

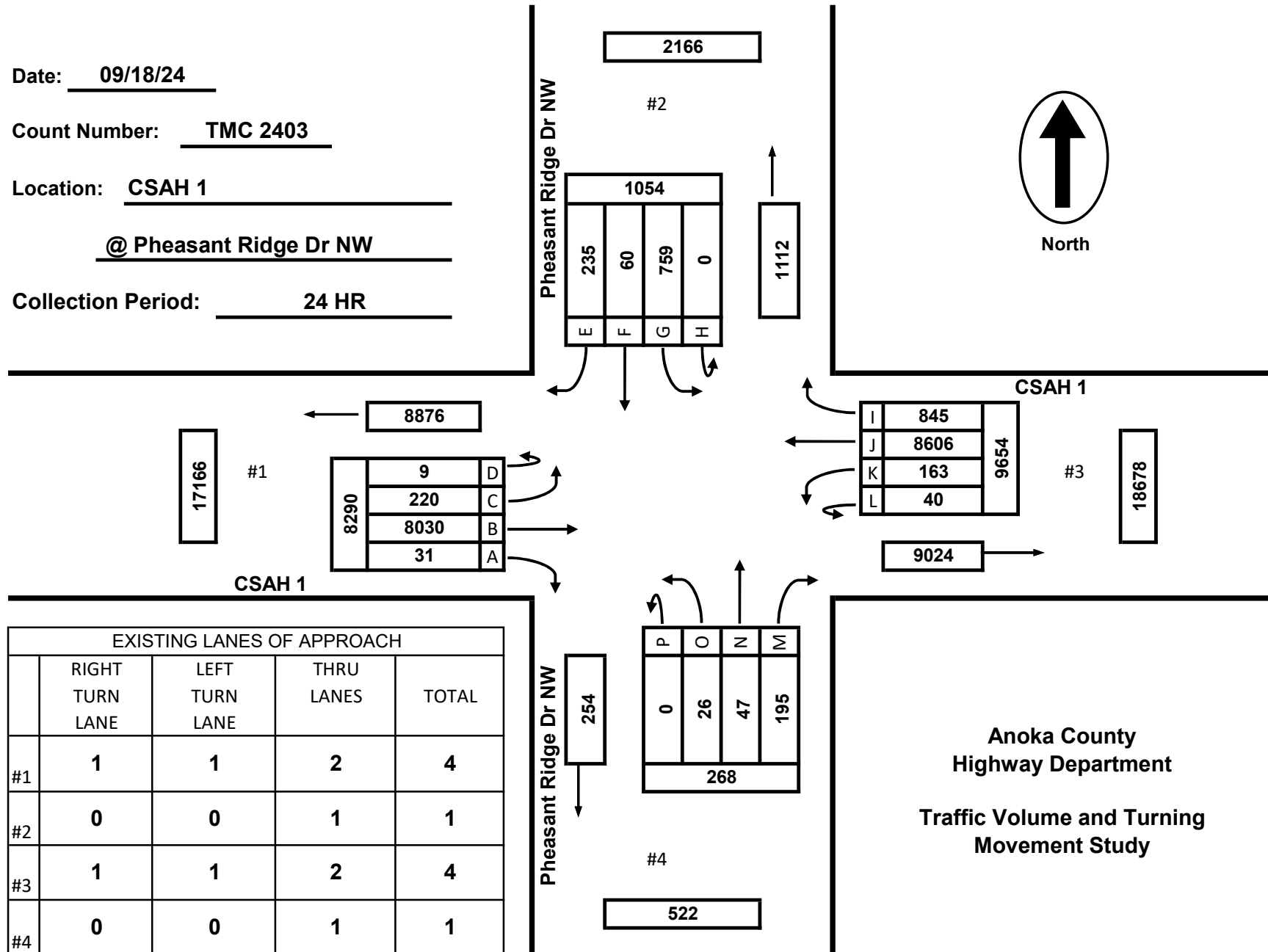
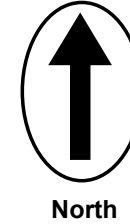
Date: 09/18/24

Count Number: TMC 2403

Location: CSAH 1

@ Pheasant Ridge Dr NW

Collection Period: 24 HR



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

**Anoka County
Highway Department
Traffic Volume and Turning
Movement Study**

Date: 09/18/24

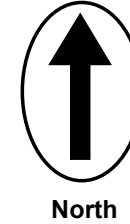
Count Number: TMC 2403

Location: CSAH 1

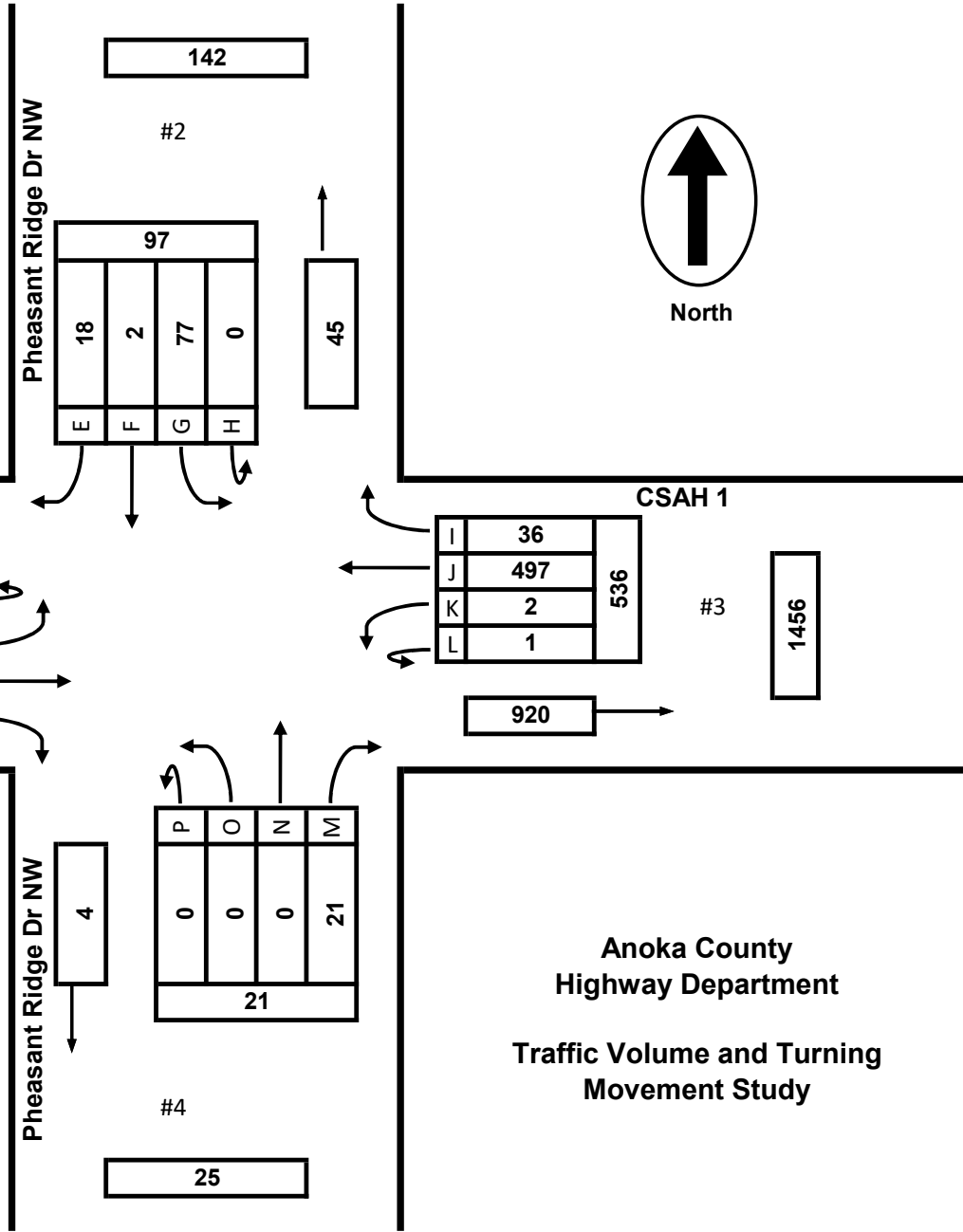
@ Pheasant Ridge Dr NW

Collection Period: 24 HR

Peak Hour: 7:15 - 8:15 AM



North



CSAH 1

CSAH 1

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

Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

Date: 09/18/24

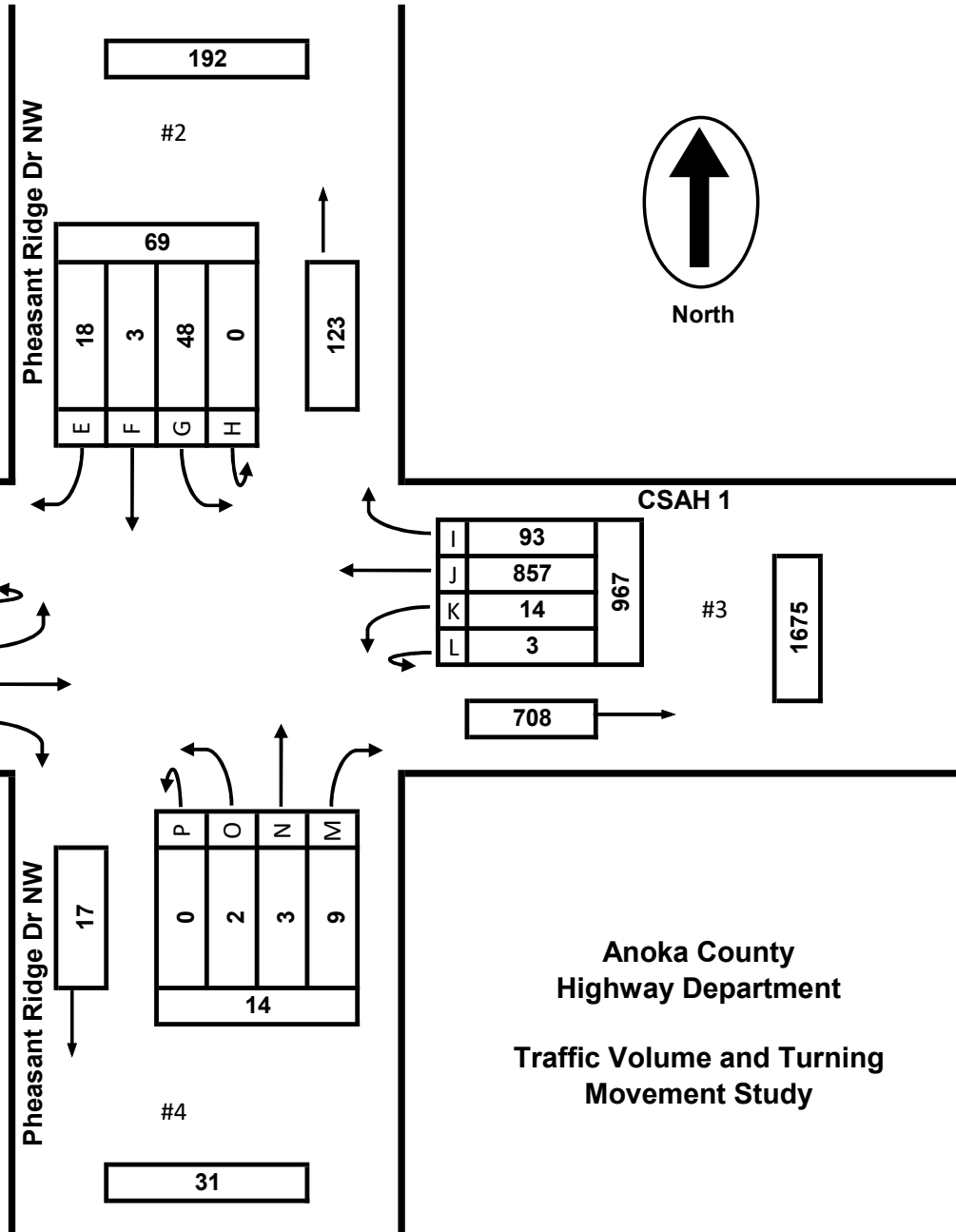
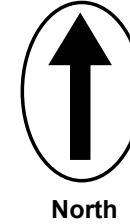
Count Number: TMC 2403

Location: CSAH 1

@ Pheasant Ridge Dr NW

Collection Period: 24 HR

Peak Hour: 3:45 - 4:45 PM



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

Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

**TMC 2403 - CSAH 1 @ Pheasant Ridge Dr NW
Coon Rapids MN
Wednesday, September 18, 2024**

Time	Southbound Pheasant Ridge Dr NW						Westbound CSAH 1						Northbound Pheasant Ridge Dr NW						Eastbound CSAH 1						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	0	1	0	2	0	1	8	1	0	10	0	0	0	0	0	0	0	0	8	0	0	8	20
12:15 AM	0	2	0	0	0	2	0	0	4	4	0	8	0	0	0	0	0	0	0	0	7	0	0	7	17
12:30 AM	0	0	0	0	0	0	0	0	7	3	0	10	0	0	0	0	0	0	0	0	7	0	0	7	17
12:45 AM	0	2	0	0	0	2	0	0	5	0	0	5	0	0	0	0	0	0	0	1	7	0	0	8	15
Hourly Total	0	5	0	1	0	6	0	1	24	8	0	33	0	0	0	0	0	0	0	1	29	0	0	30	69
1:00 AM	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	8	0	0	8	18
1:15 AM	0	0	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	0	0	11	0	0	11	16
1:30 AM	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	11	0	0	11	19
1:45 AM	0	1	1	1	0	3	0	0	4	1	0	5	0	0	0	0	0	0	0	0	6	0	0	6	14
Hourly Total	0	1	1	1	0	3	0	0	26	2	0	28	0	0	0	0	0	0	0	0	36	0	0	36	67
2:00 AM	0	0	0	0	0	0	0	1	7	2	0	10	0	0	0	0	0	0	0	0	1	0	0	1	11
2:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	4
2:30 AM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	5
2:45 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Hourly Total	0	0	0	0	0	0	0	1	15	2	0	18	0	0	0	0	0	0	0	0	5	0	0	5	23
3:00 AM	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	0	10	0	0	10	16
3:15 AM	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	0	0	4	0	0	4	8
3:30 AM	0	1	0	0	0	1	0	0	3	0	0	3	0	0	0	0	0	0	0	1	6	0	0	7	11
3:45 AM	0	1	0	1	0	2	0	0	10	0	0	10	0	0	0	0	0	0	0	0	6	0	0	6	18
Hourly Total	0	2	0	1	0	3	0	0	21	2	0	23	0	0	0	0	0	0	0	1	26	0	0	27	53
4:00 AM	0	4	0	1	0	5	0	1	5	0	0	6	0	0	0	0	0	0	0	1	4	0	0	5	16
4:15 AM	0	5	0	4	0	9	0	0	11	1	0	12	0	0	0	0	0	0	0	0	14	0	0	14	35
4:30 AM	0	3	0	2	0	5	0	0	13	3	0	16	0	0	0	0	0	0	0	2	12	0	0	14	35
4:45 AM	0	3	0	0	1	3	0	0	19	6	0	25	0	0	1	0	0	1	1	1	9	0	0	11	40
Hourly Total	0	15	0	7	1	22	0	1	48	10	0	59	0	0	1	0	0	1	1	4	39	0	0	44	126
5:00 AM	0	7	0	1	0	8	0	0	19	1	0	20	0	0	0	1	0	1	0	0	22	0	0	22	51
5:15 AM	0	10	0	0	0	10	0	0	24	2	0	26	0	0	0	0	0	0	0	0	28	0	0	28	64
5:30 AM	0	8	0	2	0	10	0	0	46	1	0	47	0	0	0	3	0	3	0	0	48	0	0	48	108
5:45 AM	0	9	1	0	0	10	0	1	42	3	0	46	0	0	0	1	0	1	0	0	38	0	0	38	95
Hourly Total	0	34	1	3	0	38	0	1	131	7	0	139	0	0	0	5	0	5	0	0	136	0	0	136	318
6:00 AM	0	6	0	2	0	8	0	1	38	2	0	41	0	0	0	3	0	3	0	1	36	0	0	37	89
6:15 AM	0	14	0	3	0	17	1	0	63	7	0	71	0	0	0	4	0	4	0	0	64	0	0	64	156
6:30 AM	0	8	0	3	0	11	0	0	79	3	2	82	0	0	0	3	0	3	0	1	68	1	0	70	166
6:45 AM	0	12	0	6	0	18	0	0	97	7	0	104	0	0	0	9	0	9	0	0	85	1	0	86	217
Hourly Total	0	40	0	14	0	54	1	1	277	19	2	298	0	0	0	19	0	19	0	2	253	2	0	257	628
7:00 AM	0	12	0	3	0	15	0	1	82	6	1	89	0	1	1	12	0	14	0	1	103	0	0	104	222
7:15 AM	0	15	0	7	0	22	1	0	112	8	0	121	0	0	0	3	0	3	1	3	138	0	0	142	288
7:30 AM	0	19	0	4	0	23	0	1	130	7	0	138	0	0	0	5	0	5	0	3	254	0	0	257	423
7:45 AM	0	27	2	5	0	34	0	0	131	11	0	142	0	0	0	5	0	5	0	2	251	0	0	253	434
Hourly Total	0	73	2	19	0	94	1	2	455	32	1	490	0	1	1	25	0	27	1	9	746	0	0	756	1367

**TMC 2403 - CSAH 1 @ Pheasant Ridge Dr NW
Coon Rapids MN
Wednesday, September 18, 2024**

Time	Southbound Pheasant Ridge Dr NW						Westbound CSAH 1						Northbound Pheasant Ridge Dr NW						Eastbound CSAH 1						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	16	0	2	0	18	0	1	124	10	0	135	0	0	0	8	0	8	0	1	178	0	0	179	340
8:15 AM	0	12	0	6	1	18	0	2	77	5	0	84	0	0	0	6	0	6	0	4	141	0	1	145	253
8:30 AM	0	11	1	2	0	14	0	1	93	9	0	103	0	1	0	6	0	7	0	1	137	0	0	138	262
8:45 AM	0	19	0	2	0	21	0	1	107	13	0	121	0	1	0	3	0	4	0	3	159	0	0	162	308
Hourly Total	0	58	1	12	1	71	0	5	401	37	0	443	0	2	0	23	0	25	0	9	615	0	1	624	1163
9:00 AM	0	9	0	2	1	11	0	2	119	9	0	130	0	0	0	5	0	5	0	3	117	1	0	121	267
9:15 AM	0	10	0	2	0	12	0	2	111	11	0	124	0	0	0	1	0	1	0	2	134	0	0	136	273
9:30 AM	0	8	0	4	0	12	0	1	109	6	0	116	0	0	1	1	0	2	0	3	155	0	0	158	288
9:45 AM	0	8	0	3	0	11	0	1	126	9	0	136	0	0	0	4	0	4	0	1	169	0	0	170	321
Hourly Total	0	35	0	11	1	46	0	6	465	35	0	506	0	0	1	11	0	12	0	9	575	1	0	585	1149
10:00 AM	0	6	0	1	0	7	0	3	124	10	0	137	0	0	0	4	0	4	0	3	99	0	0	102	250
10:15 AM	0	5	0	6	1	11	1	4	92	9	0	106	0	0	1	2	0	3	0	3	134	2	1	139	259
10:30 AM	0	16	0	5	0	21	0	2	107	11	0	120	0	0	1	2	1	3	0	3	132	1	0	136	280
10:45 AM	0	12	3	5	0	20	0	0	143	15	0	158	0	0	2	2	0	4	0	5	148	2	0	155	337
Hourly Total	0	39	3	17	1	59	1	9	466	45	0	521	0	0	4	10	1	14	0	14	513	5	1	532	1126
11:00 AM	0	19	1	1	0	21	4	4	107	13	0	128	0	0	0	2	1	2	1	4	97	0	0	102	253
11:15 AM	0	8	0	6	0	14	0	1	129	12	0	142	0	2	1	1	0	4	0	7	123	1	0	131	291
11:30 AM	0	8	1	1	1	10	3	0	129	9	0	141	0	0	0	3	2	3	0	5	144	0	1	149	303
11:45 AM	0	6	1	2	0	9	0	0	167	12	0	179	0	0	1	1	1	2	1	7	168	2	0	178	368
Hourly Total	0	41	3	10	1	54	7	5	532	46	0	590	0	2	2	7	4	11	2	23	532	3	1	560	1215
12:00 PM	0	18	1	3	0	22	0	3	160	14	0	177	0	1	1	0	3	2	0	5	115	1	0	121	322
12:15 PM	0	12	0	4	0	16	0	3	151	19	0	173	0	0	1	4	1	5	0	5	144	1	0	150	344
12:30 PM	0	8	0	3	0	11	1	7	128	11	0	147	0	0	2	1	1	3	0	2	122	1	0	125	286
12:45 PM	0	6	2	6	0	14	0	2	152	13	0	167	0	0	2	2	0	4	0	6	135	2	0	143	328
Hourly Total	0	44	3	16	0	63	1	15	591	57	0	664	0	1	6	7	5	14	0	18	516	5	0	539	1280
1:00 PM	0	8	2	2	0	12	1	1	157	16	0	175	0	0	2	2	0	4	0	2	115	0	0	117	308
1:15 PM	0	10	0	3	0	13	0	1	173	9	0	183	0	0	1	0	0	1	2	5	102	0	0	109	306
1:30 PM	0	20	1	6	0	27	0	1	165	12	0	178	0	0	0	1	0	1	0	5	108	0	0	113	319
1:45 PM	0	9	2	4	0	15	1	5	210	15	0	231	0	0	0	1	0	1	1	4	145	1	0	151	398
Hourly Total	0	47	5	15	0	67	2	8	705	52	0	767	0	0	3	4	0	7	3	16	470	1	0	490	1331
2:00 PM	0	16	0	1	0	17	1	2	196	23	1	222	0	0	1	3	2	4	0	3	140	0	0	143	386
2:15 PM	0	13	1	6	0	20	1	4	177	8	0	190	0	0	3	7	0	10	0	3	134	2	0	139	359
2:30 PM	0	23	3	3	0	29	4	5	185	19	0	213	0	0	1	4	2	5	0	2	140	1	0	143	390
2:45 PM	0	9	1	5	0	15	0	2	170	13	0	185	0	0	0	2	1	2	0	4	157	0	0	161	363
Hourly Total	0	61	5	15	0	81	6	13	728	63	1	810	0	0	5	16	5	21	0	12	571	3	0	586	1498
3:00 PM	0	17	1	8	0	26	1	7	182	24	0	214	0	1	1	1	1	3	0	9	170	0	0	179	422
3:15 PM	0	22	1	4	0	27	1	2	200	17	0	220	0	2	1	1	0	4	0	1	175	0	0	176	427
3:30 PM	0	11	1	1	0	13	1	3	188	26	0	218	0	0	1	1	1	2	0	3	188	1	0	192	425
3:45 PM	0	10	2	6	0	18	1	3	217	26	0	247	0	0	0	2	1	2	0	8	165	0	0	173	440
Hourly Total	0	60	5	19	0	84	4	15	787	93	0	899	0	3	3	5	3	11	0	21	698	1	0	720	1714

**TMC 2403 - CSAH 1 @ Pheasant Ridge Dr NW
Coon Rapids MN
Wednesday, September 18, 2024**

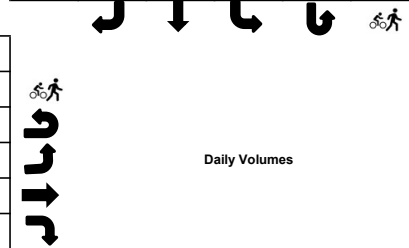
Time	Southbound Pheasant Ridge Dr NW						Westbound CSAH 1						Northbound Pheasant Ridge Dr NW						Eastbound CSAH 1						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle 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	17	0	3	0	20	1	2	203	27	0	233	0	1	1	3	2	5	0	3	157	0	0	160	418
4:15 PM	0	10	0	6	0	16	0	1	224	21	0	246	0	1	0	2	0	3	0	8	159	0	0	167	432
4:30 PM	0	11	1	3	0	15	1	8	213	19	0	241	0	0	2	2	1	4	0	8	167	0	0	175	435
4:45 PM	0	8	1	6	0	15	0	2	226	21	0	249	0	0	0	6	1	6	0	7	120	0	0	127	397
Hourly Total	0	46	2	18	0	66	2	13	866	88	0	969	0	2	3	13	4	18	0	26	603	0	0	629	1682
5:00 PM	0	9	4	6	1	19	0	7	162	30	0	199	0	2	1	5	4	8	0	7	161	1	0	169	395
5:15 PM	0	12	1	4	0	17	1	6	180	21	0	208	0	0	2	5	1	7	0	6	123	1	0	130	362
5:30 PM	0	7	3	6	0	16	0	6	175	17	0	198	0	0	2	0	1	2	0	1	109	0	1	110	326
5:45 PM	0	5	1	3	0	9	1	7	162	16	0	186	0	0	3	9	1	12	0	2	114	0	0	116	323
Hourly Total	0	33	9	19	1	61	2	26	679	84	0	791	0	2	8	19	7	29	0	16	507	2	1	525	1406
6:00 PM	0	13	1	2	0	16	1	5	157	11	0	174	0	1	0	5	0	6	0	3	103	1	0	107	303
6:15 PM	0	12	0	4	1	16	1	3	116	12	0	132	0	0	2	5	0	7	0	2	98	0	0	100	255
6:30 PM	0	9	2	0	0	11	1	2	108	12	0	123	0	0	1	2	0	3	0	7	85	0	0	92	229
6:45 PM	0	7	1	2	0	10	0	1	84	13	0	98	0	0	2	2	0	4	0	0	75	2	0	77	189
Hourly Total	0	41	4	8	1	53	3	11	465	48	0	527	0	1	5	14	0	20	0	12	361	3	0	376	976
7:00 PM	0	10	1	2	0	13	2	2	83	11	0	98	0	0	1	0	2	1	0	2	79	0	0	81	193
7:15 PM	0	9	1	3	0	13	1	2	90	11	0	104	0	1	1	2	0	4	0	2	75	1	0	78	199
7:30 PM	0	8	1	3	0	12	0	2	68	11	0	81	0	0	1	2	0	3	1	1	77	0	0	79	175
7:45 PM	0	6	2	3	0	11	0	0	79	9	0	88	0	1	0	1	0	2	0	3	62	0	0	65	166
Hourly Total	0	33	5	11	0	49	3	6	320	42	0	371	0	2	3	5	2	10	1	8	293	1	0	303	733
8:00 PM	0	4	1	4	0	9	0	5	85	10	0	100	0	3	1	1	0	5	1	2	69	1	0	73	187
8:15 PM	0	2	2	0	0	4	0	1	69	6	0	76	0	0	1	4	0	5	0	0	60	0	0	60	145
8:30 PM	0	11	1	2	0	14	0	4	73	8	0	85	0	0	0	2	0	2	0	2	54	1	0	57	158
8:45 PM	0	2	1	2	0	5	0	5	63	3	0	71	0	0	0	0	0	0	0	1	33	0	0	34	110
Hourly Total	0	19	5	8	0	32	0	15	290	27	0	332	0	3	2	7	0	12	1	5	216	2	0	224	600
9:00 PM	0	4	3	1	0	8	1	1	48	6	0	56	0	1	0	0	0	1	0	4	34	0	0	38	103
9:15 PM	0	3	1	3	0	7	1	0	41	6	0	48	0	1	0	1	0	2	0	4	35	1	0	40	97
9:30 PM	0	6	0	1	0	7	0	0	40	3	0	43	0	1	0	0	0	1	0	0	30	0	0	30	81
9:45 PM	0	5	0	0	0	5	0	2	35	1	0	38	0	0	0	0	0	0	0	1	24	0	0	25	68
Hourly Total	0	18	4	5	0	27	2	3	164	16	0	185	0	3	0	1	0	4	0	9	123	1	0	133	349
10:00 PM	0	4	0	1	0	5	1	1	29	6	0	37	0	1	0	0	0	1	0	1	36	0	0	37	80
10:15 PM	0	2	0	0	0	2	0	1	27	5	0	33	0	0	0	1	0	1	0	0	13	0	0	13	49
10:30 PM	0	0	1	1	0	2	1	1	14	5	0	21	0	1	0	1	0	2	0	3	19	0	0	22	47
10:45 PM	0	1	0	1	0	2	1	2	20	3	0	26	0	1	0	0	0	1	0	0	14	0	0	14	43
Hourly Total	0	7	1	3	0	11	3	5	90	19	0	117	0	3	0	2	0	5	0	4	82	0	0	86	219
11:00 PM	0	1	0	0	0	1	1	0	24	5	0	30	0	1	0	1	0	2	0	0	37	1	0	38	71
11:15 PM	0	3	1	0	0	4	1	1	13	3	0	18	0	0	0	1	0	1	0	0	16	0	0	16	39
11:30 PM	0	3	0	1	0	4	0	0	14	0	0	14	0	0	0	0	0	0	0	0	20	0	0	20	38
11:45 PM	0	0	0	1	0	1	0	0	9	3	0	12	0	0	0	0	0	0	0	1	12	0	0	13	26
Hourly Total	0	7	1	2	0	10	2	1	60	11	0	74	0	1	0	2	0	3	0	1	85	1	0	87	174
DAILY TOTAL	0	759	60	235	7	1054	40	163	8606	845	4	9654	0	26	47	195	31	268	9	220	8030	31	4	8290	19266
Cars	0	725	57	225	4	1007	40	161	8405	798	4	9404	0	24	47	187	8	258	9	208	7824	30	3	8071	18740
Heavy Vehicles	0	34	3	10	3	47	0	2	201	47	0	250	0	2	0	8	23	10	0	12	206	1	1	219	526
Heavy Vehicle %	0.00%	4.48%	5.00%	4.26%	42.86%	4.46%	0.00%	1.23%	2.34%	5.56%	0.00%	2.59%	0.00%	7.69%	0.00%	4.10%	74.19%	3.73%	0.00%	5.45%	2.57%	3.23%	25.00%	2.64%	2.73%

**TMC 2403 - CSAH 1 @ Pheasant Ridge Dr NW
Coon Rapids MN
Wednesday, September 18, 2024**

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	15	0	7	0	22	1	0	112	8	0	121	0	0	0	3	0	3	1	3	138	0	0	142	288
7:30 AM	0	19	0	4	0	23	0	1	130	7	0	138	0	0	0	5	0	5	0	3	254	0	0	257	423
7:45 AM	0	27	2	5	0	34	0	0	131	11	0	142	0	0	0	5	0	5	0	2	251	0	0	253	434
8:00 AM	0	16	0	2	0	18	0	1	124	10	0	135	0	0	0	8	0	8	0	1	178	0	0	179	340
Peak Hour Total	0	77	2	18	0	97	1	2	497	36	0	536	0	0	0	21	0	21	1	9	821	0	0	831	1485
PHF	0.000	0.713	0.250	0.643	0.000	0.713	0.250	0.500	0.948	0.818	0.000	0.944	0.000	0.000	0.000	0.656	0.000	0.656	0.250	0.750	0.808	0.000	0.000	0.808	0.855

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
3:45 PM	0	10	2	6	0	18	1	3	217	26	0	247	0	0	0	2	1	2	0	8	165	0	0	173	440
4:00 PM	0	17	0	3	0	20	1	2	203	27	0	233	0	1	1	3	2	5	0	3	157	0	0	160	418
4:15 PM	0	10	0	6	0	16	0	1	224	21	0	246	0	1	0	2	0	3	0	8	159	0	0	167	432
4:30 PM	0	11	1	3	0	15	1	8	213	19	0	241	0	0	2	2	1	4	0	8	167	0	0	175	435
Peak Hour Total	0	48	3	18	0	69	3	14	857	93	0	967	0	2	3	9	4	14	0	27	648	0	0	675	1725
PHF	0.000	0.706	0.375	0.750	0.000	0.863	0.750	0.438	0.956	0.861	0.000	0.979	0.000	0.500	0.375	0.750	0.500	0.700	0.000	0.844	0.970	0.000	0.000	0.964	0.980

Total Vehicles On Leg		2166	
Vehicles Entering Intersection	1054	Vehicles Exiting Intersection	1112
Southbound			
Cars	225	57	725
Heavy	10	3	34
Total	235	60	759



Cars	Heavy	Total	Eastbound	Vehicles Entering Intersection 8290	Total Vehicles on Leg 17166
3	1	4			
9	0	9			
208	12	220			
7824	206	8030			
30	1	31			

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 9654	Total Vehicles on Leg 18678
798	47	845			
8405	201	8606			
161	2	163			
40	0	40			
4	0	4			

Cars	Heavy	Total	Northbound	Vehicles Entering Intersection 268	Vehicles Exiting Intersection 254
8	0	24			
23	0	2			
Total	31	0	26	47	195
Northbound					
Total Vehicles On Leg			522		

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2403

Study Date : 09/20/2024

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 1

Number of Lanes : 2+

Total Approach Volume: 8,290

Westbound: CSAH 1

Number of Lanes :2+

Total Approach Volume: 9,654

Minor Street Approaches

Northbound: Pheasant Ridge Dr NW

Number of Lanes :1

Total Approach Volume: 268

Southbound: Pheasant Ridge Dr NW

Number of Lanes :1

Total Approach Volume: 1,054

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 0 hours, 8 are needed

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

Required volumes reached for 12 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 14 hours, 8 are needed

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

Number of hours (9) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

Warrant 3A - Peak Hour Delay.....Not Satisfied

Approach volumes on minor street don't exceed minimums for any one hour period. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....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 2403

Study Date : 09/20/2024

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 0 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				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:45 - 16:45	675	+	967	=	1642	14	69	No
15:30 - 16:30	692	+	944	=	1636	12	67	No
15:00 - 16:00	720	+	899	=	1619	11	84	No
15:15 - 16:15	701	+	918	=	1619	13	78	No
16:00 - 17:00	629	+	969	=	1598	18	66	No
16:15 - 17:15	638	+	935	=	1573	21	65	No
14:45 - 15:45	708	+	837	=	1545	11	81	No
16:30 - 17:30	601	+	897	=	1498	25	66	No
14:30 - 15:30	659	+	832	=	1491	14	97	No
13:45 - 14:45	576	+	856	=	1432	20	81	No
14:15 - 15:15	622	+	802	=	1424	20	90	No
14:00 - 15:00	586	+	810	=	1396	21	81	No
16:45 - 17:45	536	+	854	=	1390	23	67	No
07:15 - 08:15	831	+	536	=	1367	21	97	No
13:30 - 14:30	546	+	821	=	1367	16	79	No
07:30 - 08:30	834	+	499	=	1333	24	93	No
13:15 - 14:15	516	+	814	=	1330	7	72	No
17:00 - 18:00	525	+	791	=	1316	29	61	No
11:30 - 12:30	598	+	670	=	1268	12	57	No
13:00 - 14:00	490	+	767	=	1257	7	67	No
11:45 - 12:45	574	+	676	=	1250	12	58	No
07:00 - 08:00	756	+	490	=	1246	27	94	No
17:15 - 18:15	463	+	766	=	1229	27	58	No
11:15 - 12:15	579	+	639	=	1218	11	55	No
12:00 - 13:00	539		664		1203	14	63	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2403

Study Date : 09/20/2024

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

12 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**

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **630**
 Veh/Hr Minor = **53**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:00 - 16:00	720	+	899	=	1619	11	84	Yes
16:00 - 17:00	629	+	969	=	1598	18	66	Yes
14:00 - 15:00	586	+	810	=	1396	21	81	Yes
07:15 - 08:15	831	+	536	=	1367	21	97	Yes
17:00 - 18:00	525	+	791	=	1316	29	61	Yes
13:00 - 14:00	490	+	767	=	1257	7	67	Yes
12:00 - 13:00	539	+	664	=	1203	14	63	Yes
11:00 - 12:00	560	+	590	=	1150	11	54	Yes
10:00 - 11:00	532	+	521	=	1053	14	59	Yes
08:15 - 09:15	566	+	438	=	1004	22	64	Yes
18:00 - 19:00	376	+	527	=	903	20	53	Yes
06:15 - 07:15	324	+	346	=	670	30	61	Yes
09:15 - 10:15	566	+	513	=	1079	11	42	No
09:30 - 10:30	569	+	495	=	1064	13	41	No
09:45 - 10:45	547	+	499	=	1046	14	50	No
19:00 - 20:00	303	+	371	=	674	10	49	No
19:15 - 20:15	295	+	373	=	668	14	45	No
19:30 - 20:30	277	+	345	=	622	15	36	No
19:45 - 20:45	255	+	349	=	604	14	38	No
20:00 - 21:00	224	+	332	=	556	12	32	No
06:00 - 07:00	257	+	298	=	555	19	54	No
20:15 - 21:15	189	+	288	=	477	8	31	No
05:45 - 06:45	209	+	240	=	449	11	46	No
20:30 - 21:30	169	+	260	=	429	5	34	No
05:30 - 06:30	187		205		392	11	45	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2403

Study Date : 09/20/2024

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 2 hours meet 1A minimums.
14 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 1

Minor Road Pheasant Ridge Dr NW

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
14:15 - 15:15	622	+	802	=	1424	20	90	Yes
07:00 - 08:00	756	+	490	=	1246	27	94	Yes
15:45 - 16:45	675	+	967	=	1642	14	69	No
15:30 - 16:30	692	+	944	=	1636	12	67	No
15:15 - 16:15	701	+	918	=	1619	13	78	No
16:00 - 17:00	629	+	969	=	1598	18	66	No
16:15 - 17:15	638	+	935	=	1573	21	65	No
16:30 - 17:30	601	+	897	=	1498	25	66	No
13:45 - 14:45	576	+	856	=	1432	20	81	No
14:00 - 15:00	586	+	810	=	1396	21	81	No
16:45 - 17:45	536	+	854	=	1390	23	67	No
13:30 - 14:30	546	+	821	=	1367	16	79	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
15:00 - 16:00	720	+	899	=	1619	11	84	Yes
16:00 - 17:00	629	+	969	=	1598	18	66	Yes
14:00 - 15:00	586	+	810	=	1396	21	81	Yes
17:00 - 18:00	525	+	791	=	1316	29	61	Yes
13:00 - 14:00	490	+	767	=	1257	7	67	Yes
07:00 - 08:00	756	+	490	=	1246	27	94	Yes
12:00 - 13:00	539	+	664	=	1203	14	63	Yes
11:00 - 12:00	560	+	590	=	1150	11	54	Yes
09:00 - 10:00	585	+	506	=	1091	12	46	Yes
08:00 - 09:00	624	+	443	=	1067	25	71	Yes
10:00 - 11:00	532	+	521	=	1053	14	59	Yes
18:00 - 19:00	376	+	527	=	903	20	53	Yes

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2403

Study Date : 09/20/2024

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.

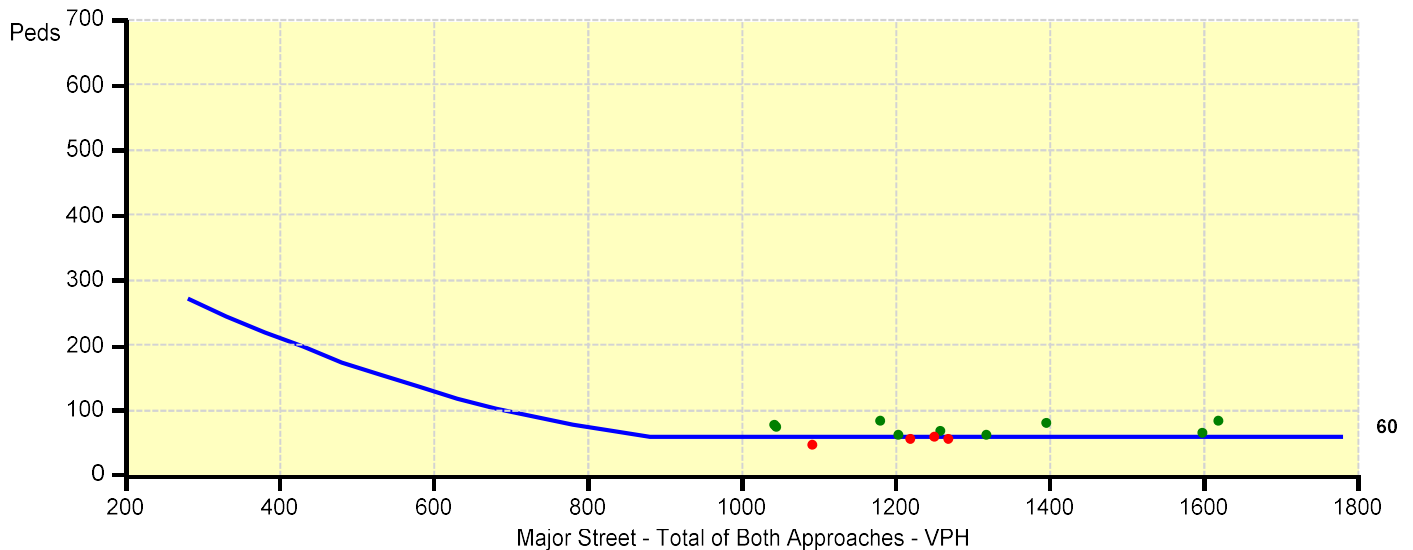
Summary

9 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 1				Total	Minor Road Pheasant Ridge Dr NW		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:00 - 16:00	720	+	899	=	1619	11	84	Yes
16:00 - 17:00	629	+	969	=	1598	18	66	Yes
14:00 - 15:00	586	+	810	=	1396	21	81	Yes
17:00 - 18:00	525	+	791	=	1316	29	61	Yes
13:00 - 14:00	490	+	767	=	1257	7	67	Yes
12:00 - 13:00	539	+	664	=	1203	14	63	Yes
07:45 - 08:45	715	+	464	=	1179	26	84	Yes
10:15 - 11:15	532	+	512	=	1044	12	73	Yes
06:45 - 07:45	589	+	452	=	1041	31	78	Yes
11:30 - 12:30	598	+	670	=	1268	12	57	No
11:45 - 12:45	574	+	676	=	1250	12	58	No
11:15 - 12:15	579	+	639	=	1218	11	55	No



ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2403

Study Date : 09/20/2024

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.

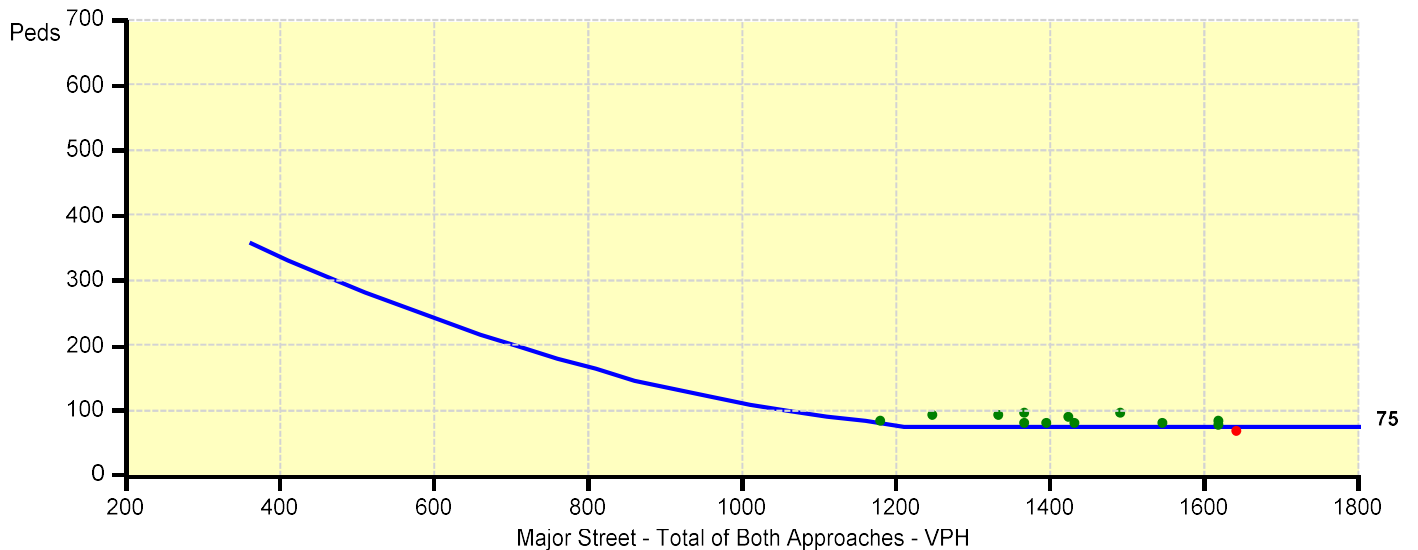
Summary

12 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 1				Total	Minor Road Pheasant Ridge Dr NW		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:00 - 16:00	720	+	899	=	1619	11	84	Yes
15:15 - 16:15	701	+	918	=	1619	13	78	Yes
14:45 - 15:45	708	+	837	=	1545	11	81	Yes
14:30 - 15:30	659	+	832	=	1491	14	97	Yes
13:45 - 14:45	576	+	856	=	1432	20	81	Yes
14:15 - 15:15	622	+	802	=	1424	20	90	Yes
14:00 - 15:00	586	+	810	=	1396	21	81	Yes
07:15 - 08:15	831	+	536	=	1367	21	97	Yes
13:30 - 14:30	546	+	821	=	1367	16	79	Yes
07:30 - 08:30	834	+	499	=	1333	24	93	Yes
07:00 - 08:00	756	+	490	=	1246	27	94	Yes
07:45 - 08:45	715	+	464	=	1179	26	84	Yes



ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2403

Study Date : 09/20/2024

Multiway Stop Warrants - Summary

Major Street Approaches

Eastbound: CSAH 1
 Number of Lanes : 2+
 Total Approach Volume: 8,290

Westbound: CSAH 1
 Number of Lanes :2+
 Total Approach Volume: 9,654

Minor Street Approaches

Northbound: Pheasant Ridge Dr NW
 Number of Lanes :1
 Total Approach Volume: 268

Southbound: Pheasant Ridge Dr NW
 Number of Lanes :1
 Total Approach Volume: 1,054

Warrant Summary (Rural Values Apply)

Criteria A - Interim Measure	Not Evaluated
If traffic signals are justified, stop signs can be installed as an interim measure.	
Criteria B - Crash Experience	Not Satisfied
Number of crashes (-1) is less than minimum required (5).	
Criteria C - Minimum Volumes and Delays	Not Satisfied
Average of 8 highest hours is less than volume criteria.	
Criteria D - 80% of Volumes, Delays, and Crashes	Not Satisfied
Number of crashes (-1) is less than minimum required (4). Average of 8 highest hours is less than volume criteria.	

Criteria C Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:45 - 16:45	1642	1362.6	88	94.1	210	140	No
14:45 - 15:45	1545		92				
13:45 - 14:45	1432		101				
07:15 - 08:15	1367		118				
16:45 - 17:45	1390		97				
11:30 - 12:30	1268		78				
12:45 - 13:45	1185		76				
10:30 - 11:30	1072		103				
09:00 - 10:00	1091		60				
17:45 - 18:45	1030		82				
06:15 - 07:15	670		91				
18:45 - 19:45	696		62				

Criteria D Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:45 - 16:45	1642	1362.6	88	94.1	240	160	No
14:45 - 15:45	1545		92				
13:45 - 14:45	1432		101				
07:15 - 08:15	1367		118				
16:45 - 17:45	1390		97				
11:30 - 12:30	1268		78				
12:45 - 13:45	1185		76				
10:30 - 11:30	1072		103				
09:00 - 10:00	1091		60				
17:45 - 18:45	1030		82				
06:15 - 07:15	670		91				
18:45 - 19:45	696		62				