

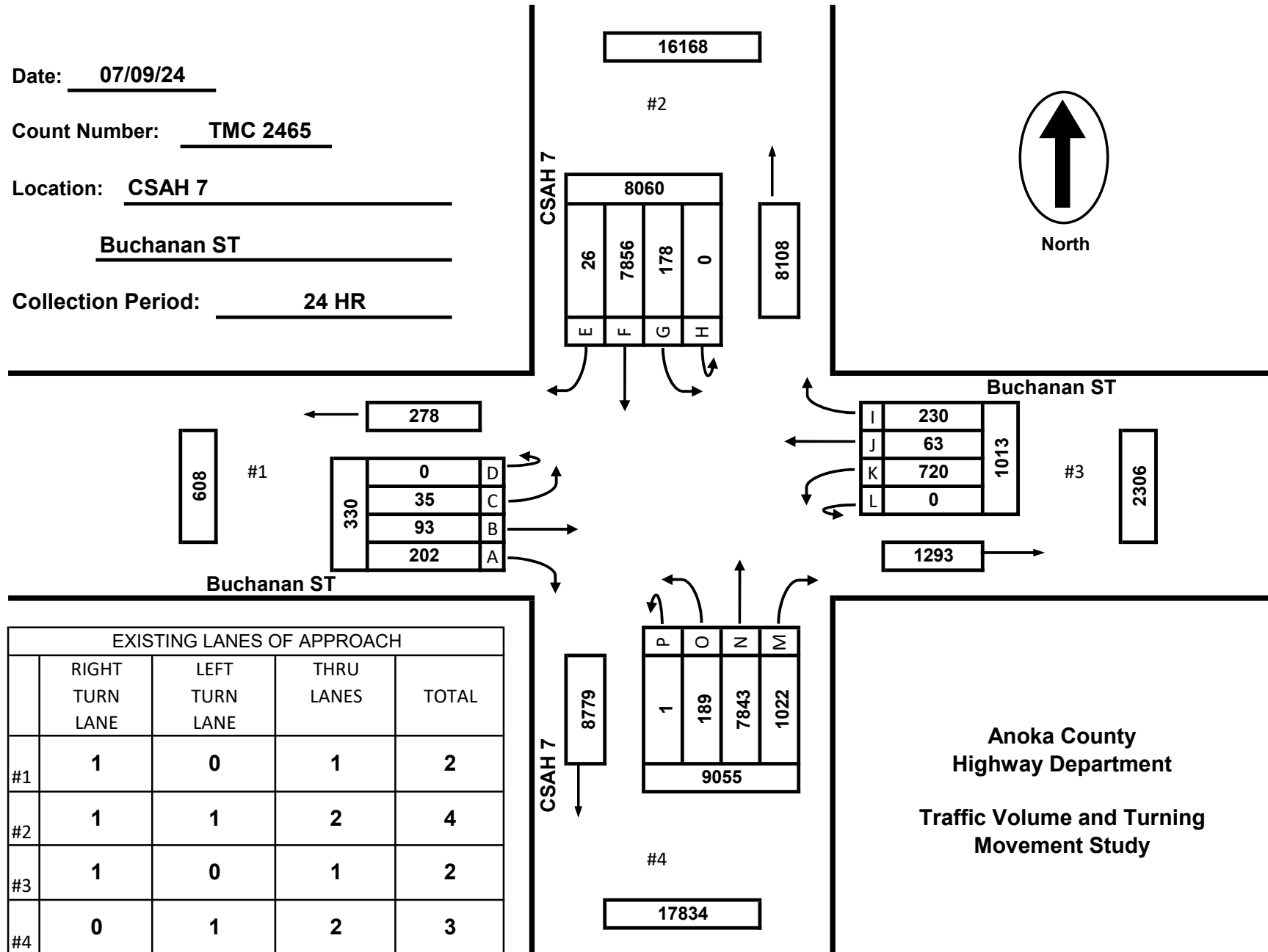
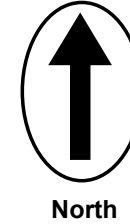
Date: 07/09/24

Count Number: TMC 2465

Location: CSAH 7

Buchanan ST

Collection Period: 24 HR



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

Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

Date: 07/09/24

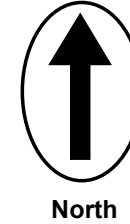
Count Number: TMC 2465

Location: CSAH 7

Buchanan ST

Collection Period: 24 HR

Peak Hour: 6:30 - 7:30 AM



1190

#2

CSAH 7

959			
2	956	1	0
E	F	G	H

231

Buchanan ST

I	13	85
J	2	
K	70	
L	0	

#3

127

42

43

#1

25	0	D
	3	C
	4	B
	18	A

Buchanan ST

P	O	N	M
0	14	215	37
266			

#4

1310

1044

CSAH 7

Anoka County
Highway Department

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

Date: 07/09/24

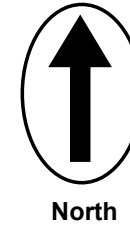
Count Number: TMC 2465

Location: CSAH 7

Buchanan ST

Collection Period: 24 HR

Peak Hour: 3:45 - 4:45 PM



North

1484

#2

CSAH 7

465			
3	450	12	0
E	F	G	H

1019

Buchanan ST

I	27	67
J	0	
K	40	
L	0	

#3

208

141

22

#1

12	0	D
	0	C
	5	B
	7	A

Buchanan ST

P	O	N	M
0	7	992	124
1123			

#4

1620

CSAH 7

497

Anoka County
Highway Department

Traffic Volume and Turning
Movement Study

EXISTING LANES OF APPROACH

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

**TMC 2465 - CSAH 7 @ Buchanan St
Anoka MN
Tuesday, July 9, 2024**

Time	Southbound 7th Ave						Westbound Buchanan ST						Northbound 7th Ave						Eastbound Buchanan ST						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	11	1	0	12	0	1	1	0	0	2	0	7	18	1	0	26	0	2	1	7	0	10	50
12:15 AM	0	0	8	0	0	8	0	0	1	1	0	2	0	8	13	2	0	23	0	3	2	5	0	10	43
12:30 AM	0	0	5	2	0	7	0	1	2	0	0	3	0	5	12	0	0	17	0	1	3	7	0	11	38
12:45 AM	0	1	4	3	0	8	0	0	0	0	0	0	0	1	9	1	0	11	0	1	2	2	0	5	24
Hourly Total	0	1	28	6	0	35	0	2	4	1	0	7	0	21	52	4	0	77	0	7	8	21	0	36	155
1:00 AM	0	2	5	2	0	9	0	0	0	0	0	0	0	8	12	4	0	24	0	1	0	3	0	4	37
1:15 AM	0	0	2	1	0	3	0	0	0	2	0	2	0	2	10	1	0	13	0	3	0	6	0	9	27
1:30 AM	0	1	3	1	0	5	0	0	0	1	0	1	0	2	8	0	0	10	0	1	0	2	0	3	19
1:45 AM	0	0	7	2	0	9	0	1	0	0	0	1	0	5	4	0	0	9	0	2	0	5	0	7	26
Hourly Total	0	3	17	6	0	26	0	1	0	3	0	4	0	17	34	5	0	56	0	7	0	16	0	23	109
2:00 AM	0	1	8	3	0	12	0	0	2	1	0	3	0	4	3	0	0	7	0	2	0	1	0	3	25
2:15 AM	0	0	4	2	0	6	0	0	0	0	0	0	0	5	7	0	0	12	0	4	0	4	0	8	26
2:30 AM	0	1	4	3	0	8	0	0	0	0	0	0	0	1	4	1	0	6	0	4	2	5	0	11	25
2:45 AM	0	0	9	2	0	11	0	0	0	0	0	0	0	1	5	1	0	7	0	0	0	4	0	4	22
Hourly Total	0	2	25	10	0	37	0	0	2	1	0	3	0	11	19	2	0	32	0	10	2	14	0	26	98
3:00 AM	0	0	13	4	0	17	0	0	2	0	0	2	0	4	5	0	0	9	0	1	1	3	0	5	33
3:15 AM	0	0	9	2	0	11	0	2	0	1	0	3	0	1	6	0	0	7	0	2	0	6	0	8	29
3:30 AM	0	0	18	2	0	20	0	0	0	0	0	0	0	10	5	1	0	16	0	1	1	4	0	6	42
3:45 AM	0	3	21	2	0	26	0	1	0	0	0	1	0	3	3	1	0	7	0	2	1	5	0	8	42
Hourly Total	0	3	61	10	0	74	0	3	2	1	0	6	0	18	19	2	0	39	0	6	3	18	0	27	146
4:00 AM	0	0	24	10	0	34	0	0	3	1	0	4	0	1	7	0	0	8	0	0	1	8	0	9	55
4:15 AM	0	2	48	4	0	54	0	5	1	0	0	6	0	6	1	2	0	9	0	2	0	10	0	12	81
4:30 AM	0	0	63	10	0	73	0	3	1	0	0	4	0	9	6	3	0	18	0	0	1	10	0	11	106
4:45 AM	0	1	50	14	0	65	0	1	0	0	0	1	0	1	5	3	0	9	0	1	1	21	0	23	98
Hourly Total	0	3	185	38	0	226	0	9	5	1	0	15	0	17	19	8	0	44	0	3	3	49	0	55	340
5:00 AM	0	1	63	11	0	75	0	3	0	1	0	4	0	4	7	1	0	12	0	1	0	11	0	12	103
5:15 AM	0	2	139	16	0	157	0	5	1	0	0	6	0	8	12	4	0	24	0	1	4	26	0	31	218
5:30 AM	0	0	182	16	0	198	0	10	0	0	0	10	0	16	33	4	0	53	0	4	1	28	0	33	294
5:45 AM	0	3	153	19	0	175	0	6	4	2	1	12	0	16	44	6	0	66	0	3	1	22	0	26	279
Hourly Total	0	6	537	62	0	605	0	24	5	3	1	32	0	44	96	15	0	155	0	9	6	87	0	102	894
6:00 AM	0	2	187	21	0	210	0	4	2	0	1	6	0	9	56	8	0	73	0	5	3	26	0	34	323
6:15 AM	0	1	229	21	0	251	0	10	1	1	1	12	0	7	60	7	0	74	0	5	2	31	0	38	375
6:30 AM	0	7	279	14	0	300	0	12	5	1	0	18	0	15	44	10	0	69	0	4	3	28	0	35	422
6:45 AM	0	1	273	16	0	290	0	19	4	7	0	30	0	20	83	16	0	119	0	3	3	26	0	32	471
Hourly Total	0	11	968	72	0	1051	0	45	12	9	2	66	0	51	243	41	0	335	0	17	11	111	0	139	1591
7:00 AM	0	5	211	14	0	230	0	8	5	6	2	19	0	20	84	12	0	116	0	7	4	24	0	35	400
7:15 AM	0	7	227	17	0	251	0	14	5	1	0	20	0	17	79	12	0	108	0	5	2	31	0	38	417
7:30 AM	0	9	231	20	0	260	0	10	3	3	0	16	0	14	69	16	0	99	0	4	4	18	0	26	401
7:45 AM	0	7	239	10	0	256	0	11	11	5	0	27	0	17	79	25	0	121	0	9	2	25	0	36	440
Hourly Total	0	28	908	61	0	997	0	43	24	15	2	82	0	68	311	65	0	444	0	25	12	98	0	135	1658

**TMC 2465 - CSAH 7 @ Buchanan St
Anoka MN
Tuesday, July 9, 2024**

Time	Southbound 7th Ave						Westbound Buchanan ST						Northbound 7th Ave						Eastbound Buchanan ST						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	10	202	16	0	228	0	11	3	6	0	20	2	9	64	27	0	102	0	8	6	17	1	31	381
8:15 AM	0	9	164	10	0	183	0	13	2	9	0	24	0	13	76	25	0	114	0	2	2	21	0	25	346
8:30 AM	0	8	155	8	0	171	0	13	2	7	0	22	1	13	62	29	0	105	0	3	2	19	0	24	322
8:45 AM	0	8	140	9	0	157	0	21	2	6	0	29	0	17	91	22	0	130	0	6	2	17	0	25	341
Hourly Total	0	35	661	43	0	739	0	58	9	28	0	95	3	52	293	103	0	451	0	19	12	74	1	105	1390
9:00 AM	0	3	120	17	0	140	0	21	8	10	0	39	0	16	71	30	0	117	0	5	2	25	0	32	328
9:15 AM	0	9	118	9	0	136	0	18	8	7	2	33	0	16	76	24	0	116	0	6	4	23	0	33	318
9:30 AM	0	9	117	10	0	136	0	28	6	8	3	42	0	15	72	34	1	121	0	4	7	17	0	28	327
9:45 AM	0	13	109	11	1	133	0	28	5	11	2	44	0	12	76	30	0	118	0	1	6	22	0	29	324
Hourly Total	0	34	464	47	1	545	0	95	27	36	7	158	0	59	295	118	1	472	0	16	19	87	0	122	1297
10:00 AM	0	6	101	10	0	117	0	24	2	12	0	38	0	8	71	33	1	112	0	2	5	15	1	22	289
10:15 AM	0	10	104	7	1	121	0	25	6	8	0	39	0	16	81	21	0	118	0	4	4	11	0	19	297
10:30 AM	0	4	118	14	0	136	0	22	10	13	0	45	0	9	94	38	0	141	0	4	8	16	1	28	350
10:45 AM	0	10	123	13	0	146	0	27	1	17	0	45	0	17	78	29	0	124	0	7	5	18	0	30	345
Hourly Total	0	30	446	44	1	520	0	98	19	50	0	167	0	50	324	121	1	495	0	17	22	60	2	99	1281
11:00 AM	0	11	95	6	1	112	0	27	8	7	0	42	0	16	74	31	1	121	0	5	6	18	1	29	304
11:15 AM	0	9	116	8	2	133	0	30	5	14	3	49	0	20	92	30	0	142	0	6	7	20	0	33	357
11:30 AM	0	19	109	4	0	132	0	27	4	21	1	52	0	16	97	29	0	142	0	7	6	17	0	30	356
11:45 AM	0	11	122	13	1	146	0	25	7	21	1	53	2	13	92	32	0	139	0	9	3	18	0	30	368
Hourly Total	0	50	442	31	4	523	0	109	24	63	5	196	2	65	355	122	1	544	0	27	22	73	1	122	1385
12:00 PM	0	13	117	10	1	140	0	29	4	15	0	48	0	19	105	29	0	153	0	9	4	20	0	33	374
12:15 PM	0	8	98	7	1	113	0	35	7	17	1	59	1	21	99	37	0	158	0	4	1	13	1	18	348
12:30 PM	0	10	88	6	1	104	0	41	6	15	0	62	0	24	94	34	0	152	0	9	5	17	0	31	349
12:45 PM	0	10	99	9	0	118	0	40	5	23	0	68	1	13	105	39	0	158	0	6	5	22	0	33	377
Hourly Total	0	41	402	32	3	475	0	145	22	70	1	237	2	77	403	139	0	621	0	28	15	72	1	115	1448
1:00 PM	0	9	92	13	0	114	0	33	4	16	0	53	0	17	120	40	0	177	0	7	4	16	3	27	371
1:15 PM	0	5	111	7	0	123	0	19	4	14	1	37	1	16	122	36	0	175	0	7	2	13	0	22	357
1:30 PM	0	10	108	10	0	128	0	26	10	14	0	50	0	13	126	29	1	168	0	9	6	27	0	42	388
1:45 PM	0	12	114	7	0	133	0	32	8	15	2	55	0	14	143	47	2	204	0	12	1	19	0	32	424
Hourly Total	0	36	425	37	0	498	0	110	26	59	3	195	1	60	511	152	3	724	0	35	13	75	3	123	1540
2:00 PM	0	12	103	8	0	123	0	28	6	23	0	57	1	20	139	36	1	196	0	8	3	21	0	32	408
2:15 PM	0	4	103	9	1	116	0	41	9	25	0	75	0	15	147	26	0	188	0	11	5	19	0	35	414
2:30 PM	0	10	111	8	2	129	0	44	5	18	0	67	0	31	176	44	0	251	0	15	3	17	0	35	482
2:45 PM	0	5	120	7	0	132	0	26	8	22	0	56	1	19	193	42	0	255	0	8	8	17	0	33	476
Hourly Total	0	31	437	32	3	500	0	139	28	88	0	255	2	85	655	148	1	890	0	42	19	74	0	135	1780
3:00 PM	0	11	121	8	1	140	0	31	5	21	0	57	0	13	256	47	0	316	0	12	3	17	0	32	545
3:15 PM	1	10	111	9	0	131	0	44	7	30	0	81	1	19	230	40	1	290	0	6	4	14	0	24	526
3:30 PM	0	12	126	13	0	151	0	38	4	28	0	70	0	21	229	34	0	284	0	10	2	18	1	30	535
3:45 PM	0	14	124	15	0	153	0	31	8	24	0	63	1	21	261	40	0	323	0	5	5	17	0	27	566
Hourly Total	1	47	482	45	1	575	0	144	24	103	0	271	2	74	976	161	1	1213	0	33	14	66	1	113	2172

**TMC 2465 - CSAH 7 @ Buchanan St
Anoka MN
Tuesday, July 9, 2024**

Time	Southbound 7th Ave						Westbound Buchanan ST						Northbound 7th Ave						Eastbound Buchanan ST						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	1	12	134	6	0	153	0	26	10	25	0	61	1	27	227	25	0	280	0	17	7	28	0	52	546
4:15 PM	0	14	113	9	1	136	0	30	5	15	0	50	0	14	243	36	0	293	0	9	4	21	0	34	513
4:30 PM	0	16	142	9	1	167	0	30	7	22	1	59	0	19	243	44	1	306	0	8	4	22	0	34	566
4:45 PM	1	15	129	4	1	149	0	35	5	22	1	62	0	13	238	41	0	292	0	18	4	11	0	33	536
Hourly Total	2	57	518	28	3	605	0	121	27	84	2	232	1	73	951	146	1	1171	0	62	19	82	0	153	2161
5:00 PM	0	8	132	10	0	150	0	48	9	17	0	74	1	12	231	38	0	282	0	12	4	17	0	33	539
5:15 PM	0	17	124	8	0	149	0	32	8	23	0	63	1	16	239	38	0	294	0	9	2	18	0	29	535
5:30 PM	0	13	123	6	0	142	0	40	5	28	1	73	1	22	209	32	0	264	0	9	2	18	1	29	508
5:45 PM	0	12	95	7	1	114	0	30	4	25	0	59	0	10	228	34	0	274	0	10	7	20	1	37	484
Hourly Total	0	50	474	31	1	555	0	150	26	93	1	269	3	62	907	142	0	1114	0	40	15	73	2	128	2066
6:00 PM	0	8	82	15	0	105	0	30	9	19	0	58	1	18	197	44	0	260	0	9	2	18	1	29	452
6:15 PM	0	9	127	6	0	142	0	35	3	21	0	59	0	15	171	31	0	217	0	7	7	26	1	40	458
6:30 PM	0	8	102	2	2	112	0	37	6	18	1	61	0	21	144	26	0	191	0	16	4	11	0	31	395
6:45 PM	1	9	66	7	0	83	0	30	4	20	0	54	0	18	118	22	0	158	0	8	2	17	1	27	322
Hourly Total	1	34	377	30	2	442	0	132	22	78	1	232	1	72	630	123	0	826	0	40	15	72	3	127	1627
7:00 PM	0	5	70	11	0	86	0	16	4	17	0	37	1	12	124	15	1	152	0	6	1	12	1	19	294
7:15 PM	0	8	80	3	1	91	0	12	4	12	5	28	0	18	107	15	2	140	0	9	4	12	0	25	284
7:30 PM	0	8	67	7	0	82	0	22	4	7	0	33	0	8	109	24	0	141	0	8	6	9	1	23	279
7:45 PM	0	5	65	10	0	80	0	27	8	15	0	50	1	3	80	22	0	106	0	10	3	10	0	23	259
Hourly Total	0	26	282	31	1	339	0	77	20	51	5	148	2	41	420	76	3	539	0	33	14	43	2	90	1116
8:00 PM	0	7	72	6	0	85	0	29	4	8	0	41	0	10	97	20	0	127	0	6	4	7	0	17	270
8:15 PM	0	7	54	8	0	69	0	17	9	10	1	36	0	10	89	16	1	115	0	3	6	14	0	23	243
8:30 PM	0	4	49	7	0	60	0	14	5	11	0	30	0	6	78	22	0	106	0	7	0	7	0	14	210
8:45 PM	0	8	35	4	0	47	0	11	1	7	0	19	0	11	91	13	0	115	0	5	6	4	0	15	196
Hourly Total	0	26	210	25	0	261	0	71	19	36	1	126	0	37	355	71	1	463	0	21	16	32	0	69	919
9:00 PM	0	1	35	8	0	44	0	17	3	9	0	29	0	9	65	17	0	91	0	8	2	13	0	23	187
9:15 PM	0	3	47	10	1	60	0	14	4	10	0	28	0	14	78	15	0	107	0	6	0	17	0	23	218
9:30 PM	0	1	41	5	0	47	0	11	0	8	0	19	0	15	54	9	0	78	0	7	1	17	0	25	169
9:45 PM	0	1	47	4	0	52	0	4	2	6	0	12	0	11	53	12	0	76	0	5	3	9	0	17	157
Hourly Total	0	6	170	27	1	203	0	46	9	33	0	88	0	49	250	53	0	352	0	26	6	56	0	88	731
10:00 PM	0	1	46	3	0	50	0	4	2	1	0	7	0	13	53	5	0	71	0	1	4	12	0	17	145
10:15 PM	0	1	33	3	0	37	0	5	0	2	0	7	0	14	56	4	0	74	0	6	1	12	0	19	137
10:30 PM	1	1	21	5	0	28	0	5	3	2	0	10	0	11	49	6	0	66	0	8	1	8	0	17	121
10:45 PM	0	2	27	5	0	34	0	7	1	5	0	13	0	10	45	1	0	56	0	9	2	9	0	20	123
Hourly Total	1	5	127	16	0	149	0	21	6	10	0	37	0	48	203	16	0	267	0	24	8	41	0	73	526
11:00 PM	0	4	28	4	0	36	0	4	2	3	0	9	0	13	37	4	0	54	0	6	0	7	0	13	112
11:15 PM	0	0	21	1	0	22	0	7	2	2	0	11	0	7	24	7	0	38	0	4	2	10	0	16	87
11:30 PM	0	1	34	3	0	38	0	1	1	0	0	2	0	7	13	7	0	27	0	6	1	8	0	15	82
11:45 PM	0	0	16	1	0	17	0	2	1	0	0	3	0	3	22	4	0	29	0	3	1	8	0	12	61
Hourly Total	0	5	99	9	0	113	0	14	6	5	0	25	0	30	96	22	0	148	0	19	4	33	0	56	342
DAILY TOTAL	5	570	8745	773	21	10093	0	1657	368	921	31	2946	19	1181	8417	1855	13	11472	0	556	278	1427	16	2261	26772
Cars	5	565	8584	754	15	9908	0	1637	365	911	4	2913	19	1120	8259	1831	6	11229	0	541	273	1346	6	2160	26210
Heavy Vehicles	0	5	161	19	6	185	0	20	3	10	27	33	0	61	158	24	7	243	0	15	5	81	10	101	562
Heavy Vehicle %	0.00%	0.88%	1.84%	2.46%	28.57%	1.83%	0.00%	1.21%	0.82%	1.09%	87.10%	1.12%	0.00%	5.17%	1.88%	1.29%	53.85%	2.12%	0.00%	2.70%	1.80%	5.68%	62.50%	4.47%	2.10%

**TMC 2465 - CSAH 7 @ Buchanan St
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	
6:30 AM	0	7	279	14	0	300	0	12	5	1	0	18	0	15	44	10	0	69	0	4	3	28	0	35	422
6:45 AM	0	1	273	16	0	290	0	19	4	7	0	30	0	20	83	16	0	119	0	3	3	26	0	32	471
7:00 AM	0	5	211	14	0	230	0	8	5	6	2	19	0	20	84	12	0	116	0	7	4	24	0	35	400
7:15 AM	0	7	227	17	0	251	0	14	5	1	0	20	0	17	79	12	0	108	0	5	2	31	0	38	417
Peak Hour Total	0	20	990	61	0	1071	0	53	19	15	2	87	0	72	290	50	0	412	0	19	12	109	0	140	1710
PHF	0.000	0.714	0.887	0.897	0.000	0.893	0.000	0.697	0.950	0.536	0.250	0.725	0.000	0.900	0.863	0.781	0.000	0.866	0.000	0.679	0.750	0.879	0.000	0.921	0.908

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	14	124	15	0	153	0	31	8	24	0	63	1	21	261	40	0	323	0	5	5	17	0	27	566
4:00 PM	1	12	134	6	0	153	0	26	10	25	0	61	1	27	227	25	0	280	0	17	7	28	0	52	546
4:15 PM	0	14	113	9	1	136	0	30	5	15	0	50	0	14	243	36	0	293	0	9	4	21	0	34	513
4:30 PM	0	16	142	9	1	167	0	30	7	22	1	59	0	19	243	44	1	306	0	8	4	22	0	34	566
Peak Hour Total	1	56	513	39	2	609	0	117	30	86	1	233	2	81	974	145	1	1202	0	39	20	88	0	147	2191
PHF	0.250	0.875	0.903	0.650	0.500	0.912	0.000	0.944	0.750	0.860	0.250	0.925	0.500	0.750	0.933	0.824	0.250	0.930	0.000	0.574	0.714	0.786	0.000	0.707	0.968

Total Vehicles On Leg				19992			
Vehicles Entering Intersection		10093		Vehicles Exiting Intersection		9899	
Southbound							
Cars	754	8584	565	5	15		
Heavy	19	161	5	0	6		
Total	773	8745	570	5	21		

Total Vehicles on Leg 4583	Vehicles Entering Intersection 2261	Eastbound	Cars	Heavy	Total	Daily Volumes	Vehicles Exiting Intersection 2322	Total Vehicles on Leg 5649
			6	10	16			
			0	0	0			
			541	15	556			
			273	5	278			
1346	81	1427						

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 2946	Total Vehicles on Leg 5649
911	10	921			
365	3	368			
1637	20	1657			
0	0	0			
4	27	31		Vehicles Exiting Intersection 2703	

Cars	6	19	1120	8259	1831
Heavy	7	0	61	158	24
Total	13	19	1181	8417	1855
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
11472			11848		
Total Vehicles On Leg			23320		

Heavy Vehicles

Date	Time	Southbound						Westbound						Northbound						Eastbound						
		U Turns	Left Turns	Straight Through	Right Turns	EB Bicycles in Crosswalk	WB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	NB Bicycles in Crosswalk	SB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	EB Bicycles in Crosswalk	WB Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	NB Bicycles in Crosswalk	SB Bicycles in Crosswalk	
07/9/2024	0:00	0	0	0	0	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	0	1	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	0	0	0	0
	0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	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	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	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	0	0	0	0	0
	2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	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	0	0	0	0	0
	3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	0	0	1	0	0
	3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0
	3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	4:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15	0	0	1	0	0	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	0	0	0	0	0
	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	5:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
	5:45	0	1	0	1	0	0	0	0	0	0	0	1	0	3	1	0	0	0	0	0	0	0	1	0	0
	6:00	0	0	2	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	4	0	0
	6:15	0	0	1	4	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	2	0	0
	6:30	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	4	0	0
	6:45	0	0	1	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	2	0	0
	7:00	0	0	2	1	0	0	0	0	0	0	1	0	0	1	3	0	0	0	0	0	0	0	0	0	0
	7:15	0	0	3	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	1	0	0
	7:30	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0
	7:45	0	0	4	1	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2	0	3	0	0
	8:00	0	0	9	0	0	0	0	0	1	0	0	0	0	1	5	0	0	0	0	0	0	0	0	1	0
	8:15	0	0	3	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	1	0	0
	8:30	0	1	3	0	0	0	0	0	0	1	1	0	0	0	3	0	0	0	0	0	1	0	1	0	0
	8:45	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	1	0	0	0	0
	9:00	0	0	0	0	0	0	0	0	0	0	1	0	0	2	5	2	0	0	0	0	0	0	0	0	0
	9:15	0	0	2	3	0	0	0	0	0	0	2	0	0	4	2	1	0	0	0	0	0	0	4	0	0
	9:30	0	0	2	0	0	0	0	0	1	0	1	2	0	2	7	0	0	0	0	0	0	0	4	0	0
	9:45	0	0	3	0	0	1	0	0	0	1	1	0	0	0	2	1	0	0	0	0	0	0	2	0	0
	10:00	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	10:15	0	0	4	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	1	0	0
	10:30	0	0	2	1	0	0	0	0	0	0	0	0	0	1	4	2	0	0	0	0	0	1	0	1	0
	10:45	0	0	5	0	0	0	0	0	4	0	1	0	0	1	2	1	0	0	0	0	0	1	2	0	0
	11:00	0	1	4	0	0	0	0	0	1	0	0	0	0	0	6	0	0	0	0	0	0	0	1	0	1
	11:15	0	0	5	0	0	0	0	0	0	0	1	0	3	1	10	0	0	0	0	0	0	0	0	0	0
	11:30	0	0	4	0	0	0	0	0	0	0	2	0	1	0	5	1	0	0	0	0	0	1	2	0	0
	11:45	0	0	12	0	0	0	0	0	1	0	0	1	0	0	3	1	0	0	0	0	0	0	0	0	0
12:00	0	1	2	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	
12:15	0	0	4	0	0	1	0	0	1	1	1	1	0	2	3	0	0	0	0	0	0	0	0	0	1	
12:30	0	1	2	0	1	0	0	0	2	0	0	0	0	3	2	0	0	0	0	0	0	0	1	0	0	
12:45	0	0	4	0	0	0	0	0	1	0	0	0	0	1	2	2	0	0	0	0	0	0	4	0	0	
13:00	0	0	4	0	0	0	0	0	0	0	0	0	0	2	7	1	0	0	0	0	0	1	0	0	0	
13:15	0	0	1	0	0	0	0	0	0	0	1	0	0	2	4	0	0	0	0	0	0	0	1	0	0	
13:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	2	0	0	
13:45	0	0	3	0	0	0	0	0	1	0	0	1	1	1	0	1	0	1	0	0	0	0	0	0	0	
14:00	0	0	1	0	0	0	0	0	2	0	0	0	0	2	1	0	0	0	0	0	0	0	2	0	0	
14:15	0	0	3	0	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	
14:30	0	0	2	0	0	1	0	0	1	0	0	0	0	3	3	3	0	0	0	0	0	1	0	1	0	0
14:45	0	0	1	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	1	0	2	0	0
15:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	
15:15	0	0	1	0	0	0	0	0	1	0	0	0	0	1	11	0	0	1	0	0	0	0	2	0	0	
15:30	0	0	10	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	
15:45	0	0	3	1	0	0	0	0	1	0	0	0	0	1	4	1	0	0	0	0	0	0	1	0	0	
16:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	2	0	0	
16:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	2	0	0	
16:30	0	0	1	1	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	1	0	1	0	0
16:45	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2	0	0	
17:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
17:30	0	0	2	1	0	0	0	0	0	0	1	0	0	2	2	0	0	0	0	0	0	0	2	1	0	
17:45	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3	0	0
18:00	0	0	2	0	0	0	0	0	0	1	0	0	0	1	0											

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2465

Study Date : 07/17/2024

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 7

Number of Lanes : 2+

Total Approach Volume: 11,472

Southbound: CSAH 7

Number of Lanes :2+

Total Approach Volume: 10,093

Minor Street Approaches

Eastbound: Buchanan St

Number of Lanes :2+

Total Approach Volume: 834

Westbound: Buchanan St

Number of Lanes :1

Total Approach Volume: 2,025

Warrant Summary (Urban Values Apply)

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

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

Required volumes reached for 6 hours, 8 are needed

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

Required volumes reached for 11 hours, 8 are needed

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

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

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

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

Number of hours (8) volumes exceed minimum \geq minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (21) volumes exceed minimum \geq 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 2465

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 6 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 = **Mixed**

Volume Requirements

Veh/Hr Major = **600**

Veh/Hr Minor = **200 150**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	1174	+	615	=	1789	61	174	Yes
15:30 - 16:30	1180	+	593	=	1773	59	152	Yes
14:30 - 15:30	1112	+	532	=	1644	59	170	Yes
17:30 - 18:30	1015	+	503	=	1518	53	156	Yes
13:30 - 14:30	756	+	500	=	1256	55	160	Yes
11:45 - 12:45	602	+	503	=	1105	44	154	Yes
06:30 - 07:30	412	+	1071	=	1483	31	72	No
06:45 - 07:45	442	+	1031	=	1473	32	68	No
06:15 - 07:15	378	+	1071	=	1449	31	64	No
07:00 - 08:00	444	+	997	=	1441	37	67	No
07:15 - 08:15	430	+	995	=	1425	40	68	No
06:00 - 07:00	335	+	1051	=	1386	28	57	No
07:30 - 08:30	436	+	927	=	1363	37	64	No
07:45 - 08:45	442	+	838	=	1280	34	66	No
13:15 - 14:15	743	+	507	=	1250	48	133	No
13:00 - 14:00	724	+	498	=	1222	48	136	No
05:45 - 06:45	282	+	936	=	1218	26	44	No
08:00 - 09:00	451	+	739	=	1190	31	67	No
12:45 - 13:45	678	+	483	=	1161	46	141	No
11:15 - 12:15	576	+	551	=	1127	51	131	No
11:30 - 12:30	592	+	531	=	1123	43	138	No
08:15 - 09:15	466	+	651	=	1117	24	82	No
05:30 - 06:30	266	+	834	=	1100	24	37	No
08:30 - 09:30	468	+	604	=	1072	30	93	No
11:00 - 12:00	544		523		1067	49	133	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2465

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

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 = **Mixed**

Volume Requirements

Veh/Hr Major = **900**
 Veh/Hr Minor = **100 75**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 7					Buchanan St		
16:15 - 17:15	1173	+	602	=	1775	63	169	Yes
15:15 - 16:15	1177	+	588	=	1765	56	168	Yes
17:15 - 18:15	1092	+	510	=	1602	50	158	Yes
14:15 - 15:15	1010	+	517	=	1527	65	169	Yes
13:15 - 14:15	743	+	507	=	1250	48	133	Yes
18:15 - 19:15	718	+	423	=	1141	51	135	Yes
11:15 - 12:15	576	+	551	=	1127	51	131	Yes
08:15 - 09:15	466	+	651	=	1117	24	82	Yes
12:15 - 13:15	645	+	449	=	1094	41	171	Yes
10:15 - 11:15	504	+	515	=	1019	43	126	Yes
09:15 - 10:15	467	+	522	=	989	35	119	Yes
06:30 - 07:30	412	+	1071	=	1483	31	72	No
06:45 - 07:45	442	+	1031	=	1473	32	68	No
06:15 - 07:15	378	+	1071	=	1449	31	64	No
07:00 - 08:00	444	+	997	=	1441	37	67	No
07:15 - 08:15	430	+	995	=	1425	40	68	No
06:00 - 07:00	335	+	1051	=	1386	28	57	No
07:30 - 08:30	436	+	927	=	1363	37	64	No
07:45 - 08:45	442	+	838	=	1280	34	66	No
05:45 - 06:45	282	+	936	=	1218	26	44	No
08:00 - 09:00	451	+	739	=	1190	31	67	No
05:30 - 06:30	266	+	834	=	1100	24	37	No
05:15 - 06:15	216	+	740	=	956	22	32	No
19:15 - 20:15	514	+	338	=	852	50	110	No
19:30 - 20:30	489		316		805	46	120	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2465

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

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

Site Data Required

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

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **480** **720**
Veh/Hr Minor EB = **160** **80**
Veh/Hr Minor WB = **120** **60**

Major Road CSAH 7

Minor Road Buchanan St

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:15 - 17:15	1173	+	602	=	1775	63	169	Yes
15:15 - 16:15	1177	+	588	=	1765	56	168	Yes
17:15 - 18:15	1092	+	510	=	1602	50	158	Yes
14:15 - 15:15	1010	+	517	=	1527	65	169	Yes
13:15 - 14:15	743	+	507	=	1250	48	133	Yes
18:15 - 19:15	718	+	423	=	1141	51	135	Yes
11:15 - 12:15	576	+	551	=	1127	51	131	Yes
12:15 - 13:15	645	+	449	=	1094	41	171	Yes
10:15 - 11:15	504	+	515	=	1019	43	126	Yes
09:00 - 10:00	472	+	545	=	1017	35	122	Yes
19:30 - 20:30	489	+	316	=	805	46	120	Yes
06:30 - 07:30	412		1071		1483	31	72	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:15 - 17:15	1173	+	602	=	1775	63	169	Yes
15:15 - 16:15	1177	+	588	=	1765	56	168	Yes
17:15 - 18:15	1092	+	510	=	1602	50	158	Yes
14:15 - 15:15	1010	+	517	=	1527	65	169	Yes
06:15 - 07:15	378	+	1071	=	1449	31	64	Yes
07:15 - 08:15	430	+	995	=	1425	40	68	Yes
13:15 - 14:15	743	+	507	=	1250	48	133	Yes
18:15 - 19:15	718	+	423	=	1141	51	135	Yes
11:15 - 12:15	576	+	551	=	1127	51	131	Yes
08:15 - 09:15	466	+	651	=	1117	24	82	Yes
12:15 - 13:15	645	+	449	=	1094	41	171	Yes
10:15 - 11:15	504		515		1019	43	126	Yes

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2465

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.

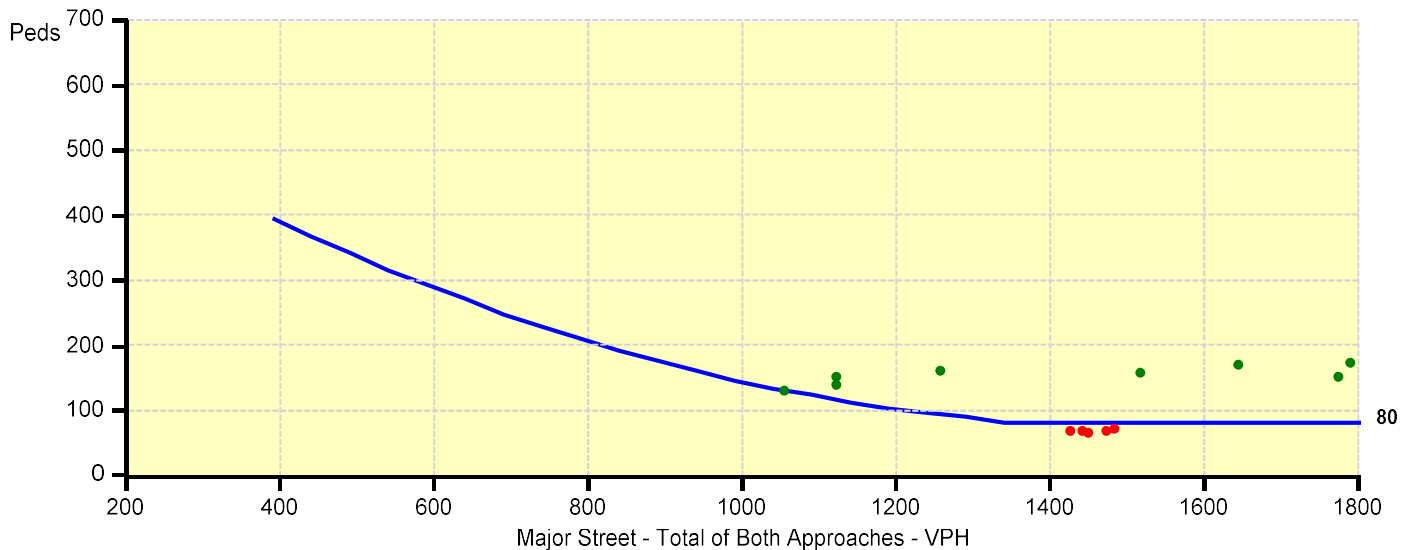
Summary

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 = **Mixed**

Time	Major Road CSAH 7				Total	Minor Road Buchanan St		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:30 - 17:30	1174	+	615	=	1789	61	174	Yes
15:30 - 16:30	1180	+	593	=	1773	59	152	Yes
14:30 - 15:30	1112	+	532	=	1644	59	170	Yes
17:30 - 18:30	1015	+	503	=	1518	53	156	Yes
13:30 - 14:30	756	+	500	=	1256	55	160	Yes
11:30 - 12:30	592	+	531	=	1123	43	138	Yes
12:30 - 13:30	662	+	459	=	1121	45	152	Yes
10:30 - 11:30	528	+	527	=	1055	48	130	Yes
06:30 - 07:30	412	+	1071	=	1483	31	72	No
06:45 - 07:45	442	+	1031	=	1473	32	68	No
06:15 - 07:15	378	+	1071	=	1449	31	64	No
07:00 - 08:00	444	+	997	=	1441	37	67	No



ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2465

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

15 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 = **Mixed**

Time	Major Road CSAH 7					Minor Road Buchanan St		Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
15:45 - 16:45	1202	+	609	=	1811	59	147	Yes
16:30 - 17:30	1174	+	615	=	1789	61	174	Yes
15:00 - 16:00	1213	+	575	=	1788	47	168	Yes
16:00 - 17:00	1171	+	605	=	1776	71	148	Yes
16:15 - 17:15	1173	+	602	=	1775	63	169	Yes
15:30 - 16:30	1180	+	593	=	1773	59	152	Yes
15:15 - 16:15	1177	+	588	=	1765	56	168	Yes
16:45 - 17:45	1132	+	590	=	1722	60	182	Yes
14:45 - 15:45	1145	+	554	=	1699	53	163	Yes
17:00 - 18:00	1114	+	555	=	1669	55	176	Yes
14:30 - 15:30	1112	+	532	=	1644	59	170	Yes
17:15 - 18:15	1092	+	510	=	1602	50	158	Yes

