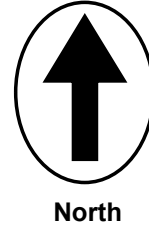


Date : 10/25/22

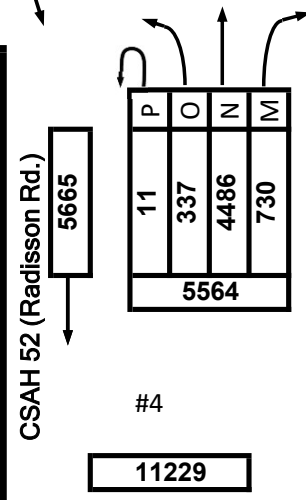
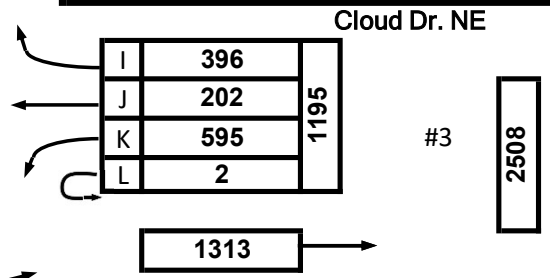
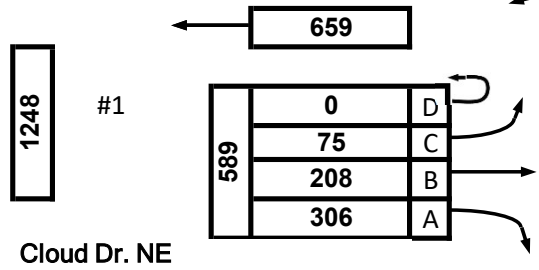
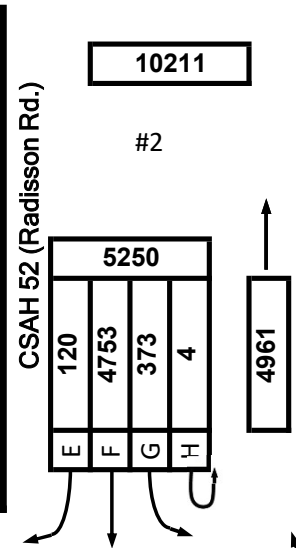
Count Number : TMC 2269

Location : CSAH 52 (Radisson Rd.)
@ Cloud Dr. NE

Collection Period : 24 HR



North



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

Anoka County Highway Department

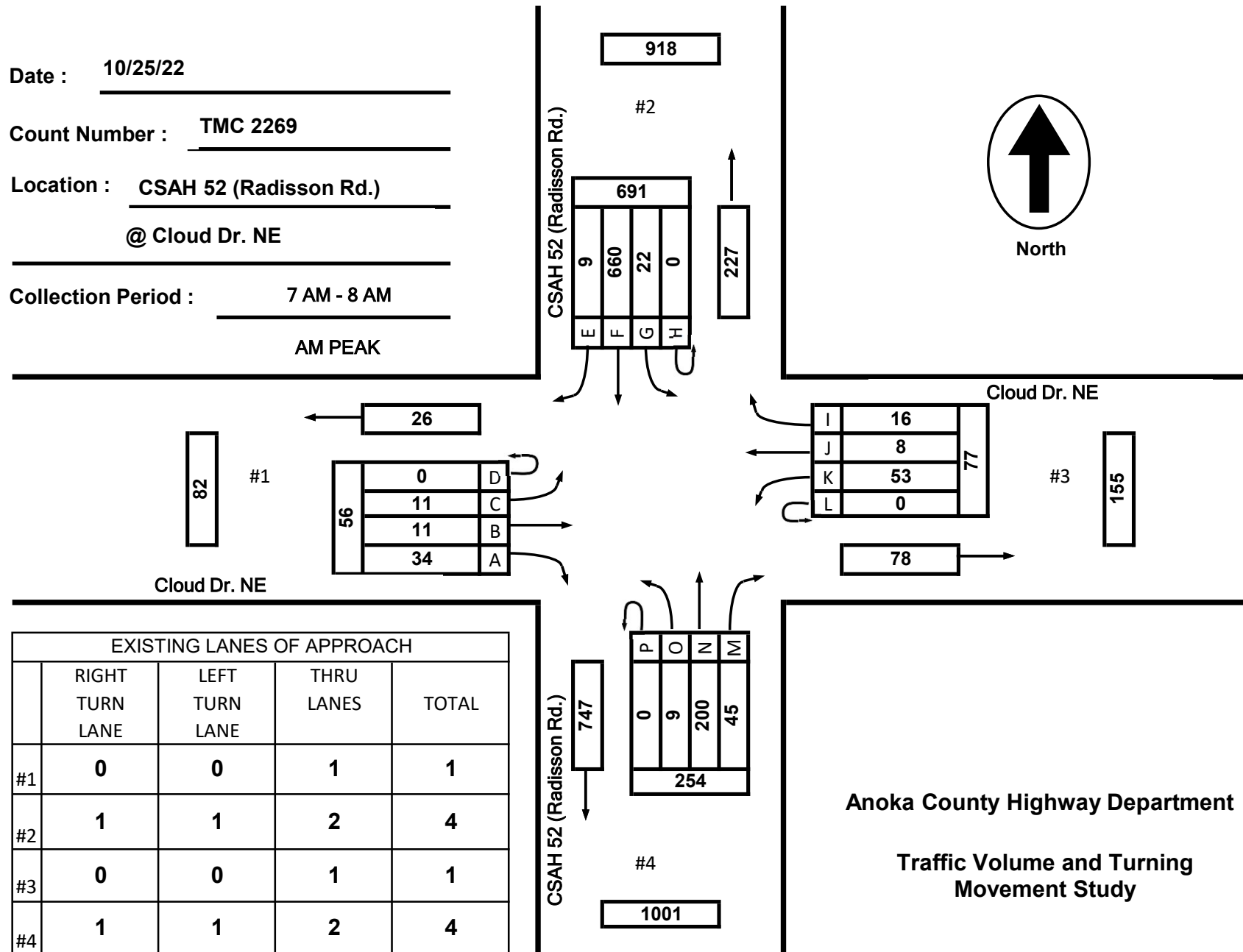
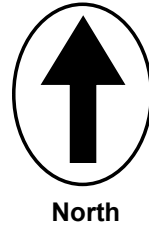
Traffic Volume and Turning Movement Study

Date : 10/25/22

Count Number : TMC 2269

Location : CSAH 52 (Radisson Rd.)
@ Cloud Dr. NE

Collection Period : 7 AM - 8 AM
AM PEAK



82

#1

26

56	0	D
	11	C
	11	B
	34	A

Cloud Dr. NE

CSAH 52 (Radisson Rd.)

918

#2

E	F	G	H	9	660	22	0	691
---	---	---	---	---	-----	----	---	-----

227

Cloud Dr. NE

I	16	77
J	8	
K	53	
L	0	

#3

155

78

CSAH 52 (Radisson Rd.)

747

P	O	N	M	254
0	9	200	45	

#4

1001

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

Anoka County Highway Department

Traffic Volume and Turning Movement Study

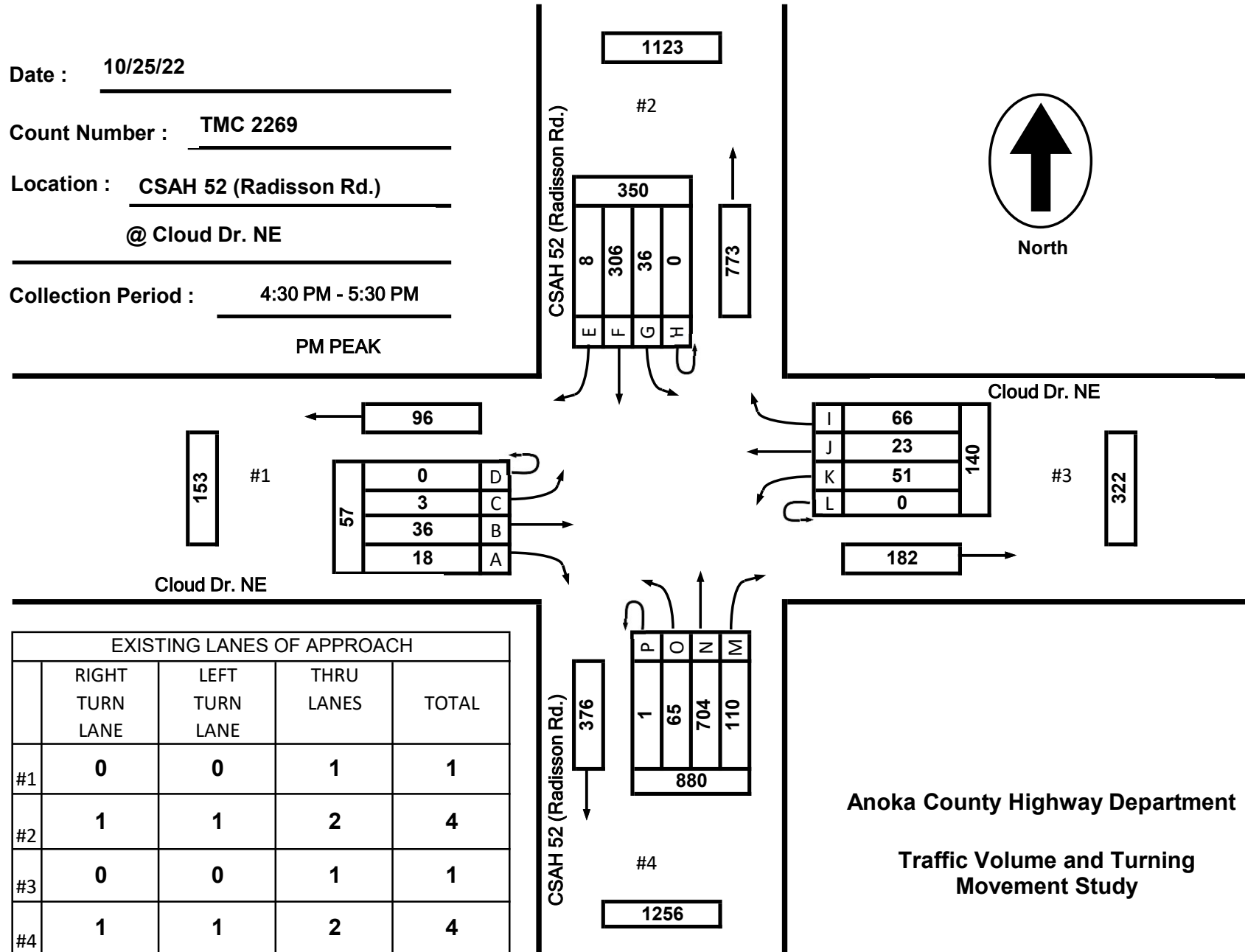
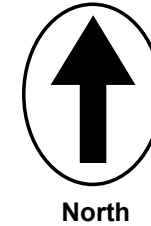
Date : 10/25/22

Count Number : TMC 2269

Location : CSAH 52 (Radisson Rd.)
@ Cloud Dr. NE

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

PM PEAK



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

Anoka County Highway Department

Traffic Volume and Turning Movement Study

**CSAH 52 @ Cloud Dr
Blaine MN
Tuesday, October 25, 2022**

Time	Southbound CSAH 52						Westbound Cloud Dr NE						Northbound CSAH 52						Eastbound Cloud Dr NE						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	0	0	2	0	0	0	0	0	0	0	1	6	0	0	7	0	1	0	0	0	1	10
12:15 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	2	5	0	0	7	0	0	0	0	0	0	11
12:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2
Hourly Total	0	0	7	0	0	7	0	0	0	0	0	0	0	3	14	0	0	17	0	1	0	0	0	1	25
1:00 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
1:15 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	1
1:30 AM	0	0	1	0	0	1	0	0	0	1	0	1	0	0	2	1	0	3	0	0	0	0	0	0	5
1:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
Hourly Total	0	0	4	0	0	4	0	0	0	1	0	1	0	0	4	1	0	5	0	0	0	0	0	0	10
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3
2:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
Hourly Total	0	0	4	0	0	4	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	11
3:00 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
3:15 AM	0	0	4	0	0	4	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	1	0	1	7
3:30 AM	0	1	6	0	0	7	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	9
3:45 AM	0	0	4	0	0	4	0	1	0	0	0	1	0	0	3	0	0	3	0	0	0	0	0	0	8
Hourly Total	0	1	16	0	0	17	0	2	1	0	0	3	0	0	4	1	0	5	0	0	0	2	0	2	27
4:00 AM	0	0	13	0	0	13	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	1	0	1	17
4:15 AM	0	0	16	0	0	16	0	1	0	0	0	1	0	0	2	0	0	2	0	0	0	2	0	2	21
4:30 AM	0	0	24	0	0	24	0	1	0	0	0	1	0	0	4	0	0	4	0	0	0	1	0	1	30
4:45 AM	0	0	25	0	0	25	0	0	0	1	0	1	0	0	5	1	0	6	0	0	1	1	0	2	34
Hourly Total	0	0	78	0	0	78	0	2	0	1	0	3	0	0	13	2	0	15	0	0	1	5	0	6	102
5:00 AM	0	0	32	0	0	32	0	0	0	0	0	0	0	0	11	1	0	12	0	0	0	2	0	2	46
5:15 AM	0	1	59	0	0	60	0	2	1	0	0	3	0	0	4	0	0	4	0	0	1	1	0	2	69
5:30 AM	0	1	75	0	0	76	0	3	0	0	0	3	0	0	15	2	0	17	0	0	0	9	0	9	105
5:45 AM	0	6	82	1	0	89	0	5	1	3	0	9	0	1	12	3	0	16	0	2	0	7	0	9	123
Hourly Total	0	8	248	1	0	257	0	10	2	3	0	15	0	1	42	6	0	49	0	2	1	19	0	22	343
6:00 AM	0	0	74	0	0	74	0	8	0	1	0	9	0	0	11	3	0	14	0	2	0	6	0	8	105
6:15 AM	0	3	101	1	0	105	0	9	0	1	0	10	0	1	14	3	0	18	0	1	1	14	0	16	149
6:30 AM	0	1	114	1	0	116	0	9	0	3	0	12	0	0	20	3	0	23	0	2	0	7	0	9	160
6:45 AM	0	4	161	3	0	168	0	12	1	4	0	17	0	1	29	5	0	35	0	3	2	8	0	13	233
Hourly Total	0	8	450	5	0	463	0	38	1	9	0	48	0	2	74	14	0	90	0	8	3	35	0	46	647
7:00 AM	0	3	136	1	0	140	0	11	2	3	0	16	0	1	55	9	0	65	0	1	2	7	0	10	231
7:15 AM	0	9	159	0	0	168	0	18	0	5	0	23	0	1	49	11	0	61	0	3	4	9	0	16	268
7:30 AM	0	4	193	3	0	200	0	12	3	3	0	18	0	3	51	8	0	62	0	5	3	8	0	16	296
7:45 AM	0	6	172	5	0	183	0	12	3	5	0	20	0	4	45	17	0	66	0	2	2	10	0	14	283
Hourly Total	0	22	660	9	0	691	0	53	8	16	0	77	0	9	200	45	0	254	0	11	11	34	0	56	1078

**CSAH 52 @ Cloud Dr
Blaine MN
Tuesday, October 25, 2022**

Time	Southbound CSAH 52						Westbound Cloud Dr NE						Northbound CSAH 52						Eastbound Cloud Dr NE						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	4	127	0	0	131	0	10	3	2	0	15	0	0	36	6	0	42	0	0	2	12	0	14	202
8:15 AM	0	3	93	0	0	96	0	10	1	2	0	13	1	4	30	6	0	41	0	0	3	2	0	5	155
8:30 AM	0	3	97	2	0	102	0	12	2	3	0	17	0	2	37	10	0	49	0	0	2	1	0	3	171
8:45 AM	0	4	107	1	0	112	0	11	1	4	1	16	0	1	42	9	0	52	0	2	4	2	0	8	188
Hourly Total	0	14	424	3	0	441	0	43	7	11	1	61	1	7	145	31	0	184	0	2	11	17	0	30	716
9:00 AM	0	4	78	0	2	82	0	29	7	5	0	41	0	1	37	16	0	54	0	0	8	5	0	13	190
9:15 AM	0	4	63	5	0	72	0	18	5	3	0	26	0	4	34	9	0	47	0	0	4	3	0	7	152
9:30 AM	1	3	67	10	0	81	0	11	4	2	0	17	0	2	31	8	3	41	0	1	6	4	0	11	150
9:45 AM	1	6	50	0	0	57	0	9	1	1	2	11	0	2	42	4	0	48	0	0	2	7	0	9	125
Hourly Total	2	17	258	15	2	292	0	67	17	11	2	95	0	9	144	37	3	190	0	1	20	19	0	40	617
10:00 AM	0	3	56	2	0	61	0	5	5	8	1	18	0	3	38	9	2	50	0	2	2	4	0	8	137
10:15 AM	0	4	43	3	0	50	0	11	2	4	0	17	0	1	39	5	0	45	0	0	2	2	0	4	116
10:30 AM	0	6	52	1	0	59	0	8	1	3	0	12	0	3	26	8	0	37	0	1	0	8	0	9	117
10:45 AM	0	8	66	0	0	74	0	8	2	7	0	17	0	2	47	7	0	56	0	2	0	4	0	6	153
Hourly Total	0	21	217	6	0	244	0	32	10	22	1	64	0	9	150	29	2	188	0	5	4	18	0	27	523
11:00 AM	0	4	58	1	0	63	0	4	2	4	0	10	0	4	41	5	0	50	0	2	2	5	0	9	132
11:15 AM	0	2	52	2	1	56	0	2	4	5	0	11	0	5	33	9	0	47	0	1	2	2	0	5	119
11:30 AM	0	8	44	2	0	54	0	9	3	5	0	17	0	3	49	13	0	65	0	0	2	6	0	8	144
11:45 AM	0	9	62	4	0	75	0	15	2	7	0	24	0	2	44	9	0	55	0	1	5	3	0	9	163
Hourly Total	0	23	216	9	1	248	0	30	11	21	0	62	0	14	167	36	0	217	0	4	11	16	0	31	558
12:00 PM	0	2	48	0	0	50	0	5	3	1	0	9	0	8	52	5	0	65	0	0	3	4	0	7	131
12:15 PM	0	8	60	0	0	68	0	15	3	9	0	27	1	4	48	11	0	64	0	0	1	2	0	3	162
12:30 PM	0	13	57	1	0	71	0	6	3	6	0	15	0	2	56	4	0	62	0	0	0	7	0	7	155
12:45 PM	0	9	57	1	0	67	0	4	1	4	0	9	0	4	59	7	0	70	0	1	5	2	0	8	154
Hourly Total	0	32	222	2	0	256	0	30	10	20	0	60	1	18	215	27	0	261	0	1	9	15	0	25	602
1:00 PM	0	7	32	1	0	40	0	12	5	5	0	22	1	7	61	8	0	77	0	3	6	3	0	12	151
1:15 PM	0	5	49	3	0	57	0	5	5	3	0	13	0	1	58	11	0	70	0	0	5	4	0	9	149
1:30 PM	0	1	57	1	0	59	0	5	3	10	0	18	1	4	69	11	0	85	0	2	5	6	0	13	175
1:45 PM	0	2	73	2	0	77	0	4	2	6	0	12	1	6	57	8	0	72	0	0	1	7	0	8	169
Hourly Total	0	15	211	7	0	233	0	26	15	24	0	65	3	18	245	38	0	304	0	5	17	20	0	42	644
2:00 PM	0	5	39	0	0	44	0	2	3	5	0	10	0	7	86	3	0	96	0	0	1	3	0	4	154
2:15 PM	0	12	58	4	0	74	0	6	1	8	0	15	0	8	79	16	2	103	0	1	1	3	0	5	197
2:30 PM	0	5	58	2	0	65	0	13	4	4	0	21	0	4	75	10	1	89	0	1	1	6	1	8	183
2:45 PM	1	10	48	0	0	59	0	9	3	14	0	26	0	12	111	20	0	143	0	3	3	3	0	9	237
Hourly Total	1	32	203	6	0	242	0	30	11	31	0	72	0	31	351	49	3	431	0	5	6	15	1	26	771
3:00 PM	0	7	68	1	0	76	0	9	4	6	0	19	1	6	112	15	0	134	0	2	2	4	0	8	237
3:15 PM	0	6	72	4	0	82	0	9	4	9	0	22	0	8	115	17	0	140	0	0	3	5	0	8	252
3:30 PM	0	7	61	2	0	70	0	14	7	6	0	27	0	9	149	19	0	177	0	0	8	2	0	10	284
3:45 PM	0	8	80	3	0	91	0	7	8	9	0	24	0	15	153	20	0	188	0	4	6	5	0	15	318
Hourly Total	0	28	281	10	0	319	0	39	23	30	0	92	1	38	529	71	0	639	0	6	19	16	0	41	1091

**CSAH 52 @ Cloud Dr
Blaine MN
Tuesday, October 25, 2022**

Time	Southbound CSAH 52						Westbound Cloud Dr NE						Northbound CSAH 52						Eastbound Cloud Dr NE						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	
4:00 PM	0	10	85	2	0	97	1	20	5	13	0	39	0	13	164	21	0	198	0	2	3	9	0	14	348
4:15 PM	0	12	65	2	0	79	0	11	7	18	0	36	2	15	143	30	0	190	0	2	2	6	0	10	315
4:30 PM	0	11	72	1	0	84	0	14	7	24	0	45	0	17	182	30	0	229	0	1	11	4	0	16	374
4:45 PM	0	9	77	2	0	88	0	15	8	21	0	44	0	21	171	34	0	226	0	1	8	9	0	18	376
Hourly Total	0	42	299	7	0	348	1	60	27	76	0	164	2	66	660	115	0	843	0	6	24	28	0	58	1413
5:00 PM	0	14	75	4	0	93	0	14	3	11	0	28	1	12	184	27	0	224	0	1	9	2	0	12	357
5:15 PM	0	2	82	1	0	85	0	8	5	10	0	23	0	15	167	19	0	201	0	0	8	3	0	11	320
5:30 PM	0	9	65	2	0	76	0	12	5	13	0	30	0	16	163	15	0	194	0	2	6	2	0	10	310
5:45 PM	0	8	94	3	0	105	0	11	4	7	0	22	0	11	96	16	0	123	0	3	7	4	0	14	264
Hourly Total	0	33	316	10	0	359	0	45	17	41	0	103	1	54	610	77	0	742	0	6	30	11	0	47	1251
6:00 PM	0	14	64	2	0	80	0	12	6	12	0	30	1	6	122	26	0	155	0	1	5	4	1	10	275
6:15 PM	0	9	65	2	0	76	0	16	3	12	0	31	1	8	87	17	2	113	0	1	3	3	0	7	227
6:30 PM	0	2	49	1	0	52	0	14	4	10	0	28	0	4	96	15	0	115	0	2	4	8	0	14	209
6:45 PM	0	6	54	1	0	61	0	7	3	7	0	17	0	3	76	18	1	97	0	2	1	9	0	12	187
Hourly Total	0	31	232	6	0	269	0	49	16	41	0	106	2	21	381	76	3	480	0	6	13	24	1	43	898
7:00 PM	1	7	50	3	0	61	1	8	6	5	0	20	0	3	54	12	0	69	0	0	3	3	0	6	156
7:15 PM	0	7	41	1	0	49	0	9	5	5	0	19	0	4	59	13	0	76	0	1	3	1	0	5	149
7:30 PM	0	6	35	4	0	45	0	4	1	3	0	8	0	1	59	7	0	67	0	4	0	1	0	5	125
7:45 PM	0	0	34	0	0	34	0	2	2	7	0	11	0	2	57	8	0	67	0	0	4	2	0	6	118
Hourly Total	1	20	160	8	0	189	1	23	14	20	0	58	0	10	229	40	0	279	0	5	10	7	0	22	548
8:00 PM	0	3	42	1	0	46	0	2	0	5	0	7	0	3	37	10	0	50	0	1	4	1	0	6	109
8:15 PM	0	8	32	2	0	42	0	3	0	1	0	4	0	3	27	2	0	32	0	0	1	1	0	2	80
8:30 PM	0	2	24	2	0	28	0	2	2	0	0	4	0	4	39	4	0	47	0	0	2	1	0	3	82
8:45 PM	0	3	26	4	0	33	0	2	4	2	0	8	0	4	23	2	0	29	0	0	3	0	0	3	73
Hourly Total	0	16	124	9	0	149	0	9	6	8	0	23	0	14	126	18	0	158	0	1	10	3	0	14	344
9:00 PM	0	3	27	0	0	30	0	2	2	1	0	5	0	4	31	3	0	38	0	0	2	0	0	2	75
9:15 PM	0	3	18	4	0	25	0	1	2	2	0	5	0	2	32	1	0	35	0	0	0	0	0	0	65
9:30 PM	0	1	18	0	0	19	0	1	0	1	0	2	0	5	21	3	0	29	0	0	0	1	0	1	51
9:45 PM	0	0	8	1	0	9	0	1	0	1	0	2	0	0	18	1	0	19	0	0	3	0	0	3	33
Hourly Total	0	7	71	5	0	83	0	5	4	5	0	14	0	11	102	8	0	121	0	0	5	1	0	6	224
10:00 PM	0	1	17	0	0	18	0	1	0	1	0	2	0	0	16	0	0	16	0	0	1	0	0	1	37
10:15 PM	0	0	10	0	0	10	0	1	0	1	0	2	0	1	14	3	0	18	0	0	0	0	0	0	30
10:30 PM	0	1	7	1	0	9	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	19
10:45 PM	0	0	9	1	0	10	0	0	0	2	0	2	0	0	8	2	0	10	0	0	1	0	0	1	23
Hourly Total	0	2	43	2	0	47	0	2	0	4	0	6	0	1	48	5	0	54	0	0	2	0	0	2	109
11:00 PM	0	1	4	0	0	5	0	0	1	1	0	2	0	0	8	1	0	9	0	0	1	0	0	1	17
11:15 PM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	5	2	0	7	0	0	0	0	0	0	9
11:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	9
11:45 PM	0	0	3	0	0	3	0	0	0	0	0	0	0	1	6	0	0	7	0	0	0	1	0	1	11
Hourly Total	0	1	9	0	0	10	0	0	2	1	0	3	0	1	26	4	0	31	0	0	1	1	0	2	46
DAILY TOTAL	4	373	4753	120	3	5250	2	595	202	396	4	1195	11	337	4486	730	11	5564	0	75	208	306	2	589	12598
Cars	4	358	4634	112	2	5108	2	561	197	385	4	1145	11	335	4379	708	11	5433	0	69	205	299	0	573	12259
Heavy Vehicles	0	15	119	8	1	142	0	34	5	11	0	50	0	2	107	22	0	131	0	6	3	7	2	16	339
Heavy Vehicle %	0.00%	4.02%	2.50%	6.67%	33.33%	2.70%	0.00%	5.71%	2.48%	2.78%	0.00%	4.18%	0.00%	0.59%	2.39%	3.01%	0.00%	2.35%	0.00%	8.00%	1.44%	2.29%	100.00%	2.72%	2.69%

**CSAH 52 @ Cloud Dr
Blaine MN
Tuesday, October 25, 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							
7:00 AM	0	3	136	1	0	140	0	11	2	3	0	16	0	1	55	9	0	65	0	1	2	7	0	10	0	3	4	9	0	16	231
7:15 AM	0	9	159	0	0	168	0	18	0	5	0	23	0	1	49	11	0	61	0	3	4	9	0	16	0	5	3	8	0	16	268
7:30 AM	0	4	193	3	0	200	0	12	3	3	0	18	0	3	51	8	0	62	0	5	3	8	0	16	0	2	2	10	0	14	296
7:45 AM	0	6	172	5	0	183	0	12	3	5	0	20	0	4	45	17	0	66	0	2	2	10	0	14	0	2	2	10	0	14	283
Peak Hour Total	0	22	660	9	0	691	0	53	8	16	0	77	0	9	200	45	0	254	0	11	11	34	0	56	0	11	11	34	0	56	1078
PHF	0.000	0.611	0.855	0.450	0.000	0.864	0.000	0.736	0.667	0.800	0.000	0.837	0.000	0.563	0.909	0.662	0.000	0.962	0.000	0.550	0.688	0.850	0.000	0.875	0.000	0.550	0.688	0.850	0.000	0.875	0.910

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	11	72	1	0	84	0	14	7	24	0	45	0	17	182	30	0	229	0	1	11	4	0	16	0	1	8	9	0	18	374
4:45 PM	0	9	77	2	0	88	0	15	8	21	0	44	0	21	171	34	0	226	0	1	8	9	0	18	0	1	8	9	0	18	376
5:00 PM	0	14	75	4	0	93	0	14	3	11	0	28	1	12	184	27	0	224	0	1	9	2	0	12	0	1	9	2	0	12	357
5:15 PM	0	2	82	1	0	85	0	8	5	10	0	23	0	15	167	19	0	201	0	0	8	3	0	11	0	0	8	3	0	11	320
Peak Hour Total	0	36	306	8	0	350	0	51	23	66	0	140	1	65	704	110	0	880	0	3	36	18	0	57	0	3	36	18	0	57	1427
PHF	0.000	0.643	0.933	0.500	0.000	0.941	0.000	0.850	0.719	0.688	0.000	0.778	0.250	0.774	0.957	0.809	0.000	0.961	0.000	0.750	0.818	0.500	0.000	0.792	0.000	0.750	0.818	0.500	0.000	0.792	0.949

Total Vehicles On Leg				10211	
Vehicles Entering Intersection		5250	Vehicles Exiting Intersection		4961
Southbound					
Cars	112	4634	358	4	2
Heavy	8	119	15	0	1
Total	120	4753	373	4	3



Total Vehicles on Leg 1248	Vehicles Entering Intersection 589	Eastbound	Cars	Heavy	Total	
			0	2	2	
	0		0	0		
	69		6	75		
	205		3	208		
Vehicles Exiting Intersection 659	299	7	306			

Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 1195	Total Vehicles on Leg 2508
385	11	396			
197	5	202			
561	34	595			
2	0	2			
4	0	4	Vehicles Exiting Intersection 1313		



Cars	11	11	335	4379	708
Heavy	0	0	2	107	22
Total	11	11	337	4486	730
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
5564			5665		
Total Vehicles On Leg			11229		

Heavy Vehicles

Date	Time	Southbound					Westbound					Northbound					Eastbound				
		U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk
10/25/2022	0:00	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
	0:30	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
	1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:30	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
	2:00	0	0	0	0	0	0	0	0	0	0	0	0	1	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
	2:30	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
	3:00	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
	3:30	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
	4:00	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	0	0	0	0	0	0	0	0	0	0	0
	4:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	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
	5:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	6:00	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
	6:15	0	0	5	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
	6:30	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45	0	0	3	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0
	7:00	0	1	1	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0
	7:15	0	0	4	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0
	7:30	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45	0	0	1	1	0	0	0	0	1	0	0	1	2	1	0	0	0	0	0	0
	8:00	0	1	1	0	0	0	1	0	1	0	0	0	3	1	0	0	0	0	1	0
	8:15	0	0	5	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0
	8:30	0	0	3	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
	8:45	0	0	2	0	0	0	0	0	0	0	0	0	2	2	0	0	0	1	0	0
	9:00	0	0	1	0	0	0	6	1	0	0	0	0	2	3	0	0	0	1	0	0
	9:15	0	0	1	0	0	0	3	0	0	0	0	0	1	0	0	0	0	0	1	0
	9:30	0	0	2	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
	9:45	0	1	1	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0
	10:00	0	1	5	0	0	0	0	0	0	0	0	0	3	1	0	0	1	0	0	0
	10:15	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:30	0	0	2	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0
	10:45	0	0	5	0	0	0	1	1	1	0	0	0	2	1	0	0	0	0	0	0
	11:00	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	11:15	0	0	1	1	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0
	11:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	11:45	0	2	3	0	0	0	2	0	0	0	0	0	2	1	0	0	0	0	0	0

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2269 SWS

Study Date : 10/25/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 52

Number of Lanes : 2+

Total Approach Volume: 5,564

Southbound: CSAH 52

Number of Lanes :2+

Total Approach Volume: 5,250

Minor Street Approaches

Eastbound: Cloud Dr NE

Number of Lanes :1

Total Approach Volume: 589

Westbound: Cloud Dr NE

Number of Lanes :1

Total Approach Volume: 1,195

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 3 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.....Not Satisfied

Required 1A volumes reached for 6 hours, 8 are needed

Required 1B volumes reached for 11 hours, 8 are needed

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

Number of hours (5) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (12) 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 2269 SWS

Study Date : 10/25/2022

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

Site Data Required

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

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **420**
 Veh/Hr Minor = **105**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:15 - 17:15	869	+	344	=	1213	56	153	Yes
15:15 - 16:15	703	+	340	=	1043	47	112	Yes
17:15 - 18:15	673	+	346	=	1019	45	105	Yes
15:00 - 16:00	639	+	319	=	958	41	92	No
07:00 - 08:00	254	+	691	=	945	56	77	No
07:15 - 08:15	231	+	682	=	913	60	76	No
06:45 - 07:45	223	+	676	=	899	55	74	No
14:45 - 15:45	594	+	287	=	881	35	94	No
07:30 - 08:30	211	+	610	=	821	49	66	No
14:30 - 15:30	506	+	282	=	788	33	88	No
06:30 - 07:30	184	+	592	=	776	48	68	No
14:15 - 15:15	469	+	274	=	743	30	81	No
07:45 - 08:45	198	+	512	=	710	36	65	No
14:00 - 15:00	431	+	242	=	673	26	72	No
06:15 - 07:15	141	+	529	=	670	48	55	No
18:15 - 19:15	394	+	250	=	644	39	96	No
08:00 - 09:00	184	+	441	=	625	30	61	No
13:45 - 14:45	360	+	260	=	620	25	58	No
13:30 - 14:30	356	+	254	=	610	30	55	No
08:15 - 09:15	196	+	392	=	588	29	87	No
18:30 - 19:30	357	+	223	=	580	37	84	No
08:30 - 09:30	202	+	368	=	570	31	100	No
13:15 - 14:15	323	+	237	=	560	34	53	No
06:00 - 07:00	90	+	463	=	553	46	48	No
08:45 - 09:45	194		347		541	39	100	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2269 SWS

Study Date : 10/25/2022

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

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

Site Data Required

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

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **630**

 Veh/Hr Minor = **53**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
	CSAH 52				Cloud Dr NE			
16:00 - 17:00	843	+	348	=	1191	58	164	Yes
17:00 - 18:00	742	+	359	=	1101	47	103	Yes
15:00 - 16:00	639	+	319	=	958	41	92	Yes
07:15 - 08:15	231	+	682	=	913	60	76	Yes
18:00 - 19:00	480	+	269	=	749	43	106	Yes
14:00 - 15:00	431	+	242	=	673	26	72	Yes
06:15 - 07:15	141	+	529	=	670	48	55	Yes
13:45 - 14:45	360	+	260	=	620	25	58	No
13:30 - 14:30	356	+	254	=	610	30	55	No
08:15 - 09:15	196	+	392	=	588	29	87	No
08:30 - 09:30	202	+	368	=	570	31	100	No
13:15 - 14:15	323	+	237	=	560	34	53	No
06:00 - 07:00	90	+	463	=	553	46	48	No
08:45 - 09:45	194	+	347	=	541	39	100	No
13:00 - 14:00	304	+	233	=	537	42	65	No
12:45 - 13:45	302	+	223	=	525	42	62	No
12:15 - 13:15	273	+	246	=	519	30	73	No
12:00 - 13:00	261	+	256	=	517	25	60	No
12:30 - 13:30	279	+	235	=	514	36	59	No
11:45 - 12:45	246	+	264	=	510	26	75	No
11:30 - 12:30	249	+	247	=	496	27	77	No
09:00 - 10:00	190	+	292	=	482	40	95	No
19:00 - 20:00	279	+	189	=	468	22	58	No
11:15 - 12:15	232	+	235	=	467	29	61	No
10:45 - 11:45	218		247		465	28	55	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2269 SWS

Study Date : 10/25/2022

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 6 hours meet 1A minimums.
11 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **336 504**

Veh/Hr Minor = **84 42**

Major Road

CSAH 52

Minor Road

Cloud Dr NE

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:30 - 17:30	880	+	350	=	1230	57	140	Yes
15:30 - 16:30	753	+	337	=	1090	49	126	Yes
17:30 - 18:30	585	+	337	=	922	41	113	Yes
14:30 - 15:30	506	+	282	=	788	33	88	Yes
08:15 - 09:15	196	+	392	=	588	29	87	Yes
18:30 - 19:30	357	+	223	=	580	37	84	Yes
07:00 - 08:00	254	+	691	=	945	56	77	No
07:15 - 08:15	231	+	682	=	913	60	76	No
06:45 - 07:45	223	+	676	=	899	55	74	No
07:30 - 08:30	211	+	610	=	821	49	66	No
06:30 - 07:30	184	+	592	=	776	48	68	No
14:15 - 15:15	469	+	274	=	743	30	81	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:45 - 17:45	845	+	342	=	1187	51	125	Yes
15:45 - 16:45	805	+	351	=	1156	55	144	Yes
07:00 - 08:00	254	+	691	=	945	56	77	Yes
14:45 - 15:45	594	+	287	=	881	35	94	Yes
17:45 - 18:45	506	+	313	=	819	45	111	Yes
08:00 - 09:00	184	+	441	=	625	30	61	Yes
13:45 - 14:45	360	+	260	=	620	25	58	Yes
06:00 - 07:00	90	+	463	=	553	46	48	Yes
12:45 - 13:45	302	+	223	=	525	42	62	Yes
18:45 - 19:45	309	+	216	=	525	28	64	Yes
11:45 - 12:45	246	+	264	=	510	26	75	Yes
11:30 - 12:30	249	+	247	=	496	27	77	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2269 SWS

Study Date : 10/25/2022

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.

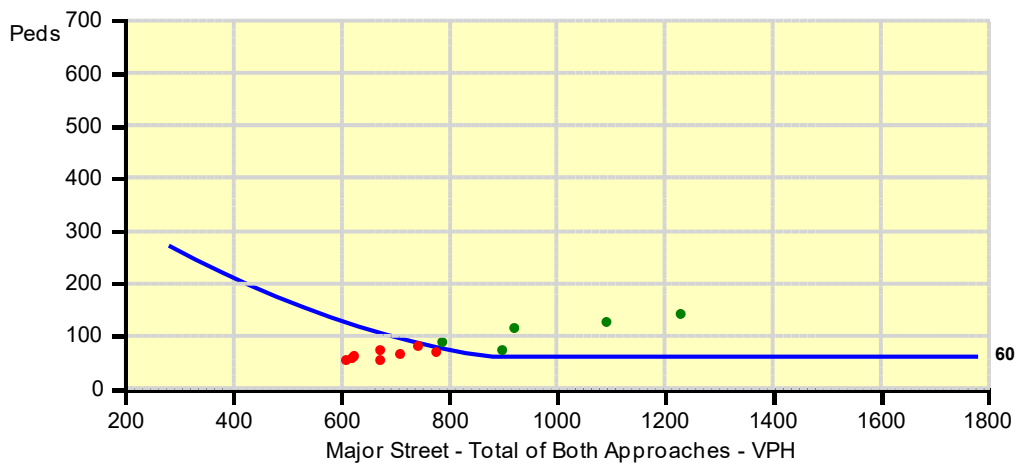
Summary

5 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 52				Total	Minor Road Cloud Dr NE		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	880	+	350	=	1230	57	140	Yes
15:30 - 16:30	753	+	337	=	1090	49	126	Yes
17:30 - 18:30	585	+	337	=	922	41	113	Yes
06:45 - 07:45	223	+	676	=	899	55	74	Yes
14:30 - 15:30	506	+	282	=	788	33	88	Yes
06:30 - 07:30	184	+	592	=	776	48	68	No
14:15 - 15:15	469	+	274	=	743	30	81	No
07:45 - 08:45	198	+	512	=	710	36	65	No
14:00 - 15:00	431	+	242	=	673	26	72	No
06:15 - 07:15	141	+	529	=	670	48	55	No
08:00 - 09:00	184	+	441	=	625	30	61	No
							58	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2269 SWS

Study Date : 10/25/2022

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

8 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 52				Total	Minor Road Cloud Dr NE		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	880	+	350	=	1230	57	140	Yes
16:15 - 17:15	869	+	344	=	1213	56	153	Yes
16:00 - 17:00	843	+	348	=	1191	58	164	Yes
16:45 - 17:45	845	+	342	=	1187	51	125	Yes
15:45 - 16:45	805	+	351	=	1156	55	144	Yes
17:00 - 18:00	742	+	359	=	1101	47	103	Yes
15:30 - 16:30	753	+	337	=	1090	49	126	Yes
15:15 - 16:15	703	+	340	=	1043	47	112	Yes
17:15 - 18:15	673	+	346	=	1019	45	105	No
15:00 - 16:00	639	+	319	=	958	41	92	No
07:00 - 08:00	254	+	691	=	945	56	77	No
							113	No

