.3	61.4	56.3	54.8	80.5	94.9	71.8	63.2	50.0	31.3	128.5	72.8
Average Queue (m)	12.3	24.2	24.3	22.9	37.4	41.3	37.1	27.4	7.4	13.6	63.8	37.9
95th Queue (m)	30.4	44.3	43.9	43.9	66.3	79.3	62.6	56.8	29.3	25.1	111.1	64.3
Link Distance (m)		848.7	848.7	848.7			248.4	248.4	248.4			264.5
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0				115.0	85.0				35.0	120.0	
Storage Blk Time (%)						1	0		0	0	1	
Queuing Penalty (veh)						1	0		1	0	3	

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	T	R
Maximum Queue (m)	72.1	63.6	39.7	53.6	100.9	101.9	82.0	19.2
Average Queue (m)	33.9	10.8	15.3	26.9	56.4	53.3	37.1	6.1
95th Queue (m)	62.0	38.1	30.8	46.3	88.5	86.0	71.7	14.6
Link Distance (m)	264.5	264.5			511.5	511.5	511.5	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			65.0	125.0				15.0
Storage Blk Time (%)		0					19	1
Queuing Penalty (veh)		0					15	2

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	T	R	LTR	L	TR
Maximum Queue (m)	41.7	47.4	45.8	57.5	8.6	46.9	61.6	60.1	13.9	19.0	11.7	26.1
Average Queue (m)	20.7	24.3	20.0	16.7	0.7	21.3	24.5	26.4	1.5	1.6	3.2	13.4
95th Queue (m)	37.7	41.9	39.0	38.6	4.2	38.5	48.0	51.2	7.2	9.3	10.8	23.2
Link Distance (m)		452.1	452.1	452.1		428.7	428.7	428.7		76.3		464.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	30.0				30.0				50.0		30.0	
Storage Blk Time (%)	2	4				3		1				0
Queuing Penalty (veh)	6	9				0		0				0

Intersection: 5: Regional Rd 25 & Site Access

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	TR
Maximum Queue (m)	22.2	40.2	38.9	70.3	261.4	35.0
Average Queue (m)	14.3	14.9	22.6	21.2	134.5	31.8
95th Queue (m)	23.1	31.1	37.8	47.5	264.8	45.6
Link Distance (m)		159.9		142.0	252.0	
Upstream Blk Time (%)					5	
Queuing Penalty (veh)					0	
Storage Bay Dist (m)	15.0		25.0			20.0
Storage Blk Time (%)	25	2	10	2	26	8
Queuing Penalty (veh)	20	2	45	4	170	49

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement	EB
Directions Served	R
Maximum Queue (m)	24.0
Average Queue (m)	9.9
95th Queue (m)	17.2
Link Distance (m)	155.3
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: 5 Side Rd & Site Access

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (m)	13.7	7.0	14.4	5.4
Average Queue (m)	4.3	0.4	6.8	3.9
95th Queue (m)	12.4	3.0	11.9	7.3
Link Distance (m)				169.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	25.0	20.0	15.0	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Network Summary

Network wide Queuing Penalty: 326

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	8292	8311	8201	8268
Vehs Exited	8300	8262	8130	8231
Starting Vehs	242	238	244	239
Ending Vehs	234	287	315	275
Travel Distance (km)	7964	7879	7928	7923
Travel Time (hr)	521.2	550.5	565.5	545.7
Total Delay (hr)	387.8	418.7	433.2	413.2
Total Stops	8088	8195	7836	8040
Fuel Used (l)	999.4	1021.2	1036.1	1018.9

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	8292	8311	8201	8268
Vehs Exited	8300	8262	8130	8231
Starting Vehs	242	238	244	239
Ending Vehs	234	287	315	275
Travel Distance (km)	7964	7879	7928	7923
Travel Time (hr)	521.2	550.5	565.5	545.7
Total Delay (hr)	387.8	418.7	433.2	413.2
Total Stops	8088	8195	7836	8040
Fuel Used (l)	999.4	1021.2	1036.1	1018.9

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	UL	T	T	T	R	UL	T	T	T	R	UL	T
Maximum Queue (m)	37.1	56.2	45.0	36.0	66.9	159.9	261.1	234.3	169.7	85.0	94.6	114.9
Average Queue (m)	15.7	22.4	19.0	11.7	28.2	129.3	128.5	106.8	56.3	51.3	41.4	72.1
95th Queue (m)	29.5	43.4	36.1	26.9	54.4	182.1	268.2	232.7	134.8	87.5	75.9	118.3
Link Distance (m)		848.7	848.7	848.7			248.4	248.4	248.4			264.5
Upstream Blk Time (%)							10	0	0			
Queuing Penalty (veh)							0	0	0			
Storage Bay Dist (m)	85.0				115.0	85.0				35.0	120.0	
Storage Blk Time (%)						49	6		14	23		0
Queuing Penalty (veh)						101	22		61	47		0

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	T	T	T	R
Maximum Queue (m)	105.7	88.0	27.3	85.1	100.9	99.8	81.6	22.6
Average Queue (m)	64.7	43.9	8.5	42.3	59.0	54.7	40.7	7.0
95th Queue (m)	110.5	83.2	21.0	69.9	99.6	94.7	78.2	16.6
Link Distance (m)	264.5	264.5			511.5	511.5	511.5	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			65.0	125.0				15.0
Storage Blk Time (%)		1				22	1	
Queuing Penalty (veh)		1				22	3	

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	T	TR	L	T	T	T	R	LTR	L	TR
Maximum Queue (m)	69.6	53.2	24.4	27.2	8.8	76.9	89.6	89.5	16.4	23.1	9.9	51.3
Average Queue (m)	30.4	10.4	7.0	6.0	0.5	39.0	43.9	45.2	4.2	5.4	2.3	25.2
95th Queue (m)	52.7	28.3	17.5	17.4	3.7	64.8	73.0	77.2	12.6	15.3	8.9	44.7
Link Distance (m)		452.1	452.1	452.1		428.7	428.7	428.7		76.3		464.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	30.0				30.0				50.0		30.0	
Storage Blk Time (%)	7	0				14		7				5
Queuing Penalty (veh)	7	0				0		2				1

Intersection: 5: Regional Rd 25 & Site Access

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	TR
Maximum Queue (m)	22.4	119.3	39.9	146.0	104.0	35.0
Average Queue (m)	21.4	71.1	35.1	144.1	44.3	21.6
95th Queue (m)	23.9	114.3	48.4	146.6	82.6	42.9
Link Distance (m)		159.9		142.0	252.0	
Upstream Blk Time (%)				19		
Queuing Penalty (veh)				305		
Storage Bay Dist (m)	15.0		25.0			20.0
Storage Blk Time (%)	59	3	31	30	16	2
Queuing Penalty (veh)	99	9	378	108	70	6

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement	EB	NB
Directions Served	R	T
Maximum Queue (m)	20.3	290.6
Average Queue (m)	11.9	280.6
95th Queue (m)	18.6	323.2
Link Distance (m)	155.3	277.9
Upstream Blk Time (%)		54
Queuing Penalty (veh)		0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: 5 Side Rd & Site Access

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (m)	20.1	7.3	21.4	31.1
Average Queue (m)	7.1	1.2	12.3	7.4
95th Queue (m)	16.5	5.4	20.6	20.4
Link Distance (m)				169.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	25.0	20.0	15.0	
Storage Blk Time (%)	0		7	0
Queuing Penalty (veh)	0		7	0

Network Summary

Network wide Queuing Penalty: 1251

Summary of All Intervals

Run Number	1	2	3	Avg
Start Time	6:57	6:57	6:57	6:57
End Time	8:12	8:12	8:12	8:12
Total Time (min)	75	75	75	75
Time Recorded (min)	60	60	60	60
# of Intervals	2	2	2	2
# of Recorded Intervals	1	1	1	1
Vehs Entered	9414	9637	9487	9515
Vehs Exited	9424	9606	9457	9495
Starting Vehs	282	296	268	282
Ending Vehs	272	327	298	301
Travel Distance (km)	9718	9829	9865	9804
Travel Time (hr)	491.4	535.1	511.8	512.8
Total Delay (hr)	327.0	368.9	345.1	347.0
Total Stops	8826	9220	8791	8943
Fuel Used (l)	1069.2	1121.5	1093.4	1094.7

Interval #0 Information Seeding

Start Time	6:57
End Time	7:12
Total Time (min)	15
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	7:12
End Time	8:12
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	Avg
Vehs Entered	9414	9637	9487	9515
Vehs Exited	9424	9606	9457	9495
Starting Vehs	282	296	268	282
Ending Vehs	272	327	298	301
Travel Distance (km)	9718	9829	9865	9804
Travel Time (hr)	491.4	535.1	511.8	512.8
Total Delay (hr)	327.0	368.9	345.1	347.0
Total Stops	8826	9220	8791	8943
Fuel Used (l)	1069.2	1121.5	1093.4	1094.7

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	UL	T	T	T	R	L	T	T	T	R	UL	T
Maximum Queue (m)	46.4	27.0	31.5	29.1	46.1	125.0	125.6	110.4	109.6	78.1	150.4	107.7
Average Queue (m)	19.9	8.4	12.3	13.7	19.4	73.9	69.7	61.4	44.1	31.3	81.5	54.5
95th Queue (m)	37.1	20.3	26.2	27.0	35.8	120.3	106.1	90.9	79.1	56.6	127.0	87.4
Link Distance (m)		848.7	848.7	848.7			248.4	248.4	248.4			264.5
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	85.0				115.0	85.0				35.0	120.0	
Storage Blk Time (%)						13	4		12	9	2	0
Queuing Penalty (veh)						32	13		44	21	5	1

Intersection: 2: Regional Rd 25 & Regional Rd 4

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	T	R
Maximum Queue (m)	89.0	74.5	17.7	71.8	88.1	86.6	74.0	23.8
Average Queue (m)	54.1	38.7	3.8	40.7	55.4	51.5	38.7	10.2
95th Queue (m)	78.5	66.9	11.9	66.5	81.2	77.0	67.2	19.6
Link Distance (m)	264.5	264.5			511.5	511.5	511.5	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			65.0	125.0				15.0
Storage Blk Time (%)		0					24	2
Queuing Penalty (veh)		0					36	6

Intersection: 3: Regional Rd 4 & 5 Side Rd

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB
Directions Served	UL	T	T	TR	T	T	T	R	LTR	L	TR
Maximum Queue (m)	51.3	53.2	54.5	49.8	49.5	61.8	65.4	12.7	12.7	11.6	47.5
Average Queue (m)	28.0	36.8	34.1	25.1	29.4	37.2	40.2	2.0	1.7	1.2	17.2
95th Queue (m)	46.5	53.5	50.0	45.4	48.6	58.5	63.2	8.2	8.6	6.3	32.3
Link Distance (m)		452.1	452.1	452.1	428.7	428.7	428.7		76.3		464.2
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	30.0							50.0		30.0	
Storage Blk Time (%)	7	9			7		3				1
Queuing Penalty (veh)	35	27			0		0				0

Intersection: 5: Regional Rd 25 & Site Access

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	TR
Maximum Queue (m)	22.4	162.1	39.8	146.8	203.4	35.0
Average Queue (m)	21.9	112.6	39.5	144.0	116.6	34.1
95th Queue (m)	22.6	181.7	41.1	145.9	202.2	40.3
Link Distance (m)		159.9		142.0	252.0	
Upstream Blk Time (%)		13		25		
Queuing Penalty (veh)		0		339		
Storage Bay Dist (m)	15.0		25.0			20.0
Storage Blk Time (%)	66	5	56	18	45	18
Queuing Penalty (veh)	130	16	497	83	199	60

Intersection: 6: Regional Rd 25 & RIRO Site Access

Movement	EB	NB
Directions Served	R	T
Maximum Queue (m)	25.2	290.6
Average Queue (m)	13.8	283.3
95th Queue (m)	21.9	286.8
Link Distance (m)	155.3	277.9
Upstream Blk Time (%)		61
Queuing Penalty (veh)		0
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: 5 Side Rd & Site Access

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (m)	20.7	10.5	21.8	35.0
Average Queue (m)	10.3	2.8	13.0	8.5
95th Queue (m)	18.6	8.8	21.2	20.6
Link Distance (m)				169.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)	25.0	20.0	15.0	
Storage Blk Time (%)	0	0	9	0
Queuing Penalty (veh)	0	0	11	1

Network Summary

Network wide Queuing Penalty: 1556