

Intersection: 36:

Movement	SB	B35	NE
Directions Served	LR	T	R
Maximum Queue (m)	24.2	36.8	65.3
Average Queue (m)	13.7	16.9	21.8
95th Queue (m)	32.2	43.4	61.7
Link Distance (m)	14.5	25.8	91.2
Upstream Blk Time (%)	43	38	
Queuing Penalty (veh)	149	133	
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 3338

Intersection: 13: Str Artarilor & Str. Cuza Voda

Movement	SE	NW	NE	SW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	61.7	34.0	9.0	16.3
Average Queue (m)	40.2	16.0	3.1	8.7
95th Queue (m)	71.5	37.4	9.4	17.3
Link Distance (m)	100.4	58.7	260.5	112.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: Str Artarilor & Str. Ion Slavici

Movement	SE	NW	NE
Directions Served	TR	LT	R
Maximum Queue (m)	66.6	33.3	116.0
Average Queue (m)	32.1	10.2	93.8
95th Queue (m)	66.5	30.4	141.3
Link Distance (m)	102.0	47.4	112.2
Upstream Blk Time (%)			25
Queuing Penalty (veh)			85
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 15: Str. Zefirului & Str. Ion Slavici/Str. Subcetate

Movement	SE	NW	NE	SW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	8.5	9.0	16.4	9.1
Average Queue (m)	1.7	3.1	8.7	3.6
95th Queue (m)	7.3	9.4	17.3	10.9
Link Distance (m)	193.8	102.0	116.6	92.3
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Bd. Republicii & Str. Lalelelor

Movement	SE	SW	SW
Directions Served	R	T	T
Maximum Queue (m)	27.7	79.9	66.1
Average Queue (m)	19.4	33.1	46.6
95th Queue (m)	30.2	93.4	79.6
Link Distance (m)	84.0	66.3	66.3
Upstream Blk Time (%)		5	5
Queuing Penalty (veh)		25	28
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: Bd. Republicii & Str. Zimbrului

Movement	NE	SW
Directions Served	T	T
Maximum Queue (m)	9.2	66.8
Average Queue (m)	1.8	20.2
95th Queue (m)	7.9	60.8
Link Distance (m)	66.3	69.3
Upstream Blk Time (%)		1
Queuing Penalty (veh)		3
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Bd. Republicii & Str. Ursului

Movement	SE	NE	SW
Directions Served	R	T	T
Maximum Queue (m)	8.9	9.1	64.4
Average Queue (m)	3.5	1.8	14.6
95th Queue (m)	10.7	7.8	56.0
Link Distance (m)	91.1	69.3	97.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: Drumul Cetatii & Str. Tarpiului

Movement	SE	B24	NW	NW	NE	SW
Directions Served	LTR	T	LT	R	LTR	LTR
Maximum Queue (m)	19.4	7.8	88.6	32.5	226.0	318.9
Average Queue (m)	14.5	3.1	45.0	19.9	222.7	256.6
95th Queue (m)	26.6	9.2	95.9	36.9	227.1	356.8
Link Distance (m)	7.3	98.6	187.4		210.1	481.6
Upstream Blk Time (%)	19				87	
Queuing Penalty (veh)	0				0	
Storage Bay Dist (m)				30.0		
Storage Blk Time (%)			19	2		
Queuing Penalty (veh)			72	5		

Intersection: 2: Drumul Cetatii & Str. Subcetate

Movement	NB	SB	NE	SW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	15.7	89.6	78.1	177.0
Average Queue (m)	8.7	69.8	63.9	173.5
95th Queue (m)	16.9	103.9	84.7	177.4
Link Distance (m)	193.8	76.6	481.6	157.8
Upstream Blk Time (%)		49		90
Queuing Penalty (veh)		0		0
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Str. Garii & Bd. Decebal

Movement	SE	SE	NW	NW	SW	SW
Directions Served	LT	T	T	R>	L	LR
Maximum Queue (m)	23.6	14.6	64.0	64.2	28.6	23.4
Average Queue (m)	19.6	7.4	38.2	29.2	13.6	9.1
95th Queue (m)	26.4	17.9	74.1	73.8	26.4	23.5
Link Distance (m)	21.6	21.6	50.3	50.3	88.5	88.5
Upstream Blk Time (%)	37		22	12		
Queuing Penalty (veh)	154		92	48		
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

13: Str Artarilor & Str. Cuza Voda Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	1.7	0.2	0.2	0.0	0.7
Total Del/Veh (s)	23.6	3.1	1.5	7.5	11.1
Stop Del/Veh (s)	20.9	2.2	0.3	3.9	9.2
Stop/Veh	0.74	0.12	0.05	0.74	0.41
Avg Speed (kph)	10	21	38	23	18
HC Emissions (g)	1	1	1	0	3
CO Emissions (g)	30	42	58	29	159
NOx Emissions (g)	3	4	4	2	13

14: Str Artarilor & Str. Ion Slavici Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	14.0	1.9	107.6	41.8
Stop Del/Veh (s)	11.3	1.0	110.7	41.6
Stop/Veh	0.57	0.11	0.85	0.52
Avg Speed (kph)	16	28	3	7
HC Emissions (g)	1	2	0	3
CO Emissions (g)	49	91	51	191
NOx Emissions (g)	5	8	3	16

15: Str. Zefirului & Str. Ion Slavici/Str. Subcetate Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.3	0.0
Total Del/Veh (s)	3.6	0.6	2.0	4.3	2.4
Stop Del/Veh (s)	1.4	0.1	0.7	1.5	0.9
Stop/Veh	0.26	0.02	0.16	0.60	0.18
Avg Speed (kph)	33	41	31	28	33
HC Emissions (g)	7	1	0	0	9
CO Emissions (g)	232	30	6	1	269
NOx Emissions (g)	23	4	1	0	28

16: Bd. Independentei/Str. Gh. Sincai & Str. Alex. Odobescu/Str. Garii Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.4	1.3	0.2	0.5
Total Del/Veh (s)	13.0	15.2	9.9	60.2	17.2
Stop Del/Veh (s)	10.8	12.9	5.9	56.0	14.2
Stop/Veh	0.71	0.61	0.71	0.98	0.72
Avg Speed (kph)	12	10	16	6	11
HC Emissions (g)	6	1	2	5	15
CO Emissions (g)	145	30	75	105	355
NOx Emissions (g)	22	3	10	9	44

5: Str. Garii & Bd. Republicii Performance by approach

Approach	SE	NW	SW	All
Denied Del/Veh (s)	0.0	0.4	14.9	6.4
Total Del/Veh (s)	50.5	8.4	31.5	26.5
Stop Del/Veh (s)	50.1	5.8	28.2	24.0
Stop/Veh	0.73	0.38	0.91	0.67
Avg Speed (kph)	6	16	8	9
HC Emissions (g)	5	4	4	13
CO Emissions (g)	111	126	121	358
NOx Emissions (g)	12	20	12	45

6: Bd. Republicii/Str. 1 Decembrie & Str. Bistricioarei/Str. Crinilor Performance by approach









Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	3.1	0.0	1.2	1.0
Total Del/Veh (s)	48.9	36.2	5.5	50.4	36.0
Stop Del/Veh (s)	48.2	37.2	1.6	50.1	34.9
Stop/Veh	1.02	0.40	0.30	0.73	0.63
Avg Speed (kph)	7	4	27	6	8
HC Emissions (g)	2	0	2	4	8
CO Emissions (g)	82	30	145	131	387
NOx Emissions (g)	9	3	11	13	36










7: Bd. Republicii & Str. Lalelelor Performance by approach













Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.1	0.0	0.2	0.1
Total Del/Veh (s)	52.4	1.8	10.4	8.5
Stop Del/Veh (s)	51.8	0.3	8.2	6.6
Stop/Veh	1.00	0.02	0.39	0.26
Avg Speed (kph)	3	34	16	19
HC Emissions (g)	0	3	6	10
CO Emissions (g)	7	195	248	450
NOx Emissions (g)	0	16	24	41

8: Bd. Republicii & Str. Zimbrului Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.1	0.1
Total Del/Veh (s)	4.2	9.0	7.0
Stop Del/Veh (s)	0.0	3.2	1.9
Stop/Veh	0.01	0.22	0.13
Avg Speed (kph)	27	18	21
HC Emissions (g)	1	3	4
CO Emissions (g)	35	84	120
NOx Emissions (g)	6	12	18

						
Lane Group	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	85	180	0	85
Future Volume (vph)	0	0	85	180	0	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t			0.908			0.865
Fl _t Protected			0.984			
Satd. Flow (prot)	0	0	1646	0	0	1593
Fl _t Permitted			0.984			
Satd. Flow (perm)	0	0	1646	0	0	1593
Link Speed (k/h)	48		48		48	
Link Distance (m)	19.9		21.7		94.0	
Travel Time (s)	1.5		1.6		7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	112%	112%	112%	112%	112%	112%
Adj. Flow (vph)	0	0	103	219	0	103
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	322	0	0	103
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0		3.5		0.0	
Link Offset(m)	0.0		0.0		0.0	
Crosswalk Width(m)	1.6		1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24	14	24	14
Sign Control	Stop		Yield		Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	21.0%			ICU Level of Service A		
Analysis Period (min)	15					

						
Lane Group	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	170	572	0	0	650
Future Volume (vph)	0	170	572	0	0	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1593	1842	0	0	1842
Flt Permitted						
Satd. Flow (perm)	0	1593	1842	0	0	1842
Link Speed (k/h)	48		48			48
Link Distance (m)	19.9		17.6			41.5
Travel Time (s)	1.5		1.3			3.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	112%	112%	112%	112%	112%	112%
Adj. Flow (vph)	0	207	696	0	0	791
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	207	696	0	0	791
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14		14	24	
Sign Control	Yield		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.2%			ICU Level of Service A		
Analysis Period (min)	15					

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑	↗		↕		↖		↗		↕	
Traffic Volume (vph)	0	525	742	210	295	0	610	0	210	75	112	55
Future Volume (vph)	0	525	742	210	295	0	610	0	210	75	112	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		30.0	0.0		0.0
Storage Lanes	0		1	0		0	2		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	1.00	1.00	0.95	0.95	0.95
Frt			0.850						0.850		0.966	
Flt Protected					0.980		0.950				0.985	
Satd. Flow (prot)	0	1842	1566	0	3430	0	3395	0	1566	0	3330	0
Flt Permitted					0.980		0.950				0.985	
Satd. Flow (perm)	0	1842	1566	0	3430	0	3395	0	1566	0	3330	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		56.2			69.0			82.9			144.5	
Travel Time (s)		4.2			5.2			6.2			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	112%	112%	112%	112%	112%	112%	112%	112%	112%	112%	112%	112%
Adj. Flow (vph)	0	639	903	256	359	0	743	0	256	91	136	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	639	903	0	615	0	743	0	256	0	294	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			10.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary










Area Type: Other


Control Type: Roundabout

Intersection Capacity Utilization 87.6%

ICU Level of Service E

Analysis Period (min) 15

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	330	40	142	320	0	329
Future Volume (vph)	330	40	142	320	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985					0.865
Flt Protected				0.985		
Satd. Flow (prot)	1814	0	0	1814	0	1593
Flt Permitted				0.985		
Satd. Flow (perm)	1814	0	0	1814	0	1593
Link Speed (k/h)	48			48	48	
Link Distance (m)	112.3			65.6	122.5	
Travel Time (s)	8.4			4.9	9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	112%	112%	112%	112%	112%	112%
Adj. Flow (vph)	402	49	173	390	0	401
Shared Lane Traffic (%)						
Lane Group Flow (vph)	451	0	0	563	0	401
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Yield	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	56.5%			ICU Level of Service B		
Analysis Period (min)	15					

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
LOS		B	A					A			B	
Approach Delay		7.3						10.0			10.0	
Approach LOS		A						A			B	
Stops (vph)		92	18					200			295	
Fuel Used(l)		4	1					9			16	
CO Emissions (g/hr)		77	24					173			291	
NOx Emissions (g/hr)		15	5					33			56	
VOC Emissions (g/hr)		18	6					40			67	
Dilemma Vehicles (#)		0	0					0			0	
Queue Length 50th (m)		8.0	0.0					9.1			13.6	
Queue Length 95th (m)		17.1	6.0					16.5			22.4	
Internal Link Dist (m)		49.5			87.2			55.8			99.6	
Turn Bay Length (m)			20.0									
Base Capacity (vph)		708	690					1027			1397	
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.23	0.15					0.35			0.38	

Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 45

Offset: 0 (0%), Referenced to phase 2: and 6:SETL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 9.4




Intersection LOS: A











Intersection Capacity Utilization 42.6%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 12: Bd. Decebal & Str. Ursului/Str. Cuza Voda

 Ø6 (R) 22.5 s	 Ø4 22.5 s
	 Ø8 22.5 s

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	20	31	265	0	0	441
Future Volume (vph)	20	31	265	0	0	441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1750	1566	3500	0	0	3500
Flt Permitted	0.950					
Satd. Flow (perm)	1750	1566	3500	0	0	3500
Link Speed (k/h)	48		48			48
Link Distance (m)	107.3		85.5			79.8
Travel Time (s)	8.0		6.4			6.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	112%	112%	112%	112%	112%	112%
Adj. Flow (vph)	24	38	323	0	0	537
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	38	323	0	0	537
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14		14	24	
Sign Control	Yield		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	23.7%			ICU Level of Service A		
Analysis Period (min)	15					



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↶		↷↷	↷↷	
Traffic Volume (vph)	0	75	0	918	902	0
Future Volume (vph)	0	75	0	918	902	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1593	0	3500	3500	0
Flt Permitted						
Satd. Flow (perm)	0	1593	0	3500	3500	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	111.2			83.1	111.7	
Travel Time (s)	8.3			6.2	8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	112%	112%	112%	112%	112%	112%
Adj. Flow (vph)	0	91	0	1118	1098	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	91	0	1118	1098	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0			4.0	5.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24			14
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 39.8%

ICU Level of Service A

Analysis Period (min) 15



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations				↑↑	↑↑	
Traffic Volume (vph)	0	0	15	918	955	25
Future Volume (vph)	0	0	15	918	955	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Fr _t					0.996	
Flt Protected				0.999		
Satd. Flow (prot)	0	0	0	3496	3486	0
Flt Permitted				0.999		
Satd. Flow (perm)	0	0	0	3496	3486	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	107.3			76.7	83.1	
Travel Time (s)	8.0			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	112%	112%	112%	112%	112%	112%
Adj. Flow (vph)	0	0	18	1118	1163	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1136	1193	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0			4.0	3.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24			14
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type: Other

Control Type: Roundabout

Intersection Capacity Utilization 43.7%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Intersection Delay, s/veh 58.4

Intersection LOS F

Approach	SE	NW	NE	SW
Entry Lanes	1	2	2	2
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	586	564	1064	897
Demand Flow Rate, veh/h	598	576	1085	915
Vehicles Circulating, veh/h	1228	1279	758	668
Vehicles Exiting, veh/h	355	564	1068	1187
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	133.3	115.6	23.8	14.6
Approach LOS	F	F	C	B

Lane	Left	Left	Right	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized							
Lane Util	1.000	0.852	0.148	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	598	491	85	510	575	430	485
Cap Entry Lane, veh/h	500	416	479	672	746	730	805
Entry HV Adj Factor	0.980	0.980	0.976	0.981	0.981	0.980	0.980
Flow Entry, veh/h	586	481	83	500	564	421	475
Cap Entry, veh/h	490	408	467	659	731	716	789
V/C Ratio	1.196	1.180	0.178	0.759	0.771	0.589	0.603
Control Delay, s/veh	133.3	133.7	10.2	24.3	23.3	14.9	14.3
LOS	F	F	B	C	C	B	B
95th %tile Queue, veh	22	19	1	7	7	4	4

Intersection						
Intersection Delay, s/veh	21.8					
Intersection LOS	C					
Approach	SE		NW		SW	
Entry Lanes	2		3		2	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	975		0		1385	
Demand Flow Rate, veh/h	995		0		1413	
Vehicles Circulating, veh/h	978		400		469	
Vehicles Exiting, veh/h	469		1573		1159	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	36.6		0.0		11.4	
Approach LOS	E		-		B	
Lane	Left	Right	Left	Right	Bypass	
Designated Moves	LT	TR	L	LTR	R	
Assumed Moves	LT	TR	L	LTR	R	
RT Channelized					Yield	
Lane Util	0.470	0.530	0.530	0.470		
Follow-Up Headway, s	2.667	2.535	2.667	2.535		
Critical Headway, s	4.645	4.328	4.645	4.328	435	
Entry Flow, veh/h	468	527	518	460	855	
Cap Entry Lane, veh/h	549	618	877	953	0.980	
Entry HV Adj Factor	0.980	0.981	0.981	0.980	426	
Flow Entry, veh/h	458	517	508	451	838	
Cap Entry, veh/h	538	607	860	934	0.508	
V/C Ratio	0.852	0.852	0.591	0.483	11.2	
Control Delay, s/veh	38.3	35.1	13.0	9.8	B	
LOS	E	E	B	A	3	
95th %tile Queue, veh	9	9	4	3		

Intersection									
Intersection Delay, s/veh	41.9								
Intersection LOS	E								
Approach	SE		NW		NE		SW		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	881		365		378		928		
Demand Flow Rate, veh/h	899		372		386		946		
Vehicles Circulating, veh/h	691		739		1212		321		
Vehicles Exiting, veh/h	576		859		378		790		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	102.2		8.4		15.0		8.7		
Approach LOS	F		A		B		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	R	LT	R	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	R	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.924	0.076	0.581	0.419	0.469	0.531	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	831	68	216	156	181	205	445	501	
Cap Entry Lane, veh/h	715	789	684	758	443	507	1005	1081	
Entry HV Adj Factor	0.980	0.985	0.982	0.981	0.982	0.978	0.980	0.982	
Flow Entry, veh/h	814	67	212	153	178	200	436	492	
Cap Entry, veh/h	700	778	672	743	435	495	985	1061	
V/C Ratio	1.162	0.086	0.316	0.206	0.409	0.404	0.443	0.463	
Control Delay, s/veh	110.1	5.5	9.4	7.1	15.9	14.1	8.7	8.6	
LOS	F	A	A	A	C	B	A	A	
95th %tile Queue, veh	26	0	1	1	2	2	2	3	

Intersection							
Intersection Delay, s/veh	9.4						
Intersection LOS	A						
Approach	SB	SE	NW	SW			
Entry Lanes	0	2	2	2			
Conflicting Circle Lanes	2	2	2	2			
Adj Approach Flow, veh/h	0	904	840	457			
Demand Flow Rate, veh/h	0	922	856	466			
Vehicles Circulating, veh/h	1135	327	255	731			
Vehicles Exiting, veh/h	62	808	994	380			
Ped Vol Crossing Leg, #/h	0	0	0	0			
Ped Cap Adj	1.000	1.000	1.000	1.000			
Approach Delay, s/veh	0.0	8.6	10.5	9.2			
Approach LOS	-	A	B	A			
Lane	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	R	L	LTR	
Assumed Moves	LT	TR	LT	R	L	LTR	
RT Channelized							
Lane Util	0.470	0.530	0.782	0.218	0.530	0.470	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	433	489	669	187	247	219	
Cap Entry Lane, veh/h	999	1075	1068	1143	689	763	
Entry HV Adj Factor	0.981	0.980	0.980	0.984	0.981	0.981	
Flow Entry, veh/h	425	479	656	184	242	215	
Cap Entry, veh/h	980	1054	1047	1125	676	748	
V/C Ratio	0.433	0.455	0.627	0.164	0.358	0.287	
Control Delay, s/veh	8.6	8.5	12.2	4.6	10.1	8.2	
LOS	A	A	B	A	B	A	
95th %tile Queue, veh	2	2	5	1	2	1	

Intersection				
Intersection Delay, s/veh	145.8			
Intersection LOS	F			
Approach	NB	SB	NE	SW
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	224	519	1062	768
Demand Flow Rate, veh/h	228	541	1184	871
Vehicles Circulating, veh/h	1306	917	621	181
Vehicles Exiting, veh/h	499	135	837	1353
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	28.6	67.5	301.6	17.6
Approach LOS	D	F	F	C
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	228	541	1184	871
Cap Entry Lane, veh/h	364	542	732	1147
Entry HV Adj Factor	0.983	0.960	0.897	0.881
Flow Entry, veh/h	224	519	1062	768
Cap Entry, veh/h	358	520	657	1011
V/C Ratio	0.626	0.999	1.617	0.759
Control Delay, s/veh	28.6	67.5	301.6	17.6
LOS	D	F	F	C
95th %tile Queue, veh	4	14	58	8

Intersection					
Intersection Delay, s/veh	158.6				
Intersection LOS	F				
Approach	SE	NW	NE	SW	
Entry Lanes	1	2	1	1	
Conflicting Circle Lanes	2	2	2	2	
Adj Approach Flow, veh/h	366	791	1215	989	
Demand Flow Rate, veh/h	408	849	1388	1121	
Vehicles Circulating, veh/h	1320	1074	467	689	
Vehicles Exiting, veh/h	490	781	1261	1234	
Ped Vol Crossing Leg, #/h	0	0	0	0	
Ped Cap Adj	1.000	1.000	1.000	1.000	
Approach Delay, s/veh	51.0	34.5	226.5	214.4	
Approach LOS	F	D	F	F	
Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.502	0.498	1.000	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	408	426	423	1388	1121
Cap Entry Lane, veh/h	462	503	570	955	791
Entry HV Adj Factor	0.898	0.883	0.981	0.875	0.882
Flow Entry, veh/h	366	376	415	1215	989
Cap Entry, veh/h	415	444	559	836	698
V/C Ratio	0.882	0.848	0.742	1.454	1.418
Control Delay, s/veh	51.0	43.4	26.4	226.5	214.4
LOS	F	E	D	F	F
95th %tile Queue, veh	9	8	6	56	45

Intersection: 36:

Movement	SB
Directions Served	LR
Maximum Queue (m)	7.4
Average Queue (m)	3.0
95th Queue (m)	8.9
Link Distance (m)	14.5
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 719

Intersection: 13: Str Artarilor & Str. Cuza Voda

Movement	SE	NW	SW
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	16.5	8.7	15.0
Average Queue (m)	14.7	3.3	10.2
95th Queue (m)	19.3	10.1	14.2
Link Distance (m)	100.4	58.7	112.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 14: Str Artarilor & Str. Ion Slavici

Movement	SE	NW	NE
Directions Served	TR	LT	R
Maximum Queue (m)	84.3	21.2	92.0
Average Queue (m)	43.5	7.8	68.6
95th Queue (m)	96.7	20.6	95.6
Link Distance (m)	102.0	47.4	112.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 15: Str. Zefirului & Str. Ion Slavici/Str. Subcetate

Movement	NW	NE	SW
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	9.0	9.3	9.1
Average Queue (m)	1.8	9.0	3.6
95th Queue (m)	7.8	9.7	10.9
Link Distance (m)	102.0	116.6	92.3
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Bd. Republicii & Str. Lalelelor

Movement	SE
Directions Served	R
Maximum Queue (m)	9.1
Average Queue (m)	5.3
95th Queue (m)	12.4
Link Distance (m)	84.0
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Bd. Republicii & Str. Zimbrului

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: 9: Bd. Republicii & Str. Ursului

Movement	SE	NE	SW	SW
Directions Served	R	T	T	T
Maximum Queue (m)	9.1	8.5	22.2	8.9
Average Queue (m)	3.6	1.7	8.0	1.8
95th Queue (m)	10.9	7.3	21.5	7.6
Link Distance (m)	91.1	69.3	97.7	97.7
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 1: Drumul Cetatii & Str. Tarpiului

Movement	SE	B24	NW	NW	NE	SW
Directions Served	LTR	T	LT	R	LTR	LTR
Maximum Queue (m)	23.3	21.0	23.2	11.1	226.0	172.7
Average Queue (m)	17.6	7.5	18.2	11.0	223.7	117.8
95th Queue (m)	25.7	20.2	24.2	11.2	231.1	170.8
Link Distance (m)	7.3	98.6	187.4		210.1	481.6
Upstream Blk Time (%)	20				87	
Queuing Penalty (veh)	0				0	
Storage Bay Dist (m)				30.0		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 2: Drumul Cetatii & Str. Subcetate

Movement	NB	SB	NE	SW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	22.2	23.8	178.5	45.7
Average Queue (m)	15.6	18.6	124.8	24.1
95th Queue (m)	22.4	27.1	212.2	46.4
Link Distance (m)	193.8	76.6	481.6	157.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Str. Garii & Bd. Decebal

Movement	SE	NW	NW	SW	SW
Directions Served	LT	T	R>	L	LR
Maximum Queue (m)	15.8	53.0	43.3	15.3	11.9
Average Queue (m)	11.0	25.3	12.4	12.3	6.5
95th Queue (m)	16.3	48.6	38.8	18.1	15.4
Link Distance (m)	21.6	50.3	50.3	88.5	88.5
Upstream Blk Time (%)	0	1			
Queuing Penalty (veh)	0	2			
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

13: Str Artarilor & Str. Cuza Voda Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.3	0.3	0.0	0.2
Total Del/Veh (s)	4.0	1.0	1.1	4.7	2.8
Stop Del/Veh (s)	1.1	0.3	0.0	1.6	0.7
Stop/Veh	0.29	0.05	0.00	0.57	0.21
Avg Speed (kph)	26	28	39	27	30
HC Emissions (g)	1	1	1	1	3
CO Emissions (g)	23	32	48	45	148
NOx Emissions (g)	3	3	4	3	13

14: Str Artarilor & Str. Ion Slavici Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	1.5	0.5
Total Del/Veh (s)	28.8	2.2	53.5	26.3
Stop Del/Veh (s)	26.0	0.7	54.7	25.3
Stop/Veh	0.56	0.14	0.88	0.49
Avg Speed (kph)	10	27	6	9
HC Emissions (g)	2	3	1	6
CO Emissions (g)	67	127	47	241
NOx Emissions (g)	5	12	4	21

15: Str. Zefirului & Str. Ion Slavici/Str. Subcetate Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	2.8	0.8	1.6	4.1	1.9
Stop Del/Veh (s)	0.7	0.0	0.5	2.5	0.5
Stop/Veh	0.06	0.02	0.17	0.40	0.08
Avg Speed (kph)	34	40	33	26	35
HC Emissions (g)	12	1	0	0	13
CO Emissions (g)	302	39	4	1	346
NOx Emissions (g)	34	3	1	0	38

16: Bd. Independentei/Str. Gh. Sincai & Str. Alex. Odobescu/Str. Garii Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.5	1.6	0.1	0.6
Total Del/Veh (s)	11.2	12.5	10.0	25.1	12.4
Stop Del/Veh (s)	9.0	9.6	6.5	22.2	9.6
Stop/Veh	0.63	0.64	0.71	0.71	0.66
Avg Speed (kph)	13	11	15	12	13
HC Emissions (g)	3	2	4	2	10
CO Emissions (g)	86	51	93	62	291
NOx Emissions (g)	13	7	12	6	38

5: Str. Garii & Bd. Republicii Performance by approach

Approach	SE	NW	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1
Total Del/Veh (s)	20.8	5.3	7.8	10.1
Stop Del/Veh (s)	18.9	2.4	4.0	7.1
Stop/Veh	0.72	0.31	0.46	0.47
Avg Speed (kph)	11	19	21	16
HC Emissions (g)	1	6	3	10
CO Emissions (g)	53	148	79	280
NOx Emissions (g)	6	24	10	41

6: Bd. Republicii/Str. 1 Decembrie & Str. Bistricioarei/Str. Crinilor Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	31.5	0.0	0.4	6.9
Total Del/Veh (s)	18.0	37.8	9.1	19.8	19.3
Stop Del/Veh (s)	14.4	39.4	5.0	14.9	16.3
Stop/Veh	0.79	0.22	0.52	0.85	0.61
Avg Speed (kph)	14	4	21	14	12
HC Emissions (g)	5	3	7	3	17
CO Emissions (g)	154	70	221	98	542
NOx Emissions (g)	21	5	21	10	56

7: Bd. Republicii & Str. Lalelelor Performance by approach









Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.8	2.2	0.5	1.5
Stop Del/Veh (s)	7.2	0.3	0.0	0.3
Stop/Veh	0.71	0.02	0.00	0.02
Avg Speed (kph)	15	33	38	34
HC Emissions (g)	0	10	8	17
CO Emissions (g)	5	316	330	651
NOx Emissions (g)	0	32	26	59










8: Bd. Republicii & Str. Zimbrului Performance by approach













Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.9	5.0	5.0
Stop Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.01	0.01	0.01
Avg Speed (kph)	25	25	25
HC Emissions (g)	3	4	8
CO Emissions (g)	76	124	200
NOx Emissions (g)	12	18	30

Lanes, Volumes, Timings
Intersectia 36:

Pasaj denivelat - Municipiul Bistrita
Anexa 2

						
Lane Group	WBL	WBR	SBL	SBR	NEL	NER
Lane Configurations						
Traffic Volume (vph)	0	0	85	180	0	85
Future Volume (vph)	0	0	85	180	0	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.908			0.865
Flt Protected			0.984			
Satd. Flow (prot)	0	0	1646	0	0	1593
Flt Permitted			0.984			
Satd. Flow (perm)	0	0	1646	0	0	1593
Link Speed (k/h)	48		48		48	
Link Distance (m)	19.9		21.7		94.0	
Travel Time (s)	1.5		1.6		7.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	92	196	0	92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	288	0	0	92
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0		3.5		0.0	
Link Offset(m)	0.0		0.0		0.0	
Crosswalk Width(m)	1.6		1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24	14	24	14
Sign Control	Stop		Yield		Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	19.1%			ICU Level of Service A		
Analysis Period (min)	15					

						
Lane Group	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	0	170	572	0	0	650
Future Volume (vph)	0	170	572	0	0	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1593	1842	0	0	1842
Flt Permitted						
Satd. Flow (perm)	0	1593	1842	0	0	1842
Link Speed (k/h)	48		48			48
Link Distance (m)	19.9		17.6			41.5
Travel Time (s)	1.5		1.3			3.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	185	622	0	0	707
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	185	622	0	0	707
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14		14	24	
Sign Control	Yield		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	47.3%			ICU Level of Service A		
Analysis Period (min)	15					

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑	↑		↑↑		↑↑		↑		↑↑	
Traffic Volume (vph)	0	525	742	210	295	0	610	0	210	75	112	55
Future Volume (vph)	0	525	742	210	295	0	610	0	210	75	112	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		30.0	0.0		0.0
Storage Lanes	0		1	0		0	2		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	1.00	1.00	0.95	0.95	0.95
Frt			0.850						0.850		0.966	
Flt Protected					0.980		0.950				0.985	
Satd. Flow (prot)	0	1842	1566	0	3430	0	3395	0	1566	0	3330	0
Flt Permitted					0.980		0.950				0.985	
Satd. Flow (perm)	0	1842	1566	0	3430	0	3395	0	1566	0	3330	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		56.2			69.0			82.9			144.5	
Travel Time (s)		4.2			5.2			6.2			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	571	807	228	321	0	663	0	228	82	122	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	571	807	0	549	0	663	0	228	0	264	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			10.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary










Area Type: Other

Control Type: Roundabout

Intersection Capacity Utilization 79.7%

ICU Level of Service D

Analysis Period (min) 15

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	330	40	142	320	0	329
Future Volume (vph)	330	40	142	320	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986					0.865
Flt Protected				0.985		
Satd. Flow (prot)	1816	0	0	1814	0	1593
Flt Permitted				0.985		
Satd. Flow (perm)	1816	0	0	1814	0	1593
Link Speed (k/h)	48			48	48	
Link Distance (m)	112.3			65.6	122.5	
Travel Time (s)	8.4			4.9	9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	359	43	154	348	0	358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	402	0	0	502	0	358
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Yield	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	51.2%			ICU Level of Service A		
Analysis Period (min)	15					



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		7.2						9.5			9.6	
Approach LOS		A						A			A	
Stops (vph)		83	16					172			258	
Fuel Used(l)		4	1					8			14	
CO Emissions (g/hr)		69	22					149			255	
NOx Emissions (g/hr)		13	4					29			49	
VOC Emissions (g/hr)		16	5					34			59	
Dilemma Vehicles (#)		0	0					0			0	
Queue Length 50th (m)		7.1	0.0					7.8			11.8	
Queue Length 95th (m)		15.6	5.7					14.6			19.9	
Internal Link Dist (m)		49.5			87.2			55.8			99.6	
Turn Bay Length (m)			20.0									
Base Capacity (vph)		708	683					1057			1397	
Starvation Cap Reductn		0	0					0			0	
Spillback Cap Reductn		0	0					0			0	
Storage Cap Reductn		0	0					0			0	
Reduced v/c Ratio		0.21	0.14					0.31			0.34	

Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 45

Offset: 0 (0%), Referenced to phase 2: and 6:SETL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 9.0




Intersection LOS: A













Intersection Capacity Utilization 39.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 12: Bd. Decebal & Str. Ursului/Str. Cuza Voda

 Ø6 (R)	22.5 s	 Ø4	22.5 s
		 Ø8	22.5 s

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations			 			 
Traffic Volume (vph)	20	31	265	0	0	441
Future Volume (vph)	20	31	265	0	0	441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1750	1566	3500	0	0	3500
Flt Permitted	0.950					
Satd. Flow (perm)	1750	1566	3500	0	0	3500
Link Speed (k/h)	48		48			48
Link Distance (m)	107.3		85.5			79.8
Travel Time (s)	8.0		6.4			6.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	34	288	0	0	479
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	34	288	0	0	479
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14		14	24	
Sign Control	Yield		Free			Free

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 22.2%

ICU Level of Service A

Analysis Period (min) 15



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations		↗		↗↗	↗↗	
Traffic Volume (vph)	0	75	0	918	902	0
Future Volume (vph)	0	75	0	918	902	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1593	0	3500	3500	0
Flt Permitted						
Satd. Flow (perm)	0	1593	0	3500	3500	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	111.2			83.1	111.7	
Travel Time (s)	8.3			6.2	8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	82	0	998	980	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	82	0	998	980	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0			4.0	5.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24			14
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.2%

ICU Level of Service A

Analysis Period (min) 15



Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations				↑↑	↑↑	
Traffic Volume (vph)	0	0	15	918	955	25
Future Volume (vph)	0	0	15	918	955	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt					0.996	
Flt Protected				0.999		
Satd. Flow (prot)	0	0	0	3496	3486	0
Flt Permitted				0.999		
Satd. Flow (perm)	0	0	0	3496	3486	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	107.3			76.7	83.1	
Travel Time (s)	8.0			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	16	998	1038	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1014	1065	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(m)	0.0			4.0	3.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24			14
Sign Control	Yield			Yield	Yield	

Intersection Summary

Area Type: Other

Control Type: Roundabout

Intersection Capacity Utilization 39.3% ICU Level of Service A

Analysis Period (min) 15

Intersection								
Intersection Delay, s/veh	27.8							
Intersection LOS	D							
Approach	SE	NW		NE		SW		
Entry Lanes	1	2		2		2		
Conflicting Circle Lanes	2	2		2		2		
Adj Approach Flow, veh/h	523	503		949		801		
Demand Flow Rate, veh/h	533	513		968		817		
Vehicles Circulating, veh/h	1096	1141		675		596		
Vehicles Exiting, veh/h	317	502		954		1058		
Ped Vol Crossing Leg, #/h	0	0		0		0		
Ped Cap Adj	1.000	1.000		1.000		1.000		
Approach Delay, s/veh	54.8	48.3		15.9		11.4		
Approach LOS	F	E		C		B		
Lane	Left	Left	Right	Left	Right	Left	Right	
Designated Moves	LTR	LT	R	LT	TR	LT	TR	
Assumed Moves	LTR	LT	R	LT	TR	LT	TR	
RT Channelized								
Lane Util	1.000	0.854	0.146	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	533	438	75	455	513	384	433	
Cap Entry Lane, veh/h	559	473	538	725	800	780	856	
Entry HV Adj Factor	0.981	0.981	0.987	0.980	0.981	0.980	0.981	
Flow Entry, veh/h	523	429	74	446	503	376	425	
Cap Entry, veh/h	549	463	531	711	785	765	839	
V/C Ratio	0.953	0.927	0.139	0.627	0.641	0.492	0.506	
Control Delay, s/veh	54.8	55.2	8.6	16.3	15.6	11.6	11.1	
LOS	F	F	A	C	C	B	B	
95th %tile Queue, veh	12	11	0	4	5	3	3	

Intersection						
Intersection Delay, s/veh	14.3					
Intersection LOS	B					
Approach	SE		NW		SW	
Entry Lanes	2		3		2	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	871		0		1237	
Demand Flow Rate, veh/h	888		0		1262	
Vehicles Circulating, veh/h	874		357		419	
Vehicles Exiting, veh/h	419		1405		1034	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	21.2		0.0		9.4	
Approach LOS	C		-		A	
Lane	Left	Right	Left	Right	Bypass	
Designated Moves	LT	TR	L	LTR	R	
Assumed Moves	LT	TR	L	LTR	R	
RT Channelized					Yield	
Lane Util	0.470	0.530	0.530	0.470		
Follow-Up Headway, s	2.667	2.535	2.667	2.535		
Critical Headway, s	4.645	4.328	4.645	4.328	388	
Entry Flow, veh/h	417	471	463	411	900	
Cap Entry Lane, veh/h	604	676	918	995	0.980	
Entry HV Adj Factor	0.981	0.980	0.981	0.980	380	
Flow Entry, veh/h	409	461	454	403	882	
Cap Entry, veh/h	593	662	901	975	0.431	
V/C Ratio	0.690	0.697	0.504	0.413	9.3	
Control Delay, s/veh	22.0	20.5	10.5	8.3	A	
LOS	C	C	B	A	2	
95th %tile Queue, veh	5	6	3	2		

Intersection									
Intersection Delay, s/veh	21.4								
Intersection LOS	C								
Approach	SE		NW		NE		SW		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	787		326		337		829		
Demand Flow Rate, veh/h	803		333		344		846		
Vehicles Circulating, veh/h	618		659		1083		287		
Vehicles Exiting, veh/h	515		768		338		705		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	45.9		7.3		11.8		7.6		
Approach LOS	E		A		B		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	R	LT	R	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	R	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.924	0.076	0.580	0.420	0.471	0.529	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	742	61	193	140	162	182	398	448	
Cap Entry Lane, veh/h	765	840	736	811	498	566	1037	1113	
Entry HV Adj Factor	0.980	0.984	0.981	0.979	0.977	0.980	0.979	0.980	
Flow Entry, veh/h	727	60	189	137	158	178	390	439	
Cap Entry, veh/h	749	826	723	794	487	554	1015	1091	
V/C Ratio	0.971	0.073	0.262	0.173	0.325	0.322	0.384	0.403	
Control Delay, s/veh	49.3	5.1	8.1	6.3	12.5	11.2	7.7	7.5	
LOS	E	A	A	A	B	B	A	A	
95th %tile Queue, veh	15	0	1	1	1	1	2	2	

Intersection							
Intersection Delay, s/veh	8.1						
Intersection LOS	A						
Approach	SB	SE	NW	SW			
Entry Lanes	0	2	2	2			
Conflicting Circle Lanes	2	2	2	2			
Adj Approach Flow, veh/h	0	807	750	409			
Demand Flow Rate, veh/h	0	823	765	417			
Vehicles Circulating, veh/h	1015	293	227	653			
Vehicles Exiting, veh/h	55	722	889	339			
Ped Vol Crossing Leg, #/h	0	0	0	0			
Ped Cap Adj	1.000	1.000	1.000	1.000			
Approach Delay, s/veh	0.0	7.5	8.8	7.9			
Approach LOS	-	A	A	A			
Lane	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	R	L	LTR	
Assumed Moves	LT	TR	LT	R	L	LTR	
RT Channelized							
Lane Util	0.470	0.530	0.782	0.218	0.530	0.470	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	387	436	598	167	221	196	
Cap Entry Lane, veh/h	1031	1107	1095	1171	740	815	
Entry HV Adj Factor	0.980	0.981	0.980	0.982	0.981	0.981	
Flow Entry, veh/h	379	428	586	164	217	192	
Cap Entry, veh/h	1011	1086	1074	1150	726	799	
V/C Ratio	0.375	0.394	0.546	0.143	0.299	0.240	
Control Delay, s/veh	7.6	7.4	10.0	4.4	8.5	7.1	
LOS	A	A	B	A	A	A	
95th %tile Queue, veh	2	2	3	0	1	1	

Intersection				
Intersection Delay, s/veh	88.1			
Intersection LOS	F			
Approach	NB	SB	NE	SW
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	200	463	948	686
Demand Flow Rate, veh/h	204	482	1057	778
Vehicles Circulating, veh/h	1166	819	554	162
Vehicles Exiting, veh/h	445	121	747	1208
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	19.1	31.2	184.4	13.5
Approach LOS	C	D	F	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	204	482	1057	778
Cap Entry Lane, veh/h	420	599	784	1170
Entry HV Adj Factor	0.982	0.960	0.897	0.882
Flow Entry, veh/h	200	463	948	686
Cap Entry, veh/h	413	575	703	1031
V/C Ratio	0.486	0.805	1.348	0.665
Control Delay, s/veh	19.1	31.2	184.4	13.5
LOS	C	D	F	B
95th %tile Queue, veh	3	8	40	5

Intersection					
Intersection Delay, s/veh	92.9				
Intersection LOS	F				
Approach	SE	NW		NE	SW
Entry Lanes	1	2		1	1
Conflicting Circle Lanes	2	2		2	2
Adj Approach Flow, veh/h	327	707		1085	884
Demand Flow Rate, veh/h	364	758		1240	1003
Vehicles Circulating, veh/h	1180	960		418	615
Vehicles Exiting, veh/h	438	698		1126	1103
Ped Vol Crossing Leg, #/h	0	0		0	0
Ped Cap Adj	1.000	1.000		1.000	1.000
Approach Delay, s/veh	27.2	20.9		137.7	119.7
Approach LOS	D	C		F	F
Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.501	0.499	1.000	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	364	380	378	1240	1003
Cap Entry Lane, veh/h	521	558	628	995	842
Entry HV Adj Factor	0.898	0.884	0.981	0.875	0.881
Flow Entry, veh/h	327	336	371	1085	884
Cap Entry, veh/h	468	493	616	871	742
V/C Ratio	0.699	0.681	0.602	1.246	1.191
Control Delay, s/veh	27.2	24.9	17.3	137.7	119.7
LOS	D	C	C	F	F
95th %tile Queue, veh	5	5	4	38	29

Intersection: 13: Str Artarilor & Str. Cuza Voda

Movement	SE	NW	SW
Directions Served	LTR	LTR	LTR
Maximum Queue (m)	46.3	15.7	21.1
Average Queue (m)	29.0	4.8	12.8
95th Queue (m)	44.0	15.2	21.3
Link Distance (m)	100.4	58.5	112.1
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 14: Str Artarilor & Str. Ion Slavici

Movement	SE	NW	NE
Directions Served	TR	LT	R
Maximum Queue (m)	29.9	15.8	103.5
Average Queue (m)	15.3	6.8	79.4
95th Queue (m)	32.3	16.9	110.1
Link Distance (m)	102.0	47.4	112.1
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 15: Str. Zefirului & Str. Ion Slavici/Str. Subcetate

Movement	NE	SW
Directions Served	LTR	LTR
Maximum Queue (m)	15.1	15.6
Average Queue (m)	10.4	12.8
95th Queue (m)	14.3	18.0
Link Distance (m)	116.6	92.3
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Bd. Republicii & Str. Lalelelor

Movement	SE
Directions Served	R
Maximum Queue (m)	8.9
Average Queue (m)	1.8
95th Queue (m)	7.7
Link Distance (m)	80.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Bd. Republicii & Str. Zimbrului

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: 9: Bd. Republicii & Str. Ursului

Movement	SE	NE	SW
Directions Served	R	T	T
Maximum Queue (m)	9.1	9.2	9.3
Average Queue (m)	1.8	1.8	1.9
95th Queue (m)	7.8	7.9	8.0
Link Distance (m)	90.7	69.3	97.7
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 1: Drumul Cetatii & Str. Tarpiului

Movement	SE	B24	NW	NE	SW
Directions Served	LTR	T	LT	LTR	LTR
Maximum Queue (m)	19.3	11.5	34.5	222.0	47.3
Average Queue (m)	17.1	4.0	22.5	148.2	30.5
95th Queue (m)	19.8	12.3	35.0	293.0	49.2
Link Distance (m)	7.3	98.6	195.2	210.1	481.6
Upstream Blk Time (%)	17			41	
Queuing Penalty (veh)	0			0	
Storage Bay Dist (m)					
Storage Blk Time (%)			1		
Queuing Penalty (veh)			0		

Intersection: 2: Drumul Cetatii & Str. Subcetate

Movement	NB	SB	NE	SW
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	110.2	81.2	271.2	173.7
Average Queue (m)	77.8	42.2	199.1	139.3
95th Queue (m)	131.1	79.8	311.0	198.9
Link Distance (m)	193.8	76.6	481.6	157.8
Upstream Blk Time (%)		13		18
Queuing Penalty (veh)		0		0
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Str. Garii & Bd. Decebal

Movement	SE	SE	NW	SW
Directions Served	L	LT	TR	L
Maximum Queue (m)	8.8	25.0	37.5	21.8
Average Queue (m)	1.8	18.2	11.2	13.8
95th Queue (m)	7.6	27.3	33.9	24.4
Link Distance (m)		19.6	59.6	92.7
Upstream Blk Time (%)		5		
Queuing Penalty (veh)		36		
Storage Bay Dist (m)	20.0			
Storage Blk Time (%)		5		
Queuing Penalty (veh)		5		

13: Str Artarilor & Str. Cuza Voda Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.0	0.1
Total Del/Veh (s)	7.6	1.5	0.7	7.7	4.6
Stop Del/Veh (s)	4.9	0.7	0.0	4.0	2.7
Stop/Veh	0.66	0.10	0.00	0.77	0.39
Avg Speed (kph)	19	24	43	23	27
HC Emissions (g)	1	1	1	2	5
CO Emissions (g)	20	35	62	65	181
NOx Emissions (g)	3	3	4	6	16

14: Str Artarilor & Str. Ion Slavici Performance by approach

Approach	SE	NW	NE	All
Denied Del/Veh (s)	0.0	0.0	4.8	1.0
Total Del/Veh (s)	6.1	3.7	82.6	22.3
Stop Del/Veh (s)	3.5	1.5	85.1	21.0
Stop/Veh	0.39	0.40	0.83	0.50
Avg Speed (kph)	23	24	4	10
HC Emissions (g)	1	6	2	9
CO Emissions (g)	57	205	70	331
NOx Emissions (g)	5	23	6	34

15: Str. Zefirului & Str. Ion Slavici/Str. Subcetate Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	4.2	0.9	3.0	10.4	2.9
Stop Del/Veh (s)	1.3	0.0	1.5	7.9	1.2
Stop/Veh	0.21	0.00	0.35	0.71	0.17
Avg Speed (kph)	32	41	30	18	33
HC Emissions (g)	12	2	0	0	14
CO Emissions (g)	304	61	6	7	379
NOx Emissions (g)	36	6	1	1	44

16: Bd. Independentei/Str. Gh. Sincai & Str. Alex. Odobescu/Str. Garii Performance by approach

Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	0.2	1.3	0.2	0.5
Total Del/Veh (s)	8.3	5.3	6.2	15.9	8.0
Stop Del/Veh (s)	6.0	2.0	2.9	12.1	5.1
Stop/Veh	0.39	0.54	0.49	0.80	0.49
Avg Speed (kph)	16	20	20	17	18
HC Emissions (g)	3	1	2	2	8
CO Emissions (g)	101	17	59	69	247
NOx Emissions (g)	15	2	7	6	31

5: Str. Garii & Bd. Republicii Performance by approach

Approach	SE	NW	SW	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1
Total Del/Veh (s)	11.7	3.8	5.7	6.8
Stop Del/Veh (s)	8.5	1.0	2.4	3.8
Stop/Veh	0.60	0.22	0.48	0.43
Avg Speed (kph)	16	21	24	20
HC Emissions (g)	1	4	3	9
CO Emissions (g)	75	114	72	261
NOx Emissions (g)	9	19	10	37

6: Bd. Republicii/Str. 1 Decembrie & Str. Bistricioarei/Str. Crinilor Performance by approach










Approach	SE	NW	NE	SW	All
Denied Del/Veh (s)	0.0	58.4	0.0	0.4	9.6
Total Del/Veh (s)	17.3	47.6	7.4	33.7	22.6
Stop Del/Veh (s)	13.0	48.5	3.0	30.7	19.3
Stop/Veh	0.98	0.42	0.55	0.96	0.76
Avg Speed (kph)	15	3	24	9	11
HC Emissions (g)	4	4	6	4	18
CO Emissions (g)	137	84	205	120	546
NOx Emissions (g)	18	5	19	13	56



















7: Bd. Republicii & Str. Lalelelor Performance by approach

Approach	SE	NE	SW	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	2.6	2.0	0.3	1.2
Stop Del/Veh (s)	2.1	0.3	0.0	0.2
Stop/Veh	0.40	0.01	0.00	0.01
Avg Speed (kph)	20	34	38	35
HC Emissions (g)	0	8	9	17
CO Emissions (g)	3	289	335	627
NOx Emissions (g)	0	29	29	57

8: Bd. Republicii & Str. Zimbrului Performance by approach

Approach	NE	SW	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	4.7	4.5	4.6
Stop Del/Veh (s)	0.0	0.0	0.0
Stop/Veh	0.00	0.00	0.00
Avg Speed (kph)	26	26	26
HC Emissions (g)	3	6	9
CO Emissions (g)	65	153	218
NOx Emissions (g)	10	21	31

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	195	55	520	45	110	550
Future Volume (vph)	195	55	520	45	110	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.970				0.888	
Flt Protected				0.956	0.992	
Satd. Flow (prot)	1787	0	0	1761	1623	0
Flt Permitted				0.956	0.992	
Satd. Flow (perm)	1787	0	0	1761	1623	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	23.0			39.3	114.2	
Travel Time (s)	1.7			2.9	8.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	60	565	49	120	598
Shared Lane Traffic (%)						
Lane Group Flow (vph)	272	0	0	614	718	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.5			3.5	3.5	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		14	24		24	14
Sign Control	Yield			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	94.8%			ICU Level of Service F		
Analysis Period (min)	15					

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	0	525	595	210	295	0	610	0	210	75	112	55
Future Volume (vph)	0	525	595	210	295	0	610	0	210	75	112	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		30.0	0.0		0.0
Storage Lanes	0		1	0		0	2		1	0		0
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.97	1.00	1.00	0.95	0.95	0.95
Frt			0.850						0.850		0.966	
Flt Protected					0.980		0.950				0.985	
Satd. Flow (prot)	0	1842	1566	0	3430	0	3395	0	1566	0	3330	0
Flt Permitted					0.980		0.950				0.985	
Satd. Flow (perm)	0	1842	1566	0	3430	0	3395	0	1566	0	3330	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		56.2			69.0			82.9			144.5	
Travel Time (s)		4.2			5.2			6.2			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	571	647	228	321	0	663	0	228	82	122	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	571	647	0	549	0	663	0	228	0	264	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(m)		0.0			0.0			10.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary










Area Type: Other


Control Type: Roundabout

Intersection Capacity Utilization 79.7%

ICU Level of Service D

Analysis Period (min) 15

						
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	330	40	142	520	0	329
Future Volume (vph)	330	40	142	520	0	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t	0.986					0.865
Flt Protected				0.989		
Satd. Flow (prot)	1816	0	0	1822	0	1593
Flt Permitted				0.989		
Satd. Flow (perm)	1816	0	0	1822	0	1593
Link Speed (k/h)	48			48	48	
Link Distance (m)	112.3			65.6	122.5	
Travel Time (s)	8.4			4.9	9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	359	43	154	565	0	358
Shared Lane Traffic (%)						
Lane Group Flow (vph)	402	0	0	719	0	358
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Free	Yield	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	61.7%			ICU Level of Service B		
Analysis Period (min)	15					

												
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		6.9						9.5			9.6	
Approach LOS		A						A			A	
Stops (vph)	67	18	16					172			258	
Fuel Used(l)	3	1	1					8			14	
CO Emissions (g/hr)	55	13	22					151			255	
NOx Emissions (g/hr)	11	3	4					29			49	
VOC Emissions (g/hr)	13	3	5					35			59	
Dilemma Vehicles (#)	0	0	0					0			0	
Queue Length 50th (m)	5.7	1.2	0.0					7.8			11.8	
Queue Length 95th (m)	13.1	4.4	5.7					14.6			19.9	
Internal Link Dist (m)		49.5			87.2			58.5			99.6	
Turn Bay Length (m)	10.0		20.0									
Base Capacity (vph)	700	736	683					1057			1397	
Starvation Cap Reductn	0	0	0					0			0	
Spillback Cap Reductn	0	0	0					0			0	
Storage Cap Reductn	0	0	0					0			0	
Reduced v/c Ratio	0.17	0.04	0.14					0.31			0.34	

Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 45

Offset: 0 (0%), Referenced to phase 2: and 6:SETL, Start of Green

Natural Cycle: 45

Control Type: Pretimed

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 9.0




Intersection LOS: A











Intersection Capacity Utilization 37.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 12: Bd. Decebal & Str. Ursului/Str. Cuza Voda

 Ø6 (R) 22.5 s	 Ø4 22.5 s
	 Ø8 22.5 s

						
Lane Group	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	20	31	265	0	0	441
Future Volume (vph)	20	31	265	0	0	441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt		0.850				
Flt Protected	0.950					
Satd. Flow (prot)	1750	1566	3500	0	0	3500
Flt Permitted	0.950					
Satd. Flow (perm)	1750	1566	3500	0	0	3500
Link Speed (k/h)	48		48			48
Link Distance (m)	104.2		80.6			82.5
Travel Time (s)	7.8		6.0			6.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	34	288	0	0	479
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	34	288	0	0	479
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.5		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14		14	24	
Sign Control	Yield		Free			Free










Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 22.2% ICU Level of Service A

Analysis Period (min) 15

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	75	0	918	802	0
Future Volume (vph)	0	75	0	918	802	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.865				
Flt Protected						
Satd. Flow (prot)	0	1593	0	3500	3500	0
Flt Permitted						
Satd. Flow (perm)	0	1593	0	3500	3500	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	111.2			83.1	111.7	
Travel Time (s)	8.3			6.2	8.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	82	0	998	872	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	82	0	998	872	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			4.0	5.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24			14
Sign Control	Yield			Yield	Yield	

Intersection Summary









Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.5%

ICU Level of Service A

Analysis Period (min) 15

						
Lane Group	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Volume (vph)	0	0	15	918	855	25
Future Volume (vph)	0	0	15	918	855	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Fr _t					0.996	
Flt Protected				0.999		
Satd. Flow (prot)	0	0	0	3496	3486	0
Flt Permitted				0.999		
Satd. Flow (perm)	0	0	0	3496	3486	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	104.2			76.7	83.1	
Travel Time (s)	7.8			5.8	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	16	998	929	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1014	956	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			4.0	3.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	1.01	1.01	1.01	1.01
Turning Speed (k/h)	24	14	24			14
Sign Control	Yield			Yield	Yield	
Intersection Summary						
Area Type:	Other					
Control Type:	Roundabout					
Intersection Capacity Utilization	39.3%			ICU Level of Service A		
Analysis Period (min)	15					

Intersection							
Intersection Delay, s/veh	30.2						
Intersection LOS	D						
Approach	SE	NW	NE	SW			
Entry Lanes	1	2	2	2			
Conflicting Circle Lanes	2	2	2	2			
Adj Approach Flow, veh/h	523	504	1058	801			
Demand Flow Rate, veh/h	533	514	1079	817			
Vehicles Circulating, veh/h	986	1252	675	708			
Vehicles Exiting, veh/h	539	502	844	1058			
Ped Vol Crossing Leg, #/h	0	0	0	0			
Ped Cap Adj	1.000	1.000	1.000	1.000			
Approach Delay, s/veh	37.3	72.7	19.1	13.6			
Approach LOS	E	F	C	B			
Lane	Left	Left	Right	Left	Right	Left	Right
Designated Moves	LTR	LT	R	LT	TR	LT	TR
Assumed Moves	LTR	LT	R	LT	TR	LT	TR
RT Channelized							
Lane Util	1.000	0.854	0.146	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	533	439	75	507	572	384	433
Cap Entry Lane, veh/h	614	427	490	725	800	704	778
Entry HV Adj Factor	0.981	0.980	0.987	0.981	0.980	0.980	0.981
Flow Entry, veh/h	523	430	74	497	561	376	425
Cap Entry, veh/h	602	418	483	712	784	690	763
V/C Ratio	0.868	1.029	0.153	0.699	0.715	0.546	0.557
Control Delay, s/veh	37.3	83.6	9.6	19.4	18.8	14.0	13.3
LOS	E	F	A	C	C	B	B
95th %tile Queue, veh	10	13	1	6	6	3	3

Intersection						
Intersection Delay, s/veh	11.9					
Intersection LOS	B					
Approach	SE		NW		SW	
Entry Lanes	2		3		2	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	734		0		1129	
Demand Flow Rate, veh/h	749		0		1151	
Vehicles Circulating, veh/h	874		357		419	
Vehicles Exiting, veh/h	419		1266		1034	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	16.4		0.0		9.0	
Approach LOS	C		-		A	
Lane	Left	Right	Left	Right	Bypass	
Designated Moves	LT	TR	L	LTR	R	
Assumed Moves	LT	TR	L	LTR	R	
RT Channelized					Yield	
Lane Util	0.470	0.530	0.530	0.470		
Follow-Up Headway, s	2.667	2.535	2.667	2.535		
Critical Headway, s	4.645	4.328	4.645	4.328	277	
Entry Flow, veh/h	352	397	463	411	900	
Cap Entry Lane, veh/h	604	676	918	995	0.980	
Entry HV Adj Factor	0.980	0.980	0.981	0.980	272	
Flow Entry, veh/h	345	389	454	403	882	
Cap Entry, veh/h	592	662	901	975	0.308	
V/C Ratio	0.583	0.588	0.504	0.413	7.4	
Control Delay, s/veh	17.1	15.8	10.5	8.3	A	
LOS	C	C	B	A	1	
95th %tile Queue, veh	4	4	3	2		

Intersection									
Intersection Delay, s/veh	22.1								
Intersection LOS	C								
Approach	SE		NW		NE		SW		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	787		544		337		829		
Demand Flow Rate, veh/h	803		555		344		846		
Vehicles Circulating, veh/h	618		659		1083		509		
Vehicles Exiting, veh/h	737		768		338		705		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	45.9		12.1		11.8		10.3		
Approach LOS	E		B		B		B		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	R	LT	R	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	R	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.924	0.076	0.748	0.252	0.471	0.529	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	742	61	415	140	162	182	398	448	
Cap Entry Lane, veh/h	765	840	736	811	498	566	845	921	
Entry HV Adj Factor	0.980	0.984	0.981	0.979	0.977	0.980	0.979	0.980	
Flow Entry, veh/h	727	60	407	137	158	178	390	439	
Cap Entry, veh/h	749	826	722	794	487	554	827	903	
V/C Ratio	0.971	0.073	0.564	0.173	0.325	0.322	0.471	0.486	
Control Delay, s/veh	49.3	5.1	14.0	6.3	12.5	11.2	10.5	10.1	
LOS	E	A	B	A	B	B	B	B	
95th %tile Queue, veh	15	0	4	1	1	1	3	3	

Intersection						
Intersection Delay, s/veh	8.2					
Intersection LOS	A					
Approach	SE		NW		SW	
Entry Lanes	2		2		2	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	839		587		409	
Demand Flow Rate, veh/h	855		599		417	
Vehicles Circulating, veh/h	293		227		487	
Vehicles Exiting, veh/h	611		921		339	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	9.1		7.4		7.2	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Right
Designated Moves	L	LTR	LTR	R	L	TR
Assumed Moves	L	TR	LT	R	L	TR
RT Channelized						
Lane Util	0.265	0.735	0.813	0.187	0.703	0.297
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	227	628	487	112	293	124
Cap Entry Lane, veh/h	1031	1107	1095	1171	862	939
Entry HV Adj Factor	0.982	0.980	0.980	0.982	0.980	0.984
Flow Entry, veh/h	223	616	477	110	287	122
Cap Entry, veh/h	1013	1085	1074	1150	845	924
V/C Ratio	0.220	0.567	0.445	0.096	0.340	0.132
Control Delay, s/veh	5.7	10.4	8.2	3.9	8.1	5.2
LOS	A	B	A	A	A	A
95th %tile Queue, veh	1	4	2	0	2	0

Intersection

Intersection Delay, s/veh 77.0

Intersection LOS F

Approach	NB	SB	NE	SW
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	560	463	794	729
Demand Flow Rate, veh/h	578	482	884	823
Vehicles Circulating, veh/h	960	864	599	423
Vehicles Exiting, veh/h	523	382	747	1115
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	103.4	36.6	117.8	37.8
Approach LOS	F	E	F	E

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	578	482	884	823
Cap Entry Lane, veh/h	518	572	749	896
Entry HV Adj Factor	0.969	0.960	0.898	0.886
Flow Entry, veh/h	560	463	794	729
Cap Entry, veh/h	502	549	673	794
V/C Ratio	1.115	0.843	1.180	0.918
Control Delay, s/veh	103.4	36.6	117.8	37.8
LOS	F	E	F	E
95th %tile Queue, veh	19	9	26	13

Intersection					
Intersection Delay, s/veh	27.4				
Intersection LOS	D				
Approach	SE	NW		NE	SW
Entry Lanes	1	2		1	1
Conflicting Circle Lanes	2	2		2	2
Adj Approach Flow, veh/h	327	272		955	689
Demand Flow Rate, veh/h	364	308		1094	786
Vehicles Circulating, veh/h	887	960		201	539
Vehicles Exiting, veh/h	438	335		1050	729
Ped Vol Crossing Leg, #/h	0	0		0	0
Ped Cap Adj	1.000	1.000		1.000	1.000
Approach Delay, s/veh	15.7	18.3		31.0	31.8
Approach LOS	C	C		D	D
Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.987	0.013	1.000	1.000
Follow-Up Headway, s	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	364	304	4	1094	786
Cap Entry Lane, veh/h	668	558	628	1197	898
Entry HV Adj Factor	0.898	0.881	1.000	0.873	0.877
Flow Entry, veh/h	327	268	4	955	689
Cap Entry, veh/h	600	492	628	1045	787
V/C Ratio	0.545	0.545	0.006	0.914	0.875
Control Delay, s/veh	15.7	18.5	5.8	31.0	31.8
LOS	C	C	A	D	D
95th %tile Queue, veh	3	3	0	14	11