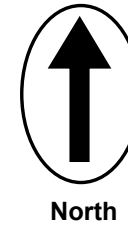


Date: 11/19/24

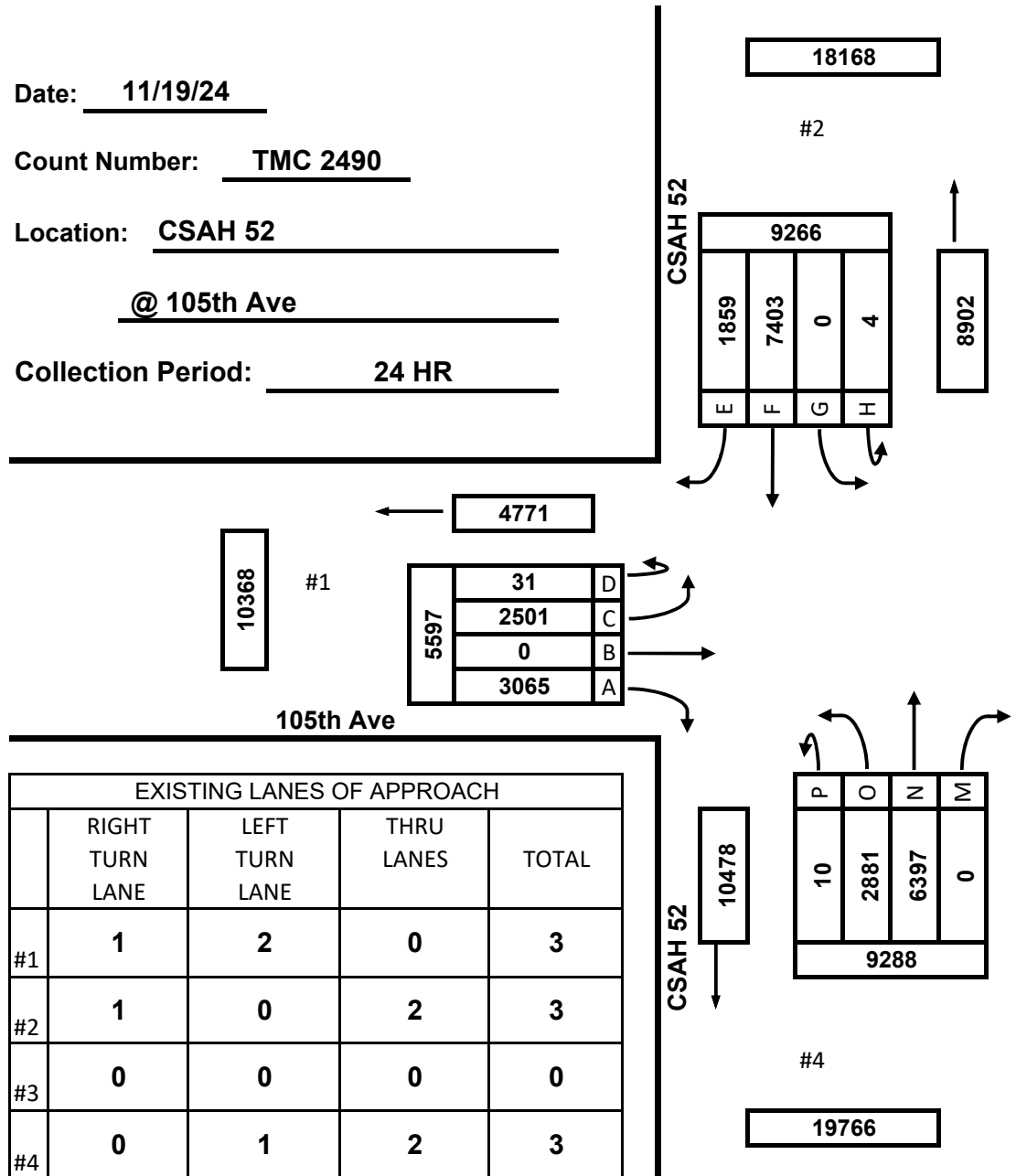
Count Number: TMC 2490

Location: CSAH 52
@ 105th Ave

Collection Period: 24 HR



North



Anoka County
 Highway Department
 Traffic Volume and Turning
 Movement Study

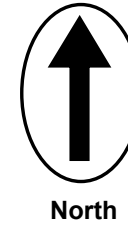
Date: 11/19/24

Count Number: TMC 2490

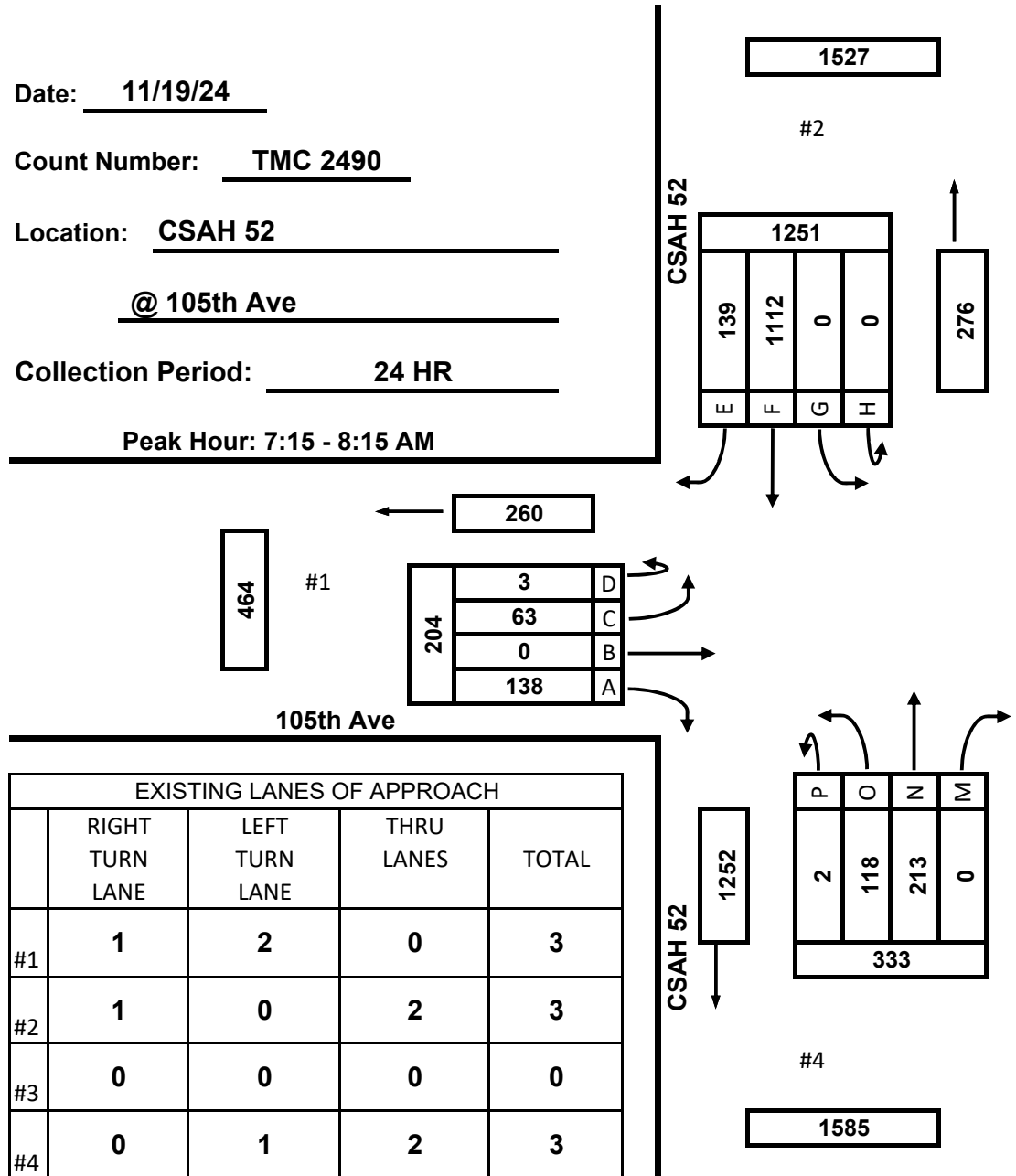
Location: CSAH 52
@ 105th Ave

Collection Period: 24 HR

Peak Hour: 7:15 - 8:15 AM



North



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

Anoka County
 Highway Department
 Traffic Volume and Turning
 Movement Study

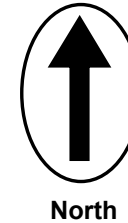
Date: 11/19/24

Count Number: TMC 2490

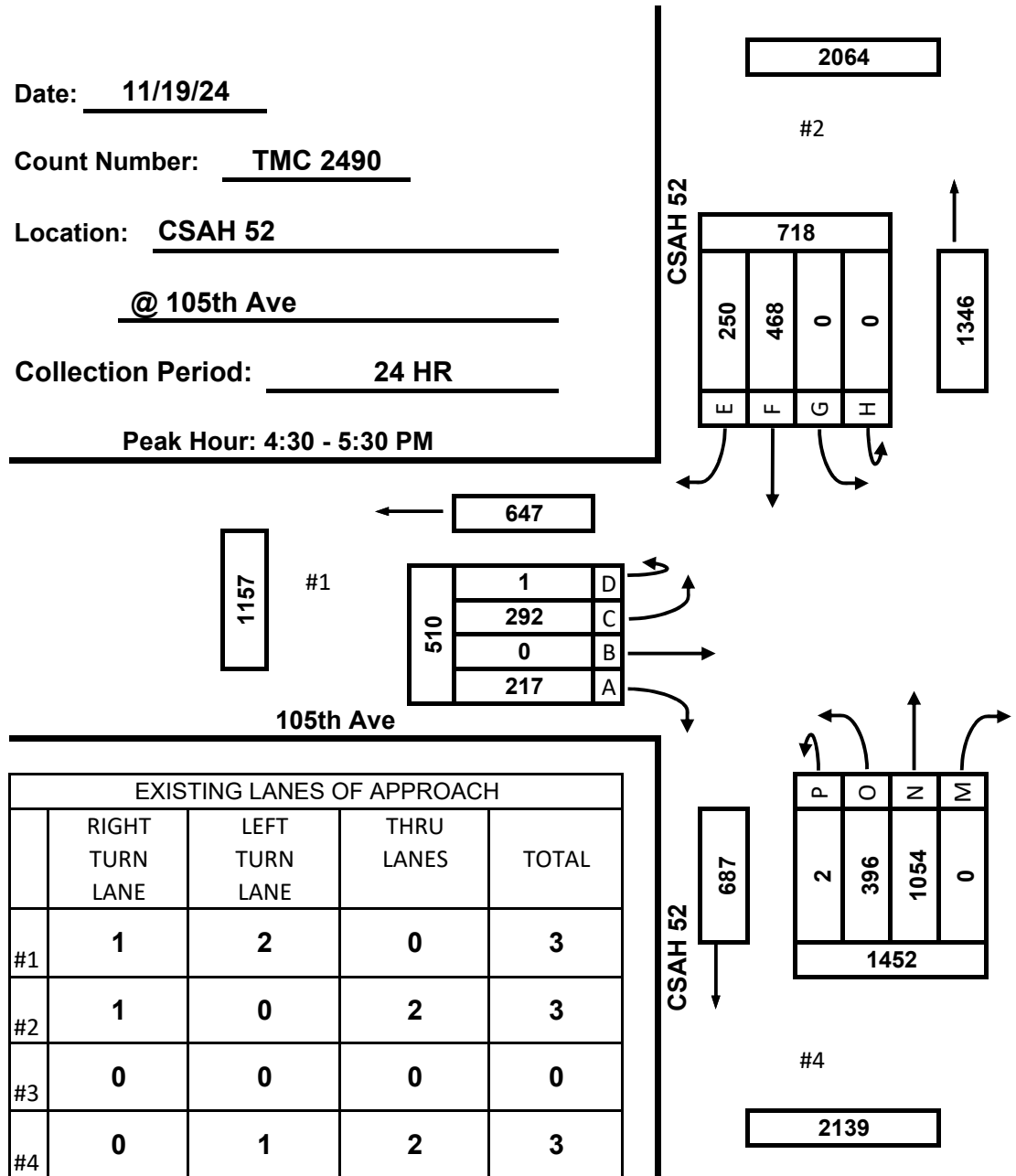
Location: CSAH 52
@ 105th Ave

Collection Period: 24 HR

Peak Hour: 4:30 - 5:30 PM



North



Anoka County
 Highway Department
 Traffic Volume and Turning
 Movement Study

**TMC 2490 - CSAH 52 @ 105th Ave
Blaine MN**

Tuesday, November 19, 2024

Time	Southbound CSAH 52 (Radisson Rd)						Westbound 0						Northbound CSAH 52 (Radisson Rd)						Eastbound 105th Ave						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	2	7	0	0	9	0	1	0	1	0	2	14
12:15 AM	0	0	8	1	0	9	0	0	0	0	0	0	0	2	7	0	0	9	0	0	0	0	0	0	18
12:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	4	5	0	0	9	0	0	0	2	0	2	13
12:45 AM	0	0	3	3	0	6	0	0	0	0	0	0	0	3	7	0	0	10	0	2	0	1	0	3	19
Hourly Total	0	0	16	4	0	20	0	0	0	0	0	0	0	11	26	0	0	37	0	3	0	4	0	7	64
1:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	2	8	0	0	10	0	0	0	1	0	1	14
1:15 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	8
1:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	4
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0	7	0	1	0	0	0	1	8
Hourly Total	0	0	7	1	0	8	0	0	0	0	0	0	0	5	19	0	0	24	0	1	0	1	0	2	34
2:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	1	3	0	0	4	0	1	0	0	0	1	8
2:15 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	2	0	2	0	4	7
2:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	2	2	0	0	4	0	1	0	2	0	3	9
2:45 AM	0	0	2	1	0	3	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	0	0	1	6
Hourly Total	0	0	8	1	0	9	0	0	0	0	0	0	0	6	6	0	0	12	0	5	0	4	0	9	30
3:00 AM	0	0	11	0	0	11	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	2	14
3:15 AM	0	0	6	1	0	7	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	1	9
3:30 AM	0	0	17	0	0	17	0	0	0	0	0	0	0	3	3	0	0	6	0	0	0	3	0	3	26
3:45 AM	0	0	14	0	0	14	0	0	0	0	0	0	0	5	3	0	0	8	0	0	0	6	0	6	28
Hourly Total	0	0	48	1	0	49	0	0	0	0	0	0	0	8	8	0	0	16	0	0	0	12	0	12	77
4:00 AM	0	0	22	1	0	23	0	0	0	0	0	0	0	4	3	0	0	7	0	1	0	3	0	4	34
4:15 AM	0	0	31	4	0	35	0	0	0	0	0	0	0	3	4	0	0	7	0	0	0	6	0	6	48
4:30 AM	0	0	38	2	0	40	0	0	0	0	0	0	0	8	6	0	0	14	0	2	0	9	0	11	65
4:45 AM	0	0	38	0	0	38	0	0	0	0	0	0	0	7	5	0	0	12	0	3	0	14	0	17	67
Hourly Total	0	0	129	7	0	136	0	0	0	0	0	0	0	22	18	0	0	40	0	6	0	32	0	38	214
5:00 AM	0	0	54	7	0	61	0	0	0	0	0	0	0	6	7	0	0	13	0	1	0	6	0	7	81
5:15 AM	0	0	93	4	0	97	0	0	0	0	0	0	0	4	10	0	0	14	0	2	0	8	0	10	121
5:30 AM	0	0	109	4	0	113	0	0	0	0	0	0	1	14	12	0	0	27	0	11	0	16	0	27	167
5:45 AM	0	0	98	6	0	104	0	0	0	0	0	0	0	16	27	0	0	43	0	3	0	14	0	17	164
Hourly Total	0	0	354	21	0	375	0	0	0	0	0	0	1	40	56	0	0	97	0	17	0	44	0	61	533
6:00 AM	0	0	128	10	0	138	0	0	0	0	0	0	0	14	15	0	0	29	0	2	0	17	0	19	186
6:15 AM	0	0	194	12	0	206	0	0	0	0	0	0	0	14	14	0	0	28	0	8	0	12	0	20	254
6:30 AM	0	0	202	14	0	216	0	0	0	0	0	0	0	18	30	0	0	48	0	9	0	29	0	38	302
6:45 AM	0	0	225	21	0	246	0	0	0	0	0	0	0	27	29	0	0	56	1	10	0	33	0	44	346
Hourly Total	0	0	749	57	0	806	0	0	0	0	0	0	0	73	88	0	0	161	1	29	0	91	0	121	1088
7:00 AM	1	0	228	32	0	261	0	0	0	0	0	0	0	25	46	0	0	71	0	20	0	24	0	44	376
7:15 AM	0	0	300	24	0	324	0	0	0	0	0	0	0	21	40	0	0	61	0	16	0	22	0	38	423
7:30 AM	0	0	296	38	0	334	0	0	0	0	0	0	2	25	54	0	0	81	0	14	0	34	0	48	463
7:45 AM	0	0	279	44	0	323	0	0	0	0	0	0	0	37	66	0	0	103	3	21	0	44	0	68	494
Hourly Total	1	0	1103	138	0	1242	0	0	0	0	0	0	2	108	206	0	0	316	3	71	0	124	0	198	1756

**TMC 2490 - CSAH 52 @ 105th Ave
Blaine MN
Tuesday, November 19, 2024**

Time	Southbound CSAH 52 (Radisson Rd)						Westbound 0						Northbound CSAH 52 (Radisson Rd)						Eastbound 105th Ave						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	237	33	0	270	0	0	0	0	0	0	0	35	53	0	0	88	0	12	0	38	0	50	408
8:15 AM	0	0	195	20	0	215	0	0	0	0	0	0	0	33	49	0	0	82	0	19	0	30	0	49	346
8:30 AM	0	0	168	21	0	189	0	0	0	0	0	0	0	27	59	0	0	86	0	21	0	30	0	51	326
8:45 AM	0	0	162	10	0	172	0	0	0	0	0	0	0	27	45	0	0	72	0	18	0	29	0	47	291
Hourly Total	0	0	762	84	0	846	0	0	0	0	0	0	0	122	206	0	0	328	0	70	0	127	0	197	1371
9:00 AM	0	0	135	29	0	164	0	0	0	0	0	0	0	36	57	0	0	93	0	24	0	34	0	58	315
9:15 AM	0	0	152	14	0	166	0	0	0	0	0	0	0	34	51	0	0	85	0	22	0	45	0	67	318
9:30 AM	0	0	99	10	0	109	0	0	0	0	0	0	1	39	54	0	0	94	0	26	0	26	0	52	255
9:45 AM	0	0	96	20	0	116	0	0	0	0	0	0	0	26	47	0	0	73	1	31	0	24	0	56	245
Hourly Total	0	0	482	73	0	555	0	0	0	0	0	0	1	135	209	0	0	345	1	103	0	129	0	233	1133
10:00 AM	0	0	88	19	0	107	0	0	0	0	0	0	0	29	54	0	0	83	0	23	0	36	0	59	249
10:15 AM	0	0	79	14	0	93	0	0	0	0	0	0	0	29	45	0	0	74	0	25	0	38	0	63	230
10:30 AM	0	0	86	17	0	103	0	0	0	0	0	0	0	31	50	0	0	81	1	23	0	28	0	52	236
10:45 AM	0	0	91	29	0	120	0	0	0	0	0	0	0	43	45	0	0	88	0	29	0	33	0	62	270
Hourly Total	0	0	344	79	0	423	0	0	0	0	0	0	0	132	194	0	0	326	1	100	0	135	0	236	985
11:00 AM	0	0	84	22	0	106	0	0	0	0	0	0	0	40	52	0	0	92	0	15	0	33	0	48	246
11:15 AM	0	0	84	18	0	102	0	0	0	0	0	0	0	43	55	0	0	98	0	20	0	35	0	55	255
11:30 AM	0	0	100	22	0	122	0	0	0	0	0	0	0	45	57	0	0	102	1	24	0	39	0	64	288
11:45 AM	0	0	86	29	0	115	0	0	0	0	0	0	0	43	67	0	0	110	0	38	0	45	0	83	308
Hourly Total	0	0	354	91	0	445	0	0	0	0	0	0	0	171	231	0	0	402	1	97	0	152	0	250	1097
12:00 PM	0	0	101	22	0	123	0	0	0	0	0	0	0	36	73	0	0	109	1	33	0	48	0	82	314
12:15 PM	0	0	92	34	0	126	0	0	0	0	0	0	1	46	80	0	0	127	1	32	0	36	0	69	322
12:30 PM	1	0	78	22	0	101	0	0	0	0	0	0	1	36	102	0	0	139	0	36	0	53	0	89	329
12:45 PM	1	0	87	21	0	109	0	0	0	0	0	0	1	55	76	0	0	132	0	45	0	51	0	96	337
Hourly Total	2	0	358	99	0	459	0	0	0	0	0	0	3	173	331	0	0	507	2	146	0	188	0	336	1302
1:00 PM	0	0	77	19	0	96	0	0	0	0	0	0	0	42	73	0	0	115	0	19	0	47	0	66	277
1:15 PM	0	0	77	16	0	93	0	0	0	0	0	0	0	34	83	0	0	117	0	30	0	48	0	78	288
1:30 PM	0	0	75	12	0	87	0	0	0	0	0	0	0	30	81	0	0	111	1	27	0	46	0	74	272
1:45 PM	0	0	78	34	0	112	0	0	0	0	0	0	0	49	94	0	0	143	1	27	0	45	0	73	328
Hourly Total	0	0	307	81	0	388	0	0	0	0	0	0	0	155	331	0	0	486	2	103	0	186	0	291	1165
2:00 PM	0	0	89	20	0	109	0	0	0	0	0	0	0	33	114	0	0	147	0	33	0	38	0	71	327
2:15 PM	0	0	76	15	0	91	0	0	0	0	0	0	0	45	106	0	0	151	1	36	0	46	0	83	325
2:30 PM	0	0	91	30	0	121	0	0	0	0	0	0	0	48	135	0	0	183	0	31	0	44	0	75	379
2:45 PM	0	0	98	22	0	120	0	0	0	0	0	0	0	44	192	0	0	236	0	43	0	37	0	80	436
Hourly Total	0	0	354	87	0	441	0	0	0	0	0	0	0	170	547	0	0	717	1	143	0	165	0	309	1467
3:00 PM	0	0	95	22	0	117	0	0	0	0	0	0	0	61	172	0	0	233	0	66	0	58	0	124	474
3:15 PM	0	0	87	21	0	108	0	0	0	0	0	0	0	78	184	0	0	262	0	54	0	38	1	92	462
3:30 PM	0	0	88	26	0	114	0	0	0	0	0	0	0	72	211	0	0	283	0	71	0	64	0	135	532
3:45 PM	0	0	97	27	0	124	0	0	0	0	0	0	0	83	235	0	0	318	2	48	0	50	0	100	542
Hourly Total	0	0	367	96	0	463	0	0	0	0	0	0	0	294	802	0	0	1096	2	239	0	210	1	451	2010

**TMC 2490 - CSAH 52 @ 105th Ave
Blaine MN
Tuesday, November 19, 2024**

Time	Southbound CSAH 52 (Radisson Rd)						Westbound 0						Northbound CSAH 52 (Radisson Rd)						Eastbound 105th Ave						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
4:00 PM	0	0	102	45	0	147	0	0	0	0	0	0	0	66	249	0	0	315	4	65	0	61	0	130	592
4:15 PM	0	0	87	35	0	122	0	0	0	0	0	0	0	72	275	0	0	347	0	89	0	57	0	146	615
4:30 PM	0	0	131	44	0	175	0	0	0	0	0	0	0	91	290	0	0	381	0	87	0	44	0	131	687
4:45 PM	0	0	129	79	0	208	0	0	0	0	0	0	1	113	270	0	0	384	0	66	0	48	0	114	706
Hourly Total	0	0	449	203	0	652	0	0	0	0	0	0	1	342	1084	0	0	1427	4	307	0	210	0	521	2600
5:00 PM	0	0	98	78	0	176	0	0	0	0	0	0	1	98	243	0	0	342	1	87	0	59	0	147	665
5:15 PM	0	0	110	49	0	159	0	0	0	0	0	0	0	94	251	0	0	345	0	52	0	66	0	118	622
5:30 PM	1	0	79	60	0	140	0	0	0	0	0	0	0	78	184	0	0	262	0	52	0	63	0	115	517
5:45 PM	0	0	104	103	0	207	0	0	0	0	0	0	0	95	166	0	0	261	0	48	0	46	0	94	562
Hourly Total	1	0	391	290	0	682	0	0	0	0	0	0	1	365	844	0	0	1210	1	239	0	234	0	474	2366
6:00 PM	0	0	90	54	0	144	0	0	0	0	0	0	0	42	111	0	0	153	0	57	0	91	0	148	445
6:15 PM	0	0	83	50	0	133	0	0	0	0	0	0	0	61	107	0	0	168	0	47	0	59	0	106	407
6:30 PM	0	0	75	43	0	118	0	0	0	0	0	0	0	42	76	0	0	118	1	61	0	36	0	98	334
6:45 PM	0	0	44	53	0	97	0	0	0	0	0	0	0	69	77	0	0	146	8	55	0	44	1	107	350
Hourly Total	0	0	292	200	0	492	0	0	0	0	0	0	0	214	371	0	0	585	9	220	0	230	1	459	1536
7:00 PM	0	0	42	28	0	70	0	0	0	0	0	0	1	38	73	0	0	112	0	86	0	87	0	173	355
7:15 PM	0	0	49	31	0	80	0	0	0	0	0	0	0	39	65	0	0	104	0	61	0	79	0	140	324
7:30 PM	0	0	47	43	0	90	0	0	0	0	0	0	0	47	57	0	0	104	0	46	0	41	0	87	281
7:45 PM	0	0	42	35	0	77	0	0	0	0	0	0	0	27	67	0	0	94	1	54	0	50	0	105	276
Hourly Total	0	0	180	137	0	317	0	0	0	0	0	0	1	151	262	0	0	414	1	247	0	257	0	505	1236
8:00 PM	0	0	26	21	0	47	0	0	0	0	0	0	0	32	63	0	0	95	1	80	0	100	0	181	323
8:15 PM	0	0	38	23	0	61	0	0	0	0	0	0	0	17	64	0	0	81	0	28	0	38	0	66	208
8:30 PM	0	0	30	16	0	46	0	0	0	0	0	0	0	25	81	0	0	106	0	20	0	61	0	81	233
8:45 PM	0	0	34	18	0	52	0	0	0	0	0	0	0	37	62	0	0	99	0	33	0	25	0	58	209
Hourly Total	0	0	128	78	0	206	0	0	0	0	0	0	0	111	270	0	0	381	1	161	0	224	0	386	973
9:00 PM	0	0	40	8	0	48	0	0	0	0	0	0	0	14	30	0	0	44	0	62	0	74	0	136	228
9:15 PM	0	0	20	3	0	23	0	0	0	0	0	0	0	4	40	0	0	44	0	46	0	57	0	103	170
9:30 PM	0	0	31	5	0	36	0	0	0	0	0	0	0	10	34	0	0	44	0	5	0	27	0	32	112
9:45 PM	0	0	30	9	0	39	0	0	0	0	0	0	0	6	36	0	0	42	0	9	0	22	0	31	112
Hourly Total	0	0	121	25	0	146	0	0	0	0	0	0	0	34	140	0	0	174	0	122	0	180	0	302	622
10:00 PM	0	0	21	3	0	24	0	0	0	0	0	0	0	8	27	0	0	35	0	25	0	20	0	45	104
10:15 PM	0	0	20	0	0	20	0	0	0	0	0	0	0	4	23	0	0	27	0	19	0	35	0	54	101
10:30 PM	0	0	14	1	0	15	0	0	0	0	0	0	0	8	31	0	0	39	0	6	0	13	0	19	73
10:45 PM	0	0	9	1	0	10	0	0	0	0	0	0	0	5	17	0	0	22	0	7	0	11	0	18	50
Hourly Total	0	0	64	5	0	69	0	0	0	0	0	0	0	25	98	0	0	123	0	57	0	79	0	136	328
11:00 PM	0	0	9	1	0	10	0	0	0	0	0	0	0	5	15	0	0	20	0	5	0	18	0	23	53
11:15 PM	0	0	13	0	0	13	0	0	0	0	0	0	0	4	13	0	0	17	0	2	0	11	0	13	43
11:30 PM	0	0	8	0	0	8	0	0	0	0	0	0	0	2	12	0	0	14	1	7	0	9	0	17	39
11:45 PM	0	0	6	0	0	6	0	0	0	0	0	0	0	3	10	0	0	13	0	1	0	9	0	10	29
Hourly Total	0	0	36	1	0	37	0	0	0	0	0	0	0	14	50	0	0	64	1	15	0	47	0	63	164
DAILY TOTAL	4	0	7403	1859	0	9266	0	0	0	0	0	0	10	2881	6397	0	0	9288	31	2501	0	3065	2	5597	24151
Cars	4	0	7186	1816	0	9006	0	0	0	0	0	0	10	2743	6242	0	0	8995	31	2473	0	2899	1	5403	23404
Heavy Vehicles	0	0	217	43	0	260	0	0	0	0	0	0	0	138	155	0	0	293	0	28	0	166	1	194	747
Heavy Vehicle %	0.00%	0.00%	2.93%	2.31%	0.00%	2.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.79%	2.42%	0.00%	0.00%	3.15%	0.00%	1.12%	0.00%	5.42%	50.00%	3.47%	3.09%

**TMC 2490 - CSAH 52 @ 105th Ave
Blaine MN**

Tuesday, November 19, 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	
7:15 AM	0	0	300	24	0	324	0	0	0	0	0	0	0	21	40	0	0	61	0	16	0	22	0	38	423
7:30 AM	0	0	296	38	0	334	0	0	0	0	0	0	2	25	54	0	0	81	0	14	0	34	0	48	463
7:45 AM	0	0	279	44	0	323	0	0	0	0	0	0	0	37	66	0	0	103	3	21	0	44	0	68	494
8:00 AM	0	0	237	33	0	270	0	0	0	0	0	0	0	35	53	0	0	88	0	12	0	38	0	50	408
Peak Hour Total	0	0	1112	139	0	1251	0	0	0	0	0	0	2	118	213	0	0	333	3	63	0	138	0	204	1788
PHF	0.000	0.000	0.927	0.790	0.000	0.936	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.797	0.807	0.000	0.000	0.808	0.250	0.750	0.000	0.784	0.000	0.750	0.905

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	0	131	44	0	175	0	0	0	0	0	0	0	91	290	0	0	381	0	87	0	44	0	131	687
4:45 PM	0	0	129	79	0	208	0	0	0	0	0	0	1	113	270	0	0	384	0	66	0	48	0	114	706
5:00 PM	0	0	98	78	0	176	0	0	0	0	0	0	1	98	243	0	0	342	1	87	0	59	0	147	665
5:15 PM	0	0	110	49	0	159	0	0	0	0	0	0	0	94	251	0	0	345	0	52	0	66	0	118	622
Peak Hour Total	0	0	468	250	0	718	0	0	0	0	0	0	2	396	1054	0	0	1452	1	292	0	217	0	510	2680
PHF	0.000	0.000	0.893	0.791	0.000	0.863	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.876	0.909	0.000	0.000	0.945	0.250	0.839	0.000	0.822	0.000	0.867	0.949

Total Vehicles On Leg		18168	
Vehicles Entering Intersection	9266	Vehicles Exiting Intersection	8902
Southbound			
Cars	1816	7186	0
Heavy	43	217	0
Total	1859	7403	0



Total Vehicles on Leg 10368	Vehicles Entering Intersection 5597	Eastbound	Cars	Heavy	Total		
			1	1	2		
			31	0	31		
	Vehicles Exiting Intersection 4771			2473	28	2501	
	0		0	0			
2899	166	3065					



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 0	Total Vehicles on Leg 0
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0	Vehicles Exiting Intersection 0		



Cars	0	10	2743	6242	0
Heavy	0	0	138	155	0
Total	0	10	2881	6397	0
Northbound					
Vehicles Entering Intersection	9288	Vehicles Exiting Intersection	10478		
Total Vehicles On Leg	19766				



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2490

Study Date : 11/21/2024

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 52

Number of Lanes : 2+

Total Approach Volume: 9,288

Southbound: CSAH 52

Number of Lanes :2+

Total Approach Volume: 9,266

Minor Street Approaches

Eastbound: 105th Ave

Number of Lanes :2+

Total Approach Volume: 2,532

Warrant Summary (Rural Values Apply)

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

Warrant 1A - Minimum Vehicular Volume.....Satisfied

Required volumes reached for 8 hours, 8 are needed

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

Required volumes reached for 13 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Satisfied

Required 1A volumes reached for 10 hours, 8 are needed

Required 1B volumes reached for 14 hours, 8 are needed

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

Number of hours (11) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (24) 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 2490

Study Date : 11/21/2024

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

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 = **2 or more**

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **420**
 Veh/Hr Minor = **140**

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:00 - 17:00	1427	+	652	=	2079	311	0	Yes
17:00 - 18:00	1210	+	682	=	1892	240	0	Yes
15:00 - 16:00	1096	+	463	=	1559	241	0	Yes
14:00 - 15:00	717	+	441	=	1158	144	0	Yes
18:00 - 19:00	585	+	492	=	1077	229	0	Yes
11:45 - 12:45	485	+	465	=	950	141	0	Yes
19:00 - 20:00	414	+	317	=	731	248	0	Yes
20:00 - 21:00	381	+	206	=	587	162	0	Yes
07:15 - 08:15	333	+	1251	=	1584	66	0	No
07:00 - 08:00	316	+	1242	=	1558	74	0	No
07:30 - 08:30	354	+	1142	=	1496	69	0	No
06:45 - 07:45	269	+	1165	=	1434	61	0	No
07:45 - 08:45	359	+	997	=	1356	76	0	No
06:30 - 07:30	236	+	1047	=	1283	56	0	No
08:00 - 09:00	328	+	846	=	1174	70	0	No
06:15 - 07:15	203	+	929	=	1132	48	0	No
08:15 - 09:15	333	+	740	=	1073	82	0	No
13:45 - 14:45	624	+	433	=	1057	129	0	No
08:30 - 09:30	336	+	691	=	1027	85	0	No
06:00 - 07:00	161	+	806	=	967	30	0	No
08:45 - 09:45	344	+	611	=	955	90	0	No
13:30 - 14:30	552	+	399	=	951	126	0	No
11:30 - 12:30	448	+	486	=	934	130	0	No
13:15 - 14:15	518	+	401	=	919	119	0	No
09:00 - 10:00	345		555		900	104	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2490

Study Date : 11/21/2024

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

13 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 = **2 or more**

Volume Requirements

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

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 52					105th Ave		
16:00 - 17:00	1427	+	652	=	2079	311	0	Yes
17:00 - 18:00	1210	+	682	=	1892	240	0	Yes
15:00 - 16:00	1096	+	463	=	1559	241	0	Yes
07:00 - 08:00	316	+	1242	=	1558	74	0	Yes
08:00 - 09:00	328	+	846	=	1174	70	0	Yes
14:00 - 15:00	717	+	441	=	1158	144	0	Yes
18:00 - 19:00	585	+	492	=	1077	229	0	Yes
12:00 - 13:00	507	+	459	=	966	148	0	Yes
09:00 - 10:00	345	+	555	=	900	104	0	Yes
13:00 - 14:00	486	+	388	=	874	105	0	Yes
11:00 - 12:00	402	+	445	=	847	98	0	Yes
10:00 - 11:00	326	+	423	=	749	101	0	Yes
19:00 - 20:00	414	+	317	=	731	248	0	Yes
06:45 - 07:45	269	+	1165	=	1434	61	0	No
06:30 - 07:30	236	+	1047	=	1283	56	0	No
06:15 - 07:15	203	+	929	=	1132	48	0	No
06:00 - 07:00	161	+	806	=	967	30	0	No
05:45 - 06:45	148	+	664	=	812	22	0	No
05:30 - 06:30	127	+	561	=	688	24	0	No
20:00 - 21:00	381	+	206	=	587	162	0	No
05:15 - 06:15	113	+	452	=	565	18	0	No
20:15 - 21:15	330	+	207	=	537	143	0	No
05:00 - 06:00	97	+	375	=	472	17	0	No
20:30 - 21:30	293	+	169	=	462	161	0	No
20:45 - 21:45	231		159		390	146	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2490

Study Date : 11/21/2024

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

10 hours meet 1A minimums.
14 hours meet 1B minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

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

Veh/Hr Minor = **112 56**

Major Road CSAH 52

Minor Road 105th Ave

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:15 - 17:15	1454	+	681	=	2135	330	0	Yes
15:15 - 16:15	1178	+	493	=	1671	244	0	Yes
17:15 - 18:15	1021	+	650	=	1671	209	0	Yes
14:15 - 15:15	803	+	449	=	1252	177	0	Yes
18:15 - 19:15	544	+	418	=	962	258	0	Yes
12:15 - 13:15	513	+	432	=	945	133	0	Yes
13:15 - 14:15	518	+	401	=	919	119	0	Yes
11:15 - 12:15	419	+	462	=	881	117	0	Yes
19:15 - 20:15	397	+	294	=	691	243	0	Yes
20:15 - 21:15	330	+	207	=	537	143	0	Yes
07:15 - 08:15	333	+	1251	=	1584	66	0	No
07:00 - 08:00	316		1242		1558	74	0	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:30 - 17:30	1452	+	718	=	2170	293	0	Yes
15:30 - 16:30	1263	+	507	=	1770	279	0	Yes
07:30 - 08:30	354	+	1142	=	1496	69	0	Yes
17:30 - 18:30	844	+	624	=	1468	204	0	Yes
14:30 - 15:30	914	+	466	=	1380	194	0	Yes
06:30 - 07:30	236	+	1047	=	1283	56	0	Yes
08:30 - 09:30	336	+	691	=	1027	85	0	Yes
13:30 - 14:30	552	+	399	=	951	126	0	Yes
11:30 - 12:30	448	+	486	=	934	130	0	Yes
12:30 - 13:30	503	+	399	=	902	130	0	Yes
18:30 - 19:30	480	+	365	=	845	272	0	Yes
10:30 - 11:30	359		431		790	88	0	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2490

Study Date : 11/21/2024

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.

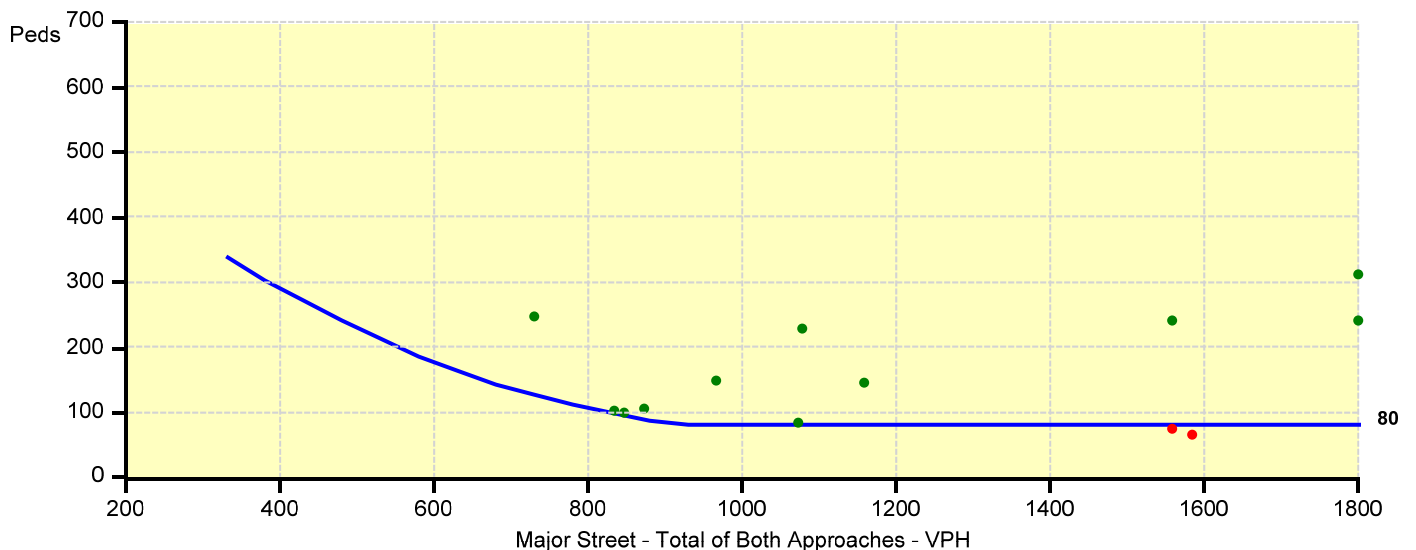
Summary

11 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 = **2 or more**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 52					105th Ave		
16:00 - 17:00	1427	+	652	=	2079	311	0	Yes
17:00 - 18:00	1210	+	682	=	1892	240	0	Yes
15:00 - 16:00	1096	+	463	=	1559	241	0	Yes
14:00 - 15:00	717	+	441	=	1158	144	0	Yes
18:00 - 19:00	585	+	492	=	1077	229	0	Yes
08:15 - 09:15	333	+	740	=	1073	82	0	Yes
12:00 - 13:00	507	+	459	=	966	148	0	Yes
13:00 - 14:00	486	+	388	=	874	105	0	Yes
11:00 - 12:00	402	+	445	=	847	98	0	Yes
09:15 - 10:15	335	+	498	=	833	103	0	Yes
19:00 - 20:00	414	+	317	=	731	248	0	Yes
07:15 - 08:15	333		1251		1584	66	0	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2490

Study Date : 11/21/2024

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

23 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 = **2 or more**

Time	Major Road CSAH 52				Total	Minor Road 105th Ave		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	1452	+	718	=	2170	293	0	Yes
16:15 - 17:15	1454	+	681	=	2135	330	0	Yes
16:00 - 17:00	1427	+	652	=	2079	311	0	Yes
16:45 - 17:45	1333	+	683	=	2016	258	0	Yes
15:45 - 16:45	1361	+	568	=	1929	295	0	Yes
17:00 - 18:00	1210	+	682	=	1892	240	0	Yes
15:30 - 16:30	1263	+	507	=	1770	279	0	Yes
15:15 - 16:15	1178	+	493	=	1671	244	0	Yes
17:15 - 18:15	1021	+	650	=	1671	209	0	Yes
15:00 - 16:00	1096	+	463	=	1559	241	0	Yes
14:45 - 15:45	1014	+	459	=	1473	234	0	Yes
17:30 - 18:30	844	+	624	=	1468	204	0	Yes

