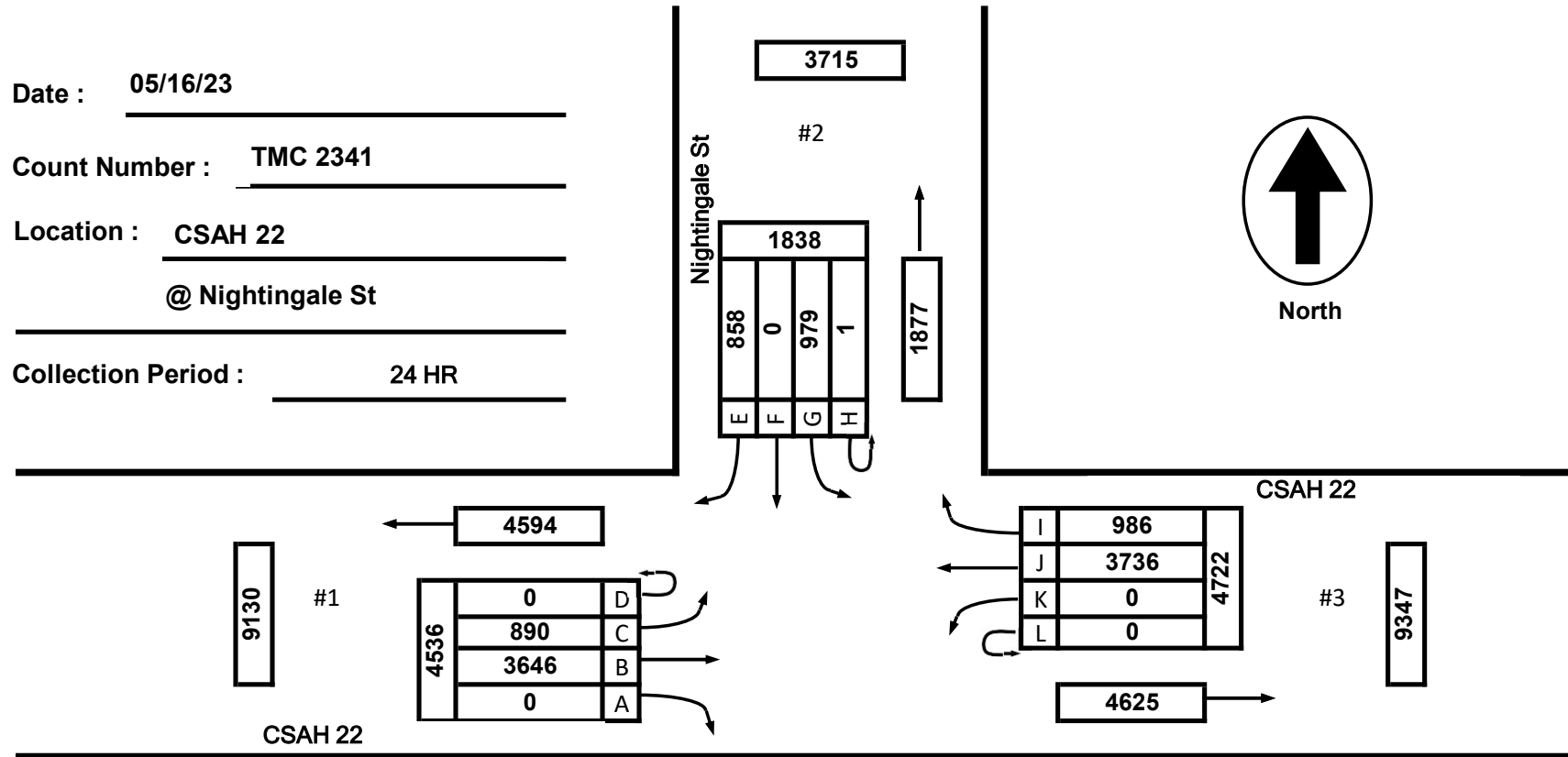


Date : 05/16/23

Count Number : TMC 2341

Location : CSAH 22  
@ Nightingale St

Collection Period : 24 HR



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

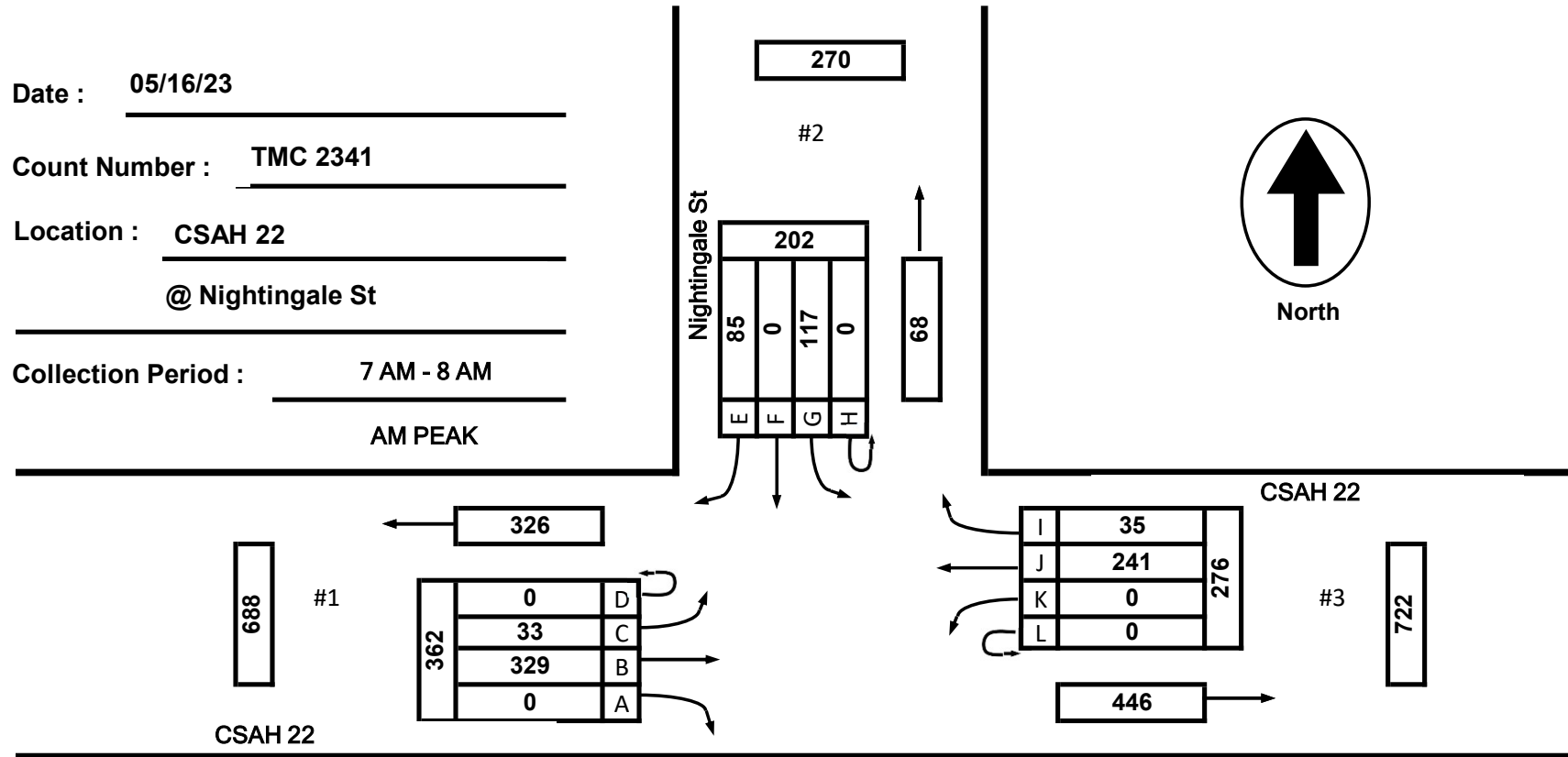
Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Date : 05/16/23

Count Number : TMC 2341

Location : CSAH 22  
@ Nightingale St

Collection Period : 7 AM - 8 AM  
AM PEAK



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

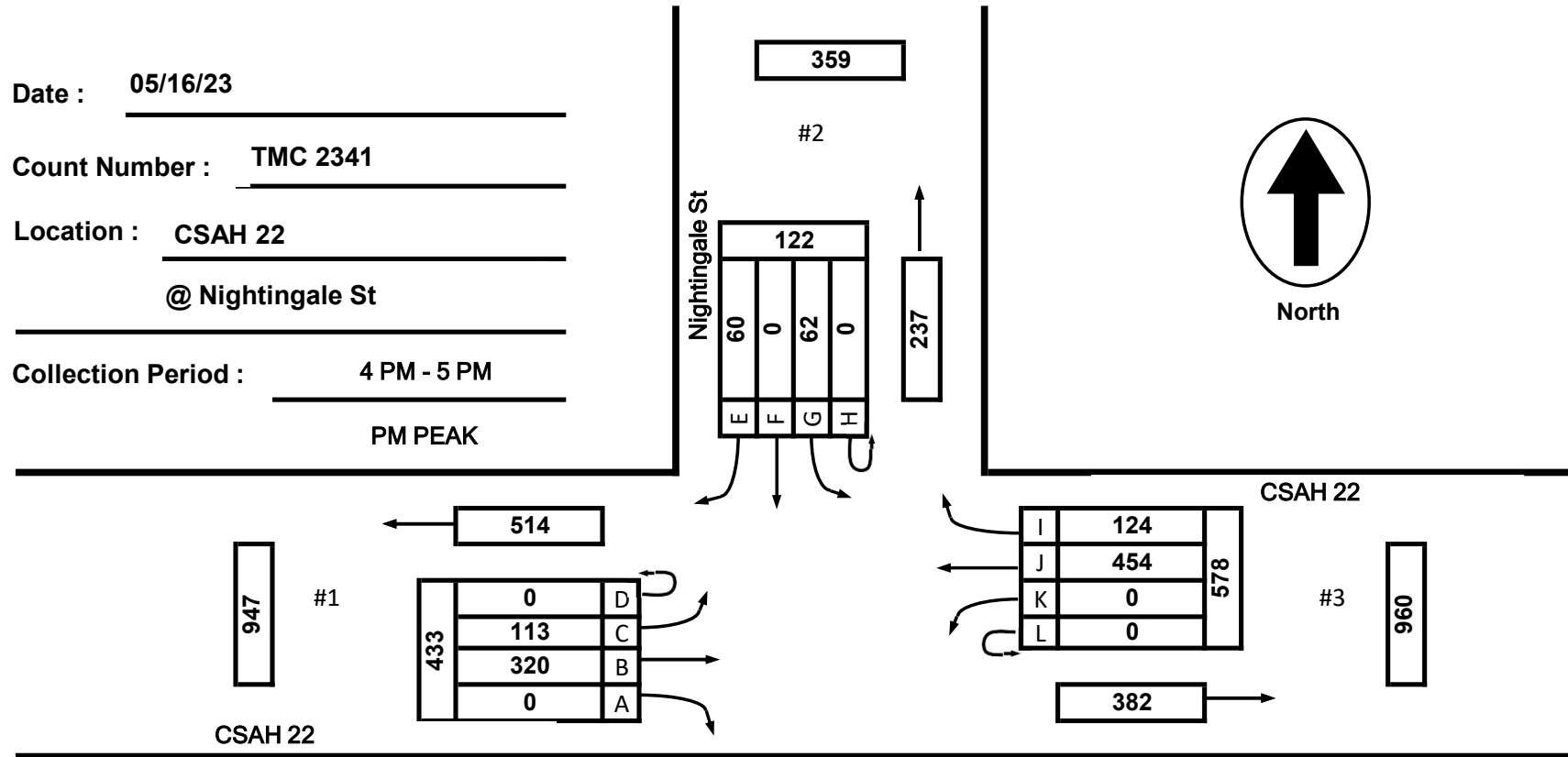
Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Date : 05/16/23

Count Number : TMC 2341

Location : CSAH 22  
@ Nightingale St

Collection Period : 4 PM - 5 PM  
PM PEAK



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

**TMC 2341 - CSAH 22 @ Nightingale St**  
**0 0**

**Tuesday, May 16, 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	1	0	0	0	1	0	0	3	1	0	4	0	0	0	0	0	0	0	1	3	0	0	4	9
12:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	2	0	0	3	5
12:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
12:45 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Hourly Total	0	1	0	0	0	1	0	0	8	1	0	9	0	0	0	0	0	0	0	3	6	0	0	9	19
1:00 AM	0	0	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	0	0	1	0	0	1	8
1:15 AM	0	1	0	1	0	2	0	0	3	2	0	5	0	0	0	0	0	0	0	1	2	0	0	3	10
1:30 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	2	2	0	0	4	6
1:45 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	2	0	0	2	4
Hourly Total	0	1	0	1	0	2	0	0	11	5	0	16	0	0	0	0	0	0	0	3	7	0	0	10	28
2:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
2:45 AM	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	5
Hourly Total	0	0	0	2	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	3	5	0	0	8	11
3:00 AM	0	0	0	1	0	1	0	0	2	1	0	3	0	0	0	0	0	0	0	1	1	0	0	2	6
3:15 AM	0	1	0	2	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	6
3:30 AM	0	1	0	2	0	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	7
3:45 AM	0	3	0	2	0	5	0	0	2	0	0	2	0	0	0	0	0	0	0	1	2	0	0	3	10
Hourly Total	0	5	0	7	0	12	0	0	6	1	0	7	0	0	0	0	0	0	0	2	8	0	0	10	29
4:00 AM	0	2	0	1	0	3	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3	0	0	3	9
4:15 AM	0	6	0	5	0	11	0	0	9	1	0	10	0	0	0	0	0	0	0	0	7	0	0	7	28
4:30 AM	0	6	0	2	0	8	0	0	14	0	0	14	0	0	0	0	0	0	0	0	12	0	0	12	34
4:45 AM	0	12	0	7	0	19	0	0	11	1	0	12	0	0	0	0	0	0	0	3	9	0	0	12	43
Hourly Total	0	26	0	15	0	41	0	0	37	2	0	39	0	0	0	0	0	0	0	3	31	0	0	34	114
5:00 AM	0	12	0	4	0	16	0	0	19	2	0	21	0	0	0	0	0	0	0	1	18	0	0	19	56
5:15 AM	0	17	0	10	0	27	0	0	35	0	0	35	0	0	0	0	0	0	0	3	29	0	0	32	94
5:30 AM	0	18	0	9	0	27	0	0	33	1	0	34	0	0	0	0	0	0	0	2	49	0	0	51	112
5:45 AM	0	14	0	13	0	27	0	0	37	2	0	39	0	0	0	0	0	0	0	6	45	0	0	51	117
Hourly Total	0	61	0	36	0	97	0	0	124	5	0	129	0	0	0	0	0	0	0	12	141	0	0	153	379
6:00 AM	0	24	0	8	0	32	0	0	33	4	0	37	0	0	0	0	0	0	0	2	51	0	0	53	122
6:15 AM	1	17	0	15	0	33	0	0	47	4	0	51	0	0	0	0	0	0	0	2	50	0	0	52	136
6:30 AM	0	27	0	22	0	49	0	0	35	2	0	37	0	0	0	0	0	0	0	6	66	0	0	72	158
6:45 AM	0	28	0	15	0	43	0	0	56	6	0	62	0	0	0	0	0	0	0	3	85	0	0	88	193
Hourly Total	1	96	0	60	0	157	0	0	171	16	0	187	0	0	0	0	0	0	0	13	252	0	0	265	609
7:00 AM	0	31	0	24	0	55	0	0	59	8	0	67	0	0	0	0	0	0	0	8	81	0	0	89	211
7:15 AM	0	31	0	26	0	57	0	0	63	11	0	74	0	0	0	0	0	0	0	13	76	0	0	89	220
7:30 AM	0	27	0	20	0	47	0	0	63	10	0	73	0	0	0	0	0	0	0	9	87	0	0	96	216
7:45 AM	0	18	0	16	0	34	0	0	45	6	0	51	0	0	0	0	0	0	0	13	87	0	0	100	185
Hourly Total	0	107	0	86	0	193	0	0	230	35	0	265	0	0	0	0	0	0	0	43	331	0	0	374	832

**TMC 2341 - CSAH 22 @ Nightingale St**  
**0 0**

**Tuesday, May 16, 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	0	27	0	16	0	43	0	0	45	11	0	56	0	0	0	0	0	0	0	0	11	49	0	0	60	159
8:15 AM	0	15	0	9	0	24	0	0	35	7	0	42	0	0	0	0	0	0	0	0	11	51	0	0	62	128
8:30 AM	0	26	0	8	0	34	0	0	37	12	0	49	0	0	0	0	0	0	0	0	15	71	0	0	86	169
8:45 AM	0	11	0	14	0	25	0	0	46	10	0	56	0	0	0	0	0	0	0	0	18	50	0	0	68	149
Hourly Total	0	79	0	47	0	126	0	0	163	40	0	203	0	0	0	0	0	0	0	0	55	221	0	0	276	605
9:00 AM	0	12	0	19	0	31	0	0	59	11	0	70	0	0	0	0	0	0	0	0	13	49	0	0	62	163
9:15 AM	0	13	0	9	0	22	0	0	42	14	0	56	0	0	0	0	0	0	0	0	15	56	0	0	71	149
9:30 AM	0	14	0	12	0	26	0	0	43	7	0	50	0	0	0	0	0	0	0	0	12	44	0	0	56	132
9:45 AM	0	14	0	15	0	29	0	0	40	10	0	50	0	0	0	0	0	0	0	0	4	45	0	0	49	128
Hourly Total	0	53	0	55	0	108	0	0	184	42	0	226	0	0	0	0	0	0	0	0	44	194	0	0	238	572
10:00 AM	0	10	0	9	0	19	0	0	32	16	0	48	0	0	0	0	0	0	0	0	10	36	0	0	46	113
10:15 AM	0	6	0	7	0	13	0	0	37	14	0	51	0	0	0	0	0	0	0	0	11	32	0	0	43	107
10:30 AM	0	6	0	13	0	19	0	0	27	6	0	33	0	0	0	0	0	0	0	0	7	49	0	0	56	108
10:45 AM	0	12	0	13	0	25	0	0	39	11	0	50	0	0	0	0	0	0	0	0	8	34	0	0	42	117
Hourly Total	0	34	0	42	0	76	0	0	135	47	0	182	0	0	0	0	0	0	0	0	36	151	0	0	187	445
11:00 AM	0	8	0	11	0	19	0	0	43	16	0	59	0	0	0	0	0	0	0	0	7	42	0	0	49	127
11:15 AM	0	8	0	4	0	12	0	0	40	11	0	51	0	0	0	0	0	0	0	0	6	49	0	0	55	118
11:30 AM	0	17	0	11	0	28	0	0	44	21	0	65	0	0	0	0	0	0	0	0	8	25	0	0	33	126
11:45 AM	0	11	0	15	0	26	0	0	42	12	0	54	0	0	0	0	0	0	0	0	19	43	0	0	62	142
Hourly Total	0	44	0	41	0	85	0	0	169	60	0	229	0	0	0	0	0	0	0	0	40	159	0	0	199	513
12:00 PM	0	14	0	19	0	33	0	0	59	9	0	68	0	0	0	0	0	0	0	0	10	56	0	0	66	167
12:15 PM	0	10	0	20	0	30	0	0	48	14	0	62	0	0	0	0	0	0	0	0	9	49	0	0	58	150
12:30 PM	0	10	0	9	0	19	0	0	58	14	0	72	0	0	0	0	0	0	0	0	11	45	0	0	56	147
12:45 PM	0	8	0	8	0	16	0	0	40	15	0	55	0	0	0	0	0	0	0	0	10	45	0	0	55	126
Hourly Total	0	42	0	56	0	98	0	0	205	52	0	257	0	0	0	0	0	0	0	0	40	195	0	0	235	590
1:00 PM	0	10	0	4	0	14	0	0	55	13	0	68	0	0	0	0	0	0	0	0	15	53	0	0	68	150
1:15 PM	0	14	0	9	0	23	0	0	50	12	0	62	0	0	0	0	0	0	0	0	11	42	0	0	53	138
1:30 PM	0	10	0	16	0	26	0	0	44	12	0	56	0	0	0	0	0	0	0	0	11	40	0	0	51	133
1:45 PM	0	13	0	9	0	22	0	0	61	12	0	73	0	0	0	0	0	0	0	0	10	53	0	0	63	158
Hourly Total	0	47	0	38	0	85	0	0	210	49	0	259	0	0	0	0	0	0	0	0	47	188	0	0	235	579
2:00 PM	0	14	0	14	0	28	0	0	65	5	0	70	0	0	0	0	0	0	0	0	12	53	0	0	65	163
2:15 PM	0	10	0	8	0	18	0	0	79	14	0	93	0	0	0	0	0	0	0	0	12	59	0	0	71	182
2:30 PM	0	13	0	10	0	23	0	0	52	22	0	74	0	0	0	0	0	0	0	0	13	75	0	0	88	185
2:45 PM	0	21	0	17	0	38	0	0	82	22	0	104	0	0	0	0	0	0	0	0	18	81	0	0	99	241
Hourly Total	0	58	0	49	0	107	0	0	278	63	0	341	0	0	0	0	0	0	0	0	55	268	0	0	323	771
3:00 PM	0	13	0	21	0	34	0	0	66	29	0	95	0	0	0	0	0	0	0	0	22	66	0	0	88	217
3:15 PM	0	17	0	7	0	24	0	0	108	28	0	136	0	0	0	0	0	0	0	0	19	67	0	0	86	246
3:30 PM	0	22	0	9	0	31	0	0	104	31	0	135	0	0	0	0	0	0	0	0	26	92	0	0	118	284
3:45 PM	0	16	0	25	0	41	0	0	109	25	0	134	0	0	0	0	0	0	0	0	20	83	0	0	103	278
Hourly Total	0	68	0	62	0	130	0	0	387	113	0	500	0	0	0	0	0	0	0	0	87	308	0	0	395	1025

# TMC 2341 - CSAH 22 @ Nightingale St

0 0

Tuesday, May 16, 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	
4:00 PM	0	19	0	16	0	35	0	0	103	35	0	138	0	0	0	0	0	0	0	26	77	0	0	103	276
4:15 PM	0	13	0	13	0	26	0	0	110	29	0	139	0	0	0	0	0	0	0	22	64	0	0	86	251
4:30 PM	0	12	0	17	0	29	0	0	115	31	0	146	0	0	0	0	0	0	0	33	75	0	0	108	283
4:45 PM	0	18	0	15	0	33	0	0	114	33	0	147	0	0	0	0	0	0	0	35	98	0	0	133	313
Hourly Total	0	62	0	61	0	123	0	0	442	128	0	570	0	0	0	0	0	0	0	116	314	0	0	430	1123
5:00 PM	0	19	0	15	0	34	0	0	115	31	0	146	0	0	0	0	0	0	0	23	83	0	0	106	286
5:15 PM	0	16	0	18	0	34	0	0	78	34	0	112	0	0	0	0	0	0	0	19	82	0	0	101	247
5:30 PM	0	20	0	13	0	33	0	0	83	31	0	114	0	0	0	0	0	0	0	29	79	0	0	108	255
5:45 PM	0	12	0	4	0	16	0	0	68	17	0	85	0	0	0	0	0	0	0	19	53	0	0	72	173
Hourly Total	0	67	0	50	0	117	0	0	344	113	0	457	0	0	0	0	0	0	0	90	297	0	0	387	961
6:00 PM	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
6:15 PM	0	5	0	3	0	8	0	0	50	14	0	64	0	0	0	0	0	0	0	12	27	0	0	39	111
6:30 PM	0	11	0	8	0	19	0	0	50	20	0	70	0	0	0	0	0	0	0	22	61	0	0	83	172
6:45 PM	0	7	0	6	0	13	0	0	54	11	0	65	0	0	0	0	0	0	0	17	48	0	0	65	143
Hourly Total	0	23	0	17	0	40	0	0	154	45	0	199	0	0	0	0	0	0	0	51	136	0	0	187	426
7:00 PM	0	16	0	15	0	31	0	0	71	25	0	96	0	0	0	0	0	0	0	11	40	0	0	51	178
7:15 PM	0	8	0	6	0	14	0	0	34	13	0	47	0	0	0	0	0	0	0	19	42	0	0	61	122
7:30 PM	0	6	0	9	0	15	0	0	59	15	0	74	0	0	0	0	0	0	0	15	37	0	0	52	141
7:45 PM	0	8	0	11	0	19	0	0	51	12	0	63	0	0	0	0	0	0	0	6	40	0	0	46	128
Hourly Total	0	38	0	41	0	79	0	0	215	65	0	280	0	0	0	0	0	0	0	51	159	0	0	210	569
8:00 PM	0	4	0	12	0	16	0	0	39	14	0	53	0	0	0	0	0	0	0	12	33	0	0	45	114
8:15 PM	0	13	0	17	0	30	0	0	35	21	0	56	0	0	0	0	0	0	0	13	39	0	0	52	138
8:30 PM	0	10	0	10	0	20	0	0	39	7	0	46	0	0	0	0	0	0	0	12	37	0	0	49	115
8:45 PM	0	4	0	9	0	13	0	0	30	9	0	39	0	0	0	0	0	0	0	15	36	0	0	51	103
Hourly Total	0	31	0	48	0	79	0	0	143	51	0	194	0	0	0	0	0	0	0	52	145	0	0	197	470
9:00 PM	0	10	0	14	0	24	0	0	29	18	0	47	0	0	0	0	0	0	0	5	21	0	0	26	97
9:15 PM	0	9	0	10	0	19	0	0	21	11	0	32	0	0	0	0	0	0	0	11	20	0	0	31	82
9:30 PM	0	7	0	11	0	18	0	0	14	6	0	20	0	0	0	0	0	0	0	6	16	0	0	22	60
9:45 PM	0	2	0	3	0	5	0	0	7	5	0	12	0	0	0	0	0	0	0	7	14	0	0	21	38
Hourly Total	0	28	0	38	0	66	0	0	71	40	0	111	0	0	0	0	0	0	0	29	71	0	0	100	277
10:00 PM	0	4	0	4	0	8	0	0	5	1	0	6	0	0	0	0	0	0	0	5	16	0	0	21	35
10:15 PM	0	1	0	2	0	3	0	0	14	2	0	16	0	0	0	0	0	0	0	0	8	0	0	8	27
10:30 PM	0	1	0	0	0	1	0	0	8	2	0	10	0	0	0	0	0	0	0	1	10	0	0	11	22
10:45 PM	0	1	0	0	0	1	0	0	9	0	0	9	0	0	0	0	0	0	0	5	9	0	0	14	24
Hourly Total	0	7	0	6	0	13	0	0	36	5	0	41	0	0	0	0	0	0	0	11	43	0	0	54	108
11:00 PM	0	0	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	0	0	0	8	0	0	8	14
11:15 PM	0	1	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	2	5	0	0	7	10
11:30 PM	0	0	0	0	0	0	0	0	4	3	0	7	0	0	0	0	0	0	0	0	2	0	0	2	9
11:45 PM	0	0	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	0	0	2	1	0	0	3	8
Hourly Total	0	1	0	0	0	1	0	0	13	7	0	20	0	0	0	0	0	0	0	4	16	0	0	20	41
<b>DAILY TOTAL</b>	<b>1</b>	<b>979</b>	<b>0</b>	<b>858</b>	<b>0</b>	<b>1838</b>	<b>0</b>	<b>0</b>	<b>3736</b>	<b>986</b>	<b>0</b>	<b>4722</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>890</b>	<b>3646</b>	<b>0</b>	<b>0</b>	<b>4536</b>	<b>11096</b>
<b>Cars</b>	1	968	0	842	0	1811	0	0	3481	968	0	4449	0	0	0	0	0	0	0	875	3386	0	0	4261	10521
<b>Heavy Vehicles</b>	0	11	0	16	0	27	0	0	255	18	0	273	0	0	0	0	0	0	0	15	260	0	0	275	575
<b>Heavy Vehicle %</b>	0.00%	1.12%	0.00%	1.86%	0.00%	1.47%	0.00%	0.00%	6.83%	1.83%	0.00%	5.78%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.69%	7.13%	0.00%	0.00%	6.06%	5.18%

## TMC 2341 - CSAH 22 @ Nightingale St 0 0

**Tuesday, May 16, 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	
6:45 AM	0	28	0	15	0	43	0	0	56	6	0	62	0	0	0	0	0	0	0	3	85	0	0	88	
7:00 AM	0	31	0	24	0	55	0	0	59	8	0	67	0	0	0	0	0	0	0	8	81	0	0	89	
7:15 AM	0	31	0	26	0	57	0	0	63	11	0	74	0	0	0	0	0	0	0	13	76	0	0	89	
7:30 AM	0	27	0	20	0	47	0	0	63	10	0	73	0	0	0	0	0	0	0	9	87	0	0	96	
Peak Hour Total	0	117	0	85	0	202	0	0	241	35	0	276	0	0	0	0	0	0	0	33	329	0	0	362	
PHF	0.000	0.944	0.000	0.817	0.000	0.886	0.000	0.000	0.956	0.795	0.000	0.932	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.635	0.945	0.000	0.000	0.943	

**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	0	13	0	13	0	26	0	0	110	29	0	139	0	0	0	0	0	0	0	22	64	0	0	86	
4:30 PM	0	12	0	17	0	29	0	0	115	31	0	146	0	0	0	0	0	0	0	33	75	0	0	108	
4:45 PM	0	18	0	15	0	33	0	0	114	33	0	147	0	0	0	0	0	0	0	35	98	0	0	133	
5:00 PM	0	19	0	15	0	34	0	0	115	31	0	146	0	0	0	0	0	0	0	23	83	0	0	106	
Peak Hour Total	0	62	0	60	0	122	0	0	454	124	0	578	0	0	0	0	0	0	0	113	320	0	0	433	
PHF	0.000	0.816	0.000	0.882	0.000	0.897	0.000	0.000	0.987	0.939	0.000	0.983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.807	0.816	0.000	0.000	0.814	

Total Vehicles On Leg		3715	
Vehicles Entering Intersection		Vehicles Exiting Intersection	
1838		1877	
<b>Southbound</b>			
Cars	842	0	968
Heavy	16	0	11
<b>Total</b>	<b>858</b>	<b>0</b>	<b>979</b>



Total Vehicles on Leg 9130	Vehicles Entering Intersection 4536	Cars	0	0
		Heavy	0	0
		<b>Total</b>	<b>0</b>	<b>0</b>
	Vehicles Exiting Intersection 4594	Cars	875	15
		Heavy	3386	260
		<b>Total</b>	<b>4261</b>	<b>275</b>



Daily Volumes

Cars	Heavy	<b>Total</b>	Westbound	Vehicles Entering Intersection 4722	Total Vehicles on Leg 9347
968	18	<b>986</b>			
3481	255	<b>3736</b>			
0	0	<b>0</b>			
0	0	<b>0</b>			
0	0	<b>0</b>		Vehicles Exiting Intersection 4625	



Cars	0	0	0	0	0
Heavy	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Northbound</b>					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
0			0		
Total Vehicles On Leg			0		



# 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	
05/16/2023	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	0	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	1	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	0	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	0	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	0	0	0	0	
	3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0
	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	5:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	5:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	6:00	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	6:15	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
	6:30	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0
	6:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
	7:00	0	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	6	0	0	0
	7:15	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
7:30	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
7:45	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
8:00	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
8:15	0	1	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	8	0	0	0	
8:30	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	
8:45	0	1	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
9:00	0	0	0	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
9:15	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
9:30	0	0	0	2	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
9:45	0	1	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	
10:00	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	6	0	0	0	
10:15	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
10:30	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	6	0	0	0	
10:45	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
11:00	0	0	0	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	
11:15	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	9	0	0	0	
11:30	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	6	0	0	0	
11:45	0	0	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	





# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2341

Study Date : 05/25/2023

## Signal Warrants - Summary

### Major Street Approaches

Eastbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 4,536

Westbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 4,722

### Minor Street Approaches

Southbound: Nightingale St

Number of Lanes : 1

Total Approach Volume: 1,838

### Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Satisfied

Warrant 1A - Minimum Vehicular Volume.....Satisfied

Required volumes reached for 9 hours, 8 are needed

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

Required volumes reached for 7 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Satisfied

Required 1A volumes reached for 13 hours, 8 are needed

Required 1B volumes reached for 13 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Satisfied

Number of hours (6) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (19) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Satisfied

Volumes exceed minimums for at least 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 2341

Study Date : 05/25/2023

## 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

9 one hour periods meet minimums.  
Warrant IS met.

#### Site Data Required

Rural Settings Apply = **True**  
Number of Major Lanes = **1**  
Number of Minor Lanes = **1**

#### Volume Requirements

Rural Factor of 70 % applied  
Veh/Hr Major = **350**  
  
Veh/Hr Minor = **105**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
							N/A	
16:00 - 17:00	430	+	570	=	1000	0	123	Yes
15:00 - 16:00	395	+	500	=	895	0	130	Yes
17:00 - 18:00	387	+	457	=	844	0	117	Yes
14:00 - 15:00	323	+	341	=	664	0	107	Yes
06:30 - 07:30	338	+	240	=	578	0	204	Yes
07:30 - 08:30	318	+	222	=	540	0	148	Yes
08:30 - 09:30	287	+	231	=	518	0	112	Yes
11:30 - 12:30	219	+	249	=	468	0	117	Yes
05:30 - 06:30	207	+	161	=	368	0	119	Yes
13:45 - 14:45	287	+	310	=	597	0	91	No
13:30 - 14:30	250	+	292	=	542	0	94	No
18:30 - 19:30	260	+	278	=	538	0	77	No
18:15 - 19:15	238	+	295	=	533	0	71	No
18:45 - 19:45	229	+	282	=	511	0	73	No
13:00 - 14:00	235	+	259	=	494	0	85	No
13:15 - 14:15	232	+	261	=	493	0	99	No
19:00 - 20:00	210	+	280	=	490	0	79	No
12:30 - 13:30	232	+	257	=	489	0	72	No
12:45 - 13:45	227	+	241	=	468	0	79	No
11:15 - 12:15	216	+	238	=	454	0	99	No
19:15 - 20:15	204	+	237	=	441	0	64	No
19:30 - 20:30	195	+	246	=	441	0	80	No
11:00 - 12:00	199	+	229	=	428	0	85	No
19:45 - 20:45	192	+	218	=	410	0	85	No
10:45 - 11:45	179		225		404	0	84	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2341

Study Date : 05/25/2023

## 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 7 one hour periods meet minimums.  
Warrant is NOT met.

#### Site Data Required

Rural Settings Apply = **True**  
Number of Major Lanes = **1**  
Number of Minor Lanes = **1**

#### Volume Requirements

Rural Factor of 70 % applied  
Veh/Hr Major = **525**  
  
Veh/Hr Minor = **52**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 22					N/A		
16:30 - 17:30	448	+	551	=	999	0	130	Yes
15:30 - 16:30	410	+	546	=	956	0	133	Yes
14:30 - 15:30	361	+	409	=	770	0	119	Yes
06:30 - 07:30	338	+	240	=	578	0	204	Yes
13:30 - 14:30	250	+	292	=	542	0	94	Yes
07:30 - 08:30	318	+	222	=	540	0	148	Yes
18:15 - 19:15	238	+	295	=	533	0	71	Yes
06:15 - 07:15	301	+	217	=	518	0	180	No
08:30 - 09:30	287	+	231	=	518	0	112	No
11:45 - 12:45	242	+	256	=	498	0	108	No
12:15 - 13:15	237	+	257	=	494	0	79	No
13:00 - 14:00	235	+	259	=	494	0	85	No
13:15 - 14:15	232	+	261	=	493	0	99	No
12:00 - 13:00	235	+	257	=	492	0	98	No
08:45 - 09:45	257	+	232	=	489	0	104	No
12:30 - 13:30	232	+	257	=	489	0	72	No
17:30 - 18:30	219	+	263	=	482	0	57	No
12:45 - 13:45	227	+	241	=	468	0	79	No
11:30 - 12:30	219	+	249	=	468	0	117	No
09:00 - 10:00	238	+	226	=	464	0	108	No
11:15 - 12:15	216	+	238	=	454	0	99	No
06:00 - 07:00	265	+	187	=	452	0	157	No
19:15 - 20:15	204	+	237	=	441	0	64	No
19:30 - 20:30	195	+	246	=	441	0	80	No
11:00 - 12:00	199		229		428	0	85	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2341

Study Date : 05/25/2023

## 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

13 hours meet 1A minimums.  
13 hours meet 1B minimums.  
Warrant IS met.

#### Site Data Required

Rural Settings Apply = **True**  
Number of Major Lanes = **1**  
Number of Minor Lanes = **1**

#### Volume Requirements

Rural Factor of 70% applied  
Warrant 1A 1B  
Veh/Hr Major = **280 420**  
  
Veh/Hr Minor = **84 42**

**Major Road**  
**CSAH 22**

**Minor Road**  
**N/A**

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:00 - 17:00	430	+	570	=	1000	0	123	Yes
15:00 - 16:00	395	+	500	=	895	0	130	Yes
17:00 - 18:00	387	+	457	=	844	0	117	Yes
14:00 - 15:00	323	+	341	=	664	0	107	Yes
07:00 - 08:00	374	+	265	=	639	0	193	Yes
11:45 - 12:45	242	+	256	=	498	0	108	Yes
13:00 - 14:00	235	+	259	=	494	0	85	Yes
08:00 - 09:00	276	+	203	=	479	0	126	Yes
09:00 - 10:00	238	+	226	=	464	0	108	Yes
06:00 - 07:00	265	+	187	=	452	0	157	Yes
19:45 - 20:45	192	+	218	=	410	0	85	Yes
10:45 - 11:45	179	+	225	=	404	0	84	Yes

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:00 - 17:00	430	+	570	=	1000	0	123	Yes
15:00 - 16:00	395	+	500	=	895	0	130	Yes
17:00 - 18:00	387	+	457	=	844	0	117	Yes
14:00 - 15:00	323	+	341	=	664	0	107	Yes
07:00 - 08:00	374	+	265	=	639	0	193	Yes
18:15 - 19:15	238	+	295	=	533	0	71	Yes
13:00 - 14:00	235	+	259	=	494	0	85	Yes
12:00 - 13:00	235	+	257	=	492	0	98	Yes
08:00 - 09:00	276	+	203	=	479	0	126	Yes
09:00 - 10:00	238	+	226	=	464	0	108	Yes
06:00 - 07:00	265	+	187	=	452	0	157	Yes
19:15 - 20:15	204	+	237	=	441	0	64	Yes

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2341

Study Date : 05/25/2023

## 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.

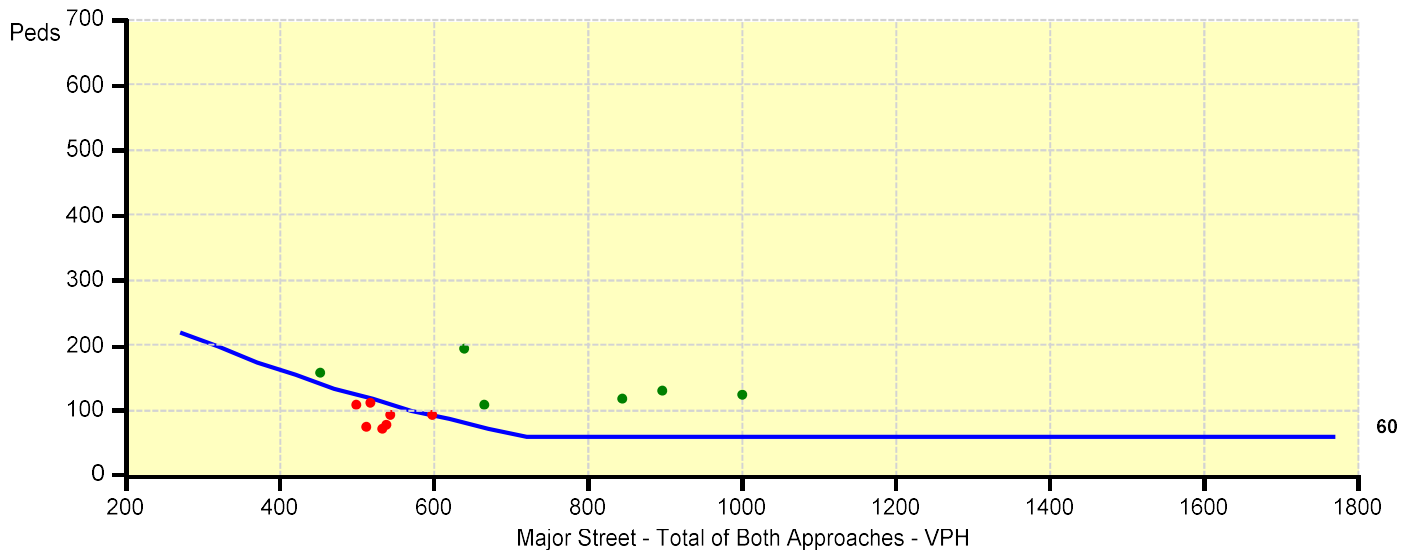
#### Summary

6 one hour periods meet minimums.  
Warrant IS met.

#### Site Data Required

Rural Settings Apply = **True**  
 Number of Major Lanes = **1**  
 Number of Minor Lanes = **1**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	<b>CSAH 22</b>					<b>N/A</b>		
16:00 - 17:00	430	+	570	=	1000	0	123	Yes
15:00 - 16:00	395	+	500	=	895	0	130	Yes
17:00 - 18:00	387	+	457	=	844	0	117	Yes
14:00 - 15:00	323	+	341	=	664	0	107	Yes
07:00 - 08:00	374	+	265	=	639	0	193	Yes
06:00 - 07:00	265	+	187	=	452	0	157	Yes
13:45 - 14:45	287	+	310	=	597	0	91	No
13:30 - 14:30	250	+	292	=	542	0	94	No
18:30 - 19:30	260	+	278	=	538	0	77	No
18:15 - 19:15	238	+	295	=	533	0	71	No
08:30 - 09:30	287	+	231	=	518	0	112	No
18:45 - 19:45	229	+	282	=	511	0	73	No



# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2341

Study Date : 05/25/2023

## 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

14 one hour periods meet minimums.  
Warrant IS met.

### Site Data Required

Rural Settings Apply = **True**  
 Number of Major Lanes = **1**  
 Number of Minor Lanes = **1**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	<b>CSAH 22</b>					<b>N/A</b>		
16:15 - 17:15	433	+	578	=	1011	0	122	Yes
16:00 - 17:00	430	+	570	=	1000	0	123	Yes
16:30 - 17:30	448	+	551	=	999	0	130	Yes
16:45 - 17:45	448	+	519	=	967	0	134	Yes
15:45 - 16:45	400	+	557	=	957	0	131	Yes
15:30 - 16:30	410	+	546	=	956	0	133	Yes
15:15 - 16:15	410	+	543	=	953	0	131	Yes
15:00 - 16:00	395	+	500	=	895	0	130	Yes
14:45 - 15:45	391	+	470	=	861	0	127	Yes
17:00 - 18:00	387	+	457	=	844	0	117	Yes
07:00 - 08:00	374	+	265	=	639	0	193	Yes
06:45 - 07:45	362		276		638	0	202	Yes

