

Date : 04/20/23

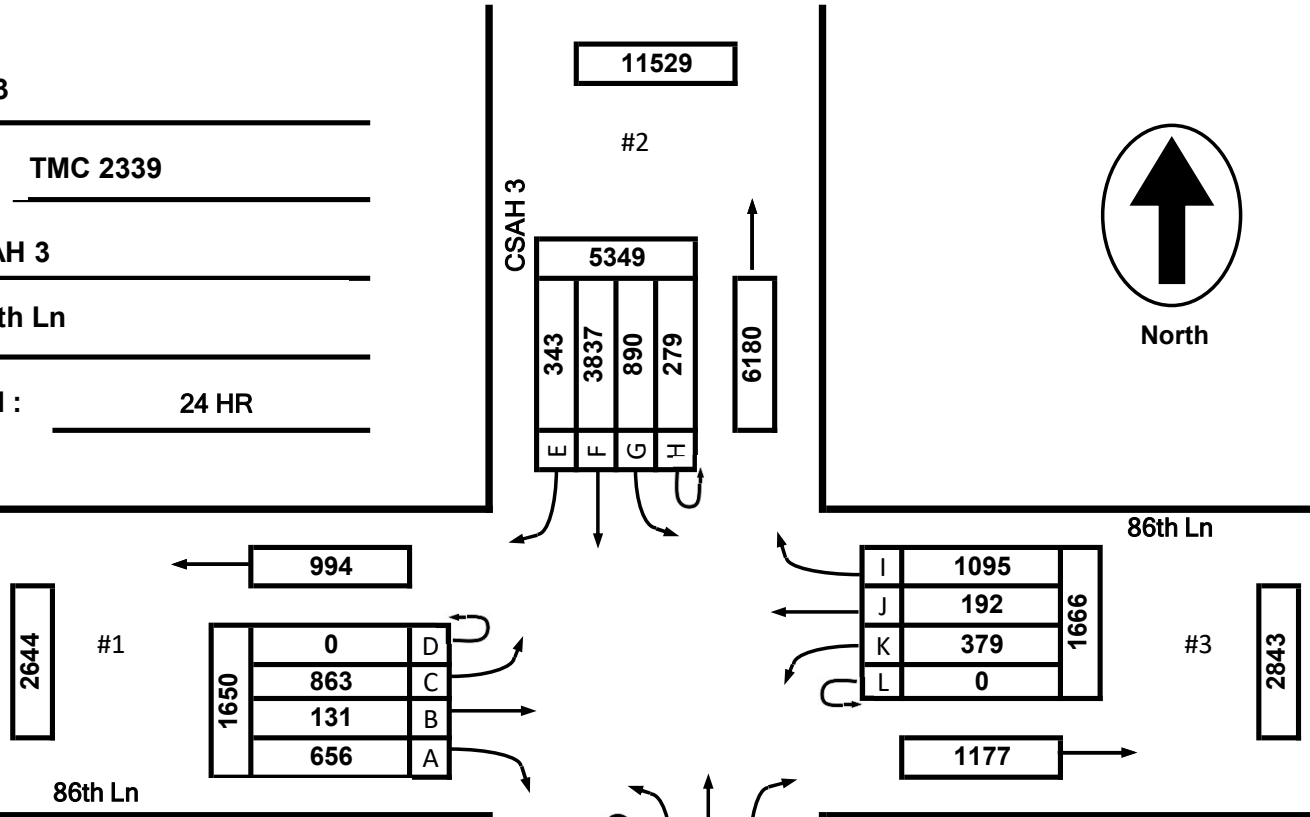
Count Number : TMC 2339

Location : CSAH 3
@ 86th Ln

Collection Period : 24 HR



North



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	0	1	2
#2	1	1	2	4
#3	1	0	1	2
#4	1	1	2	4

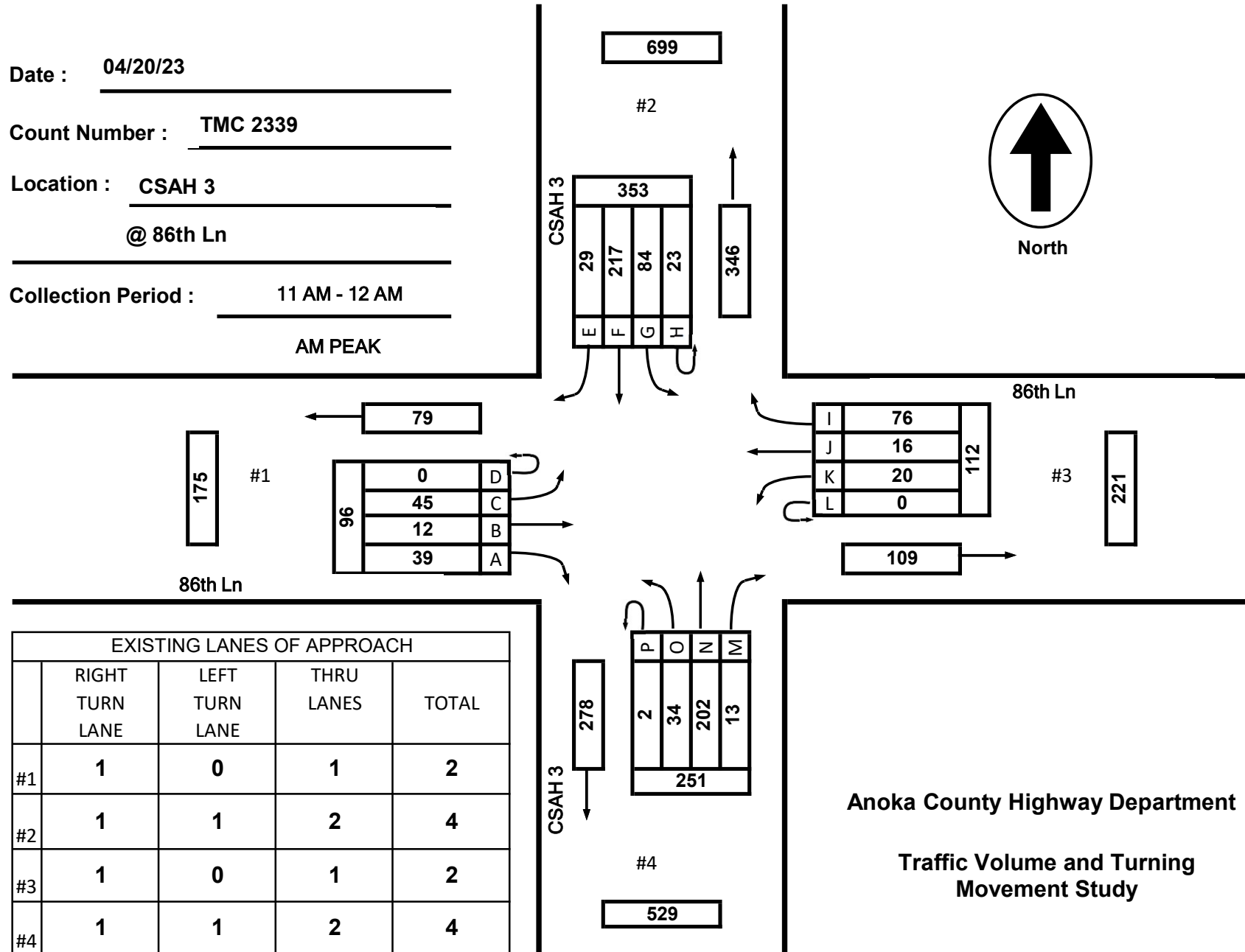
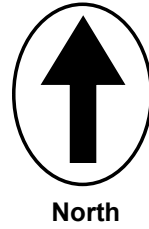
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 04/20/23

Count Number : TMC 2339

Location : CSAH 3
@ 86th Ln

Collection Period : 11 AM - 12 AM
AM PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	0	1	2
#2	1	1	2	4
#3	1	0	1	2
#4	1	1	2	4

Anoka County Highway Department

Traffic Volume and Turning Movement Study

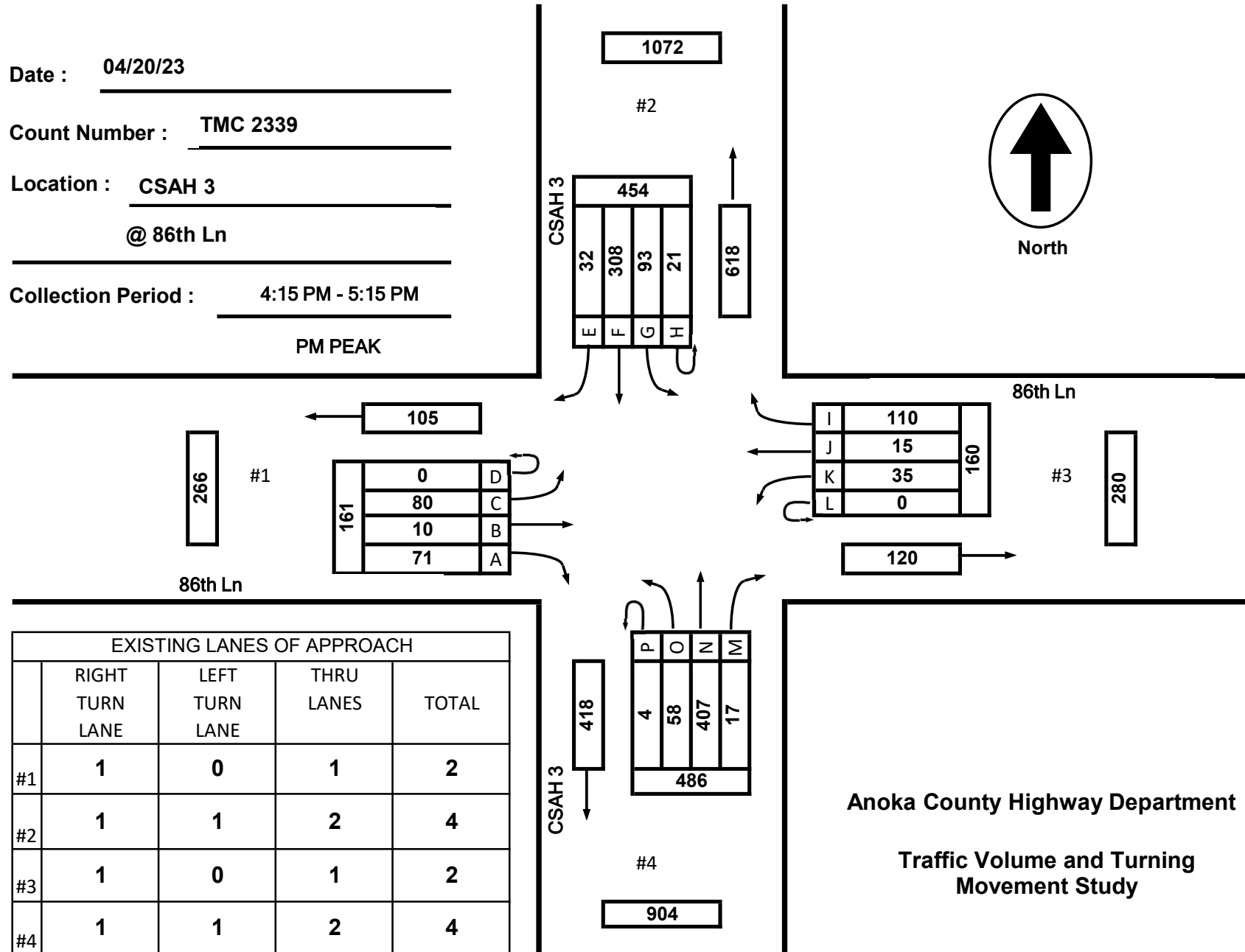
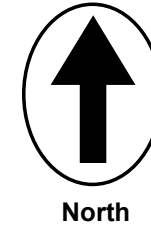
Date : 04/20/23

Count Number : TMC 2339

Location : CSAH 3
@ 86th Ln

Collection Period : 4:15 PM - 5:15 PM

PM PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	0	1	2
#2	1	1	2	4
#3	1	0	1	2
#4	1	1	2	4

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

TMC 2339 - CSAH 3 @ 86th Ln

0 0

Thursday, April 20, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						VEHICLE TOTAL		
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total			
12:00 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	1	0	0	1	15
12:15 AM	0	0	1	1	0	2	0	0	0	2	0	2	0	0	5	0	0	5	0	0	0	1	0	0	1	10	
12:30 AM	1	0	6	0	0	7	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	11	
12:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	3	0	0	4	0	1	0	1	0	2	2	8	
Hourly Total	1	0	13	1	0	15	0	0	0	2	0	2	0	1	21	1	0	23	0	1	0	3	0	4	4	44	
1:00 AM	0	0	2	0	0	2	0	0	0	3	0	3	0	0	5	0	0	5	0	1	0	1	0	2	2	12	
1:15 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	2	0	1	0	3	3	11	
1:30 AM	0	0	2	1	0	3	0	0	1	0	0	1	0	0	8	0	0	8	0	1	0	1	0	2	2	14	
1:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	7	0	0	8	0	0	0	0	0	0	0	10	
Hourly Total	0	0	9	1	0	10	0	0	1	3	0	4	0	1	25	0	0	26	0	4	0	3	0	7	7	47	
2:00 AM	0	0	5	0	0	5	0	0	0	1	0	1	0	0	15	0	0	15	0	0	0	1	0	1	1	22	
2:15 AM	1	0	4	0	0	5	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	10	
2:30 AM	0	0	4	0	0	4	0	0	0	1	0	1	0	0	6	0	0	6	0	0	0	0	0	0	0	11	
2:45 AM	0	0	9	0	0	9	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	1	0	2	2	13	
Hourly Total	1	0	22	0	0	23	0	0	0	2	0	2	0	0	28	0	0	28	0	1	0	2	0	3	3	56	
3:00 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	14	
3:15 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	10	
3:30 AM	0	1	4	0	0	5	0	0	0	0	0	0	0	0	27	0	0	27	0	0	0	1	0	1	1	33	
3:45 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	10	
Hourly Total	0	1	21	0	0	22	0	0	0	0	0	0	0	0	44	0	0	44	0	0	0	1	0	1	1	67	
4:00 AM	0	0	11	0	0	11	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	0	0	14	
4:15 AM	0	0	14	0	0	14	0	0	0	0	0	0	0	2	5	0	0	7	0	0	0	0	0	0	0	21	
4:30 AM	0	0	30	0	0	30	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	1	0	2	2	34	
4:45 AM	0	1	35	0	0	36	0	0	0	1	0	1	0	3	1	0	0	4	0	1	0	1	0	2	2	43	
Hourly Total	0	1	90	0	0	91	0	0	0	1	0	1	0	6	9	0	0	15	0	3	0	2	0	5	5	112	
5:00 AM	0	0	22	0	0	22	0	0	0	1	0	1	0	2	5	0	0	7	0	2	0	0	0	2	2	32	
5:15 AM	0	2	33	1	0	36	0	0	0	1	0	1	0	1	11	0	0	12	0	2	0	1	0	3	3	52	
5:30 AM	0	6	38	0	0	44	0	0	0	2	0	2	0	0	12	0	0	12	0	1	0	2	0	3	3	61	
5:45 AM	0	6	30	0	0	36	0	0	0	2	0	2	0	1	10	0	0	11	0	3	0	1	0	4	4	53	
Hourly Total	0	14	123	1	0	138	0	0	0	6	0	6	0	4	38	0	0	42	0	8	0	4	0	12	12	198	
6:00 AM	0	2	30	1	0	33	0	1	0	0	0	1	0	2	11	0	0	13	0	2	0	0	0	2	2	49	
6:15 AM	0	1	37	1	0	39	0	0	0	2	0	2	0	0	17	0	0	17	0	3	0	3	0	6	6	64	
6:30 AM	1	5	50	1	0	57	0	0	0	4	0	4	1	0	23	0	1	24	0	1	0	4	0	5	5	90	
6:45 AM	1	2	50	3	0	56	0	1	0	1	0	2	0	2	22	0	0	24	0	5	0	5	0	10	10	92	
Hourly Total	2	10	167	6	0	185	0	2	0	7	0	9	1	4	73	0	1	78	0	11	0	12	0	23	23	295	
7:00 AM	1	5	39	1	0	46	0	1	1	1	0	3	0	7	27	0	0	34	0	2	0	5	0	7	7	90	
7:15 AM	1	4	57	1	0	63	0	1	2	3	1	6	0	2	40	1	0	43	0	2	2	2	0	6	6	118	
7:30 AM	0	3	83	1	0	87	0	0	0	1	0	1	0	1	36	0	0	37	0	3	0	2	0	5	5	130	
7:45 AM	1	13	75	2	0	91	0	2	0	2	0	4	0	0	32	0	1	32	0	9	0	2	0	11	11	138	
Hourly Total	3	25	254	5	0	287	0	4	3	7	1	14	0	10	135	1	1	146	0	16	2	11	0	29	29	476	

TMC 2339 - CSAH 3 @ 86th Ln

0 0

Thursday, April 20, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
8:00 AM	1	11	67	1	0	80	0	3	1	6	0	10	1	3	33	3	0	40	0	7	1	2	0	10	140
8:15 AM	0	11	65	2	0	78	0	3	3	7	0	13	0	3	37	1	0	41	0	6	1	4	0	11	143
8:30 AM	4	8	47	2	1	61	0	2	2	2	0	6	1	5	21	1	0	28	0	5	3	4	0	12	107
8:45 AM	6	14	56	5	0	81	0	3	3	3	0	9	0	4	38	1	1	43	0	3	0	4	0	7	140
Hourly Total	11	44	235	10	1	300	0	11	9	18	0	38	2	15	129	6	1	152	0	21	5	14	0	40	530
9:00 AM	4	15	42	0	0	61	0	3	0	5	0	8	0	0	37	3	0	40	0	3	1	4	0	8	117
9:15 AM	7	16	32	3	0	58	0	7	2	14	0	23	0	1	34	3	0	38	0	5	0	3	0	8	127
9:30 AM	5	22	44	1	0	72	0	6	0	13	0	19	0	6	33	2	1	41	0	3	1	5	0	9	141
9:45 AM	4	12	54	2	0	72	0	5	7	8	0	20	0	2	38	1	0	41	0	7	0	2	0	9	142
Hourly Total	20	65	172	6	0	263	0	21	9	40	0	70	0	9	142	9	1	160	0	18	2	14	0	34	527
10:00 AM	3	15	59	2	0	79	0	2	6	13	0	21	1	11	58	2	1	72	0	3	2	10	0	15	187
10:15 AM	5	11	43	10	0	69	0	3	1	12	0	16	1	8	37	1	0	47	0	14	0	5	0	19	151
10:30 AM	4	19	59	5	0	87	0	6	2	14	0	22	0	6	38	2	0	46	0	12	1	15	0	28	183
10:45 AM	2	18	53	7	0	80	0	1	4	15	0	20	0	7	51	4	0	62	0	24	1	8	0	33	195
Hourly Total	14	63	214	24	0	315	0	12	13	54	0	79	2	32	184	9	1	227	0	53	4	38	0	95	716
11:00 AM	6	27	50	8	1	91	0	4	7	19	0	30	0	6	49	2	1	57	0	8	2	12	0	22	200
11:15 AM	5	11	62	6	0	84	0	6	2	20	0	28	0	8	55	2	0	65	0	10	4	8	0	22	199
11:30 AM	8	20	52	8	0	88	0	5	2	20	0	27	1	11	48	5	0	65	0	10	4	8	0	22	202
11:45 AM	4	26	53	7	0	90	0	5	5	17	0	27	1	9	50	4	0	64	0	17	2	11	0	30	211
Hourly Total	23	84	217	29	1	353	0	20	16	76	0	112	2	34	202	13	1	251	0	45	12	39	0	96	812
12:00 PM	6	13	68	9	1	96	0	7	4	21	0	32	4	9	82	7	0	102	0	13	2	9	0	24	254
12:15 PM	9	19	49	10	0	87	0	8	6	25	0	39	1	9	54	5	0	69	0	24	2	8	0	34	229
12:30 PM	5	21	69	5	0	100	0	12	3	25	0	40	1	16	50	5	0	72	0	15	5	15	0	35	247
12:45 PM	8	28	59	6	0	101	0	9	4	28	0	41	0	13	60	1	0	74	0	12	3	14	0	29	245
Hourly Total	28	81	245	30	1	384	0	36	17	99	0	152	6	47	246	18	0	317	0	64	12	46	0	122	975
1:00 PM	5	26	56	7	0	94	0	11	4	26	0	41	1	11	80	1	0	93	0	21	2	16	0	39	267
1:15 PM	5	15	42	9	0	71	0	13	5	30	0	48	0	4	74	8	0	86	0	19	5	7	0	31	236
1:30 PM	6	21	53	2	0	82	0	4	3	23	0	30	2	7	49	2	0	60	0	14	4	10	0	28	200
1:45 PM	8	13	61	2	0	84	0	12	4	24	0	40	1	5	50	1	0	57	0	17	2	5	0	24	205
Hourly Total	24	75	212	20	0	331	0	40	16	103	0	159	4	27	253	12	0	296	0	71	13	38	0	122	908
2:00 PM	8	18	47	7	0	80	0	11	1	23	0	35	0	5	72	0	0	77	0	11	2	9	0	22	214
2:15 PM	8	13	64	6	0	91	0	8	6	23	0	37	2	4	75	3	1	84	0	18	1	7	0	26	238
2:30 PM	7	21	71	8	1	107	0	11	2	30	0	43	0	7	97	6	1	110	0	13	5	7	0	25	285
2:45 PM	6	18	68	7	0	99	0	9	7	22	0	38	0	4	92	1	1	97	0	10	4	10	0	24	258
Hourly Total	29	70	250	28	1	377	0	39	16	98	0	153	2	20	336	10	3	368	0	52	12	33	0	97	995
3:00 PM	5	16	79	7	0	107	0	7	4	21	0	32	0	11	115	3	0	129	0	18	5	15	0	38	306
3:15 PM	6	16	82	3	0	107	0	4	2	27	0	33	0	10	105	6	0	121	0	18	5	9	0	32	293
3:30 PM	8	18	72	4	0	102	0	5	5	23	0	33	1	15	107	9	1	132	0	22	0	11	0	33	300
3:45 PM	10	16	81	6	0	113	0	8	2	28	0	38	1	8	97	7	0	113	0	18	0	10	0	28	292
Hourly Total	29	66	314	20	0	429	0	24	13	99	0	136	2	44	424	25	1	495	0	76	10	45	0	131	1191

TMC 2339 - CSAH 3 @ 86th Ln

0 0

Thursday, April 20, 2023

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:00 PM	3	18	92	6	0	119	0	7	10	30	0	47	0	10	114	6	0	130	0	13	2	12	0	27	323
4:15 PM	4	16	77	5	0	102	0	9	4	22	0	35	2	15	103	4	1	124	0	23	2	26	0	51	312
4:30 PM	4	28	69	8	0	109	0	10	5	33	0	48	1	13	108	5	2	127	0	9	5	12	0	26	310
4:45 PM	8	22	64	11	0	105	0	4	2	20	0	26	0	15	92	4	1	111	0	21	2	10	0	33	275
Hourly Total	19	84	302	30	0	435	0	30	21	105	0	156	3	53	417	19	4	492	0	66	11	60	0	137	1220
5:00 PM	5	27	98	8	0	138	0	12	4	35	0	51	1	15	104	4	0	124	0	27	1	23	0	51	364
5:15 PM	5	15	98	7	0	125	0	13	2	14	0	29	0	5	86	2	0	93	0	22	5	16	0	43	290
5:30 PM	3	17	69	8	0	97	0	10	1	22	0	33	1	11	85	1	1	98	0	16	4	15	0	35	263
5:45 PM	5	17	54	8	0	84	0	5	7	23	0	35	3	13	93	3	1	112	0	21	1	21	0	43	274
Hourly Total	18	76	319	31	0	444	0	40	14	94	0	148	5	44	368	10	2	427	0	86	11	75	0	172	1191
6:00 PM	6	20	72	10	0	108	0	12	6	23	0	41	1	14	70	2	0	87	0	14	6	17	0	37	273
6:15 PM	4	19	50	12	0	85	0	13	5	28	0	46	0	14	68	1	0	83	0	24	7	13	0	44	258
6:30 PM	3	7	59	10	0	79	0	5	6	24	0	35	0	5	56	3	1	64	0	19	6	15	0	40	218
6:45 PM	3	8	50	14	0	75	0	9	3	23	0	35	0	3	59	4	1	66	0	26	1	13	0	40	216
Hourly Total	16	54	231	46	0	347	0	39	20	98	0	157	1	36	253	10	2	300	0	83	20	58	0	161	965
7:00 PM	2	5	42	6	0	55	0	10	2	30	0	42	1	11	54	2	0	68	0	22	4	21	0	47	212
7:15 PM	1	15	37	5	0	58	0	10	4	29	0	43	1	6	57	3	0	67	0	15	2	18	0	35	203
7:30 PM	5	7	38	5	0	55	0	4	2	22	0	28	1	4	55	1	0	61	0	18	3	11	0	32	176
7:45 PM	5	7	27	11	0	50	0	6	4	14	0	24	0	7	54	0	0	61	0	18	1	12	0	31	166
Hourly Total	13	34	144	27	0	218	0	30	12	95	0	137	3	28	220	6	0	257	0	73	10	62	0	145	757
8:00 PM	5	7	27	6	0	45	0	3	1	16	0	20	0	5	43	2	0	50	0	25	1	20	0	46	161
8:15 PM	3	10	29	3	0	45	0	5	2	17	0	24	2	4	32	1	0	39	0	7	1	8	0	16	124
8:30 PM	3	3	30	4	0	40	0	6	3	9	0	18	1	8	33	1	0	43	0	14	1	5	0	20	121
8:45 PM	1	3	32	1	0	37	0	4	2	9	0	15	0	4	31	1	0	36	0	14	0	9	0	23	111
Hourly Total	12	23	118	14	0	167	0	18	8	51	0	77	3	21	139	5	0	168	0	60	3	42	0	105	517
9:00 PM	3	2	17	1	0	23	0	5	1	7	0	13	1	4	21	0	0	26	0	9	0	12	0	21	83
9:15 PM	2	3	23	0	0	28	0	0	0	2	0	2	1	4	31	1	0	37	0	15	0	10	0	25	92
9:30 PM	0	2	19	0	0	21	0	1	0	5	0	6	1	0	26	1	0	28	0	0	1	6	0	7	62
9:45 PM	1	3	17	1	0	22	0	3	2	3	0	8	0	2	30	0	0	32	0	5	1	4	0	10	72
Hourly Total	6	10	76	2	0	94	0	9	3	17	0	29	3	10	108	2	0	123	0	29	2	32	0	63	309
10:00 PM	2	2	18	3	0	25	0	0	0	3	0	3	0	3	26	0	0	29	0	7	0	2	0	9	66
10:15 PM	4	2	18	0	0	24	0	0	1	5	0	6	0	5	22	0	0	27	0	5	0	6	0	11	68
10:30 PM	0	0	13	3	0	16	0	0	0	2	0	2	0	1	19	0	0	20	0	1	1	7	0	9	47
10:45 PM	0	1	14	3	0	18	0	0	0	1	0	1	0	1	23	0	0	24	0	3	0	2	0	5	48
Hourly Total	6	5	63	9	0	83	0	0	1	11	0	12	0	10	90	0	0	100	0	16	1	17	0	34	229
11:00 PM	1	2	9	1	0	13	0	0	0	2	0	2	0	0	24	0	0	24	0	2	0	1	0	3	42
11:15 PM	0	3	7	0	0	10	0	0	0	4	0	4	0	1	10	0	0	11	0	0	0	0	0	0	25
11:30 PM	2	0	5	0	0	7	0	2	0	2	0	4	0	1	15	0	0	16	0	1	0	3	0	4	31
11:45 PM	1	0	5	2	0	8	0	2	0	1	0	3	0	1	10	0	0	11	0	3	1	1	0	5	27
Hourly Total	4	5	26	3	0	38	0	4	0	9	0	13	0	3	59	0	0	62	0	6	1	5	0	12	125
DAILY TOTAL	279	890	3837	343	4	5349	0	379	192	1095	1	1666	39	459	3943	156	18	4597	0	863	131	656	0	1650	13262
Cars	278	872	3722	337	2	5209	0	378	190	1084	1	1652	39	457	3828	155	15	4479	0	843	130	650	0	1623	12963
Heavy Vehicles	1	18	115	6	2	140	0	1	2	11	0	14	0	2	115	1	3	118	0	20	1	6	0	27	299
Heavy Vehicle %	0.36%	2.02%	3.00%	1.75%	50.00%	2.62%	0.00%	0.26%	1.04%	1.00%	0.00%	0.84%	0.00%	0.44%	2.92%	0.64%	16.67%	2.57%	0.00%	2.32%	0.76%	0.91%	0.00%	1.64%	2.25%

TMC 2339 - CSAH 3 @ 86th Ln

0 0

Thursday, April 20, 2023

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
11:00 AM	6	27	50	8	1	91	0	4	7	19	0	30	0	6	49	2	1	57	0	8	2	12	0	22	200
11:15 AM	5	11	62	6	0	84	0	6	2	20	0	28	0	8	55	2	0	65	0	10	4	8	0	22	199
11:30 AM	8	20	52	8	0	88	0	5	2	20	0	27	1	11	48	5	0	65	0	10	4	8	0	22	202
11:45 AM	4	26	53	7	0	90	0	5	5	17	0	27	1	9	50	4	0	64	0	17	2	11	0	30	211
Peak Hour Total PHF	23	84	217	29	1	353	0	20	16	76	0	112	2	34	202	13	1	251	0	45	12	39	0	96	812
	0.719	0.778	0.875	0.906	0.250	0.970	0.000	0.833	0.571	0.950	0.000	0.933	0.500	0.773	0.918	0.650	0.250	0.965	0.000	0.662	0.750	0.813	0.000	0.800	0.962

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:15 PM	4	16	77	5	0	102	0	9	4	22	0	35	2	15	103	4	1	124	0	23	2	26	0	51	312
4:30 PM	4	28	69	8	0	109	0	10	5	33	0	48	1	13	108	5	2	127	0	9	5	12	0	26	310
4:45 PM	8	22	64	11	0	105	0	4	2	20	0	26	0	15	92	4	1	111	0	21	2	10	0	33	275
5:00 PM	5	27	98	8	0	138	0	12	4	35	0	51	1	15	104	4	0	124	0	27	1	23	0	51	364
Peak Hour Total PHF	21	93	308	32	0	454	0	35	15	110	0	160	4	58	407	17	4	486	0	80	10	71	0	161	1261
	0.656	0.830	0.786	0.727	0.000	0.822	0.000	0.729	0.750	0.786	0.000	0.784	0.500	0.967	0.942	0.850	0.500	0.957	0.000	0.741	0.500	0.683	0.000	0.789	0.866

Total Vehicles On Leg				11529	
Vehicles Entering Intersection		5349	Vehicles Exiting Intersection		6180
Southbound					
Cars	337	3722	872	278	2
Heavy	6	115	18	1	2
Total	343	3837	890	279	4



Total Vehicles on Leg 2644	Vehicles Entering Intersection 1650	Eastbound	Cars	Heavy	Total
			0	0	0
	0		0	0	
	843		20	863	
	130		1	131	
Vehicles Exiting Intersection 994			650	6	656



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 1666	Total Vehicles on Leg 2843
1084	11	1095			
190	2	192			
378	1	379			
0	0	0			
1	0	1	Vehicles Exiting Intersection 1177		



Cars	15	39	457	3828	155
Heavy	3	0	2	115	1
Total	18	39	459	3943	156
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
4597			4911		
Total Vehicles On Leg			9508		



Heavy Vehicles

Date	Time	Southbound						Westbound						Northbound						Eastbound					
		U Turns	Left Turns	Straight Through	Right Turns	EB Bicycles in Crosswalk	WB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	NB Bicycles in Crosswalk	SB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	EB Bicycles in Crosswalk	WB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	NB Bicycles in Crosswalk	SB Bicycles in Crosswalk
04/20/2023	0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	2:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	3:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	3:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	5:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	5:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	6:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
	6:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	6:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	7:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	7:15	0	1	5	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
	7:30	0	0	4	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
	7:45	0	1	5	0	0	0	0	0	1	0	0	0	0	0	5	0	0	0	0	0	1	0	0	0
	8:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
	8:15	0	0	4	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
	8:30	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
	9:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0
	9:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	9:30	0	3	2	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	9:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
	10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	1	0	0	0	1	1	0	0
	10:15	0	1	2	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	2	0	0	0
	10:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:45	0	1	3	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
	11:00	0	0	5	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	11:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	11:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0
	11:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2339

Study Date : 05/03/2023

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 3

Number of Lanes : 2+

Total Approach Volume: 4,597

Southbound: CSAH 3

Number of Lanes :2+

Total Approach Volume: 5,349

Minor Street Approaches

Eastbound: 86th Ln

Number of Lanes :1

Total Approach Volume: 1,650

Westbound: 86th Ln

Number of Lanes :1

Total Approach Volume: 1,666

Warrant Summary (Urban Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Not Satisfied

Warrant 1A - Minimum Vehicular Volume.....Not Satisfied

Required volumes reached for 6 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied

Required volumes reached for 2 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Not Satisfied

Required 1A volumes reached for 8 hours, 8 are needed

Required 1B volumes reached for 4 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Not Satisfied

Number of hours (1) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

Warrant 3A - Peak Hour Delay.....Satisfied

Number of one hour periods (32) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Not Satisfied

Volumes do not exceed minimums for any one hour period.

Warrant 4 - Pedestrian Volumes.....Not Evaluated

Warrant 5 - School Crossing.....Not Evaluated

Warrant 6 - Coordinated Signal System.....Not Evaluated

Warrant 7 - Crash Experience.....Not Evaluated

Warrant 8 - Roadway Network.....Not Evaluated

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2339

Study Date : 05/03/2023

Warrant 1A - Minimum Volumes

Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

Summary

Only 6 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **600**

Veh/Hr Minor = **150**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	486	+	454	=	940	161	160	Yes
15:15 - 16:15	496	+	441	=	937	120	151	Yes
17:15 - 18:15	390	+	414	=	804	158	138	Yes
14:00 - 15:00	368	+	377	=	745	97	153	Yes
12:00 - 13:00	317	+	384	=	701	122	152	Yes
13:00 - 14:00	296	+	331	=	627	122	159	Yes
15:00 - 16:00	495	+	429	=	924	131	136	No
11:45 - 12:45	307	+	373	=	680	123	138	No
11:30 - 12:30	300	+	361	=	661	110	125	No
11:15 - 12:15	296	+	358	=	654	98	114	No
11:00 - 12:00	251	+	353	=	604	96	112	No
10:45 - 11:45	249	+	343	=	592	99	105	No
18:15 - 19:15	281	+	294	=	575	171	158	No
10:30 - 11:30	230	+	342	=	572	105	100	No
10:00 - 11:00	227	+	315	=	542	95	79	No
10:15 - 11:15	212	+	327	=	539	102	88	No
18:30 - 19:30	265	+	267	=	532	162	155	No
09:45 - 10:45	206	+	307	=	513	71	79	No
18:45 - 19:45	262	+	243	=	505	154	148	No
09:30 - 10:30	201	+	292	=	493	52	76	No
07:30 - 08:30	150	+	336	=	486	37	28	No
19:00 - 20:00	257	+	218	=	475	145	137	No
09:15 - 10:15	192	+	281	=	473	41	83	No
07:15 - 08:15	152	+	321	=	473	32	21	No
08:00 - 09:00	152		300		452	40	38	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2339

Study Date : 05/03/2023

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 2 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **900**

Veh/Hr Minor = **75**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	492	+	435	=	927	137	156	Yes
15:00 - 16:00	495	+	429	=	924	131	136	Yes
14:45 - 15:45	479	+	415	=	894	127	136	No
14:30 - 15:30	457	+	420	=	877	119	146	No
17:00 - 18:00	427	+	444	=	871	172	148	No
14:15 - 15:15	420	+	404	=	824	113	150	No
17:15 - 18:15	390	+	414	=	804	158	138	No
17:30 - 18:30	380	+	374	=	754	159	155	No
14:00 - 15:00	368	+	377	=	745	97	153	No
17:45 - 18:45	346	+	356	=	702	164	157	No
12:00 - 13:00	317	+	384	=	701	122	152	No
12:30 - 13:30	325	+	366	=	691	134	170	No
13:45 - 14:45	328	+	362	=	690	97	155	No
12:15 - 13:15	308	+	382	=	690	137	161	No
11:45 - 12:45	307	+	373	=	680	123	138	No
12:45 - 13:45	313	+	348	=	661	127	160	No
11:30 - 12:30	300	+	361	=	661	110	125	No
11:15 - 12:15	296	+	358	=	654	98	114	No
18:00 - 19:00	300	+	347	=	647	161	157	No
13:00 - 14:00	296	+	331	=	627	122	159	No
13:30 - 14:30	278	+	337	=	615	100	142	No
11:00 - 12:00	251	+	353	=	604	96	112	No
13:15 - 14:15	280	+	317	=	597	105	153	No
10:45 - 11:45	249	+	343	=	592	99	105	No
18:15 - 19:15	281		294		575	171	158	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2339

Study Date : 05/03/2023

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

8 hours meet 1A minimums.
Only 4 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
Number of Major Lanes = **2 or more**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **480 720**

Veh/Hr Minor = **120 60**

Major Road CSAH 3

Minor Road 86th Ln

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:30 - 16:30	499	+	436	=	935	139	153	Yes
16:30 - 17:30	455	+	477	=	932	153	154	Yes
14:30 - 15:30	457	+	420	=	877	119	146	Yes
17:30 - 18:30	380	+	374	=	754	159	155	Yes
12:30 - 13:30	325	+	366	=	691	134	170	Yes
11:30 - 12:30	300	+	361	=	661	110	125	Yes
13:30 - 14:30	278	+	337	=	615	100	142	Yes
18:30 - 19:30	265	+	267	=	532	162	155	Yes
11:15 - 12:15	296	+	358	=	654	98	114	No
11:00 - 12:00	251	+	353	=	604	96	112	No
10:45 - 11:45	249	+	343	=	592	99	105	No
10:30 - 11:30	230	+	342	=	572	105	100	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:00 - 17:00	492	+	435	=	927	137	156	Yes
15:00 - 16:00	495	+	429	=	924	131	136	Yes
17:00 - 18:00	427	+	444	=	871	172	148	Yes
14:00 - 15:00	368	+	377	=	745	97	153	Yes
12:00 - 13:00	317	+	384	=	701	122	152	No
12:30 - 13:30	325	+	366	=	691	134	170	No
12:15 - 13:15	308	+	382	=	690	137	161	No
13:45 - 14:45	328	+	362	=	690	97	155	No
11:45 - 12:45	307	+	373	=	680	123	138	No
12:45 - 13:45	313	+	348	=	661	127	160	No
11:30 - 12:30	300	+	361	=	661	110	125	No
11:15 - 12:15	296	+	358	=	654	98	114	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2339

Study Date : 05/03/2023

Warrant 2 - Four Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

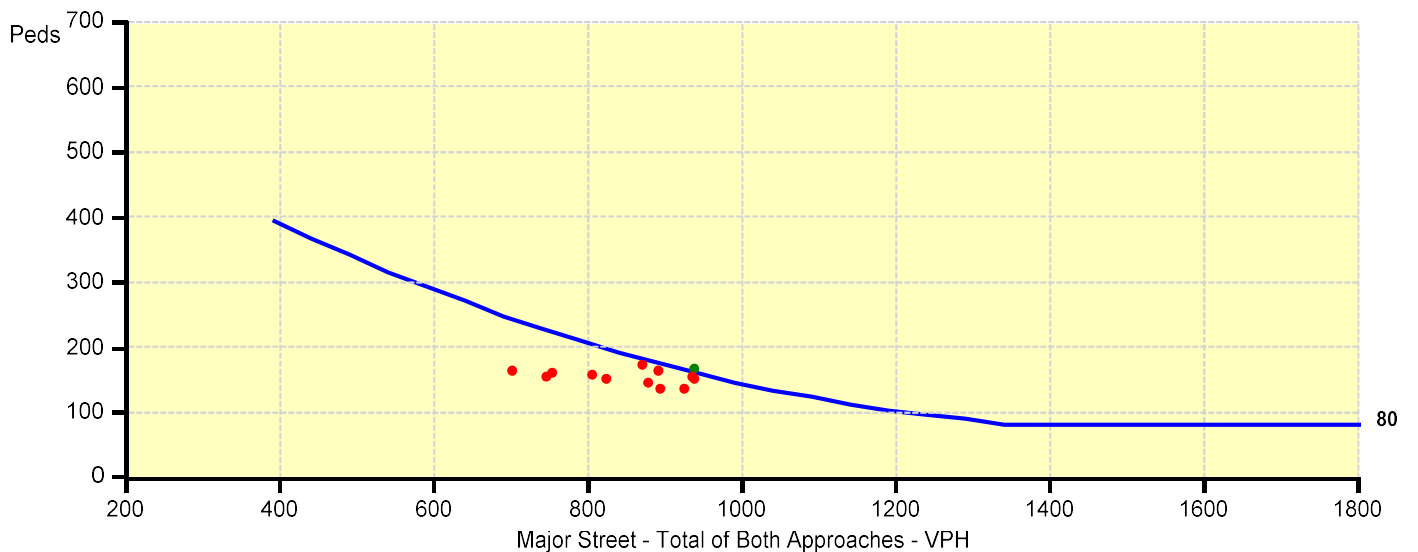
Summary

Only 1 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 3				Total	Minor Road 86th Ln		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:45 - 16:45	494	+	443	=	937	132	168	Yes
15:15 - 16:15	496	+	441	=	937	120	151	No
15:30 - 16:30	499	+	436	=	935	139	153	No
15:00 - 16:00	495	+	429	=	924	131	136	No
14:45 - 15:45	479	+	415	=	894	127	136	No
16:45 - 17:45	426	+	465	=	891	162	139	No
14:30 - 15:30	457	+	420	=	877	119	146	No
17:00 - 18:00	427	+	444	=	871	172	148	No
14:15 - 15:15	420	+	404	=	824	113	150	No
17:15 - 18:15	390	+	414	=	804	158	138	No
17:30 - 18:30	380	+	374	=	754	159	155	No
14:00 - 15:00	368		377		745	97	153	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2339

Study Date : 05/03/2023

Warrant 3B - Peak Hour Volumes

Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

Rural Settings Apply = **False**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 3				Total	Minor Road 86th Ln		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	486	+	454	=	940	161	160	No
15:15 - 16:15	496	+	441	=	937	120	151	No
15:45 - 16:45	494	+	443	=	937	132	168	No
15:30 - 16:30	499	+	436	=	935	139	153	No
16:30 - 17:30	455	+	477	=	932	153	154	No
16:00 - 17:00	492	+	435	=	927	137	156	No
15:00 - 16:00	495	+	429	=	924	131	136	No
14:45 - 15:45	479	+	415	=	894	127	136	No
16:45 - 17:45	426	+	465	=	891	162	139	No
14:30 - 15:30	457	+	420	=	877	119	146	No
17:00 - 18:00	427	+	444	=	871	172	148	No
14:15 - 15:15	420		404		824	113	150	No

