Preliminary Traffic Engineering Report

APPENDIX E – CORRIDOR ALTERNATIVE OPERATIONS

EXISTING 2017 TRAFFIC CONDITIONS

PROJECTED 2042 TRAFFIC CONDITIONS

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	3.1	0.2	1.3	
Total Del/Veh (s)	0.1	6.1	3.1	10.2	5.0	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	2.2	0.8
Total Del/Veh (s)	21.3	16.6	23.9	78.4	39.5

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.8	1.2	0.6
Total Del/Veh (s)	13.4	13.9	22.6	46.6	19.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
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Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	7.6	8.5	52.9	10.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	1.2	0.4
Total Del/Veh (s)	50.8	25.7	39.6	49.0	41.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.2	0.1	0.1
Total Del/Veh (s)	6.8	6.7	25.6	32.0	8.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	1.5	1.0	0.5
Total Del/Veh (s)	32.1	40.2	34.4	38.0	36.7

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.6	2.3	0.3
Total Del/Veh (s)	20.1	14.7	33.1	43.6	20.0

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.2	0.1
Total Del/Veh (s)	8.9	18.9	13.9	14.7

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	proach EB WB	NB	All
Denied Del/Veh (s)	nied Del/Veh (s) 0.0 0.2	1.6	0.4
Total Del/Veh (s)	tal Del/Veh (s) 9.7 13.3	14.6	12.5

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	1.5	2.7	1.9	1.3
Total Del/Veh (s)	18.5	16.1	29.1	46.1	22.0

Denied Del/Veh (s)	1.6
Total Del/Veh (s)	72.0

Lane	EB	WB	NB	NB	SB	All	
Movements Served	LTR	LTR	T	R	LTR		
Denied Del/Veh (s)						1.3	
Total Del/Veh (s)	0.1	6.1	72.3	1.2	10.2	5.0	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									8.0	
Total Del/Veh (s)	15.5	23.1	15.7	17.1	37.6	23.5	41.6	92.8	39.5	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	All	
Movements Served	L	T	R	L	TR	L	Т	R	L	TR		
Denied Del/Veh (s)											0.6	
Total Del/Veh (s)	19.5	16.6	3.2	16.3	13.0	51.6	43.5	9.2	56.1	38.3	19.2	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All	
Movements Served	L	Т	TR	LR		
Denied Del/Veh (s)					0.0	
Total Del/Veh (s)	11.0	7.6	8.5	53.5	10.6	

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									0.4	
Total Del/Veh (s)	25.7	55.1	26.2	25.6	40.7	38.6	44.8	51.4	41.5	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							0.1
Total Del/Veh (s)	7.9	6.8	14.9	6.0	25.9	32.0	8.2

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Movements Served	L	T	T	R	L	L	T	R	L	T	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	36.6	37.0	41.2	7.3	50.6	66.9	45.9	6.6	37.2	45.1	39.4	7.1

7: Montana Ave & Custer Ave Performance by lane

Lane	SB	SB	SB	All
Movements Served	L	Т	TR	•
Denied Del/Veh (s)				0.5
Total Del/Veh (s)	35.6	40.4	37.8	36.7

8: Sanders St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Movements Served	L	T	Т	R	L	Т	TR	L	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	18.4	17.9	23.8	2.6	15.5	16.0	12.4	53.4	50.1	10.1	56.1	49.4

8: Sanders St & Custer Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Del/Veh (s)		0.3
Total Del/Veh (s)	7.3	20.0

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by lane

Lane	EB	EB	EB	WB	WB	WB	SB	SB	All
Movements Served	T	Т	R	Т	Т	R	<	R	
Denied Del/Veh (s)									0.1
Total Del/Veh (s)	11.9	20.3	1.7	24.7	19.3	2.1	14.2	13.7	14.7

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	All	
Movements Served	L	Т	Т	Т	Т	R	L	LT	R		
Denied Del/Veh (s)										0.4	
Total Del/Veh (s)	24.2	8.3	8.6	13.9	13.7	1.3	16.6	18.2	4.6	12.5	

11: Washington St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Movements Served	L	Т	T	R	L	T	T	R	L	T	R	L
Denied Del/Veh (s)												
Total Del/Veh (s)	18.9	21.2	22.0	4.4	17.2	17.5	17.2	1.8	46.2	54.0	4.1	40.2

11: Washington St & Custer Ave Performance by lane

Lane	SB	SB	All
Movements Served	Т	R	
Denied Del/Veh (s)			1.3
Total Del/Veh (s)	56.4	5.8	22.0

Denied Del/Veh (s)	1.6
Total Del/Veh (s)	72.0

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	3.1	0.2	1.3
Total Del/Veh (s)	0.1	6.1	3.1	10.2	5.0
Stop/Veh	0.00	0.01	0.03	1.00	0.03
Avg Speed (mph)	24	29	28	18	29
Fuel Used (gal)	0.0	5.9	22	0.1	8.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.0	0.0	0.4	2.2	8.0	
Total Del/Veh (s)	21.3	16.6	23.9	78.4	39.5	
Stop/Veh	0.57	0.42	0.85	1.16	0.75	
Avg Speed (mph)	21	22	11	10	14	
Fuel Used (gal)	5.0	5.7	0.9	6.3	17.9	

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.8	1.2	0.6
Total Del/Veh (s)	13.4	13.9	22.6	46.6	19.2
Stop/Veh	0.38	0.43	0.77	0.86	0.52
Avg Speed (mph)	21	21	19	12	18
Fuel Used (gal)	5.3	5.0	2.5	2.6	15.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	7.6	8.5	52.9	10.6
Stop/Veh	0.15	0.16	0.88	0.20
Avg Speed (mph)	24	25	11	23
Fuel Used (gal)	5.5	7.2	1.1	13.7

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	1.2	0.4
Total Del/Veh (s)	50.8	25.7	39.6	49.0	41.5
Stop/Veh	0.85	0.58	0.87	0.93	0.79
Avg Speed (mph)	11	15	13	11	12
Fuel Used (gal)	7.5	4.7	2.4	5.6	20.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.2	0.1	0.1
Total Del/Veh (s)	6.8	6.7	25.6	32.0	8.2
Stop/Veh	0.01	0.06	0.96	1.00	0.10
Avg Speed (mph)	23	27	15	5	23
Fuel Used (gal)	6.9	6.9	0.9	0.1	14.9

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	1.5	1.0	0.5
Total Del/Veh (s)	32.1	40.2	34.4	38.0	36.7
Stop/Veh	0.65	0.64	0.75	0.72	0.68
Avg Speed (mph)	15	14	17	16	15
Fuel Used (gal)	8.3	9.4	3.9	9.6	31.2

Total Zone Performance

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	788.8
Stop/Veh	15.12
Avg Speed (mph)	17
Fuel Used (gal)	121.6

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.0	6.2	3.5	0.1	9.9
Vehicles Entered	3	538	360	14	915

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	5.8	6.6	2.1	16.9	31.5
Vehicles Entered	364	562	161	565	1652

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.4	7.1	4.4	5.7	23.5
Vehicles Entered	540	699	270	213	1722

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	6.0	7.5	2.4	15.9
Vehicles Entered	696	741	85	1522

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	17.0	9.5	5.1	12.6	44.2
Vehicles Entered	750	636	209	463	2058

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.2	6.9	1.7	0.4	17.2
Vehicles Entered	827	683	81	33	1624

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	13.6	16.5	6.8	18.3	55.2
Vehicles Entered	806	912	365	945	3028

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.8	7.8	2.9	4.0	25.5
Vehicles Entered	843	1122	129	176	2270

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	5.1	11.9	2.0	19.0
Vehicles Entered	862	1212	208	2282

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB WB	NB	All
pprodon (1.)			
Travel Time (hr)	3.6 8.9	5.1	17.6
Vehicles Entered	d 534 955	335	1824

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.2	11.7	4.1	5.1	27.1
Vehicles Entered	550	1054	227	268	2099

Travel Time (hr)	351.5
Vehicles Entered	6572

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	NB	SB
Directions Served	LTR	Т	R	LTR
Maximum Queue (ft)	38	33	44	58
Average Queue (ft)	3	8	2	14
95th Queue (ft)	20	30	20	45
Link Distance (ft)	1779	1291		990
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	157	232	145	246	53	191	200	833
Average Queue (ft)	44	113	63	94	6	78	149	387
95th Queue (ft)	103	200	118	198	33	147	251	775
Link Distance (ft)		1779		1291		759		1492
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100		500		75		100	
Storage Blk Time (%)	0	13			0	14	17	51
Queuing Penalty (veh)	1	12			0	1	67	84

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	TR	L	Т	R	L	TR	
Maximum Queue (ft)	31	265	137	142	295	103	100	115	178	207	
Average Queue (ft)	4	129	36	63	114	43	25	48	81	79	
95th Queue (ft)	21	236	101	116	236	89	71	93	148	157	
Link Distance (ft)		1291			1054		1511			1653	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		175	500		225		225	100		
Storage Blk Time (%)		3							12	6	
Queuing Penalty (veh)		4							14	7	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	33	219	232	140
Average Queue (ft)	7	71	90	75
95th Queue (ft)	27	179	206	128
Link Distance (ft)		1054	1287	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	368	774	157	530	143	205	275	482
Average Queue (ft)	121	395	42	243	56	95	147	213
95th Queue (ft)	417	844	110	460	109	165	264	391
Link Distance (ft)		1287		1159		1624		1621
Upstream Blk Time (%)		0						
Queuing Penalty (veh)		2						
Storage Bay Dist (ft)	500		500		100		175	
Storage Blk Time (%)		10		1	1	9	4	19
Queuing Penalty (veh)		12		1	2	6	12	32

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	NB	SB	
Directions Served	L	TR	L	LTR	LTR	
Maximum Queue (ft)	36	37	105	111	76	
Average Queue (ft)	5	4	33	48	27	
95th Queue (ft)	24	21	77	92	60	
Link Distance (ft)		1159		1682	276	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500		500			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	Т	R	L	L	Т	R	L	Т	T	R
Maximum Queue (ft)	153	349	308	221	174	380	587	160	164	143	133	63
Average Queue (ft)	53	151	169	58	76	105	252	32	69	69	45	21
95th Queue (ft)	105	261	256	132	144	242	462	102	135	127	100	49
Link Distance (ft)		1380					1224	1224		1656	1656	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225		225	225	400	400			300			225
Storage Blk Time (%)	0	2	2	0			3					
Queuing Penalty (veh)	0	8	7	0			6					

Intersection: 7: Montana Ave & Custer Ave

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	318	362	327
Average Queue (ft)	163	179	181
95th Queue (ft)	281	290	288
Link Distance (ft)		1633	1633
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	230		
Storage Blk Time (%)	5	2	
Queuing Penalty (veh)	15	6	

Intersection: 8: Sanders St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	Т	Т	R	L	Т	TR	L	T	R	L	T
Maximum Queue (ft)	106	243	346	216	313	394	334	91	83	68	161	104
Average Queue (ft)	41	96	164	28	72	152	99	29	28	23	86	36
95th Queue (ft)	83	197	291	125	185	310	237	68	66	53	144	79
Link Distance (ft)		1224	1224			425	425		1651			1264
Upstream Blk Time (%)						0	0					
Queuing Penalty (veh)						1	0					
Storage Bay Dist (ft)	175			135	230			150		300	150	
Storage Blk Time (%)	0	1	13		0	3		0			1	0
Queuing Penalty (veh)	0	1	7		0	6		0			1	0

Intersection: 8: Sanders St & Custer Ave

Movement	SB		
Directions Served	R		
Maximum Queue (ft)	75		
Average Queue (ft)	27		
95th Queue (ft)	61		
Link Distance (ft)			
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	150		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: I-15 SB On & Custer Ave & I-15 SB Off

Movement	EB	EB	WB	WB	WB	SB	SB	
Directions Served	T	T	T	Т	R	<	R	
Maximum Queue (ft)	113	94	366	329	82	89	137	
Average Queue (ft)	25	18	166	111	14	34	49	
95th Queue (ft)	75	62	311	258	83	71	98	
Link Distance (ft)	425	425	767	767		669	669	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)					300			
Storage Blk Time (%)				1				
Queuing Penalty (veh)				1				

Intersection: 10: I-15 NB Off/I-15 NB On & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	Т	Т	T	T	R	L	LT	R
Maximum Queue (ft)	99	126	115	224	211	68	118	120	79
Average Queue (ft)	32	49	50	106	95	9	55	59	32
95th Queue (ft)	78	96	95	189	176	41	97	99	64
Link Distance (ft)		767	767	1143	1143			1350	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	500					150	400		400
Storage Blk Time (%)					1				
Queuing Penalty (veh)					0				

Intersection: 11: Washington St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	Т	Т	R	L	Т	T	R	L	Т	R	L
Maximum Queue (ft)	128	137	147	57	248	214	211	51	161	112	81	139
Average Queue (ft)	49	53	65	11	104	99	96	6	63	36	34	47
95th Queue (ft)	99	113	123	35	194	181	180	23	129	85	63	101
Link Distance (ft)		1143	1143			1198	1198			1706		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350			350	400			300	350		350	150
Storage Blk Time (%)					0							0
Queuing Penalty (veh)					0							0

Intersection: 11: Washington St & Custer Ave

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	234	70
Average Queue (ft)	114	13
95th Queue (ft)	208	44
Link Distance (ft)	1069	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)	7	
Queuing Penalty (veh)	7	

Network Summary

Network wide Queuing Penalty: 325

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	3.1	0.1	1.7	
Total Del/Veh (s)	0.2	5.7	4.1	7.9	4.9	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	2.0	0.4
Total Del/Veh (s)	17.9	14.8	34.2	32.7	21.4

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	2.8	1.1	0.8
Total Del/Veh (s)	17.3	17.3	29.0	49.9	21.8

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	9.5	10.6	48.1	12.2

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	1.1	1.2	0.3
Total Del/Veh (s)	27.1	28.1	42.3	39.2	30.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	5.5	6.4	70.8	47.1	10.8

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.1	0.6
Total Del/Veh (s)	39.6	41.5	42.5	53.6	43.9

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	1.9	2.8	0.6
Total Del/Veh (s)	34.3	26.2	31.0	48.5	32.7

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	7.2	10.4	34.2	10.0

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	0.1	1.8	0.4
Total Del/Veh (s)	9.7	18.8	46.5	20.5

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	1.2	2.9	2.8	1.3
Total Del/Veh (s)	31.5	46.4	27.9	46.3	35.3

Denied Del/Veh (s)	1.8
Total Del/Veh (s)	82.7

Lane	EB	WB	NB	NB	SB	All
Movements Served	LTR	LTR	LT	R	LTR	
Denied Del/Veh (s)						1.7
Total Del/Veh (s)	0.2	5.7	70.4	1.5	7.9	4.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									0.4	
Total Del/Veh (s)	17.8	17.9	10.2	15.8	37.0	34.3	43.2	23.5	21.4	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	All	
Movements Served	L	T	R	L	TR	L	T	R	L	TR		
Denied Del/Veh (s)											8.0	
Total Del/Veh (s)	16.3	19.9	3.2	24.6	13.4	52.1	50.9	15.3	64.4	34.9	21.8	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All	
Movements Served	L	Т	TR	LR		
Denied Del/Veh (s)					0.0	
Total Del/Veh (s)	16.4	9.4	10.6	48.1	12.2	

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									0.3	
Total Del/Veh (s)	26.3	27.2	24.2	28.2	42.6	41.7	46.2	33.6	30.5	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							0.1
Total Del/Veh (s)	7.2	5.5	11.1	6.0	71.4	45.5	10.8

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Movements Served	L	T	T	R	L	L	T	R	L	T	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	49.6	44.6	42.8	5.2	60.4	79.2	49.6	11.6	38.7	57.3	52.2	13.1

7: Montana Ave & Custer Ave Performance by lane

Lane	SB	SB	SB	All
Movements Served	l	T	TR	7 (11
Denied Del/Veh (s)		ı	110	0.6
Total Del/Veh (s)	66.3	51.2	42.0	43.9

8: Sanders St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Movements Served	L	T	T	R	L	T	TR	L	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	34.5	34.5	39.8	3.3	30.7	27.0	24.2	46.3	45.8	19.8	57.9	61.7

8: Sanders St & Custer Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Del/Veh (s)		0.6
Total Del/Veh (s)	10.1	32.7

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by lane

Lane	EB	EB	EB	WB	WB	WB	SB	SB	All	
Movements Served	Т	T	R	T	T	R	<	R		
Denied Del/Veh (s)									0.0	
Total Del/Veh (s)	8.2	10.9	1.1	11.9	11.0	1.0	35.6	32.8	10.0	

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	All	
Movements Served	L	T	Т	Т	Т	R	L	LT	R		
Denied Del/Veh (s)										0.4	
Total Del/Veh (s)	12.0	9.3	9.6	20.0	20.8	2.2	55.1	61.7	13.9	20.5	

11: Washington St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Movements Served	L	T	T	R	L	T	T	R	L	T	R	L
Denied Del/Veh (s)												
Total Del/Veh (s)	46.6	31.6	29.7	2.7	34.0	57.0	55.0	5.7	32.4	42.1	7.2	37.8

11: Washington St & Custer Ave Performance by lane

Lane	SB	SB	All
Movements Served	T	R	
Denied Del/Veh (s)			1.3
Total Del/Veh (s)	74.8	5.9	35.3

Denied Del/Veh (s)	1.8
Total Del/Veh (s)	82.7

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	3.1	0.1	1.7
Total Del/Veh (s)	0.2	5.7	4.1	7.9	4.9
Stop/Veh	0.00	0.02	0.05	1.00	0.08
Avg Speed (mph)	24	30	27	19	28
Fuel Used (gal)	0.1	4 0	3.0	0.2	7.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	2.0	0.4
Total Del/Veh (s)	17.9	14.8	34.2	32.7	21.4
Stop/Veh	0.53	0.39	0.87	0.82	0.57
Avg Speed (mph)	22	22	9	17	19
Fuel Used (gal)	6.9	4.9	1.4	2.0	15.2

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	2.8	1.1	0.8
Total Del/Veh (s)	17.3	17.3	29.0	49.9	21.8
Stop/Veh	0.42	0.51	0.75	0.89	0.56
Avg Speed (mph)	20	18	17	12	18
Fuel Used (gal)	5.4	6.0	4.3	1.1	16.8

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	9.5	10.6	48.1	12.2
Stop/Veh	0.14	0.28	0.89	0.24
Avg Speed (mph)	23	19	12	19
Fuel Used (gal)	6.2	6.6	1.2	13.9

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	1.1	1.2	0.3	
Total Del/Veh (s)	27.1	28.1	42.3	39.2	30.5	
Stop/Veh	0.59	0.58	0.88	0.87	0.65	
Avg Speed (mph)	14	14	12	13	14	
Fuel Used (gal)	8.0	5.1	2.4	2.8	18.3	

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	5.5	6.4	70.8	47.1	10.8
Stop/Veh	0.01	0.04	0.96	1.00	0.10
Avg Speed (mph)	24	27	9	3	22
Fuel Used (gal)	7 1	7 1	15	0.1	15.8

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.1	0.6
Total Del/Veh (s)	39.6	41.5	42.5	53.6	43.9
Stop/Veh	0.67	0.61	0.76	0.81	0.71
Avg Speed (mph)	14	13	15	13	14
Fuel Used (gal)	9.4	11.4	9.7	8.7	39.1

Total Zone Performance

Denied Del/Veh (s)	1.6
Total Del/Veh (s)	863.0
Stop/Veh	16.44
Avg Speed (mph)	17
Fuel Used (gal)	126.5

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.1	3.9	4.9	0.4	9.3	
Vehicles Entered	11	342	494	39	886	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.6	5.8	3.4	3.6	20.4
Vehicles Entered	501	509	210	211	1431

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.3	8.0	8.3	2.4	26.0
Vehicles Entered	574	697	456	88	1815

4: Custer Ave & Cooney Dr Performance by approach

Approach	roach EB WB	SB	All
Travel Time (hr)	vel Time (hr) 7.3 9.9	2.5	19.7
Vehicles Entered		93	1626

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.6	10.6	5.2	6.0	37.4
Vehicles Entered	866	680	208	246	2000

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.2	7.1	3.6	0.4	19.5
Vehicles Entered	868	708	108	29	1713

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	17.2	19.0	18.6	18.2	73.0
Vehicles Entered	898	1020	892	763	3573

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	18.0	12.0	7.6	9.8	47.4
Vehicles Entered	1075	1175	335	399	2984

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	Approach	EB	WB	SB	All
Travel Time (hr)	Travel Time (hr)	7.2	9.1	2.0	18.4
Vehicles Entered		1352	1235	134	2721

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB	WB	NB	All
Travel Time (hr)	7.1	10.9	12.0	30.0
Vehicles Entered	1044	956	495	2495

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.9	11.9	11.9	4.3	44.0
Vehicles Entered	1076	603	677	222	2578

Travel Time (hr)	415.3	
Vehicles Entered	7103	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	NB	SB
Directions Served	LTR	LT	R	LTR
Maximum Queue (ft)	44	35	82	50
Average Queue (ft)	6	12	11	23
95th Queue (ft)	27	37	50	47
Link Distance (ft)	1779	1291		990
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB	
Directions Served	L	TR	L	TR	L	TR	L	TR	
Maximum Queue (ft)	191	232	97	255	75	266	140	149	
Average Queue (ft)	71	95	32	110	5	116	69	56	
95th Queue (ft)	137	194	70	215	38	220	120	117	
Link Distance (ft)		1779		1291		759		1492	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100		500		75		100		
Storage Blk Time (%)	5	9				28	5	2	
Queuing Penalty (veh)	15	16				1	5	2	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	T	R	L	TR	L	T	R	L	TR	
Maximum Queue (ft)	44	338	251	222	234	169	111	207	98	99	
Average Queue (ft)	13	159	33	98	102	72	45	89	40	35	
95th Queue (ft)	39	274	120	179	208	133	94	175	83	82	
Link Distance (ft)		1291			1054		1511			1653	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		175	500		225		225	100		
Storage Blk Time (%)		6						0	1	1	
Queuing Penalty (veh)		6						0	1	0	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	35	212	351	157
Average Queue (ft)	7	78	152	78
95th Queue (ft)	28	173	311	134
Link Distance (ft)		1054	1287	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	384	652	115	621	143	192	180	199
Average Queue (ft)	96	284	23	274	62	88	84	89
95th Queue (ft)	287	582	88	534	113	157	147	163
Link Distance (ft)		1287		1159		1624		1621
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	500		500		100		175	
Storage Blk Time (%)		4		3	4	8	1	1
Queuing Penalty (veh)		6		1	4	7	1	1

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	33	25	58	4	260	82
Average Queue (ft)	6	2	23	0	95	28
95th Queue (ft)	26	13	50	3	221	65
Link Distance (ft)		1159		1380	1682	276
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500		500			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	R	L	T	T	R
Maximum Queue (ft)	292	413	322	250	176	372	589	230	224	312	305	196
Average Queue (ft)	124	191	190	48	88	118	261	68	102	194	182	62
95th Queue (ft)	229	320	284	135	156	253	478	160	186	280	273	138
Link Distance (ft)		1380					1224	1224		1656	1656	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225		225	225	400	400			300			225
Storage Blk Time (%)	1	4	4	0			3		0	0	3	0
Queuing Penalty (veh)	6	23	19	0			6		0	1	7	0

Intersection: 7: Montana Ave & Custer Ave

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	318	465	399
Average Queue (ft)	208	192	168
95th Queue (ft)	341	381	314
Link Distance (ft)		1633	1633
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	230		
Storage Blk Time (%)	18	1	
Queuing Penalty (veh)	36	3	

Intersection: 8: Sanders St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	274	432	515	235	329	463	445	132	114	183	250	438
Average Queue (ft)	87	224	265	81	101	225	211	58	40	75	180	112
95th Queue (ft)	212	388	456	245	265	441	425	113	88	147	265	319
Link Distance (ft)		1224	1224			425	425		1651			1264
Upstream Blk Time (%)						2	1					
Queuing Penalty (veh)						11	7					
Storage Bay Dist (ft)	175			135	230			150		300	150	
Storage Blk Time (%)	0	17	26		0	10		0	0		25	0
Queuing Penalty (veh)	0	17	23		0	13		1	0		39	1

Intersection: 8: Sanders St & Custer Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	126
Average Queue (ft)	39
95th Queue (ft)	86
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	150
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: I-15 SB On & Custer Ave & I-15 SB Off

Movement	EB	EB	WB	WB	WB	SB	SB	
Directions Served	T	Т	Т	T	R	<	R	
Maximum Queue (ft)	143	138	208	176	18	150	115	
Average Queue (ft)	30	21	79	58	1	57	43	
95th Queue (ft)	95	80	174	142	10	118	95	
Link Distance (ft)	425	425	767	767		669	669	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)					300			
Storage Blk Time (%)		0		0				
Queuing Penalty (veh)		0		0				

Intersection: 10: I-15 NB Off/I-15 NB On & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	L	Т	T	T	Т	R	L	LT	R
Maximum Queue (ft)	87	260	246	354	367	233	238	246	127
Average Queue (ft)	37	105	105	158	157	30	148	161	56
95th Queue (ft)	73	203	203	292	292	119	224	228	101
Link Distance (ft)		767	767	1143	1143			1350	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	500					150	400		400
Storage Blk Time (%)					9				
Queuing Penalty (veh)					8				

Intersection: 11: Washington St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	Т	R	L	T	T	R	L	Т	R	L
Maximum Queue (ft)	355	251	253	66	156	274	278	49	365	235	131	168
Average Queue (ft)	158	125	136	13	69	154	155	8	188	84	51	72
95th Queue (ft)	288	221	227	42	132	247	248	28	313	173	102	135
Link Distance (ft)		1143	1143			1198	1198			1706		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350			350	400			300	350		350	150
Storage Blk Time (%)	0	0	0				0		1			1
Queuing Penalty (veh)	1	0	0				0		3			1

Intersection: 11: Washington St & Custer Ave

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	156	54
Average Queue (ft)	63	11
95th Queue (ft)	128	36
Link Distance (ft)	1069	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)	1	
Queuing Penalty (veh)	1	

Network Summary

Network wide Queuing Penalty: 294

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	3.1	0.1	1.6	
Total Del/Veh (s)	0.3	6.8	4.6	10.5	5.6	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.3	2.0	0.4
Total Del/Veh (s)	15.6	17.0	30.5	36.9	20.6

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.9	1.1	1.0
Total Del/Veh (s)	22.5	19.7	31.9	73.8	26.9

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	1.4	0.3
Total Del/Veh (s)	32.8	75.7	46.5	58.5	51.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.2	0.1	0.1
Total Del/Veh (s)	6.9	9.5	257.5	132.1	25.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.0	0.5
Total Del/Veh (s)	51.8	57.0	47.8	74.1	56.5

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	2.0	4.3	0.9
Total Del/Veh (s)	54.0	51.9	32.2	86.2	54.1

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	8.0	0.2	0.4
Total Del/Veh (s)	8.3	49.1	32.6	28.2

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB	WB	NB	All
Denied Del/Veh (s)	0.0	1 /	1.0	0.9
Defiled Del/Veri (S)	0.0	1.4	1.0	0.9
Total Del/Veh (s)	16.6	34.7	46.1	29.5

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	1.1	2.7	2.9	1.3
Total Del/Veh (s)	34.8	44.9	34.6	44.1	37.6

Denied Del/Veh (s)	2.2
Total Del/Veh (s)	118.3

Lane	EB	WB	NB	NB	SB	All
Movements Served	LTR	LTR	LT	R	LTR	
Denied Del/Veh (s)						1.6
Total Del/Veh (s)	0.3	6.8	68.5	1.7	10.2	5.6

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									0.4	
Total Del/Veh (s)	17.6	14.5	8.8	18.2	49.3	30.0	50.1	24.6	20.6	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	All	
Movements Served	L	T	R	L	TR	L	T	R	L	TR		
Denied Del/Veh (s)											1.0	
Total Del/Veh (s)	21.6	25.1	3.6	25.6	17.7	47.3	55.9	20.6	113.2	36.5	26.9	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All	
Movements Served	L	Т	TR	LR		
Denied Del/Veh (s)					0.0	
Total Del/Veh (s)	13.9	10.5	12.6	46.8	13.3	

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									0.3	
Total Del/Veh (s)	40.5	31.2	31.1	76.8	41.0	49.5	74.4	42.2	51.9	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							0.1
Total Del/Veh (s)	11.2	6.9	20.9	8.4	253.4	132.1	25.1

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Movements Served	L	T	T	R	L	L	Т	R	L	Т	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	82.1	59.7	45.3	6.1	68.1	86.1	81.0	13.2	48.2	63.1	56.9	16.8

7: Montana Ave & Custer Ave Performance by lane

Lane	SB	SB	SB	All
Movements Served	L	T	TR	
Denied Del/Veh (s)				0.5
Total Del/Veh (s)	106.2	70.5	49.0	56.5

8: Sanders St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Movements Served	L	T	T	R	L	Т	TR	L	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	45.2	57.1	63.6	4.0	38.8	56.3	51.1	41.2	44.3	24.3	78.8	201.2

8: Sanders St & Custer Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Del/Veh (s)		0.9
Total Del/Veh (s)	13.6	54.1

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by lane

Lane	EB	EB	EB	WB	WB	WB	SB	SB	All
Movements Served	Т	Т	R	Т	Т	R	<	R	
Denied Del/Veh (s)									0.4
Total Del/Veh (s)	9.9	11.4	0.9	55.9	51.7	1.7	31.9	33.1	28.2

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	All	
Movements Served	L	Т	Т	Т	Т	R	L	LT	R		
Denied Del/Veh (s)										0.9	
Total Del/Veh (s)	19.6	16.1	16.5	38.2	38.7	2.7	55.3	60.0	17.2	29.5	

11: Washington St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Movements Served	L	T	T	R	L	T	T	R	L	T	R	L
Denied Del/Veh (s)												
Total Del/Veh (s)	47.0	35.8	33.9	2.8	35.7	55.5	51.6	8.6	38.8	51.6	11.4	38.8

11: Washington St & Custer Ave Performance by lane

Lane	SB	SB	All
Movements Served	Т	R	
Denied Del/Veh (s)			1.3
Total Del/Veh (s)	72.2	6.2	37.6

Denied Del/Veh (s)	2.2
Total Del/Veh (s)	118.3

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	3.1	0.1	1.6
Total Del/Veh (s)	0.3	6.8	4.6	10.5	5.6
Stop/Veh	0.00	0.04	0.08	1.00	0.09
Avg Speed (mph)	24	30	27	18	28
Fuel Used (gal)	0.2	5.4	3.3	0.2	9.0

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	0.3	2.0	0.4	
Total Del/Veh (s)	15.6	17.0	30.5	36.9	20.6	
Stop/Veh	0.50	0.38	0.91	0.88	0.54	
Avg Speed (mph)	24	21	10	16	20	
Fuel Used (gal)	7.7	6.3	0.7	2.4	17.1	

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.9	1.1	1.0
Total Del/Veh (s)	22.5	19.7	31.9	73.8	26.9
Stop/Veh	0.52	0.50	0.75	0.85	0.60
Avg Speed (mph)	18	18	16	9	16
Fuel Used (gal)	5.3	6.2	6.2	1.5	19.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	10.5	12.6	46.8	13.3
Stop/Veh	0.14	0.26	0.89	0.23
Avg Speed (mph)	22	23	12	21
Fuel Used (gal)	7.8	8.5	1.2	17.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.0	0.0	1.0	1.4	0.3	
Total Del/Veh (s)	32.8	75.7	46.5	58.5	51.9	
Stop/Veh	0.62	1.05	0.88	0.96	0.83	
Avg Speed (mph)	14	8	12	10	11	
Fuel Used (gal)	9.5	7.8	2.3	4.7	24.2	

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	0.2	0.1	0.1
Total Del/Veh (s)	6.9	9.5	257.5	132.1	25.1
Stop/Veh	0.01	0.12	0.98	0.97	0.13
Avg Speed (mph)	23	25	4	1	16
Fuel Used (gal)	8.3	8.2	3.0	0.3	19.8

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.0	0.5
Total Del/Veh (s)	51.8	57.0	47.8	74.1	56.5
Stop/Veh	0.76	0.71	0.79	0.91	0.78
Avg Speed (mph)	12	11	14	11	12
Fuel Used (gal)	11.9	14.8	12.0	9.9	48.5

Total Zone Performance

Denied Del/Veh (s)	1.7
Total Del/Veh (s)	1239.8
Stop/Veh	19.10
Avg Speed (mph)	15
Fuel Used (gal)	155.3

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.3	5.4	5.4	0.4	11.4
Vehicles Entered	24	458	541	33	1056

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.2	7.6	1.7	4.5	21.9
Vehicles Entered	564	632	116	243	1555

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.1	9.5	12.3	3.6	33.6
Vehicles Entered	d 576	801	650	104	2131

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	9.1	9.6	2.6	21.3
Vehicles Entered	956	855	98	1909

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	18.2	22.0	4.9	11.0	56.1
Vehicles Entered	1018	756	188	368	2330

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.0	8.9	10.2	1.2	30.4
Vehicles Entered	1007	828	118	30	1983

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	23.9	27.6	24.0	22.9	98.5
Vehicles Entered	1053	1195	1069	769	4086

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	27.7	24.4	11.2	15.4	78.7
Vehicles Entered	1239	1390	490	434	3553

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	8.9	26.8	2.2	37.9
Vehicles Entered	1582	1460	147	3189

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB	WB	NB	All
Travel Time (hr)	e (hr) 11.0	17.9	15.1	44.0
Vehicles Entered	ntered 1263	1099	623	2985

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	r) 20.9	12.6	18.1	5.2	56.8
Vehicles Entered	red 1311	653	935	274	3173

Total Network Performance

Travel Time (hr)	574.0	
Vehicles Entered	8352	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	NB	SB
Directions Served	LTR	LT	R	LTR
Maximum Queue (ft)	64	65	98	52
Average Queue (ft)	14	18	20	22
95th Queue (ft)	49	50	69	48
Link Distance (ft)	1779	1291		990
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB	
Directions Served	L	TR	L	TR	L	TR	L	TR	
Maximum Queue (ft)	169	224	70	333	37	166	166	194	
Average Queue (ft)	73	84	26	139	3	65	81	69	
95th Queue (ft)	133	178	56	278	20	128	141	142	
Link Distance (ft)		1779		1291		759		1492	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	100		500		75		100		
Storage Blk Time (%)	4	6			0	13	9	3	
Queuing Penalty (veh)	16	10			0	0	11	4	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	TR	L	T	R	L	TR	
Maximum Queue (ft)	39	372	249	175	318	230	286	301	154	142	
Average Queue (ft)	9	203	36	86	161	101	63	144	60	42	
95th Queue (ft)	32	317	131	148	294	179	174	263	125	109	
Link Distance (ft)		1291			1054		1511			1653	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		175	500		225		225	100		
Storage Blk Time (%)		11				0	0	4	9	1	
Queuing Penalty (veh)		9				0	0	9	5	0	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	33	265	308	151
Average Queue (ft)	4	94	155	79
95th Queue (ft)	21	207	294	135
Link Distance (ft)		1054	1287	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB	
Directions Served	L	TR	L	TR	L	TR	L	TR	
Maximum Queue (ft)	418	676	492	976	126	184	248	414	
Average Queue (ft)	135	325	57	616	56	88	162	158	
95th Queue (ft)	324	595	309	1103	100	155	264	364	
Link Distance (ft)		1287		1159		1624		1621	
Upstream Blk Time (%)				1					
Queuing Penalty (veh)				8					
Storage Bay Dist (ft)	500		500		100		175		
Storage Blk Time (%)		3		27	1	8	18	3	
Queuing Penalty (veh)		6		5	1	6	33	5	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	33	31	107	126	490	124
Average Queue (ft)	6	3	42	18	249	44
95th Queue (ft)	25	18	84	136	538	106
Link Distance (ft)		1159		1380	1682	276
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500		500			
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	R	L	T	T	R
Maximum Queue (ft)	322	576	325	275	199	469	916	530	303	382	383	325
Average Queue (ft)	182	269	231	79	115	195	387	82	124	246	235	110
95th Queue (ft)	308	463	331	224	175	439	853	354	240	349	345	255
Link Distance (ft)		1380					1224	1224		1656	1656	
Upstream Blk Time (%)							0	0				
Queuing Penalty (veh)							1	0				
Storage Bay Dist (ft)	225		225	225	400	400			300			225
Storage Blk Time (%)	10	11	10	0			12		0	3	12	0
Queuing Penalty (veh)	85	76	53	0			32		1	6	32	0

Intersection: 7: Montana Ave & Custer Ave

Movement	SB	SB	SB
Directions Served	L	Т	TR
Maximum Queue (ft)	311	518	487
Average Queue (ft)	233	278	256
95th Queue (ft)	365	574	521
Link Distance (ft)		1633	1633
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	230		
Storage Blk Time (%)	33	1	
Queuing Penalty (veh)	73	3	

Intersection: 8: Sanders St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	R	L	T
Maximum Queue (ft)	275	551	561	235	330	476	459	157	152	265	250	722
Average Queue (ft)	184	371	403	116	239	417	397	78	55	125	213	284
95th Queue (ft)	343	532	559	291	433	541	529	145	112	228	289	794
Link Distance (ft)		1224	1224			425	425		1651			1264
Upstream Blk Time (%)						20	15					3
Queuing Penalty (veh)						140	105					0
Storage Bay Dist (ft)	175			135	230			150		300	150	
Storage Blk Time (%)	1	37	43		0	35		1	0	0	50	0
Queuing Penalty (veh)	6	54	44		2	58		4	1	0	83	0

Intersection: 8: Sanders St & Custer Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	190
Average Queue (ft)	47
95th Queue (ft)	118
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	150
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: I-15 SB On & Custer Ave & I-15 SB Off

Movement	EB	EB	WB	WB	WB	SB	SB		
Directions Served	T	Т	Т	T	R	<	R		
Maximum Queue (ft)	232	214	597	592	250	128	121		
Average Queue (ft)	84	68	349	324	104	46	50		
95th Queue (ft)	180	162	751	746	389	97	102		
Link Distance (ft)	425	425	767	767		669	669		
Upstream Blk Time (%)			2	2					
Queuing Penalty (veh)			17	15					
Storage Bay Dist (ft)					300				
Storage Blk Time (%)		1		22					
Queuing Penalty (veh)		3		30					

Intersection: 10: I-15 NB Off/I-15 NB On & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	
Directions Served	L	Т	T	T	Т	R	L	LT	R	
Maximum Queue (ft)	165	389	396	484	489	250	284	292	174	
Average Queue (ft)	57	183	188	265	260	71	175	180	74	
95th Queue (ft)	127	339	343	545	553	227	255	263	131	
Link Distance (ft)		767	767	1143	1143			1350		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500					150	400		400	
Storage Blk Time (%)		0			21	0				
Queuing Penalty (veh)		0			25	0				

Intersection: 11: Washington St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	Т	R	L	Т	R	L
Maximum Queue (ft)	408	416	351	72	160	282	280	68	422	503	245	188
Average Queue (ft)	194	175	180	15	70	161	154	15	247	177	80	90
95th Queue (ft)	361	329	299	49	129	251	250	46	397	360	160	155
Link Distance (ft)		1143	1143			1198	1198			1706		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	350			350	400			300	350		350	150
Storage Blk Time (%)	3	0	0			0	0		4	0		2
Queuing Penalty (veh)	9	0	0			0	0		21	0		3

Intersection: 11: Washington St & Custer Ave

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	159	37
Average Queue (ft)	64	10
95th Queue (ft)	130	27
Link Distance (ft)	1069	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)	0	
Queuing Penalty (veh)	1	

Network Summary

Network wide Queuing Penalty: 1114

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	0.4	0.1	0.2	
Total Del/Veh (s)	1.9	6.7	4.2	2.3	5.6	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	3.0	1.1
Total Del/Veh (s)	17.9	13.3	32.7	41.6	25.9

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	2.8	1.2	0.6
Total Del/Veh (s)	14.2	12.5	25.2	47.6	19.4

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	1.3	0.4
Total Del/Veh (s)	18.4	19.6	39.6	40.1	25.6

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB W	В	NB	SB	All
Denied Del/Veh (s)	0.0 0		0.7	0.1	0.1
Total Del/Veh (s)	5.0 8	4	23.4	38.5	8.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.5	1.2	0.6
Total Del/Veh (s)	37.0	33.7	31.2	29.7	33.0

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	648.5

Lane	EB	WB	NB	SB	All	
Movements Served	LTR	LTR	LTR	LTR		
Denied Del/Veh (s)					0.2	
Total Del/Veh (s)	2.5	6.7	4.2	2.3	5.6	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											1.1	
Total Del/Veh (s)	13.4	19.3	13.1	15.4	4.1	38.2	32.6	40.8	58.2	26.0	25.9	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	T	R	L	Т	R	L	TR	
Denied Del/Veh (s)												0.6
Total Del/Veh (s)	13.0	17.7	3.4	17.5	11.7	1.4	47.9	56.4	11.2	51.5	43.8	19.4

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All	
Movements Served	L	Т	TR	LR		
Denied Del/Veh (s)					0.0	
Total Del/Veh (s)	11.8	6.0	8.0	52.3	9.5	

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	Т	TR	L	Т	R	L	TR	L	TR		
Denied Del/Veh (s)											0.4	
Total Del/Veh (s)	19.8	19.4	16.8	16.7	23.6	3.3	45.7	37.0	40.4	40.1	25.6	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	T	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	10.3	4.1	5.4	14.3	7.7	8.7	56.4	13.1	38.5	8.1	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	Т	Т	R	L	Т
Denied Del/Veh (s)												
Total Del/Veh (s)	56.0	66.5	36.5	47.5	8.2	45.1	53.6	38.3	39.9	2.5	28.8	41.7

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	38.5	7.5	27.1	36.8	32.5	5.8	33.0

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	648.5

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	29	28	23	29
Fuel Used (gal)	0.0	5.6	2.5	0.1	8.2
Fuel Eff. (mpg)	31.9	30.5	34.3	30.9	31.7

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.51	0.40	0.91	0.79	0.61
Avg Speed (mph)	23	24	9	15	18
Fuel Used (gal)	5.0	5.6	1.1	5.1	16.7
Fuel Eff. (mpg)	26.0	25.8	22.4	31.3	27.3

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.40	0.40	0.84	0.88	0.53	
Avg Speed (mph)	21	21	18	12	18	
Fuel Used (gal)	5.5	4.9	2.6	2.7	15.6	
Fuel Eff. (mpg)	26.0	29.5	30.9	25.5	27.8	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.10	0.14	0.88	0.16
Avg Speed (mph)	26	25	12	23
Fuel Used (gal)	5.7	6.9	1.1	13.6
Fuel Eff. (mpg)	26.2	26.8	25.1	26.4

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.46	0.48	0.90	0.86	0.60
Avg Speed (mph)	18	17	13	13	15
Fuel Used (gal)	6.5	5.1	2.4	5.1	19.1
Fuel Eff. (mpg)	29.1	28.4	26.9	26.8	28.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.11	0.18	0.91	0.91	0.20	
Avg Speed (mph)	24	26	16	4	24	
Fuel Used (gal)	6.9	7.3	0.9	0.1	15.3	
Fuel Eff. (mpg)	27.6	25.6	29.7	13.0	26.6	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.67	0.55	0.72	0.65	0.63
Avg Speed (mph)	14	15	18	19	16
Fuel Used (gal)	8.5	9.2	3.7	9.2	30.7
Fuel Eff. (mpg)	24.6	24.4	30.2	31.7	27.4

Stop/Veh	14.00
Avg Speed (mph)	19
Fuel Used (gal)	119.2
Fuel Used (gal) Fuel Eff. (mpg)	27.6

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.0	5.9	3.1	0.1	9.2	
Vehicles Entered	4	528	373	13	918	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	5.7	6.1	2.6	11.1	25.5
Vehicles Entered	d 373	563	166	561	1663

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.8	6.8	4.7	5.8	24.1
Vehicles Entered	562	701	274	218	1755

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB W	В	SB	All
Travel Time (hr)	hr) 5.8 7	3	2.3	15.5
Vehicles Entered	red 712 73		83	1526

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.4	8.6	5.0	11.0	35.1
Vehicles Entered	763	650	208	450	2071

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.8	7.3	1.7	0.4	17.3
Vehicles Entered	834	697	85	32	1648

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.1	14.8	6.3	16.0	52.2
Vehicles Entered	819	911	358	945	3033

Travel Time (hr)	178.9	
Vehicles Entered	3920	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	4	15	9
Average Queue (ft)	0	1	0
95th Queue (ft)	4	8	6
Link Distance (ft)	1256	1708	928
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	130	220	172	156	59	44	226	192	395	199	
Average Queue (ft)	37	91	65	71	13	5	96	110	149	102	
95th Queue (ft)	84	176	129	135	40	27	191	186	357	187	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	0	8					22	13	15	11	
Queuing Penalty (veh)	1	8					1	53	56	40	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	30	298	173	158	240	33	123	105	144	160	176	
Average Queue (ft)	4	128	38	68	98	7	42	35	51	74	77	
95th Queue (ft)	19	249	103	120	199	24	91	84	106	138	147	
Link Distance (ft)		1290			1054			1511			1642	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500		175	500		250	225		225	100		
Storage Blk Time (%)		4			0				0	10	6	
Queuing Penalty (veh)		6			1				0	11	6	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	Т	TR	LR
Maximum Queue (ft)	40	170	230	150
Average Queue (ft)	9	57	88	65
95th Queue (ft)	32	134	205	124
Link Distance (ft)		1054	1286	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	R	L	TR	L	TR	
Maximum Queue (ft)	110	255	223	85	482	58	134	193	270	324	
Average Queue (ft)	51	115	117	36	208	16	49	81	108	154	
95th Queue (ft)	96	194	184	75	385	46	101	158	202	265	
Link Distance (ft)		1286			1152	1152		1612		1608	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		150	500			100		175		
Storage Blk Time (%)		3	3		0		1	8	2	9	
Queuing Penalty (veh)		12	12		0		1	6	6	16	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	36	85	112	87	179	132	63	80	69	
Average Queue (ft)	5	24	47	29	50	22	24	37	28	
95th Queue (ft)	24	66	96	69	133	80	57	68	61	
Link Distance (ft)		1152	1152		1362	1362		1664	258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500			50			
Storage Blk Time (%)							6	5		
Queuing Penalty (veh)							4	1		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	Т
Maximum Queue (ft)	86	163	262	300	162	164	176	225	221	65	140	141
Average Queue (ft)	24	45	137	177	47	73	90	115	110	23	59	70
95th Queue (ft)	61	103	234	270	107	139	152	198	187	50	109	122
Link Distance (ft)			1362	1362				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)			1	4								
Queuing Penalty (veh)			1	8								

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	Т	R
Maximum Queue (ft)	134	61	306	310	264	74
Average Queue (ft)	42	18	146	151	138	23
95th Queue (ft)	96	46	257	250	229	53
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			2	1	1	
Queuing Penalty (veh)			7	3	1	

Zone Summary

Zone wide Queuing Penalty: 261

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	0.7	0.1	0.4	
Total Del/Veh (s)	2.0	7.0	4.8	2.3	5.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	3.0	0.5
Total Del/Veh (s)	17.0	13.5	36.4	29.7	20.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	2.8	1.2	0.8
Total Del/Veh (s)	15.8	12.8	31.7	49.0	20.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Defiled Deli Veri (3)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	9.9	7.0	48.8	10.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	1.1	1.2	0.3
Total Del/Veh (s)	12.2	17.4	45.2	43.3	21.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.8	0.1	0.1
Total Del/Veh (s)	7.5	13.1	17.4	28.1	10.8

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.0	0.0	1.2	1.3	0.6	
Total Del/Veh (s)	47.8	34.7	37.8	34.8	38.9	

Denied Del/Veh (s)	1.4
Total Del/Veh (s)	779.6

Lane	EB	WB	NB	SB	All	
Movements Served	LTR	LTR	LTR	LTR		
Denied Del/Veh (s)					0.4	
Total Del/Veh (s)	2.2	7.0	4.8	2.3	5.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											0.5	
Total Del/Veh (s)	14.2	18.6	13.3	19.9	3.0	45.0	36.2	42.3	46.8	3.6	20.7	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Denied Del/Veh (s)												0.8
Total Del/Veh (s)	12.8	18.4	2.1	22.7	8.6	1.2	52.1	57.9	17.7	53.3	45.0	20.4

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All	
Movements Served	L	Т	TR	LR		
Denied Del/Veh (s)					0.0	
Total Del/Veh (s)	15.7	9.8	7.0	48.8	10.8	

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	T	TR	L	Т	R	L	TR	L	TR		
Denied Del/Veh (s)											0.3	
Total Del/Veh (s)	17.9	13.0	8.6	12.7	20.2	5.1	49.8	41.8	56.3	32.8	21.2	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	17.5	7.2	7.6	23.0	12.4	12.6	45.6	10.8	28.1	10.8	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	Т	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	57.1	74.5	48.4	52.5	5.8	48.7	61.1	40.5	44.9	7.8	31.3	52.3

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	47.9	11.3	40.4	38.4	35.0	5.1	38.9

Denied Del/Veh (s)	1.4
Total Del/Veh (s)	779.6

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	29	27	23	28
Fuel Used (gal)	0.1	3.8	3.3	0.2	7.3
Fuel Eff. (mpg)	32.2	29.4	36.1	30.6	32.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.51	0.44	0.89	0.78	0.58
Avg Speed (mph)	23	23	9	18	20
Fuel Used (gal)	6.7	4.8	1.5	2.0	15.0
Fuel Eff. (mpg)	26.3	27.4	21.6	30.1	26.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.38	0.41	0.81	0.91	0.53	
Avg Speed (mph)	20	21	16	12	18	
Fuel Used (gal)	5.5	5.9	4.5	1.1	17.0	
Fuel Eff. (mpg)	26.4	24.6	29.8	25.1	26.6	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.19	0.12	0.89	0.20
Avg Speed (mph)	23	20	12	20
Fuel Used (gal)	6.4	6.2	1.2	13.7
Fuel Eff. (mpg)	26.8	30.0	25.8	28.1

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.39	0.37	0.91	0.89	0.50
Avg Speed (mph)	18	18	12	12	16
Fuel Used (gal)	7.6	5.5	2.3	3.0	18.4
Fuel Eff. (mpg)	29.2	28.1	25.8	26.2	28.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.21	0.32	0.75	0.74	0.30	
Avg Speed (mph)	23	23	18	5	22	
Fuel Used (gal)	7.4	7.6	1.1	0.1	16.2	
Fuel Eff. (mpg)	27.1	25.2	31.1	15.7	26.4	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.73	0.53	0.72	0.68	0.66
Avg Speed (mph)	12	15	16	17	15
Fuel Used (gal)	10.5	11.0	9.5	7.7	38.7
Fuel Eff. (mpg)	22.9	22.1	29.8	30.3	25.8

Stop/Veh	16.17
Stop/Veh Avg Speed (mph)	18
Fuel Used (gal)	126.3
Fuel Used (gal) Fuel Eff. (mpg)	27.1

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.1	3.8	4.4	0.3	8.6	
Vehicles Entered	13	336	508	38	895	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.7	5.6	3.7	3.6	20.6
Vehicles Entered	ed 514	510	222	216	1462

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.2	7.0	8.8	2.4	25.4
Vehicles Entered	581	694	463	89	1827

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB W	B SB	All
Travel Time (hr)	e (hr) 7.6 9.	2.5	19.1
Vehicles Entered	ntered 816 72		1635

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	12.1	8.6	5.1	6.6	32.3
Vehicles Entered	878	681	197	258	2014

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.9	8.4	2.0	0.3	19.6
Vehicles Entered	886	705	108	34	1733

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	19.8	16.6	17.5	13.9	67.9
Vehicles Entered	919	998	894	754	3565

Travel Time (hr)	193.5	
Vehicles Entered	4023	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	9	4	4
Average Queue (ft)	0	0	0
95th Queue (ft)	6	5	5
Link Distance (ft)	1708	1227	928
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	180	263	101	206	71	66	277	150	118	64	
Average Queue (ft)	65	102	37	85	31	7	130	71	29	18	
95th Queue (ft)	137	210	77	169	62	37	231	125	80	43	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	2	8		0			33	4	0	0	
Queuing Penalty (veh)	6	16		0			2	5	0	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	T	R	L	TR	
Maximum Queue (ft)	48	346	163	228	152	30	167	127	228	85	90	
Average Queue (ft)	13	136	23	93	56	7	80	53	97	37	34	
95th Queue (ft)	40	264	88	176	122	24	143	105	188	75	73	
Link Distance (ft)		1290			1054			1511			1642	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500		175	500		250	225		225	100		
Storage Blk Time (%)		5					0		1	0	0	
Queuing Penalty (veh)		5					1		1	0	0	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	37	288	265	163
Average Queue (ft)	6	112	68	77
95th Queue (ft)	26	243	189	137
Link Distance (ft)		1054	1286	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	R	L	TR	L	TR	
Maximum Queue (ft)	127	182	184	60	396	59	141	177	176	186	
Average Queue (ft)	58	89	97	19	179	15	59	78	83	71	
95th Queue (ft)	104	158	166	48	344	45	113	148	148	141	
Link Distance (ft)		1286			1152	1152		1612		1608	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	500		150	500			100		175		
Storage Blk Time (%)		1	1				3	8	1	0	
Queuing Penalty (veh)		4	5				3	6	2	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	34	143	152	77	264	244	66	96	70	
Average Queue (ft)	7	68	76	29	97	61	17	39	24	
95th Queue (ft)	29	120	131	65	218	169	51	74	59	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							0	2		
Queuing Penalty (veh)							0	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	T	Т	R	L	T
Maximum Queue (ft)	144	244	350	362	275	182	201	248	250	181	188	297
Average Queue (ft)	70	89	194	214	34	77	95	114	112	57	87	180
95th Queue (ft)	123	165	294	313	120	146	164	205	201	129	153	269
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	5	9								0
Queuing Penalty (veh)		0	8	11								0

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	Т	R
Maximum Queue (ft)	288	186	293	278	205	65
Average Queue (ft)	167	60	161	123	109	18
95th Queue (ft)	261	129	269	216	187	47
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	3		3	0	0	
Queuing Penalty (veh)	5		7	1	0	

Zone Summary

Zone wide Queuing Penalty: 89

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	0.7	0.1	0.4	
Total Del/Veh (s)	2.3	6.6	4.8	2.2	5.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.3	3.2	0.5
Total Del/Veh (s)	12.5	8.5	31.5	29.6	14.9

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	3.0	1.1	1.0
Total Del/Veh (s)	19.9	11.9	38.8	53.4	24.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	11.7	9.5	49.3	12.7

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	1.7	0.3
Total Del/Veh (s)	18.4	27.3	46.2	80.1	33.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	2.0	0.1	0.2
Total Del/Veh (s)	7.6	15.3	16.4	28.4	11.8

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.3	0.6
Total Del/Veh (s)	50.6	31.9	43.0	41.6	41.4

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	760.8

Lane	EB	WB	NB	SB	All	
Movements Served	LTR	LTR	LTR	LTR		
Denied Del/Veh (s)					0.4	
Total Del/Veh (s)	2.3	6.6	4.8	2.2	5.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											0.5	
Total Del/Veh (s)	11.0	13.2	10.1	11.4	2.2	65.0	31.2	44.5	59.8	3.5	14.9	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	R	L	T	R	L	T	R	L	TR	
Denied Del/Veh (s)												1.0
Total Del/Veh (s)	14.5	22.3	3.4	24.2	8.8	1.6	63.2	63.9	23.3	55.6	51.2	24.2

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All	
Movements Served	L	Т	TR	LR		
Denied Del/Veh (s)					0.0	
Total Del/Veh (s)	22.8	11.6	9.5	49.3	12.7	

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	Т	TR	L	T	R	L	TR	L	TR		
Denied Del/Veh (s)											0.3	
Total Del/Veh (s)	33.3	17.8	11.2	14.6	31.0	8.0	45.2	46.9	83.0	77.0	33.2	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.2	
Total Del/Veh (s)	19.1	7.3	7.6	29.2	14.3	13.2	50.3	12.0	29.3	11.8	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	64.0	74.6	52.9	55.7	6.9	45.0	58.6	37.9	42.2	7.5	36.3	59.1

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	53.9	14.0	53.6	44.4	38.8	6.2	41.4

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	760.8

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.03	0.00
Avg Speed (mph)	23	29	27	23	28
Fuel Used (gal)	0.2	4.4	3.5	0.2	8.2
Fuel Eff. (mpg)	32.3	30.6	36.6	30.5	33.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.43	0.30	0.92	0.80	0.47
Avg Speed (mph)	25	26	10	18	22
Fuel Used (gal)	7.3	5.7	8.0	2.2	16.0
Fuel Eff. (mpg)	26.8	27.0	22.7	30.0	27.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.46	0.33	0.83	0.92	0.55
Avg Speed (mph)	19	22	14	11	17
Fuel Used (gal)	5.4	6.2	6.5	1.3	19.4
Fuel Eff. (mpg)	27.4	27.6	29.1	24.8	27.9

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.22	0.10	0.89	0.20
Avg Speed (mph)	21	24	12	21
Fuel Used (gal)	7.8	8.1	1.3	17.2
Fuel Eff. (mpg)	25.7	27.6	25.5	26.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.45	0.46	0.87	0.95	0.56
Avg Speed (mph)	18	15	12	9	14
Fuel Used (gal)	9.1	6.8	2.2	5.1	23.3
Fuel Eff. (mpg)	28.0	26.1	25.5	21.7	25.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.18	0.36	0.78	0.76	0.31
Avg Speed (mph)	23	21	18	5	21
Fuel Used (gal)	8.1	8.9	1.3	0.1	18.5
Fuel Eff. (mpg)	28.0	25.4	30.8	15.6	26.9

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.77	0.44	0.75	0.73	0.66
Avg Speed (mph)	12	15	15	15	14
Fuel Used (gal)	12.2	13.8	11.7	8.0	45.8
Fuel Eff. (mpg)	22.7	21.7	28.9	28.9	25.1

Stop/Veh	14.03
Avg Speed (mph)	17
Fuel Used (gal)	148.3
Fuel Used (gal) Fuel Eff. (mpg)	26.6

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.3	4.7	4.7	0.2	9.9
Vehicles Entered	25	454	545	29	1053

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.7	5.9	1.8	4.0	19.5
Vehicles Entered	562	649	121	237	1569

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.8	7.9	13.7	2.9	32.4
Vehicles Entered	578	820	654	105	2157

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	9.4	9.2	2.8	21.4
Vehicles Entered	955	879	102	1936

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	14.0	12.1	4.8	13.1	44.0
Vehicles Entered	1022	779	181	363	2345

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.0	10.6	2.4	0.3	23.2
Vehicles Entered	987	851	127	33	1998

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	23.6	19.4	22.7	15.3	81.0	
Vehicles Entered	1049	1213	1078	753	4093	

Travel Time (hr)	231.3	
Vehicles Entered	4564	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	24	14	13
Average Queue (ft)	1	1	1
95th Queue (ft)	12	8	9
Link Distance (ft)	1708	1227	928
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	126	190	73	160	75	27	165	156	119	52	
Average Queue (ft)	55	83	33	75	31	3	68	73	21	19	
95th Queue (ft)	102	170	62	146	63	16	128	130	71	39	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	1	5					14	6	0		
Queuing Penalty (veh)	5	10					0	7	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	42	372	274	180	162	44	237	259	287	92	103	
Average Queue (ft)	7	182	40	84	59	11	118	73	141	41	39	
95th Queue (ft)	29	307	150	150	127	34	214	173	252	81	84	
Link Distance (ft)		1290			1054			1511			1642	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500		175	500		250	225		225	100		
Storage Blk Time (%)		8					2	0	3	1	1	
Queuing Penalty (veh)		7					11	0	7	0	0	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	31	324	200	161
Average Queue (ft)	6	144	69	79
95th Queue (ft)	26	285	163	139
Link Distance (ft)		1054	1286	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	R	L	TR	L	TR	
Maximum Queue (ft)	196	195	193	97	583	122	128	176	249	416	
Average Queue (ft)	97	114	115	13	234	23	54	81	154	191	
95th Queue (ft)	174	185	181	75	470	89	101	146	262	685	
Link Distance (ft)		1286			1152	1152		1612		1608	
Upstream Blk Time (%)										1	
Queuing Penalty (veh)										0	
Storage Bay Dist (ft)	500		150	500			100		175		
Storage Blk Time (%)		2	2		1		1	6	19	2	
Queuing Penalty (veh)		11	11		0		2	5	35	4	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	46	128	136	116	292	255	85	110	78	
Average Queue (ft)	7	64	70	49	119	73	16	50	25	
95th Queue (ft)	30	113	121	94	252	197	53	91	63	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				50		
Storage Blk Time (%)							2	10		
Queuing Penalty (veh)							3	1		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	T	T	R	L	T
Maximum Queue (ft)	144	320	421	430	325	182	198	216	214	142	245	386
Average Queue (ft)	72	108	240	253	75	90	106	103	102	53	97	238
95th Queue (ft)	126	231	364	376	247	163	176	187	188	107	182	346
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	13	17								3
Queuing Penalty (veh)		0	24	24								5

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	Т	R
Maximum Queue (ft)	405	308	305	306	254	62
Average Queue (ft)	231	104	165	143	127	21
95th Queue (ft)	348	241	278	256	222	47
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	10	0	6	0	0	
Queuing Penalty (veh)	26	1	12	1	0	

Zone Summary

Zone wide Queuing Penalty: 211

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	0.5	0.1	0.2	
Total Del/Veh (s)	2.3	7.0	4.2	2.4	5.8	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.3	3.0	1.0
Total Del/Veh (s)	16.7	13.5	31.9	31.6	22.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.8	1.3	0.6
Total Del/Veh (s)	12.6	8.5	23.1	45.7	17.0

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB WB	SB	All
Denied Del/Veh (s)	eh (s) 0.0 0.0	0.2	0.0
Total Del/Veh (s)		50.8	7.4

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.9	1.8	0.5
Total Del/Veh (s)	19.3	13.6	41.0	29.0	21.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach
Denied Del/Veh (s)
Total Del/Veh (s)

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.5	1.2	0.6
Total Del/Veh (s)	37.1	32.6	29.9	29.6	32.5

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	613.0

Lane	EB	WB	NB	SB	All		
Movements Served	LTR	LTR	LTR	LTR			
Denied Del/Veh (s)					0.2		
Total Del/Veh (s)	2.3	7.0	4.2	2.3	5.8		

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											1.0	
Total Del/Veh (s)	12.7	18.1	14.0	15.8	1.0	48.1	31.7	39.8	51.7	5.5	22.1	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Denied Del/Veh (s)												0.6
Total Del/Veh (s)	13.7	15.9	2.1	15.2	6.6	1.9	48.4	60.8	5.5	46.7	45.1	17.0

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	T	T	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	9.7	4.0	3.7	5.2	6.9	51.4	7.4

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	Т	Т	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	15.4	18.9	20.8	14.6	14.6	14.7	2.6	44.2	39.5	41.4	47.9	6.5

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.5	
Total Del/Veh (s)	21.8	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	T	TR	L	T	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	9.4	4.5	6.0	13.8	6.6	6.6	60.0	13.0	37.9	7.8	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	48.1	65.2	37.6	47.1	8.8	44.5	54.3	36.0	37.5	2.8	27.5	40.1

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	37.5	8.1	28.1	35.7	31.9	5.1	32.5

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	613.0

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	29	28	23	28
Fuel Used (gal)	0.0	5.8	2.5	0.1	8.4
Fuel Eff. (mpg)	32.6	29.8	34.3	31.4	31.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.49	0.41	0.91	0.74	0.59
Avg Speed (mph)	23	23	9	17	20
Fuel Used (gal)	4.9	5.2	1.1	4.6	15.8
Fuel Eff. (mpg)	26.1	27.8	22.6	33.8	28.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.33	0.28	0.84	0.88	0.46	
Avg Speed (mph)	22	24	18	12	19	
Fuel Used (gal)	5.5	4.7	2.5	2.8	15.5	
Fuel Eff. (mpg)	25.6	31.2	31.1	25.7	28.2	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.13	0.10	0.90	0.16
Avg Speed (mph)	28	27	12	25
Fuel Used (gal)	5.8	7.4	1.1	14.2
Fuel Eff. (mpg)	25.8	25.3	25.0	25.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.53	0.39	0.89	0.81	0.59
Avg Speed (mph)	18	19	13	15	16
Fuel Used (gal)	6.4	4.8	2.4	4.8	18.4
Fuel Eff. (mpg)	29.7	29.5	26.7	28.3	28.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.10	0.19	0.90	0.84	0.19
Avg Speed (mph)	24	27	16	4	24
Fuel Used (gal)	7.1	6.9	0.9	0.1	15.0
Fuel Eff. (mpg)	26.9	26.8	29.7	12.9	26.9

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.68	0.57	0.71	0.65	0.64
Avg Speed (mph)	14	15	19	19	16
Fuel Used (gal)	8.4	8.9	3.7	9.3	30.3
Fuel Eff. (mpg)	24.6	24.7	30.6	31.6	27.5

Stop/Veh	14.06
Stop/Veh Avg Speed (mph)	19
Fuel Used (gal)	117.6
Fuel Used (gal) Fuel Eff. (mpg)	27.9

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.0	6.0	3.1	0.1	9.3
Vehicles Entered	3	532	370	13	918

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	5.5	6.2	2.6	9.4	23.7
Vehicles Entered	375	569	169	552	1665

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.4	6.1	4.4	6.0	22.9
Vehicles Entered	556	705	271	228	1760

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	hr) 5.4	6.9	2.4	14.7
Vehicles Entered	ered 712	742	86	1540

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.7	7.3	5.1	9.6	32.7
Vehicles Entered	767	633	208	448	2056

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.0	6.9	1.7	0.4	17.0
Vehicles Entered	830	681	83	31	1625

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	14.8	14.3	6.2	16.0	51.4
Vehicles Entered	810	896	358	950	3014

Travel Time (hr)	171.7	
Vehicles Entered	3915	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	SB
Directions Served	LTR
Maximum Queue (ft)	8
Average Queue (ft)	0
95th Queue (ft)	6
Link Distance (ft)	928
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	147	207	146	191	40	30	209	196	268	186	
Average Queue (ft)	38	87	63	78	9	4	96	103	119	47	
95th Queue (ft)	90	171	118	156	32	20	178	171	211	120	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	0	7					22	12	13	0	
Queuing Penalty (veh)	0	6					1	49	50	1	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	31	283	188	166	138	23	126	107	88	163	187	
Average Queue (ft)	4	113	31	59	43	3	53	42	47	81	88	
95th Queue (ft)	21	235	109	117	107	15	104	90	78	142	161	
Link Distance (ft)		1290			1055	1055		1512			1642	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500		175	500			225		225	100		
Storage Blk Time (%)		3								8	7	
Queuing Penalty (veh)		4								9	8	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	Т	Т	Т	TR	LR
Maximum Queue (ft)	36	105	120	117	57	160
Average Queue (ft)	9	36	45	53	14	68
95th Queue (ft)	32	82	93	106	44	129
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	Т	TR	L	Т	T	R	L	TR	L	T	R
Maximum Queue (ft)	108	209	229	94	222	201	76	116	192	195	178	107
Average Queue (ft)	47	116	142	33	96	82	18	46	86	101	67	43
95th Queue (ft)	87	185	210	72	194	175	55	96	167	172	135	78
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						1		1	10	1	0	
Queuing Penalty (veh)						1		2	7	3	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	32	67	107	86	148	165	81	84	79	
Average Queue (ft)	6	19	43	31	36	42	23	36	29	
95th Queue (ft)	26	55	88	70	103	117	60	68	63	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							1	1		
Queuing Penalty (veh)							1	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Maximum Queue (ft)	66	152	276	324	255	142	164	234	227	72	135	141
Average Queue (ft)	19	44	141	173	50	73	88	112	113	26	59	67
95th Queue (ft)	51	99	241	270	130	128	143	197	198	56	111	123
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	2	4					0			
Queuing Penalty (veh)		0	1	7					0			

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	122	71	302	322	284	75
Average Queue (ft)	40	20	151	153	140	21
95th Queue (ft)	93	50	269	255	232	52
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			3	1	1	
Queuing Penalty (veh)			8	2	1	

Zone Summary

Zone wide Queuing Penalty: 164

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	0.7	0.1	0.4	
Total Del/Veh (s)	2.0	6.5	4.6	2.3	5.2	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	3.0	0.5
Total Del/Veh (s)	15.7	11.0	33.4	29.4	18.9

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	2.8	1.2	8.0
Total Del/Veh (s)	15.5	13.1	24.8	50.0	18.8

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	4.4	7.3	47.9	8.2

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	1.8	0.3
Total Del/Veh (s)	9.6	11.8	40.9	35.2	16.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.8	0.1	0.1
Total Del/Veh (s)	9.4	10.9	18.4	27.5	10.8

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.4	0.6
Total Del/Veh (s)	46.9	35.3	38.4	35.9	39.2

Denied Del/Veh (s)	1.4
Total Del/Veh (s)	716.9

Lane	EB	WB	NB	SB	All			
Movements Served	LTR	LTR	LTR	LTR			•	
Denied Del/Veh (s)					0.4			
Total Del/Veh (s)	2.0	6.5	4.6	2.3	5.2			

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											0.5	
Total Del/Veh (s)	13.4	17.0	11.1	16.0	2.4	40.9	33.2	40.7	46.9	3.4	18.9	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	T	R	L	Т	R	L	TR	
Denied Del/Veh (s)												0.8
Total Del/Veh (s)	15.6	17.9	2.6	20.6	10.0	3.1	53.8	57.8	7.0	53.4	47.7	18.8

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	8.6	4.6	4.2	7.4	6.9	47.9	8.2

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	Т	T	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	16.2	8.3	8.4	13.9	12.6	13.5	2.3	43.1	39.4	50.8	57.7	6.7

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.3	
Total Del/Veh (s)	16.8	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	18.9	8.9	9.5	19.5	10.1	10.5	49.5	11.0	27.5	10.8	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	57.3	72.1	48.9	51.0	6.1	52.2	63.3	38.7	47.0	7.3	31.5	53.7

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	48.2	11.3	41.6	39.6	36.4	5.0	39.2

Denied Del/Veh (s)	1.4
Total Del/Veh (s)	716.9

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	30	28	23	28
Fuel Used (gal)	0.1	3.7	3.2	0.2	7.2
Fuel Eff. (mpg)	32.5	30.4	35.9	30.9	32.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.49	0.38	0.88	0.75	0.55
Avg Speed (mph)	24	25	9	18	20
Fuel Used (gal)	6.6	4.9	1.4	2.1	14.9
Fuel Eff. (mpg)	26.5	27.0	22.3	30.1	26.8

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.41	0.40	0.80	0.90	0.53
Avg Speed (mph)	21	20	18	11	19
Fuel Used (gal)	5.6	5.9	4.2	1.2	16.9
Fuel Eff. (mpg)	26.1	25.0	31.4	25.3	27.0

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.10	0.21	0.87	0.19
Avg Speed (mph)	27	20	12	22
Fuel Used (gal)	6.7	6.5	1.1	14.3
Fuel Eff. (mpg)	25.7	28.8	25.7	27.1

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.33	0.32	0.90	0.90	0.46
Avg Speed (mph)	19	20	13	14	17
Fuel Used (gal)	7.2	5.3	2.4	2.9	17.8
Fuel Eff. (mpg)	31.0	29.2	26.5	27.4	29.3

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.28	0.28	0.79	0.81	0.32
Avg Speed (mph)	21	24	17	5	22
Fuel Used (gal)	7.4	7.3	1.1	0.1	15.8
Fuel Eff. (mpg)	27.2	26.4	30.6	16.2	27.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.71	0.53	0.71	0.69	0.66
Avg Speed (mph)	12	14	16	17	15
Fuel Used (gal)	10.5	11.2	9.3	8.0	38.9
Fuel Eff. (mpg)	22.7	22.0	29.7	30.1	25.7

Stop/Veh	15.54
Stop/Veh Avg Speed (mph)	18
Fuel Used (gal)	125.8
Fuel Used (gal) Fuel Eff. (mpg)	27.2

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.1	3.8	4.3	0.3	8.4
Vehicles Entered	11	340	498	38	887

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.4	5.3	3.4	3.6	19.8
Vehicles Entered	502	512	219	221	1454

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.1	7.3	7.7	2.7	24.7
Vehicles Entered	578	708	456	98	1840

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB W	SB SB	All
Travel Time (hr)	6.3 9.3	2 2.5	18.0
Vehicles Entered	817 74	92	1651

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	11.5	7.6	5.0	6.0	30.1
Vehicles Entered	886	687	206	259	2038

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	9.4	8.0	1.9	0.3	19.6
Vehicles Entered	889	714	101	26	1730

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	19.5	17.1	17.1	14.6	68.3
Vehicles Entered	913	1013	872	779	3577

Travel Time (hr)	188.9	
Vehicles Entered	4011	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	10	4
Average Queue (ft)	0	0
95th Queue (ft)	7	5
Link Distance (ft)	1708	928
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	T	R	L	TR	L	Т	R	
Maximum Queue (ft)	180	205	90	191	62	76	254	151	111	66	
Average Queue (ft)	65	89	35	71	28	8	123	74	29	17	
95th Queue (ft)	133	180	72	155	56	42	214	129	77	44	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	1	7		0			30	5	0		
Queuing Penalty (veh)	5	13		0			2	6	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	50	283	151	231	181	38	165	121	128	85	107	
Average Queue (ft)	12	144	24	89	62	6	79	56	65	39	39	
95th Queue (ft)	39	250	81	175	141	25	143	104	106	76	86	
Link Distance (ft)		1290			1055	1055		1512			1642	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500		175	500			225		225	100		
Storage Blk Time (%)		5					0			0	1	
Queuing Penalty (veh)		5					0			0	0	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	Т	TR	LR
Maximum Queue (ft)	35	123	126	273	194	152
Average Queue (ft)	5	32	35	93	39	71
95th Queue (ft)	24	89	91	219	121	125
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	142	158	177	67	209	193	84	129	175	185	104	75
Average Queue (ft)	57	64	78	20	83	67	18	59	75	84	31	31
95th Queue (ft)	109	129	148	52	174	153	58	109	146	152	76	59
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						1		2	7	1		
Queuing Penalty (veh)						1		3	6	2		

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	40	179	196	74	209	225	78	100	66	
Average Queue (ft)	8	86	99	27	60	68	19	40	20	
95th Queue (ft)	32	153	173	60	156	173	54	75	52	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							1	2		
Queuing Penalty (veh)							1	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	133	209	306	339	247	192	208	252	255	195	198	297
Average Queue (ft)	67	87	189	210	40	79	97	118	124	56	85	178
95th Queue (ft)	116	162	289	311	141	155	171	217	227	131	162	269
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	6	9								0
Queuing Penalty (veh)		0	9	11								1

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	290	222	312	292	236	97
Average Queue (ft)	167	60	168	131	116	20
95th Queue (ft)	264	139	283	231	199	61
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	3	0	5	0	0	
Queuing Penalty (veh)	6	0	10	1	0	

Zone Summary

Zone wide Queuing Penalty: 84

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	0.7	0.1	0.4	
Total Del/Veh (s)	2.3	6.3	4.8	2.3	5.3	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.3	3.2	0.5
Total Del/Veh (s)	12.0	7.3	31.8	29.4	14.2

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	3.0	1.2	1.0
Total Del/Veh (s)	18.5	12.0	27.2	50.1	20.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	h EB WB	SB	All
Denied Del/Veh (s)	Del/Veh (s) 0.0 0.0	0.2	0.0
Total Del/Veh (s)		46.4	8.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	1.4	0.3
Total Del/Veh (s)	11.9	15.3	43.6	36.7	19.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	1.9	0.1	0.2
Total Del/Veh (s)	9.1	12.7	15.8	26.0	11.3

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.3	0.6
Total Del/Veh (s)	48.2	32.2	41.6	37.7	39.8

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	713.8

Lane	EB	WB	NB	SB	All		
Movements Served	LTR	LTR	LTR	LTR			
Denied Del/Veh (s)					0.4		
Total Del/Veh (s)	2.2	6.3	4.8	2.3	5.3		

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											0.5	
Total Del/Veh (s)	10.6	12.7	7.3	10.0	2.2	58.3	31.1	45.5	54.2	3.7	14.2	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	T	R	L	Т	R	L	TR	
Denied Del/Veh (s)												1.0
Total Del/Veh (s)	16.5	20.7	2.7	20.0	10.7	3.1	54.5	60.0	9.6	49.1	51.1	20.2

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	T	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	11.9	4.6	4.1	8.7	8.4	46.4	8.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	Т	Т	R	L	TR	L	TR	R
Denied Del/Veh (s)												
Total Del/Veh (s)	23.5	9.7	8.9	15.9	16.4	18.3	3.4	37.6	47.3	53.2	28.1	6.8

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.3	
Total Del/Veh (s)	19.5	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	T	TR	L	T	TR	L	TR	LTR		
Denied Del/Veh (s)										0.2	
Total Del/Veh (s)	16.3	8.5	9.4	27.7	10.9	11.9	53.0	11.5	26.0	11.3	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	Т	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	51.6	69.8	51.6	54.0	5.9	41.6	56.8	38.7	44.8	8.3	36.7	55.8

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	50.8	14.9	48.2	40.2	35.5	6.8	39.8

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	713.8

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.03	0.00
Avg Speed (mph)	23	29	27	22	28
Fuel Used (gal)	0.2	4.3	3.3	0.2	8.0
Fuel Eff. (mpg)	31.4	31.0	36.3	30.6	33.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.43	0.25	0.94	0.80	0.45
Avg Speed (mph)	25	27	10	18	23
Fuel Used (gal)	7.0	5.8	8.0	2.2	15.9
Fuel Eff. (mpg)	26.8	26.0	22.8	30.2	26.8

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.44	0.35	0.78	0.92	0.53	
Avg Speed (mph)	19	22	17	12	18	
Fuel Used (gal)	5.2	6.0	5.9	1.3	18.4	
Fuel Eff. (mpg)	27.0	28.8	31.6	25.2	28.9	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.10	0.20	0.86	0.19
Avg Speed (mph)	27	25	12	24
Fuel Used (gal)	8.1	8.7	1.3	18.1
Fuel Eff. (mpg)	24.4	25.6	25.5	25.0

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.36	0.34	0.87	0.89	0.48
Avg Speed (mph)	21	19	12	13	17
Fuel Used (gal)	8.1	6.6	2.2	4.1	20.9
Fuel Eff. (mpg)	31.1	27.5	25.9	26.9	28.6

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.25	0.32	0.77	0.75	0.32	
Avg Speed (mph)	22	23	18	5	22	
Fuel Used (gal)	7.9	8.4	1.3	0.1	17.7	
Fuel Eff. (mpg)	28.7	26.7	31.3	16.4	27.9	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.75	0.46	0.74	0.70	0.65
Avg Speed (mph)	12	15	16	16	15
Fuel Used (gal)	12.1	13.7	11.6	8.0	45.4
Fuel Eff. (mpg)	22.7	21.7	29.2	29.6	25.3

Stop/Veh	14.84
Stop/Veh Avg Speed (mph)	18
Fuel Used (gal)	144.4
Fuel Used (gal) Fuel Eff. (mpg)	27.1

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.2	4.6	4.5	0.2	9.6
Vehicles Entered	24	448	523	30	1025

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.4	5.6	1.8	4.0	18.9
Vehicles Entered	544	644	120	241	1549

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.3	8.0	11.3	2.9	29.4
Vehicles Entered	559	819	645	108	2131

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	7.3	9.0	2.7	19.0
Vehicles Entered	937	878	101	1916

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	12.0	9.6	4.8	8.5	34.8
Vehicles Entered	1006	787	186	359	2338

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.4	9.9	2.3	0.3	22.9
Vehicles Entered	978	851	129	32	1990

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	22.7	19.4	22.3	14.7	79.1
Vehicles Entered	1041	1206	1077	763	4087

Travel Time (hr)	213.7	
Vehicles Entered	4551	

Queuing Penalty (veh)

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	7	25	11	19
Average Queue (ft)	0	1	1	1
95th Queue (ft)	5	12	8	9
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	161	194	63	139	82	32	190	155	83	57	
Average Queue (ft)	60	83	27	59	30	3	66	71	19	20	
95th Queue (ft)	119	167	56	120	65	17	137	126	55	42	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	1	5					15	5	0		
Queuing Penalty (veh)	4	9					0	6	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	32	335	186	164	239	47	217	173	216	93	130	
Average Queue (ft)	6	164	28	83	95	10	103	68	88	37	39	
95th Queue (ft)	25	287	116	144	192	31	184	133	161	78	91	
Link Distance (ft)		1290			1055	1055		1512			1642	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500		175	500			225		225	100		
Storage Blk Time (%)		8					1	0	0	0	1	
Queuing Penalty (veh)		6					6	0	1	0	1	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	Т	Т	Т	TR	LR
Maximum Queue (ft)	31	110	114	232	184	154
Average Queue (ft)	4	37	41	97	49	80
95th Queue (ft)	20	93	92	203	130	139
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	Т	Т	R	L	TR	L	TR	R
Maximum Queue (ft)	168	151	155	44	208	206	85	132	200	226	224	84
Average Queue (ft)	83	72	80	12	96	89	27	53	85	129	60	25
95th Queue (ft)	145	131	139	38	186	179	63	103	157	210	142	57
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						3	0	1	8	6	0	
Queuing Penalty (veh)						3	0	1	6	10	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	34	179	192	105	254	271	104	122	61	
Average Queue (ft)	7	87	99	43	79	92	16	52	23	
95th Queue (ft)	27	156	175	88	183	209	60	94	56	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							1	3		
Queuing Penalty (veh)							1	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	127	312	407	432	324	184	197	237	238	184	241	353
Average Queue (ft)	68	102	234	254	71	89	106	102	111	59	102	227
95th Queue (ft)	117	225	363	392	242	164	177	189	201	132	184	318
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	12	16							0	2
Queuing Penalty (veh)		0	22	22							0	3

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	367	301	291	305	236	70
Average Queue (ft)	219	96	156	137	120	20
95th Queue (ft)	316	206	266	235	198	48
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	8	0	4	0	0	
Queuing Penalty (veh)	21	0	8	1	0	

Zone Summary

Zone wide Queuing Penalty: 132

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.4	0.1	0.2
Total Del/Veh (s)	2.0	6.4	4.1	2.3	5.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.0	1.1
Total Del/Veh (s)	11.5	9.9	18.2	35.0	19.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.9	1.2	0.6
Total Del/Veh (s)	13.7	9.8	22.4	43.3	17.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	5.2	5.1	50.4	7.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	1.9	0.5
Total Del/Veh (s)	16.4	13.5	40.5	30.0	21.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.7	0.1	0.1
Total Del/Veh (s)	5.6	6.7	21.8	37.9	7.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.5	1.2	0.6
Total Del/Veh (s)	36.4	34.6	30.4	29.9	33.1

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	588.7

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.2
Total Del/Veh (s)	2.7	6.4	4.1	2.3	5.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	Т	TR	L	Т	R	LT	R	L	Т	R	
Denied Del/Veh (s)												1.1
Total Del/Veh (s)	10.8	11.8	11.7	9.3	11.7	3.6	54.5	6.0	44.5	56.7	5.8	19.7

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												0.6
Total Del/Veh (s)	22.8	13.0	14.1	14.2	9.2	6.1	52.5	60.6	5.6	43.8	42.8	17.3

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	10.3	5.3	4.9	5.1	5.2	50.4	7.8

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	T	R	L	TR	L	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	14.4	16.6	17.0	17.9	14.5	14.2	2.0	40.7	40.4	41.4	49.4	6.1

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.5	
Total Del/Veh (s)	21.0	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	T	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	6.7	4.4	6.4	16.8	5.8	6.0	52.7	11.7	37.9	7.6	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	T	R	L	L	T	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	47.4	64.2	36.1	46.3	8.1	46.9	58.0	37.9	39.0	2.7	28.8	41.8

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	36.4	7.5	27.4	36.2	33.0	5.5	33.1

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	588.7

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	29	28	23	29
Fuel Used (gal)	0.0	5.7	2.5	0.1	8.2
Fuel Eff. (mpg)	33.5	30.4	34.1	30.2	31.5

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.41	0.32	0.90	0.80	0.56
Avg Speed (mph)	26	26	13	16	20
Fuel Used (gal)	4.8	5.4	0.9	4.8	15.9
Fuel Eff. (mpg)	25.9	26.5	27.2	33.1	28.4

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.42	0.36	0.85	0.85	0.52
Avg Speed (mph)	21	23	19	12	19
Fuel Used (gal)	5.4	4.7	2.4	2.6	15.1
Fuel Eff. (mpg)	25.8	30.9	31.5	26.2	28.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.15	0.12	0.88	0.18
Avg Speed (mph)	26	27	12	24
Fuel Used (gal)	5.8	7.2	1.1	14.1
Fuel Eff. (mpg)	25.3	25.6	25.4	25.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.43	0.39	0.90	0.80	0.55
Avg Speed (mph)	19	19	13	14	17
Fuel Used (gal)	6.3	4.6	2.5	4.9	18.3
Fuel Eff. (mpg)	29.9	30.6	26.7	28.0	29.1

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.12	0.15	0.90	0.88	0.19
Avg Speed (mph)	24	27	16	4	24
Fuel Used (gal)	7.0	6.9	0.9	0.1	14.8
Fuel Eff. (mpg)	27.3	26.7	29.9	12.6	27.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.67	0.56	0.72	0.66	0.64
Avg Speed (mph)	14	15	18	19	16
Fuel Used (gal)	8.4	9.1	3.7	9.2	30.3
Fuel Eff. (mpg)	24.7	24.3	30.3	31.6	27.3

Stop/Veh	13.68
Avg Speed (mph)	19
Fuel Used (gal) Fuel Eff. (mpg)	116.9
Fuel Eff. (mpg)	27.9

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.0	6.0	3.0	0.1	9.1
Vehicles Entered	4	532	359	14	909

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	4.8	5.5	2.0	10.2	22.5
Vehicles Entered	362	560	173	567	1662

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.6	6.3	4.2	5.7	22.8
Vehicles Entered	557	695	259	220	1731

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	5.5	6.7	2.4	14.7
Vehicles Entered	701	732	87	1520

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	9.9	7.3	5.2	9.9	32.3
Vehicles Entered	758	632	215	457	2062

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.0	6.8	1.6	0.4	16.9
Vehicles Entered	830	681	81	33	1625

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	14.7	14.9	6.2	16.0	51.7
Vehicles Entered	808	902	354	937	3001

Travel Time (hr)	170.0	
Vehicles Entered	3906	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	15	7	3
Average Queue (ft)	1	0	0
95th Queue (ft)	8	5	3
Link Distance (ft)	1708	1227	928
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	R	LT	R	L	Т	R	
Maximum Queue (ft)	87	97	95	117	130	34	117	101	199	331	187	
Average Queue (ft)	31	34	35	48	44	5	41	45	117	142	52	
95th Queue (ft)	64	77	77	90	99	21	88	76	192	257	135	
Link Distance (ft)		1708			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					100		100	
Storage Blk Time (%)	0	0	0						16	16	0	
Queuing Penalty (veh)	0	0	1						66	61	1	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	32	182	210	154	178	110	125	111	92	171	184	
Average Queue (ft)	4	78	98	61	66	26	51	39	46	81	92	
95th Queue (ft)	20	151	181	115	142	75	103	86	77	141	157	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)										8	10	
Queuing Penalty (veh)										9	11	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	Т	T	TR	LR
Maximum Queue (ft)	38	126	142	135	104	160
Average Queue (ft)	8	40	46	47	25	70
95th Queue (ft)	30	103	109	109	73	128
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	106	172	190	100	187	184	59	138	187	199	179	100
Average Queue (ft)	44	84	105	37	78	72	14	51	90	107	74	42
95th Queue (ft)	85	149	170	75	158	154	44	100	160	181	140	74
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						2		1	10	2	0	
Queuing Penalty (veh)						1		1	7	5	1	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	36	111	147	102	124	145	82	84	81	
Average Queue (ft)	4	27	50	28	25	30	21	35	29	
95th Queue (ft)	22	78	113	74	82	94	59	69	68	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							1	1		
Queuing Penalty (veh)							0	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	T	T	R	L	T
Maximum Queue (ft)	84	116	255	279	114	150	196	217	221	73	152	140
Average Queue (ft)	24	44	139	171	42	68	89	108	114	24	58	69
95th Queue (ft)	63	96	227	261	87	125	151	186	190	56	116	119
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	0	0	1	4	0							
Queuing Penalty (veh)	0	0	1	7	0							

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	Ţ	R	L	T	T	R
Maximum Queue (ft)	121	67	281	286	273	94
Average Queue (ft)	39	19	147	149	142	23
95th Queue (ft)	90	50	251	241	233	69
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			2	1	1	
Queuing Penalty (veh)			5	3	1	

Zone Summary

Zone wide Queuing Penalty: 181

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	0.6	0.1	0.4	
Total Del/Veh (s)	2.2	6.2	4.6	2.2	5.1	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.0	0.5
Total Del/Veh (s)	11.1	9.5	22.3	29.2	15.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.8	1.1	0.8
Total Del/Veh (s)	11.7	9.0	24.9	47.3	15.7

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	4.8	4.9	49.6	7.3

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	1.0	0.2
Total Del/Veh (s)	11.5	12.6	43.2	30.8	17.7

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.8	0.1	0.1
Total Del/Veh (s)	7.3	11.1	17.7	34.1	10.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.4	0.6
Total Del/Veh (s)	49.4	37.8	40.9	40.8	42.1

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	715.9

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.4
Total Del/Veh (s)	2.2	6.2	4.6	2.2	5.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	Т	TR	L	Т	R	LT	R	L	Т	R	
Denied Del/Veh (s)												0.5
Total Del/Veh (s)	10.7	11.7	10.4	9.6	13.3	3.3	54.0	5.8	41.7	50.0	3.4	15.0

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	T	R	L	TR	
Denied Del/Veh (s)												0.8
Total Del/Veh (s)	12.7	11.6	11.8	15.4	6.2	4.6	51.8	59.3	8.2	46.2	48.1	15.7

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	T	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	9.1	4.8	4.7	5.1	4.8	49.6	7.3

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	T	T	R	L	TR	L	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	13.8	11.4	10.8	12.9	13.8	14.3	2.3	44.4	41.9	47.3	49.8	6.2

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.2	
Total Del/Veh (s)	17.7	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	T	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	16.3	7.0	7.4	21.4	10.3	10.5	47.6	11.4	34.1	10.0	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	T	R	L	L	Т	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	58.1	72.7	51.4	55.1	6.1	52.6	68.0	43.1	49.5	7.1	31.5	57.9

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	51.6	11.5	57.3	38.7	33.5	5.0	42.1

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	715.9

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	30	28	23	28
Fuel Used (gal)	0.1	3.7	3.2	0.2	7.2
Fuel Eff. (mpg)	33.3	29.9	36.0	31.0	32.7

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.42	0.36	0.89	0.78	0.52
Avg Speed (mph)	26	26	11	18	22
Fuel Used (gal)	6.7	4.5	1.2	2.1	14.5
Fuel Eff. (mpg)	26.1	28.5	25.4	29.9	27.3

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.36	0.33	0.81	0.91	0.49	
Avg Speed (mph)	23	23	18	12	20	
Fuel Used (gal)	5.4	5.8	4.2	1.1	16.4	
Fuel Eff. (mpg)	26.4	25.6	31.5	25.8	27.4	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.13	0.12	0.90	0.17
Avg Speed (mph)	27	21	12	22
Fuel Used (gal)	6.4	6.4	1.1	14.0
Fuel Eff. (mpg)	26.1	29.3	25.1	27.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.41	0.34	0.90	0.84	0.49
Avg Speed (mph)	19	20	12	14	17
Fuel Used (gal)	7.1	5.2	2.4	2.7	17.5
Fuel Eff. (mpg)	30.6	29.5	26.1	28.1	29.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.21	0.28	0.77	0.79	0.28	
Avg Speed (mph)	23	24	17	4	22	
Fuel Used (gal)	7.2	7.4	1.1	0.1	15.8	
Fuel Eff. (mpg)	27.0	26.1	30.9	14.0	26.8	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.75	0.53	0.75	0.68	0.68
Avg Speed (mph)	12	14	16	16	14
Fuel Used (gal)	10.3	11.4	9.5	8.1	39.4
Fuel Eff. (mpg)	22.6	21.4	29.4	29.0	25.2

Stop/Veh	15.42
Stop/Veh Avg Speed (mph)	18
Fuel Used (gal)	124.7
Fuel Used (gal) Fuel Eff. (mpg)	27.2

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.1	3.7	4.2	0.3	8.3
Vehicles Entered	13	336	492	38	879

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.7	5.0	2.7	3.6	18.0
Vehicles Entered	503	505	216	219	1443

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.3	6.4	7.7	2.3	22.8
Vehicles Entered	563	707	460	88	1818

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	6.3	8.8	2.4	17.4
Vehicles Entered	802	738	86	1626

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	11.7	7.7	5.3	5.4	30.0
Vehicles Entered	865	678	208	250	2001

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.6	8.1	2.0	0.3	19.0
Vehicles Entered	863	713	107	28	1711

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	19.8	17.7	18.1	15.3	70.9
Vehicles Entered	893	1008	887	762	3550

Travel Time (hr)	186.6	
Vehicles Entered	3986	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	6	8	19
Average Queue (ft)	0	0	1
95th Queue (ft)	4	5	8
Link Distance (ft)	1708	1227	928
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	R	LT	R	L	T	R	
Maximum Queue (ft)	119	106	90	85	169	72	130	76	137	115	70	
Average Queue (ft)	53	39	33	31	66	19	59	43	65	27	19	
95th Queue (ft)	97	84	75	66	141	51	109	68	117	72	48	
Link Distance (ft)		1708			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					100		100	
Storage Blk Time (%)	1	0	0						4	0		
Queuing Penalty (veh)	3	1	0						4	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	46	151	163	196	75	70	164	132	156	73	105	
Average Queue (ft)	13	72	79	76	20	15	73	56	72	33	41	
95th Queue (ft)	41	133	141	149	58	46	136	109	126	67	84	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)									0	0	1	
Queuing Penalty (veh)									0	0	0	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	Т	Т	Т	TR	LR
Maximum Queue (ft)	33	112	114	177	165	151
Average Queue (ft)	4	41	44	43	34	70
95th Queue (ft)	22	95	100	122	105	126
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	T	R
Maximum Queue (ft)	122	198	218	66	202	200	78	153	193	151	105	66
Average Queue (ft)	52	91	106	16	83	78	19	66	90	77	33	28
95th Queue (ft)	98	169	186	46	175	170	64	126	163	135	76	53
Link Distance (ft)		1280	1280		1152	1152			1612		1596	1596
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		
Storage Blk Time (%)						2		3	8	0	0	
Queuing Penalty (veh)						2		3	7	0	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	38	137	146	83	215	225	68	104	72	
Average Queue (ft)	6	65	73	28	59	65	18	42	24	
95th Queue (ft)	26	114	129	64	151	158	49	80	59	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							0	2		
Queuing Penalty (veh)							0	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	147	280	398	402	277	183	208	269	287	158	198	313
Average Queue (ft)	69	93	197	215	45	80	100	121	127	50	88	190
95th Queue (ft)	128	186	318	331	155	150	169	221	231	115	164	283
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	7	10								1
Queuing Penalty (veh)		0	12	13								1

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	308	198	325	361	275	67
Average Queue (ft)	182	59	207	137	112	17
95th Queue (ft)	276	134	319	284	209	44
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	4		10	0	0	
Queuing Penalty (veh)	8		21	0	0	

Zone Summary

Zone wide Queuing Penalty: 78

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.6	0.1	0.4
Total Del/Veh (s)	2.5	6.1	4.7	2.3	5.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.2	3.2	0.5
Total Del/Veh (s)	9.4	5.3	17.8	31.0	11.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.9	1.2	0.9
Total Del/Veh (s)	17.7	8.6	26.5	48.7	18.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB WB	SB	All
Denied Del/Veh (s)	Veh (s) 0.0 0.0	0.2	0.0
Total Del/Veh (s)		50.3	8.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	2.0	0.4
Total Del/Veh (s)	11.5	14.9	44.2	41.6	20.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	2.0	0.1	0.2
Total Del/Veh (s)	9.4	12.1	15.3	28.8	11.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.3	1.3	0.6
Total Del/Veh (s)	52.1	30.8	43.7	39.0	41.3

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	681.3

Lane	EB	WB	NB	SB	All		
Movements Served	LTR	LTR	LTR	LTR			
Denied Del/Veh (s)					0.4		
Total Del/Veh (s)	2.4	6.1	4.7	2.3	5.2		

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	T	TR	L	Т	R	LT	R	L	Т	R	
Denied Del/Veh (s)												0.5
Total Del/Veh (s)	10.4	9.7	7.4	6.8	7.1	3.0	54.8	5.2	48.0	60.5	3.4	11.7

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	T	R	L	TR	
Denied Del/Veh (s)												0.9
Total Del/Veh (s)	16.4	16.9	18.6	14.2	7.0	6.5	48.9	58.4	9.9	47.9	49.5	18.3

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	T	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	7.9	5.4	5.2	6.9	7.4	50.3	8.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	T	Т	R	L	TR	L	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	21.5	10.0	8.9	16.7	15.8	17.8	2.7	36.2	49.3	64.8	69.8	7.5

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.4	
Total Del/Veh (s)	20.0	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	T	TR	L	T	TR	L	TR	LTR		
Denied Del/Veh (s)										0.2	
Total Del/Veh (s)	20.0	8.8	9.7	27.7	10.4	10.8	46.4	11.3	28.8	11.2	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	T	R	L	L	T	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	63.0	73.4	55.0	57.5	6.8	42.1	54.0	36.3	42.9	7.3	37.2	60.0

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	54.3	14.5	49.1	41.8	37.0	6.1	41.3

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	681.3

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	29	28	23	28
Fuel Used (gal)	0.2	4.2	3.4	0.2	7.9
Fuel Eff. (mpg)	31.3	31.6	36.3	31.0	33.6

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.38	0.21	0.93	0.80	0.42
Avg Speed (mph)	27	29	13	17	24
Fuel Used (gal)	7.3	5.5	0.6	2.2	15.6
Fuel Eff. (mpg)	26.2	27.1	28.0	29.8	27.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.48	0.30	0.77	0.89	0.52
Avg Speed (mph)	20	24	17	12	19
Fuel Used (gal)	5.4	5.7	5.7	1.2	18.0
Fuel Eff. (mpg)	27.1	30.1	31.6	25.3	29.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.12	0.18	0.91	0.19
Avg Speed (mph)	26	26	12	24
Fuel Used (gal)	8.1	8.4	1.3	17.9
Fuel Eff. (mpg)	24.5	26.2	25.3	25.3

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.34	0.33	0.87	0.88	0.46
Avg Speed (mph)	21	19	12	12	17
Fuel Used (gal)	8.2	6.2	2.3	4.2	20.8
Fuel Eff. (mpg)	30.8	28.6	26.0	26.2	28.7

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.25	0.31	0.78	0.75	0.32
Avg Speed (mph)	22	23	18	5	22
Fuel Used (gal)	8.1	8.2	1.3	0.1	17.7
Fuel Eff. (mpg)	28.5	27.0	31.4	15.6	28.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.77	0.45	0.77	0.70	0.67
Avg Speed (mph)	12	16	15	16	14
Fuel Used (gal)	12.6	13.3	11.8	8.1	45.8
Fuel Eff. (mpg)	22.3	21.9	29.0	29.4	25.1

Stop/Veh	14.07
Stop/Veh Avg Speed (mph)	19
Fuel Used (gal)	143.8
Fuel Used (gal) Fuel Eff. (mpg)	27.2

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.2	4.5	4.6	0.2	9.6
Vehicles Entered	23	445	529	31	1028

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.1	5.2	1.4	4.0	17.7
Vehicles Entered	552	635	122	234	1543

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.3	7.2	11.0	2.7	28.1
Vehicles Entered	574	815	636	99	2124

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB V	3	SB	All
Travel Time (hr)	7.6 8	 5	2.9	19.0
Vehicles Entered	943 8	3	105	1921

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	12.0	9.4	4.8	9.0	35.1
Vehicles Entered	1013	776	192	360	2341

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.6	9.6	2.4	0.3	22.9
Vehicles Entered	997	836	131	32	1996

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	24.3	18.6	23.0	15.2	81.1
Vehicles Entered	1064	1180	1081	770	4095

Travel Time (hr)	213.6	
Vehicles Entered	4563	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	7	18	11	10
Average Queue (ft)	0	1	0	0
95th Queue (ft)	5	9	7	6
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	R	LT	R	L	T	R	
Maximum Queue (ft)	116	97	88	58	124	65	70	60	162	116	67	
Average Queue (ft)	53	35	31	22	35	20	31	33	81	20	21	
95th Queue (ft)	96	77	70	48	90	49	66	56	143	79	47	
Link Distance (ft)		1708			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					100		100	
Storage Blk Time (%)	1	0	0						6	0		
Queuing Penalty (veh)	2	1	0						8	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	37	194	222	153	117	126	197	164	206	102	114	
Average Queue (ft)	6	100	107	66	31	38	108	75	94	44	44	
95th Queue (ft)	26	172	185	127	86	97	181	134	166	85	90	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)							0	0	0	1	2	
Queuing Penalty (veh)							2	0	1	0	1	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	33	139	154	191	189	164
Average Queue (ft)	4	42	49	63	61	83
95th Queue (ft)	20	105	116	148	143	147
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	Т	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	160	163	177	50	206	207	82	128	183	258	250	111
Average Queue (ft)	72	73	82	12	95	94	22	52	84	138	39	41
95th Queue (ft)	131	134	146	38	184	189	64	103	152	239	164	83
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						4		1	8	11	0	
Queuing Penalty (veh)						4		1	6	20	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	36	195	209	113	224	233	79	124	72	
Average Queue (ft)	7	88	98	46	72	80	14	50	23	
95th Queue (ft)	29	164	177	95	166	182	50	92	58	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							0	3		
Queuing Penalty (veh)							0	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	T	T	R	L	T
Maximum Queue (ft)	151	306	420	450	325	164	192	228	241	162	221	373
Average Queue (ft)	75	113	249	261	74	85	106	100	107	52	97	236
95th Queue (ft)	133	243	368	383	248	149	167	186	197	121	176	334
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	14	18							0	3
Queuing Penalty (veh)		0	26	25							0	5

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	Т	R
Maximum Queue (ft)	390	324	290	243	215	57
Average Queue (ft)	226	106	162	137	122	19
95th Queue (ft)	337	241	259	209	195	43
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	10	0	3	0	0	
Queuing Penalty (veh)	27	0	7	0	0	

Zone Summary

Zone wide Queuing Penalty: 139

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	0.5	0.1	0.2	
Total Del/Veh (s)	1.7	6.6	4.2	2.0	5.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.0	1.0
Total Del/Veh (s)	11.2	8.5	18.9	33.3	18.5

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.8	1.3	0.6
Total Del/Veh (s)	14.5	9.0	21.9	43.6	17.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Defiled Deli Vell (3)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	5.1	4.5	52.6	7.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.9	1.9	0.5
Total Del/Veh (s)	17.1	13.4	41.6	28.8	21.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.7	0.1	0.1
Total Del/Veh (s)	5.9	7.2	21.9	40.3	7.8

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.5	1.3	0.6
Total Del/Veh (s)	36.3	31.6	29.6	30.1	32.2

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	589.9

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						0.2
Total Del/Veh (s)	2.3	6.3	15.6	4.2	2.1	5.5

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	T	TR	L	T	TR	LT	R	L	T	R	
Denied Del/Veh (s)												1.0
Total Del/Veh (s)	10.0	11.5	11.9	8.6	9.1	7.5	54.5	6.2	42.0	57.6	3.8	18.5

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	TR	L	Т	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												0.6
Total Del/Veh (s)	14.6	14.0	15.0	14.1	7.9	6.6	50.9	58.5	5.8	45.0	42.6	17.4

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	T	T	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	6.9	5.2	4.9	4.4	4.7	52.6	7.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	T	T	R	L	TR	L	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	15.9	16.4	17.9	19.2	14.2	14.3	1.6	40.7	42.1	40.2	48.4	5.7

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.5	
Total Del/Veh (s)	21.0	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	8.8	4.7	6.5	14.6	6.6	6.7	55.0	12.2	39.0	7.8	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	50.3	65.6	36.2	46.0	8.9	38.9	54.0	34.8	36.1	4.6	27.9	39.9

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	36.0	7.3	28.7	36.1	32.8	5.1	32.2

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	589.9

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	29	28	23	29
Fuel Used (gal)	0.0	5.8	2.5	0.1	8.4
Fuel Eff. (mpg)	34.5	29.4	34.6	30.9	31.0

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.41	0.31	0.89	0.79	0.55
Avg Speed (mph)	26	27	12	17	21
Fuel Used (gal)	5.1	5.4	0.9	4.7	16.1
Fuel Eff. (mpg)	25.8	26.2	26.9	33.3	28.2

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.44	0.35	0.83	0.85	0.52	
Avg Speed (mph)	21	24	19	12	19	
Fuel Used (gal)	5.4	4.5	2.5	2.7	15.2	
Fuel Eff. (mpg)	25.8	32.0	31.5	25.9	28.6	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.14	0.12	0.89	0.17
Avg Speed (mph)	26	28	11	25
Fuel Used (gal)	6.0	7.1	1.1	14.2
Fuel Eff. (mpg)	25.1	26.2	24.8	25.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.44	0.39	0.90	0.79	0.54
Avg Speed (mph)	19	20	12	15	17
Fuel Used (gal)	6.6	4.7	2.5	4.8	18.5
Fuel Eff. (mpg)	29.6	30.5	26.4	28.3	29.1

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.12	0.15	0.89	0.90	0.18
Avg Speed (mph)	24	26	16	4	24
Fuel Used (gal)	7.3	7.3	8.0	0.1	15.5
Fuel Eff. (mpg)	27.1	25.8	30.1	12.7	26.5

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.68	0.67	0.71	0.65	0.67
Avg Speed (mph)	14	16	19	19	16
Fuel Used (gal)	8.7	9.1	3.8	9.1	30.7
Fuel Eff. (mpg)	24.6	24.7	30.6	31.6	27.5

Stop/Veh	14.12
Stop/Veh Avg Speed (mph)	20
Fuel Used (gal)	118.5
Fuel Used (gal) Fuel Eff. (mpg)	27.9

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.0	5.9	3.1	0.1	9.1	
Vehicles Entered	4	528	376	13	921	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB V	B 1	NΒ	SB	All
Travel Time (hr)	5.1 5	.3 1	1.9	9.6	21.9
Vehicles Entered	377 5	9 1	64	556	1656

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.7	6.1	4.4	5.8	23.0
Vehicles Entered	555	692	277	224	1748

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	5.7	6.6	2.5	14.8
Vehicles Entered	725	730	86	1541

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.5	7.4	5.3	9.4	32.5
Vehicles Entered	786	643	213	442	2084

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.3	7.1	1.6	0.4	17.4
Vehicles Entered	855	700	80	29	1664

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.1	14.4	6.4	15.8	51.6
Vehicles Entered	836	914	368	933	3051

Travel Time (hr)	170.4	
Vehicles Entered	3904	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement **Directions Served**

Maximum Queue (ft)

Average Queue (ft)

95th Queue (ft)

Link Distance (ft)

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	TR	LT	R	L	Т	R	
Maximum Queue (ft)	81	102	92	118	85	75	107	90	194	369	177	
Average Queue (ft)	31	37	36	46	30	21	40	42	111	135	54	
95th Queue (ft)	64	83	77	91	71	55	87	71	193	285	125	
Link Distance (ft)		1690			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					100		100	
Storage Blk Time (%)	0	0	0						17	18	0	
Queuing Penalty (veh)	0	1	0						68	66	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	32	175	205	156	131	137	112	103	92	173	192	
Average Queue (ft)	5	83	101	60	44	40	50	41	49	86	91	
95th Queue (ft)	22	153	176	120	101	98	95	84	78	151	165	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)										8	9	
Queuing Penalty (veh)										9	10	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	Т	Т	T	TR	LR
Maximum Queue (ft)	31	125	133	114	108	162
Average Queue (ft)	6	38	46	38	33	73
95th Queue (ft)	26	97	105	90	83	130
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	Т	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	118	192	211	94	195	198	52	157	219	191	190	89
Average Queue (ft)	45	89	113	38	79	73	13	55	93	103	70	39
95th Queue (ft)	94	154	185	77	163	159	41	114	176	168	138	73
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						2		1	10	1	1	
Queuing Penalty (veh)						1		1	7	3	2	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	31	105	141	87	132	137	66	79	72	
Average Queue (ft)	4	25	50	28	28	31	18	35	26	
95th Queue (ft)	22	76	114	69	85	93	50	66	63	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							0	1		
Queuing Penalty (veh)							0	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	T	T	R	L	T
Maximum Queue (ft)	66	101	282	424	243	168	179	254	244	118	147	138
Average Queue (ft)	21	41	141	180	52	73	87	133	138	40	60	66
95th Queue (ft)	54	80	242	333	131	132	141	218	221	86	117	115
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)				0								
Queuing Penalty (veh)				0								
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)			2	4								
Queuing Penalty (veh)			1	7								

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	Т	R
Maximum Queue (ft)	123	72	303	308	274	72
Average Queue (ft)	39	19	143	149	139	23
95th Queue (ft)	91	50	253	245	226	54
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			3	1	1	
Queuing Penalty (veh)			9	2	1	

Zone Summary

Zone wide Queuing Penalty: 191

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	0.6	0.1	0.4	
Total Del/Veh (s)	2.1	6.4	4.6	2.2	5.2	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.0	0.5
Total Del/Veh (s)	11.5	10.3	21.3	30.5	15.4

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.7	1.1	0.7
Total Del/Veh (s)	11.4	9.1	24.0	46.7	15.4

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	1.0	0.2
Total Del/Veh (s)	10.8	12.7	44.5	33.0	17.6

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.7	0.1	0.1
Total Del/Veh (s)	7.5	11.5	16.0	30.1	10.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.0	0.0	1.2	1.4	0.6	
Total Del/Veh (s)	46.4	31.4	40.8	49.6	41.4	

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	727.6

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						0.4
Total Del/Veh (s)	2.1	6.2	8.2	4.6	2.1	5.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	T	TR	L	Т	TR	LT	R	L	T	R	
Denied Del/Veh (s)												0.5
Total Del/Veh (s)	11.3	12.5	10.0	9.1	12.4	9.1	54.5	5.7	43.6	52.1	2.6	15.4

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												0.7
Total Del/Veh (s)	13.3	11.1	11.5	15.9	6.3	4.9	49.3	58.3	7.9	48.5	46.3	15.4

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	8.3	4.9	4.7	4.7	4.4	50.6	7.1

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	Т	Т	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	14.3	10.3	9.9	11.9	14.0	14.4	2.3	48.5	41.3	50.9	53.5	6.5

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.2	
Total Del/Veh (s)	17.6	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	13.9	7.1	7.7	21.4	10.9	11.0	40.2	10.6	30.1	10.1	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	58.5	71.3	48.2	50.8	6.6	42.6	56.1	36.3	40.9	6.3	34.3	56.5

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	50.4	11.6	72.5	47.3	37.5	6.0	41.4

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	727.6

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	30	28	23	28
Fuel Used (gal)	0.1	3.9	3.2	0.2	7.4
Fuel Eff. (mpg)	31.2	29.0	36.4	31.2	32.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.43	0.39	0.89	0.78	0.54
Avg Speed (mph)	25	25	12	18	22
Fuel Used (gal)	6.9	4.8	1.2	2.1	15.0
Fuel Eff. (mpg)	26.2	27.3	25.8	29.5	27.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.35	0.34	0.80	0.91	0.49	
Avg Speed (mph)	23	23	18	12	20	
Fuel Used (gal)	5.5	5.7	4.1	1.1	16.4	
Fuel Eff. (mpg)	26.7	26.0	31.6	25.7	27.6	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.13	0.12	0.90	0.16
Avg Speed (mph)	27	22	12	22
Fuel Used (gal)	6.5	6.3	1.1	14.0
Fuel Eff. (mpg)	26.2	29.8	25.1	27.7

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.39	0.34	0.90	0.87	0.48
Avg Speed (mph)	19	20	12	14	17
Fuel Used (gal)	7.1	5.3	2.4	2.7	17.5
Fuel Eff. (mpg)	30.9	29.1	25.9	27.8	29.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.22	0.31	0.76	0.81	0.30
Avg Speed (mph)	23	24	18	5	22
Fuel Used (gal)	7.3	7.3	1.1	0.1	15.7
Fuel Eff. (mpg)	27.1	26.5	31.1	15.3	27.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.72	0.49	0.74	0.75	0.67
Avg Speed (mph)	12	15	16	14	14
Fuel Used (gal)	10.3	10.9	9.4	8.5	39.1
Fuel Eff. (mpg)	23.1	22.4	29.4	27.5	25.4

Stop/Veh	15.78
Stop/Veh Avg Speed (mph)	18
Fuel Used (gal)	125.1
Fuel Used (gal) Fuel Eff. (mpg)	27.3

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.1	3.8	4.3	0.3	8.5	
Vehicles Entered	9	349	504	39	901	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.1	5.2	2.7	3.6	18.6
Vehicles Entered	515	513	223	219	1470

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.5	6.4	7.6	2.3	22.8
Vehicles Entered	586	706	456	87	1835

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	6.4	8.7	2.4	17.5
Vehicles Entered	820	742	86	1648

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	11.6	7.8	5.1	5.6	30.1
Vehicles Entered	875	685	199	250	2009

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.8	8.2	1.9	0.3	19.2
Vehicles Entered	d 873	713	106	30	1722

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	19.3	15.9	17.8	17.1	70.0
Vehicles Entered	905	1008	877	757	3547

Travel Time (hr)	186.7	
Vehicles Entered	3980	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	WB
Directions Served	L	TR
Maximum Queue (ft)	4	5
Average Queue (ft)	0	0
95th Queue (ft)	4	5
Link Distance (ft)	1690	1690
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	LT	R	L	Т	R	
Maximum Queue (ft)	136	120	98	79	123	145	144	79	147	96	54	
Average Queue (ft)	55	40	34	28	48	47	59	44	70	28	25	
95th Queue (ft)	106	87	76	60	104	108	113	70	122	71	46	
Link Distance (ft)		1690			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					100		100	
Storage Blk Time (%)	2	0	0						5	0		
Queuing Penalty (veh)	6	1	1						5	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	41	163	163	200	57	73	155	121	141	90	113	
Average Queue (ft)	11	71	78	77	14	22	71	52	70	33	41	
95th Queue (ft)	36	135	145	149	41	56	130	105	117	70	88	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)										0	1	
Queuing Penalty (veh)										0	1	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	Т	Т	TR	LR
Maximum Queue (ft)	33	129	119	174	140	156
Average Queue (ft)	6	40	43	39	35	70
95th Queue (ft)	26	94	95	112	98	125
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	T	R
Maximum Queue (ft)	136	178	196	54	207	208	66	154	194	168	82	72
Average Queue (ft)	56	82	96	17	83	77	17	62	84	83	31	29
95th Queue (ft)	106	153	171	46	171	165	48	123	156	151	69	57
Link Distance (ft)		1280	1280		1152	1152			1612		1596	1596
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		
Storage Blk Time (%)						2		4	7	1		
Queuing Penalty (veh)						2		5	6	0		

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	36	136	157	84	245	247	69	89	76	
Average Queue (ft)	7	66	79	27	68	74	17	40	27	
95th Queue (ft)	30	118	135	63	166	176	51	74	62	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							0	1		
Queuing Penalty (veh)							0	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	123	228	337	359	228	170	181	236	242	162	211	284
Average Queue (ft)	61	83	186	209	45	75	92	105	108	50	90	182
95th Queue (ft)	108	156	291	312	149	141	156	197	201	116	167	260
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	5	8								0
Queuing Penalty (veh)		0	8	10								0

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	Т	R
Maximum Queue (ft)	289	132	329	494	422	63
Average Queue (ft)	173	56	227	179	140	20
95th Queue (ft)	257	111	347	405	326	46
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	2		19	0	0	
Queuing Penalty (veh)	5		40	1	0	

Zone Summary

Zone wide Queuing Penalty: 92

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	0.7	0.1	0.4	
Total Del/Veh (s)	2.3	5.8	4.7	2.0	5.1	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.2	3.2	0.5
Total Del/Veh (s)	9.1	6.0	19.2	30.6	12.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	3.0	1.2	1.0
Total Del/Veh (s)	17.2	8.7	26.6	48.0	18.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB WB	SB	All
Denied Del/Veh (s)	0.0 0.0	0.2	0.0
Total Del/Veh (s)	5.4 6.9	49.0	8.4

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	2.1	0.4
Total Del/Veh (s)	11.4	15.5	43.6	39.6	19.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	1.9	0.1	0.2
Total Del/Veh (s)	8.6	13.1	17.5	32.1	11.4

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.3	0.6
Total Del/Veh (s)	50.6	37.2	42.7	48.4	44.2

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	736.1

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						0.4
Total Del/Veh (s)	2.3	5.6	6.9	4.7	2.0	5.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	LT	R	L	Т	R	
Denied Del/Veh (s)												0.5
Total Del/Veh (s)	9.7	9.6	7.4	6.6	6.2	5.7	53.0	5.4	48.1	60.0	2.8	12.0

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												1.0
Total Del/Veh (s)	20.2	16.4	17.9	13.0	7.5	7.0	50.4	58.6	10.4	45.6	50.3	18.4

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	8.1	5.7	5.2	6.4	7.3	48.5	8.4

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	Т	R	L	TR	L	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	21.3	9.6	8.9	16.6	16.6	18.4	2.5	41.0	44.9	62.3	66.9	8.3

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.4	
Total Del/Veh (s)	19.5	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.2	
Total Del/Veh (s)	19.9	8.0	8.9	27.9	11.4	11.8	48.7	13.0	31.1	11.4	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	T	R	L	L	T	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	59.7	69.3	54.4	56.4	7.3	43.9	58.7	40.9	47.8	17.5	37.4	57.3

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	51.4	16.4	71.6	46.4	39.6	5.9	44.2

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	736.1

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	30	27	23	28
Fuel Used (gal)	0.2	4.5	3.4	0.1	8.1
Fuel Eff. (mpg)	32.2	30.3	36.5	30.6	32.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.38	0.25	0.91	0.81	0.43
Avg Speed (mph)	27	28	12	18	24
Fuel Used (gal)	7.4	5.8	0.6	2.2	16.1
Fuel Eff. (mpg)	26.2	26.0	27.4	30.1	26.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.49	0.31	0.78	0.89	0.53	
Avg Speed (mph)	20	24	17	12	19	
Fuel Used (gal)	5.3	5.5	6.0	1.2	18.1	
Fuel Eff. (mpg)	27.5	30.6	31.6	25.4	29.7	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.12	0.18	0.90	0.19
Avg Speed (mph)	26	26	12	24
Fuel Used (gal)	8.3	8.3	1.3	17.9
Fuel Eff. (mpg)	24.5	26.4	25.7	25.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.34	0.36	0.88	0.90	0.47
Avg Speed (mph)	21	19	12	13	17
Fuel Used (gal)	8.4	6.1	2.0	4.2	20.7
Fuel Eff. (mpg)	30.9	28.6	26.0	26.4	28.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.25	0.31	0.77	0.83	0.32
Avg Speed (mph)	22	23	17	4	22
Fuel Used (gal)	8.0	8.7	1.3	0.1	18.2
Fuel Eff. (mpg)	28.9	25.3	30.7	14.7	27.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.77	0.69	0.74	0.75	0.74
Avg Speed (mph)	12	14	15	14	14
Fuel Used (gal)	12.4	14.0	11.6	8.5	46.5
Fuel Eff. (mpg)	22.5	21.1	29.0	27.7	24.7

Stop/Veh	15.50
Stop/Veh Avg Speed (mph)	18
	145.6
Fuel Used (gal) Fuel Eff. (mpg)	27.0

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.2	4.6	4.6	0.2	9.6
Vehicles Entered	24	459	535	27	1045

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.3	5.4	1.4	4.1	18.2
Vehicles Entered	554	644	123	240	1561

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.3	7.1	11.5	2.7	28.6
Vehicles Entered	575	808	662	102	2147

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB WB	SB	All
Travel Time (hr)	7.8 8.4	2.8	19.0
Vehicles Entered	963 868	105	1936

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	12.2	9.3	4.3	8.9	34.7
Vehicles Entered	1032	763	171	364	2330

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.4	9.8	2.3	0.3	22.9
Vehicles Entered	1001	835	124	29	1989

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	23.6	21.1	22.4	17.1	84.1
Vehicles Entered	1053	1202	1063	763	4081

Travel Time (hr)	217.1	
Vehicles Entered	4553	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB
Directions Served	TR
Maximum Queue (ft)	3
Average Queue (ft)	0
95th Queue (ft)	3
Link Distance (ft)	1690
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	LT	R	L	Т	R	
Maximum Queue (ft)	127	84	85	60	100	109	86	62	157	112	64	
Average Queue (ft)	52	33	29	22	28	34	34	35	83	26	30	
95th Queue (ft)	95	73	68	49	74	78	74	57	139	78	52	
Link Distance (ft)		1690			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					100		100	
Storage Blk Time (%)	1	0	0						7	0	0	
Queuing Penalty (veh)	2	0	0						9	0	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	35	194	209	144	122	152	204	162	204	96	127	
Average Queue (ft)	8	96	105	63	31	49	110	73	97	43	46	
95th Queue (ft)	29	164	180	116	84	114	183	132	171	82	94	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)							0	0	0	1	2	
Queuing Penalty (veh)							1	0	1	0	1	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	Т	TR	LR
Maximum Queue (ft)	33	144	158	179	177	178
Average Queue (ft)	3	46	51	57	69	79
95th Queue (ft)	19	115	119	138	151	143
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	168	138	149	46	247	245	119	125	169	246	215	131
Average Queue (ft)	77	74	83	11	109	110	23	49	69	136	29	44
95th Queue (ft)	137	129	140	36	212	213	78	100	135	224	120	94
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						5		2	5	8	0	
Queuing Penalty (veh)						5		2	3	15	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	38	177	202	122	240	249	89	116	68	
Average Queue (ft)	8	97	109	50	78	90	15	48	22	
95th Queue (ft)	31	165	181	96	185	206	56	90	58	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							1	3		
Queuing Penalty (veh)							1	0		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	162	304	428	427	278	198	202	292	300	341	238	378
Average Queue (ft)	74	111	244	257	62	92	108	159	173	154	97	229
95th Queue (ft)	131	236	367	378	210	162	174	262	275	293	181	326
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	0	0	13	17					0	0		2
Queuing Penalty (veh)	0	0	24	25					0	0		3

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	382	269	316	396	314	71
Average Queue (ft)	221	97	196	170	142	21
95th Queue (ft)	327	208	327	338	274	51
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	8	0	15	0	0	
Queuing Penalty (veh)	22	0	33	1	0	

Zone Summary

Zone wide Queuing Penalty: 152

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	0.4	0.1	0.2	
Total Del/Veh (s)	2.2	5.6	4.1	2.0	4.9	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	2.2	0.8
Total Del/Veh (s)	5.6	6.1	3.2	11.6	7.6

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.1	0.3	0.4
Total Del/Veh (s)	5.6	5.1	5.0	7.4	5.5

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	5.5	6.0	5.8	5.8

5: McHugh Dr & Custer Ave Performance by approach

Approach
Denied Del/Veh (s)
Total Del/Veh (s)

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	5.4	8.6	4.3	4.6	6.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.5	1.3	0.6
Total Del/Veh (s)	34.8	33.2	30.6	30.4	32.4

Denied Del/Veh (s)	1.2
Total Del/Veh (s)	417.5

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						0.2
Total Del/Veh (s)	2.2	5.5	6.7	4.1	2.0	4.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LT	R	
Denied Del/Veh (s)								8.0
Total Del/Veh (s)	7.0	4.1	6.5	5.0	3.2	16.8	2.1	7.6

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All	
Movements Served	LT	TR	LT	TR	LT	R	LTR		
Denied Del/Veh (s)								0.4	
Total Del/Veh (s)	7.3	4.7	5.4	4.6	8.6	3.4	7.4	5.5	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	WB	SB	All
Movements Served	LT	Т	T	TR	LR	•
Denied Del/Veh (s)						0.0
Total Del/Veh (s)	5.8	5.3	6.1	5.9	5.8	5.8

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	TR	LT	TR	LTR	LT	R		
Denied Del/Veh (s)								0.3	
Total Del/Veh (s)	5.8	3.8	5.4	4.3	8.3	14.5	3.6	6.3	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LTR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	6.1	5.0	8.5	8.6	4.3	4.6	6.6

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	T	R	L	L	Т	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	44.6	61.8	37.0	42.7	7.3	43.9	54.7	35.3	40.1	2.5	27.9	42.3

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	35.7	8.4	28.1	37.1	33.3	5.2	32.4

Denied Del/Veh (s)	1.2
Total Del/Veh (s)	417.5

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.01	0.00	0.00	0.00
Avg Speed (mph)	23	28	28	23	28
Fuel Used (gal)	0.0	6.3	2.4	0.1	8.8
Fuel Eff. (mpg)	32.3	26.9	33.9	31.4	28.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.20	0.15	0.22	0.39	0.25
Avg Speed (mph)	29	25	21	27	27
Fuel Used (gal)	4.3	5.8	0.7	3.6	14.4
Fuel Eff. (mpg)	27.1	24.3	31.3	42.0	29.9

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.11	0.07	0.30	0.55	0.18
Avg Speed (mph)	25	23	28	21	24
Fuel Used (gal)	5.6	5.9	2.1	2.0	15.5
Fuel Eff. (mpg)	25.5	24.8	36.0	33.5	27.7

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.02	0.02	0.52	0.05
Avg Speed (mph)	24	25	22	24
Fuel Used (gal)	6.3	7.3	8.0	14.4
Fuel Eff. (mpg)	24.0	25.3	33.4	25.2

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.12	0.10	0.60	0.50	0.25
Avg Speed (mph)	23	23	21	20	22
Fuel Used (gal)	7.2	5.3	1.9	4.3	18.7
Fuel Eff. (mpg)	27.7	26.9	33.1	32.0	29.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.03	0.01	0.47	0.38	0.05	
Avg Speed (mph)	22	25	22	14	23	
Fuel Used (gal)	7.5	6.4	8.0	0.0	14.8	
Fuel Eff. (mpg)	26.2	27.1	33.9	31.0	27.0	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.68	0.55	0.73	0.66	0.64
Avg Speed (mph)	14	15	18	18	16
Fuel Used (gal)	9.9	8.8	3.7	8.9	31.4
Fuel Eff. (mpg)	22.5	24.6	30.4	31.5	26.6

Stop/Veh	8.86
Avg Speed (mph)	21
Fuel Used (gal)	118.0
Fuel Used (gal) Fuel Eff. (mpg)	27.6

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.0	6.1	2.9	0.1	9.2	
Vehicles Entered	3	506	350	12	871	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB '	WB	NB	SB	All
Travel Time (hr)	4.0	5.6	1.1	5.8	16.5
Vehicles Entered	353	539	163	551	1606

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	5.8	6.2	2.8	3.1	17.9
Vehicles Entered	542	681	268	216	1707

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	6.4	7.5	1.2	15.1
Vehicles Entered	i 710	721	86	1517

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.6	6.3	3.1	7.0	25.1
Vehicles Entered	763	625	217	462	2067

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.9	6.9	1.2	0.1	17.0
Vehicles Entered	834	673	86	29	1622

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.8	14.3	6.3	15.6	51.9
Vehicles Entered	822	887	359	912	2980

Travel Time (hr)	152.8	
Vehicles Entered	3861	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	NB
Directions Served	LTR	LTR
Maximum Queue (ft)	4	4
Average Queue (ft)	0	0
95th Queue (ft)	3	3
Link Distance (ft)	1256	1227
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB		
Directions Served	LT	TR	LT	TR	LTR	LT	R		
Maximum Queue (ft)	62	17	97	35	73	162	78		
Average Queue (ft)	31	1	32	2	25	61	15		
95th Queue (ft)	55	12	77	16	60	122	51		
Link Distance (ft)	1662		1176	1176	699	1432			
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)		500					100		
Storage Blk Time (%)						4			
Queuing Penalty (veh)						8			

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	57	44	88	15	70	73	123
Average Queue (ft)	26	7	24	0	23	26	49
95th Queue (ft)	50	30	63	5	55	57	92
Link Distance (ft)	1176	1176	937	937	1463		1593
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)						225	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (ft)	50	3	40	16	62
Average Queue (ft)	12	0	4	1	27
95th Queue (ft)	38	3	25	8	57
Link Distance (ft)	937	937	1174	1174	1643
Unatraga Dila Tima (0/)					

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	LT	TR	LT	TR	LTR	LT	R
Maximum Queue (ft)	79	30	86	57	130	170	90
Average Queue (ft)	37	1	33	3	52	74	31
95th Queue (ft)	66	13	71	27	100	142	70
Link Distance (ft)	1174	1174	1041	1041	1567	1560	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)							175
Storage Blk Time (%)						0	
Queuing Penalty (veh)						1	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	NB	SB
Directions Served	LT	TR	LT	LTR	LTR
Maximum Queue (ft)	57	28	54	60	41
Average Queue (ft)	14	2	8	26	9
95th Queue (ft)	45	14	36	54	34
Link Distance (ft)	1041	1041	1309	1621	215
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	73	163	276	308	190	143	167	214	210	62	147	141
Average Queue (ft)	20	47	144	175	44	69	87	105	116	23	60	71
95th Queue (ft)	53	100	236	266	111	124	144	189	191	52	117	126
Link Distance (ft)			1309	1309				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)			1	4								
Queuing Penalty (veh)			1	7								

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	Т	R
Maximum Queue (ft)	120	74	286	347	266	64
Average Queue (ft)	44	21	144	150	140	20
95th Queue (ft)	98	54	251	257	228	49
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			2	1	1	
Queuing Penalty (veh)			7	3	1	

Zone Summary

Zone wide Queuing Penalty: 26

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.6	0.2	0.3
Total Del/Veh (s)	2.2	4.6	4.5	2.3	4.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.3	1.6	0.3
Total Del/Veh (s)	10.6	7.8	5.7	4.7	8.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.1	0.2	0.5
Total Del/Veh (s)	5.9	7.4	6.7	5.3	6.6

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	6.0	4.2	5.6	5.2

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.3	0.2	0.1
Total Del/Veh (s)	3.9	5.2	8.9	6.9	5.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	5.3	8.6	4.8	6.2	6.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.4	0.6
Total Del/Veh (s)	47.4	35.9	39.9	39.8	40.7

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	571.3

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						0.3
Total Del/Veh (s)	2.2	4.6	4.7	4.5	2.3	4.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	R	LT	R	LTR	LT	R		
Denied Del/Veh (s)								0.3	
Total Del/Veh (s)	10.7	3.7	9.4	4.3	5.7	6.0	2.3	8.0	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All	
Movements Served	LT	TR	LT	TR	LT	R	LTR		
Denied Del/Veh (s)								0.5	
Total Del/Veh (s)	7.7	4.8	8.5	5.0	10.7	4.3	5.1	6.6	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	WB	SB	All
Movements Served	LT	T	Т	TR	LR	
Denied Del/Veh (s)						0.0
Total Del/Veh (s)	5.9	6.0	4.4	4.0	5.5	5.2

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	TR	LT	TR	LTR	LT	R		
Denied Del/Veh (s)								0.1	
Total Del/Veh (s)	4.7	3.2	6.0	4.6	9.0	8.9	3.8	5.2	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LTR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	5.7	5.0	8.5	8.7	4.7	6.0	6.6

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	T	R	L	L	T	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	56.8	75.4	50.1	50.9	5.7	52.5	65.5	39.6	47.7	7.3	31.5	56.3

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	49.6	11.6	56.0	38.4	33.8	4.7	40.7

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	571.3

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.02	0.00	0.00	0.01
Avg Speed (mph)	23	28	28	23	28
Fuel Used (gal)	0.1	4.7	3.2	0.2	8.1
Fuel Eff. (mpg)	33.2	25.4	36.0	30.9	29.8

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.34	0.35	0.50	0.28	0.36
Avg Speed (mph)	26	24	19	34	26
Fuel Used (gal)	5.9	5.6	0.9	1.5	13.9
Fuel Eff. (mpg)	28.5	24.4	31.6	38.1	28.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.13	0.22	0.40	0.46	0.25	
Avg Speed (mph)	24	22	27	22	24	
Fuel Used (gal)	5.9	6.1	3.5	8.0	16.3	
Fuel Eff. (mpg)	25.3	24.9	36.2	33.7	27.9	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.03	0.02	0.50	0.05
Avg Speed (mph)	23	21	22	22
Fuel Used (gal)	7.1	6.9	8.0	14.8
Fuel Eff. (mpg)	24.0	27.5	33.7	26.1

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.09	0.11	0.64	0.48	0.20
Avg Speed (mph)	21	22	20	21	21
Fuel Used (gal)	8.0	5.8	1.8	2.4	18.0
Fuel Eff. (mpg)	28.7	26.9	32.9	32.8	29.1

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.04	0.02	0.48	0.39	0.06
Avg Speed (mph)	22	25	22	12	23
Fuel Used (gal)	7.9	6.7	1.0	0.0	15.5
Fuel Eff. (mpg)	26.4	27.2	33.4	28.9	27.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.74	0.52	0.74	0.68	0.66
Avg Speed (mph)	12	14	16	16	14
Fuel Used (gal)	12.0	11.2	9.5	8.2	40.8
Fuel Eff. (mpg)	21.2	21.8	29.4	29.0	24.8

Stop/Veh	11.11
Stop/Veh Avg Speed (mph)	20
Fuel Used (gal)	127.4
Fuel Used (gal) Fuel Eff. (mpg)	26.9

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.1	4.2	4.2	0.3	8.8	
Vehicles Entered	12	341	489	40	882	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.4	5.6	1.6	1.9	15.4
Vehicles Entered	497	510	220	216	1443

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.1	6.9	4.9	1.3	19.2
Vehicles Entered	578	698	454	91	1821

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	7.2	9.0	1.3	17.5
Vehicles Entered	806	727	90	1623

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.9	6.9	3.0	3.7	24.4
Vehicles Entered	874	669	203	263	2009

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	9.3	7.2	1.4	0.1	18.1
Vehicles Entered	891	699	104	31	1725

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	21.1	17.1	17.7	15.2	71.2
Vehicles Entered	917	1008	879	768	3572

Travel Time (hr)	174.6	
Vehicles Entered	3997	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	NB
Directions Served	LTR	LTR
Maximum Queue (ft)	2	4
Average Queue (ft)	0	0
95th Queue (ft)	2	3
Link Distance (ft)	1256	1227
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	LT	R	LT	R	LTR	LT	R
Maximum Queue (ft)	188	27	127	65	98	67	45
Average Queue (ft)	59	3	49	26	44	23	13
95th Queue (ft)	141	17	97	55	78	51	38
Link Distance (ft)	1662		1176	1176	699	1432	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		500					100
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	54	36	184	76	84	88	74
Average Queue (ft)	29	4	58	4	37	37	26
95th Queue (ft)	52	20	126	32	67	70	58
Link Distance (ft)	1176	1176	937	937	1463		1593
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)						225	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (ft)	56	9	55	3	64
Average Queue (ft)	13	0	5	0	27
95th Queue (ft)	41	9	27	3	57
Link Distance (ft)	937	937	1174	1174	1643

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	LT	TR	LT	TR	LTR	LT	R
Maximum Queue (ft)	88	34	98	85	121	117	69
Average Queue (ft)	34	1	35	7	54	44	23
95th Queue (ft)	71	13	74	42	95	87	54
Link Distance (ft)	1174	1174	1041	1041	1567	1560	1560

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	66	18	56	6	70	48
Average Queue (ft)	17	0	9	0	29	11
95th Queue (ft)	52	7	36	4	59	39
Link Distance (ft)	1041	1041	1309	1309	1621	215
Upstream Blk Time (%)						

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	Т	T	R	L	T
Maximum Queue (ft)	150	224	322	329	276	171	192	250	242	174	178	302
Average Queue (ft)	66	86	203	217	39	75	95	109	120	52	83	188
95th Queue (ft)	121	156	293	305	135	146	165	202	208	125	145	268
Link Distance (ft)			1309	1309				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	6	9								0
Queuing Penalty (veh)		0	10	12								1

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	Т	R
Maximum Queue (ft)	298	187	323	375	248	60
Average Queue (ft)	179	60	200	133	113	19
95th Queue (ft)	266	129	304	255	199	44
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	3		9	0	0	
Queuing Penalty (veh)	6		18	0	0	

Zone Summary

Zone wide Queuing Penalty: 47

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.7	0.1	0.4
Total Del/Veh (s)	2.4	4.9	4.7	2.2	4.7

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB \	٧B	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	1.8	0.3
Total Del/Veh (s)	6.1	4.7	3.4	4.1	5.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.3	0.2	0.7
Total Del/Veh (s)	5.5	5.6	8.4	6.8	6.5

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	6.4	6.6	8.2	6.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.3	1.1	0.2
Total Del/Veh (s)	5.4	5.8	14.1	9.8	6.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	5.8	8.6	5.3	6.8	7.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.3	1.3	0.6
Total Del/Veh (s)	48.9	30.1	43.9	39.2	40.3

Denied Del/Veh (s)	1.2
Total Del/Veh (s)	535.2

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						0.4
Total Del/Veh (s)	2.3	4.9	4.7	4.7	2.1	4.7

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	TR	LT	TR	LTR	LT	R		
Denied Del/Veh (s)								0.3	
Total Del/Veh (s)	7.2	4.7	5.8	3.7	3.4	6.1	1.5	5.0	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All
Movements Served	LT	TR	LT	TR	LT	R	LTR	
Denied Del/Veh (s)								0.7
Total Del/Veh (s)	6.1	5.0	6.3	5.0	13.8	5.3	6.8	6.5

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	WB	SB	All
Movements Served	LT	Т	T	TR	LR	
Denied Del/Veh (s)						0.0
Total Del/Veh (s)	6.3	6.5	6.9	6.4	8.2	6.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	TR	LT	TR	LTR	LT	R		
Denied Del/Veh (s)								0.2	
Total Del/Veh (s)	6.6	4.3	6.9	5.1	14.0	14.1	4.1	6.9	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LTR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	6.6	5.1	8.3	8.8	5.3	6.8	7.0

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	63.9	75.3	51.2	52.5	6.6	41.1	56.4	34.7	41.0	7.3	38.8	60.4

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	54.7	13.7	48.4	42.1	37.4	6.1	40.3

Denied Del/Veh (s)	1.2
Total Del/Veh (s)	535.2

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	28	27	23	28
Fuel Used (gal)	0.2	5.2	3.4	0.2	8.9
Fuel Eff. (mpg)	32.0	26.7	36.6	30.9	30.6

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.10	0.10	0.30	0.18	0.13
Avg Speed (mph)	29	26	21	34	28
Fuel Used (gal)	6.8	6.8	0.5	1.7	15.8
Fuel Eff. (mpg)	27.4	23.2	31.9	37.5	26.8

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.11	0.12	0.45	0.60	0.24	
Avg Speed (mph)	25	23	26	21	24	
Fuel Used (gal)	5.8	7.1	4.9	0.9	18.7	
Fuel Eff. (mpg)	26.0	25.0	36.6	33.6	28.8	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.03	0.01	0.62	0.05
Avg Speed (mph)	23	24	21	24
Fuel Used (gal)	8.5	8.9	0.9	18.4
Fuel Eff. (mpg)	23.8	25.3	33.1	25.0

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.12	0.14	0.80	0.54	0.24
Avg Speed (mph)	23	22	19	20	22
Fuel Used (gal)	9.7	6.6	1.7	3.3	21.4
Fuel Eff. (mpg)	27.6	27.1	32.3	32.2	28.6

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.06	0.01	0.52	0.43	0.08
Avg Speed (mph)	22	25	22	11	23
Fuel Used (gal)	9.2	7.6	1.1	0.0	18.0
Fuel Eff. (mpg)	26.3	28.1	33.8	29.2	27.5

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.77	0.45	0.76	0.71	0.66
Avg Speed (mph)	12	16	15	16	14
Fuel Used (gal)	13.9	13.4	11.7	8.1	47.1
Fuel Eff. (mpg)	21.1	22.0	28.9	29.4	24.7

Stop/Veh	9.72
Stop/Veh Avg Speed (mph)	20
Fuel Used (gal)	148.1
Fuel Used (gal) Fuel Eff. (mpg)	26.7

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.2	4.9	4.6	0.2	10.0
Vehicles Entered	21	452	535	30	1038

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.4	6.1	0.8	2.0	15.3
Vehicles Entered	552	633	125	232	1542

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	6.0	7.6	7.4	1.5	22.6
Vehicles Entered	574	812	650	105	2141

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	8.7	9.3	1.5	19.5
Vehicles Entered	964	871	99	1934

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	11.8	8.1	3.0	5.5	28.3
Vehicles Entered	1028	769	184	361	2342

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.9	8.6	1.7	0.1	21.3
Vehicles Entered	1006	842	120	30	1998

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	24.8	18.5	22.9	15.1	81.3
Vehicles Entered	1057	1193	1072	767	4089

Travel Time (hr)	198.2	
Vehicles Entered	4554	

Queuing Penalty (veh)

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB
Directions Served	LTR	TR	LTR
Maximum Queue (ft)	2	3	6
Average Queue (ft)	0	0	0
95th Queue (ft)	2	3	4
Link Distance (ft)	1256	1662	1227
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	WB	WB	NB	SB	SB
Directions Served	LT	LT	TR	LTR	LT	R
Maximum Queue (ft)	66	78	39	63	56	33
Average Queue (ft)	28	28	7	22	21	5
95th Queue (ft)	57	60	29	53	48	23
Link Distance (ft)	1662	1176	1176	699	1432	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						100
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	TR	LT	TR	LT	R	LTR
Maximum Queue (ft)	63	37	97	21	111	113	84
Average Queue (ft)	30	3	38	2	47	52	35
95th Queue (ft)	56	19	77	13	83	90	66
Link Distance (ft)	1176	1176	937	937	1463		1593
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)						225	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	WB	WB	SB
Directions Served	LT	T	TR	LR
Maximum Queue (ft)	54	32	4	93
Average Queue (ft)	16	2	0	35
95th Queue (ft)	46	17	4	70
Link Distance (ft)	937	1174	1174	1643
Unstream Blk Time (%)				

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB		
Directions Served	LT	TR	LT	TR	LTR	LT	R		
Maximum Queue (ft)	101	13	83	76	136	133	76		
Average Queue (ft)	45	1	43	8	61	62	32		
95th Queue (ft)	85	12	75	43	109	111	65		
Link Distance (ft)	1174	1174	1041	1041	1567	1560			
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)							175		
Storage Blk Time (%)						0			
Queuing Penalty (veh)						0			

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	NB	SB
Directions Served	LT	TR	LT	LTR	LTR
Maximum Queue (ft)	71	39	59	72	49
Average Queue (ft)	26	2	7	35	12
95th Queue (ft)	62	16	34	63	39
Link Distance (ft)	1041	1041	1309	1621	215
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	Т	T	R	L	T
Maximum Queue (ft)	166	281	407	426	301	180	192	213	214	168	225	361
Average Queue (ft)	77	114	238	252	70	88	104	90	100	53	105	235
95th Queue (ft)	137	236	355	371	235	158	169	169	181	120	185	330
Link Distance (ft)			1309	1309				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	12	15							0	2
Queuing Penalty (veh)		0	23	22							0	4

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	Т	R
Maximum Queue (ft)	362	306	272	251	229	88
Average Queue (ft)	225	100	160	138	127	21
95th Queue (ft)	329	227	256	219	206	60
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	9		3	0	0	
Queuing Penalty (veh)	25		7	1	0	

Zone Summary

Zone wide Queuing Penalty: 81

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	397.1	0.1	183.8	
Total Del/Veh (s)	569.6	10.6	272.6	887.9	135.9	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	8.1	0.0	0.4	564.3	200.4
Total Del/Veh (s)	504.2	31.0	51.5	379.9	234.5

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	24.4	0.1	2.9	732.9	108.4
Total Del/Veh (s)	273.1	27.1	38.6	1507.5	207.3

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	8.1	1.0	127.9	37.1
Total Del/Veh (s)	171.5	124.9	42.4	293.9	175.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	3.8	11.2	0.6	2.4
Total Del/Veh (s)	6.8	47.9	736.1	213.9	71.5

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	4.2	1.7	14.9	6.5
Total Del/Veh (s)	31.8	167.1	51.7	147.4	111.3

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.2	1.5	2.4	0.4
Total Del/Veh (s)	30.1	56.9	57.2	46.9	44.8

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All	
Denied Del/Veh (s)	0.0	95.8	0.4	40.3	
Total Del/Veh (s)	29.9	174.5	16.5	88.4	

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB	WB	NB	All
prodon	LU		IND	
Denied Del/Veh (s)	0.0	395.6	1.6	182.9
Total Del/Veh (s)	32.8	342.7	44.8	160.5

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	515.5	2.8	23.1	241.7
Total Del/Veh (s)	42.4	305.2	89.9	161.8	167.7

Total Network Performance

Denied Del/Veh (s)	248.5	
Total Del/Veh (s)	382.8	

Lane	EB	WB	NB	NB	SB	All
Movements Served	LTR	LTR	Т	R	LTR	
Denied Del/Veh (s)						183.8
Total Del/Veh (s)	569.6	10.6	1745.9	42.2	913.3	135.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									200.4	
Total Del/Veh (s)	26.3	602.6	28.2	32.1	37.7	51.9	170.5	452.5	234.5	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	TR	L	T	R	L	TR	
Denied Del/Veh (s)											108.4
Total Del/Veh (s)	71.1	330.5	3.6	27.7	27.0	36.8	47.6	37.9	569.7	2005.3	207.3

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All
Movements Served	L	Т	TR	LR	
Denied Del/Veh (s)					20.6
Total Del/Veh (s)	27.1	156.8	14.0	50.4	74.3

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	TR	L	TR	L	TR	L	TR	
Denied Del/Veh (s)									37.1
Total Del/Veh (s)	38.5	190.3	28.5	132.3	50.6	37.8	85.3	412.1	175.2

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							2.4
Total Del/Veh (s)	13.9	6.7	18.3	49.4	730.1	207.4	71.5

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Movements Served	L	T	Т	R	L	L	T	R	L	T	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	39.5	37.0	37.4	6.6	45.6	63.6	228.5	86.2	81.7	46.7	43.0	9.4

7: Montana Ave & Custer Ave Performance by lane

Lane	SB	SB	SB	All
Movements Served	L	T	TR	
Denied Del/Veh (s)				6.5
Total Del/Veh (s)	95.4	271.4	76.1	111.3

8: Sanders St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Movements Served	L	T	Т	R	L	T	TR	L	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	28.4	27.5	35.2	2.9	25.1	85.8	41.3	156.6	43.0	18.7	57.4	45.8

8: Sanders St & Custer Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Del/Veh (s)		0.4
Total Del/Veh (s)	23.5	44.8

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by lane

Lane	EB	EB	EB	WB	WB	WB	SB	SB	All
Movements Served	T	T	R	Т	T	R	<	R	
Denied Del/Veh (s)									40.3
Total Del/Veh (s)	44.7	53.0	2.0	246.4	214.2	7.4	9.7	18.6	88.4

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	All	
Movements Served	L	Т	Т	Т	Т	R	L	LT	R		
Denied Del/Veh (s)										182.9	
Total Del/Veh (s)	52.3	31.4	31.8	360.4	343.6	3.7	56.5	54.9	6.5	160.5	

11: Washington St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Movements Served	L	T	T	R	L	Т	Т	R	L	T	R	L
Denied Del/Veh (s)												
Total Del/Veh (s)	68.4	40.8	37.9	13.1	104.3	441.4	448.1	5.5	170.6	95.1	5.1	46.4

11: Washington St & Custer Ave Performance by lane

Lane	SB	SB	All
Movements Served	Т	R	
Denied Del/Veh (s)			241.7
Total Del/Veh (s)	206.6	32.3	167.7

Denied Del/Veh (s)	248.5	
Total Del/Veh (s)	382.8	

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	397.1	0.1	183.8
Total Del/Veh (s)	569.6	10.6	272.6	887.9	135.9
Stop/Veh	0.33	0.11	0.21	0.97	0.17
Avg Speed (mph)	1	27	3	1	6
Fuel Used (gal)	0.1	8 1	27.5	21	37.8

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	8.1	0.0	0.4	564.3	200.4
Total Del/Veh (s)	504.2	31.0	51.5	379.9	234.5
Stop/Veh	0.76	0.56	0.90	0.83	0.71
Avg Speed (mph)	2	16	7	2	3
Fuel Used (gal)	17.8	8.5	1.6	43.1	71.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	24.4	0.1	2.9	732.9	108.4
Total Del/Veh (s)	273.1	27.1	38.6	1507.5	207.3
Stop/Veh	1.30	0.61	0.80	0.81	0.85
Avg Speed (mph)	3	15	14	1	4
Fuel Used (gal)	14.4	7.6	3.7	29.7	55.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	50.0	0.0	0.2	20.6
Total Del/Veh (s)	155.7	14.0	50.9	74.3
Stop/Veh	0.95	0.27	0.90	0.58
Avg Speed (mph)	4	22	12	8
Fuel Used (gal)	13.4	9.5	1.2	24.1

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	8.1	1.0	127.9	37.1
Total Del/Veh (s)	171.5	124.9	42.4	293.9	175.2
Stop/Veh	1.84	1.55	0.90	1.24	1.50
Avg Speed (mph)	4	5	12	3	4
Fuel Used (gal)	14.6	11.5	3.1	23.3	52.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	3.8	11.2	0.6	2.4
Total Del/Veh (s)	6.8	47.9	736.1	213.9	71.5
Stop/Veh	0.01	0.47	0.96	1.00	0.29
Avg Speed (mph)	23	12	1	1	9
Fuel Used (gal)	8.3	10.2	6.6	0.5	25.7

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	4.2	1.7	14.9	6.5
Total Del/Veh (s)	31.8	167.1	51.7	147.4	111.3
Stop/Veh	0.62	1.91	0.82	1.17	1.19
Avg Speed (mph)	15	4	14	6	7
Fuel Used (gal)	9.5	18.9	4.8	22.9	56.1

Total Zone Performance

Denied Del/Veh (s)	202.3
Total Del/Veh (s)	1899.0
Stop/Veh	11.42
Avg Speed (mph)	5
Fuel Used (gal)	322.7

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.5	9.4	114.2	9.1	133.2
Vehicles Entered	3	744	476	35	1258

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	67.0	12.0	4.3	178.8	262.2
Vehicles Entered	424	763	208	498	1893

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	52.2	13.3	7.7	127.7	200.9
Vehicles Entered	558	956	367	140	2021

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	48.0	11.4	2.7	62.1
Vehicles Entered	729	976	98	1803

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	46.4	36.7	6.6	87.6	177.3
Vehicles Entered	793	813	261	631	2498

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	9.7	19.9	26.4	2.0	57.9
Vehicles Entered	977	875	117	32	2001

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.9	54.3	9.7	66.9	146.8
Vehicles Entered	954	979	407	1219	3559

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	17.1	21.9	4.6	5.8	49.4
Vehicles Entered	1093	1154	154	246	2647

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	13.3	91.9	4.7	109.8
Vehicles Entered	1139	1101	452	2692

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB	WB	NB	All
Travel Time (hr)	(hr) 9.8	191.5	10.3	211.6
Vehicles Entered	tered 738	770	435	1943

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	14.1	310.3	16.1	32.4	372.9
Vehicles Entered	l 771	957	461	557	2746

Travel Time (hr)	1857.3
Vehicles Entered	8099

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	T	R	LTR
Maximum Queue (ft)	28	97	1331	200	633
Average Queue (ft)	8	21	921	153	251
95th Queue (ft)	33	93	1863	284	608
Link Distance (ft)	1322	1779	1291		990
Upstream Blk Time (%)			64		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)				100	
Storage Blk Time (%)			1	72	
Queuing Penalty (veh)			4	20	

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB	
Directions Served	L	TR	L	TR	L	TR	L	TR	
Maximum Queue (ft)	200	1857	238	405	93	322	200	1526	
Average Queue (ft)	148	1546	98	226	9	138	193	1414	
95th Queue (ft)	282	2439	191	361	53	259	235	1798	
Link Distance (ft)		1779		1291		759		1492	
Upstream Blk Time (%)		73						78	
Queuing Penalty (veh)		492						0	
Storage Bay Dist (ft)	100		500		75		100		
Storage Blk Time (%)	2	85		0	0	45	82	43	
Queuing Penalty (veh)	8	121		0	0	3	450	92	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	T	R	L	TR	L	Т	R	L	TR	_
Maximum Queue (ft)	542	1314	275	229	487	104	247	283	200	1688	
Average Queue (ft)	43	1249	225	94	289	44	34	133	192	1469	
95th Queue (ft)	287	1543	394	191	428	93	133	246	213	2136	
Link Distance (ft)		1291			1054		1511			1653	
Upstream Blk Time (%)		25								72	
Queuing Penalty (veh)		220								0	
Storage Bay Dist (ft)	500		175	500		225		225	100		
Storage Blk Time (%)		79			0		0	4	99	5	
Queuing Penalty (veh)		139			1		0	4	136	9	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	600	1074	362	167
Average Queue (ft)	86	1055	191	83
95th Queue (ft)	425	1161	324	141
Link Distance (ft)		1054	1287	1705
Upstream Blk Time (%)		16		
Queuing Penalty (veh)		185		
Storage Bay Dist (ft)	500			
Storage Blk Time (%)		76		
Queuing Penalty (veh)		9		

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	600	1301	600	1173	172	222	275	1650
Average Queue (ft)	458	1292	260	988	74	107	269	1481
95th Queue (ft)	848	1299	718	1386	138	183	312	2027
Link Distance (ft)		1287		1159		1624		1621
Upstream Blk Time (%)		13		9				66
Queuing Penalty (veh)		164		97				0
Storage Bay Dist (ft)	500		500		100		175	
Storage Blk Time (%)		65		55	6	11	41	70
Queuing Penalty (veh)		104		46	10	10	175	200

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	33	26	391	985	1240	175
Average Queue (ft)	5	3	121	372	593	61
95th Queue (ft)	23	17	470	1164	1368	159
Link Distance (ft)		1159		1380	1682	276
Upstream Blk Time (%)				0	4	1
Queuing Penalty (veh)				1	0	0
Storage Bay Dist (ft)	500		500			
Storage Blk Time (%)				22		
Queuing Penalty (veh)				13		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	R	L	Т	T	R
Maximum Queue (ft)	200	371	312	235	165	500	1263	1269	274	169	124	87
Average Queue (ft)	62	182	189	59	71	422	1217	1072	129	77	47	26
95th Queue (ft)	129	293	273	145	139	693	1338	1484	257	163	101	61
Link Distance (ft)		1380					1224	1224		1656	1656	
Upstream Blk Time (%)							35	8				
Queuing Penalty (veh)							239	58				
Storage Bay Dist (ft)	225		225	225	400	400			300			225
Storage Blk Time (%)		3	3	0			64		3			
Queuing Penalty (veh)		20	17	0			172		3			

Intersection: 7: Montana Ave & Custer Ave

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	330	1566	1524
Average Queue (ft)	324	1080	1019
95th Queue (ft)	363	1851	1798
Link Distance (ft)		1633	1633
Upstream Blk Time (%)		12	4
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	230		
Storage Blk Time (%)	82	8	
Queuing Penalty (veh)	267	35	

Intersection: 8: Sanders St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	Т	R	L	Т	TR	L	T	R	L	T
Maximum Queue (ft)	236	409	509	235	330	476	478	140	99	96	220	200
Average Queue (ft)	65	183	256	75	250	402	383	51	34	29	113	52
95th Queue (ft)	154	336	431	240	450	573	572	127	75	70	193	156
Link Distance (ft)		1224	1224			425	425		1651			1264
Upstream Blk Time (%)						21	15					
Queuing Penalty (veh)						178	124					
Storage Bay Dist (ft)	175			135	230			150		300	150	
Storage Blk Time (%)	0	10	25		0	55		5			6	0
Queuing Penalty (veh)	0	13	20		0	123		6			8	0

Intersection: 8: Sanders St & Custer Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	139
Average Queue (ft)	43
95th Queue (ft)	97
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	150
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: I-15 SB On & Custer Ave & I-15 SB Off

Movement	EB	EB	EB	WB	WB	WB	SB	SB	
Directions Served	Т	T	R	Т	Т	R	<	R	
Maximum Queue (ft)	386	389	200	804	824	400	97	324	
Average Queue (ft)	158	145	28	776	781	388	34	127	
95th Queue (ft)	320	320	157	826	831	498	77	242	
Link Distance (ft)	425	425		767	767		669	669	
Upstream Blk Time (%)	1	1		36	34				
Queuing Penalty (veh)	8	10		313	291				
Storage Bay Dist (ft)			150			300			
Storage Blk Time (%)		12			77				
Queuing Penalty (veh)		73			364				

Intersection: 10: I-15 NB Off/I-15 NB On & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	
Directions Served	L	Т	Т	T	Т	R	L	LT	R	
Maximum Queue (ft)	196	422	419	1177	1177	250	285	333	136	
Average Queue (ft)	48	177	178	1050	1058	99	115	127	39	
95th Queue (ft)	135	346	343	1399	1384	299	251	281	128	
Link Distance (ft)		767	767	1143	1143			1350		
Upstream Blk Time (%)				19	22					
Queuing Penalty (veh)				106	126					
Storage Bay Dist (ft)	500					150	400		400	
Storage Blk Time (%)		0			86		1	1		
Queuing Penalty (veh)		0			29		2	3		

Intersection: 11: Washington St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	Т	R	L	Т	T	R	L	T	R	L
Maximum Queue (ft)	357	185	193	166	500	1241	1234	400	434	668	181	250
Average Queue (ft)	176	72	83	38	465	1091	1071	210	253	222	46	148
95th Queue (ft)	304	149	158	104	646	1538	1553	532	470	767	115	308
Link Distance (ft)		1143	1143			1198	1198			1706		
Upstream Blk Time (%)						64	45			1		
Queuing Penalty (veh)						0	0			0		
Storage Bay Dist (ft)	350			350	400			300	350		350	150
Storage Blk Time (%)	1				29	63	73		23	0		1
Queuing Penalty (veh)	1				131	317	94		68	0		7

Intersection: 11: Washington St & Custer Ave

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	1010	250
Average Queue (ft)	754	101
95th Queue (ft)	1274	284
Link Distance (ft)	1069	
Upstream Blk Time (%)	24	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		150
Storage Blk Time (%)	65	0
Queuing Penalty (veh)	103	1

Network Summary

Network wide Queuing Penalty: 6044

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	700.6	406.5	453.8
Total Del/Veh (s)	969.6	9.0	352.7	1540.2	274.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	10.7	0.0	40.0	263.5	57.6
Total Del/Veh (s)	630.2	39.5	180.5	706.6	308.5

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	94.8	0.1	214.8	207.4	95.8
Total Del/Veh (s)	361.5	29.8	325.8	1847.2	275.4

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	41.9	0.0	1.2	37.9	21.3
Total Del/Veh (s)	183.6	149.1	51.5	202.3	158.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	24.7	68.7	458.9	95.2	78.9
Total Del/Veh (s)	88.1	116.2	2326.9	660.3	222.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.6	3.7	1.5	613.5	159.0
Total Del/Veh (s)	189.2	117.7	107.7	442.7	185.4

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	109.8	0.7	2.8	586.9	139.0
Total Del/Veh (s)	301.8	59.8	76.8	457.5	183.9

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All			
Denied Del/Veh (s)	0.3	0.4	0.3	0.3			
Total Del/Veh (s)	87.8	131.6	40.4	104.8			

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	EB	WB	NB	All
TOUCH	LD		IND	
Denied Del/Veh (s)	2.2	151.2	2.0	61.5
Total Del/Veh (s)	167.6	231.7	50.1	161.1

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	4.5	699.4	2.5	272.0
Total Del/Veh (s)	165.3	113.4	244.6	63.9	158.3

Denied Del/Veh (s)	328.5	
Total Del/Veh (s)	529.0	

Lane	EB	WB	NB	NB	SB	All
Movements Served	LTR	LTR	LT	R	LTR	
Denied Del/Veh (s)						453.8
Total Del/Veh (s)	969.6	9.0	1919.7	56.9	1563.1	274.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									57.6	
Total Del/Veh (s)	59.0	837.2	18.6	42.8	43.4	183.7	354.1	889.1	308.5	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	All	
Movements Served	L	Т	R	L	TR	L	Т	R	L	TR		
Denied Del/Veh (s)											95.8	
Total Del/Veh (s)	55.5	408.9	3.4	41.9	24.4	52.6	1155.4	134.2	1376.7	1956.6	275.4	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All
Movements Served	L	T	TR	LR	
Denied Del/Veh (s)					8.1
Total Del/Veh (s)	38.2	175.3	17.0	60.6	82.9

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									21.3	
Total Del/Veh (s)	37.6	208.2	26.6	152.9	46.2	55.4	152.4	236.1	158.8	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							78.9
Total Del/Veh (s)	13.2	88.7	20.2	119.8	2302.4	660.3	222.1

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Movements Served	L	T	T	R	L	L	Т	R	L	Т	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	80.1	316.9	131.9	4.7	54.8	73.0	190.7	28.7	65.1	66.1	168.3	125.2

7: Montana Ave & Custer Ave Performance by lane

Lane	SB	SB	SB	All
Movements Served	L	Т	TR	
Denied Del/Veh (s)				159.0
Total Del/Veh (s)	278.8	871.1	119.2	185.4

8: Sanders St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Movements Served	L	Т	Т	R	L	Т	TR	L	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	47.9	345.2	356.8	3.0	31.2	73.4	53.9	44.8	145.3	65.8	172.3	1391.2

8: Sanders St & Custer Ave Performance by lane

Lane	SB	All	
Movements Served	R		
Denied Del/Veh (s)		139.0	
Total Del/Veh (s)	20.4	183.9	

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by lane

Lane	EB	EB	EB	WB	WB	WB	SB	SB	All	
Movements Served	Т	T	R	Т	Т	R	<	R		
Denied Del/Veh (s)									0.3	
Total Del/Veh (s)	119.3	103.2	1.8	163.2	150.5	4.2	43.8	38.7	104.8	

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	All	
Movements Served	L	T	Т	Т	Т	R	L	LT	R		
Denied Del/Veh (s)										61.5	
Total Del/Veh (s)	41.2	297.4	109.0	247.7	248.8	3.1	55.0	61.8	25.8	161.1	

11: Washington St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Movements Served	L	Т	T	R	L	Т	T	R	L	T	R	L
Denied Del/Veh (s)												
Total Del/Veh (s)	192.9	580.3	30.4	4.2	48.0	152.5	171.0	9.6	144.6	517.3	7.8	47.4

11: Washington St & Custer Ave Performance by lane

Lane	SB	SB	All
Movements Served	Т	R	
Denied Del/Veh (s)			272.0
Total Del/Veh (s)	81.0	50.4	158.3

Denied Del/Veh (s)	328.5
Total Del/Veh (s)	529.0

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	700.6	406.5	453.8
Total Del/Veh (s)	969.6	9.0	352.7	1540.2	274.1
Stop/Veh	0.75	0.09	0.33	0.97	0.26
Avg Speed (mph)	1	28	2	0	3
Fuel Used (gal)	0.8	5.8	53.6	10.1	70.3
Fuel Eff. (mpg)	3.6	28.9	1.8	0.8	3.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	10.7	0.0	40.0	263.5	57.6
Total Del/Veh (s)	630.2	39.5	180.5	706.6	308.5
Stop/Veh	0.88	0.61	0.89	0.88	0.76
Avg Speed (mph)	2	14	2	1	3
Fuel Used (gal)	19.2	7.4	4.8	15.9	47.4
Fuel Eff. (mpg)	6.1	23.0	7.4	3.2	7.9

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	94.8	0.1	214.8	207.4	95.8
Total Del/Veh (s)	361.5	29.8	325.8	1847.2	275.4
Stop/Veh	0.98	0.63	0.90	0.88	0.79
Avg Speed (mph)	2	14	3	0	3
Fuel Used (gal)	16.6	8.3	21.9	14.4	61.3
Fuel Eff. (mpg)	6.6	23.1	6.0	1.3	7.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	20.1	0.1	0.2	8.1
Total Del/Veh (s)	173.9	17.0	60.0	82.9
Stop/Veh	0.83	0.41	0.90	0.61
Avg Speed (mph)	4	17	11	7
Fuel Used (gal)	12.3	8.9	1.4	22.5
Fuel Eff. (mpg)	11.5	26.7	24.0	18.3

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	41.9	0.0	1.2	37.9	21.3
Total Del/Veh (s)	183.6	149.1	51.5	202.3	158.8
Stop/Veh	1.58	1.55	0.90	1.00	1.39
Avg Speed (mph)	4	4	11	4	5
Fuel Used (gal)	15.9	12.9	3.2	9.5	41.5
Fuel Eff. (mpg)	11.8	14.0	25.0	12.1	13.6

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	24.7	68.7	458.9	95.2	78.9
Total Del/Veh (s)	88.1	116.2	2326.9	660.3	222.1
Stop/Veh	0.38	0.90	0.80	0.83	0.65
Avg Speed (mph)	7	7	0	0	3
Fuel Used (gal)	12.2	16.4	18.6	1.4	48.7
Fuel Eff. (mpg)	15.7	14.3	0.7	0.8	9.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.6	3.7	1.5	613.5	159.0
Total Del/Veh (s)	189.2	117.7	107.7	442.7	185.4
Stop/Veh	1.18	1.42	0.92	1.02	1.16
Avg Speed (mph)	4	6	8	2	4
Fuel Used (gal)	15.6	17.8	15.5	60.9	109.9
Fuel Eff. (mpg)	13.2	15.0	20.3	2.7	8.7

Total Zone Performance

Denied Del/Veh (s)	329.6
Total Del/Veh (s)	2141.3
Stop/Veh	9.35
Avg Speed (mph)	4
Fuel Used (gal)	401.5
Fuel Eff. (mpg)	8.6

Approach	EB	WB	NB	SB	All
Travel Time (hr)	3.3	5.9	229.1	43.2	281.6
Vehicles Entered	11	487	431	66	995

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	75.5	12.2	17.9	65.8	171.4
Vehicles Entered	374	667	259	213	1513

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	64.4	13.8	86.6	61.4	226.1
Vehicles Entered	441	922	489	93	1945

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	42.8	14.2	3.2	60.2
Vehicles Entered	688	936	104	1728

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	56.1	40.6	7.3	32.3	136.2
Vehicles Entered	739	804	262	394	2199

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	34.2	52.7	80.3	6.1	173.3
Vehicles Entered	862	868	79	26	1835

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	50.1	45.9	39.9	250.7	386.5
Vehicles Entered	808	1112	1008	549	3477

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	110.1	25.8	14.9	145.7	296.5
Vehicles Entered	865	1281	421	344	2911

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	30.9	55.7	4.6	91.2
Vehicles Entered	1101	1326	268	2695

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	54.1	30.3	341.4	11.8	437.6
Vehicles Entered	1004	764	807	479	3054

Travel Time (hr)	2509.3	
Vehicles Entered	7996	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	NB	SB	
Directions Served	LTR	LTR	LT	R	LTR	
Maximum Queue (ft)	208	69	1322	200	992	
Average Queue (ft)	79	17	1056	178	656	
95th Queue (ft)	220	50	1849	269	1291	
Link Distance (ft)	1322	1779	1291		990	
Upstream Blk Time (%)			74		40	
Queuing Penalty (veh)			0		0	
Storage Bay Dist (ft)				100		
Storage Blk Time (%)				85		
Queuing Penalty (veh)				36		

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	200	1853	158	524	174	764	200	1507
Average Queue (ft)	147	1725	41	275	18	383	183	1007
95th Queue (ft)	286	2223	113	476	95	785	244	1942
Link Distance (ft)		1779		1291		759		1492
Upstream Blk Time (%)		85				16		43
Queuing Penalty (veh)		795				0		0
Storage Bay Dist (ft)	100		500		75		100	
Storage Blk Time (%)	19	86		1		79	91	3
Queuing Penalty (veh)	121	254		1		6	141	4

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	T	R	L	TR	L	Т	R	L	TR	
Maximum Queue (ft)	600	1314	275	321	371	278	1542	325	200	1673	
Average Queue (ft)	115	1293	166	150	236	70	1101	314	189	1194	
95th Queue (ft)	493	1385	384	292	356	183	2001	374	211	2066	
Link Distance (ft)		1291			1054		1511			1653	
Upstream Blk Time (%)		41					50			38	
Queuing Penalty (veh)		382					0			0	
Storage Bay Dist (ft)	500		175	500		225		225	100		
Storage Blk Time (%)		85				0	0	87	99	1	
Queuing Penalty (veh)		112				0	2	167	58	1	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	Т	TR	LR
Maximum Queue (ft)	600	1076	523	207
Average Queue (ft)	74	1056	276	96
95th Queue (ft)	390	1134	478	178
Link Distance (ft)		1054	1287	1705
Upstream Blk Time (%)		26		
Queuing Penalty (veh)		334		
Storage Bay Dist (ft)	500			
Storage Blk Time (%)		76		
Queuing Penalty (veh)		9		

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	600	1304	600	1176	180	303	275	1244
Average Queue (ft)	472	1283	177	1147	89	120	211	574
95th Queue (ft)	856	1360	611	1272	166	244	331	1513
Link Distance (ft)		1287		1159		1624		1621
Upstream Blk Time (%)		19		16				14
Queuing Penalty (veh)		262		177				0
Storage Bay Dist (ft)	500		500		100		175	
Storage Blk Time (%)		70		60	9	17	52	7
Queuing Penalty (veh)		141		22	14	19	111	15

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	486	1178	600	1381	1694	225
Average Queue (ft)	28	611	261	941	1353	131
95th Queue (ft)	224	1542	734	1701	2085	284
Link Distance (ft)		1159		1380	1682	276
Upstream Blk Time (%)		13		0	51	17
Queuing Penalty (veh)		179		5	0	0
Storage Bay Dist (ft)	500		500			
Storage Blk Time (%)		45		61		
Queuing Penalty (veh)		5		29		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	Т	Т	R	L	L	T	R	L	Т	T	R
Maximum Queue (ft)	325	1396	325	275	167	500	1245	1213	331	981	1029	325
Average Queue (ft)	208	928	287	133	82	391	1052	702	177	496	522	213
95th Queue (ft)	389	1822	377	337	144	686	1560	1527	313	1158	1229	403
Link Distance (ft)		1380					1224	1224		1656	1656	
Upstream Blk Time (%)		20					12	2		0	1	
Queuing Penalty (veh)		299					85	17		0	0	
Storage Bay Dist (ft)	225		225	225	400	400			300			225
Storage Blk Time (%)	8	56	57	0			58		4	1	5	46
Queuing Penalty (veh)	91	524	433	0			148		13	2	13	128

Intersection: 7: Montana Ave & Custer Ave

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	330	1659	1660
Average Queue (ft)	327	1516	1405
95th Queue (ft)	337	1968	2118
Link Distance (ft)		1633	1633
Upstream Blk Time (%)		72	35
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	230		
Storage Blk Time (%)	97	2	
Queuing Penalty (veh)	230	8	

Intersection: 8: Sanders St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	Т	R	L	T	TR	L	Т	R	L	T
Maximum Queue (ft)	275	1259	1251	235	330	467	459	152	553	343	250	1302
Average Queue (ft)	189	1003	1009	133	213	429	416	68	171	177	247	1176
95th Queue (ft)	376	1588	1581	321	436	547	535	136	734	352	256	1567
Link Distance (ft)		1224	1224			425	425		1651			1264
Upstream Blk Time (%)		26	32			26	21		1			74
Queuing Penalty (veh)		209	256			211	175		0			0
Storage Bay Dist (ft)	175			135	230			150		300	150	
Storage Blk Time (%)	1	77	79		0	47		1	0	12	91	0
Queuing Penalty (veh)	8	122	92		0	75		4	0	21	195	1

Intersection: 8: Sanders St & Custer Ave

Movement	SB	
Directions Served	R	
Maximum Queue (ft)	194	
Average Queue (ft)	40	
95th Queue (ft)	117	
Link Distance (ft)		
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	150	
Storage Blk Time (%)	0	
Queuing Penalty (veh)	1	

Intersection: 9: I-15 SB On & Custer Ave & I-15 SB Off

Movement	EB	EB	EB	WB	WB	WB	SB	SB	
Directions Served	T	Т	R	Т	Т	R	<	R	
Maximum Queue (ft)	453	467	250	813	812	400	197	260	
Average Queue (ft)	386	381	191	744	748	376	77	111	
95th Queue (ft)	547	560	365	930	941	530	160	210	
Link Distance (ft)	425	425		767	767		669	669	
Upstream Blk Time (%)	26	26		22	22				
Queuing Penalty (veh)	266	266		193	196				
Storage Bay Dist (ft)			150			300			
Storage Blk Time (%)		65			73				
Queuing Penalty (veh)		282			223				

Intersection: 10: I-15 NB Off/I-15 NB On & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	
Directions Served	L	Т	T	T	Т	R	L	LT	R	
Maximum Queue (ft)	600	806	819	1168	1174	250	364	417	291	
Average Queue (ft)	362	712	708	905	924	148	184	198	98	
95th Queue (ft)	824	1001	1007	1427	1436	344	306	329	201	
Link Distance (ft)		767	767	1143	1143			1350		
Upstream Blk Time (%)		37	28	11	18					
Queuing Penalty (veh)		310	231	67	107					
Storage Bay Dist (ft)	500					150	400		400	
Storage Blk Time (%)		80			73		1	1		
Queuing Penalty (veh)		86			70		4	5		

Intersection: 11: Washington St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	Т	R	L	Т	Т	R	L	T	R	L
Maximum Queue (ft)	450	1167	1168	101	427	832	844	365	450	1757	412	249
Average Queue (ft)	450	1140	224	18	192	356	365	96	446	1673	71	140
95th Queue (ft)	450	1251	804	59	444	878	877	351	467	2053	244	254
Link Distance (ft)		1143	1143			1198	1198			1706		
Upstream Blk Time (%)		23	1			4	3			68		
Queuing Penalty (veh)		202	9			0	0			0		
Storage Bay Dist (ft)	350			350	400			300	350		350	150
Storage Blk Time (%)	96				1	19	26		71	1	0	10
Queuing Penalty (veh)	277				1	33	28		515	6	0	30

Intersection: 11: Washington St & Custer Ave

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	490	248
Average Queue (ft)	228	52
95th Queue (ft)	420	165
Link Distance (ft)	1069	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)	29	4
Queuing Penalty (veh)	74	16

Network Summary

Network wide Queuing Penalty: 10256

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	806.0	192.1	504.4
Total Del/Veh (s)	1144.3	9.0	421.9	1527.0	290.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	88.2	0.0	49.9	350.0	101.6
Total Del/Veh (s)	733.1	31.4	267.5	765.4	350.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	100.5	0.0	759.5	533.6	339.8
Total Del/Veh (s)	459.3	23.6	484.0	2507.2	353.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Defiled Del/Veff (S)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	221.9	17.6	105.9	98.9

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	720.7	187.9
Total Del/Veh (s)	232.9	143.6	55.0	687.5	249.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	14.1	109.3	714.6	285.1	132.7
Total Del/Veh (s)	164.7	118.3	2757.2	1167.4	278.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	13.5	0.3	193.1	655.3	223.0
Total Del/Veh (s)	306.4	101.3	207.8	460.3	232.4

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	160.7	0.1	20.7	1059.0	244.1
Total Del/Veh (s)	418.9	57.7	143.3	631.4	225.1

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	4.3	4.5	0.2	4.0
Total Del/Veh (s)	101.8	139.1	41.1	114.3

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	pach EB	WB	NB	All
Denied Del/Veh (s)	ed Del/Veh (s) 4.9	363.3	3.4	129.2
Total Del/Veh (s)	Del/Veh (s) 182.4	371.1	70.1	204.0

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	166.7	1219.4	74.3	574.5
Total Del/Veh (s)	145.2	291.2	313.0	176.1	224.3

Denied Del/Veh (s)	575.8
Total Del/Veh (s)	641.6

Lane	EB	WB	NB	NB	SB	All
Movements Served	LTR	LTR	LT	R	LTR	
Denied Del/Veh (s)						504.4
Total Del/Veh (s)	1144.3	9.0	2127.2	69.3	1502.4	290.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									101.6	
Total Del/Veh (s)	43.5	922.5	17.5	32.9	37.2	273.7	408.7	940.1	350.1	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	TR	L	Т	R	L	TR	
Denied Del/Veh (s)											339.8
Total Del/Veh (s)	47.0	500.6	3.5	23.0	23.7	58.1	1755.5	172.6	1908.0	2646.7	353.3

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All
Movements Served	L	T	TR	LR	
Denied Del/Veh (s)					0.0
Total Del/Veh (s)	21.0	222.9	17.6	106.8	98.9

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	TR	L	TR	L	TR	L	TR		
Denied Del/Veh (s)									187.9	
Total Del/Veh (s)	45.2	265.2	24.7	145.5	39.4	65.6	284.3	996.1	249.2	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	L	TR	L	TR	LTR	LTR	
Denied Del/Veh (s)							132.7
Total Del/Veh (s)	14.1	165.8	17.1	125.4	2724.4	1167.4	278.6

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Movements Served	L	T	Т	R	L	L	Т	R	L	T	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	67.5	541.9	197.5	4.9	54.2	68.8	158.0	28.9	76.5	104.8	389.3	183.8

7: Montana Ave & Custer Ave Performance by lane

Lane	SB	SB	SB	All
Movements Served	L	T	TR	
Denied Del/Veh (s)				223.0
Total Del/Veh (s)	331.5	869.7	116.0	232.4

8: Sanders St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Movements Served	L	Т	Т	R	L	Т	TR	L	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	51.5	509.2	492.0	2.8	29.0	69.6	53.6	49.7	350.4	101.5	217.9	1939.1

8: Sanders St & Custer Ave Performance by lane

Lane	SB	All
Movements Served	R	
Denied Del/Veh (s)		244.1
Total Del/Veh (s)	22.5	225.1

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by lane

Lane	EB	EB	EB	WB	WB	WB	SB	SB	All	
Movements Served	T	T	R	Т	Т	R	<	R		
Denied Del/Veh (s)									4.0	
Total Del/Veh (s)	149.6	105.4	1.6	169.8	154.8	4.0	39.1	41.6	114.3	

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	All	
Movements Served	L	Т	Т	Т	Т	R	L	LT	R		
Denied Del/Veh (s)										129.2	
Total Del/Veh (s)	54.1	288.6	128.3	404.4	392.7	3.2	75.1	97.4	28.2	204.0	

11: Washington St & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Movements Served	L	T	T	R	L	Т	T	R	L	T	R	L
Denied Del/Veh (s)												
Total Del/Veh (s)	151.8	519.6	26.5	2.2	48.3	411.7	473.9	13.3	204.5	566.5	9.0	90.3

11: Washington St & Custer Ave Performance by lane

Lane	SB	SB	All
Movements Served	Т	R	•
Denied Del/Veh (s)			574.5
Total Del/Veh (s)	273.5	136.5	224.3

nied Del/Veh (s)	575.8
al Del/Veh (s)	641.6

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	806.0	192.1	504.4
Total Del/Veh (s)	1144.3	9.0	421.9	1527.0	290.3
Stop/Veh	0.82	0.10	0.44	0.98	0.31
Avg Speed (mph)	1	28	2	0	3
Fuel Used (gal)	1.8	5.9	62.8	7.2	77.7
Fuel Eff. (mpg)	2.8	29.9	1.4	1.0	3.6

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	88.2	0.0	49.9	350.0	101.6
Total Del/Veh (s)	733.1	31.4	267.5	765.4	350.1
Stop/Veh	0.88	0.53	0.89	0.88	0.71
Avg Speed (mph)	1	16	2	1	2
Fuel Used (gal)	21.1	7.1	3.7	19.1	51.1
Fuel Eff. (mpg)	4.9	23.6	5.5	2.7	6.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	100.5	0.0	759.5	533.6	339.8
Total Del/Veh (s)	459.3	23.6	484.0	2507.2	353.3
Stop/Veh	0.95	0.54	0.66	0.76	0.67
Avg Speed (mph)	2	16	2	0	2
Fuel Used (gal)	16.4	6.9	58.8	19.5	101.7
Fuel Eff. (mpg)	5.5	26.7	2.0	0.6	4.0

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	221.9	17.6	105.9	98.9
Stop/Veh	0.85	0.34	0.91	0.57
Avg Speed (mph)	3	20	7	7
Fuel Used (gal)	11.6	9.1	2.0	22.6
Fuel Eff. (mpg)	10.4	25.7	19.5	17.3

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
	LU	770	טוו		
Denied Del/Veh (s)	0.0	0.0	1.1	720.7	187.9
Total Del/Veh (s)	232.9	143.6	55.0	687.5	249.2
Stop/Veh	1.48	1.39	0.90	0.84	1.27
Avg Speed (mph)	3	5	11	1	3
Fuel Used (gal)	14.5	12.8	3.0	44.7	75.1
Fuel Eff. (mpg)	11.2	14.5	24.6	1.9	6.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	14.1	109.3	714.6	285.1	132.7
Total Del/Veh (s)	164.7	118.3	2757.2	1167.4	278.6
Stop/Veh	0.62	0.97	0.76	0.72	0.82
Avg Speed (mph)	4	6	0	0	3
Fuel Used (gal)	12.4	19.6	22.5	2.5	57.0
Fuel Eff. (mpg)	12.7	12.3	0.4	0.4	7.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	13.5	0.3	193.1	655.3	223.0
Total Del/Veh (s)	306.4	101.3	207.8	460.3	232.4
Stop/Veh	1.46	1.22	1.03	1.03	1.18
Avg Speed (mph)	3	7	4	2	4
Fuel Used (gal)	17.7	17.4	37.2	63.0	135.4
Fuel Eff. (mpg)	9.4	16.4	8.2	2.5	6.7

Total Zone Performance

Denied Del/Veh (s)	536.0
Total Del/Veh (s)	2604.4
Stop/Veh	8.92
Avg Speed (mph)	3
Fuel Used (gal)	520.5
Fuel Eff. (mpg)	6.2

Approach	EB	WB	NB	SB	All
Travel Time (hr)	7.2	6.3	269.3	30.7	313.5
Vehicles Entered	22	515	379	60	976

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	85.2	10.6	14.4	79.3	189.4
Vehicles Entered	328	663	151	211	1353

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	65.2	11.5	248.1	84.3	409.1
Vehicles Entered	360	885	425	69	1739

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	41.3	11.6	5.3	58.2
Vehicles Entered	580	922	120	1622

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	50.1	40.2	6.9	189.1	286.3
Vehicles Entered	650	818	243	290	2001

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	40.6	66.3	98.3	10.6	215.9
Vehicles Entered	696	898	65	23	1682

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	64.4	41.6	134.3	259.5	499.8
Vehicles Entered	645	1158	996	528	3327

8: Sanders St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	134.6	26.1	34.3	246.5	441.5
Vehicles Entered	750	1348	579	260	2937

9: I-15 SB On & Custer Ave & I-15 SB Off Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	35.1	62.2	5.0	102.3
Vehicles Entered	1057	1344	291	2692

10: I-15 NB Off/I-15 NB On & Custer Ave Performance by approach

Approach	h EB WB NE	All
Travel Time (hr)	ime (hr) 55.0 190.7 27.8	273.5
Vehicles Entered	s Entered 933 777 886	2596

11: Washington St & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	53.8	107.5	750.5	44.6	956.4
Vehicles Entered	1101	762	707	574	3144

Travel Time (hr)	me (hr) 3815.3
Vehicles Entered	Entered 7812

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	NB	SB	
Directions Served	LTR	LTR	LT	R	LTR	
Maximum Queue (ft)	374	69	1319	200	996	
Average Queue (ft)	156	19	1093	187	588	
95th Queue (ft)	393	52	1812	252	1218	
Link Distance (ft)	1322	1779	1291		990	
Upstream Blk Time (%)			75		28	
Queuing Penalty (veh)			0		0	
Storage Bay Dist (ft)				100		
Storage Blk Time (%)			0	88		
Queuing Penalty (veh)			1	44		

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	200	1829	85	469	102	590	200	1516
Average Queue (ft)	113	1740	28	245	8	304	188	1065
95th Queue (ft)	272	2203	67	432	60	738	232	1977
Link Distance (ft)		1779		1291		759		1492
Upstream Blk Time (%)		87				12		50
Queuing Penalty (veh)		868				0		0
Storage Bay Dist (ft)	100		500		75		100	
Storage Blk Time (%)	9	89		0		64	95	4
Queuing Penalty (veh)	62	270		0		3	172	5

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	TR	L	Т	R	L	TR	
Maximum Queue (ft)	599	1310	275	184	374	252	1526	325	199	1669	
Average Queue (ft)	53	1298	118	81	236	68	1468	324	191	1385	
95th Queue (ft)	330	1334	338	153	360	168	1799	338	198	2031	
Link Distance (ft)		1291			1054		1511			1653	
Upstream Blk Time (%)		52					88			56	
Queuing Penalty (veh)		508					0			0	
Storage Bay Dist (ft)	500		175	500		225		225	100		
Storage Blk Time (%)		88				0	0	98	100	0	
Queuing Penalty (veh)		87				1	1	274	59	0	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	480	1073	391	324
Average Queue (ft)	32	1049	222	144
95th Queue (ft)	251	1209	367	343
Link Distance (ft)		1054	1287	1705
Upstream Blk Time (%)		37		
Queuing Penalty (veh)		581		
Storage Bay Dist (ft)	500			
Storage Blk Time (%)		81		
Queuing Penalty (veh)		6		

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	600	1304	600	1174	175	288	275	1654
Average Queue (ft)	467	1272	101	1135	78	125	272	1526
95th Queue (ft)	857	1423	458	1333	149	244	292	2016
Link Distance (ft)		1287		1159		1624		1621
Upstream Blk Time (%)		28		15				81
Queuing Penalty (veh)		462		189				0
Storage Bay Dist (ft)	500		500		100		175	
Storage Blk Time (%)		79		57	4	20	97	5
Queuing Penalty (veh)		203		12	6	20	274	15

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	600	1177	600	1353	1696	285
Average Queue (ft)	49	897	389	980	1440	185
95th Queue (ft)	315	1681	846	1597	2093	332
Link Distance (ft)		1159		1380	1682	276
Upstream Blk Time (%)		23		0	63	34
Queuing Penalty (veh)		383		4	0	0
Storage Bay Dist (ft)	500		500			
Storage Blk Time (%)		69		68		
Queuing Penalty (veh)		7		58		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	Т	T	R	L	L	T	R	L	T	Т	R
Maximum Queue (ft)	325	1398	325	275	167	500	1239	1226	377	1447	1467	325
Average Queue (ft)	195	1196	314	161	86	338	895	572	170	1034	1069	290
95th Queue (ft)	403	1848	359	374	148	661	1579	1455	371	2014	2042	413
Link Distance (ft)		1380					1224	1224		1656	1656	
Upstream Blk Time (%)		33					10	2		21	37	
Queuing Penalty (veh)		590					88	17		0	0	
Storage Bay Dist (ft)	225		225	225	400	400			300			225
Storage Blk Time (%)	3	79	80				47		7	6	14	74
Queuing Penalty (veh)	41	866	718				144		23	14	44	255

Intersection: 7: Montana Ave & Custer Ave

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	330	1648	1648
Average Queue (ft)	326	1488	1312
95th Queue (ft)	337	2023	2180
Link Distance (ft)		1633	1633
Upstream Blk Time (%)		74	30
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)	230		
Storage Blk Time (%)	97	2	
Queuing Penalty (veh)	245	7	

Intersection: 8: Sanders St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	Т	TR	L	Т	R	L	T
Maximum Queue (ft)	275	1260	1259	235	330	478	471	221	1219	400	250	1279
Average Queue (ft)	190	1165	1170	126	231	441	425	90	589	305	248	1271
95th Queue (ft)	380	1488	1487	316	441	526	515	175	1567	480	255	1341
Link Distance (ft)		1224	1224			425	425		1651			1264
Upstream Blk Time (%)		37	43			27	21		10			94
Queuing Penalty (veh)		345	405			266	208		0			0
Storage Bay Dist (ft)	175			135	230			150		300	150	
Storage Blk Time (%)	1	85	86		0	47		4	3	44	97	0
Queuing Penalty (veh)	7	202	119		0	93		19	13	110	222	0

Intersection: 8: Sanders St & Custer Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	201
Average Queue (ft)	37
95th Queue (ft)	122
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	150
Storage Blk Time (%)	0
Queuing Penalty (veh)	1

Intersection: 9: I-15 SB On & Custer Ave & I-15 SB Off

Movement	EB	EB	EB	WB	WB	WB	SB	SB	
Directions Served	Т	Т	R	Т	Т	R	<	R	
Maximum Queue (ft)	452	466	250	804	812	400	157	285	
Average Queue (ft)	429	430	204	776	780	375	63	139	
95th Queue (ft)	490	493	362	817	827	530	128	249	
Link Distance (ft)	425	425		767	767		669	669	
Upstream Blk Time (%)	34	33		27	26				
Queuing Penalty (veh)	401	384		284	276				
Storage Bay Dist (ft)			150			300			
Storage Blk Time (%)		62			75				
Queuing Penalty (veh)		272			243				

Intersection: 10: I-15 NB Off/I-15 NB On & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	
Directions Served	L	Т	Т	Т	Т	R	L	LT	R	
Maximum Queue (ft)	600	801	814	1172	1182	250	455	908	436	
Average Queue (ft)	427	780	764	1124	1130	160	259	350	169	
95th Queue (ft)	855	835	891	1254	1248	353	460	866	394	
Link Distance (ft)		767	767	1143	1143			1350		
Upstream Blk Time (%)		46	32	27	38			2		
Queuing Penalty (veh)		459	312	186	262			0		
Storage Bay Dist (ft)	500					150	400		400	
Storage Blk Time (%)	0	86			84		10	11	1	
Queuing Penalty (veh)	1	121			109		54	62	5	

Intersection: 11: Washington St & Custer Ave

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	Т	R	L	Т	Т	R	L	T	R	L
Maximum Queue (ft)	450	1164	1078	54	474	1149	1148	400	450	1738	450	250
Average Queue (ft)	448	1081	300	9	330	797	793	222	445	1672	87	221
95th Queue (ft)	474	1406	1003	32	650	1523	1516	534	473	2007	304	313
Link Distance (ft)		1143	1143			1198	1198			1706		
Upstream Blk Time (%)		17	2			31	33			73		
Queuing Penalty (veh)		177	25			0	0			0		
Storage Bay Dist (ft)	350			350	400			300	350		350	150
Storage Blk Time (%)	88				0	59	69		76	5		54
Queuing Penalty (veh)	360				0	120	91		861	64		174

Intersection: 11: Washington St & Custer Ave

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	1033	250
Average Queue (ft)	682	97
95th Queue (ft)	1290	253
Link Distance (ft)	1069	
Upstream Blk Time (%)	29	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		150
Storage Blk Time (%)	22	19
Queuing Penalty (veh)	79	103

Network Summary

Network wide Queuing Penalty: 15126

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.2	1.0	0.1	0.5	
Total Del/Veh (s)	2.4	11.4	5.9	2.7	8.9	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	44.2	13.4
Total Del/Veh (s)	44.0	29.2	62.4	113.2	61.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.1	2.9	94.8	11.6
Total Del/Veh (s)	43.6	23.3	53.7	535.0	94.0

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.2	0.1	0.2	0.2
Total Del/Veh (s)	20.1	17.6	57.9	20.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.5	1.0	220.3	50.1
Total Del/Veh (s)	41.0	76.8	143.1	304.8	116.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.7	0.1	0.1
Total Del/Veh (s)	6.6	18.6	29.6	44.0	13.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.6	3.6	1.2
Total Del/Veh (s)	43.0	28.1	53.3	108.0	58.8

Denied Del/Veh (s)	42.1
Total Del/Veh (s)	1273.1

Lane	EB	WB	NB	SB	All	
Movements Served	LTR	LTR	LTR	LTR		
Denied Del/Veh (s)					0.5	
Total Del/Veh (s)	2.4	11.4	5.9	2.6	8.9	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R	
Denied Del/Veh (s)											13.4
Total Del/Veh (s)	32.4	47.0	35.9	30.2	2.2	60.0	62.4	82.0	285.9	20.7	61.0

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	R	L	T	R	L	Т	R	L	TR	
Denied Del/Veh (s)												11.6
Total Del/Veh (s)	30.3	52.8	5.4	48.0	17.3	0.9	67.1	108.6	42.1	188.4	825.1	94.0

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All	
Movements Served	L	Т	TR	LR		
Denied Del/Veh (s)					0.2	
Total Del/Veh (s)	49.7	19.8	17.6	57.9	20.5	

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	All	
Movements Served	L	Т	TR	L	T	R	L	TR	L	TR		
Denied Del/Veh (s)											50.1	
Total Del/Veh (s)	133.1	32.6	21.4	35.4	91.1	26.1	164.5	132.4	101.2	427.5	116.8	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	19.6	5.5	7.3	30.7	19.8	15.0	71.2	17.7	44.0	13.2	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	T	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	65.0	78.8	41.5	52.4	11.7	41.9	53.4	29.4	29.9	3.7	63.6	64.1

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	T	Т	R	
Denied Del/Veh (s)							1.2
Total Del/Veh (s)	54.9	16.7	87.4	214.4	66.0	12.8	58.8

Denied Del/Veh (s)	42.1
Total Del/Veh (s)	1273.1

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.05	0.00
Avg Speed (mph)	23	26	27	22	26
Fuel Used (gal)	0.0	10.0	4.2	0.2	14.5
Fuel Eff. (mpg)	31.5	29.9	37.5	30.6	32.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.80	0.57	0.92	1.21	0.85
Avg Speed (mph)	15	17	6	7	11
Fuel Used (gal)	9.6	8.9	1.8	12.2	32.4
Fuel Eff. (mpg)	24.4	25.0	17.0	17.1	21.4

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.72	0.46	0.87	1.10	0.68	
Avg Speed (mph)	13	16	12	2	7	
Fuel Used (gal)	9.7	9.0	4.1	14.6	37.3	
Fuel Eff. (mpg)	23.2	24.9	25.7	5.6	17.0	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.29	0.26	0.91	0.30
Avg Speed (mph)	17	20	11	18
Fuel Used (gal)	9.1	10.6	1.3	20.9
Fuel Eff. (mpg)	25.6	26.4	24.1	25.9

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.57	1.14	1.08	1.31	0.96
Avg Speed (mph)	12	8	6	3	6
Fuel Used (gal)	12.3	11.6	4.8	27.9	56.7
Fuel Eff. (mpg)	23.5	19.1	16.7	6.6	13.7

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.10	0.31	0.89	0.94	0.24
Avg Speed (mph)	23	20	15	3	21
Fuel Used (gal)	10.9	11.7	1.2	0.1	24.0
Fuel Eff. (mpg)	26.8	24.5	28.4	11.6	25.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.68	0.51	0.84	1.09	0.76
Avg Speed (mph)	13	17	13	8	11
Fuel Used (gal)	13.6	13.2	5.0	18.9	50.7
Fuel Eff. (mpg)	23.7	23.5	26.2	19.8	22.4

Stop/Veh	13.12
Avg Speed (mph)	11
Fuel Used (gal)	236.5
Fuel Used (gal) Fuel Eff. (mpg)	20.6

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.0	11.6	6.1	0.3	18.1	
Vehicles Entered	4	930	675	40	1649	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.3	13.3	5.0	38.6	72.2
Vehicles Entered	681	872	208	740	2501

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	17.9	13.7	9.2	57.7	98.6
Vehicles Entered	886	1073	364	288	2611

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	13.5	14.0	2.9	30.3
Vehicles Entered	1120	1101	95	2316

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	23.5	29.7	14.2	107.4	174.8
Vehicles Entered	1173	1009	264	613	3059

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	12.5	14.1	2.5	0.4	29.6
Vehicles Entered	1282	1058	113	30	2483

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	25.2	18.4	10.1	48.8	102.5
Vehicles Entered	1256	1260	419	1221	4156

Travel Time (hr)	526.1	
Vehicles Entered	5313	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Movement	ED	VVD	IND	<u> </u>
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	4	32	36	38
Average Queue (ft)	0	4	2	2
95th Queue (ft)	4	21	17	17
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)				
Queuing Penalty (veh)				

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	200	688	264	378	173	88	349	200	1225	200	
Average Queue (ft)	117	316	129	214	27	7	163	168	627	136	
95th Queue (ft)	230	623	228	336	115	44	343	236	1490	241	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)							0		13		
Queuing Penalty (veh)							0		0		
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	7	34		6			45	56	22	19	
Queuing Penalty (veh)	37	49		24			3	305	125	82	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	T	R	L	TR	
Maximum Queue (ft)	269	871	275	298	387	124	165	318	301	200	1555	
Average Queue (ft)	21	440	146	156	209	9	60	68	153	193	1130	
95th Queue (ft)	173	915	340	269	355	68	133	304	277	232	2023	
Link Distance (ft)		1290			1054			1511			1642	
Upstream Blk Time (%)		0									33	
Queuing Penalty (veh)		1									0	
Storage Bay Dist (ft)	500		175	500		250	225		225	100		
Storage Blk Time (%)		30			5		0	0	6	90	18	
Queuing Penalty (veh)		53			16		0	1	7	124	30	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	110	488	441	170
Average Queue (ft)	14	238	225	83
95th Queue (ft)	78	468	393	141
Link Distance (ft)		1054	1286	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)		1		
Queuing Penalty (veh)		0		

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	R	L	TR	L	TR	
Maximum Queue (ft)	322	382	250	600	1090	949	190	554	275	1649	
Average Queue (ft)	177	231	215	246	775	335	115	265	270	1475	
95th Queue (ft)	342	336	269	683	1255	1064	221	711	303	1984	
Link Distance (ft)		1286			1152	1152		1612		1608	
Upstream Blk Time (%)					6	1				73	
Queuing Penalty (veh)					32	6				0	
Storage Bay Dist (ft)	500		150	500			100		175		
Storage Blk Time (%)	0	18	21		37		41	21	51	62	
Queuing Penalty (veh)	1	120	136		31		72	19	213	179	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	50	95	126	115	338	286	113	115	74	
Average Queue (ft)	9	39	60	40	125	85	30	44	27	
95th Queue (ft)	34	85	112	87	321	259	80	87	63	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				50		
Storage Blk Time (%)					0		7	13		
Queuing Penalty (veh)					0		6	3		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	103	305	482	536	325	168	181	304	298	100	250	208
Average Queue (ft)	41	84	266	301	153	92	107	155	155	32	110	90
95th Queue (ft)	85	207	418	470	361	154	166	265	266	73	218	152
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	15	24				0	0		2	
Queuing Penalty (veh)		0	18	59				0	0		2	

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	150	92	330	1176	1151	329
Average Queue (ft)	68	31	320	795	725	72
95th Queue (ft)	135	69	371	1530	1473	218
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				5	1	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			68	5	12	
Queuing Penalty (veh)			221	22	17	

Zone Summary

Zone wide Queuing Penalty: 2015

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	67.3	0.2	37.0
Total Del/Veh (s)	3.0	12.7	95.3	2.8	55.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	2.2	0.0	0.6	3.5	1.4
Total Del/Veh (s)	198.0	26.4	114.5	201.5	125.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	25.7	0.1	4.5	1.3	9.3
Total Del/Veh (s)	141.5	36.0	170.6	165.5	107.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	2.0	0.1	0.2	1.0
	46.0	10.1	72.4	30.8
Total Del/Veh (s)	46.0	10.3	73.1	30.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	1.2	17.6	2.9
Total Del/Veh (s)	30.8	63.8	148.9	240.6	83.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	1.8	0.1	0.2
Total Del/Veh (s)	12.3	16.1	36.8	47.2	15.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	1.3	19.4	4.5
Total Del/Veh (s)	76.4	34.0	54.0	181.3	82.9

Denied Del/Veh (s)	21.9
Total Del/Veh (s)	1526.5

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					37.0
Total Del/Veh (s)	2.7	12.7	95.3	2.7	55.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											1.4	
Total Del/Veh (s)	48.9	259.0	30.6	33.9	4.2	52.9	116.5	153.9	720.8	9.3	125.0	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Denied Del/Veh (s)												9.3
Total Del/Veh (s)	34.3	159.9	5.1	85.4	15.8	1.7	127.6	715.3	78.2	193.0	132.8	107.3

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All
Movements Served	L	T	TR	LR	•
Denied Del/Veh (s)					1.0
Total Del/Veh (s)	42.9	46.1	10.3	73.1	30.8

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	R	L	TR	L	TR	
Denied Del/Veh (s)											2.9
Total Del/Veh (s)	80.8	29.5	13.5	23.6	72.6	22.3	135.7	159.9	148.4	316.9	83.5

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.2	
Total Del/Veh (s)	28.7	11.8	12.7	41.8	17.2	11.2	78.9	25.2	47.2	15.6	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	65.3	81.1	84.8	91.4	9.0	57.9	77.8	35.5	39.0	5.0	63.4	65.6

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							4.5
Total Del/Veh (s)	61.0	21.6	131.0	445.1	70.5	9.6	82.9

Denied Del/Veh (s)	21.9
Total Del/Veh (s)	1526.5

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.03	0.22	0.04	0.13
Avg Speed (mph)	23	26	7	22	11
Fuel Used (gal)	0.1	7.0	13.1	0.7	20.9
Fuel Eff. (mpg)	31.5	29.3	14.6	30.6	20.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.06	0.52	0.99	1.05	0.85
Avg Speed (mph)	5	17	4	4	6
Fuel Used (gal)	17.9	8.0	3.3	6.1	35.3
Fuel Eff. (mpg)	15.2	26.0	12.1	13.4	17.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.56	0.55	1.43	1.04	1.10
Avg Speed (mph)	5	13	5	5	6
Fuel Used (gal)	14.9	10.4	11.3	2.6	39.1
Fuel Eff. (mpg)	14.1	21.5	15.4	15.5	16.5

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.62	0.16	0.94	0.42
Avg Speed (mph)	11	19	9	14
Fuel Used (gal)	10.9	9.8	1.4	22.1
Fuel Eff. (mpg)	23.1	28.3	22.4	25.3

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.48	0.91	1.10	1.30	0.80
Avg Speed (mph)	13	9	5	4	8
Fuel Used (gal)	13.0	10.7	5.0	10.8	39.5
Fuel Eff. (mpg)	24.5	21.0	16.2	11.8	19.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.20	0.23	0.86	0.83	0.26	
Avg Speed (mph)	20	21	13	3	19	
Fuel Used (gal)	11.7	10.8	1.7	0.1	24.3	
Fuel Eff. (mpg)	26.1	25.2	27.3	11.3	25.7	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.02	0.42	0.85	1.11	0.85
Avg Speed (mph)	9	15	13	5	9
Fuel Used (gal)	18.1	14.2	11.7	21.1	65.2
Fuel Eff. (mpg)	20.3	20.7	27.2	13.8	19.5

Stop/Veh	14.22
Avg Speed (mph)	9
Fuel Used (gal)	246.3
Fuel Used (gal) Fuel Eff. (mpg)	19.8

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.1	7.9	45.5	0.9	54.4	
Vehicles Entered	11	620	848	115	1594	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	54.4	11.9	10.7	19.6	96.5
Vehicles Entered	814	810	276	299	2199

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	46.4	17.7	36.0	7.7	107.8
Vehicles Entered	828	1065	613	127	2633

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	24.0	14.6	3.4	42.0
Vehicles Entered	1197	1095	98	2390

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	24.2	25.6	15.1	36.8	101.7
Vehicles Entered	1267	990	267	422	2946

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.5	12.8	3.5	0.4	32.2
Vehicles Entered	1360	1010	144	28	2542

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	41.8	20.0	24.5	64.3	150.6
Vehicles Entered	1412	1218	1011	979	4620

Travel Time (hr)	585.3	
Vehicles Entered	5450	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	15	93	1276	33
Average Queue (ft)	1	16	666	4
95th Queue (ft)	8	62	1619	24
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)			42	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	200	1786	144	455	322	173	542	200	893	182	
Average Queue (ft)	181	1341	65	219	59	21	308	161	419	44	
95th Queue (ft)	245	2333	120	374	193	98	581	246	1173	139	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)		52					0		1		
Queuing Penalty (veh)		471					0		0		
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	36	50		7			71	68	0	1	
Queuing Penalty (veh)	220	148		24			6	105	1	2	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	T	R	L	TR	
Maximum Queue (ft)	600	1305	275	507	445	72	318	1274	325	191	333	
Average Queue (ft)	123	1226	126	305	191	10	158	744	303	103	120	
95th Queue (ft)	495	1516	337	497	391	49	297	1511	385	209	389	
Link Distance (ft)		1290			1054			1511			1642	
Upstream Blk Time (%)		5						4				
Queuing Penalty (veh)		52						0				
Storage Bay Dist (ft)	500		175	500		250	225		225	100		
Storage Blk Time (%)		48		3	2		10	2	61	38	4	
Queuing Penalty (veh)		64		29	8		48	11	117	22	2	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	318	898	278	197
Average Queue (ft)	19	553	146	95
95th Queue (ft)	148	906	255	173
Link Distance (ft)		1054	1286	1705
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	500			
Storage Blk Time (%)		14		
Queuing Penalty (veh)		2		

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	R	L	TR	L	TR	
Maximum Queue (ft)	305	335	249	489	1090	936	199	591	274	1199	
Average Queue (ft)	155	186	183	90	645	314	138	279	238	723	
95th Queue (ft)	284	286	264	402	1320	1073	233	739	334	1630	
Link Distance (ft)		1286			1152	1152		1612		1608	
Upstream Blk Time (%)					6	1				13	
Queuing Penalty (veh)					31	7				0	
Storage Bay Dist (ft)	500		150	500			100		175		
Storage Blk Time (%)		11	13		24		47	29	63	24	
Queuing Penalty (veh)		96	99		9		71	32	137	48	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	T	TR	L	TR	LTR	
Maximum Queue (ft)	95	259	276	84	276	246	151	143	74	
Average Queue (ft)	14	107	116	33	97	59	43	64	25	
95th Queue (ft)	114	342	353	70	263	214	121	121	62	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		0	0							
Queuing Penalty (veh)		1	0							
Storage Bay Dist (ft)	500			500				50		
Storage Blk Time (%)		2			0		9	25		
Queuing Penalty (veh)		0			0		10	7		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	200	325	843	865	325	182	186	225	214	98	326	338
Average Queue (ft)	107	224	499	518	203	87	103	113	107	38	173	215
95th Queue (ft)	180	396	1037	1043	436	158	168	190	182	77	301	311
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			1	1								
Queuing Penalty (veh)			8	9								
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	0	1	32	38							2	1
Queuing Penalty (veh)	1	3	88	68							6	3

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	T	R
Maximum Queue (ft)	338	262	330	1604	1574	238
Average Queue (ft)	208	99	328	1142	1086	51
95th Queue (ft)	308	204	349	1839	1818	161
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				20	7	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	8	0	85	1	3	0
Queuing Penalty (veh)	19	0	202	4	4	0

Zone Summary

Zone wide Queuing Penalty: 2294

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	167.3	0.1	92.9
Total Del/Veh (s)	2.5	12.2	118.1	2.5	67.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	27.3	0.0	0.4	3.6	11.6
Total Del/Veh (s)	218.9	16.9	72.0	88.2	113.2

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	29.3	0.0	609.7	1.4	195.7
Total Del/Veh (s)	157.0	19.0	330.6	205.4	149.5

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Danied Del/Veh (e)	0.0	0.0	0.2	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	53.1	13.9	90.1	37.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	718.8	137.3
Total Del/Veh (s)	32.0	124.4	77.3	610.1	144.3

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	6.0	2.0	0.1	2.8
Total Del/Veh (s)	16.6	88.5	96.0	47.2	53.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	1.4	66.5	14.2
Total Del/Veh (s)	124.7	45.4	108.3	205.4	115.4

Denied Del/Veh (s)	203.8
Total Del/Veh (s)	1979.3

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					92.9
Total Del/Veh (s)	2.5	12.2	117.9	2.5	67.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											11.6	
Total Del/Veh (s)	34.3	290.7	17.8	22.0	2.7	47.8	73.1	117.3	323.0	11.3	113.2	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Denied Del/Veh (s)												195.7
Total Del/Veh (s)	31.9	172.3	4.2	57.8	8.4	1.0	132.1	1339.9	97.4	217.6	182.7	149.5

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	SB	All
Movements Served	L	Т	TR	LR	
Denied Del/Veh (s)					0.0
Total Del/Veh (s)	40.3	53.2	13.9	90.1	37.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	T	R	L	TR	L	TR	
Denied Del/Veh (s)											137.3
Total Del/Veh (s)	82.0	30.0	12.4	23.2	131.4	93.3	75.0	80.1	230.0	933.3	144.3

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										2.8	
Total Del/Veh (s)	19.5	16.0	17.1	39.2	122.6	65.1	398.1	37.9	47.2	53.2	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	72.6	89.1	147.3	156.0	8.2	77.1	96.2	48.9	50.8	13.3	82.5	146.1

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	Т	R	
Denied Del/Veh (s)							14.2
Total Del/Veh (s)	145.5	40.9	153.8	505.1	72.9	10.7	115.4

Denied Del/Veh (s)	203.8
Total Del/Veh (s)	1979.3

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.05	0.17	0.04	0.11
Avg Speed (mph)	23	26	6	22	10
Fuel Used (gal)	0.2	7.4	21.2	0.5	29.3
Fuel Eff. (mpg)	32.1	30.4	9.3	30.6	15.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.01	0.39	0.94	0.94	0.76
Avg Speed (mph)	5	22	5	9	7
Fuel Used (gal)	20.8	7.2	1.4	4.2	33.7
Fuel Eff. (mpg)	13.8	28.4	15.5	21.3	18.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	1.55	0.29	0.99	1.06	0.90	
Avg Speed (mph)	5	18	3	4	5	
Fuel Used (gal)	15.7	8.4	53.3	3.3	80.7	
Fuel Eff. (mpg)	13.3	25.7	3.3	13.6	8.0	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.77	0.14	0.97	0.51
Avg Speed (mph)	10	22	8	13
Fuel Used (gal)	11.4	10.3	1.8	23.6
Fuel Eff. (mpg)	22.6	26.5	20.8	24.2

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.45	1.57	0.94	0.77	0.92
Avg Speed (mph)	14	5	9	1	5
Fuel Used (gal)	13.6	15.3	3.4	45.3	77.6
Fuel Eff. (mpg)	24.1	14.7	21.7	2.2	9.3

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.24	0.84	0.88	0.83	0.55
Avg Speed (mph)	18	8	8	3	11
Fuel Used (gal)	10.8	16.4	2.6	0.1	29.8
Fuel Eff. (mpg)	27.0	17.5	20.5	11.1	21.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.32	0.53	1.35	1.04	1.06
Avg Speed (mph)	6	12	8	4	7
Fuel Used (gal)	21.3	16.1	18.8	24.9	81.1
Fuel Eff. (mpg)	16.5	19.6	20.7	11.2	16.5

Stop/Veh	14.83
Avg Speed (mph)	7
Fuel Used (gal)	355.8
Fuel Used (gal) Fuel Eff. (mpg)	13.9

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.3	8.6	80.2	0.7	89.8	
Vehicles Entered	26	675	862	84	1647	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	68.3	9.4	4.1	10.8	92.6
Vehicles Entered	846	803	153	322	2124

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	50.4	12.0	218.1	10.5	291.0
Vehicles Entered	823	1029	608	145	2605

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	22.8	43.2	8.4	190.5	264.9
Vehicles Entered	1296	995	240	338	2869

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.9	38.1	6.9	0.5	61.4
Vehicles Entered	1259	1105	169	31	2564

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	58.7	25.3	49.5	81.3	214.9
Vehicles Entered	1347	1276	1236	934	4793

Travel Time (hr)	1058.1
Vehicles Entered	5424

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	14	119	1269	35
Average Queue (ft)	1	23	857	3
95th Queue (ft)	9	80	1760	18
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)			59	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	200	1759	98	353	209	102	260	199	514	166	
Average Queue (ft)	193	1537	37	176	39	7	134	143	164	48	
95th Queue (ft)	232	2278	76	299	119	46	253	230	528	127	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)		63									
Queuing Penalty (veh)		632									
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	21	66		2			45	53	0	1	
Queuing Penalty (veh)	149	201		9			2	96	0	2	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	T	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	599	1306	275	291	173	42	297	1526	325	196	448	
Average Queue (ft)	45	1279	111	174	61	7	149	1524	324	138	168	
95th Queue (ft)	287	1391	321	266	134	26	266	1569	328	230	461	
Link Distance (ft)		1290			1054			1511			1642	
Upstream Blk Time (%)		8						94				
Queuing Penalty (veh)		78						0				
Storage Bay Dist (ft)	500		175	500		250	225		225	100		
Storage Blk Time (%)		49			0		8		82	58	3	
Queuing Penalty (veh)		48			0		54		230	34	2	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	SB	
Directions Served	L	T	TR	LR	
Maximum Queue (ft)	205	938	306	241	
Average Queue (ft)	16	705	132	124	
95th Queue (ft)	145	972	261	229	
Link Distance (ft)		1054	1286	1705	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500				
Storage Blk Time (%)		20			
Queuing Penalty (veh)		1			

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	R	L	TR	L	TR	
Maximum Queue (ft)	319	258	243	599	1190	1210	198	325	275	1645	
Average Queue (ft)	177	161	161	101	1095	955	99	143	274	1606	
95th Queue (ft)	302	241	238	453	1431	1616	186	324	277	1769	
Link Distance (ft)		1286			1152	1152		1612		1608	
Upstream Blk Time (%)					29	12				93	
Queuing Penalty (veh)					185	78				0	
Storage Bay Dist (ft)	500		150	500			100		175		
Storage Blk Time (%)		8	8		51		17	21	97	8	
Queuing Penalty (veh)		76	74		10		23	21	273	25	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	40	401	400	552	1040	1013	497	148	77	
Average Queue (ft)	7	122	128	222	487	445	123	84	27	
95th Queue (ft)	29	420	435	648	1099	1066	517	149	63	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		0	0			0				
Queuing Penalty (veh)		0	1			0				
Storage Bay Dist (ft)	500			500				50		
Storage Blk Time (%)		3			38		6	39		
Queuing Penalty (veh)		0			32		9	7		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	T	T	R	L	T
Maximum Queue (ft)	193	325	1245	1251	325	177	200	236	232	190	400	812
Average Queue (ft)	100	244	734	744	214	101	114	151	149	85	269	508
95th Queue (ft)	172	417	1444	1447	448	167	179	216	218	156	467	949
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			3	4								
Queuing Penalty (veh)			27	39								
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	0	0	45	50							8	34
Queuing Penalty (veh)	1	2	135	98							27	80

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	Т	R	L	Т	Т	R
Maximum Queue (ft)	807	325	330	1592	1584	151
Average Queue (ft)	508	247	329	1187	1140	40
95th Queue (ft)	950	414	344	1899	1890	100
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				30	12	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	47	9	89	1	3	
Queuing Penalty (veh)	145	30	225	2	4	

Zone Summary

Zone wide Queuing Penalty: 3171

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.2	1.1	0.1	0.6	
Total Del/Veh (s)	3.4	12.9	6.0	2.7	9.9	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.5	4.8	1.5
Total Del/Veh (s)	48.3	37.9	52.8	81.8	54.8

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.3	0.0	2.9	1.7	0.7
Total Del/Veh (s)	42.8	23.3	30.2	238.6	55.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Defilied Delit Veri (5)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	8.3	15.1	57.0	13.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	2.4	0.6
Total Del/Veh (s)	24.4	25.6	49.2	39.3	30.1

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.7	0.1	0.1
Total Del/Veh (s)	7.4	9.5	28.1	43.2	9.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.7	1.5	0.6
Total Del/Veh (s)	44.6	29.8	52.6	97.1	56.1

Denied Del/Veh (s)	2.1
Total Del/Veh (s)	911.8

Lane	EB	WB	NB	SB	All			
Movements Served	LTR	LTR	LTR	LTR				
Denied Del/Veh (s)					0.6			
Total Del/Veh (s)	2.6	12.9	6.0	2.7	9.9			

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											1.5	
Total Del/Veh (s)	35.4	51.6	45.3	40.1	3.3	52.4	52.9	72.2	180.4	21.9	54.8	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Denied Del/Veh (s)												0.7
Total Del/Veh (s)	42.5	51.9	5.1	53.7	15.7	6.5	83.2	66.6	11.1	118.1	385.5	55.2

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	29.3	8.1	8.1	15.2	15.0	56.5	13.8

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	Т	T	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	28.6	21.6	25.8	34.8	28.7	25.5	3.7	41.4	53.0	49.9	65.8	15.4

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.6	
Total Del/Veh (s)	30.1	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	T	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	16.1	6.1	8.3	41.0	7.6	8.1	63.6	17.4	43.2	9.6	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	T	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	67.0	82.9	42.6	54.7	11.8	45.9	58.5	30.3	32.7	2.2	66.6	61.4

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	51.7	16.1	86.0	180.5	63.1	14.1	56.1

Denied Del/Veh (s)	2.1
Total Del/Veh (s)	911.8

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.03	0.00
Avg Speed (mph)	24	25	26	22	25
Fuel Used (gal)	0.0	10.7	4.2	0.2	15.1
Fuel Eff. (mpg)	32.2	29.5	37.3	30.6	31.7

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.84	0.70	0.95	1.13	0.88
Avg Speed (mph)	14	14	7	9	12
Fuel Used (gal)	9.7	9.8	1.7	8.8	30.0
Fuel Eff. (mpg)	24.0	24.4	18.5	24.3	23.9

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.73	0.37	0.82	1.30	0.66
Avg Speed (mph)	13	16	16	4	10
Fuel Used (gal)	10.0	9.4	3.4	7.4	30.3
Fuel Eff. (mpg)	22.7	25.3	30.1	12.5	21.9

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.21	0.25	0.88	0.26
Avg Speed (mph)	24	21	11	21
Fuel Used (gal)	9.8	12.3	1.4	23.5
Fuel Eff. (mpg)	24.5	24.1	24.4	24.3

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.49	0.55	0.91	0.86	0.62
Avg Speed (mph)	16	15	11	13	14
Fuel Used (gal)	10.9	8.7	3.2	8.0	30.9
Fuel Eff. (mpg)	27.7	26.1	25.3	26.5	26.7

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.09	0.18	0.89	0.90	0.17
Avg Speed (mph)	23	25	15	3	23
Fuel Used (gal)	11.9	10.6	1.2	0.1	23.8
Fuel Eff. (mpg)	26.1	27.7	28.6	11.7	26.9

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.69	0.41	0.84	1.06	0.73
Avg Speed (mph)	13	16	13	9	12
Fuel Used (gal)	14.4	13.7	5.0	17.7	50.8
Fuel Eff. (mpg)	23.6	23.1	26.2	21.1	22.9

Stop/Veh	13.33
Avg Speed (mph)	14
Fuel Used (gal)	204.6
Fuel Used (gal) Fuel Eff. (mpg)	24.7

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.0	12.6	6.2	0.3	19.1
Vehicles Entered	3	972	677	36	1688

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	16.1	16.6	4.6	24.4	61.8
Vehicles Entered	679	942	215	765	2601

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	18.0	14.6	6.7	24.7	64.0
Vehicles Entered	897	1144	362	299	2702

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	10.1	14.1	3.1	27.3
Vehicles Entered	1148	1180	104	2432

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	18.7	15.3	7.2	17.1	58.3
Vehicles Entered	1221	1035	265	700	3221

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	13.7	11.7	2.4	0.4	28.2
Vehicles Entered	1365	1085	109	30	2589

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	27.1	19.5	10.0	44.3	100.9
Vehicles Entered	1326	1289	415	1223	4253

Travel Time (hr)	359.5	
Vehicles Entered	5430	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	32	29	37
Average Queue (ft)	3	1	2
95th Queue (ft)	19	13	18
Link Distance (ft)	1708	1227	928
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	200	765	345	534	350	104	334	200	1041	200	
Average Queue (ft)	120	336	159	315	80	10	153	160	461	140	
95th Queue (ft)	235	676	292	488	285	57	283	235	1141	241	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)									3		
Queuing Penalty (veh)									0		
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	8	37	0	17			47	48	25	22	
Queuing Penalty (veh)	45	53	0	63			3	261	141	95	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	148	937	275	373	428	35	154	120	202	200	1116	
Average Queue (ft)	16	446	128	167	133	6	66	43	80	170	527	
95th Queue (ft)	131	980	322	315	319	24	131	95	150	245	1284	
Link Distance (ft)		1290			1055	1055		1512			1642	
Upstream Blk Time (%)		0									1	
Queuing Penalty (veh)		0									0	
Storage Bay Dist (ft)	500		175	500			225		225	100		
Storage Blk Time (%)		26			0			0	0	66	19	
Queuing Penalty (veh)		46			0			0	0	92	32	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	Т	Т	Т	TR	LR
Maximum Queue (ft)	44	197	225	368	292	195
Average Queue (ft)	10	94	108	171	90	90
95th Queue (ft)	34	181	202	330	237	161
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	Т	TR	L	Т	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	158	291	308	113	423	403	232	189	268	273	505	239
Average Queue (ft)	76	173	201	51	216	195	59	70	126	190	143	93
95th Queue (ft)	132	265	288	100	377	357	191	142	229	289	390	186
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)					0	14		3	23	20	1	1
Queuing Penalty (veh)					0	14		5	20	84	6	5

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	34	110	139	129	179	197	90	90	87	
Average Queue (ft)	7	38	62	44	50	63	28	45	28	
95th Queue (ft)	28	92	118	97	133	155	72	77	66	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)							2	3		
Queuing Penalty (veh)							2	1		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	120	324	489	528	325	188	214	295	312	56	240	148
Average Queue (ft)	49	101	272	319	171	91	106	133	142	19	116	84
95th Queue (ft)	102	250	427	487	387	163	181	246	258	43	213	137
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	18	27	0			0	0		0	
Queuing Penalty (veh)		0	22	66	0			0	0		0	

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	143	81	330	1162	1080	307
Average Queue (ft)	63	31	315	697	623	65
95th Queue (ft)	123	68	375	1344	1266	191
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				1	0	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			64	5	12	
Queuing Penalty (veh)			207	22	16	

Zone Summary

Zone wide Queuing Penalty: 1305

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	56.3	0.2	31.0
Total Del/Veh (s)	2.4	12.9	85.7	2.7	51.5

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	2.2	0.0	2.3	3.4	1.6
Total Del/Veh (s)	194.0	29.0	123.8	79.7	111.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	16.3	0.0	3.2	1.3	6.1
Total Del/Veh (s)	112.4	38.5	55.3	77.9	68.5

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Defiled Deli Vett (3)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	8.3	10.6	65.6	11.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	2.4	0.4
Total Del/Veh (s)	18.2	13.4	61.3	66.4	27.1

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.0	1.7	0.1	0.8
Total Del/Veh (s)	31.2	9.6	55.2	40.2	24.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.3	0.0	1.3	23.5	5.3
Total Del/Veh (s)	123.4	34.8	53.6	190.4	98.3

Denied Del/Veh (s)	18.0
Total Del/Veh (s)	1323.3

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					31.0
Total Del/Veh (s)	2.4	12.9	85.7	2.7	51.5

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R	
Denied Del/Veh (s)											1.6
Total Del/Veh (s)	49.8	257.0	36.9	36.0	5.5	63.2	126.0	102.0	200.7	9.0	111.1

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	T	R	L	Т	R	L	TR	
Denied Del/Veh (s)												6.1
Total Del/Veh (s)	32.1	128.1	6.1	88.4	16.7	5.5	145.7	139.3	16.9	93.8	57.0	68.5

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	Т	T	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	19.8	8.4	8.1	10.9	9.6	65.6	11.8

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	Т	Т	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	32.3	15.3	16.2	20.9	14.9	14.1	1.9	54.7	66.4	82.7	177.9	14.5

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.4	
Total Del/Veh (s)	27.1	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										8.0	
Total Del/Veh (s)	17.3	31.6	30.9	61.8	6.8	7.5	104.6	42.9	40.2	24.2	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	76.5	92.9	146.6	155.3	9.6	64.5	82.4	34.4	39.4	5.6	54.7	67.6

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							5.3
Total Del/Veh (s)	62.0	24.6	133.2	487.7	68.8	9.9	98.3

Denied Del/Veh (s)	18.0
Total Del/Veh (s)	1323.3

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.03	0.23	0.03	0.14
Avg Speed (mph)	23	26	7	22	12
Fuel Used (gal)	0.1	7.0	12.4	0.7	20.2
Fuel Eff. (mpg)	31.6	29.1	16.2	30.1	21.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.12	0.58	0.92	0.88	0.87
Avg Speed (mph)	5	17	3	9	7
Fuel Used (gal)	18.6	7.8	3.6	3.6	33.6
Fuel Eff. (mpg)	15.5	26.5	11.3	22.1	18.3

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	1.43	0.51	0.84	0.95	0.91	
Avg Speed (mph)	6	12	12	9	9	
Fuel Used (gal)	13.9	10.9	6.7	1.8	33.2	
Fuel Eff. (mpg)	16.0	20.9	26.3	21.9	20.0	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.20	0.16	0.96	0.21
Avg Speed (mph)	24	19	10	20
Fuel Used (gal)	10.9	10.1	1.5	22.5
Fuel Eff. (mpg)	24.3	27.7	23.3	25.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.42	0.24	0.94	0.99	0.48
Avg Speed (mph)	16	20	10	10	14
Fuel Used (gal)	11.8	7.9	3.3	5.6	28.5
Fuel Eff. (mpg)	28.5	28.6	23.7	22.8	26.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.32	0.12	0.88	0.87	0.28
Avg Speed (mph)	14	25	11	4	16
Fuel Used (gal)	13.4	10.1	1.8	0.1	25.4
Fuel Eff. (mpg)	23.4	27.1	24.8	12.7	25.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.27	0.42	0.85	1.08	0.91
Avg Speed (mph)	6	15	13	5	8
Fuel Used (gal)	22.1	14.6	12.0	21.5	70.2
Fuel Eff. (mpg)	16.5	20.6	27.2	13.3	18.2

Stop/Veh	13.36
Avg Speed (mph)	10
Fuel Used (gal)	233.6
Fuel Used (gal) Fuel Eff. (mpg)	21.3

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.1	7.9	41.7	0.9	50.7
Vehicles Entered	14	616	879	117	1626

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	56.2	12.4	12.0	8.8	89.4
Vehicles Entered	851	807	280	286	2224

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	39.1	18.8	15.7	4.5	78.1
Vehicles Entered	878	1083	613	128	2702

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	11.1	14.8	3.4	29.4
Vehicles Entered	1263	1107	108	2478

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	20.5	11.4	7.8	13.5	53.3
Vehicles Entered	1338	992	257	418	3005

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	23.7	11.1	4.2	0.4	39.3
Vehicles Entered	1392	1017	144	30	2583

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	60.8	20.7	24.9	66.6	173.0
Vehicles Entered	1416	1251	1033	956	4656

Travel Time (hr)	513.2	
Vehicles Entered	5472	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	11	97	1192	36
Average Queue (ft)	0	17	634	3
95th Queue (ft)	7	64	1580	20
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)			38	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	200	1782	203	474	350	131	517	197	412	143	
Average Queue (ft)	189	1419	73	255	84	19	335	128	128	32	
95th Queue (ft)	238	2302	158	416	251	93	659	219	443	94	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)		50					5				
Queuing Penalty (veh)		452					0				
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	42	49		10		0	70	41	0	0	
Queuing Penalty (veh)	262	145		35		1	6	64	1	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	T	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	600	1302	275	533	493	148	299	524	308	152	139	
Average Queue (ft)	121	1069	130	314	183	30	159	117	140	70	49	
95th Queue (ft)	490	1599	339	537	599	273	286	480	259	133	107	
Link Distance (ft)		1290			1055	1055		1512			1642	
Upstream Blk Time (%)		2			1	0		0				
Queuing Penalty (veh)		20			4	0		0				
Storage Bay Dist (ft)	500		175	500			225		225	100		
Storage Blk Time (%)		43		7	0		15	0	3	10	1	
Queuing Penalty (veh)		58		52	1		73	2	5	6	1	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	Т	Т	TR	LR
Maximum Queue (ft)	43	178	193	314	247	215
Average Queue (ft)	9	95	103	105	47	100
95th Queue (ft)	34	170	182	310	226	186
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	Т	TR	L	T	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	245	379	389	61	196	172	56	199	306	268	520	214
Average Queue (ft)	102	154	172	20	100	79	19	93	129	174	139	65
95th Queue (ft)	201	314	333	50	169	150	47	177	246	282	572	146
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)		0				1		10	24	23	0	0
Queuing Penalty (veh)		1				1		15	27	51	0	1

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	212	586	604	114	111	122	232	164	77	
Average Queue (ft)	31	226	240	43	33	36	60	77	26	
95th Queue (ft)	227	761	767	96	86	93	184	150	63	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		1	1							
Queuing Penalty (veh)		5	6							
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)		11					4	22		
Queuing Penalty (veh)		1					4	6		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	T	Т	R	L	T
Maximum Queue (ft)	210	325	1243	1249	325	176	198	228	221	119	325	358
Average Queue (ft)	113	246	738	758	234	88	106	113	117	41	155	224
95th Queue (ft)	192	413	1469	1469	452	155	171	191	193	91	280	323
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			5	6								
Queuing Penalty (veh)			40	47								
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	1	1	45	51							2	2
Queuing Penalty (veh)	3	7	124	91							6	3

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	351	282	330	1577	1551	221
Average Queue (ft)	217	111	328	1169	1112	51
95th Queue (ft)	320	233	347	1882	1863	151
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				25	8	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	9	1	85	1	2	0
Queuing Penalty (veh)	22	2	202	2	3	0

Zone Summary

Zone wide Queuing Penalty: 1860

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	20.2	0.2	10.8
Total Del/Veh (s)	2.4	12.7	45.3	2.6	29.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	15.2	0.0	0.4	3.6	6.8
Total Del/Veh (s)	140.7	18.8	60.6	109.4	84.8

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	12.7	0.0	383.6	1.3	112.9
Total Del/Veh (s)	120.6	22.0	263.0	77.8	113.9

4: Custer Ave & Cooney Dr Performance by approach

Approach	h EB WB	SB	All
Denied Del/Veh (s)	Del/Veh (s) 0.0 0.0	0.2	0.0
Total Del/Veh (s)		66.7	12.7

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	218.4	39.6
Total Del/Veh (s)	48.7	16.8	59.3	355.3	90.6

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.7	0.1	2.0	0.1	1.0
Total Del/Veh (s)	81.7	10.8	305.0	55.1	66.5

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	1.8	0.0	1.4	37.0	8.4	
Total Del/Veh (s)	185.1	29.5	109.7	204.0	129.9	

Denied Del/Veh (s)	90.4
Total Del/Veh (s)	1711.4

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					10.8
Total Del/Veh (s)	2.4	12.7	45.3	2.6	29.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All	
Movements Served	L	TR	L	Т	R	L	TR	L	Т	R		
Denied Del/Veh (s)											6.8	
Total Del/Veh (s)	44.6	179.0	20.8	24.3	3.7	51.9	60.9	130.1	498.8	13.6	84.8	

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Denied Del/Veh (s)												112.9
Total Del/Veh (s)	35.5	133.3	5.0	70.3	7.7	2.3	297.9	1002.4	37.5	89.9	63.3	113.9

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	T	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	21.6	10.9	10.1	9.5	9.8	66.1	12.7

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	Т	Т	R	L	TR	L	T	R
Denied Del/Veh (s)												
Total Del/Veh (s)	43.8	50.2	48.9	23.2	18.9	18.3	2.2	44.9	68.7	144.2	2262.8	21.4

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	39.6	
Total Del/Veh (s)	90.6	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										1.0	
Total Del/Veh (s)	22.9	81.7	82.3	48.4	7.5	8.6	827.1	107.1	53.3	66.5	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	Т	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	83.6	126.6	223.1	235.1	8.4	52.8	68.1	30.7	33.4	6.9	78.0	147.3

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							8.4
Total Del/Veh (s)	148.5	43.8	149.9	495.8	71.4	11.6	129.9

Denied Del/Veh (s)	90.4
Total Del/Veh (s)	1711.4

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.03	0.25	0.05	0.15
Avg Speed (mph)	23	26	12	22	17
Fuel Used (gal)	0.2	8.0	8.8	0.5	17.5
Fuel Eff. (mpg)	31.9	30.6	24.9	30.6	27.8

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.16	0.41	0.94	0.99	0.84
Avg Speed (mph)	7	21	6	7	9
Fuel Used (gal)	18.5	7.7	1.3	4.9	32.4
Fuel Eff. (mpg)	17.6	29.1	17.0	19.2	20.5

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	1.55	0.28	1.17	0.96	0.93	
Avg Speed (mph)	6	17	3	9	6	
Fuel Used (gal)	14.5	9.4	38.3	2.1	64.3	
Fuel Eff. (mpg)	15.9	25.7	4.9	21.8	11.0	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.23	0.07	0.93	0.19
Avg Speed (mph)	22	24	10	22
Fuel Used (gal)	11.7	12.0	1.7	25.5
Fuel Eff. (mpg)	23.7	25.3	23.4	24.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.63	0.25	0.89	1.42	0.66
Avg Speed (mph)	11	18	10	2	7
Fuel Used (gal)	14.5	8.7	3.1	24.8	51.2
Fuel Eff. (mpg)	23.9	27.1	23.8	6.0	15.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.62	0.18	0.94	0.90	0.47
Avg Speed (mph)	7	24	3	3	9
Fuel Used (gal)	17.1	10.4	4.7	0.1	32.4
Fuel Eff. (mpg)	18.6	27.6	10.5	10.2	20.3

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.60	0.39	1.31	1.04	1.11
Avg Speed (mph)	4	16	8	4	6
Fuel Used (gal)	27.8	14.7	18.9	23.4	84.7
Fuel Eff. (mpg)	13.2	21.3	20.6	12.2	16.0

Stop/Veh	14.15
Stop/Veh Avg Speed (mph)	8
Fuel Used (gal)	307.9
Fuel Used (gal) Fuel Eff. (mpg)	17.2

Approach	EB	WB	NB	SB	All	
Travel Time (hr)	0.3	9.5	24.2	0.6	34.6	
Vehicles Entered	25	736	949	81	1791	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	51.6	10.9	3.7	13.2	79.5
Vehicles Entered	949	884	159	331	2323

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	41.5	14.4	152.2	5.2	213.3
Vehicles Entered	912	1154	680	147	2893

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	12.5	12.5	3.9	28.9
Vehicles Entered	1320	1203	123	2646

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	31.0	13.0	7.3	96.2	147.5
Vehicles Entered	1397	1034	246	508	3185

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	43.9	12.1	16.6	0.5	73.2
Vehicles Entered	1401	1098	169	30	2698

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	87.0	19.3	50.0	74.1	230.4
Vehicles Entered	1415	1262	1238	952	4867

Travel Time (hr)	807.4	
Vehicles Entered	5816	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	4	91	949	36
Average Queue (ft)	0	18	364	4
95th Queue (ft)	5	64	1181	22
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)			15	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	TR	L	Т	R	L	TR	L	Т	R	
Maximum Queue (ft)	200	1700	89	415	245	67	249	200	690	189	
Average Queue (ft)	187	1188	41	198	52	7	121	159	231	56	
95th Queue (ft)	243	2227	79	349	160	38	212	235	675	142	
Link Distance (ft)		1708		1290			759		1480		
Upstream Blk Time (%)		31									
Queuing Penalty (veh)		304									
Storage Bay Dist (ft)	100		500		250	75		100		100	
Storage Blk Time (%)	38	44		4			44	64	0	2	
Queuing Penalty (veh)	272	132		17			2	116	1	4	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	R	L	Т	R	L	Т	R	L	TR	
Maximum Queue (ft)	545	1298	275	346	175	34	325	1527	325	163	164	
Average Queue (ft)	55	1176	108	214	48	6	298	1266	223	76	61	
95th Queue (ft)	320	1526	312	325	125	22	381	2044	417	138	131	
Link Distance (ft)		1290			1055	1055		1512			1642	
Upstream Blk Time (%)		3						64				
Queuing Penalty (veh)		27						0				
Storage Bay Dist (ft)	500		175	500			225		225	100		
Storage Blk Time (%)		43					81	0	27	11	5	
Queuing Penalty (veh)		42					561	2	76	7	4	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	Т	Т	TR	LR
Maximum Queue (ft)	94	268	270	168	109	225
Average Queue (ft)	7	110	118	56	19	113
95th Queue (ft)	67	250	259	131	66	197
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)		1				
Queuing Penalty (veh)		0				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	Т	TR	L	Т	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	526	847	858	43	207	207	134	191	254	275	1638	193
Average Queue (ft)	194	320	327	12	111	96	25	79	126	273	1446	84
95th Queue (ft)	482	851	857	37	185	171	69	159	217	282	2003	172
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)		1	1								67	
Queuing Penalty (veh)		5	5								0	
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)		13				2		5	25	85	0	3
Queuing Penalty (veh)		32				3		7	25	240	0	11

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	488	1109	1113	119	122	134	968	175	89	
Average Queue (ft)	65	548	557	56	47	54	368	124	27	
95th Queue (ft)	359	1329	1334	103	105	117	1070	216	70	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		3	4							
Queuing Penalty (veh)		25	31							
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)		35					3	59		
Queuing Penalty (veh)		3					4	11		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	R	L	L	Т	T	R	L	T
Maximum Queue (ft)	224	325	1390	1388	325	160	182	187	188	140	399	848
Average Queue (ft)	116	275	1076	1082	237	83	98	88	94	44	272	518
95th Queue (ft)	205	423	1721	1720	457	151	164	155	164	95	474	1079
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			12	14								0
Queuing Penalty (veh)			102	126								0
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	1	3	59	64							7	32
Queuing Penalty (veh)	5	18	176	126							25	74

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	T	R
Maximum Queue (ft)	845	325	330	1618	1612	140
Average Queue (ft)	520	258	327	1208	1160	41
95th Queue (ft)	1080	407	354	1928	1910	96
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)	0			27	10	
Queuing Penalty (veh)	0			0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	45	10	86	1	3	
Queuing Penalty (veh)	140	34	219	2	4	

Zone Summary

Zone wide Queuing Penalty: 3022

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	1.1	0.1	0.5
Total Del/Veh (s)	3.1	13.1	5.9	2.8	10.1

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.9	1.2
Total Del/Veh (s)	26.3	36.0	20.6	43.1	34.4

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.9	1.5	0.6
Total Del/Veh (s)	24.2	17.9	26.9	52.5	25.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	6.0	9.9	60.2	10.2

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.0	2.4	0.6
Total Del/Veh (s)	26.4	27.1	49.5	42.6	32.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.6	0.1	0.1
Total Del/Veh (s)	7.5	10.2	32.3	40.8	10.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.6	7.7	2.4
Total Del/Veh (s)	44.2	30.5	54.4	112.7	60.8

Denied Del/Veh (s)	3.3
Total Del/Veh (s)	800.9

Lane	EB	WB	NB	SB	All	
Movements Served	LTR	LTR	LTR	LTR		
Denied Del/Veh (s)					0.5	
Total Del/Veh (s)	3.1	13.1	5.9	2.7	10.1	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	T	TR	L	Т	R	LT	R	L	T	R	
Denied Del/Veh (s)												1.2
Total Del/Veh (s)	29.7	28.9	20.6	21.1	48.0	7.4	66.4	7.8	56.3	63.3	22.0	34.4

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												0.6
Total Del/Veh (s)	35.0	21.6	26.4	31.0	16.3	9.9	65.5	65.6	10.4	48.4	58.1	25.2

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	20.3	6.0	5.8	10.0	9.6	59.6	10.2

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	Т	T	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	32.2	24.0	26.8	39.6	28.4	28.8	2.0	44.4	52.4	54.6	78.7	13.2

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.6	
Total Del/Veh (s)	32.0	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	14.1	6.0	8.5	48.8	7.9	8.1	70.8	19.7	39.5	10.1	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	66.3	83.3	41.2	54.4	12.4	47.5	60.0	31.1	33.0	2.3	68.4	63.6

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	Т	R	
Denied Del/Veh (s)							2.4
Total Del/Veh (s)	52.6	14.9	92.5	226.5	66.8	13.8	60.8

Denied Del/Veh (s)	3.3
Total Del/Veh (s)	800.9

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.05	0.00
Avg Speed (mph)	23	25	26	22	25
Fuel Used (gal)	0.0	10.8	4.2	0.2	15.2
Fuel Eff. (mpg)	31.0	30.4	37.3	30.3	32.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.58	0.61	0.82	0.76	0.66
Avg Speed (mph)	20	15	12	14	16
Fuel Used (gal)	9.2	10.5	1.2	7.0	27.9
Fuel Eff. (mpg)	25.1	23.2	26.3	31.2	26.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.48	0.40	0.80	0.89	0.54	
Avg Speed (mph)	17	19	17	11	16	
Fuel Used (gal)	9.3	8.9	3.4	4.0	25.6	
Fuel Eff. (mpg)	24.4	27.6	30.8	24.9	26.4	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.10	0.16	0.91	0.16
Avg Speed (mph)	26	24	11	23
Fuel Used (gal)	9.9	12.5	1.4	23.7
Fuel Eff. (mpg)	24.8	24.4	24.1	24.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.49	0.54	0.93	0.88	0.62
Avg Speed (mph)	16	14	11	12	14
Fuel Used (gal)	10.9	8.7	3.1	8.3	31.0
Fuel Eff. (mpg)	28.1	26.7	25.4	25.9	26.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.09	0.19	0.91	0.93	0.18	
Avg Speed (mph)	23	25	14	4	22	
Fuel Used (gal)	11.8	10.8	1.3	0.1	24.0	
Fuel Eff. (mpg)	26.4	27.5	27.9	12.8	26.9	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.68	0.41	0.85	1.08	0.73
Avg Speed (mph)	13	16	13	8	11
Fuel Used (gal)	14.4	14.1	5.0	19.4	52.9
Fuel Eff. (mpg)	23.6	22.8	26.1	19.0	21.9

Stop/Veh	12.52
Avg Speed (mph)	16
Fuel Used (gal)	200.3
Fuel Used (gal) Fuel Eff. (mpg)	25.5

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.0	13.1	6.0	0.3	19.5
Vehicles Entered	3	999	666	40	1708

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	11.7	16.5	2.6	16.1	46.9
Vehicles Entered	671	957	218	780	2626

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	13.2	13.2	6.4	9.0	41.7
Vehicles Entered	890	1181	365	318	2754

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	19.7	16.1	7.0	18.0	60.7
Vehicles Entered	1236	1051	260	710	3257

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	13.8	12.1	2.6	0.4	28.8
Vehicles Entered	1364	1096	112	31	2603

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	27.1	20.0	10.0	51.6	108.7
Vehicles Entered	1331	1309	411	1207	4258

Travel Time (hr)	331.8	
Vehicles Entered	5458	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	36	32	33
Average Queue (ft)	4	2	2
95th Queue (ft)	21	18	17
Link Distance (ft)	1708	1227	928
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	R	LT	R	L	T	R	
Maximum Queue (ft)	178	341	198	367	753	296	112	118	284	362	292	
Average Queue (ft)	73	117	101	132	286	27	46	53	165	146	134	
95th Queue (ft)	136	250	179	356	693	243	96	91	268	289	245	
Link Distance (ft)		1708			1280	1280	747	747		1480		
Upstream Blk Time (%)					0							
Queuing Penalty (veh)					1							
Storage Bay Dist (ft)	100		100	500					250		250	
Storage Blk Time (%)	5	10	9		4				3	1	1	
Queuing Penalty (veh)	27	42	36		13				14	6	4	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	39	285	321	282	313	238	152	133	157	200	342	
Average Queue (ft)	7	158	184	115	141	74	64	45	73	130	134	
95th Queue (ft)	27	255	281	217	271	180	128	101	127	211	258	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)										26	21	
Queuing Penalty (veh)										37	36	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	37	158	174	260	194	187
Average Queue (ft)	9	46	53	107	66	88
95th Queue (ft)	32	120	129	209	154	157
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	Т	R
Maximum Queue (ft)	195	315	330	132	435	444	175	195	273	274	612	255
Average Queue (ft)	83	183	204	54	211	211	59	72	124	198	181	91
95th Queue (ft)	155	284	309	109	374	383	177	152	231	291	500	186
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)					0	18	0	3	20	22	1	1
Queuing Penalty (veh)					0	18	0	5	18	94	6	4

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	33	127	144	139	198	200	111	107	78	
Average Queue (ft)	7	35	60	53	56	65	31	47	27	
95th Queue (ft)	27	90	116	115	145	161	80	88	63	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				50		
Storage Blk Time (%)							9	13		
Queuing Penalty (veh)							8	3		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	123	324	519	586	325	188	227	290	292	64	283	204
Average Queue (ft)	48	95	271	315	154	91	108	135	138	20	118	91
95th Queue (ft)	97	242	438	500	363	162	186	249	254	50	233	182
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	16	26	0			0	0		1	
Queuing Penalty (veh)		0	20	65	1			1	1		1	

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	185	89	330	1257	1226	327
Average Queue (ft)	67	28	318	820	759	65
95th Queue (ft)	152	67	375	1539	1493	195
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				7	2	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			72	5	11	
Queuing Penalty (veh)			233	22	16	

Zone Summary

Zone wide Queuing Penalty: 731

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	2.1	0.2	1.2	
Total Del/Veh (s)	2.4	11.0	8.9	2.7	9.2	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.4	0.5
Total Del/Veh (s)	29.8	24.0	26.3	40.3	28.6

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	3.0	1.3	0.8
Total Del/Veh (s)	32.8	20.0	41.5	67.7	31.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.5	0.0	0.2	0.3
Total Del/Veh (s)	16.5	5.2	87.1	14.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.3	0.0	1.2	1.2	0.4
Total Del/Veh (s)	40.3	12.7	56.1	66.5	36.4

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	s) 4.5	0.0	1.8	0.1	2.6
Total Del/Veh (s)	59.4	8.6	110.3	44.1	43.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.5	0.0	1.3	27.7	6.3
Total Del/Veh (s)	171.7	39.8	50.0	184.2	113.5

Denied Del/Veh (s)	7.8
Total Del/Veh (s)	1161.7

Lane	EB	WB	NB	SB	All		
Movements Served	LTR	LTR	LTR	LTR			
Denied Del/Veh (s)					1.2		
Total Del/Veh (s)	2.4	11.0	8.9	2.7	9.2		

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	Т	TR	L	Т	R	LT	R	L	Т	R	
Denied Del/Veh (s)												0.5
Total Del/Veh (s)	28.8	41.4	13.5	17.6	31.9	8.5	67.2	9.2	60.2	61.9	9.4	28.6

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												0.8
Total Del/Veh (s)	22.5	30.9	35.3	39.8	11.9	9.5	74.4	99.9	23.5	75.0	59.7	31.4

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	T	Т	TR	LR	
Denied Del/Veh (s)							0.3
Total Del/Veh (s)	15.8	16.9	16.1	5.5	4.6	86.3	14.5

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	Т	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	30.7	41.8	42.1	22.3	13.5	14.0	1.5	50.0	60.8	88.6	165.5	13.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.4	
Total Del/Veh (s)	36.4	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	T	TR	L	TR	LTR		
Denied Del/Veh (s)										2.6	
Total Del/Veh (s)	24.5	59.6	59.7	60.2	6.3	6.7	219.9	73.1	44.1	43.0	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	Т	R	L	L	Т	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	84.1	99.7	208.3	220.9	9.1	79.9	96.8	38.0	44.3	5.4	44.2	66.7

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	T	R	
Denied Del/Veh (s)							6.3
Total Del/Veh (s)	59.8	23.1	125.9	470.7	69.4	9.9	113.5

Denied Del/Veh (s)	7.8
Total Del/Veh (s)	1161.7

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.01	0.03	0.01
Avg Speed (mph)	23	27	24	22	25
Fuel Used (gal)	0.1	6.9	5.7	0.6	13.4
Fuel Eff. (mpg)	31.3	29.5	38.0	30.7	33.2

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.56	0.56	0.89	0.77	0.63
Avg Speed (mph)	19	18	10	15	17
Fuel Used (gal)	12.8	8.0	1.7	3.0	25.4
Fuel Eff. (mpg)	25.4	25.7	24.1	28.0	25.7

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.49	0.48	0.80	0.93	0.58
Avg Speed (mph)	15	17	14	10	15
Fuel Used (gal)	10.4	9.6	6.1	1.8	27.8
Fuel Eff. (mpg)	23.9	23.7	28.8	22.8	24.9

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.17	0.08	0.93	0.16
Avg Speed (mph)	19	21	9	19
Fuel Used (gal)	11.9	9.6	1.6	23.1
Fuel Eff. (mpg)	24.0	29.1	21.3	25.9

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.59	0.23	0.91	0.91	0.55
Avg Speed (mph)	12	20	11	10	13
Fuel Used (gal)	14.2	7.4	3.3	5.5	30.4
Fuel Eff. (mpg)	25.0	30.1	24.4	22.9	25.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.48	0.10	0.92	0.79	0.37
Avg Speed (mph)	9	25	7	3	12
Fuel Used (gal)	16.4	10.0	2.4	0.1	28.9
Fuel Eff. (mpg)	19.9	26.9	19.3	11.5	22.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.66	0.45	0.84	1.09	1.05
Avg Speed (mph)	4	13	14	5	7
Fuel Used (gal)	26.9	14.8	11.3	21.5	74.5
Fuel Eff. (mpg)	13.8	20.0	28.0	13.4	17.1

Stop/Veh	13.32
Avg Speed (mph)	12
Fuel Used (gal)	223.6
Fuel Used (gal) Fuel Eff. (mpg)	22.8

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.2	7.5	9.5	0.9	18.1
Vehicles Entered	15	614	934	113	1676

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	17.5	11.2	3.9	5.8	38.4
Vehicles Entered	d 939	807	284	292	2322

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	16.8	13.1	13.3	4.2	47.5
Vehicles Entered	982	1083	616	131	2812

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	15.2	13.1	4.0	32.3
Vehicles Entered	1363	1105	107	2575

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	30.8	11.1	7.6	13.2	62.8
Vehicles Entered	1426	984	263	414	3087

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	37.5	10.5	6.7	0.5	55.2
Vehicles Entered	1450	995	150	34	2629

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	83.0	22.2	23.2	66.3	194.6
Vehicles Entered	1450	1230	1005	961	4646

ravel Time (hr)
ehicles Entered

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	7	33	67	37
Average Queue (ft)	0	2	6	4
95th Queue (ft)	5	16	37	23
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)				
Queuing Penalty (veh)				

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	T	TR	L	T	R	LT	R	L	Т	R	
Maximum Queue (ft)	199	631	195	118	471	139	165	121	229	133	110	
Average Queue (ft)	131	172	96	48	235	45	81	58	113	26	30	
95th Queue (ft)	211	490	178	91	406	104	143	97	204	94	72	
Link Distance (ft)		1708			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					200		200	
Storage Blk Time (%)	23	7	6		0				2	0	0	
Queuing Penalty (veh)	142	41	36		0				4	0	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	119	422	446	385	227	182	229	450	315	156	159	
Average Queue (ft)	21	214	226	206	107	69	108	89	167	66	59	
95th Queue (ft)	106	441	458	348	197	148	187	277	291	125	126	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)		2		0			0	0	7	8	6	
Queuing Penalty (veh)		0		1			2	1	14	5	4	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	Т	Т	TR	LR
Maximum Queue (ft)	90	276	279	151	128	237
Average Queue (ft)	21	120	123	49	29	111
95th Queue (ft)	161	452	454	114	84	254
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)		1	1			
Queuing Penalty (veh)		4	5			
Storage Bay Dist (ft)	500					
Storage Blk Time (%)		4				
Queuing Penalty (veh)		0				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	T	R
Maximum Queue (ft)	336	647	653	65	178	177	48	194	262	272	394	191
Average Queue (ft)	157	320	338	22	90	82	14	88	122	183	114	58
95th Queue (ft)	424	805	817	54	157	152	40	165	218	288	470	149
Link Distance (ft)		1280	1280		1152	1152			1612		1596	1596
Upstream Blk Time (%)		2	2									
Queuing Penalty (veh)		10	12									
Storage Bay Dist (ft)	500			500			150	100		175		
Storage Blk Time (%)		9				1		8	21	27	0	
Queuing Penalty (veh)		18				2		13	23	12	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	T	TR	L	T	TR	L	TR	LTR	
Maximum Queue (ft)	434	947	956	96	94	114	383	172	86	
Average Queue (ft)	60	414	427	35	27	30	125	96	28	
95th Queue (ft)	340	1147	1150	81	72	77	364	187	71	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		3	4							
Queuing Penalty (veh)		22	25							
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)		24					7	38		
Queuing Penalty (veh)		2					8	11		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	T	T	R	L	T
Maximum Queue (ft)	209	325	1368	1368	325	212	216	220	214	101	262	327
Average Queue (ft)	117	280	1058	1069	259	100	115	121	127	39	134	215
95th Queue (ft)	190	422	1635	1630	458	192	201	192	198	80	231	304
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			9	11								
Queuing Penalty (veh)			68	79								
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	0	1	58	64							0	1
Queuing Penalty (veh)	2	6	161	115							1	2

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	T	R
Maximum Queue (ft)	328	262	330	1596	1553	226
Average Queue (ft)	206	99	327	1142	1079	50
95th Queue (ft)	302	191	349	1908	1880	152
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				20	7	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	7	0	82	1	2	0
Queuing Penalty (veh)	17	1	195	3	3	0

Zone Summary

Zone wide Queuing Penalty: 1069

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	1.9	0.2	1.0	
Total Del/Veh (s)	2.6	12.8	8.5	2.7	10.0	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.5	0.0	0.2	3.5	0.7
Total Del/Veh (s)	40.8	20.9	23.0	47.5	32.8

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	34.9	1.3	9.7
Total Del/Veh (s)	44.0	17.5	103.6	72.7	51.7

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	18.7	3.3
Total Del/Veh (s)	89.7	19.9	59.5	159.4	78.2

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.0	0.1	2.0	0.1	1.8
Total Del/Veh (s)	98.7	15.7	283.9	55.6	76.9

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.5	0.0	1.4	75.9	16.6
Total Del/Veh (s)	206.9	110.4	92.6	233.4	158.9

Denied Del/Veh (s)	21.8
Total Del/Veh (s)	1571.7

Lane	EB	WB	NB	SB	All	
Movements Served	LTR	LTR	LTR	LTR		
Denied Del/Veh (s)					1.0	
Total Del/Veh (s)	2.6	12.8	8.5	2.7	10.0	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	Т	TR	L	Т	R	LT	R	L	T	R	
Denied Del/Veh (s)												0.7
Total Del/Veh (s)	42.0	62.5	10.1	15.7	27.4	7.6	66.1	7.8	72.6	76.2	17.2	32.8

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	TR	L	Т	TR	L	T	R	L	TR	
Denied Del/Veh (s)												9.7
Total Del/Veh (s)	36.7	41.5	46.7	44.5	9.7	8.5	144.7	373.7	32.7	78.9	63.9	51.7

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	21.8	30.4	28.8	7.7	7.8	123.2	24.2

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	Т	Т	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	48.2	95.2	99.0	24.7	21.5	23.3	2.3	41.1	72.5	104.9	1148.9	13.7

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	3.3	
Total Del/Veh (s)	78.2	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										1.8	
Total Del/Veh (s)	23.7	97.3	100.5	98.6	9.4	10.9	830.5	122.2	54.0	76.9	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	157.8	207.7	236.0	246.6	9.1	384.3	446.2	69.1	56.1	14.5	67.5	124.0

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	Т	R	
Denied Del/Veh (s)							16.6
Total Del/Veh (s)	122.5	38.9	161.0	573.4	82.9	12.7	158.9

Denied Del/Veh (s)	21.8
Total Del/Veh (s)	1571.7

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.01	0.01	0.06	0.01
Avg Speed (mph)	23	26	24	22	25
Fuel Used (gal)	0.2	8.4	5.8	0.5	14.8
Fuel Eff. (mpg)	32.3	30.7	39.2	30.5	34.0

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.67	0.46	0.92	0.79	0.62
Avg Speed (mph)	16	20	11	14	16
Fuel Used (gal)	14.5	8.9	8.0	3.4	27.7
Fuel Eff. (mpg)	24.1	27.0	25.6	26.9	25.5

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.60	0.36	1.02	0.94	0.64
Avg Speed (mph)	13	19	7	9	11
Fuel Used (gal)	10.6	9.1	13.5	1.9	35.0
Fuel Eff. (mpg)	23.5	27.3	17.9	22.4	22.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.30	0.08	0.94	0.23
Avg Speed (mph)	14	26	7	17
Fuel Used (gal)	14.5	12.5	2.1	29.1
Fuel Eff. (mpg)	21.7	25.0	18.2	22.9

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.84	0.26	0.90	1.40	0.76
Avg Speed (mph)	7	17	10	5	8
Fuel Used (gal)	19.3	8.8	3.0	11.9	43.1
Fuel Eff. (mpg)	19.5	27.1	23.7	14.7	20.1

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.74	0.23	0.96	0.88	0.56
Avg Speed (mph)	6	21	3	3	8
Fuel Used (gal)	20.2	10.8	4.5	0.2	35.7
Fuel Eff. (mpg)	17.1	26.6	11.3	10.0	19.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.87	0.65	1.20	1.06	1.24
Avg Speed (mph)	4	6	9	4	5
Fuel Used (gal)	32.4	21.3	17.3	27.3	98.4
Fuel Eff. (mpg)	12.3	14.8	22.3	10.1	14.0

Stop/Veh	14.23
Avg Speed (mph)	9
Fuel Used (gal)	283.8
Fuel Used (gal) Fuel Eff. (mpg)	19.7

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.2	9.9	9.8	0.7	20.6
Vehicles Entered	23	763	974	86	1846

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	22.0	12.4	1.9	7.2	43.5
Vehicles Entered	1006	958	152	329	2445

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	19.8	13.2	41.2	4.7	78.9
Vehicles Entered	984	1177	851	138	3150

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB WE	SB SB	All
Travel Time (hr)	22.3 12.3	' 5 K	40.4
	4540 400		
Vehicles Entered	1513 123	122	2872

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	51.8	14.1	7.0	37.2	110.1
Vehicles Entered	1540	1046	235	587	3408

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	55.4	13.7	15.6	0.6	85.2
Vehicles Entered	1517	1098	167	32	2814

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	104.7	49.5	43.4	91.5	289.2
Vehicles Entered	1527	1290	1225	923	4965

Travel Time (hr)	667.8
Vehicles Entered	6036

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	17	41	53	36
Average Queue (ft)	1	5	9	5
95th Queue (ft)	8	26	36	25
Link Distance (ft)	1256	1708	1227	928
Upstream Blk Time (%)				
Our dia a Danaltu (usla)				

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	T	TR	L	T	R	LT	R	L	Т	R	
Maximum Queue (ft)	200	1018	197	94	437	112	99	84	244	143	174	
Average Queue (ft)	155	308	91	38	241	47	40	41	128	25	56	
95th Queue (ft)	236	880	179	74	397	99	84	68	225	121	132	
Link Distance (ft)		1708			1280	1280	747	747		1480		
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		2										
Storage Bay Dist (ft)	100		100	500					200		200	
Storage Blk Time (%)	40	5	5		0				5	0	0	
Queuing Penalty (veh)	285	32	30		0				10	0	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	104	581	589	327	204	189	315	1117	325	163	168	
Average Queue (ft)	12	258	268	174	84	61	229	539	259	75	61	
95th Queue (ft)	75	499	513	286	168	145	352	1433	393	139	124	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)		0	0					14				
Queuing Penalty (veh)		0	0					0				
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)		3					33	0	27	12	4	
Queuing Penalty (veh)		0					226	4	76	7	4	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	Т	Т	TR	LR
Maximum Queue (ft)	144	656	661	131	96	419
Average Queue (ft)	12	224	225	49	36	152
95th Queue (ft)	128	718	718	109	82	351
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)		1	1			
Queuing Penalty (veh)		4	6			
Storage Bay Dist (ft)	500					
Storage Blk Time (%)		11				
Queuing Penalty (veh)		1				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	567	1222	1219	46	230	226	82	193	315	275	1251	243
Average Queue (ft)	309	614	626	10	117	113	20	79	127	261	773	77
95th Queue (ft)	667	1345	1346	36	198	196	65	161	240	316	1682	191
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)		5	5								17	
Queuing Penalty (veh)		42	44								0	
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)		29				4		4	22	67		1
Queuing Penalty (veh)		74				6		6	22	190		3

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	599	1180	1181	173	152	161	816	175	82	
Average Queue (ft)	68	711	719	76	68	83	356	139	30	
95th Queue (ft)	371	1484	1485	155	134	153	832	218	73	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		4	6							
Queuing Penalty (veh)		37	46							
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)		45					4	71		
Queuing Penalty (veh)		5					6	13		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	255	325	1391	1390	325	430	472	742	774	223	398	774
Average Queue (ft)	184	299	1274	1278	244	336	364	327	303	98	241	440
95th Queue (ft)	300	398	1578	1583	458	507	555	809	768	192	440	865
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			11	14				0	0			
Queuing Penalty (veh)			100	127				2	1			
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	20	29	55	61		24	33	0		0	2	27
Queuing Penalty (veh)	117	171	165	120		103	140	1		0	7	63

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	780	325	330	1637	1637	249
Average Queue (ft)	441	240	330	1327	1286	48
95th Queue (ft)	868	399	331	1901	1891	137
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				38	16	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	41	6	90	1	3	
Queuing Penalty (veh)	126	22	227	4	4	

Zone Summary

Zone wide Queuing Penalty: 2684

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	1.0	0.1	0.4	
Total Del/Veh (s)	2.3	14.0	5.8	2.4	10.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.8	1.2
Total Del/Veh (s)	21.1	17.5	20.5	37.6	24.6

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.9	1.4	0.6
Total Del/Veh (s)	22.9	14.3	26.1	53.5	23.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB WB	SB	All
Denied Del/Veh (s)	0.0 0.0	0.2	0.0
Total Del/Veh (s)	6.0 7.2	57.1	8.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.9	2.4	0.6
Total Del/Veh (s)	25.6	27.0	50.6	41.2	31.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.8	0.1	0.1
Total Del/Veh (s)	7.7	10.7	29.3	41.2	10.3

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	1.6	1.5	0.6	
Total Del/Veh (s)	46.0	41.4	53.8	100.4	61.0	

Denied Del/Veh (s)	1.9
Total Del/Veh (s)	746.7

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						0.4
Total Del/Veh (s)	2.3	13.6	25.2	5.8	2.4	10.5

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	T	TR	L	T	TR	LT	R	L	Т	R	
Denied Del/Veh (s)												1.2
Total Del/Veh (s)	21.7	23.1	18.0	18.2	18.4	15.6	62.6	8.3	54.2	67.5	7.9	24.6

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	T	TR	L	T	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												0.6
Total Del/Veh (s)	24.9	20.6	25.1	28.8	10.6	9.8	59.8	70.5	10.7	50.1	57.7	23.2

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	Т	T	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	15.8	6.0	5.7	7.0	7.4	57.1	8.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	T	TR	L	T	T	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	30.4	23.7	25.9	35.2	29.1	28.9	2.2	43.0	54.2	55.2	72.4	12.9

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.6	
Total Del/Veh (s)	31.5	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.1	
Total Del/Veh (s)	14.5	6.2	8.7	54.5	8.0	8.3	63.8	18.5	41.2	10.3	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	59.3	78.7	44.4	57.1	14.2	70.7	83.9	40.6	43.1	3.0	66.2	61.1

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	51.9	20.1	89.5	192.2	61.1	12.0	61.0

Denied Del/Veh (s)	1.9
Total Del/Veh (s)	746.7

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.01	0.00	0.00	0.00
Avg Speed (mph)	24	24	26	23	25
Fuel Used (gal)	0.0	11.1	4.0	0.2	15.3
Fuel Eff. (mpg)	32.2	28.5	37.7	32.2	31.0

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.52	0.42	0.92	0.75	0.59
Avg Speed (mph)	21	21	12	16	19
Fuel Used (gal)	9.1	9.8	1.2	6.5	26.6
Fuel Eff. (mpg)	25.3	24.4	26.1	33.1	26.9

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.46	0.36	0.82	0.91	0.52
Avg Speed (mph)	18	20	17	11	17
Fuel Used (gal)	9.1	8.0	3.4	3.9	24.4
Fuel Eff. (mpg)	24.7	30.1	30.9	24.8	27.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.10	0.13	0.92	0.15
Avg Speed (mph)	26	26	11	24
Fuel Used (gal)	9.9	12.0	1.3	23.2
Fuel Eff. (mpg)	24.6	25.1	24.4	24.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.48	0.54	0.92	0.86	0.62
Avg Speed (mph)	16	14	11	13	14
Fuel Used (gal)	10.7	8.6	3.2	8.3	30.8
Fuel Eff. (mpg)	28.2	26.7	25.3	26.1	26.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.10	0.18	0.90	0.88	0.18
Avg Speed (mph)	23	24	15	4	22
Fuel Used (gal)	11.9	10.8	1.3	0.1	24.0
Fuel Eff. (mpg)	26.3	27.1	28.2	12.2	26.7

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.72	0.50	0.85	1.08	0.77
Avg Speed (mph)	12	13	13	8	11
Fuel Used (gal)	14.6	14.9	5.2	17.8	52.6
Fuel Eff. (mpg)	23.4	20.9	26.4	20.6	22.0

Stop/Veh	12.19
Avg Speed (mph)	16
Fuel Used (gal)	196.8
Fuel Used (gal) Fuel Eff. (mpg)	25.7

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.0	13.0	5.9	0.3	19.2
Vehicles Entered	4	979	664	34	1681

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.8	11.2	2.6	14.5	39.1
Vehicles Entered	664	936	221	762	2583

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	12.9	11.8	6.3	8.8	39.7
Vehicles Entered	888	1159	363	310	2720

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	9.4	11.6	2.9	24.0
Vehicles Entered	1164	1194	99	2457

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	19.1	15.8	7.2	17.8	60.0
Vehicles Entered	1223	1034	263	714	3234

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	13.9	12.0	2.5	0.4	28.9
Vehicles Entered	1368	1078	114	31	2591

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	27.8	23.4	10.6	44.9	106.7
Vehicles Entered	1332	1270	437	1200	4239

Travel Time (hr)	317.4	
Vehicles Entered	5445	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	WB	NB
Directions Served	L	TR	LTR
Maximum Queue (ft)	18	6	10
Average Queue (ft)	1	0	0
95th Queue (ft)	9	5	7
Link Distance (ft)	1690	1690	1207
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	TR	LT	R	L	T	R	
Maximum Queue (ft)	167	270	193	206	213	200	127	95	279	455	223	
Average Queue (ft)	62	100	90	87	86	70	48	54	164	160	81	
95th Queue (ft)	122	195	166	164	165	154	98	84	261	351	173	
Link Distance (ft)		1690			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					200		200	
Storage Blk Time (%)	2	7	7						8	3	0	
Queuing Penalty (veh)	13	30	27						46	17	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	30	286	300	237	224	236	157	127	176	199	338	
Average Queue (ft)	6	154	176	114	86	86	64	41	73	131	134	
95th Queue (ft)	25	248	273	198	181	188	125	95	131	212	263	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)									0	25	19	
Queuing Penalty (veh)									0	35	33	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	38	144	155	165	163	186
Average Queue (ft)	9	43	47	69	65	86
95th Queue (ft)	32	110	115	137	132	153
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	163	323	343	119	400	399	175	184	298	274	551	226
Average Queue (ft)	80	181	201	51	213	212	64	69	127	200	165	90
95th Queue (ft)	146	283	305	101	361	365	186	150	246	296	429	178
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)						19	0	3	22	23	1	1
Queuing Penalty (veh)						19	0	4	20	97	3	3

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	39	117	134	146	200	213	108	118	74	
Average Queue (ft)	7	36	63	55	54	65	30	47	27	
95th Queue (ft)	29	87	122	127	142	156	79	86	62	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500			500				50		
Storage Blk Time (%)							8	12		
Queuing Penalty (veh)							7	3		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	119	324	628	674	325	189	206	341	322	87	248	161
Average Queue (ft)	45	100	299	342	161	114	123	171	175	26	116	92
95th Queue (ft)	94	256	556	610	371	171	182	287	287	62	215	148
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	17	27	0			0			1	
Queuing Penalty (veh)		0	20	66	0			0			0	

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	Т	R
Maximum Queue (ft)	151	111	330	1208	1136	284
Average Queue (ft)	69	34	317	732	665	66
95th Queue (ft)	134	79	374	1373	1294	197
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				0	0	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			68	4	11	0
Queuing Penalty (veh)			219	16	15	0

Zone Summary

Zone wide Queuing Penalty: 696

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	1.9	0.2	1.0	
Total Del/Veh (s)	2.5	11.7	8.6	2.5	9.3	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	3.4	0.5
Total Del/Veh (s)	24.1	21.3	24.7	37.2	24.8

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	3.0	1.2	0.7
Total Del/Veh (s)	31.8	15.5	42.0	61.5	29.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Defiled Deli Veti (3)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	8.4	7.2	69.1	10.4

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.2	1.2	0.3
Total Del/Veh (s)	21.1	12.8	55.8	71.1	28.5

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.7	0.0	1.8	0.1	0.5
Total Del/Veh (s)	25.8	10.2	90.2	42.8	23.6

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.6	0.0	1.3	26.7	6.1
Total Del/Veh (s)	139.7	39.3	53.8	200.5	107.9

Denied Del/Veh (s)	6.5
Total Del/Veh (s)	1087.6

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						1.0
Total Del/Veh (s)	2.3	11.4	14.5	8.6	2.5	9.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	LT	R	L	Т	R	
Denied Del/Veh (s)												0.5
Total Del/Veh (s)	22.4	32.0	13.7	16.3	23.6	20.7	65.3	9.0	58.7	60.8	3.6	24.8

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	T	R	L	TR	
Denied Del/Veh (s)												0.7
Total Del/Veh (s)	24.5	30.0	34.1	36.2	7.1	5.4	76.9	89.6	23.4	67.9	53.3	29.2

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	T	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	16.1	8.5	8.3	7.4	7.1	68.5	10.4

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	T	Т	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	38.7	17.7	18.5	30.1	13.6	13.7	1.5	50.7	59.4	98.0	176.1	15.3

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	0.3	
Total Del/Veh (s)	28.5	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	T	TR	L	TR	LTR		
Denied Del/Veh (s)										0.5	
Total Del/Veh (s)	20.8	25.1	26.5	91.6	6.3	6.9	200.6	57.6	42.8	23.6	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	Т	R	L	L	T	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	81.0	100.0	167.6	177.1	8.8	71.1	90.6	39.4	46.3	5.7	49.2	70.6

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	Т	R	
Denied Del/Veh (s)							6.1
Total Del/Veh (s)	66.1	23.5	129.1	513.1	78.5	10.7	107.9

Denied Del/Veh (s)	6.5
Total Del/Veh (s)	1087.6

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.00	0.00	0.00	0.00
Avg Speed (mph)	23	26	24	22	25
Fuel Used (gal)	0.1	7.3	5.4	0.6	13.5
Fuel Eff. (mpg)	31.9	28.4	39.0	31.1	32.8

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.52	0.52	0.89	0.78	0.60
Avg Speed (mph)	20	19	11	16	18
Fuel Used (gal)	12.7	8.2	1.6	2.9	25.4
Fuel Eff. (mpg)	25.7	25.8	24.5	28.7	26.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.62	0.31	0.81	0.91	0.55
Avg Speed (mph)	15	19	14	10	15
Fuel Used (gal)	10.1	9.5	6.2	1.7	27.5
Fuel Eff. (mpg)	24.4	24.4	28.7	23.7	25.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.11	0.20	0.92	0.18
Avg Speed (mph)	24	20	10	20
Fuel Used (gal)	11.4	9.7	1.5	22.5
Fuel Eff. (mpg)	25.1	29.4	23.0	26.8

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.43	0.22	0.91	0.92	0.48
Avg Speed (mph)	16	20	11	9	14
Fuel Used (gal)	12.8	7.4	3.3	6.0	29.4
Fuel Eff. (mpg)	28.1	30.4	24.3	22.4	27.1

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.36	0.11	0.89	0.84	0.30
Avg Speed (mph)	15	24	8	3	16
Fuel Used (gal)	13.7	10.2	2.1	0.1	26.1
Fuel Eff. (mpg)	24.7	26.5	20.8	12.2	25.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.53	0.45	0.87	1.11	1.02
Avg Speed (mph)	5	14	13	5	7
Fuel Used (gal)	25.0	15.0	11.7	22.7	74.4
Fuel Eff. (mpg)	15.5	20.0	27.2	12.7	17.4

Stop/Veh	13.57
Avg Speed (mph)	13
Fuel Used (gal)	218.7
Fuel Used (gal) Fuel Eff. (mpg)	23.5

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.1	7.8	9.2	0.9	18.1
Vehicles Entered	13	632	923	116	1684

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	16.1	10.9	3.7	5.5	36.2
Vehicles Entered	930	828	281	295	2334

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)) 16.3	12.0	13.6	3.9	45.9
Vehicles Entered	ed 980	1100	625	127	2832

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	12.0	14.0	3.5	29.4
Vehicles Entered	1361	1121	107	2589

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	23.2	11.2	7.6	14.7	56.6
Vehicles Entered	1433	987	260	438	3118

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	22.9	11.1	5.5	0.4	40.0
Vehicles Entered	1496	1005	140	31	2672

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	72.0	22.2	24.4	71.4	190.0
Vehicles Entered	1506	1245	1008	970	4729

Travel Time (hr)	416.1	
Vehicles Entered	5557	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	WB	NB
Directions Served	L	TR	LTR
Maximum Queue (ft)	15	4	42
Average Queue (ft)	1	0	2
95th Queue (ft)	8	4	18
Link Distance (ft)	1690	1690	1207
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	TR	LT	R	L	T	R	
Maximum Queue (ft)	200	428	192	117	263	266	166	107	226	102	68	
Average Queue (ft)	112	126	87	48	138	132	70	59	116	32	30	
95th Queue (ft)	191	292	161	94	236	236	131	94	194	85	55	
Link Distance (ft)		1690			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					200		200	
Storage Blk Time (%)	15	6	5						2	0		
Queuing Penalty (veh)	99	37	33						4	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	T	R	L	TR	
Maximum Queue (ft)	59	412	447	367	99	110	231	340	320	132	143	
Average Queue (ft)	20	238	261	166	24	34	119	88	170	66	52	
95th Queue (ft)	51	381	412	292	69	83	205	228	296	122	112	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)							1	0	7	6	4	
Queuing Penalty (veh)							4	0	15	4	3	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	Т	T	TR	LR
Maximum Queue (ft)	37	183	191	225	219	210
Average Queue (ft)	6	61	63	103	98	100
95th Queue (ft)	25	144	143	201	193	184
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	Т	R	L	TR	L	T	R
Maximum Queue (ft)	279	360	354	77	175	166	48	199	266	270	484	152
Average Queue (ft)	120	180	193	23	88	84	13	90	123	192	163	63
95th Queue (ft)	217	317	328	57	149	148	39	167	232	305	515	125
Link Distance (ft)		1280	1280		1152	1152			1612		1596	1596
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			500			150	100		175		
Storage Blk Time (%)		0				1		7	21	35	0	
Queuing Penalty (veh)		1				1		11	23	15	0	

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	149	557	567	131	100	95	321	157	83	
Average Queue (ft)	16	212	228	47	26	31	95	82	27	
95th Queue (ft)	131	637	658	116	70	78	336	164	64	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		0	0							
Queuing Penalty (veh)		2	3							
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)		7					4	26		
Queuing Penalty (veh)		1					4	7		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	Т	T	R	L	T
Maximum Queue (ft)	226	325	1338	1337	325	181	187	221	234	118	312	387
Average Queue (ft)	127	273	914	929	237	91	105	124	131	41	156	225
95th Queue (ft)	204	417	1577	1578	454	161	171	192	204	87	285	358
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			4	5								
Queuing Penalty (veh)			31	36								
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	0	2	52	57							1	3
Queuing Penalty (veh)	2	8	143	102							2	7

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	Ţ	R	L	T	T	R
Maximum Queue (ft)	370	307	330	1624	1608	254
Average Queue (ft)	217	115	329	1253	1201	54
95th Queue (ft)	349	241	332	1945	1935	155
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				31	11	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	10	0	86	1	3	0
Queuing Penalty (veh)	23	1	204	5	4	0

Zone Summary

Zone wide Queuing Penalty: 835

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	1.9	0.2	1.0	
Total Del/Veh (s)	2.5	11.5	8.8	2.5	9.6	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.2	3.6	0.5
Total Del/Veh (s)	26.3	13.1	24.5	41.3	23.0

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	10.4	1.4	3.0
Total Del/Veh (s)	57.1	11.3	88.8	70.1	49.6

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Defilied Deli Vett (3)	0.0	0.0	0.2	0.0
Total Del/Veh (s)	38.4	8.2	63.7	26.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.1	26.5	4.7
Total Del/Veh (s)	94.2	21.0	58.8	211.7	89.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.5	0.1	2.0	0.1	0.9
Total Del/Veh (s)	100.5	16.2	229.6	44.7	74.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	2.1	0.0	1.4	39.2	8.6
Total Del/Veh (s)	204.2	121.7	98.0	210.0	157.4

Denied Del/Veh (s)	12.2
Total Del/Veh (s)	1526.1

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						1.0
Total Del/Veh (s)	2.4	11.5	11.8	8.8	2.5	9.6

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	LT	R	L	Т	R	
Denied Del/Veh (s)												0.5
Total Del/Veh (s)	31.2	34.3	9.5	11.0	13.4	13.4	66.6	8.7	74.3	73.5	4.0	23.0

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	All
Movements Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Denied Del/Veh (s)												3.0
Total Del/Veh (s)	36.9	55.0	59.7	23.3	6.9	8.1	116.6	302.5	36.4	75.6	61.6	49.6

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	EB	WB	WB	SB	All
Movements Served	L	Т	Т	Т	TR	LR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	17.6	39.4	37.5	7.7	8.7	64.2	26.5

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Movements Served	L	Т	TR	L	Т	Т	R	L	TR	L	Т	R
Denied Del/Veh (s)												
Total Del/Veh (s)	57.5	100.6	101.3	26.9	22.4	24.7	2.1	42.1	70.8	114.1	1493.1	13.8

5: McHugh Dr & Custer Ave Performance by lane

Lane	All	
Movements Served		
Denied Del/Veh (s)	4.7	
Total Del/Veh (s)	89.0	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	EB	WB	WB	WB	NB	NB	SB	All	
Movements Served	L	Т	TR	L	Т	TR	L	TR	LTR		
Denied Del/Veh (s)										0.9	
Total Del/Veh (s)	32.0	100.2	101.7	100.8	9.5	11.2	647.3	108.5	43.1	74.1	

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	Т	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	160.4	216.0	232.9	239.5	9.5	392.0	465.3	91.8	65.1	16.2	63.7	132.7

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	Т	R	
Denied Del/Veh (s)							8.6
Total Del/Veh (s)	131.5	43.5	155.8	505.0	76.2	13.8	157.4

Denied Del/Veh (s)	12.2
Total Del/Veh (s)	1526.1

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.01	0.01	0.00	0.01
Avg Speed (mph)	23	27	24	22	25
Fuel Used (gal)	0.2	8.7	5.6	0.5	14.9
Fuel Eff. (mpg)	32.0	29.7	39.5	31.1	33.4

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.51	0.32	0.90	0.80	0.50
Avg Speed (mph)	20	24	11	15	19
Fuel Used (gal)	13.9	9.4	0.9	3.3	27.5
Fuel Eff. (mpg)	25.0	25.8	25.0	27.8	25.6

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.78	0.23	1.05	0.92	0.66	
Avg Speed (mph)	11	22	8	9	11	
Fuel Used (gal)	11.0	8.4	11.6	2.0	32.9	
Fuel Eff. (mpg)	22.3	30.0	21.5	22.5	24.0	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.31	0.13	0.90	0.26
Avg Speed (mph)	12	25	10	16
Fuel Used (gal)	15.3	12.4	1.6	29.3
Fuel Eff. (mpg)	20.7	25.6	23.6	22.9

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.82	0.29	0.89	1.55	0.78
Avg Speed (mph)	7	17	10	4	7
Fuel Used (gal)	19.9	9.1	3.0	14.1	46.0
Fuel Eff. (mpg)	19.0	27.0	23.9	12.2	18.8

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.75	0.22	0.96	0.85	0.55	
Avg Speed (mph)	6	21	4	3	8	
Fuel Used (gal)	19.9	11.3	3.9	0.1	35.2	
Fuel Eff. (mpg)	17.2	26.3	12.9	12.1	19.6	

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.81	0.76	1.28	1.08	1.27
Avg Speed (mph)	4	6	9	4	5
Fuel Used (gal)	31.8	22.7	17.9	23.5	95.8
Fuel Eff. (mpg)	12.4	14.3	21.7	11.8	14.5

Stop/Veh	13.88
Avg Speed (mph)	9
Fuel Used (gal)	281.7
Fuel Used (gal) Fuel Eff. (mpg)	19.9

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.2	9.7	9.6	0.7	20.3
Vehicles Entered	24	776	962	89	1851

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	17.9	10.3	2.0	6.5	36.7
Vehicles Entered	999	960	154	325	2438

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	23.1	11.4	32.7	4.8	72.0
Vehicles Entered	976	1197	878	144	3195

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Travel Time (hr)	26.3	12.5	3.8	42.6
Vehicles Entered	1522	1254	122	2898

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	54.0	14.8	6.8	46.9	122.5
Vehicles Entered	1544	1070	232	581	3427

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	55.3	14.2	13.1	0.4	82.9
Vehicles Entered	1509	1129	168	28	2834

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	102.0	54.9	45.8	74.7	277.4
Vehicles Entered	1520	1326	1236	931	5013

Travel Time (hr)	654.5
Vehicles Entered	6075

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	WB	WB	NB
Directions Served	L	TR	LTR
Maximum Queue (ft)	30	21	59
Average Queue (ft)	1	1	4
95th Queue (ft)	14	11	34
Link Distance (ft)	1690	1690	1207
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB	
Directions Served	L	Т	TR	L	T	TR	LT	R	L	Т	R	
Maximum Queue (ft)	199	676	192	77	203	208	109	87	256	129	104	
Average Queue (ft)	131	153	81	33	91	86	43	41	132	25	36	
95th Queue (ft)	212	438	161	63	176	174	88	74	229	89	75	
Link Distance (ft)		1690			1280	1280	747	747		1480		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	100		100	500					200		200	
Storage Blk Time (%)	25	4	4						5	0		
Queuing Penalty (veh)	180	25	24						9	0		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR	
Maximum Queue (ft)	162	659	673	232	130	156	312	1090	325	161	183	
Average Queue (ft)	14	342	356	101	41	56	201	502	276	79	64	
95th Queue (ft)	98	644	658	192	101	123	328	1276	392	140	141	
Link Distance (ft)		1280	1280		1055	1055		1512			1641	
Upstream Blk Time (%)		1	1					6				
Queuing Penalty (veh)		4	5					0				
Storage Bay Dist (ft)	500			500			225		225	100		
Storage Blk Time (%)		5					21	0	35	13	5	
Queuing Penalty (veh)		1					146	2	99	8	4	

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	Т	Т	Т	TR	LR
Maximum Queue (ft)	149	838	844	186	209	212
Average Queue (ft)	12	256	263	64	73	107
95th Queue (ft)	128	856	860	149	163	182
Link Distance (ft)		1055	1055	1280	1280	1693
Upstream Blk Time (%)		2	2			
Queuing Penalty (veh)		13	15			
Storage Bay Dist (ft)	500					
Storage Blk Time (%)		17				
Queuing Penalty (veh)		1				

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	Т	Т	R	L	TR	L	Т	R
Maximum Queue (ft)	600	1300	1304	52	263	282	155	199	284	275	1524	275
Average Queue (ft)	333	619	625	15	126	124	24	75	120	266	1020	83
95th Queue (ft)	677	1396	1396	43	219	223	89	146	218	309	1916	216
Link Distance (ft)		1280	1280		1152	1152			1612		1596	
Upstream Blk Time (%)		5	6								22	
Queuing Penalty (veh)		43	47								0	
Storage Bay Dist (ft)	500			500			150	100		175		175
Storage Blk Time (%)		31				6		4	20	73		1
Queuing Penalty (veh)		79				9		5	20	206		3

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	
Directions Served	L	Т	TR	L	Т	TR	L	TR	LTR	
Maximum Queue (ft)	600	1179	1181	179	147	150	720	173	71	
Average Queue (ft)	94	721	734	77	65	78	286	137	25	
95th Queue (ft)	442	1492	1493	163	133	148	765	216	61	
Link Distance (ft)		1152	1152		1361	1361	1664		258	
Upstream Blk Time (%)		5	6							
Queuing Penalty (veh)		43	52							
Storage Bay Dist (ft)	500			500				75		
Storage Blk Time (%)		45					3	66		
Queuing Penalty (veh)		4					5	12		

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	T	R	L	T
Maximum Queue (ft)	261	325	1394	1396	325	438	485	928	925	242	397	840
Average Queue (ft)	188	299	1230	1239	241	348	380	439	413	111	249	473
95th Queue (ft)	303	400	1664	1665	458	528	578	1053	1032	210	456	875
Link Distance (ft)			1361	1361				1224	1224			1656
Upstream Blk Time (%)			11	14				0	0			0
Queuing Penalty (veh)			100	124				3	4			0
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	20	30	54	59		33	43	0	0	0	2	34
Queuing Penalty (veh)	122	177	161	117		143	184	0	0	0	6	79

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	824	325	330	1637	1636	177
Average Queue (ft)	476	259	328	1206	1160	46
95th Queue (ft)	881	413	345	1877	1856	122
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				26	10	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	47	10	88	1	3	0
Queuing Penalty (veh)	145	33	222	3	4	0

Zone Summary

Zone wide Queuing Penalty: 2691

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.1	1.0	0.1	0.4	
Total Del/Veh (s)	3.5	10.6	5.8	2.7	8.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.3	31.5	9.3
Total Del/Veh (s)	7.4	10.2	5.1	123.5	42.2

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.2	0.4	0.4
Total Del/Veh (s)	7.7	7.2	8.5	55.6	13.2

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
. ,	7.5	0.0	10.4	0.0
Total Del/Veh (s)	7.5	8.1	12.1	8.0

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	98.6	21.3
Total Del/Veh (s)	7.3	7.0	57.8	248.4	62.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	7.8	10.5	8.3	14.1	9.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	1.6	6.0	1.9
Total Del/Veh (s)	40.9	30.7	53.4	117.5	61.2

Denied Del/Veh (s)	18.9
Total Del/Veh (s)	858.0

Lane	EB	WB	WB	NB	SB	All	
Movements Served	LTR	L	TR	LTR	LTR		
Denied Del/Veh (s)						0.4	
Total Del/Veh (s)	2.3	10.4	14.6	5.8	2.7	8.5	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LT	R	
Denied Del/Veh (s)								9.3
Total Del/Veh (s)	10.7	5.0	11.7	7.3	5.1	214.2	4.6	42.2

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All	
Movements Served	LT	TR	LT	TR	LT	R	LTR		
Denied Del/Veh (s)								0.4	
Total Del/Veh (s)	10.4	6.4	8.2	6.1	14.9	6.0	55.4	13.2	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	WB	SB	All
Movements Served	LT	T	T	TR	LR	
Denied Del/Veh (s)						0.0
Total Del/Veh (s)	7.9	7.2	8.1	8.1	12.1	8.0

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	TR	LT	TR	LTR	LT	R		
Denied Del/Veh (s)								21.3	
Total Del/Veh (s)	10.6	5.2	8.9	5.8	57.6	395.9	9.7	62.0	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LTR	
Denied Del/Veh (s)							0.0
Total Del/Veh (s)	8.7	7.2	10.4	10.5	8.3	13.7	9.0

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	T	R	L	L	Т	T	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	63.0	79.3	40.1	48.1	11.5	47.3	59.0	30.3	34.5	2.3	66.0	62.1

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	T	R	L	Т	T	R	
Denied Del/Veh (s)							1.9
Total Del/Veh (s)	51.7	15.9	90.9	243.5	68.4	13.8	61.2

Denied Del/Veh (s)	18.9
Total Del/Veh (s)	858.0

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.05	0.00	0.10	0.03
Avg Speed (mph)	23	25	27	22	25
Fuel Used (gal)	0.0	11.9	4.2	0.2	16.3
Fuel Eff. (mpg)	31.5	27.2	37.5	31.9	29.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.19	0.32	0.45	0.78	0.43
Avg Speed (mph)	28	23	19	6	14
Fuel Used (gal)	8.3	10.1	0.9	11.5	30.8
Fuel Eff. (mpg)	27.0	23.9	31.6	17.4	22.6

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.17	0.14	0.58	0.91	0.30
Avg Speed (mph)	23	22	26	11	20
Fuel Used (gal)	9.1	9.8	2.9	3.7	25.4
Fuel Eff. (mpg)	25.4	25.0	35.8	25.6	26.4

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.04	0.04	0.77	0.07
Avg Speed (mph)	22	23	19	23
Fuel Used (gal)	10.6	12.1	1.0	23.6
Fuel Eff. (mpg)	23.6	24.8	32.4	24.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.21	0.19	0.91	0.78	0.38
Avg Speed (mph)	22	21	10	3	9
Fuel Used (gal)	11.6	8.7	3.2	19.9	43.5
Fuel Eff. (mpg)	27.4	26.8	24.9	9.5	18.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.08	0.04	0.70	0.58	0.10
Avg Speed (mph)	21	24	21	7	22
Fuel Used (gal)	12.4	10.0	1.1	0.1	23.5
Fuel Eff. (mpg)	25.5	28.3	33.4	21.8	27.0

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.68	0.43	0.84	1.11	0.74
Avg Speed (mph)	13	16	13	7	11
Fuel Used (gal)	16.2	13.9	5.0	19.8	54.9
Fuel Eff. (mpg)	21.8	22.9	26.0	18.7	21.4

Stop/Veh	8.80
Avg Speed (mph)	14
Fuel Used (gal)	218.1
Fuel Used (gal) Fuel Eff. (mpg)	23.2

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.0	13.0	6.0	0.3	19.4
Vehicles Entered	2	958	670	39	1669

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	8.0	10.5	1.5	37.6	57.6
Vehicles Entered	d 674	922	218	744	2558

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	9.9	11.0	4.2	8.8	33.9
Vehicles Entered	885	1136	371	311	2703

4: Custer Ave & Cooney Dr Performance by approach

Approach	proach EB WB SB	All
Travel Time (hr)		25.7
Vehicles Entered		438

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	14.6	11.0	7.8	73.8	107.1
Vehicles Entered	1230	1031	273	653	3187

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	15.0	11.7	1.7	0.2	28.6
Vehicles Entered	1326	1084	116	33	2559

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	27.3	19.9	10.0	52.7	110.0
Vehicles Entered	1306	1303	413	1211	4233

Travel Time (hr)	382.2	
Vehicles Entered	5389	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	LTR	LTR
Maximum Queue (ft)	10	144	4	15	39
Average Queue (ft)	0	8	0	1	3
95th Queue (ft)	4	100	4	6	19
Link Distance (ft)	1256	1662	1662	1227	928
Lington and Dily Times (0/)					

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB	
Directions Served	LT	TR	LT	TR	LTR	LT	R	
Maximum Queue (ft)	80	30	179	102	112	1344	200	
Average Queue (ft)	40	2	73	11	44	767	159	
95th Queue (ft)	67	13	138	58	81	1671	278	
Link Distance (ft)	1662		1176	1176	699	1432		
Upstream Blk Time (%)						25		
Queuing Penalty (veh)						0		
Storage Bay Dist (ft)		500					100	
Storage Blk Time (%)						79	0	
Queuing Penalty (veh)						269	2	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	
Directions Served	LT	TR	LT	TR	LT	R	LTR	
Maximum Queue (ft)	85	70	146	83	103	122	440	
Average Queue (ft)	44	12	52	4	39	48	188	
95th Queue (ft)	71	45	115	40	77	89	407	
Link Distance (ft)	1176	1176	937	937	1463		1593	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)						225		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	WB	SB
Directions Served	LT	Т	T	TR	LR
Maximum Queue (ft)	59	22	72	27	81
Average Queue (ft)	19	0	9	1	39
95th Queue (ft)	51	12	42	15	70
Link Distance (ft)	937	937	1174	1174	1643
Unatroom DIL Time (0/)					

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	LT	TR	LT	TR	LTR	LT	R
Maximum Queue (ft)	142	114	148	144	365	1604	275
Average Queue (ft)	69	14	64	22	164	1344	268
95th Queue (ft)	118	66	119	88	353	1986	331
Link Distance (ft)	1174	1174	1041	1041	1567	1560	
Upstream Blk Time (%)						57	
Queuing Penalty (veh)						0	
Storage Bay Dist (ft)							175
Storage Blk Time (%)						96	0
Queuing Penalty (veh)						277	1

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	78	57	92	57	89	68
Average Queue (ft)	29	4	15	3	39	17
95th Queue (ft)	67	27	55	31	72	51
Link Distance (ft)	1041	1041	1309	1309	1621	215
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	111	324	510	551	325	203	232	322	335	102	257	180
Average Queue (ft)	43	91	270	305	145	96	110	135	146	21	118	88
95th Queue (ft)	92	229	431	483	351	169	188	253	267	76	225	148
Link Distance (ft)			1309	1309				1224	1224			1656
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)		0	14	22	0			0	0		0	0
Queuing Penalty (veh)		0	17	55	0			0	0		0	0

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	R	L	Т	Т	R
Maximum Queue (ft)	156	84	330	1322	1273	287
Average Queue (ft)	66	30	322	879	807	66
95th Queue (ft)	132	68	365	1606	1543	193
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				5	2	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)			71	5	11	
Queuing Penalty (veh)			230	22	16	

Zone Summary

Zone wide Queuing Penalty: 891

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	1.7	0.2	1.0	
Total Del/Veh (s)	2.3	6.1	8.0	2.6	6.9	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.4	1.8	0.3
Total Del/Veh (s)	10.1	10.0	9.3	7.3	9.6

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	2.4	0.2	0.6
Total Del/Veh (s)	8.4	7.6	21.9	11.3	11.3

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB WB	SB	All
Denied Del/Veh (s)	0.1 0.0	0.2	0.1
Total Del/Veh (s)	11.0 5.3	11.1	8.6

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	33.6	0.2	3.0
Total Del/Veh (s)	19.1	6.9	350.2	17.0	42.7

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	4.0	0.0	0.2	0.1	2.2
Total Del/Veh (s)	47.9	9.6	244.6	11.5	44.2

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	1.3	20.6	4.7
Total Del/Veh (s)	167.8	38.1	54.7	195.3	115.1

Denied Del/Veh (s)	7.4
Total Del/Veh (s)	1060.6

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						1.0
Total Del/Veh (s)	2.3	6.3	4.1	8.0	2.6	6.9

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LT	R	
Denied Del/Veh (s)								0.3
Total Del/Veh (s)	14.5	5.6	13.5	6.0	9.4	11.1	1.6	9.6

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All	
Movements Served	LT	TR	LT	TR	LT	R	LTR		
Denied Del/Veh (s)								0.6	
Total Del/Veh (s)	10.1	7.3	9.0	6.1	34.7	15.9	11.3	11.3	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	WB	SB	All
Movements Served	LT	T	T	TR	LR	
Denied Del/Veh (s)						0.1
Total Del/Veh (s)	11.0	11.0	5.5	5.1	11.1	8.6

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	TR	LT	TR	LTR	LT	R		
Denied Del/Veh (s)								3.0	
Total Del/Veh (s)	25.4	14.6	8.7	5.8	350.2	24.4	6.4	42.7	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LTR	
Denied Del/Veh (s)							2.2
Total Del/Veh (s)	51.6	44.8	9.3	9.8	243.0	11.5	44.2

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	Т	T	R	L	L	Т	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	89.7	107.4	205.5	212.6	8.8	75.5	89.1	36.3	43.6	5.7	47.4	72.6

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	Т	R	
Denied Del/Veh (s)							4.7
Total Del/Veh (s)	67.1	24.0	129.3	514.5	70.0	9.8	115.1

Denied Del/Veh (s)	7.4
Total Del/Veh (s)	1060.6

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.02	0.01	0.02	0.01
Avg Speed (mph)	23	27	25	22	26
Fuel Used (gal)	0.1	8.2	5.5	0.7	14.5
Fuel Eff. (mpg)	31.9	26.1	39.3	30.8	31.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.19	0.32	0.65	0.37	0.32
Avg Speed (mph)	26	23	16	31	25
Fuel Used (gal)	11.3	8.8	1.2	2.1	23.4
Fuel Eff. (mpg)	27.6	23.8	30.4	37.6	27.2

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.21	0.19	0.78	0.71	0.35	
Avg Speed (mph)	23	22	19	19	21	
Fuel Used (gal)	9.6	9.0	5.1	1.2	24.9	
Fuel Eff. (mpg)	25.7	25.2	33.9	32.5	27.5	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.08	0.03	0.72	0.09
Avg Speed (mph)	20	21	20	20
Fuel Used (gal)	12.0	10.3	1.1	23.3
Fuel Eff. (mpg)	23.4	27.1	32.5	25.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.33	0.19	0.89	0.69	0.38
Avg Speed (mph)	16	21	2	18	11
Fuel Used (gal)	13.9	8.5	8.1	3.9	34.3
Fuel Eff. (mpg)	26.6	26.9	8.4	30.9	22.9

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.46	0.02	0.88	0.50	0.31
Avg Speed (mph)	10	24	4	8	12
Fuel Used (gal)	16.0	9.4	3.6	0.1	29.0
Fuel Eff. (mpg)	21.0	27.8	11.9	23.1	22.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.65	0.44	0.88	1.14	1.06
Avg Speed (mph)	5	14	13	5	7
Fuel Used (gal)	28.2	14.5	11.9	21.8	76.4
Fuel Eff. (mpg)	13.8	20.3	27.1	13.2	16.9

Stop/Veh	10.81
Avg Speed (mph)	12
Fuel Used (gal)	225.8
Fuel Used (gal) Fuel Eff. (mpg)	22.5

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.1	7.9	9.1	0.9	18.1
Vehicles Entered	12	615	927	119	1673

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	11.8	9.2	2.3	2.7	26.0
Vehicles Entered	923	799	281	292	2295

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	10.8	10.4	9.4	2.0	32.6
Vehicles Entered	959	1051	618	129	2757

4: Custer Ave & Cooney Dr Performance by approach

Approach	oach EB WB SE	B All
Travel Time (hr)	el Time (hr) 13.9 13.6 1.8	3 29.2
Vehicles Entered		

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	23.6	10.6	30.6	6.9	71.7
Vehicles Entered	1414	982	247	410	3053

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	33.9	10.6	12.2	0.1	56.9
Vehicles Entered	1444	1007	151	30	2632

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	82.6	21.4	24.9	67.5	196.3
Vehicles Entered	1438	1220	1019	960	4637

Travel Time (hr)	430.7	
Vehicles Entered	5522	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	NB	SB
Directions Served	LTR	TR	LTR	LTR
Maximum Queue (ft)	12	4	61	15
Average Queue (ft)	0	0	5	1
95th Queue (ft)	5	4	26	7
Link Distance (ft)	1256	1649	1227	928
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				

Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB	
Directions Served	LT	TR	LT	TR	LTR	LT	R	
Maximum Queue (ft)	98	21	177	121	164	113	40	
Average Queue (ft)	43	1	72	11	64	43	3	
95th Queue (ft)	78	11	137	68	120	85	21	
Link Distance (ft)	1649		1163	1163	699	1420		
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		500					100	
Storage Blk Time (%)						1		
Queuing Penalty (veh)						1		

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	
Directions Served	LT	TR	LT	TR	LT	R	LTR	
Maximum Queue (ft)	97	78	166	98	294	271	113	
Average Queue (ft)	53	12	61	7	82	101	46	
95th Queue (ft)	84	49	125	52	213	216	87	
Link Distance (ft)	1163	1163	937	937	1463		1593	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)						225		
Storage Blk Time (%)					1	4		
Queuing Penalty (veh)					5	8		

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	WB	SB
Directions Served	LT	T	T	TR	LR
Maximum Queue (ft)	127	81	61	20	102
Average Queue (ft)	38	16	6	1	41
95th Queue (ft)	184	166	32	13	78
Link Distance (ft)	937	937	1174	1174	1643
I I t DII - T' (0/ \					

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	LT	TR	LT	TR	LTR	LT	R
Maximum Queue (ft)	394	385	114	123	1207	231	94
Average Queue (ft)	159	111	58	17	660	94	40
95th Queue (ft)	552	528	100	73	1472	193	77
Link Distance (ft)	1174	1174	1041	1041	1567	1560	1560
Upstream Blk Time (%)	3	3			10		
Queuing Penalty (veh)	19	19			0		
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	788	780	71	32	850	58
Average Queue (ft)	292	278	10	1	282	14
95th Queue (ft)	932	948	43	16	861	44
Link Distance (ft)	1041	1041	1309	1309	1621	215
Upstream Blk Time (%)	5	9				
Queuing Penalty (veh)	34	61				
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	Т	R	L	L	T	T	R	L	T
Maximum Queue (ft)	231	325	1364	1368	325	197	209	224	222	120	292	388
Average Queue (ft)	123	277	990	1006	251	92	107	116	124	42	146	231
95th Queue (ft)	215	421	1636	1636	459	170	181	187	195	92	261	360
Link Distance (ft)			1309	1309				1224	1224			1656
Upstream Blk Time (%)			24	29								
Queuing Penalty (veh)			176	219								
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	2	3	59	64							1	4
Queuing Penalty (veh)	10	15	164	115							2	9

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	Т	R	L	Т	Т	R
Maximum Queue (ft)	391	292	330	1589	1565	236
Average Queue (ft)	225	116	329	1230	1155	44
95th Queue (ft)	366	253	336	1860	1846	129
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				19	7	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	11	1	86	1	3	0
Queuing Penalty (veh)	27	2	204	3	3	0

Zone Summary

Zone wide Queuing Penalty: 1096

Approach	EB	WB	NB	SB	All	
Denied Del/Veh (s)	0.1	0.0	2.0	0.2	1.1	
Total Del/Veh (s)	2.4	6.7	8.3	2.5	7.3	

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	s) 0.1	0.0	0.3	2.0	0.3
Total Del/Veh (s)	9.8	9.5	6.4	6.8	9.1

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)) 0.0	0.0	33.5	0.2	9.2
Total Del/Veh (s)	9.8	7.0	134.0	14.7	42.4

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	373.0	2.8	25.9
Total Del/Veh (s)	71.4	7.3	1261.8	116.1	115.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	2.9	0.0	49.7	0.1	4.4
Total Del/Veh (s)	105.9	9.9	600.6	11.8	94.1

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	3.7	0.0	1.4	72.8	15.8
Total Del/Veh (s)	212.3	99.8	70.9	240.9	153.9

Denied Del/Veh (s)	34.7
Total Del/Veh (s)	1586.8

Lane	EB	WB	WB	NB	SB	All
Movements Served	LTR	L	TR	LTR	LTR	
Denied Del/Veh (s)						1.1
Total Del/Veh (s)	2.4	6.9	5.4	8.3	2.4	7.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LT	R	
Denied Del/Veh (s)								0.3
Total Del/Veh (s)	14.1	5.7	12.3	6.6	6.4	10.8	2.3	9.1

3: Benton Ave & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	NB	SB	All	
Movements Served	LT	TR	LT	TR	LT	R	LTR		
Denied Del/Veh (s)								9.2	
Total Del/Veh (s)	11.6	8.6	8.2	6.1	275.0	57.4	14.6	42.4	

4: Custer Ave & Cooney Dr Performance by lane

Lane	EB	EB	WB	WB	SB	All
Movements Served	LT	T	T	TR	LR	
Denied Del/Veh (s)						0.0
Total Del/Veh (s)	27.7	25.0	8.2	8.0	14.4	18.0

5: McHugh Dr & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	SB	All	
Movements Served	LT	TR	LT	TR	LTR	LT	R		
Denied Del/Veh (s)								25.9	
Total Del/Veh (s)	98.0	54.2	8.9	6.3	1254.0	187.3	8.7	115.0	

6: Villard Ave/Private Approach & Custer Ave Performance by lane

Lane	EB	EB	WB	WB	NB	SB	All
Movements Served	LT	TR	LT	TR	LTR	LTR	
Denied Del/Veh (s)							4.4
Total Del/Veh (s)	112.5	100.2	9.4	10.3	596.8	12.2	94.1

7: Montana Ave & Custer Ave Performance by lane

Lane	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Movements Served	L	L	T	Т	R	L	L	Т	Т	R	L	T
Denied Del/Veh (s)												
Total Del/Veh (s)	152.2	198.4	244.7	255.4	9.4	353.5	404.3	60.7	51.3	13.0	64.0	90.1

7: Montana Ave & Custer Ave Performance by lane

Lane	NB	NB	SB	SB	SB	SB	All
Movements Served	Т	R	L	Т	Т	R	
Denied Del/Veh (s)							15.8
Total Del/Veh (s)	87.1	35.2	161.0	604.3	82.0	13.8	153.9

Denied Del/Veh (s)	34.7
Total Del/Veh (s)	1586.8

Approach	EB	WB	NB	SB	All
Stop/Veh	0.00	0.01	0.01	0.03	0.01
Avg Speed (mph)	23	27	25	22	26
Fuel Used (gal)	0.2	10.0	5.7	0.5	16.4
Fuel Eff. (mpg)	32.6	26.6	39.6	31.0	31.3

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.15	0.29	0.58	0.41	0.26
Avg Speed (mph)	27	23	18	31	25
Fuel Used (gal)	12.3	10.3	0.7	2.3	25.5
Fuel Eff. (mpg)	27.7	23.7	31.4	38.6	27.2

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All	
Stop/Veh	0.21	0.15	0.99	0.81	0.42	
Avg Speed (mph)	22	22	6	18	12	
Fuel Used (gal)	9.9	10.0	13.8	1.4	35.2	
Fuel Eff. (mpg)	25.8	25.0	16.2	31.7	22.0	

4: Custer Ave & Cooney Dr Performance by approach

Approach	EB	WB	SB	All
Stop/Veh	0.18	0.03	0.80	0.14
Avg Speed (mph)	14	23	19	18
Fuel Used (gal)	14.7	12.4	1.2	28.3
Fuel Eff. (mpg)	21.6	24.9	32.2	23.5

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.63	0.19	0.74	1.06	0.57
Avg Speed (mph)	9	21	1	6	6
Fuel Used (gal)	19.3	9.1	19.3	9.4	57.2
Fuel Eff. (mpg)	20.6	27.1	1.7	18.8	15.0

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	0.83	0.01	0.90	0.57	0.51
Avg Speed (mph)	6	24	1	8	7
Fuel Used (gal)	21.3	10.3	7.7	0.1	39.3
Fuel Eff. (mpg)	17.0	27.6	5.3	23.4	17.5

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Stop/Veh	1.96	0.59	1.01	1.02	1.20
Avg Speed (mph)	4	7	11	4	5
Fuel Used (gal)	34.1	20.5	15.4	27.4	97.4
Fuel Eff. (mpg)	12.2	15.4	24.8	10.0	14.2

Stop/Veh	11.33
Avg Speed (mph)	9
Fuel Used (gal)	299.3
Fuel Used (gal) Fuel Eff. (mpg)	18.6

Approach	EB	WB	NB	SB	All
Travel Time (hr)	0.3	9.8	9.8	0.7	20.5
Vehicles Entered	24	758	978	87	1847

2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	12.8	10.5	1.2	3.0	27.4
Vehicles Entered	1009	927	158	326	2420

3: Benton Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	11.5	11.3	46.3	2.4	71.5
Vehicles Entered	d 984	1154	820	147	3105

4: Custer Ave & Cooney Dr Performance by approach

5: McHugh Dr & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	46.5	11.6	82.2	27.8	168.1
Vehicles Entered	1555	1062	142	606	3365

6: Villard Ave/Private Approach & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	60.6	11.8	30.5	0.1	103.0
Vehicles Entered	1526	1127	155	28	2836

7: Montana Ave & Custer Ave Performance by approach

Approach	EB	WB	NB	SB	All
Travel Time (hr)	108.0	45.4	35.4	91.6	280.3
Vehicles Entered	1507	1291	1214	913	4925

Travel Time (hr)	708.2	
Vehicles Entered	5921	

Intersection: 1: Henderson St & Custer Ave/ Custer Ave

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	L	TR	LTR	LTR
Maximum Queue (ft)	9	7	7	40	17
Average Queue (ft)	0	0	0	5	1
95th Queue (ft)	4	5	5	22	9
Link Distance (ft)	1256	1662	1662	1227	928
Unstroom DIK Time (0/)					

Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 2: Valley Dr/Green Meadow Dr & Custer Ave/Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB	
Directions Served	LT	TR	LT	TR	LTR	LT	R	
Maximum Queue (ft)	92	3	142	102	90	89	57	
Average Queue (ft)	46	0	69	20	40	40	19	
95th Queue (ft)	78	3	121	70	74	72	48	
Link Distance (ft)	1662		1176	1176	699	1432		
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		500					100	
Storage Blk Time (%)						0	0	
Queuing Penalty (veh)						0	0	

Intersection: 3: Benton Ave & Custer Ave

Movement	EB	EB	WB	WB	NB	NB	SB	
Directions Served	LT	TR	LT	TR	LT	R	LTR	
Maximum Queue (ft)	158	129	127	54	1334	325	116	
Average Queue (ft)	60	17	50	4	782	291	54	
95th Queue (ft)	169	139	98	28	1665	403	97	
Link Distance (ft)	1176	1176	937	937	1463		1593	
Upstream Blk Time (%)					25			
Queuing Penalty (veh)					0			
Storage Bay Dist (ft)						225		
Storage Blk Time (%)					24	65		
Queuing Penalty (veh)					141	182		

Intersection: 4: Custer Ave & Cooney Dr

Movement	EB	EB	WB	WB	SB
Directions Served	LT	Т	Т	TR	LR
Maximum Queue (ft)	421	406	49	17	107
Average Queue (ft)	128	107	5	1	49
95th Queue (ft)	576	575	28	10	89
Link Distance (ft)	937	937	1174	1174	1643
Upstream Blk Time (%)	4	6			
Queuing Penalty (veh)	29	47			
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: McHugh Dr & Custer Ave

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	LT	TR	LT	TR	LTR	LT	R
Maximum Queue (ft)	1207	1210	119	127	1580	1110	275
Average Queue (ft)	491	455	58	22	1284	614	209
95th Queue (ft)	1232	1241	102	86	1895	1341	376
Link Distance (ft)	1174	1174	1041	1041	1567	1560	
Upstream Blk Time (%)	15	15			49	4	
Queuing Penalty (veh)	120	126			0	0	
Storage Bay Dist (ft)							175
Storage Blk Time (%)						72	0
Queuing Penalty (veh)						181	1

Intersection: 6: Villard Ave/Private Approach & Custer Ave

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	1092	1092	70	11	1281	59
Average Queue (ft)	674	672	9	0	660	15
95th Queue (ft)	1405	1429	41	9	1552	44
Link Distance (ft)	1041	1041	1309	1309	1621	215
Upstream Blk Time (%)	19	30			9	
Queuing Penalty (veh)	160	251			0	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Montana Ave & Custer Ave

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	Т	Т	R	L	L	Т	Т	R	L	T
Maximum Queue (ft)	270	325	1360	1361	325	440	474	649	612	176	391	586
Average Queue (ft)	178	299	1257	1261	249	309	334	249	231	83	199	329
95th Queue (ft)	289	399	1620	1619	459	478	511	658	624	154	373	579
Link Distance (ft)			1309	1309				1224	1224			1656
Upstream Blk Time (%)			38	47				0	0			
Queuing Penalty (veh)			339	413				1	1			
Storage Bay Dist (ft)	225	225			225	400	400			400	300	
Storage Blk Time (%)	16	24	58	63		14	21	0			3	15
Queuing Penalty (veh)	98	143	173	124		61	91	0			10	34

Intersection: 7: Montana Ave & Custer Ave

Movement	NB	NB	SB	SB	SB	SB
Directions Served	Т	R	L	T	T	R
Maximum Queue (ft)	591	325	330	1604	1604	148
Average Queue (ft)	328	200	329	1362	1321	46
95th Queue (ft)	588	359	338	1917	1926	103
Link Distance (ft)	1656			1622	1622	
Upstream Blk Time (%)				44	18	
Queuing Penalty (veh)				0	0	
Storage Bay Dist (ft)		225	230			230
Storage Blk Time (%)	28	5	90	1	2	
Queuing Penalty (veh)	86	16	227	3	3	

Zone Summary

Zone wide Queuing Penalty: 3061