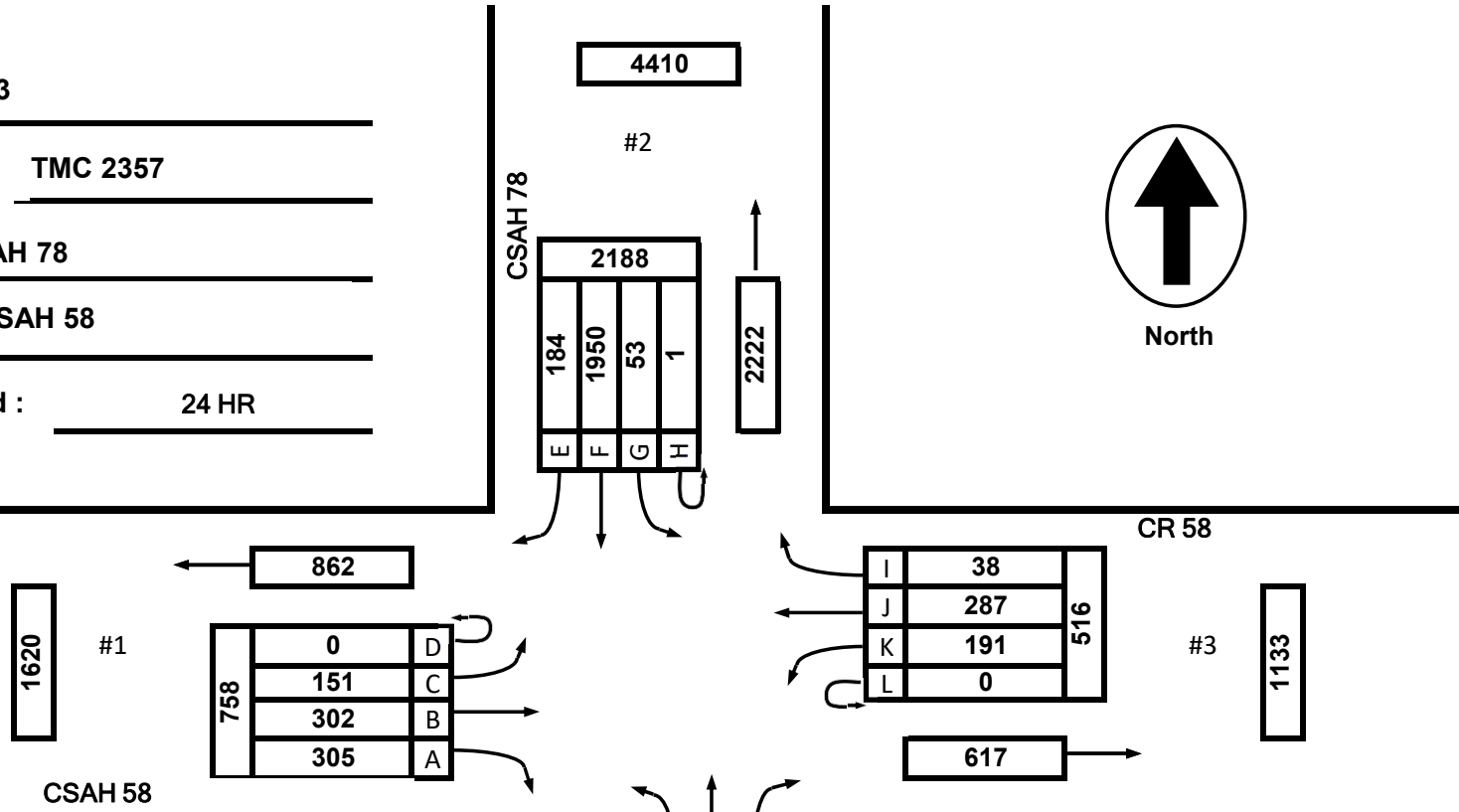
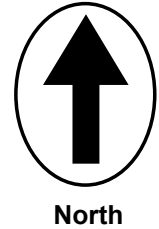


Date : 12/21/23

Count Number : TMC 2357

Location : CSAH 78
@ CSAH 58

Collection Period : 24 HR



0	D
151	C
302	B
305	A

38	I
287	J
191	K
0	L

1	P
391	O
2032	N
262	M

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

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

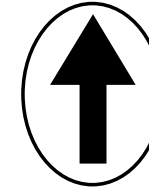
Date : 12/21/23

Count Number : TMC 2357

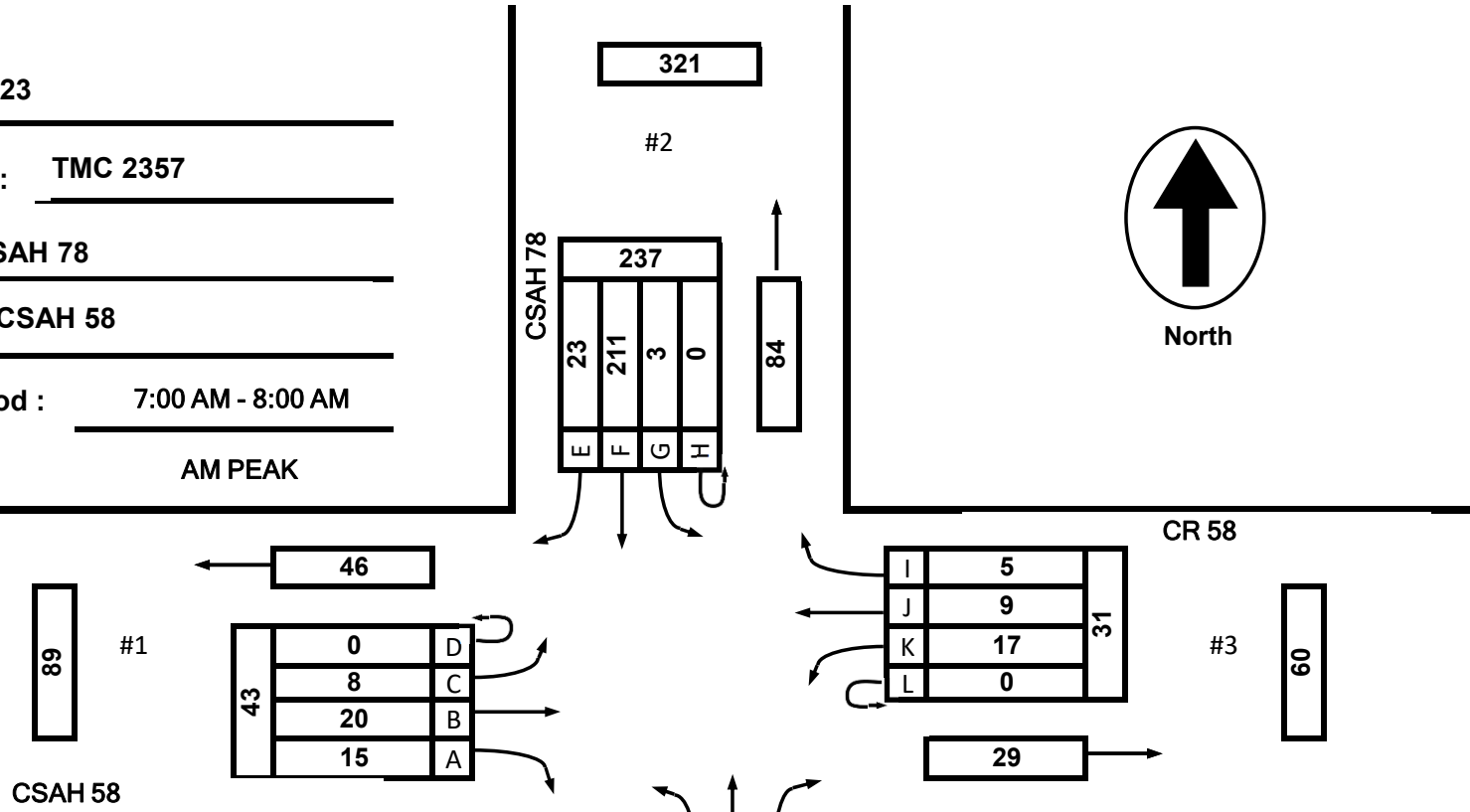
Location : CSAH 78
@ CSAH 58

Collection Period : 7:00 AM - 8:00 AM

AM PEAK



North



CSAH 58

CR 58

CSAH 78

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

P	O	N	M	TOTAL
0	14	71	6	91

Anoka County Highway Department

Traffic Volume and Turning Movement Study

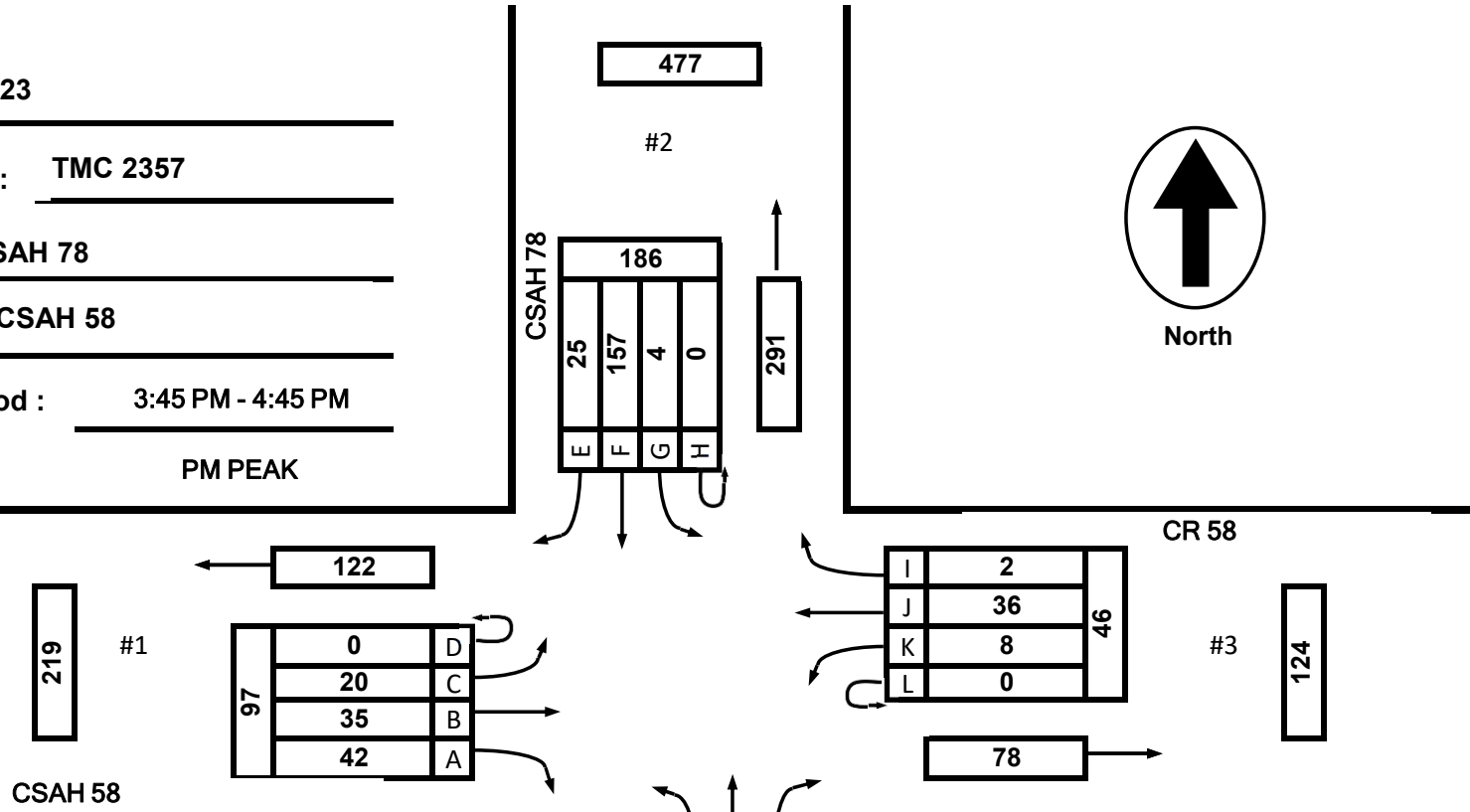
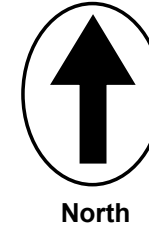
Date : 12/21/23

Count Number : TMC 2357

Location : CSAH 78
@ CSAH 58

Collection Period : 3:45 PM - 4:45 PM

PM PEAK



CSAH 58

CSAH 78

CR 58

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

208	P	O	N	M	
	1	61	269	39	
	370				

186	E	F	G	H
	25	157	4	0

46	I	2
	J	36
	K	8
	L	0

78

578

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

**TMC 2357 - CSAH 78 @ CSAH 58
Andover MN
Thursday, December 21, 2023**

Time	Southbound CSAH 78						Westbound CR 58						Northbound CSAH 78						Eastbound CSAH 58						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	2	1	0	3	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	1	0	1	6
12:15 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	0	0	0	0	5
12:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	4
12:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	0	2	0	0	0	0	0	0	3
Hourly Total	0	0	6	1	0	7	0	0	0	1	0	1	0	2	7	0	0	0	9	0	0	0	1	0	1	18
1:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	0	0	0	0	6
1:15 AM	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	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
1:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Hourly Total	0	0	4	0	0	4	0	0	0	0	0	0	0	1	4	0	0	0	5	0	0	0	0	0	0	9
2:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	2	1	0	0	0	3	0	0	0	0	0	0	4
2:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	4
2:30 AM	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	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Hourly Total	0	0	2	0	0	2	0	0	0	0	0	0	0	2	5	0	0	0	7	0	0	0	0	0	0	9
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
3:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
3:45 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	6
Hourly Total	0	0	6	0	0	6	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	1	0	0	1	10
4:00 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	2	7
4:15 AM	0	0	10	2	0	12	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	2	15
4:30 AM	1	0	12	0	0	13	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	1	0	0	1	16
4:45 AM	0	0	6	1	0	7	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	3	4	0	7	16
Hourly Total	1	0	32	3	0	36	0	0	1	1	0	2	0	1	3	0	0	0	4	0	0	7	5	0	12	54
5:00 AM	0	1	19	0	0	20	0	3	0	0	0	3	0	0	2	0	0	0	2	0	0	0	1	0	1	26
5:15 AM	0	1	23	0	0	24	0	1	0	1	0	2	0	0	2	0	0	0	2	0	0	1	0	0	1	29
5:30 AM	0	0	22	0	0	22	0	1	0	0	0	1	0	0	4	1	0	0	5	0	1	2	2	0	5	33
5:45 AM	0	0	24	1	0	25	0	1	0	0	0	1	0	1	6	1	0	0	8	0	1	1	4	0	6	40
Hourly Total	0	2	88	1	0	91	0	6	0	1	0	7	0	1	14	2	0	0	17	0	2	4	7	0	13	128
6:00 AM	0	0	32	2	0	34	0	2	1	0	0	3	0	1	3	1	0	0	5	0	1	2	2	0	5	47
6:15 AM	0	0	30	4	0	34	0	3	1	1	0	5	0	2	9	0	0	0	11	0	0	2	4	0	6	56
6:30 AM	0	0	54	4	0	58	0	2	4	0	0	6	0	1	7	0	0	0	8	0	2	2	6	0	10	82
6:45 AM	0	0	45	2	0	47	0	3	2	0	0	5	0	5	15	3	0	0	23	0	4	2	4	0	10	85
Hourly Total	0	0	161	12	0	173	0	10	8	1	0	19	0	9	34	4	0	0	47	0	7	8	16	0	31	270
7:00 AM	0	1	45	3	0	49	0	8	1	3	0	12	0	0	10	1	0	0	11	0	4	7	4	0	15	87
7:15 AM	0	1	63	7	0	71	0	5	0	1	0	6	0	4	23	1	0	0	28	0	3	2	5	0	10	115
7:30 AM	0	1	58	3	0	62	0	3	3	0	0	6	0	4	19	1	0	0	24	0	1	7	5	0	13	105
7:45 AM	0	0	45	10	0	55	0	1	5	1	0	7	0	6	19	3	0	0	28	0	0	4	1	0	5	95
Hourly Total	0	3	211	23	0	237	0	17	9	5	0	31	0	14	71	6	0	0	91	0	8	20	15	0	43	402

TMC 2357 - CSAH 78 @ CSAH 58

Andover MN

Thursday, December 21, 2023

Time	Southbound CSAH 78						Westbound CR 58						Northbound CSAH 78						Eastbound CSAH 58						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	30	0	0	30	0	6	7	0	0	13	0	3	13	2	0	18	0	3	7	7	0	17	78
8:15 AM	0	0	47	6	0	53	0	0	5	1	0	6	0	5	18	1	0	24	0	4	7	2	0	13	96
8:30 AM	0	2	38	3	0	43	0	2	3	0	0	5	0	4	16	4	0	24	0	0	3	2	0	5	77
8:45 AM	0	1	32	5	0	38	0	4	6	1	0	11	0	3	17	3	0	23	0	0	7	7	0	14	86
Hourly Total	0	3	147	14	0	164	0	12	21	2	0	35	0	15	64	10	0	89	0	7	24	18	0	49	337
9:00 AM	0	0	35	5	0	40	0	8	13	0	0	21	0	2	18	1	0	21	0	1	4	6	0	11	93
9:15 AM	0	1	33	5	0	39	0	4	2	1	0	7	0	4	24	2	0	30	0	5	6	5	0	16	92
9:30 AM	0	0	25	3	0	28	0	0	4	0	0	4	0	6	20	3	0	29	0	1	1	4	0	6	67
9:45 AM	0	0	40	2	0	42	0	2	5	0	0	7	0	1	18	1	0	20	0	2	1	7	0	10	79
Hourly Total	0	1	133	15	0	149	0	14	24	1	0	39	0	13	80	7	0	100	0	9	12	22	0	43	331
10:00 AM	0	1	19	2	0	22	0	4	5	1	0	10	0	4	20	2	0	26	0	1	5	3	0	9	67
10:15 AM	0	1	20	1	0	22	0	1	8	2	0	11	0	4	25	3	0	32	0	2	4	8	0	14	79
10:30 AM	0	0	22	2	0	24	0	2	1	0	0	3	0	5	20	5	0	30	0	0	4	5	0	9	66
10:45 AM	0	3	31	1	0	35	0	6	5	0	0	11	0	1	20	4	0	25	0	1	3	8	0	12	83
Hourly Total	0	5	92	6	0	103	0	13	19	3	0	35	0	14	85	14	0	113	0	4	16	24	0	44	295
11:00 AM	0	3	37	3	0	43	0	2	2	0	0	4	0	8	31	4	0	43	0	3	6	2	0	11	101
11:15 AM	0	1	27	3	0	31	0	4	4	0	0	8	0	5	26	3	0	34	0	0	4	3	0	7	80
11:30 AM	0	1	24	2	0	27	0	2	4	0	0	6	0	8	31	3	0	42	0	4	1	6	0	11	86
11:45 AM	0	0	35	0	0	35	0	2	3	0	0	5	0	3	21	4	0	28	0	1	5	7	0	13	81
Hourly Total	0	5	123	8	0	136	0	10	13	0	0	23	0	24	109	14	0	147	0	8	16	18	0	42	348
12:00 PM	0	1	19	0	0	20	0	3	4	0	0	7	0	4	31	3	0	38	0	4	3	3	0	10	75
12:15 PM	0	2	33	3	0	38	0	5	2	0	0	7	0	7	29	2	0	38	0	2	6	2	0	10	93
12:30 PM	0	2	35	4	0	41	0	8	4	0	0	12	0	6	26	1	0	33	0	1	3	8	0	12	98
12:45 PM	0	1	30	4	0	35	0	1	7	0	0	8	0	5	25	4	0	34	0	5	11	2	0	18	95
Hourly Total	0	6	117	11	0	134	0	17	17	0	0	34	0	22	111	10	0	143	0	12	23	15	0	50	361
1:00 PM	0	2	18	1	0	21	0	3	1	0	0	4	0	4	28	5	0	37	0	1	3	4	0	8	70
1:15 PM	0	0	23	3	0	26	0	4	3	0	0	7	0	3	24	5	0	32	0	2	7	7	0	16	81
1:30 PM	0	0	28	3	0	31	0	2	4	0	0	6	0	9	21	4	0	34	0	7	3	2	0	12	83
1:45 PM	0	0	30	0	0	30	0	2	6	0	0	8	0	9	33	5	0	47	0	2	6	5	0	13	98
Hourly Total	0	2	99	7	0	108	0	11	14	0	0	25	0	25	106	19	0	150	0	12	19	18	0	49	332
2:00 PM	0	0	23	0	0	23	0	6	2	1	0	9	0	9	32	6	0	47	0	4	7	4	0	15	94
2:15 PM	0	0	25	2	0	27	0	1	2	0	0	3	0	6	36	4	0	46	0	2	5	5	0	12	88
2:30 PM	0	0	31	2	0	33	0	6	4	0	0	10	0	8	40	6	0	54	0	0	6	6	0	12	109
2:45 PM	0	1	31	4	0	36	0	1	5	0	0	6	0	8	50	10	0	68	0	1	6	4	0	11	121
Hourly Total	0	1	110	8	0	119	0	14	13	1	0	28	0	31	158	26	0	215	0	7	24	19	0	50	412
3:00 PM	0	0	27	4	0	31	0	8	8	4	0	20	0	10	56	8	0	74	0	1	6	4	0	11	136
3:15 PM	0	4	37	2	0	43	0	4	8	1	0	13	0	16	47	3	0	66	0	5	12	8	0	25	147
3:30 PM	0	2	29	2	0	33	0	3	3	0	0	6	0	12	66	11	0	89	0	2	4	5	0	11	139
3:45 PM	0	0	41	11	0	52	0	2	11	2	0	15	0	7	75	8	0	90	0	3	8	6	0	17	174
Hourly Total	0	6	134	19	0	159	0	17	30	7	0	54	0	45	244	30	0	319	0	11	30	23	0	64	596

**TMC 2357 - CSAH 78 @ CSAH 58
Andover MN
Thursday, December 21, 2023**

Time	Southbound CSAH 78						Westbound CR 58						Northbound CSAH 78						Eastbound CSAH 58						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	3	37	3	0	43	0	3	13	0	0	16	0	20	76	9	0	105	0	10	13	10	0	33	197
4:15 PM	0	1	39	9	0	49	0	1	6	0	0	7	0	19	68	10	0	97	0	4	4	22	0	30	183
4:30 PM	0	0	40	2	0	42	0	2	6	0	0	8	1	15	50	12	0	78	0	3	10	4	0	17	145
4:45 PM	0	1	41	1	0	43	0	5	17	0	0	22	0	17	61	11	0	89	0	4	4	9	0	17	171
Hourly Total	0	5	157	15	0	177	0	11	42	0	0	53	1	71	255	42	0	369	0	21	31	45	0	97	696
5:00 PM	0	2	35	4	0	41	0	2	5	1	0	8	0	4	74	7	0	85	0	4	7	5	0	16	150
5:15 PM	0	1	36	7	0	44	0	7	12	1	0	20	0	8	56	8	0	72	0	6	10	6	0	22	158
5:30 PM	0	1	32	1	0	34	0	3	7	0	0	10	0	6	51	4	0	61	0	2	2	2	0	6	111
5:45 PM	0	0	19	6	0	25	0	1	4	0	0	5	0	14	41	6	0	61	0	0	6	3	0	9	100
Hourly Total	0	4	122	18	0	144	0	13	28	2	0	43	0	32	222	25	0	279	0	12	25	16	0	53	519
6:00 PM	0	1	15	2	0	18	0	2	3	1	0	6	0	3	49	4	0	56	0	0	4	4	0	8	88
6:15 PM	0	0	23	2	0	25	0	3	5	2	0	10	0	10	37	4	0	51	0	0	3	3	0	6	92
6:30 PM	0	0	18	3	0	21	0	2	3	0	0	5	0	3	34	4	0	41	0	1	1	6	0	8	75
6:45 PM	0	1	14	3	0	18	0	4	5	0	0	9	0	6	26	2	0	34	0	3	0	8	0	11	72
Hourly Total	0	2	70	10	0	82	0	11	16	3	0	30	0	22	146	14	0	182	0	4	8	21	0	33	327
7:00 PM	0	2	18	1	0	21	0	1	2	1	0	4	0	4	38	4	0	46	0	4	1	6	0	11	82
7:15 PM	0	2	11	2	0	15	0	1	1	1	0	3	0	1	14	3	0	18	0	1	4	1	0	6	42
7:30 PM	0	0	8	6	0	14	0	1	2	1	0	4	0	4	27	5	0	36	0	1	4	2	0	7	61
7:45 PM	0	0	15	0	0	15	0	0	6	0	0	6	0	4	30	2	0	36	0	1	2	3	0	6	63
Hourly Total	0	4	52	9	0	65	0	3	11	3	0	17	0	13	109	14	0	136	0	7	11	12	0	30	248
8:00 PM	0	0	8	0	0	8	0	0	4	0	0	4	0	5	23	2	0	30	0	5	3	2	0	10	52
8:15 PM	0	0	4	0	0	4	0	2	1	0	0	3	0	4	17	2	0	23	0	1	1	0	0	2	32
8:30 PM	0	0	5	0	0	5	0	1	5	0	0	6	0	4	13	1	0	18	0	1	2	0	0	3	32
8:45 PM	0	0	12	1	0	13	0	0	2	1	0	3	0	1	23	3	0	27	0	2	2	0	0	4	47
Hourly Total	0	0	29	1	0	30	0	3	12	1	0	16	0	14	76	8	0	98	0	9	8	2	0	19	163
9:00 PM	0	1	9	0	0	10	0	1	2	1	0	4	0	1	27	3	0	31	0	0	2	0	0	2	47
9:15 PM	0	0	6	0	0	6	0	0	1	1	0	2	0	2	16	3	0	21	0	2	2	0	0	4	33
9:30 PM	0	1	4	0	0	5	0	0	2	1	0	3	0	4	13	3	0	20	0	1	1	1	0	3	31
9:45 PM	0	0	6	0	0	6	0	1	0	2	0	3	0	3	11	3	0	17	0	2	2	3	0	7	33
Hourly Total	0	2	25	0	0	27	0	2	5	5	0	12	0	10	67	12	0	89	0	5	7	4	0	16	144
10:00 PM	0	1	5	1	0	7	0	3	3	1	0	7	0	4	13	2	0	19	0	0	1	1	0	2	35
10:15 PM	0	0	6	1	0	7	0	0	0	0	0	0	0	0	3	0	0	3	0	3	2	0	0	5	15
10:30 PM	0	1	7	0	0	8	0	0	0	0	0	0	0	3	10	0	0	13	0	0	0	0	0	0	21
10:45 PM	0	0	1	0	0	1	0	2	0	0	0	2	0	0	10	0	0	10	0	2	2	0	0	4	17
Hourly Total	0	2	19	2	0	23	0	5	3	1	0	9	0	7	36	2	0	45	0	5	5	1	0	11	88
11:00 PM	0	0	3	0	0	3	0	2	0	0	0	2	0	2	8	1	0	11	0	0	0	1	0	1	17
11:15 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	10	2	0	12	0	1	1	2	0	4	19
11:30 PM	0	0	3	1	0	4	0	0	1	0	0	1	0	1	3	0	0	4	0	0	2	0	0	2	11
11:45 PM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
Hourly Total	0	0	11	1	0	12	0	2	1	0	0	3	0	3	23	3	0	29	0	1	3	3	0	7	51
DAILY TOTAL	1	53	1950	184	0	2188	0	191	287	38	0	516	1	391	2032	262	0	2686	0	151	302	305	0	758	6148
Cars	1	52	1927	183	0	2163	0	188	284	38	0	510	1	387	2006	257	0	2651	0	149	298	304	0	751	6075
Heavy Vehicles	0	1	23	1	0	25	0	3	3	0	0	6	0	4	26	5	0	35	0	2	4	1	0	7	73
Heavy Vehicle %	0.00%	1.89%	1.18%	0.54%	0.00%	1.14%	0.00%	1.57%	1.05%	0.00%	0.00%	1.16%	0.00%	1.02%	1.28%	1.91%	0.00%	1.30%	0.00%	1.32%	1.32%	0.33%	0.00%	0.92%	1.19%

TMC 2357 - CSAH 78 @ CSAH 58

Andover MN

Thursday, December 21, 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	
7:00 AM	0	1	45	3	0	49	0	8	1	3	0	12	0	0	10	1	0	11	0	4	7	4	0	15	
7:15 AM	0	1	63	7	0	71	0	5	0	1	0	6	0	4	23	1	0	28	0	3	2	5	0	10	
7:30 AM	0	1	58	3	0	62	0	3	3	0	0	6	0	4	19	1	0	24	0	1	7	5	0	13	
7:45 AM	0	0	45	10	0	55	0	1	5	1	0	7	0	6	19	3	0	28	0	0	4	1	0	5	
Peak Hour Total	0	3	211	23	0	237	0	17	9	5	0	31	0	14	71	6	0	91	0	8	20	15	0	43	
PHF	0.000	0.750	0.837	0.575	0.000	0.835	0.000	0.531	0.450	0.417	0.000	0.646	0.000	0.583	0.772	0.500	0.000	0.813	0.000	0.500	0.714	0.750	0.000	0.717	

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	
3:45 PM	0	0	41	11	0	52	0	2	11	2	0	15	0	7	75	8	0	90	0	3	8	6	0	17	
4:00 PM	0	3	37	3	0	43	0	3	13	0	0	16	0	20	76	9	0	105	0	10	13	10	0	33	
4:15 PM	0	1	39	9	0	49	0	1	6	0	0	7	0	19	68	10	0	97	0	4	4	22	0	30	
4:30 PM	0	0	40	2	0	42	0	2	6	0	0	8	1	15	50	12	0	78	0	3	10	4	0	17	
Peak Hour Total	0	4	157	25	0	186	0	8	36	2	0	46	1	61	269	39	0	370	0	20	35	42	0	97	
PHF	0.000	0.333	0.957	0.568	0.000	0.894	0.000	0.667	0.692	0.250	0.000	0.719	0.250	0.763	0.885	0.813	0.000	0.881	0.000	0.500	0.673	0.477	0.000	0.735	

Total Vehicles On Leg		4410	
Vehicles Entering Intersection	2188	Vehicles Exiting Intersection	2222
Southbound			
Cars	183	1927	52
Heavy	1	23	1
Total	184	1950	53



Total Vehicles on Leg 1620	Vehicles Entering Intersection 758	Eastbound	Cars	Heavy	Total
			0	0	0
			0	0	0
	149		2	151	
	298		4	302	
	Vehicles Exiting Intersection 862		304	1	305



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 516	Total Vehicles on Leg 1133
38	0	38			
284	3	287			
188	3	191			
0	0	0			
0	0	0		Vehicles Exiting Intersection 617	



Cars	0	1	387	2006	257
Heavy	0	0	4	26	5
Total	0	1	391	2032	262
Northbound					
Vehicles Entering Intersection	2686		Vehicles Exiting Intersection 2447		
Total Vehicles On Leg	5133				



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2357

Study Date : 12/29/2023

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 78

Number of Lanes : 1

Total Approach Volume: 2,686

Southbound: CSAH 78

Number of Lanes : 1

Total Approach Volume: 2,188

Minor Street Approaches

Eastbound: CSAH 58

Number of Lanes : 1

Total Approach Volume: 758

Westbound: CR 58

Number of Lanes : 1

Total Approach Volume: 516

Warrant Summary (Rural 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 1 hours, 8 are needed

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

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

Required 1B volumes reached for 3 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 2357

Study Date : 12/29/2023

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 0 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 = **350**
 Veh/Hr Minor = **105**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:30 - 16:30	381	+	177	=	558	91	44	No
15:45 - 16:45	370	+	186	=	556	97	46	No
16:00 - 17:00	369	+	177	=	546	97	53	No
16:15 - 17:15	349	+	175	=	524	80	45	No
15:15 - 16:15	350	+	171	=	521	86	50	No
16:30 - 17:30	324	+	170	=	494	72	58	No
15:00 - 16:00	319	+	159	=	478	64	54	No
16:45 - 17:45	307	+	162	=	469	61	60	No
14:45 - 15:45	297	+	143	=	440	58	45	No
17:00 - 18:00	279	+	144	=	423	53	43	No
14:30 - 15:30	262	+	143	=	405	59	49	No
17:15 - 18:15	250	+	121	=	371	45	41	No
14:15 - 15:15	242	+	127	=	369	46	39	No
14:00 - 15:00	215	+	119	=	334	50	28	No
17:30 - 18:30	229	+	102	=	331	29	31	No
07:00 - 08:00	91	+	237	=	328	43	31	No
07:15 - 08:15	98	+	218	=	316	45	32	No
06:45 - 07:45	86	+	229	=	315	48	29	No
13:45 - 14:45	194	+	113	=	307	52	30	No
17:45 - 18:45	209	+	89	=	298	31	26	No
06:30 - 07:30	70	+	225	=	295	45	29	No
07:30 - 08:30	94	+	200	=	294	48	32	No
13:30 - 14:30	174	+	111	=	285	52	26	No
11:00 - 12:00	147	+	136	=	283	42	23	No
10:45 - 11:45	144		136		280	41	29	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2357

Study Date : 12/29/2023

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 1 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 NB	+	Major SB	=		Minor EB	Minor WB	
15:30 - 16:30	381	+	177	=	558	91	44	Yes
15:15 - 16:15	350	+	171	=	521	86	50	No
16:30 - 17:30	324	+	170	=	494	72	58	No
15:00 - 16:00	319	+	159	=	478	64	54	No
16:45 - 17:45	307	+	162	=	469	61	60	No
14:45 - 15:45	297	+	143	=	440	58	45	No
17:00 - 18:00	279	+	144	=	423	53	43	No
14:30 - 15:30	262	+	143	=	405	59	49	No
17:15 - 18:15	250	+	121	=	371	45	41	No
14:15 - 15:15	242	+	127	=	369	46	39	No
14:00 - 15:00	215	+	119	=	334	50	28	No
17:30 - 18:30	229	+	102	=	331	29	31	No
07:00 - 08:00	91	+	237	=	328	43	31	No
07:15 - 08:15	98	+	218	=	316	45	32	No
06:45 - 07:45	86	+	229	=	315	48	29	No
13:45 - 14:45	194	+	113	=	307	52	30	No
17:45 - 18:45	209	+	89	=	298	31	26	No
06:30 - 07:30	70	+	225	=	295	45	29	No
07:30 - 08:30	94	+	200	=	294	48	32	No
13:30 - 14:30	174	+	111	=	285	52	26	No
11:00 - 12:00	147	+	136	=	283	42	23	No
10:45 - 11:45	144	+	136	=	280	41	29	No
12:00 - 13:00	143	+	134	=	277	50	34	No
12:15 - 13:15	142	+	135	=	277	48	31	No
07:45 - 08:45	94		181		275	40	31	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2357

Study Date : 12/29/2023

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

Only 1 hours meet 1A minimums.
Only 3 hours meet 1B 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
Warrant 1A 1B
Veh/Hr Major = **280 420**

Veh/Hr Minor = **84 42**

Major Road CSAH 78

Minor Road CSAH 58

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:15 - 16:15	350	+	171	=	521	86	50	Yes
16:15 - 17:15	349	+	175	=	524	80	45	No
16:30 - 17:30	324	+	170	=	494	72	58	No
15:00 - 16:00	319	+	159	=	478	64	54	No
16:45 - 17:45	307	+	162	=	469	61	60	No
14:45 - 15:45	297	+	143	=	440	58	45	No
17:00 - 18:00	279	+	144	=	423	53	43	No
14:30 - 15:30	262	+	143	=	405	59	49	No
17:15 - 18:15	250	+	121	=	371	45	41	No
14:15 - 15:15	242	+	127	=	369	46	39	No
14:00 - 15:00	215	+	119	=	334	50	28	No
17:30 - 18:30	229	+	102	=	331	29	31	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:45 - 16:45	370	+	186	=	556	97	46	Yes
16:45 - 17:45	307	+	162	=	469	61	60	Yes
14:45 - 15:45	297	+	143	=	440	58	45	Yes
14:30 - 15:30	262	+	143	=	405	59	49	No
14:15 - 15:15	242	+	127	=	369	46	39	No
14:00 - 15:00	215	+	119	=	334	50	28	No
07:00 - 08:00	91	+	237	=	328	43	31	No
07:15 - 08:15	98	+	218	=	316	45	32	No
06:45 - 07:45	86	+	229	=	315	48	29	No
13:45 - 14:45	194	+	113	=	307	52	30	No
17:45 - 18:45	209	+	89	=	298	31	26	No
06:30 - 07:30	70	+	225	=	295	45	29	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2357

Study Date : 12/29/2023

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.

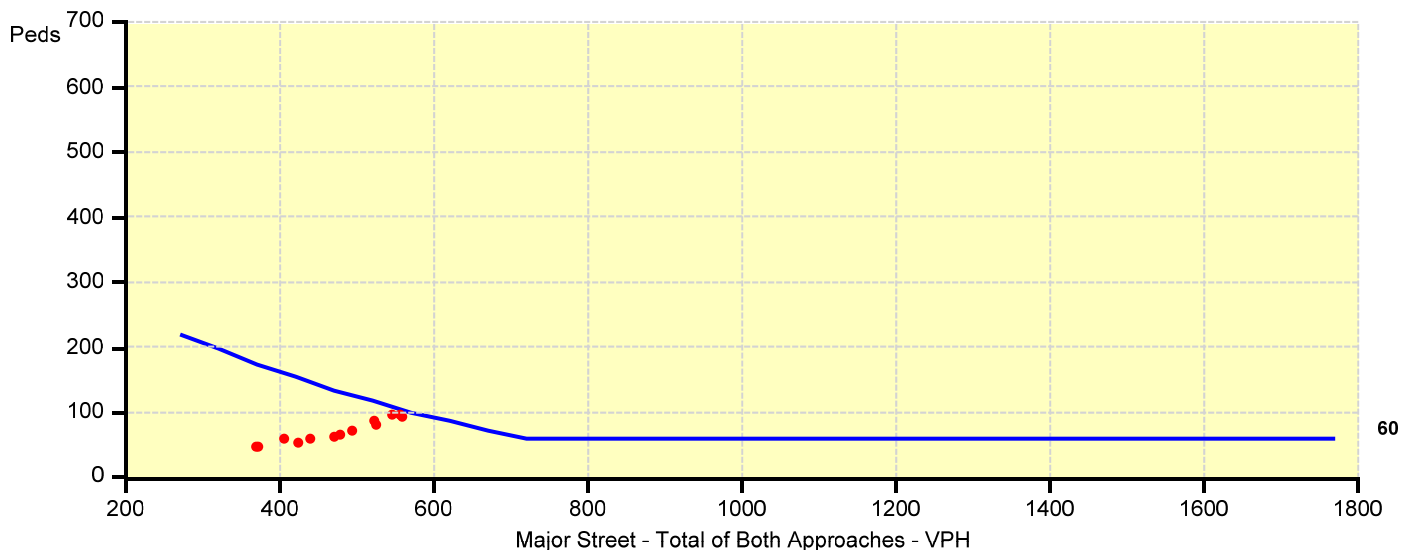
Summary

Only 0 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**

Time	Major Road CSAH 78				Total	Minor Road CSAH 58		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:30 - 16:30	381	+	177	=	558	91	44	No
15:45 - 16:45	370	+	186	=	556	97	46	No
16:00 - 17:00	369	+	177	=	546	97	53	No
16:15 - 17:15	349	+	175	=	524	80	45	No
15:15 - 16:15	350	+	171	=	521	86	50	No
16:30 - 17:30	324	+	170	=	494	72	58	No
15:00 - 16:00	319	+	159	=	478	64	54	No
16:45 - 17:45	307	+	162	=	469	61	60	No
14:45 - 15:45	297	+	143	=	440	58	45	No
17:00 - 18:00	279	+	144	=	423	53	43	No
14:30 - 15:30	262	+	143	=	405	59	49	No
17:15 - 18:15	250	+	121	=	371	45	41	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2357

Study Date : 12/29/2023

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 = **True**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 78				Total	Minor Road CSAH 58		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:30 - 16:30	381	+	177	=	558	91	44	No
15:45 - 16:45	370	+	186	=	556	97	46	No
16:00 - 17:00	369	+	177	=	546	97	53	No
16:15 - 17:15	349	+	175	=	524	80	45	No
15:15 - 16:15	350	+	171	=	521	86	50	No
16:30 - 17:30	324	+	170	=	494	72	58	No
15:00 - 16:00	319	+	159	=	478	64	54	No
16:45 - 17:45	307	+	162	=	469	61	60	No
14:45 - 15:45	297	+	143	=	440	58	45	No
17:00 - 18:00	279	+	144	=	423	53	43	No
14:30 - 15:30	262	+	143	=	405	59	49	No
17:15 - 18:15	250	+	121	=	371	45	41	No

