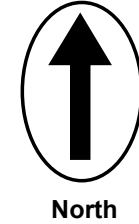


Date: 07/09/24

Count Number: TMC 2427

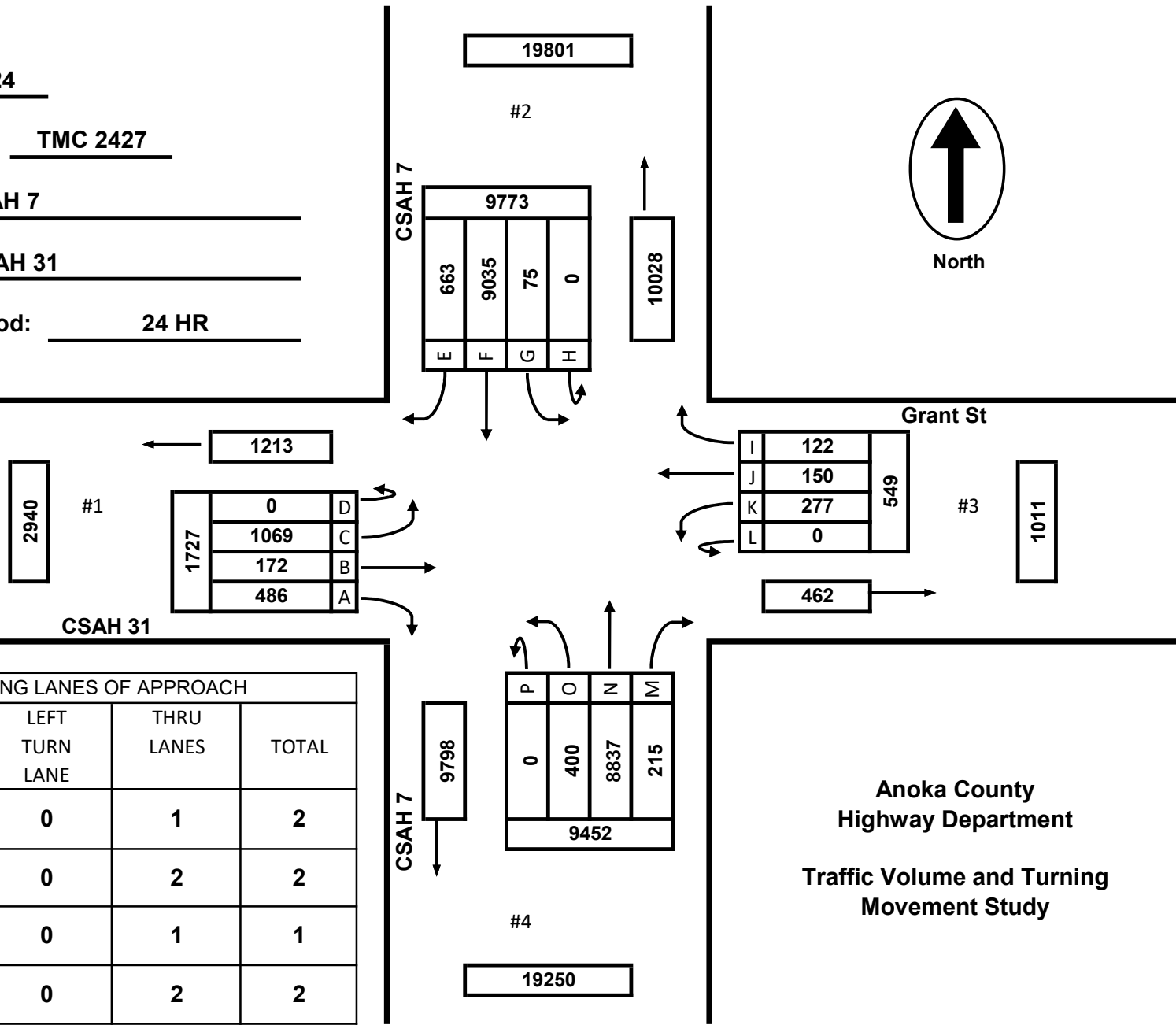
Location: CSAH 7
@ CSAH 31

Collection Period: 24 HR



North

Grant St



9773			
663	9035	75	0
E	F	G	H

1727		0	D
		1069	C
		172	B
		486	A

I	122	549
J	150	
K	277	
L	0	

P	O	N	M
0	400	8837	215
9452			

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

Anoka County
 Highway Department
 Traffic Volume and Turning
 Movement Study

Date: 07/09/24

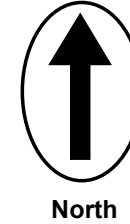
Count Number: TMC 2427

Location: CSAH 7

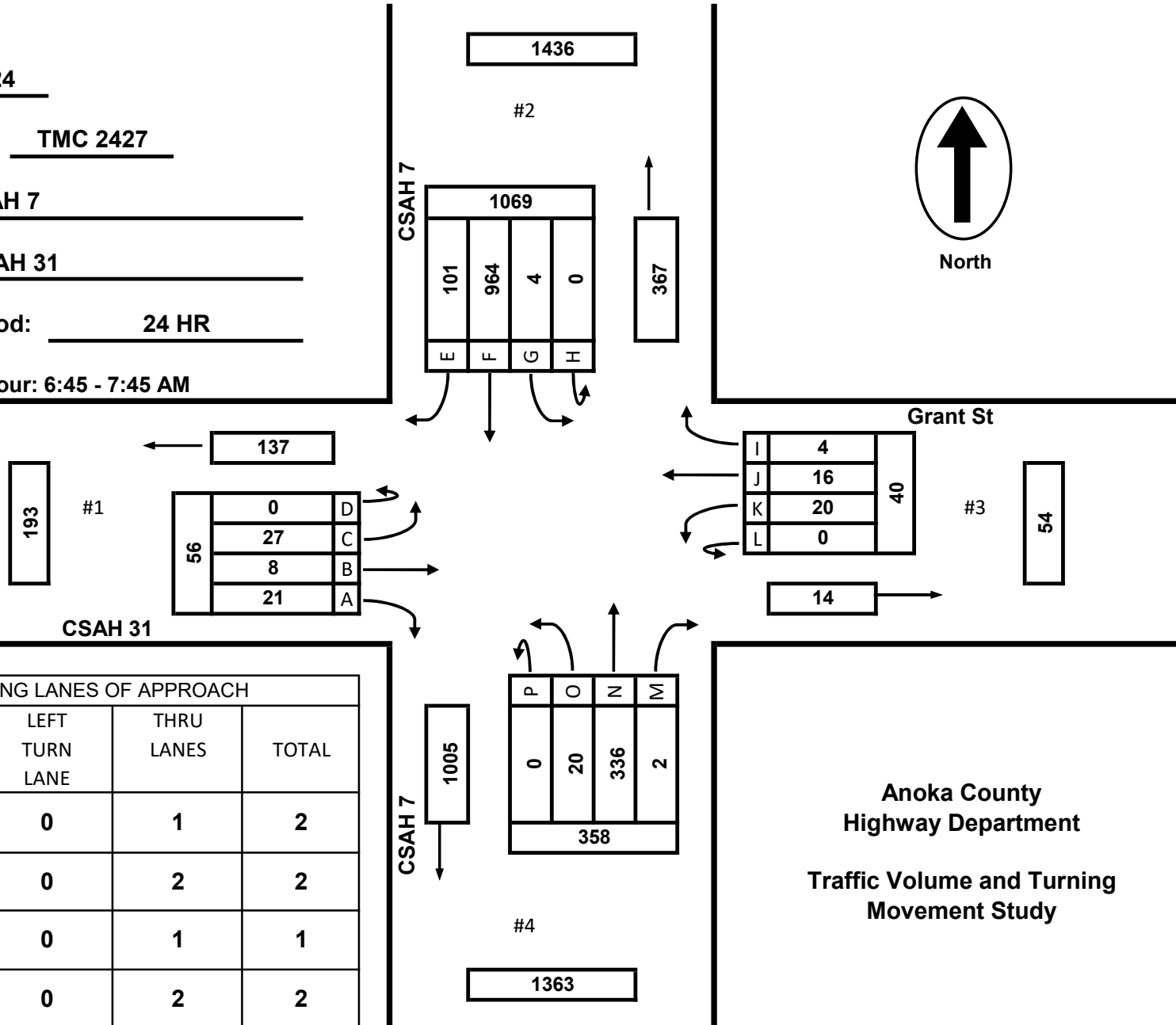
@ CSAH 31

Collection Period: 24 HR

Peak Hour: 6:45 - 7:45 AM



Grant St



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

Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

Date: 07/09/24

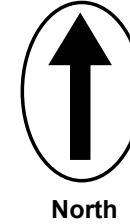
Count Number: TMC 2427

Location: CSAH 7

@ CSAH 31

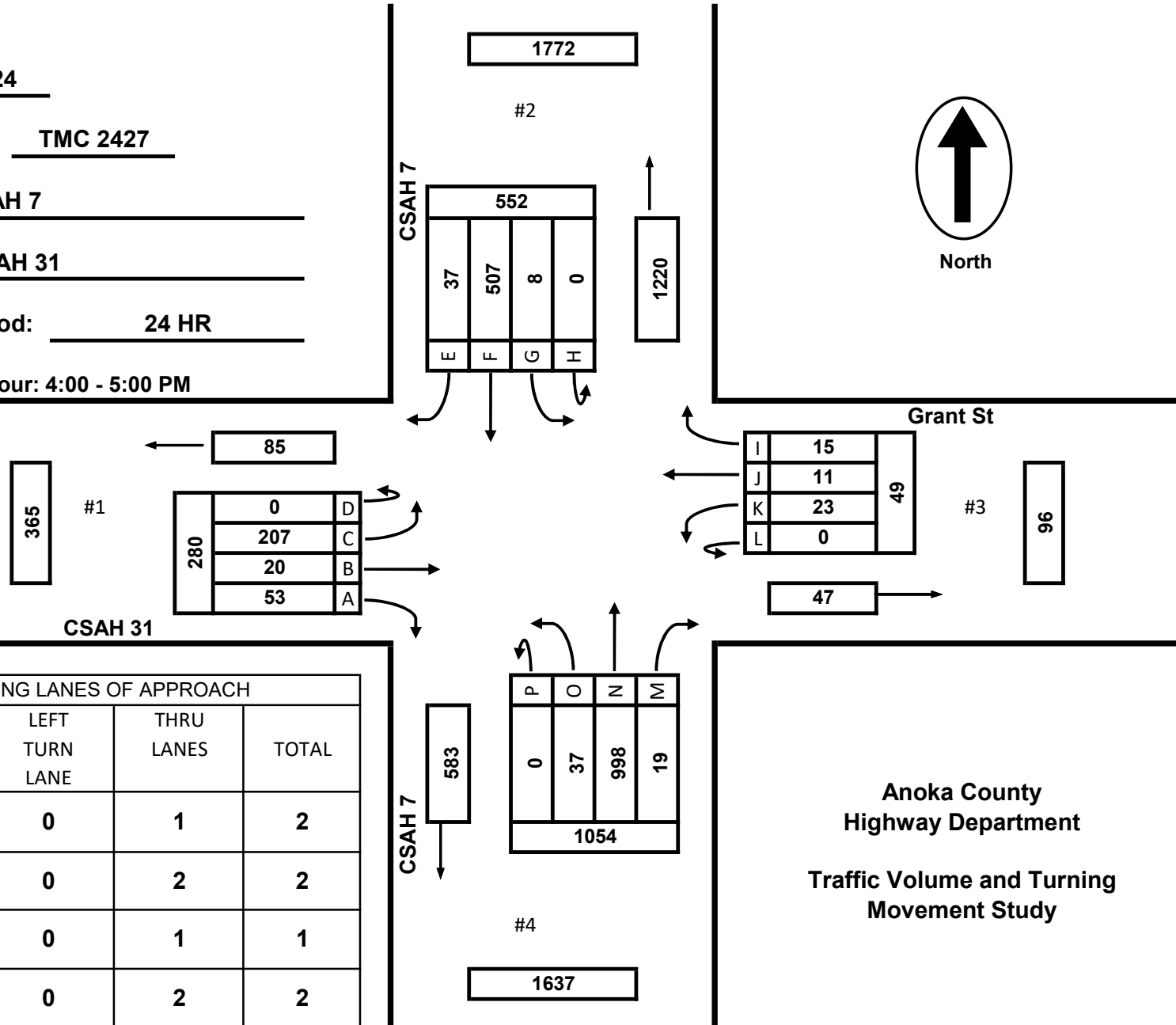
Collection Period: 24 HR

Peak Hour: 4:00 - 5:00 PM



North

Grant St



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

TMC 2427 - CSAH 7 @ CSAH 31
Anoka MN
Tuesday, July 9, 2024

Time	Southbound CSAH 7						Westbound CR 31						Northbound CSAH 7						Eastbound CSAH 31						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	0	1	8	1	0	10	0	2	0	0	0	2	0	0	17	0	0	17	0	2	0	1	0	3	32
12:15 AM	0	1	7	1	0	9	0	0	0	0	0	0	0	0	14	1	0	15	0	4	0	0	0	4	28
12:30 AM	0	0	7	1	0	8	0	0	0	0	0	0	0	0	11	0	0	11	0	1	0	0	0	1	20
12:45 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	10	0	0	10	0	1	1	1	0	3	16
Hourly Total	0	2	25	3	0	30	0	2	0	0	0	2	0	0	52	1	0	53	0	8	1	2	0	11	96
1:00 AM	0	0	7	0	0	7	0	0	0	0	0	0	0	1	10	0	0	11	0	0	0	0	0	0	18
1:15 AM	0	1	2	0	0	3	0	0	0	0	0	0	0	0	9	1	0	10	0	0	0	0	0	0	13
1:30 AM	0	0	5	1	0	6	0	0	1	0	0	1	0	0	8	0	0	8	0	1	1	0	0	2	17
1:45 AM	0	0	7	0	0	7	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	12
Hourly Total	0	1	21	1	0	23	0	0	1	0	0	1	0	1	32	1	0	34	0	1	1	0	0	2	60
2:00 AM	0	0	12	0	0	12	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	17
2:15 AM	0	0	7	0	0	7	0	0	0	0	0	0	0	1	8	0	0	9	0	0	0	0	0	0	16
2:30 AM	0	0	8	0	0	8	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	14
2:45 AM	0	0	10	0	0	10	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	15
Hourly Total	0	0	37	0	0	37	0	0	0	0	0	0	0	1	24	0	0	25	0	0	0	0	0	0	62
3:00 AM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	23
3:15 AM	0	0	11	0	0	11	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	1	0	1	19
3:30 AM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	1	0	1	25
3:45 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
Hourly Total	0	0	71	0	0	71	0	1	0	0	0	1	0	0	22	0	0	22	0	0	0	3	0	3	97
4:00 AM	0	0	33	1	0	34	0	2	0	0	0	2	0	1	6	0	0	7	0	1	0	0	0	1	44
4:15 AM	0	0	50	2	0	52	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	56
4:30 AM	0	0	69	2	0	71	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	2	0	2	78
4:45 AM	0	0	60	0	0	60	0	2	0	1	0	3	0	2	2	1	0	5	0	0	0	0	0	0	68
Hourly Total	0	0	212	5	0	217	0	4	0	1	0	5	0	3	17	1	0	21	0	1	0	2	0	3	246
5:00 AM	0	0	74	1	0	75	0	4	0	0	0	4	0	0	9	0	0	9	0	1	0	1	0	2	90
5:15 AM	0	0	164	9	0	173	0	1	3	1	0	5	0	0	13	0	0	13	0	1	0	4	0	5	196
5:30 AM	0	0	185	7	0	192	0	4	1	3	1	8	0	3	25	0	0	28	0	1	0	2	0	3	231
5:45 AM	0	2	166	7	0	175	0	5	1	0	2	6	0	5	42	1	0	48	0	5	0	3	0	8	237
Hourly Total	0	2	589	24	0	615	0	14	5	4	3	23	0	8	89	1	0	98	0	8	0	10	0	18	754
6:00 AM	0	0	198	12	0	210	0	1	0	1	0	2	0	0	57	2	0	59	0	2	1	1	0	4	275
6:15 AM	0	0	234	12	0	246	0	9	2	0	0	11	0	9	52	1	0	62	0	3	1	2	0	6	325
6:30 AM	0	0	283	22	0	305	0	5	1	0	0	6	0	3	47	0	0	50	0	0	0	8	0	8	369
6:45 AM	0	2	289	23	0	314	0	3	6	1	0	10	0	7	93	0	0	100	0	9	1	6	0	16	440
Hourly Total	0	2	1004	69	0	1075	0	18	9	2	0	29	0	19	249	3	0	271	0	14	3	17	0	34	1409
7:00 AM	0	0	212	16	0	228	0	3	7	1	2	11	0	6	88	0	0	94	0	5	0	4	0	9	342
7:15 AM	0	1	221	24	0	246	0	8	0	1	0	9	0	4	81	1	0	86	0	8	3	5	0	16	357
7:30 AM	0	1	242	38	0	281	0	6	3	1	0	10	0	3	74	1	0	78	0	5	4	6	0	15	384
7:45 AM	0	2	235	35	1	272	0	6	3	3	0	12	0	6	80	4	0	90	0	5	1	3	0	9	383
Hourly Total	0	4	910	113	1	1027	0	23	13	6	2	42	0	19	323	6	0	348	0	23	8	18	0	49	1466

TMC 2427 - CSAH 7 @ CSAH 31
Anoka MN
Tuesday, July 9, 2024

Time	Southbound CSAH 7						Westbound CR 31						Northbound CSAH 7						Eastbound CSAH 31						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	217	23	0	240	0	5	1	4	0	10	0	6	72	2	0	80	0	2	1	5	1	8	338
8:15 AM	0	2	170	13	0	185	0	4	1	1	0	6	0	3	74	1	0	78	0	4	1	3	0	8	277
8:30 AM	0	1	155	15	0	171	0	4	2	1	1	7	0	6	64	1	0	71	0	4	0	8	0	12	261
8:45 AM	0	1	147	18	0	166	0	2	3	0	0	5	0	3	83	3	0	89	0	7	1	8	0	16	276
Hourly Total	0	4	689	69	0	762	0	15	7	6	1	28	0	18	293	7	0	318	0	17	3	24	1	44	1152
9:00 AM	0	0	119	11	0	130	0	7	2	5	0	14	0	6	72	2	0	80	0	15	1	6	0	22	246
9:15 AM	0	2	110	6	0	118	0	5	3	2	3	10	0	3	81	3	0	87	0	10	1	8	0	19	234
9:30 AM	0	1	134	9	1	144	0	2	4	0	1	6	0	4	79	1	0	84	0	5	3	6	0	14	248
9:45 AM	0	1	112	9	0	122	0	3	4	0	1	7	0	7	65	4	0	76	0	6	1	5	0	12	217
Hourly Total	0	4	475	35	1	514	0	17	13	7	5	37	0	20	297	10	0	327	0	36	6	25	0	67	945
10:00 AM	0	1	111	7	0	119	0	4	2	0	0	6	0	7	80	2	0	89	0	10	0	2	0	12	226
10:15 AM	0	2	102	10	0	114	0	4	3	2	0	9	0	1	87	0	0	88	0	11	2	7	0	20	231
10:30 AM	0	0	124	10	0	134	0	4	2	0	0	6	0	4	104	1	0	109	0	11	4	5	0	20	269
10:45 AM	0	0	124	9	0	133	0	6	1	1	1	8	0	13	81	2	0	96	0	11	4	7	0	22	259
Hourly Total	0	3	461	36	0	500	0	18	8	3	1	29	0	25	352	5	0	382	0	43	10	21	0	74	985
11:00 AM	0	0	103	10	0	113	0	3	1	3	0	7	0	6	71	4	1	81	0	7	0	10	0	17	218
11:15 AM	0	1	117	9	0	127	0	5	2	2	2	9	0	4	101	1	0	106	0	9	5	9	0	23	265
11:30 AM	0	1	118	6	0	125	0	0	2	2	0	4	0	4	120	1	0	125	0	12	5	8	0	25	279
11:45 AM	0	1	129	16	0	146	0	4	2	2	0	8	0	8	110	2	0	120	0	16	1	11	0	28	302
Hourly Total	0	3	467	41	0	511	0	12	7	9	2	28	0	22	402	8	1	432	0	44	11	38	0	93	1064
12:00 PM	0	0	126	10	0	136	0	5	2	3	0	10	0	4	116	5	0	125	0	8	4	6	0	18	289
12:15 PM	0	0	103	10	0	113	0	0	2	0	1	2	0	11	101	5	0	117	0	16	1	15	0	32	264
12:30 PM	0	0	89	5	0	94	0	8	1	4	0	13	0	9	100	1	0	110	0	19	6	12	0	37	254
12:45 PM	0	0	112	10	0	122	0	1	2	3	0	6	0	10	120	3	0	133	0	9	0	8	0	17	278
Hourly Total	0	0	430	35	0	465	0	14	7	10	1	31	0	34	437	14	0	485	0	52	11	41	0	104	1085
1:00 PM	0	0	89	4	0	93	0	7	2	3	0	12	0	10	120	5	0	135	0	23	2	10	0	35	275
1:15 PM	0	1	109	10	0	120	0	5	3	0	0	8	0	8	122	2	0	132	0	13	5	6	0	24	284
1:30 PM	0	1	115	11	0	127	0	1	5	4	0	10	0	5	133	6	0	144	0	10	1	7	0	18	299
1:45 PM	0	2	108	8	0	118	0	5	1	5	2	11	0	6	156	1	0	163	0	9	3	13	0	25	317
Hourly Total	0	4	421	33	0	458	0	18	11	12	2	41	0	29	531	14	0	574	0	55	11	36	0	102	1175
2:00 PM	0	4	122	3	0	129	0	1	1	2	0	4	0	7	150	6	0	163	0	37	2	5	0	44	340
2:15 PM	0	1	106	7	0	114	0	5	4	5	0	14	0	10	169	1	0	180	0	14	3	11	0	28	336
2:30 PM	0	1	105	6	0	112	0	4	3	1	0	8	0	12	180	2	0	194	0	25	3	6	0	34	348
2:45 PM	0	4	107	9	1	120	0	6	6	1	0	13	0	6	206	7	0	219	0	25	1	14	0	40	392
Hourly Total	0	10	440	25	1	475	0	16	14	9	0	39	0	35	705	16	0	756	0	101	9	36	0	146	1416
3:00 PM	0	1	117	10	0	128	0	5	1	8	0	14	0	5	270	8	0	283	0	44	3	14	0	61	486
3:15 PM	0	0	114	4	0	118	0	6	4	1	0	11	0	6	241	5	0	252	0	26	5	6	0	37	418
3:30 PM	0	0	134	9	0	143	0	3	1	4	0	8	0	10	239	5	0	254	0	38	4	12	0	54	459
3:45 PM	0	0	128	8	0	136	0	3	2	0	0	5	0	10	260	4	0	274	0	26	4	12	0	42	457
Hourly Total	0	1	493	31	0	525	0	17	8	13	0	38	0	31	1010	22	0	1063	0	134	16	44	0	194	1820

TMC 2427 - CSAH 7 @ CSAH 31
Anoka MN
Tuesday, July 9, 2024

Time	Southbound CSAH 7						Westbound CR 31						Northbound CSAH 7						Eastbound CSAH 31						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	2	126	7	0	135	0	7	4	4	0	15	0	9	237	8	0	254	0	54	7	15	0	76	480
4:15 PM	0	2	110	8	1	120	0	6	0	2	0	8	0	8	254	5	0	267	0	32	5	9	0	46	441
4:30 PM	0	3	137	5	0	145	0	3	5	8	0	16	0	10	251	2	0	263	0	71	8	18	0	97	521
4:45 PM	0	1	134	17	0	152	0	7	2	1	0	10	0	10	266	4	0	270	0	50	0	11	1	61	493
Hourly Total	0	8	507	37	1	552	0	23	11	15	0	49	0	37	998	19	0	1054	0	207	20	53	1	280	1935
5:00 PM	0	3	140	12	0	155	0	6	4	0	0	10	0	10	236	6	0	252	0	33	7	6	0	46	463
5:15 PM	0	1	122	11	0	134	0	3	1	3	0	7	0	6	248	2	0	256	0	31	5	14	0	50	447
5:30 PM	0	0	124	7	0	131	0	7	2	1	0	10	0	3	226	5	0	234	0	30	1	6	0	37	412
5:45 PM	0	3	85	11	0	99	0	4	1	1	0	6	0	12	237	3	0	252	0	18	2	8	0	28	385
Hourly Total	0	7	471	41	0	519	0	20	8	5	0	33	0	31	947	16	0	994	0	112	15	34	0	161	1707
6:00 PM	0	0	97	11	0	108	0	1	5	1	1	7	0	10	188	5	0	203	0	21	5	8	0	34	352
6:15 PM	0	2	134	6	0	142	0	3	3	1	0	7	0	5	186	8	0	199	0	23	3	4	0	30	378
6:30 PM	0	0	86	3	0	89	0	4	1	0	2	5	0	5	157	5	0	167	0	10	4	6	0	20	281
6:45 PM	0	0	69	3	0	72	0	2	1	3	1	6	0	3	136	2	0	141	0	14	3	6	0	23	242
Hourly Total	0	2	386	23	0	411	0	10	10	5	4	25	0	23	667	20	0	710	0	68	15	24	0	107	1253
7:00 PM	0	1	81	3	0	85	0	1	2	1	1	4	0	2	134	3	0	139	0	17	2	6	0	25	253
7:15 PM	0	1	77	1	0	79	0	3	1	2	0	6	0	4	115	3	0	122	0	10	3	3	0	16	223
7:30 PM	0	0	79	3	0	82	0	5	1	2	0	8	0	2	105	5	0	112	0	11	2	1	0	14	216
7:45 PM	0	0	72	6	0	78	0	1	4	1	0	6	0	2	95	1	0	98	0	15	1	7	0	23	205
Hourly Total	0	2	309	13	0	324	0	10	8	6	1	24	0	10	449	12	0	471	0	53	8	17	0	78	897
8:00 PM	0	2	64	5	0	71	0	4	2	0	0	6	0	1	97	4	0	102	0	13	4	5	0	22	201
8:15 PM	0	2	64	3	0	69	0	2	2	1	0	5	0	0	90	6	0	96	0	13	2	1	0	16	186
8:30 PM	0	1	54	3	0	58	0	3	1	0	0	4	0	4	77	5	0	86	0	8	2	4	0	14	162
8:45 PM	0	2	39	1	0	42	0	1	1	0	0	2	0	6	98	2	0	106	0	14	6	4	0	24	174
Hourly Total	0	7	221	12	0	240	0	10	6	1	0	17	0	11	362	17	0	390	0	48	14	14	0	76	723
9:00 PM	0	1	40	3	0	44	0	3	1	0	0	4	0	3	73	4	0	80	0	10	2	1	0	13	141
9:15 PM	0	1	45	3	0	49	0	3	1	1	0	5	0	0	82	2	0	84	0	6	3	2	0	11	149
9:30 PM	0	2	41	2	0	45	0	1	0	0	0	1	0	1	55	3	0	59	0	6	1	3	0	10	115
9:45 PM	0	2	49	2	0	53	0	1	0	1	0	2	0	0	62	3	0	65	0	7	2	0	0	9	129
Hourly Total	0	6	175	10	0	191	0	8	2	2	0	12	0	4	272	12	0	288	0	29	8	6	0	43	534
10:00 PM	0	1	46	1	0	48	0	1	0	1	0	2	0	0	55	2	0	57	0	1	0	1	0	2	109
10:15 PM	0	0	33	1	0	34	0	0	0	0	0	0	0	10	47	1	0	58	0	3	0	3	0	6	98
10:30 PM	0	0	23	4	0	27	0	2	2	0	0	4	0	4	54	1	0	59	0	4	1	2	0	7	97
10:45 PM	0	0	23	0	0	23	0	4	0	0	0	4	0	2	48	2	0	52	0	1	1	4	0	6	85
Hourly Total	0	1	125	6	0	132	0	7	2	1	0	10	0	16	204	6	0	226	0	9	2	10	0	21	389
11:00 PM	0	2	27	1	1	30	0	0	0	3	0	3	0	1	40	0	0	41	0	3	0	7	0	10	84
11:15 PM	0	0	19	0	0	19	0	0	0	1	0	1	0	2	25	1	0	28	0	3	0	2	0	5	53
11:30 PM	0	0	32	0	0	32	0	0	0	1	0	1	0	0	18	2	0	20	0	0	0	1	0	1	54
11:45 PM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	20	1	0	21	0	0	0	1	0	1	40
Hourly Total	0	2	96	1	1	99	0	0	0	5	0	5	0	3	103	4	0	110	0	6	0	11	0	17	231
DAILY TOTAL	0	75	9035	663	5	9773	0	277	150	122	22	549	0	400	8837	215	1	9452	0	1069	172	486	2	1727	21501
Cars	0	75	8860	659	4	9594	0	275	134	121	6	530	0	399	8659	214	0	9272	0	1062	156	481	1	1699	21095
Heavy Vehicles	0	0	175	4	1	179	0	2	16	1	16	19	0	1	178	1	1	180	0	7	16	5	1	28	406
Heavy Vehicle %	0.00%	0.00%	1.94%	0.60%	20.00%	1.83%	0.00%	0.72%	10.67%	0.82%	72.73%	3.46%	0.00%	0.25%	2.01%	0.47%	100.00%	1.90%	0.00%	0.65%	9.30%	1.03%	50.00%	1.62%	1.89%

TMC 2427 - CSAH 7 @ CSAH 31
Anoka MN
Tuesday, July 9, 2024
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	2	289	23	0	314	0	3	6	1	0	10	0	7	93	0	0	100	0	9	1	6	0	16	440
7:00 AM	0	0	212	16	0	228	0	3	7	1	2	11	0	6	88	0	0	94	0	5	0	4	0	9	342
7:15 AM	0	1	221	24	0	246	0	8	0	1	0	9	0	4	81	1	0	86	0	8	3	5	0	16	357
7:30 AM	0	1	242	38	0	281	0	6	3	1	0	10	0	3	74	1	0	78	0	5	4	6	0	15	384
Peak Hour Total PHF	0.000	0.500	0.834	0.664	0.000	0.851	0.000	0.625	0.571	1.000	0.250	0.909	0.000	0.714	0.903	0.500	0.000	0.895	0.000	0.750	0.500	0.875	0.000	0.875	1523
																									0.865

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	
4:00 PM	0	2	126	7	0	135	0	7	4	4	0	15	0	9	237	8	0	254	0	54	7	15	0	76	480
4:15 PM	0	2	110	8	1	120	0	6	0	2	0	8	0	8	254	5	0	267	0	32	5	9	0	46	441
4:30 PM	0	3	137	5	0	145	0	3	5	8	0	16	0	10	251	2	0	263	0	71	8	18	0	97	521
4:45 PM	0	1	134	17	0	152	0	7	2	1	0	10	0	10	256	4	0	270	0	50	0	11	1	61	493
Peak Hour Total PHF	0.000	0.667	0.925	0.544	0.250	0.908	0.000	0.821	0.550	0.469	0.000	0.766	0.000	0.925	0.975	0.594	0.000	0.976	0.000	0.729	0.625	0.736	0.250	0.722	1935
																									0.929

Total Vehicles On Leg				19801	
Vehicles Entering Intersection			9773	Vehicles Exiting Intersection	
				10028	
Southbound					
Cars	659	8860	75	0	4
Heavy	4	175	0	0	1
Total	663	9035	75	0	5

Total Vehicles on Leg 2940	Eastbound	Vehicles Entering Intersection	1727	Cars	1	Heavy	1	Total	2
		Vehicles Exiting Intersection	1213		0	0	0		
				1062	7	1069			
				156	16	172			
				481	5	486			

Total Vehicles on Leg 1011	Westbound	Vehicles Entering Intersection	549	Cars	121	Heavy	1	Total	122
		Vehicles Exiting Intersection	462		134	16	150		
				275	2	277			
				0	0	0			
				6	16	22			

Total Vehicles On Leg				19250	
Vehicles Entering Intersection			9452	Vehicles Exiting Intersection	
				9798	
Northbound					
Cars	0	0	399	8659	214
Heavy	1	0	1	178	1
Total	1	0	400	8837	215

Daily Volumes

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/17/2024

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 7

Number of Lanes : 2+

Total Approach Volume: 9,452

Southbound: CSAH 7

Number of Lanes :2+

Total Approach Volume: 9,773

Minor Street Approaches

Eastbound: Grant St

Number of Lanes :1

Total Approach Volume: 1,727

Westbound: CSAH 31

Number of Lanes :1

Total Approach Volume: 427

Warrant Summary (Urban Values Apply)

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

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

Required volumes reached for 3 hours, 8 are needed

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

Required volumes reached for 8 hours, 8 are needed

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

Required 1A volumes reached for 5 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 (26) 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:

Study Date : 07/17/2024

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 = **False**
 Number of Major Lanes = **2 or more**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **600**

Veh/Hr Minor = **150**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	1052	+	572	=	1624	250	33	Yes
15:15 - 16:15	1034	+	532	=	1566	209	30	Yes
14:15 - 15:15	876	+	474	=	1350	163	34	Yes
06:45 - 07:45	358	+	1069	=	1427	56	36	No
06:30 - 07:30	330	+	1093	=	1423	49	33	No
17:15 - 18:15	945	+	472	=	1417	149	24	No
06:15 - 07:15	306	+	1093	=	1399	39	36	No
07:00 - 08:00	348	+	1027	=	1375	49	36	No
07:15 - 08:15	334	+	1039	=	1373	48	32	No
17:30 - 18:30	888	+	480	=	1368	129	26	No
06:00 - 07:00	271	+	1075	=	1346	34	27	No
07:30 - 08:30	326	+	978	=	1304	40	29	No
17:45 - 18:45	821	+	438	=	1259	112	22	No
14:00 - 15:00	756	+	475	=	1231	146	30	No
07:45 - 08:45	319	+	868	=	1187	37	26	No
13:45 - 14:45	700	+	473	=	1173	131	24	No
05:45 - 06:45	219	+	936	=	1155	26	24	No
13:30 - 14:30	650	+	488	=	1138	115	23	No
18:00 - 19:00	710	+	411	=	1121	107	20	No
13:15 - 14:15	602	+	494	=	1096	111	22	No
08:00 - 09:00	318	+	762	=	1080	44	22	No
18:15 - 19:15	646	+	388	=	1034	98	17	No
13:00 - 14:00	574	+	458	=	1032	102	29	No
05:30 - 06:30	197	+	823	=	1020	21	23	No
11:15 - 12:15	476		534		1010	94	22	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/17/2024

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

8 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

Veh/Hr Major = **900**

Veh/Hr Minor = **75**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:45 - 16:45	1058	+	536	=	1594	261	30	Yes
16:45 - 17:45	1012	+	572	=	1584	194	32	Yes
14:45 - 15:45	1008	+	509	=	1517	192	32	Yes
17:45 - 18:45	821	+	438	=	1259	112	22	Yes
13:45 - 14:45	700	+	473	=	1173	131	24	Yes
12:45 - 13:45	544	+	462	=	1006	94	26	Yes
11:45 - 12:45	472	+	489	=	961	115	24	Yes
10:45 - 11:45	408	+	498	=	906	87	20	Yes
06:45 - 07:45	358	+	1069	=	1427	56	36	No
06:30 - 07:30	330	+	1093	=	1423	49	33	No
06:15 - 07:15	306	+	1093	=	1399	39	36	No
07:00 - 08:00	348	+	1027	=	1375	49	36	No
07:15 - 08:15	334	+	1039	=	1373	48	32	No
06:00 - 07:00	271	+	1075	=	1346	34	27	No
07:30 - 08:30	326	+	978	=	1304	40	29	No
07:45 - 08:45	319	+	868	=	1187	37	26	No
05:45 - 06:45	219	+	936	=	1155	26	24	No
08:00 - 09:00	318	+	762	=	1080	44	22	No
05:30 - 06:30	197	+	823	=	1020	21	23	No
08:15 - 09:15	318	+	652	=	970	58	25	No
08:30 - 09:30	327	+	585	=	912	69	28	No
10:30 - 11:30	392	+	507	=	899	82	24	No
08:45 - 09:45	340	+	558	=	898	71	28	No
05:15 - 06:15	148	+	750	=	898	20	16	No
10:00 - 11:00	382		500		882	74	26	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/17/2024

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

Site Data Required

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

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **480 720**

Veh/Hr Minor = **120 60**

Major Road CSAH 7

Minor Road Grant St

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:45 - 16:45	1058	+	536	=	1594	261	30	Yes
16:45 - 17:45	1012	+	572	=	1584	194	32	Yes
14:45 - 15:45	1008	+	509	=	1517	192	32	Yes
13:45 - 14:45	700	+	473	=	1173	131	24	Yes
12:15 - 13:15	495	+	422	=	917	121	23	Yes
06:45 - 07:45	358	+	1069	=	1427	56	36	No
06:30 - 07:30	330	+	1093	=	1423	49	33	No
06:15 - 07:15	306	+	1093	=	1399	39	36	No
07:00 - 08:00	348	+	1027	=	1375	49	36	No
07:15 - 08:15	334	+	1039	=	1373	48	32	No
06:00 - 07:00	271	+	1075	=	1346	34	27	No
07:30 - 08:30	326	+	978	=	1304	40	29	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:45 - 16:45	1058	+	536	=	1594	261	30	Yes
16:45 - 17:45	1012	+	572	=	1584	194	32	Yes
14:45 - 15:45	1008	+	509	=	1517	192	32	Yes
17:45 - 18:45	821	+	438	=	1259	112	22	Yes
13:45 - 14:45	700	+	473	=	1173	131	24	Yes
12:45 - 13:45	544	+	462	=	1006	94	26	Yes
11:45 - 12:45	472	+	489	=	961	115	24	Yes
08:30 - 09:30	327	+	585	=	912	69	28	Yes
10:45 - 11:45	408	+	498	=	906	87	20	Yes
09:45 - 10:45	362	+	489	=	851	64	26	Yes
18:45 - 19:45	514	+	318	=	832	78	16	Yes
06:45 - 07:45	358	+	1069	=	1427	56	36	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/17/2024

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.

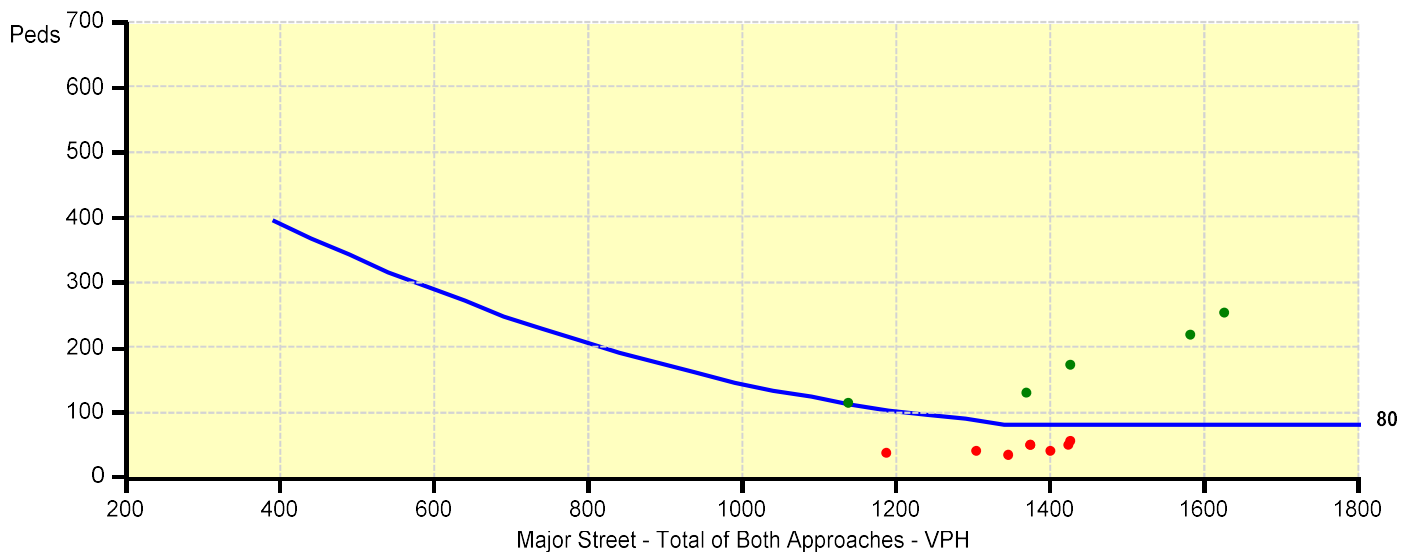
Summary

5 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 7				Total	Minor Road Grant St		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	1041	+	586	=	1627	254	31	Yes
15:30 - 16:30	1049	+	534	=	1583	218	26	Yes
14:30 - 15:30	948	+	478	=	1426	172	35	Yes
17:30 - 18:30	888	+	480	=	1368	129	26	Yes
13:30 - 14:30	650	+	488	=	1138	115	23	Yes
06:45 - 07:45	358	+	1069	=	1427	56	36	No
06:30 - 07:30	330	+	1093	=	1423	49	33	No
06:15 - 07:15	306	+	1093	=	1399	39	36	No
07:00 - 08:00	348	+	1027	=	1375	49	36	No
07:15 - 08:15	334	+	1039	=	1373	48	32	No
06:00 - 07:00	271	+	1075	=	1346	34	27	No
07:30 - 08:30	326	+	978	=	1304	40	29	No



ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 07/17/2024

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

11 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 7				Total	Minor Road Grant St		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	1041	+	586	=	1627	254	31	Yes
16:15 - 17:15	1052	+	572	=	1624	250	33	Yes
16:00 - 17:00	1054	+	552	=	1606	280	34	Yes
15:45 - 16:45	1058	+	536	=	1594	261	30	Yes
15:00 - 16:00	1063	+	525	=	1588	194	25	Yes
16:45 - 17:45	1012	+	572	=	1584	194	32	Yes
15:30 - 16:30	1049	+	534	=	1583	218	26	Yes
15:15 - 16:15	1034	+	532	=	1566	209	30	Yes
14:45 - 15:45	1008	+	509	=	1517	192	32	Yes
17:00 - 18:00	994	+	519	=	1513	161	28	Yes
14:30 - 15:30	948	+	478	=	1426	172	35	Yes
06:45 - 07:45	358		1069		1427	56	36	No

