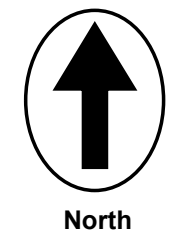
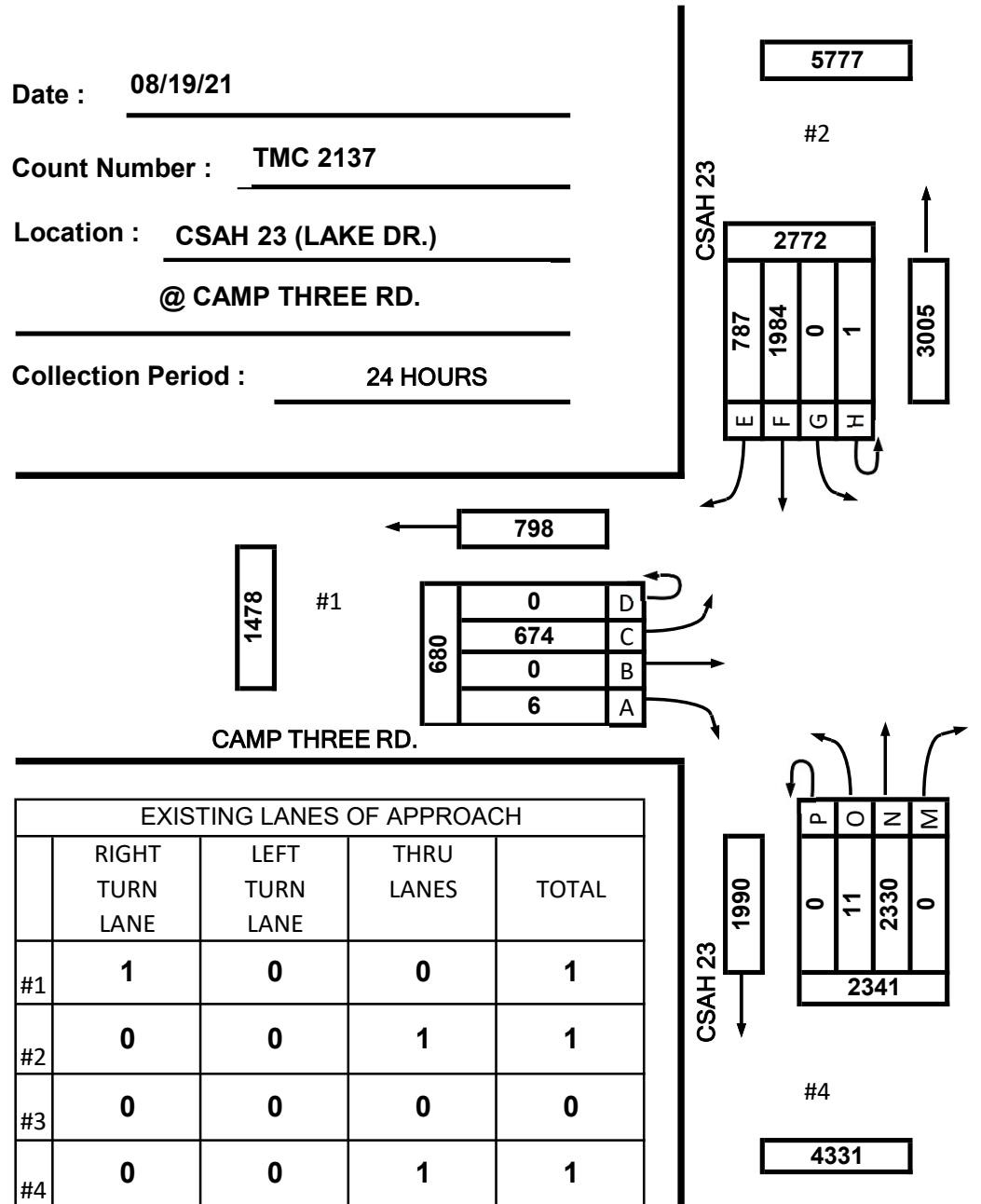


Date : 08/19/21

Count Number : TMC 2137

Location : CSAH 23 (LAKE DR.)
@ CAMP THREE RD.

Collection Period : 24 HOURS



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

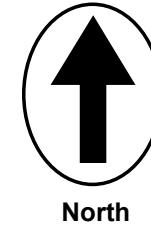
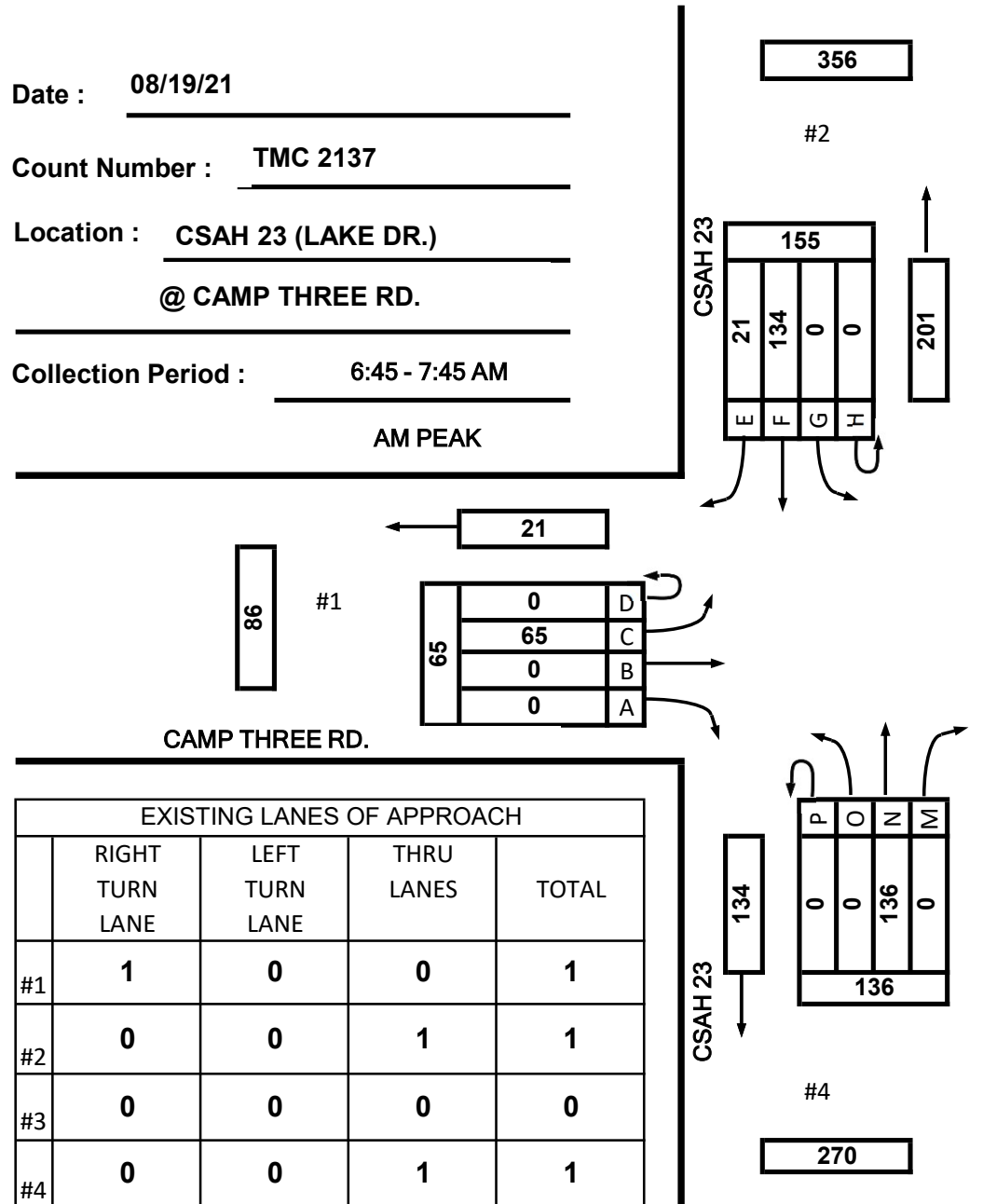
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 08/19/21

Count Number : TMC 2137

Location : CSAH 23 (LAKE DR.)
@ CAMP THREE RD.

Collection Period : 6:45 - 7:45 AM
AM PEAK



Anoka County Highway Department

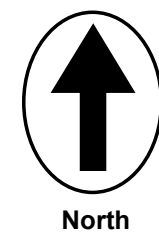
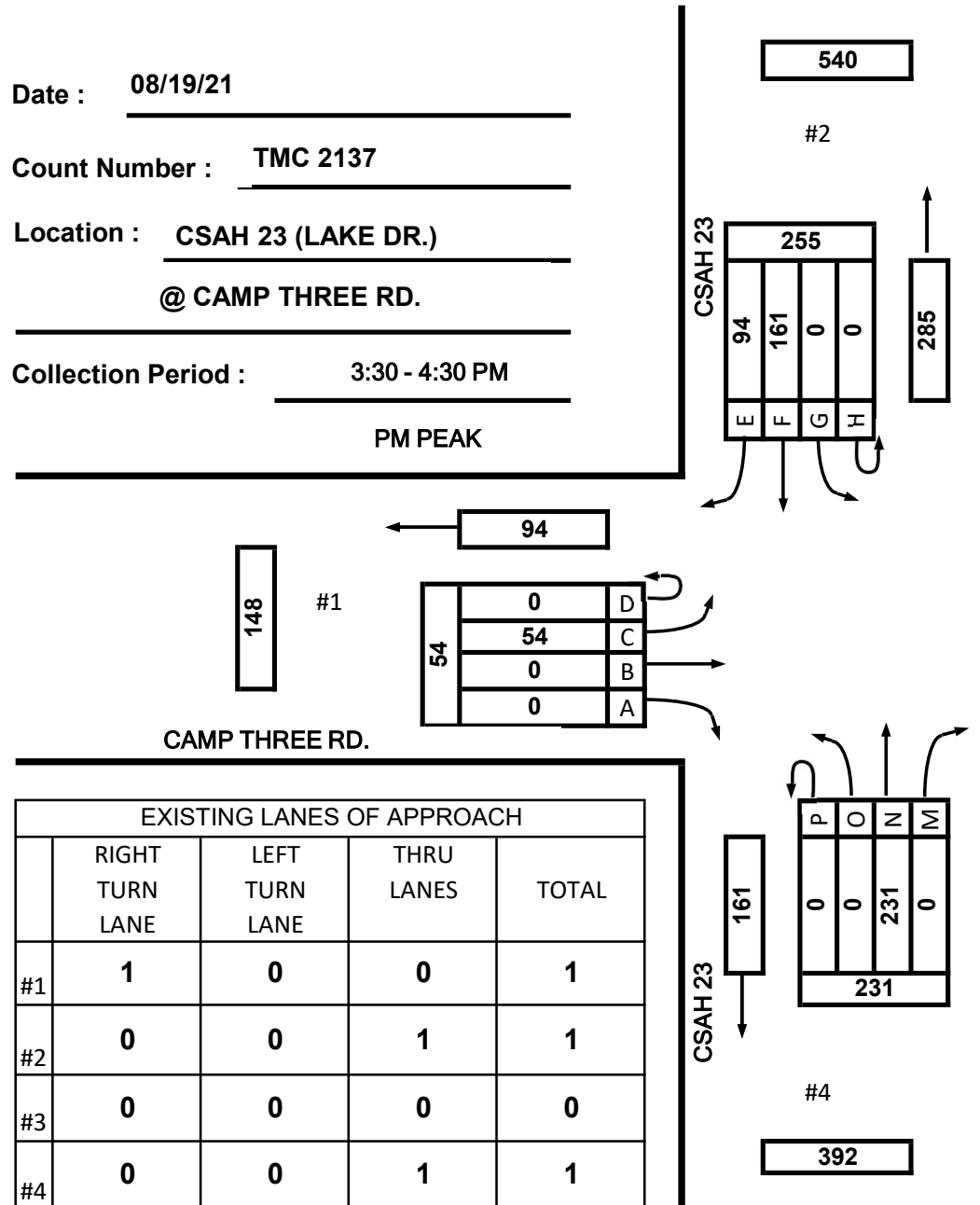
Traffic Volume and Turning Movement Study

Date : 08/19/21

Count Number : TMC 2137

Location : CSAH 23 (LAKE DR.)
@ CAMP THREE RD.

Collection Period : 3:30 - 4:30 PM
 PM PEAK



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

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

**CSAH 23 (Lake Dr) and Camp Three Rd
Columbus MN
Thursday, August 19, 2021**

Time	Southbound CSAH 23						Westbound 0						Northbound CSAH 23						Eastbound Camp Three Rd						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	3	1	0	4	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	7
12:15 AM	0	0	1	6	0	7	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10
12:30 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
12:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	0	0	0	0	2	0	0	0	2	6
Hourly Total	0	0	10	7	0	17	0	0	0	0	0	0	0	0	10	0	0	10	0	0	2	0	0	0	0	2	0	0	0	2	29
1:00 AM	0	0	0	2	0	2	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
1:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
1:30 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3	0	0	3	0	0	3	0	0	0	0	3	0	0	0	3	9
1:45 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
Hourly Total	0	0	6	4	0	10	0	0	0	0	0	0	0	0	8	0	0	8	0	0	3	0	0	0	0	3	0	0	0	3	21
2:00 AM	0	0	2	2	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
2:15 AM	0	0	2	2	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
2:30 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	5
2:45 AM	0	0	4	0	0	4	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
Hourly Total	0	0	11	4	0	15	0	0	0	0	0	0	0	0	3	0	0	3	0	0	1	0	0	0	0	1	0	0	0	1	19
3:00 AM	0	0	6	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	4
3:30 AM	0	0	2	2	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
3:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hourly Total	0	0	14	3	0	17	0	0	0	0	0	0	0	0	3	0	0	3	0	0	1	0	0	0	0	1	0	0	0	1	21
4:00 AM	0	0	5	0	0	5	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
4:15 AM	0	0	4	1	0	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	0	0	0	0	3	0	0	0	3	9
4:30 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	10	0	0	10	0	0	3	0	0	0	0	3	0	0	0	3	19
4:45 AM	0	0	8	2	0	10	0	0	0	0	0	0	0	0	5	0	0	5	0	0	4	0	0	0	0	4	0	0	0	4	19
Hourly Total	0	0	23	3	0	26	0	0	0	0	0	0	0	0	16	0	0	16	0	0	10	0	0	0	0	10	0	0	0	10	52
5:00 AM	0	0	8	1	0	9	0	0	0	0	0	0	0	0	7	0	0	7	0	0	4	0	0	0	0	4	0	0	0	4	20
5:15 AM	0	0	16	1	0	17	0	0	0	0	0	0	0	0	6	0	0	6	0	0	15	0	0	0	0	15	0	0	0	15	38
5:30 AM	0	0	33	2	0	35	0	0	0	0	0	0	0	0	4	0	0	4	0	0	7	0	0	0	0	7	0	0	0	7	46
5:45 AM	0	0	30	2	0	32	0	0	0	0	0	0	0	0	10	0	0	10	0	0	15	0	0	0	0	15	0	0	0	15	57
Hourly Total	0	0	87	6	0	93	0	0	0	0	0	0	0	0	27	0	0	27	0	0	41	0	0	0	0	41	0	0	0	41	161
6:00 AM	0	0	36	2	0	38	0	0	0	0	0	0	0	0	14	0	0	14	0	0	12	0	0	0	0	12	0	0	0	12	64
6:15 AM	0	0	34	0	0	34	0	0	0	0	0	0	0	0	19	0	0	19	0	0	11	0	0	0	0	11	0	0	0	11	64
6:30 AM	0	0	44	5	0	49	0	0	0	0	0	0	0	0	26	0	0	26	0	0	18	0	0	0	0	18	0	0	0	18	93
6:45 AM	0	0	52	5	0	57	0	0	0	0	0	0	0	0	31	0	0	31	0	0	18	0	0	0	0	18	0	0	0	18	106
Hourly Total	0	0	166	12	0	178	0	0	0	0	0	0	0	0	90	0	0	90	0	0	59	0	0	0	0	59	0	0	0	59	327
7:00 AM	0	0	21	4	0	25	0	0	0	0	0	0	0	0	24	0	0	24	0	0	16	0	0	0	0	16	0	0	0	16	65
7:15 AM	0	0	30	6	0	36	0	0	0	0	0	0	0	0	28	0	0	28	0	0	19	0	0	0	0	19	0	0	0	19	83
7:30 AM	0	0	31	6	0	37	0	0	0	0	0	0	0	0	53	0	0	53	0	0	12	0	0	0	0	12	0	0	0	12	102
7:45 AM	0	0	29	9	0	38	0	0	0	0	0	0	0	0	29	0	0	29	0	0	23	0	0	0	0	23	0	0	0	23	90
Hourly Total	0	0	111	25	0	136	0	0	0	0	0	0	0	0	134	0	0	134	0	0	70	0	0	0	0	70	0	0	0	70	340

**CSAH 23 (Lake Dr) and Camp Three Rd
Columbus MN
Thursday, August 19, 2021**

Time	Southbound CSAH 23						Westbound 0						Northbound CSAH 23						Eastbound Camp Three Rd						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	0	28	4	0	32	0	0	0	0	0	0	0	0	27	0	0	27	0	11	0	0	0	11	70
8:15 AM	0	0	16	13	0	29	0	0	0	0	0	0	0	0	25	0	0	25	0	9	0	0	0	9	63
8:30 AM	0	0	29	4	0	33	0	0	0	0	0	0	0	0	24	0	0	24	0	11	0	0	0	11	68
8:45 AM	0	0	21	6	0	27	0	0	0	0	0	0	0	0	22	0	0	22	0	14	0	0	0	14	63
Hourly Total	0	0	94	27	0	121	0	0	0	0	0	0	0	0	98	0	0	98	0	45	0	0	0	45	264
9:00 AM	0	0	24	10	0	34	0	0	0	0	0	0	0	0	22	0	0	22	0	3	0	0	0	3	59
9:15 AM	0	0	19	4	0	23	0	0	0	0	0	0	0	0	37	0	0	37	0	10	0	0	0	10	70
9:30 AM	0	0	34	5	0	39	0	0	0	0	0	0	0	0	27	0	0	27	0	10	0	1	0	11	77
9:45 AM	0	0	27	8	0	35	0	0	0	0	0	0	0	0	37	0	0	37	0	12	0	0	0	12	84
Hourly Total	0	0	104	27	0	131	0	0	0	0	0	0	0	0	123	0	0	123	0	35	0	1	0	36	290
10:00 AM	0	0	26	5	0	31	0	0	0	0	0	0	0	1	32	0	0	33	0	9	0	0	0	9	73
10:15 AM	0	0	24	14	0	38	0	0	0	0	0	0	0	0	42	0	0	42	0	16	0	0	0	16	96
10:30 AM	0	0	33	13	0	46	0	0	0	0	0	0	0	1	27	0	0	28	0	6	0	0	0	6	80
10:45 AM	0	0	27	14	0	41	0	0	0	0	0	0	0	0	35	0	0	35	0	13	0	0	0	13	89
Hourly Total	0	0	110	46	0	156	0	0	0	0	0	0	0	2	136	0	0	138	0	44	0	0	0	44	338
11:00 AM	0	0	32	8	0	40	0	0	0	0	0	0	0	0	32	0	0	32	0	8	0	0	0	8	80
11:15 AM	0	0	28	6	0	34	0	0	0	0	0	0	0	0	33	0	0	33	0	4	0	0	0	4	71
11:30 AM	0	0	27	16	0	43	0	0	0	0	0	0	0	0	28	0	0	28	0	8	0	0	0	8	79
11:45 AM	0	0	27	9	0	36	0	0	0	0	0	0	0	0	29	0	0	29	0	11	0	0	0	11	76
Hourly Total	0	0	114	39	0	153	0	0	0	0	0	0	0	0	122	0	0	122	0	31	0	0	0	31	306
12:00 PM	0	0	25	6	0	31	0	0	0	0	0	0	0	0	38	0	0	38	0	2	0	0	0	2	71
12:15 PM	0	0	36	7	0	43	0	0	0	0	0	0	0	1	21	0	0	22	0	6	0	0	0	6	71
12:30 PM	0	0	24	8	0	32	0	0	0	0	0	0	0	0	35	0	0	35	0	10	0	0	0	10	77
12:45 PM	0	0	35	9	0	44	0	0	0	0	0	0	0	0	34	0	0	34	0	7	0	0	0	7	85
Hourly Total	0	0	120	30	0	150	0	0	0	0	0	0	0	1	128	0	0	129	0	25	0	0	0	25	304
1:00 PM	0	0	25	13	0	38	0	0	0	0	0	0	0	0	35	0	0	35	0	4	0	0	0	4	77
1:15 PM	0	0	25	9	0	34	0	0	0	0	0	0	0	0	47	0	0	47	0	13	0	0	0	13	94
1:30 PM	0	0	28	10	0	38	0	0	0	0	0	0	0	0	29	0	0	29	0	3	0	0	0	3	70
1:45 PM	0	0	37	4	0	41	0	0	0	0	0	0	0	0	39	0	0	39	0	7	0	0	0	7	87
Hourly Total	0	0	115	36	0	151	0	0	0	0	0	0	0	0	150	0	0	150	0	27	0	0	0	27	328
2:00 PM	0	0	31	9	0	40	0	0	0	0	0	0	0	0	43	0	0	43	0	2	0	0	0	2	85
2:15 PM	0	0	31	9	0	40	0	0	0	0	0	0	0	0	40	0	0	40	0	13	0	0	0	13	93
2:30 PM	0	0	28	15	0	43	0	0	0	0	0	0	0	0	31	0	0	31	0	8	0	0	0	8	82
2:45 PM	0	0	26	12	0	38	0	0	0	0	0	0	0	1	51	0	0	52	0	12	0	0	0	12	102
Hourly Total	0	0	116	45	0	161	0	0	0	0	0	0	0	1	165	0	0	166	0	35	0	0	0	35	362
3:00 PM	0	0	35	6	0	41	0	0	0	0	0	0	0	0	60	0	0	60	0	9	0	0	0	9	110
3:15 PM	0	0	30	19	0	49	0	0	0	0	0	0	0	1	47	0	0	48	0	10	0	0	0	10	107
3:30 PM	0	0	45	21	0	66	0	0	0	0	0	0	0	0	53	0	0	53	0	15	0	0	0	15	134
3:45 PM	0	0	42	28	0	70	0	0	0	0	0	0	0	2	59	0	0	61	0	9	0	3	0	12	143
Hourly Total	0	0	152	74	0	226	0	0	0	0	0	0	0	3	219	0	0	222	0	43	0	3	0	46	494

**CSAH 23 (Lake Dr) and Camp Three Rd
Columbus MN
Thursday, August 19, 2021**

Time	Southbound CSAH 23						Westbound 0						Northbound CSAH 23						Eastbound Camp Three Rd						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	0	43	23	0	66	0	0	0	0	0	0	0	0	68	0	0	68	0	18	0	0	0	18	152
4:15 PM	0	0	31	22	0	53	0	0	0	0	0	0	0	0	51	0	0	51	0	12	0	0	0	12	116
4:30 PM	0	0	34	23	0	57	0	0	0	0	0	0	0	1	60	0	0	61	0	10	0	0	0	10	128
4:45 PM	0	0	43	22	0	65	0	0	0	0	0	0	0	0	68	0	0	68	0	12	0	0	0	12	145
Hourly Total	0	0	151	90	0	241	0	0	0	0	0	0	0	1	247	0	0	248	0	52	0	0	0	52	541
5:00 PM	0	0	33	23	0	56	0	0	0	0	0	0	0	0	60	0	0	60	0	16	0	0	0	16	132
5:15 PM	0	0	30	18	0	48	0	0	0	0	0	0	0	0	58	0	0	58	0	15	0	0	0	15	121
5:30 PM	0	0	42	28	0	70	0	0	0	0	0	0	0	0	56	0	0	56	0	12	0	0	0	12	138
5:45 PM	0	0	23	23	0	46	0	0	0	0	0	0	0	0	49	0	0	49	0	9	0	0	0	9	104
Hourly Total	0	0	128	92	0	220	0	0	0	0	0	0	0	0	223	0	0	223	0	52	0	0	0	52	495
6:00 PM	0	0	21	21	0	42	0	0	0	0	0	0	0	0	39	0	0	39	0	9	0	0	0	9	90
6:15 PM	0	0	22	22	0	44	0	0	0	0	0	0	0	0	39	0	0	39	0	7	0	0	0	7	90
6:30 PM	0	0	20	23	0	43	0	0	0	0	0	0	0	0	33	0	0	33	0	8	0	0	0	8	84
6:45 PM	0	0	19	16	0	35	0	0	0	0	0	0	0	0	26	0	0	26	0	5	0	0	0	5	66
Hourly Total	0	0	82	82	0	164	0	0	0	0	0	0	0	0	137	0	0	137	0	29	0	0	0	29	330
7:00 PM	0	0	20	8	0	28	0	0	0	0	0	0	0	0	39	0	0	39	0	8	0	1	0	9	76
7:15 PM	0	0	19	14	0	33	0	0	0	0	0	0	0	0	25	0	0	25	0	14	0	0	0	14	72
7:30 PM	0	0	21	10	0	31	0	0	0	0	0	0	0	0	20	0	0	20	0	2	0	0	0	2	53
7:45 PM	1	0	19	12	0	32	0	0	0	0	0	0	0	0	26	0	0	26	0	5	0	0	0	5	63
Hourly Total	1	0	79	44	0	124	0	0	0	0	0	0	0	0	110	0	0	110	0	29	0	1	0	30	264
8:00 PM	0	0	14	11	0	25	0	0	0	0	0	0	0	0	21	0	0	21	0	4	0	0	0	4	50
8:15 PM	0	0	21	21	0	42	0	0	0	0	0	0	0	0	24	0	0	24	0	7	0	0	0	7	73
8:30 PM	0	0	7	4	0	11	0	0	0	0	0	0	0	1	20	0	0	21	0	6	0	0	0	6	38
8:45 PM	0	0	21	8	0	29	0	0	0	0	0	0	0	0	19	0	0	19	0	7	0	0	0	7	55
Hourly Total	0	0	63	44	0	107	0	0	0	0	0	0	0	1	84	0	0	85	0	24	0	0	0	24	216
9:00 PM	0	0	21	8	0	29	0	0	0	0	0	0	0	0	12	0	0	12	0	4	0	0	0	4	45
9:15 PM	0	0	27	9	0	36	0	0	0	0	0	0	0	0	19	0	0	19	0	2	0	0	0	2	57
9:30 PM	0	0	9	7	0	16	0	0	0	0	0	0	0	0	14	0	0	14	0	3	0	1	0	4	34
9:45 PM	0	0	9	6	0	15	0	0	0	0	0	0	0	1	4	0	0	5	0	2	0	0	0	2	22
Hourly Total	0	0	66	30	0	96	0	0	0	0	0	0	0	1	49	0	0	50	0	11	0	1	0	12	158
10:00 PM	0	0	17	3	0	20	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	0	0	2	28
10:15 PM	0	0	4	4	0	8	0	0	0	0	0	0	0	0	11	0	0	11	0	1	0	0	0	1	20
10:30 PM	0	0	10	2	0	12	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	21
10:45 PM	0	0	9	1	0	10	0	0	0	0	0	0	0	1	6	0	0	7	0	0	0	0	0	0	17
Hourly Total	0	0	40	10	0	50	0	0	0	0	0	0	0	1	32	0	0	33	0	3	0	0	0	3	86
11:00 PM	0	0	7	1	0	8	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	11
11:15 PM	0	0	7	3	0	10	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	14
11:30 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	6	0	0	6	0	2	0	0	0	2	11
11:45 PM	0	0	5	3	0	8	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	11
Hourly Total	0	0	22	7	0	29	0	0	0	0	0	0	0	0	16	0	0	16	0	2	0	0	0	2	47
DAILY TOTAL	1	0	1984	787	0	2772	0	0	0	0	0	0	0	11	2330	0	0	2341	0	674	0	6	0	680	5793
Cars	1	0	1804	764	0	2569	0	0	0	0	0	0	0	11	2180	0	0	2191	0	665	0	5	0	670	5430
Heavy Vehicles	0	0	180	23	0	203	0	0	0	0	0	0	0	0	150	0	0	150	0	9	0	1	0	10	363
Heavy Vehicle %	0.00%	0.00%	9.07%	2.92%	0.00%	7.32%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.44%	0.00%	0.00%	6.41%	0.00%	1.34%	0.00%	16.67%	0.00%	1.47%	6.27%

**CSAH 23 (Lake Dr) and Camp Three Rd
Columbus MN
Thursday, August 19, 2021**

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	0	52	5	0	57	0	0	0	0	0	0	0	0	31	0	0	31	0	18	0	0	0	18	0	0	0	0	0	0	0
7:00 AM	0	0	21	4	0	25	0	0	0	0	0	0	0	0	24	0	0	24	0	16	0	0	0	16	0	0	0	0	0	0	0
7:15 AM	0	0	30	6	0	36	0	0	0	0	0	0	0	0	28	0	0	28	0	19	0	0	0	19	0	0	0	0	0	0	0
7:30 AM	0	0	31	6	0	37	0	0	0	0	0	0	0	0	53	0	0	53	0	12	0	0	0	12	0	0	0	0	0	0	0
Peak Hour Total PHF	0.000	0.000	134	21	0.000	0.680	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	136	0.000	0.000	0.642	0.000	0.855	0.000	0.000	0.000	0.855	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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							
3:30 PM	0	0	45	21	0	66	0	0	0	0	0	0	0	0	53	0	0	53	0	15	0	0	0	15	0	0	0	0	0	0	0
3:45 PM	0	0	42	28	0	70	0	0	0	0	0	0	0	0	59	0	0	59	0	9	0	0	0	9	0	0	0	0	0	0	0
4:00 PM	0	0	43	23	0	66	0	0	0	0	0	0	0	0	68	0	0	68	0	18	0	0	0	18	0	0	0	0	0	0	0
4:15 PM	0	0	31	22	0	53	0	0	0	0	0	0	0	0	51	0	0	51	0	12	0	0	0	12	0	0	0	0	0	0	0
Peak Hour Total PHF	0.000	0.000	161	94	0.000	0.911	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	231	0.000	0.000	0.849	0.000	0.750	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Total Vehicles On Leg				5777			
Vehicles Entering Intersection				2772			
Vehicles Exiting Intersection				3005			
Southbound							
Cars	764	1804	0	1	0		
Heavy	23	180	0	0	0		
Total	787	1984	0	1	0		

Total Vehicles on Leg 1478	Eastbound	Cars	0	0	0
		Heavy	0	0	0
		Total	665	9	674
		Cars	0	0	0
		Heavy	0	0	0

Total Vehicles on Leg 1478	Westbound	Cars	0	0	0
		Heavy	0	0	0
		Total	0	0	0
		Cars	0	0	0
		Heavy	0	0	0

Total Vehicles on Leg 1478	Southbound	Cars	0	0	0
		Heavy	0	0	0
		Total	0	0	0
		Cars	0	0	0
		Heavy	0	0	0

Total Vehicles on Leg 1478	Northbound	Cars	0	0	11
		Heavy	0	0	150
		Total	0	0	11
		Cars	0	0	11
		Heavy	0	0	150

Total Vehicles On Leg				4331			
Vehicles Entering Intersection				2341			
Vehicles Exiting Intersection				1990			

Daily Volumes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2137

Study Date : 09/10/2021

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 23 (Lake Dr.)

Number of Lanes : 1

Total Approach Volume: 2,341

Southbound: CSAH 23 (Lake Dr.)

Number of Lanes : 1

Total Approach Volume: 2,772

Minor Street Approaches

Eastbound: Camp Three Rd.

Number of Lanes : 1

Total Approach Volume: 689

Warrant Summary (Urban Values Apply)

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

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

Required volumes reached for 0 hours, 8 are needed

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

Required volumes reached for 0 hours, 8 are needed

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

Required 1A volumes reached for 0 hours, 8 are needed

Required 1B volumes reached for 0 hours, 8 are needed

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

Number of hours (0) volumes exceed minimum < minimum required (4).

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

Warrant 3A - Peak Hour Delay.....Not Satisfied

Approach volumes on minor street don't exceed minimums for any one hour period. 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 2137

Study Date : 09/10/2021

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

Site Data Required

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

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	248	+	241	=	489	52	0	No
15:30 - 16:30	233	+	255	=	488	57	0	No
15:45 - 16:45	241	+	246	=	487	52	0	No
16:45 - 17:45	242	+	239	=	481	55	0	No
15:15 - 16:15	230	+	251	=	481	57	0	No
16:30 - 17:30	247	+	226	=	473	53	0	No
16:15 - 17:15	240	+	231	=	471	50	0	No
15:00 - 16:00	222	+	226	=	448	48	0	No
17:00 - 18:00	223	+	220	=	443	52	0	No
17:15 - 18:15	202	+	206	=	408	45	0	No
14:45 - 15:45	213	+	194	=	407	48	0	No
17:30 - 18:30	183	+	202	=	385	37	0	No
14:30 - 15:30	191	+	171	=	362	41	0	No
14:15 - 15:15	183	+	162	=	345	43	0	No
17:45 - 18:45	160	+	175	=	335	33	0	No
14:00 - 15:00	166	+	161	=	327	36	0	No
13:45 - 14:45	153	+	164	=	317	31	0	No
13:15 - 14:15	158	+	153	=	311	25	0	No
13:30 - 14:30	151	+	159	=	310	26	0	No
10:15 - 11:15	137	+	165	=	302	44	0	No
13:00 - 14:00	150	+	151	=	301	27	0	No
18:00 - 19:00	137	+	164	=	301	29	0	No
12:30 - 13:30	151	+	148	=	299	34	0	No
12:45 - 13:45	145	+	154	=	299	27	0	No
10:00 - 11:00	138		156		294	45	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2137

Study Date : 09/10/2021

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

Site Data Required

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

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:00 - 17:00	248	+	241	=	489	52	0	No
15:30 - 16:30	233	+	255	=	488	57	0	No
15:45 - 16:45	241	+	246	=	487	52	0	No
16:45 - 17:45	242	+	239	=	481	55	0	No
15:15 - 16:15	230	+	251	=	481	57	0	No
16:30 - 17:30	247	+	226	=	473	53	0	No
16:15 - 17:15	240	+	231	=	471	50	0	No
15:00 - 16:00	222	+	226	=	448	48	0	No
17:00 - 18:00	223	+	220	=	443	52	0	No
17:15 - 18:15	202	+	206	=	408	45	0	No
14:45 - 15:45	213	+	194	=	407	48	0	No
17:30 - 18:30	183	+	202	=	385	37	0	No
14:30 - 15:30	191	+	171	=	362	41	0	No
14:15 - 15:15	183	+	162	=	345	43	0	No
17:45 - 18:45	160	+	175	=	335	33	0	No
14:00 - 15:00	166	+	161	=	327	36	0	No
13:45 - 14:45	153	+	164	=	317	31	0	No
13:15 - 14:15	158	+	153	=	311	25	0	No
13:30 - 14:30	151	+	159	=	310	26	0	No
10:15 - 11:15	137	+	165	=	302	44	0	No
13:00 - 14:00	150	+	151	=	301	27	0	No
18:00 - 19:00	137	+	164	=	301	29	0	No
12:30 - 13:30	151	+	148	=	299	34	0	No
12:45 - 13:45	145	+	154	=	299	27	0	No
10:00 - 11:00	138		156		294	45	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2137

Study Date : 09/10/2021

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

Only 0 hours meet 1A minimums.
Only 0 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road CSAH 23 (Lake Dr.)

Minor Road Camp Three Rd.

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:00 - 17:00	248	+	241	=	489	52	0	No
15:30 - 16:30	233	+	255	=	488	57	0	No
15:45 - 16:45	241	+	246	=	487	52	0	No
15:15 - 16:15	230	+	251	=	481	57	0	No
16:45 - 17:45	242	+	239	=	481	55	0	No
16:30 - 17:30	247	+	226	=	473	53	0	No
16:15 - 17:15	240	+	231	=	471	50	0	No
15:00 - 16:00	222	+	226	=	448	48	0	No
17:00 - 18:00	223	+	220	=	443	52	0	No
17:15 - 18:15	202	+	206	=	408	45	0	No
14:45 - 15:45	213	+	194	=	407	48	0	No
17:30 - 18:30	183		202		385	37	0	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:00 - 17:00	248	+	241	=	489	52	0	No
15:30 - 16:30	233	+	255	=	488	57	0	No
15:45 - 16:45	241	+	246	=	487	52	0	No
15:15 - 16:15	230	+	251	=	481	57	0	No
16:45 - 17:45	242	+	239	=	481	55	0	No
16:30 - 17:30	247	+	226	=	473	53	0	No
16:15 - 17:15	240	+	231	=	471	50	0	No
15:00 - 16:00	222	+	226	=	448	48	0	No
17:00 - 18:00	223	+	220	=	443	52	0	No
17:15 - 18:15	202	+	206	=	408	45	0	No
14:45 - 15:45	213	+	194	=	407	48	0	No
17:30 - 18:30	183		202		385	37	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2137

Study Date : 09/10/2021

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.

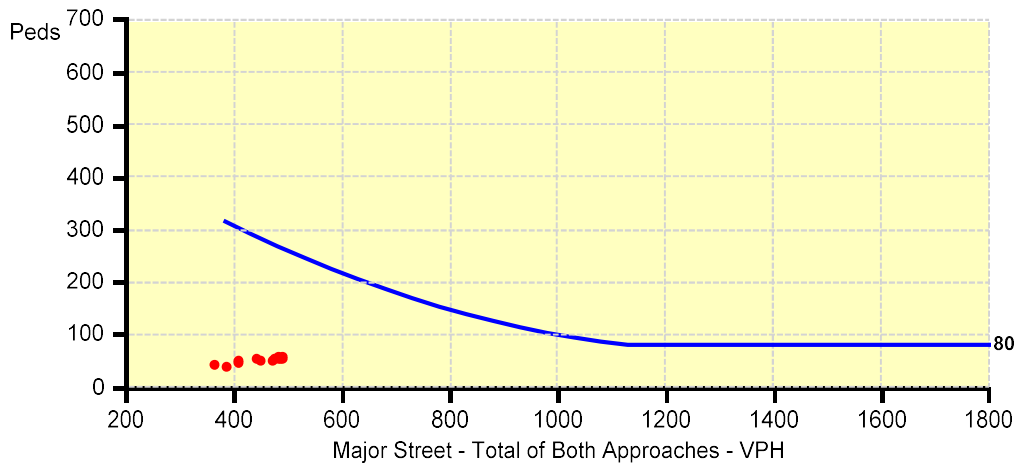
Summary

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

Site Data Required

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

Time	Major Road CSAH 23 (Lake Dr.)				Total	Minor Road Camp Three Rd.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	248	+	241	=	489	52	0	No
15:30 - 16:30	233	+	255	=	488	57	0	No
15:45 - 16:45	241	+	246	=	487	52	0	No
16:45 - 17:45	242	+	239	=	481	55	0	No
15:15 - 16:15	230	+	251	=	481	57	0	No
16:30 - 17:30	247	+	226	=	473	53	0	No
16:15 - 17:15	240	+	231	=	471	50	0	No
15:00 - 16:00	222	+	226	=	448	48	0	No
17:00 - 18:00	223	+	220	=	443	52	0	No
17:15 - 18:15	202	+	206	=	408	45	0	No
14:45 - 15:45	213	+	194	=	407	48	0	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2137

Study Date : 09/10/2021

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 = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 23 (Lake Dr.)				Total	Minor Road Camp Three Rd.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	248	+	241	=	489	52	0	No
15:30 - 16:30	233	+	255	=	488	57	0	No
15:45 - 16:45	241	+	246	=	487	52	0	No
16:45 - 17:45	242	+	239	=	481	55	0	No
15:15 - 16:15	230	+	251	=	481	57	0	No
16:30 - 17:30	247	+	226	=	473	53	0	No
16:15 - 17:15	240	+	231	=	471	50	0	No
15:00 - 16:00	222	+	226	=	448	48	0	No
17:00 - 18:00	223	+	220	=	443	52	0	No
17:15 - 18:15	202	+	206	=	408	45	0	No
14:45 - 15:45	213	+	194	=	407	48	0	No

