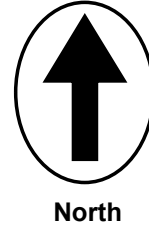


Date : 10/12/22

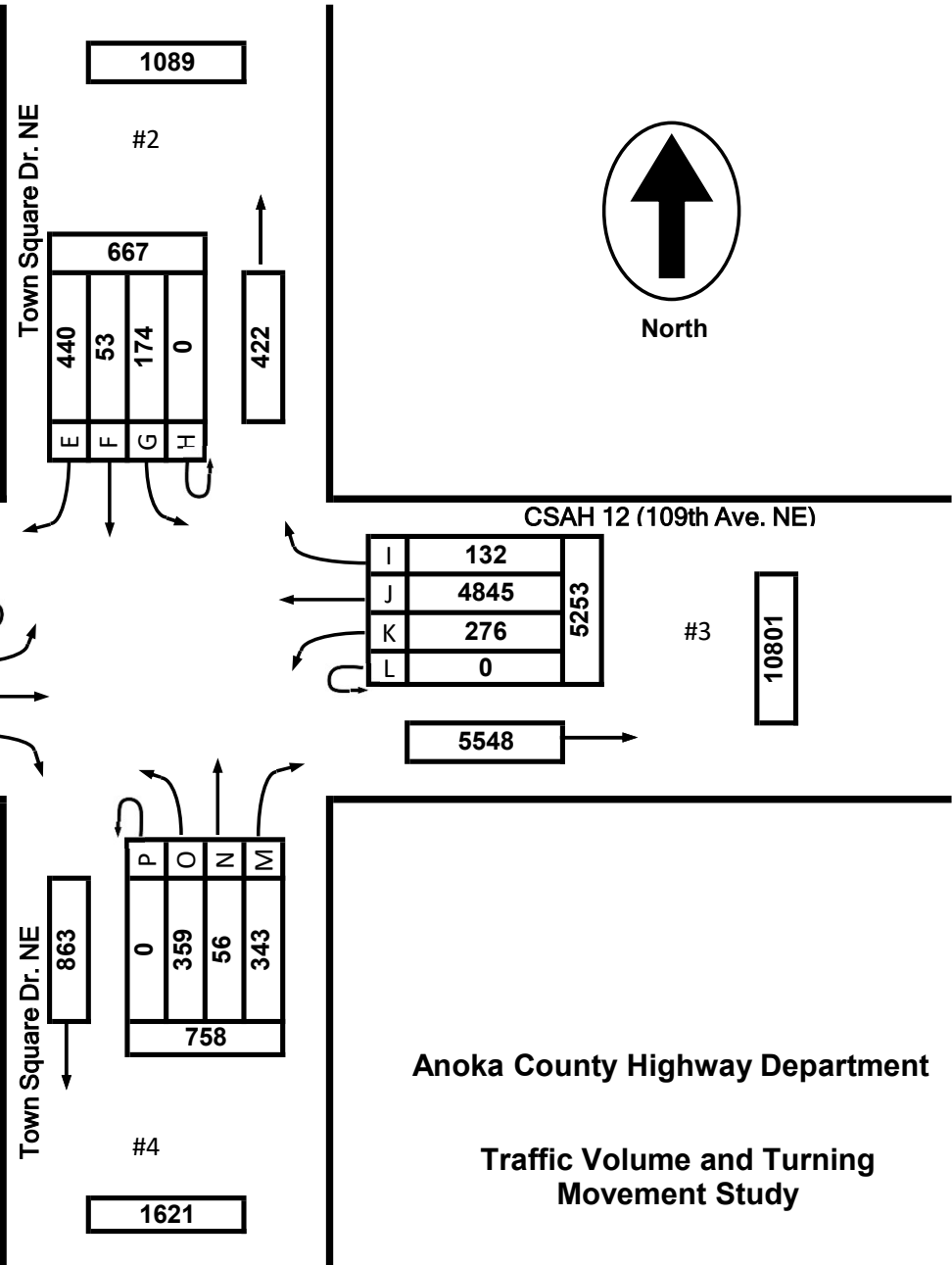
Count Number : TMC 2265

Location : CSAH 12 (109th Ave. NE)
@ Town Square Dr. NE

Collection Period : 24 HR



North



CSAH 12 (109th Ave. NE)

Town Square Dr. NE

CSAH 12 (109th Ave. NE)

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

Anoka County Highway Department

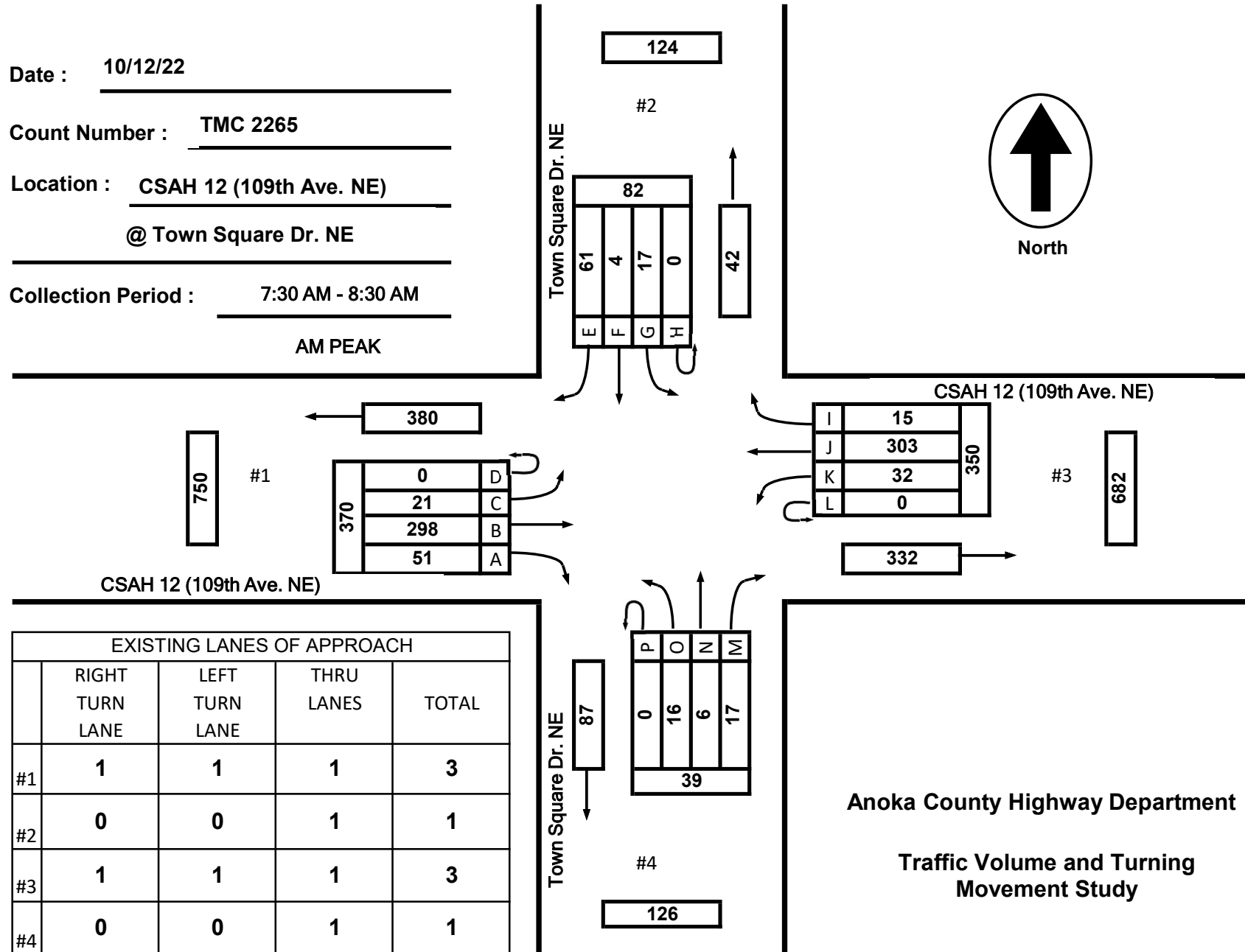
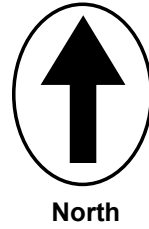
Traffic Volume and Turning Movement Study

Date : 10/12/22

Count Number : TMC 2265

Location : CSAH 12 (109th Ave. NE)
@ Town Square Dr. NE

Collection Period : 7:30 AM - 8:30 AM
AM PEAK



CSAH 12 (109th Ave. NE)

Town Square Dr. NE

CSAH 12 (109th Ave. NE)

Town Square Dr. NE

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

Anoka County Highway Department

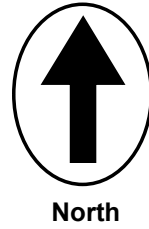
Traffic Volume and Turning Movement Study

Date : 10/12/22

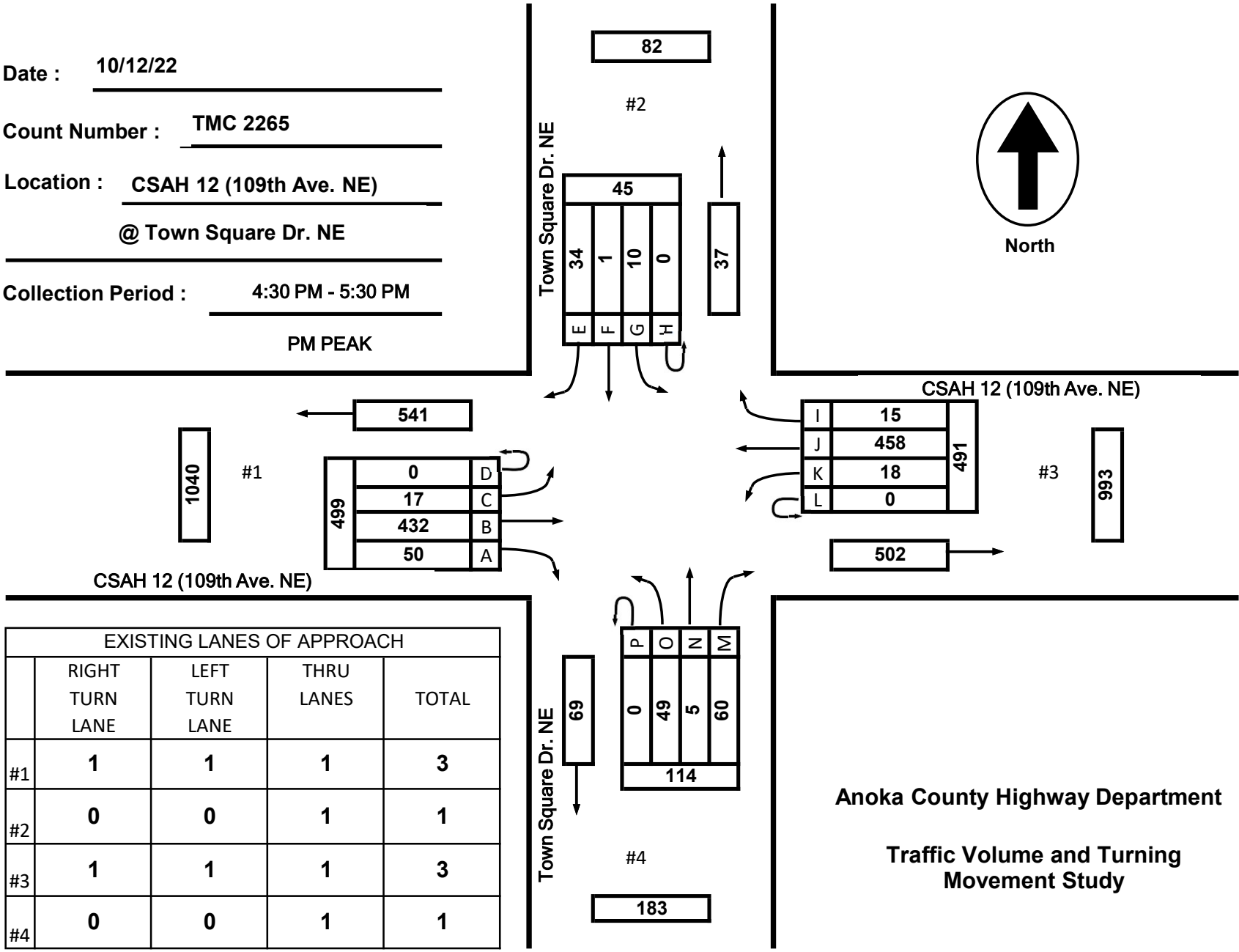
Count Number : TMC 2265

Location : CSAH 12 (109th Ave. NE)
@ Town Square Dr. NE

Collection Period : 4:30 PM - 5:30 PM
PM PEAK



North



CSAH 12 (109th Ave. NE)

Town Square Dr. NE

CSAH 12 (109th Ave. NE)

Town Square Dr. NE

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

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

**CSAH 12 @ Town Square Dr
Blaine MN
Wednesday, October 12, 2022**

Time	Southbound Town Square Dr NE						Westbound CSAH 12						Northbound Town Square Dr NE						Eastbound CSAH 12						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	0	0	0	0	0	0	3	0	0	3	0	1	0	0	0	1	0	0	8	0	0	8	12
12:15 AM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	2	0	0	2	8
12:30 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	1	0	0	0	1	0	0	1	0	0	1	5
12:45 AM	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	4
Hourly Total	0	0	0	0	0	0	0	1	14	0	0	15	0	2	0	0	0	2	0	0	12	0	0	12	29
1:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
1:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	5
1:30 AM	0	0	0	0	0	0	0	0	9	0	0	9	0	1	0	0	0	1	0	0	7	0	0	7	17
1:45 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	1	0	1	4
Hourly Total	0	0	0	1	0	1	0	0	14	0	0	14	0	1	0	0	0	1	0	0	11	1	0	12	28
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	4	5
2:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	2	0	0	2	5
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4	1	0	5	6
2:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
Hourly Total	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	0	1	0	0	11	1	0	12	18
3:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
3:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
3:30 AM	0	0	0	0	0	0	0	0	6	0	0	6	0	1	0	0	0	1	0	0	4	0	0	4	11
3:45 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	8
Hourly Total	0	0	0	0	0	0	0	0	12	0	0	12	0	1	0	0	0	1	0	0	11	0	0	11	24
4:00 AM	0	0	1	1	0	2	0	0	4	0	0	4	0	0	1	0	0	1	0	1	3	0	0	4	11
4:15 AM	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	0	5	0	0	5	11
4:30 AM	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	11	0	0	11	18
4:45 AM	0	0	0	0	0	0	0	0	7	0	0	7	0	1	0	0	0	1	0	0	14	1	0	15	23
Hourly Total	0	0	1	1	0	2	0	0	23	1	0	24	0	1	1	0	0	2	0	1	33	1	0	35	63
5:00 AM	0	3	0	3	0	6	0	0	4	2	0	6	0	1	0	0	0	1	0	4	7	1	0	12	25
5:15 AM	0	0	0	6	0	6	0	1	14	2	0	17	0	0	0	0	0	0	0	0	13	3	0	16	39
5:30 AM	0	1	2	3	0	6	0	2	13	1	0	16	0	1	0	0	0	1	0	1	24	6	0	31	54
5:45 AM	0	1	2	8	0	11	0	3	24	2	0	29	0	3	1	1	0	5	0	0	18	4	0	22	67
Hourly Total	0	5	4	20	0	29	0	6	55	7	0	68	0	5	1	1	0	7	0	5	62	14	0	81	185
6:00 AM	0	3	0	11	0	14	0	2	23	2	0	27	0	0	1	1	0	2	0	1	24	4	0	29	72
6:15 AM	0	6	2	11	0	19	0	4	38	1	0	43	0	2	0	0	0	2	0	4	41	0	0	45	109
6:30 AM	0	2	0	13	0	15	0	2	49	0	0	51	0	1	1	0	0	2	0	2	64	2	0	68	136
6:45 AM	0	2	0	10	0	12	0	7	64	6	0	77	0	2	2	0	0	4	0	2	72	5	0	79	172
Hourly Total	0	13	2	45	0	60	0	15	174	9	0	198	0	5	4	1	0	10	0	9	201	11	0	221	489
7:00 AM	0	9	1	12	0	22	0	8	56	1	0	65	0	2	2	0	0	4	0	1	44	2	0	47	138
7:15 AM	0	4	2	12	0	18	0	7	67	4	0	78	0	1	1	4	0	6	0	5	47	9	0	61	163
7:30 AM	0	4	1	15	0	20	0	8	78	3	0	89	0	7	0	3	0	10	0	2	73	7	0	82	201
7:45 AM	0	7	1	14	0	22	0	12	95	5	0	112	0	3	4	4	0	11	0	6	82	23	0	111	256
Hourly Total	0	24	5	53	0	82	0	35	296	13	0	344	0	13	7	11	0	31	0	14	246	41	0	301	758

**CSAH 12 @ Town Square Dr
Blaine MN
Wednesday, October 12, 2022**

Time	Southbound Town Square Dr NE						Westbound CSAH 12						Northbound Town Square Dr NE						Eastbound CSAH 12						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	3	0	14	0	17	0	9	77	4	0	90	0	3	2	5	0	10	0	7	69	10	0	86	203
8:15 AM	0	3	2	18	0	23	0	3	53	3	0	59	0	3	0	5	0	8	0	6	74	11	0	91	181
8:30 AM	0	5	0	5	0	10	0	6	58	2	0	66	0	5	1	4	0	10	0	7	65	7	0	79	165
8:45 AM	0	1	1	7	0	9	0	8	61	3	0	72	0	4	1	5	0	10	0	5	70	9	0	84	175
Hourly Total	0	12	3	44	0	59	0	26	249	12	0	287	0	15	4	19	0	38	0	25	278	37	0	340	724
9:00 AM	0	4	1	8	0	13	0	0	73	0	0	73	0	3	2	3	0	8	0	3	67	6	0	76	170
9:15 AM	0	4	3	6	0	13	0	6	67	3	0	76	0	4	1	3	0	8	0	4	72	9	0	85	182
9:30 AM	0	2	1	7	0	10	0	6	68	0	0	74	0	4	0	4	0	8	0	2	68	11	0	81	173
9:45 AM	0	5	0	8	0	13	0	6	73	2	0	81	0	8	0	6	0	14	0	2	63	10	0	75	183
Hourly Total	0	15	5	29	0	49	0	18	281	5	0	304	0	19	3	16	0	38	0	11	270	36	0	317	708
10:00 AM	0	1	2	8	0	11	0	4	62	2	0	68	0	9	1	6	0	16	0	1	51	8	0	60	155
10:15 AM	0	2	2	7	0	11	0	10	64	3	0	77	0	6	3	3	0	12	0	2	49	10	0	61	161
10:30 AM	0	2	0	3	0	5	0	4	57	0	0	61	0	2	0	11	0	13	0	2	57	10	0	69	148
10:45 AM	0	2	3	5	0	10	0	3	75	0	0	78	0	9	1	5	0	15	0	5	59	11	0	75	178
Hourly Total	0	7	7	23	0	37	0	21	258	5	0	284	0	26	5	25	0	56	0	10	216	39	0	265	642
11:00 AM	0	2	3	6	0	11	0	2	64	3	0	69	0	8	4	5	0	17	0	3	79	9	0	91	188
11:15 AM	0	4	1	6	0	11	0	3	91	3	0	97	0	8	2	3	0	13	0	2	87	9	0	98	219
11:30 AM	0	5	3	2	0	10	0	5	80	0	0	85	0	9	3	5	0	17	0	1	78	10	0	89	201
11:45 AM	0	2	0	11	0	13	0	2	79	1	0	82	0	10	1	6	0	17	0	1	95	14	0	110	222
Hourly Total	0	13	7	25	0	45	0	12	314	7	0	333	0	35	10	19	0	64	0	7	339	42	0	388	830
12:00 PM	0	2	2	9	0	13	0	9	83	0	0	92	0	5	0	11	0	16	0	8	73	9	0	90	211
12:15 PM	0	3	1	2	0	6	0	6	81	1	0	88	0	7	1	5	0	13	0	2	76	17	0	95	202
12:30 PM	0	2	0	7	0	9	0	4	85	1	0	90	0	11	1	8	0	20	0	3	82	4	0	89	208
12:45 PM	0	3	1	7	0	11	0	8	84	2	0	94	0	7	3	6	0	16	0	6	94	16	0	116	237
Hourly Total	0	10	4	25	0	39	0	27	333	4	0	364	0	30	5	30	0	65	0	19	325	46	0	390	858
1:00 PM	0	2	1	2	0	5	0	3	62	1	0	66	0	5	0	10	0	15	0	4	66	13	0	83	169
1:15 PM	0	2	1	3	0	6	0	1	103	1	0	105	0	4	1	10	0	15	0	6	82	9	0	97	223
1:30 PM	0	4	0	6	0	10	0	6	78	1	0	85	0	8	0	8	0	16	0	8	80	10	0	98	209
1:45 PM	0	3	1	8	0	12	0	8	59	0	0	67	0	2	0	4	0	6	0	6	74	10	0	90	175
Hourly Total	0	11	3	19	0	33	0	18	302	3	0	323	0	19	1	32	0	52	0	24	302	42	0	368	776
2:00 PM	0	2	2	3	0	7	0	2	67	3	0	72	0	6	0	2	0	8	0	5	89	5	0	99	186
2:15 PM	0	2	1	6	0	9	0	6	59	2	0	67	0	4	0	3	0	7	1	4	95	9	0	109	192
2:30 PM	0	3	0	2	0	5	0	5	72	4	0	81	0	8	0	6	0	14	0	3	89	10	0	102	202
2:45 PM	0	3	0	10	0	13	0	6	84	1	0	91	0	6	2	9	0	17	0	8	98	16	0	122	243
Hourly Total	0	10	3	21	0	34	0	19	282	10	0	311	0	24	2	20	0	46	1	20	371	40	0	432	823
3:00 PM	0	5	0	6	0	11	0	3	108	3	0	114	0	9	2	6	0	17	0	2	88	11	0	101	243
3:15 PM	0	5	0	4	0	9	0	5	113	2	0	120	0	5	1	12	0	18	0	4	108	10	0	122	269
3:30 PM	0	7	1	12	0	20	0	4	135	3	0	142	0	5	0	6	0	11	0	4	100	9	0	113	286
3:45 PM	0	1	0	6	0	7	0	5	85	5	0	95	0	2	0	8	0	10	0	8	103	3	0	114	226
Hourly Total	0	18	1	28	0	47	0	17	441	13	0	471	0	21	3	32	0	56	0	18	399	33	0	450	1024

**CSAH 12 @ Town Square Dr
Blaine MN
Wednesday, October 12, 2022**

Time	Southbound Town Square Dr NE						Westbound CSAH 12						Northbound Town Square Dr NE						Eastbound CSAH 12						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehcle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehcle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehcle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehcle Approach Total</i>	
4:00 PM	0	1	1	8	0	10	0	6	90	2	0	98	0	8	1	9	0	18	0	3	86	11	0	100	226
4:15 PM	0	2	1	7	0	10	0	1	95	4	0	100	0	10	0	11	0	21	0	7	110	11	0	128	259
4:30 PM	0	4	0	5	0	9	0	1	113	2	0	116	0	24	1	17	0	42	0	1	102	15	0	118	285
4:45 PM	0	4	0	7	0	11	0	7	107	5	0	119	0	11	2	15	0	28	0	5	121	12	0	138	296
Hourly Total	0	11	2	27	0	40	0	15	405	13	0	433	0	53	4	52	0	109	0	16	419	49	0	484	1066
5:00 PM	0	1	0	13	0	14	0	7	116	4	0	127	0	9	1	17	0	27	0	5	104	10	0	119	287
5:15 PM	0	1	1	9	0	11	0	3	122	4	0	129	0	5	1	11	0	17	0	6	105	13	0	124	281
5:30 PM	0	2	1	7	0	10	0	7	101	5	0	113	0	8	0	5	0	13	0	4	101	12	0	117	253
5:45 PM	0	2	1	2	0	5	0	1	93	3	0	97	0	7	2	4	0	13	1	6	90	8	0	105	220
Hourly Total	0	6	3	31	0	40	0	18	432	16	0	466	0	29	4	37	0	70	1	21	400	43	0	465	1041
6:00 PM	0	3	0	3	0	6	0	3	80	2	0	85	0	14	1	6	0	21	0	3	95	4	0	102	214
6:15 PM	0	3	1	4	0	8	0	2	99	1	0	102	0	8	0	6	0	14	0	3	103	4	0	110	234
6:30 PM	0	0	0	3	0	3	0	2	93	1	0	96	0	2	0	4	0	6	0	7	96	5	0	108	213
6:45 PM	0	1	0	5	0	6	0	3	86	1	0	90	0	3	1	3	0	7	0	2	74	5	0	81	184
Hourly Total	0	7	1	15	0	23	0	10	358	5	0	373	0	27	2	19	0	48	0	15	368	18	0	401	845
7:00 PM	0	2	0	1	0	3	0	0	63	1	0	64	0	3	0	2	0	5	0	3	71	2	0	76	148
7:15 PM	0	0	0	5	0	5	0	5	55	1	0	61	0	2	0	2	0	4	0	4	71	7	0	82	152
7:30 PM	0	2	0	5	0	7	0	2	67	0	0	69	0	8	0	6	0	14	0	3	74	5	0	82	172
7:45 PM	0	1	0	2	0	3	0	2	36	0	0	38	0	1	0	0	0	1	0	1	57	2	0	60	102
Hourly Total	0	5	0	13	0	18	0	9	221	2	0	232	0	14	0	10	0	24	0	11	273	16	0	300	574
8:00 PM	0	1	1	1	0	3	0	1	39	0	0	40	0	5	0	2	0	7	0	1	80	2	0	83	133
8:15 PM	0	1	0	1	0	2	0	1	39	1	0	41	0	1	0	2	0	3	0	1	50	3	0	54	100
8:30 PM	0	1	1	3	0	5	0	1	56	1	0	58	0	1	0	3	0	4	0	1	46	0	0	47	114
8:45 PM	0	0	0	2	0	2	0	1	34	1	0	36	0	0	0	1	0	1	0	1	54	1	0	56	95
Hourly Total	0	3	2	7	0	12	0	4	168	3	0	175	0	7	0	8	0	15	0	4	230	6	0	240	442
9:00 PM	0	1	0	2	0	3	0	1	40	0	0	41	0	0	0	1	0	1	0	0	37	3	0	40	85
9:15 PM	0	0	0	2	0	2	0	1	27	0	0	28	0	2	0	2	0	4	0	0	36	1	0	37	71
9:30 PM	0	1	0	3	0	4	0	1	20	1	0	22	0	2	0	0	0	2	0	2	42	1	0	45	73
9:45 PM	0	0	0	2	0	2	0	0	12	0	0	12	0	0	0	1	0	1	0	0	26	3	0	29	44
Hourly Total	0	2	0	9	0	11	0	3	99	1	0	103	0	4	0	4	0	8	0	2	141	8	0	151	273
10:00 PM	0	1	0	0	0	1	0	1	23	1	0	25	0	1	0	3	0	4	0	1	18	4	0	23	53
10:15 PM	0	0	0	0	0	0	0	0	15	1	0	16	0	3	0	2	0	5	0	0	16	2	0	18	39
10:30 PM	0	0	0	0	0	0	0	1	17	0	0	18	0	0	0	0	0	0	0	0	23	1	0	24	42
10:45 PM	0	0	0	0	0	0	0	0	9	0	0	9	0	1	0	0	0	1	0	0	16	1	0	17	27
Hourly Total	0	1	0	0	0	1	0	2	64	2	0	68	0	5	0	5	0	10	0	1	73	8	0	82	161
11:00 PM	0	1	0	2	0	3	0	0	19	1	0	20	0	2	0	1	0	3	0	1	10	1	0	12	38
11:15 PM	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	12	0	0	12	20
11:30 PM	0	0	0	2	0	2	0	0	16	0	0	16	0	0	0	1	0	1	0	0	9	1	0	10	29
11:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	9	0	0	9	11
Hourly Total	0	1	0	4	0	5	0	0	45	1	0	46	0	2	0	2	0	4	0	1	40	2	0	43	98
DAILY TOTAL	0	174	53	440	0	667	0	276	4845	132	0	5253	0	359	56	343	0	758	2	234	5031	534	0	5801	12479
Cars	0	171	51	433	0	655	0	273	4777	130	0	5180	0	352	53	343	0	748	2	228	4939	527	0	5696	12279
Heavy Vehicles	0	3	2	7	0	12	0	3	68	2	0	73	0	7	3	0	0	10	0	6	92	7	0	105	200
Heavy Vehicle %	0.00%	1.72%	3.77%	1.59%	0.00%	1.80%	0.00%	1.09%	1.40%	1.52%	0.00%	1.39%	0.00%	1.95%	5.36%	0.00%	0.00%	1.32%	0.00%	2.56%	1.83%	1.31%	0.00%	1.81%	1.60%

**CSAH 12 @ Town Square Dr
Blaine MN**

Wednesday, October 12, 2022

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	
7:30 AM	0	4	1	15	0	20	0	8	78	3	0	89	0	7	0	3	0	10	0	2	73	7	0	82	201
7:45 AM	0	7	1	14	0	22	0	12	95	5	0	112	0	3	4	4	0	11	0	6	82	23	0	111	256
8:00 AM	0	3	0	14	0	17	0	9	77	4	0	90	0	3	2	5	0	10	0	7	69	10	0	86	203
8:15 AM	0	3	2	18	0	23	0	3	53	3	0	59	0	3	0	5	0	8	0	6	74	11	0	91	181
Peak Hour Total PHF	0	17	4	61	0	82	0	32	303	15	0	350	0	16	6	17	0	39	0	21	298	51	0	370	841
	0.000	0.607	0.500	0.847	0.000	0.891	0.000	0.667	0.797	0.750	0.000	0.781	0.000	0.571	0.375	0.850	0.000	0.886	0.000	0.750	0.909	0.554	0.000	0.833	0.821

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	
4:30 PM	0	4	0	5	0	9	0	1	113	2	0	116	0	24	1	17	0	42	0	1	102	15	0	118	285
4:45 PM	0	4	0	7	0	11	0	7	107	5	0	119	0	11	2	15	0	28	0	5	121	12	0	138	296
5:00 PM	0	1	0	13	0	14	0	7	116	4	0	127	0	9	1	17	0	27	0	5	104	10	0	119	287
5:15 PM	0	1	1	9	0	11	0	3	122	4	0	129	0	5	1	11	0	17	0	6	105	13	0	124	281
Peak Hour Total PHF	0	10	1	34	0	45	0	18	458	15	0	491	0	49	5	60	0	114	0	17	432	50	0	499	1149
	0.000	0.625	0.250	0.654	0.000	0.804	0.000	0.643	0.939	0.750	0.000	0.952	0.000	0.510	0.625	0.882	0.000	0.679	0.000	0.708	0.893	0.833	0.000	0.904	0.970

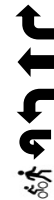
Total Vehicles On Leg		1089			
Vehicles Entering Intersection		667	Vehicles Exiting Intersection		422
Southbound					
Cars	433	51	171	0	0
Heavy	7	2	3	0	0
Total	440	53	174	0	0



Total Vehicles on Leg 11447	Vehicles Entering Intersection 5801	Eastbound	Cars	Heavy	Total	
			0	0	0	
			2	0	2	
			228	6	234	
	Vehicles Exiting Intersection 5646		4939	92	5031	
	527	7	534			

Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 5253	Total Vehicles on Leg 10801
130	2	132			
4777	68	4845			
273	3	276			
0	0	0			
0	0	0		Vehicles Exiting Intersection 5548	



Cars	0	0	352	53	343
Heavy	0	0	7	3	0
Total	0	0	359	56	343
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
758			863		
Total Vehicles On Leg			1621		

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2265 SWS

Study Date : 10/12/2022

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 12

Number of Lanes : 1

Total Approach Volume: 5,801

Westbound: CSAH 12

Number of Lanes : 1

Total Approach Volume: 5,253

Minor Street Approaches

Northbound: Town Square Dr. NE

Number of Lanes : 1

Total Approach Volume: 758

Southbound: Town Square Dr. NE

Number of Lanes : 1

Total Approach Volume: 667

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 1 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Satisfied

Required volumes reached for 10 hours, 8 are needed

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

Required 1A volumes reached for 2 hours, 8 are needed

Required 1B volumes reached for 12 hours, 8 are needed

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

Number of hours (7) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (3) 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 2265 SWS

Study Date : 10/12/2022

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 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 = **350**

Veh/Hr Minor = **105**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 12					Town Square Dr. NE		
16:00 - 17:00	484	+	433	=	917	109	40	Yes
17:00 - 18:00	465	+	466	=	931	70	40	No
14:45 - 15:45	458	+	467	=	925	63	53	No
15:00 - 16:00	450	+	471	=	921	56	47	No
15:15 - 16:15	449	+	455	=	904	57	46	No
15:30 - 16:30	455	+	435	=	890	60	47	No
17:15 - 18:15	448	+	424	=	872	64	32	No
15:45 - 16:45	460	+	409	=	869	91	36	No
14:30 - 15:30	447	+	406	=	853	66	38	No
17:30 - 18:30	434	+	397	=	831	61	29	No
17:45 - 18:45	425	+	380	=	805	54	22	No
14:15 - 15:15	434	+	353	=	787	55	38	No
18:00 - 19:00	401	+	373	=	774	48	23	No
12:00 - 13:00	390	+	364	=	754	65	39	No
12:45 - 13:45	394	+	350	=	744	62	32	No
14:00 - 15:00	432	+	311	=	743	46	34	No
11:15 - 12:15	387	+	356	=	743	63	47	No
12:30 - 13:30	385	+	355	=	740	66	31	No
11:45 - 12:45	384	+	352	=	736	66	41	No
11:30 - 12:30	384	+	347	=	731	63	42	No
18:15 - 19:15	375	+	352	=	727	32	20	No
11:00 - 12:00	388	+	333	=	721	64	45	No
12:15 - 13:15	383	+	338	=	721	64	31	No
07:30 - 08:30	370	+	350	=	720	39	82	No
13:15 - 14:15	384		329		713	45	35	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2265 SWS

Study Date : 10/12/2022

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

10 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 = **525**

Veh/Hr Minor = **52**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 12					Town Square Dr. NE		
16:15 - 17:15	503	+	462	=	965	118	44	Yes
15:15 - 16:15	449	+	455	=	904	57	46	Yes
17:15 - 18:15	448	+	424	=	872	64	32	Yes
14:15 - 15:15	434	+	353	=	787	55	38	Yes
12:45 - 13:45	394	+	350	=	744	62	32	Yes
11:45 - 12:45	384	+	352	=	736	66	41	Yes
07:30 - 08:30	370	+	350	=	720	39	82	Yes
10:45 - 11:45	353	+	329	=	682	62	42	Yes
09:45 - 10:45	265	+	287	=	552	55	40	Yes
06:30 - 07:30	255	+	271	=	526	16	67	Yes
14:00 - 15:00	432	+	311	=	743	46	34	No
18:15 - 19:15	375	+	352	=	727	32	20	No
13:45 - 14:45	400	+	287	=	687	35	33	No
18:30 - 19:30	347	+	311	=	658	22	17	No
08:45 - 09:45	326	+	295	=	621	34	45	No
09:00 - 10:00	317	+	304	=	621	38	49	No
08:30 - 09:30	324	+	287	=	611	36	45	No
18:45 - 19:45	321	+	284	=	605	30	21	No
09:15 - 10:15	301	+	299	=	600	46	47	No
09:30 - 10:30	277	+	300	=	577	50	45	No
19:00 - 20:00	300	+	232	=	532	24	18	No
19:15 - 20:15	307	+	208	=	515	26	18	No
06:15 - 07:15	239	+	236	=	475	12	68	No
19:30 - 20:30	279	+	188	=	467	25	15	No
19:45 - 20:45	244		177		421	15	13	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2265 SWS

Study Date : 10/12/2022

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 2 hours meet 1A minimums.
12 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 12

Minor Road

Town Square Dr. NE

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:45 - 17:45	498	+	488	=	986	85	46	Yes
15:45 - 16:45	460	+	409	=	869	91	36	Yes
14:45 - 15:45	458	+	467	=	925	63	53	No
15:00 - 16:00	450	+	471	=	921	56	47	No
15:15 - 16:15	449	+	455	=	904	57	46	No
15:30 - 16:30	455	+	435	=	890	60	47	No
14:30 - 15:30	447	+	406	=	853	66	38	No
17:45 - 18:45	425	+	380	=	805	54	22	No
14:15 - 15:15	434	+	353	=	787	55	38	No
18:00 - 19:00	401	+	373	=	774	48	23	No
12:00 - 13:00	390	+	364	=	754	65	39	No
12:45 - 13:45	394	+	350	=	744	62	32	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:15 - 17:15	503	+	462	=	965	118	44	Yes
15:15 - 16:15	449	+	455	=	904	57	46	Yes
17:15 - 18:15	448	+	424	=	872	64	32	Yes
14:15 - 15:15	434	+	353	=	787	55	38	Yes
11:15 - 12:15	387	+	356	=	743	63	47	Yes
12:15 - 13:15	383	+	338	=	721	64	31	Yes
13:15 - 14:15	384	+	329	=	713	45	35	Yes
07:15 - 08:15	340	+	369	=	709	37	77	Yes
09:15 - 10:15	301	+	299	=	600	46	47	Yes
08:15 - 09:15	330	+	270	=	600	36	55	Yes
10:15 - 11:15	296	+	285	=	581	57	37	Yes
06:15 - 07:15	239	+	236	=	475	12	68	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2265 SWS

Study Date : 10/12/2022

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.

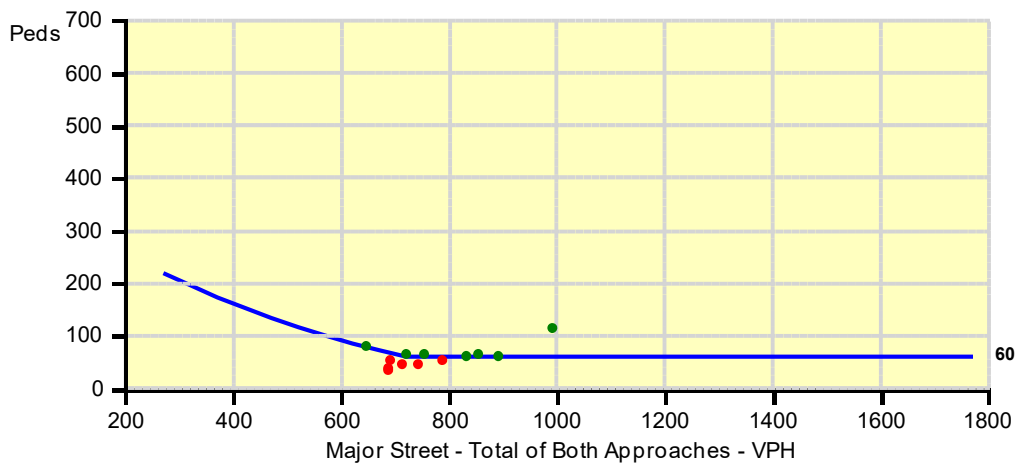
Summary

7 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 CSAH 12				=	Total	Minor Road Town Square Dr. NE		Met?
	Major EB	+	Major WB				Minor NB	Minor SB	
16:30 - 17:30	499	+	491	=	990	114	45	Yes	
15:30 - 16:30	455	+	435	=	890	60	47	Yes	
14:30 - 15:30	447	+	406	=	853	66	38	Yes	
17:30 - 18:30	434	+	397	=	831	61	29	Yes	
12:00 - 13:00	390	+	364	=	754	65	39	Yes	
11:00 - 12:00	388	+	333	=	721	64	45	Yes	
07:00 - 08:00	301	+	344	=	645	31	82	Yes	
14:15 - 15:15	434	+	353	=	787	55	38	No	
14:00 - 15:00	432	+	311	=	743	46	34	No	
13:15 - 14:15	384	+	329	=	713	45	35	No	
13:00 - 14:00	368	+	323	=	691	52	33	No	



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2265 SWS

Study Date : 10/12/2022

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

3 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 CSAH 12				=	Total	Minor Road Town Square Dr. NE		Met?
	Major EB	+	Major WB				Minor NB	Minor SB	
16:30 - 17:30	499	+	491	=	990	114	45	Yes	
16:15 - 17:15	503	+	462	=	965	118	44	Yes	
16:00 - 17:00	484	+	433	=	917	109	40	Yes	
16:45 - 17:45	498	+	488	=	986	85	46	No	
17:00 - 18:00	465	+	466	=	931	70	40	No	
14:45 - 15:45	458	+	467	=	925	63	53	No	
15:00 - 16:00	450	+	471	=	921	56	47	No	
15:15 - 16:15	449	+	455	=	904	57	46	No	
15:30 - 16:30	455	+	435	=	890	60	47	No	
17:15 - 18:15	448	+	424	=	872	64	32	No	
15:45 - 16:45	460	+	409	=	869	91	36	No	
							38	No	

