

Date : 11/10/21

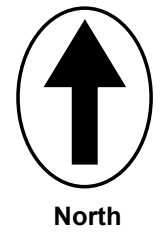
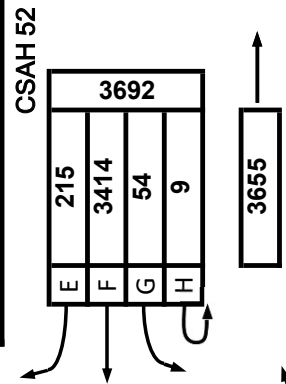
Count Number : TMC 2157

Location : CSAH 52 (Radisson Rd.)
@ 129th Ave./Quail Creek Parkway

Collection Period : 24 Hours

7347

#2

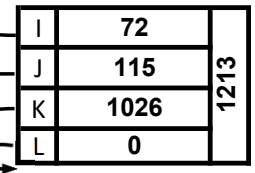
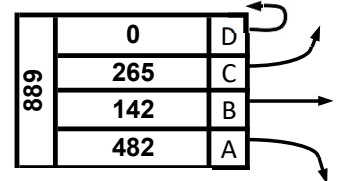


Quail Creek Parkway

718

#1

1607

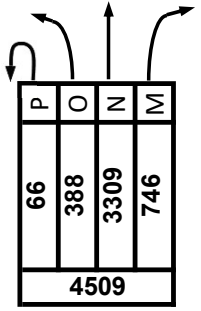


#3

2155

942

129th Ave.



#4

9497

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

CSAH 52

Anoka County Highway Department

Traffic Volume and Turning Movement Study

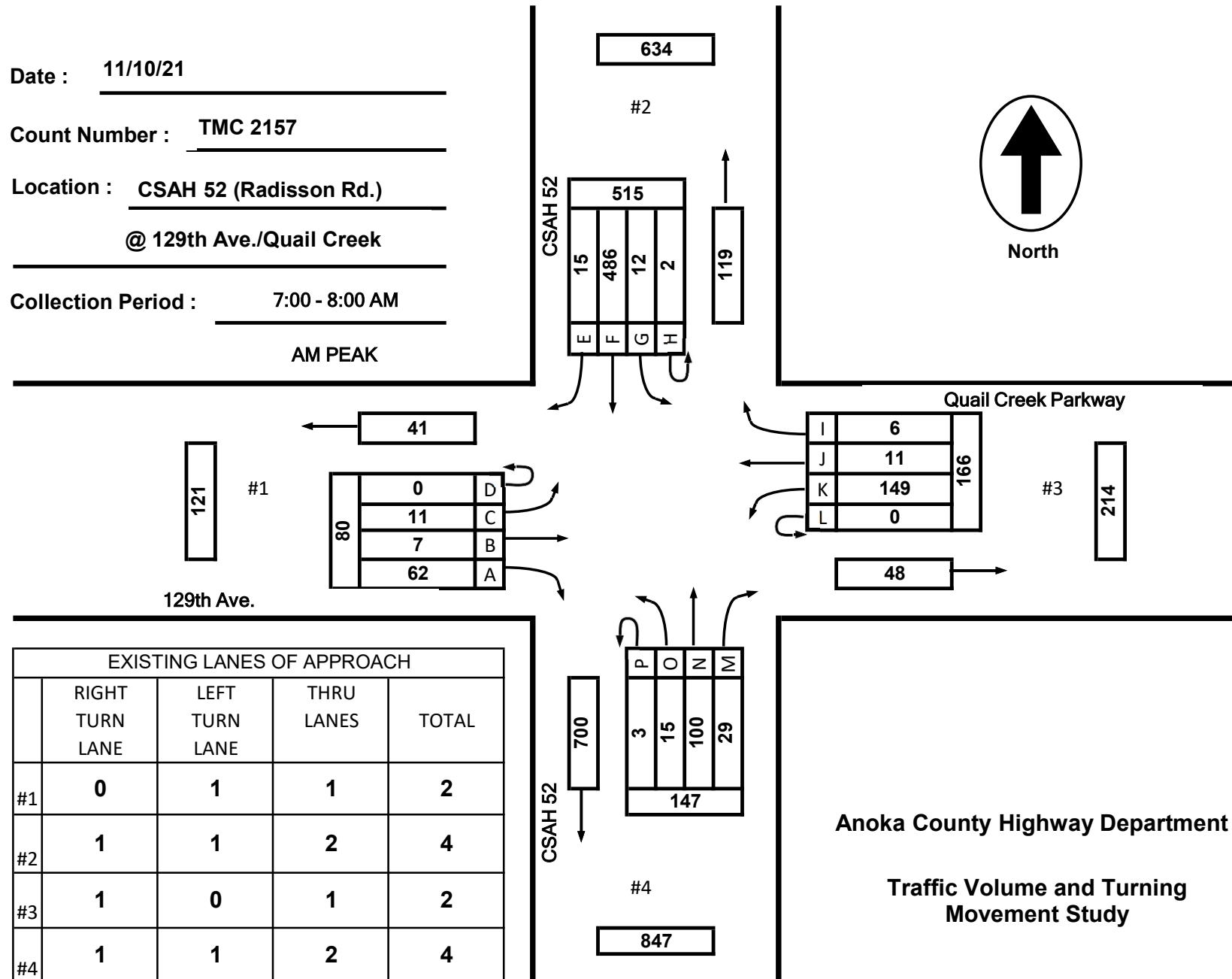
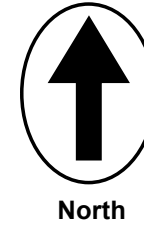
Date : 11/10/21

Count Number : TMC 2157

Location : CSAH 52 (Radisson Rd.)
@ 129th Ave./Quail Creek

Collection Period : 7:00 - 8:00 AM

AM PEAK



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

Anoka County Highway Department

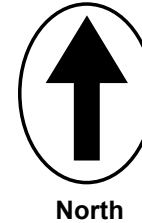
Traffic Volume and Turning Movement Study

Date : 11/10/21

Count Number : TMC 2157

Location : CSAH 52 (Radisson Rd.)
@ 129th Ave./Quail Creek

Collection Period : 4 PM - 5 PM
 PM PEAK



185

#1

95	0	D
	44	C
	16	B
	35	A

129th Ave.

861

#2

291			
21	263	6	1
E	F	G	H

CSAH 52

570

Quail Creek Parkway

I	6	101
J	13	
K	82	
L	0	

#3

227

126

390

P	O	N	M
10	56	519	104
689			

#4

1079

CSAH 52

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

Anoka County Highway Department

Traffic Volume and Turning Movement Study

TMC 2157
Blaine MN
Wednesday, November 10, 2021

Time	Southbound CSAH 52						Westbound Quail Creek Parkway						Northbound CSAH 52						Eastbound 129th 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	1	1	0	0	2	0	1	1	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	7
12:15 AM	0	0	2	0	0	2	0	0	1	0	0	1	0	1	4	0	0	5	0	0	0	0	0	0	8
12:30 AM	0	1	0	0	0	1	0	1	0	0	0	1	0	0	3	0	0	3	0	0	0	0	0	0	5
12:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4
Hourly Total	0	2	4	0	0	6	0	2	2	0	0	4	0	1	13	0	0	14	0	0	0	0	0	0	24
1:00 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	4
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	0	0	0	1	0	1	4
1:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hourly Total	0	0	2	1	0	3	0	0	0	0	0	0	0	2	3	1	0	6	0	0	0	1	0	1	10
2:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
2:30 AM	0	0	1	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	3
2:45 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hourly Total	0	0	2	1	0	3	0	2	0	0	0	2	0	1	1	0	0	2	0	0	0	0	0	0	7
3:00 AM	0	0	4	0	0	4	0	0	1	0	0	1	0	0	2	1	0	3	0	0	0	0	0	0	8
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
3:30 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3
3:45 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	1	4
Hourly Total	0	0	7	0	0	7	0	0	1	0	0	1	0	0	6	1	0	7	0	0	0	1	0	1	16
4:00 AM	0	0	7	0	0	7	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	1	0	1	10
4:15 AM	0	0	9	0	0	9	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	2	0	2	13
4:30 AM	0	0	12	0	0	12	0	6	0	0	0	6	0	0	2	1	0	3	0	0	0	1	0	1	22
4:45 AM	0	0	14	0	0	14	0	9	0	0	0	9	0	0	4	0	0	4	0	0	0	5	0	5	32
Hourly Total	0	0	42	0	0	42	0	16	0	0	0	16	0	1	8	1	0	10	0	0	0	9	0	9	77
5:00 AM	0	0	16	0	0	16	0	6	0	0	0	6	0	0	0	0	0	0	0	0	0	1	0	1	23
5:15 AM	0	0	23	0	0	23	0	3	1	1	0	5	0	0	1	1	0	2	0	0	0	5	0	5	35
5:30 AM	0	0	41	1	0	42	0	2	0	0	0	2	0	0	4	0	0	4	0	0	0	9	0	9	57
5:45 AM	0	0	49	2	0	51	0	8	2	1	0	11	0	1	4	1	0	6	0	0	0	7	0	7	75
Hourly Total	0	0	129	3	0	132	0	19	3	2	0	24	0	1	9	2	0	12	0	0	0	22	0	22	190
6:00 AM	0	0	45	0	0	45	0	12	0	1	0	13	0	1	12	2	0	15	0	1	1	5	0	7	80
6:15 AM	0	0	82	1	0	83	0	13	2	0	0	15	0	3	6	0	0	9	0	0	0	13	0	13	120
6:30 AM	0	0	84	2	0	86	0	25	2	0	0	27	0	2	12	0	0	14	0	1	0	6	0	7	134
6:45 AM	0	0	103	5	0	108	0	22	1	2	0	25	0	4	18	4	0	26	0	1	2	16	0	19	178
Hourly Total	0	0	314	8	0	322	0	72	5	3	0	80	0	10	48	6	0	64	0	3	3	40	0	46	512
7:00 AM	0	2	117	4	0	123	0	37	1	0	0	38	0	4	17	4	0	25	0	1	1	18	0	20	206
7:15 AM	1	2	122	6	0	131	0	46	4	1	0	51	2	1	22	7	0	32	0	2	2	9	0	13	227
7:30 AM	0	1	140	4	0	145	0	38	2	4	0	44	0	5	35	13	0	53	0	4	2	18	0	24	266
7:45 AM	1	7	107	1	0	116	0	28	4	1	0	33	1	5	26	5	0	37	0	4	2	17	0	23	209
Hourly Total	2	12	486	15	0	515	0	149	11	6	0	166	3	15	100	29	0	147	0	11	7	62	0	80	908

TMC 2157
Blaine MN
Wednesday, November 10, 2021

Time	Southbound CSAH 52						Westbound Quail Creek Parkway						Northbound CSAH 52						Eastbound 129th 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	1	70	2	1	73	0	23	3	0	0	26	0	1	28	8	0	37	0	1	1	9	0	11	147
8:15 AM	0	1	61	3	0	65	0	15	1	1	0	17	1	4	25	14	0	44	0	0	2	13	1	15	141
8:30 AM	0	0	53	2	0	55	0	24	0	1	0	25	2	5	36	5	0	48	0	2	0	6	1	8	136
8:45 AM	0	1	70	3	0	74	0	21	3	2	0	26	1	5	25	6	0	37	0	2	1	6	1	9	146
Hourly Total	0	3	254	10	1	267	0	83	7	4	0	94	4	15	114	33	0	166	0	5	4	34	3	43	570
9:00 AM	0	0	53	2	0	55	0	15	1	1	0	17	2	7	23	8	0	40	0	4	3	13	0	20	132
9:15 AM	0	1	48	2	0	51	0	14	3	1	0	18	1	6	36	10	0	53	0	3	0	5	0	8	130
9:30 AM	0	0	47	2	0	49	0	12	2	0	0	14	1	10	31	8	0	50	0	1	0	6	0	7	120
9:45 AM	0	0	56	5	1	61	0	13	1	0	0	14	1	4	24	9	0	38	0	6	1	7	1	14	127
Hourly Total	0	1	204	11	1	216	0	54	7	2	0	63	5	27	114	35	0	181	0	14	4	31	1	49	509
10:00 AM	0	0	29	7	0	36	0	13	1	0	0	14	1	2	27	7	0	37	0	7	1	7	0	15	102
10:15 AM	0	0	41	3	3	44	0	10	1	3	0	14	0	1	26	4	0	31	0	0	1	8	0	9	98
10:30 AM	0	0	57	4	0	61	0	15	3	0	0	18	0	1	31	8	0	40	0	3	2	7	0	12	131
10:45 AM	0	0	40	2	0	42	0	14	2	0	0	16	1	3	26	7	0	37	0	3	1	6	0	10	105
Hourly Total	0	0	167	16	3	183	0	52	7	3	0	62	2	7	110	26	0	145	0	13	5	28	0	46	436
11:00 AM	0	0	43	3	0	46	0	13	1	1	0	15	0	4	31	3	0	38	0	7	1	1	0	9	108
11:15 AM	0	2	36	2	0	40	0	15	4	1	0	20	1	2	31	5	0	39	0	2	4	8	0	14	113
11:30 AM	0	1	53	2	0	56	0	10	0	3	0	13	0	2	49	9	0	60	0	2	3	8	0	13	142
11:45 AM	0	0	43	3	0	46	0	15	5	1	0	21	1	0	28	9	0	38	0	3	1	4	0	8	113
Hourly Total	0	3	175	10	0	188	0	53	10	6	0	69	2	8	139	26	0	175	0	14	9	21	0	44	476
12:00 PM	0	2	34	1	0	37	0	11	0	2	0	13	2	4	42	10	0	58	0	5	2	6	1	13	121
12:15 PM	0	0	29	7	0	36	0	11	1	2	0	14	2	5	39	19	0	65	0	2	3	1	0	6	121
12:30 PM	1	0	36	2	0	39	0	10	1	0	0	11	1	6	39	13	0	59	0	2	3	6	0	11	120
12:45 PM	0	0	44	6	0	50	0	12	1	0	0	13	0	5	36	8	0	49	0	5	3	5	0	13	125
Hourly Total	1	2	143	16	0	162	0	44	3	4	0	51	5	20	156	50	0	231	0	14	11	18	1	43	487
1:00 PM	0	0	32	3	1	35	0	15	0	0	0	15	1	3	35	10	0	49	0	2	2	0	0	4	103
1:15 PM	0	0	36	4	0	40	0	15	1	1	0	17	0	1	45	12	0	58	0	4	0	4	0	8	123
1:30 PM	0	1	33	3	1	37	0	14	2	1	0	17	0	3	46	9	0	58	0	9	1	3	0	13	125
1:45 PM	2	0	42	2	0	46	0	16	2	2	0	20	0	6	39	8	0	53	0	3	4	9	0	16	135
Hourly Total	2	1	143	12	2	158	0	60	5	4	0	69	1	13	165	39	0	218	0	18	7	16	0	41	486
2:00 PM	0	0	42	0	0	42	0	8	2	0	0	10	1	6	41	7	0	55	0	4	0	3	0	7	114
2:15 PM	0	3	47	5	0	55	0	11	0	0	0	11	2	11	55	20	0	88	0	3	2	2	1	7	161
2:30 PM	0	0	55	4	1	59	0	16	2	4	0	22	2	9	92	20	0	123	0	5	5	7	0	17	221
2:45 PM	0	0	43	5	0	48	0	16	3	0	0	19	2	7	70	17	0	96	0	6	5	6	0	17	180
Hourly Total	0	3	187	14	1	204	0	51	7	4	0	62	7	33	258	64	0	362	0	18	12	18	1	48	676
3:00 PM	0	0	48	5	0	53	0	16	2	1	0	19	2	8	90	15	0	115	0	6	5	10	0	21	208
3:15 PM	0	0	43	4	0	47	0	17	3	2	0	22	1	13	81	20	0	115	0	6	5	7	0	18	202
3:30 PM	0	1	38	6	0	45	0	22	2	1	0	25	0	8	78	18	0	104	0	7	6	11	0	24	198
3:45 PM	0	2	58	6	0	66	0	16	2	1	0	19	0	12	112	15	0	139	0	11	1	12	0	24	248
Hourly Total	0	3	187	21	0	211	0	71	9	5	0	85	3	41	361	68	0	473	0	30	17	40	0	87	856

**TMC 2157
Blaine MN
Wednesday, November 10, 2021**

Time	Southbound CSAH 52						Westbound Quail Creek Parkway						Northbound CSAH 52						Eastbound 129th 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	1	64	6	0	71	0	24	4	1	0	29	3	14	118	28	0	163	0	10	2	6	0	18	281
4:15 PM	0	3	59	6	0	68	0	17	5	3	0	25	3	16	152	31	0	202	0	9	6	11	0	26	321
4:30 PM	0	1	59	6	0	66	0	22	2	0	0	24	2	14	123	25	0	164	0	14	6	9	0	29	283
4:45 PM	1	1	81	3	0	86	0	19	2	2	0	23	2	12	126	20	0	160	0	11	2	9	1	22	291
Hourly Total	1	6	263	21	0	291	0	82	13	6	0	101	10	56	519	104	0	689	0	44	16	35	1	95	1176
5:00 PM	0	3	55	7	0	65	0	17	3	5	0	25	0	15	121	22	0	158	0	4	6	4	0	14	262
5:15 PM	0	1	49	3	0	53	0	21	3	2	0	26	2	13	117	22	0	154	0	7	3	6	0	16	249
5:30 PM	0	2	59	4	0	65	0	25	1	3	0	29	0	18	128	14	0	160	0	4	3	13	0	20	274
5:45 PM	1	0	56	8	0	65	0	16	2	1	0	19	2	8	77	13	0	100	0	8	0	9	0	17	201
Hourly Total	1	6	219	22	0	248	0	79	9	11	0	99	4	54	443	71	0	572	0	23	12	32	0	67	986
6:00 PM	0	0	63	3	0	66	0	14	1	0	0	15	4	16	79	24	0	123	0	4	6	7	0	17	221
6:15 PM	0	1	47	3	0	51	0	18	1	3	0	22	2	4	85	17	0	108	0	2	4	7	0	13	194
6:30 PM	0	0	43	5	0	48	0	10	1	0	0	11	0	5	55	12	0	72	0	3	6	3	0	12	143
6:45 PM	0	3	47	1	0	51	0	14	1	1	0	16	0	8	62	9	0	79	0	7	1	6	0	14	160
Hourly Total	0	4	200	12	0	216	0	56	4	4	0	64	6	33	281	62	0	382	0	16	17	23	0	56	718
7:00 PM	1	1	41	6	0	49	0	8	3	0	0	11	1	5	54	12	0	72	0	5	3	4	0	12	144
7:15 PM	1	0	22	2	0	25	0	6	1	1	0	8	2	5	43	12	0	62	0	4	0	4	0	8	103
7:30 PM	0	0	31	1	0	32	0	10	1	1	0	12	0	5	48	6	0	59	0	4	3	3	0	10	113
7:45 PM	0	0	27	3	0	30	0	9	1	1	0	11	0	3	40	14	0	57	0	4	1	4	0	9	107
Hourly Total	2	1	121	12	0	136	0	33	6	3	0	42	3	18	185	44	0	250	0	17	7	15	0	39	467
8:00 PM	0	2	24	0	0	26	0	8	0	0	0	8	1	5	29	6	0	41	0	5	1	4	0	10	85
8:15 PM	0	0	13	3	0	16	0	5	2	2	0	9	1	2	40	11	0	54	0	3	1	6	0	10	89
8:30 PM	0	2	26	1	0	29	0	5	0	0	0	5	0	4	28	14	0	46	0	4	0	9	0	13	93
8:45 PM	0	2	19	2	0	23	0	4	0	0	0	4	1	7	26	7	0	41	0	3	2	2	0	7	75
Hourly Total	0	6	82	6	0	94	0	22	2	2	0	26	3	18	123	38	0	182	0	15	4	21	0	40	342
9:00 PM	0	1	14	0	0	15	0	6	0	2	0	8	0	2	22	8	0	32	0	1	1	6	0	8	63
9:15 PM	0	0	13	1	0	14	0	4	2	0	0	6	2	2	21	5	0	30	0	1	2	3	0	6	56
9:30 PM	0	0	14	2	0	16	0	4	2	0	0	6	0	1	26	6	0	33	0	2	1	3	0	6	61
9:45 PM	0	0	7	0	0	7	0	1	0	0	0	1	1	3	17	5	0	26	0	1	0	0	0	1	35
Hourly Total	0	1	48	3	0	52	0	15	4	2	0	21	3	8	86	24	0	121	0	5	4	12	0	21	215
10:00 PM	0	0	10	0	0	10	0	4	0	1	0	5	2	0	9	5	0	16	0	0	0	0	0	0	31
10:15 PM	0	0	7	0	0	7	0	1	0	0	0	1	3	2	17	6	0	28	0	1	0	1	0	2	38
10:30 PM	0	0	4	0	0	4	0	1	0	0	0	1	0	1	11	2	0	14	0	3	0	1	0	4	23
10:45 PM	0	0	2	0	0	2	0	3	0	0	0	3	0	0	6	2	0	8	0	1	0	1	0	2	15
Hourly Total	0	0	23	0	0	23	0	9	0	1	0	10	5	3	43	15	0	66	0	5	0	3	0	8	107
11:00 PM	0	0	8	1	0	9	0	1	0	0	0	1	0	1	9	3	0	13	0	0	1	0	0	1	24
11:15 PM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	11
11:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	7	1	0	9	0	0	1	0	0	1	11
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	5	0	0	1	0	0	1	6
Hourly Total	0	0	12	1	0	13	0	2	0	0	0	2	0	3	24	7	0	34	0	0	3	0	0	3	52
DAILY TOTAL	9	54	3414	215	8	3692	0	1026	115	72	0	1213	66	388	3309	746	0	4509	0	265	142	482	7	889	10303
Cars	9	49	3341	211	7	3610	0	1007	113	69	0	1189	66	381	3247	736	0	4430	0	263	141	472	6	876	10105
Heavy Vehicles	0	5	73	4	1	82	0	19	2	3	0	24	0	7	62	10	0	79	0	2	1	10	1	13	198
Heavy Vehicle %	0.00%	9.26%	2.14%	1.86%	12.50%	2.22%	0.00%	1.85%	1.74%	4.17%	0.00%	1.98%	0.00%	1.80%	1.87%	1.34%	0.00%	1.75%	0.00%	0.75%	0.70%	2.07%	14.29%	1.46%	1.92%

**TMC 2157
Blaine MN
Wednesday, November 10, 2021**

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL						
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total							
7:00 AM	0	2	117	4	0	123	0	37	1	0	0	38	0	4	17	4	0	25	0	1	1	18	0	20	0	2	2	9	0	13	206
7:15 AM	1	2	122	6	0	131	0	46	4	1	0	51	2	1	22	7	0	32	0	2	2	9	0	13	227						
7:30 AM	0	1	140	4	0	145	0	38	2	4	0	44	0	5	35	13	0	53	0	4	2	18	0	24	266						
7:45 AM	1	7	107	1	0	116	0	28	4	1	0	33	1	5	26	5	0	37	0	4	2	17	0	23	209						
Peak Hour Total	2	12	486	15	0	515	0	149	11	6	0	166	3	15	100	29	0	147	0	11	7	62	0	80	908						
PHF	0.500	0.429	0.868	0.625	0.000	0.888	0.000	0.810	0.688	0.375	0.000	0.814	0.375	0.750	0.714	0.558	0.000	0.693	0.000	0.688	0.875	0.861	0.000	0.833	0.853						

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	1	64	6	0	71	0	24	4	1	0	29	3	14	118	28	0	163	0	10	2	6	0	18	281
4:15 PM	0	3	59	6	0	68	0	17	5	3	0	25	3	16	152	31	0	202	0	9	6	11	0	26	321
4:30 PM	0	1	59	6	0	66	0	22	2	0	0	24	2	14	123	25	0	164	0	14	6	9	0	29	283
4:45 PM	1	1	81	3	0	86	0	19	2	2	0	23	2	12	126	20	0	160	0	11	2	9	1	22	291
Peak Hour Total	1	6	263	21	0	291	0	82	13	6	0	101	10	56	519	104	0	689	0	44	16	35	1	95	1176
PHF	0.250	0.500	0.812	0.875	0.000	0.846	0.000	0.854	0.650	0.500	0.000	0.871	0.833	0.875	0.854	0.839	0.000	0.853	0.000	0.786	0.667	0.795	0.250	0.819	0.916

Total Vehicles On Leg		7347
Vehicles Entering Intersection	3692	Vehicles Exiting Intersection 3655
Southbound		
Cars	211	3341
Heavy	4	73
Total	215	3414



Total Vehicles on Leg 1607	Vehicles Entering Intersection 889	Eastbound	Cars	Heavy	Total
			6	1	7
	0		0	0	
	263		2	265	
	Vehicles Exiting Intersection 718		141	1	142
		472	10	482	



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 1213	Total Vehicles on Leg 2155
69	3	72			
113	2	115			
1007	19	1026			
0	0	0		Vehicles Exiting Intersection 942	
0	0	0			



Cars	0	66	381	3247	736
Heavy	0	0	7	62	10
Total	0	66	388	3309	746
Northbound					
Vehicles Entering Intersection	4509	Vehicles Exiting Intersection	4988		
Total Vehicles On Leg		9497			



Heavy Vehicles

Date	Time	Southbound					Westbound					Northbound					Eastbound				
		U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk	U Turns	Left Turns	Straight Through	Right Turns	Bicycles in Crosswalk
11/10/2021	0:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:00	0	0	0	0	0	0	0	0	0	0	0	0	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
	2:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30	0	0	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
	5:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	6:45	0	0	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	7:00	0	1	3	1	0	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0
	7:15	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30	0	1	2	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0
	7:45	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	8:00	0	0	5	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	0
	8:15	0	0	2	0	0	0	1	0	0	0	0	1	2	1	0	0	0	0	0	0
	8:30	0	0	1	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	2	0
	8:45	0	0	4	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
	9:00	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	2	0
	9:15	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
	9:30	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	9:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:15	0	0	3	0	0	0	1	0	0	0	0	0	3	0	0	0	0	0	1	0
	10:30	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
	10:45	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
	11:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
	11:15	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	11:45	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2157

Study Date : 12/14/2021

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 52

Number of Lanes : 2+

Total Approach Volume: 4,509

Southbound: CSAH 52

Number of Lanes :2+

Total Approach Volume: 3,692

Minor Street Approaches

Eastbound: 129th Ave.

Number of Lanes :1

Total Approach Volume: 889

Westbound: Quail Creek Parkway

Number of Lanes :1

Total Approach Volume: 1,213

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 2 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied

Required volumes reached for 5 hours, 8 are needed

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

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

Required 1B volumes reached for 7 hours, 8 are needed

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

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

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (5) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Not Satisfied

Volumes do not exceed minimums for any 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 2157

Study Date : 12/14/2021

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

Site Data Required

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

Volume Requirements

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

Time	Major Road				Minor Road			Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
07:15 - 08:15	159	+	465	=	624	71	154	Yes
06:15 - 07:15	74	+	400	=	474	59	105	Yes
16:00 - 17:00	689	+	291	=	980	95	101	No
16:15 - 17:15	684	+	285	=	969	91	97	No
15:45 - 16:45	668	+	271	=	939	97	97	No
16:30 - 17:30	636	+	270	=	906	81	98	No
16:45 - 17:45	632	+	269	=	901	72	103	No
15:30 - 16:30	608	+	250	=	858	92	98	No
17:00 - 18:00	572	+	248	=	820	67	99	No
17:15 - 18:15	537	+	249	=	786	70	89	No
15:15 - 16:15	521	+	229	=	750	84	95	No
17:30 - 18:30	491	+	247	=	738	67	85	No
15:00 - 16:00	473	+	211	=	684	87	85	No
14:30 - 15:30	449	+	207	=	656	73	82	No
14:15 - 15:15	422	+	215	=	637	62	71	No
17:45 - 18:45	403	+	230	=	633	59	67	No
14:45 - 15:45	430	+	193	=	623	80	85	No
18:00 - 19:00	382	+	216	=	598	56	64	No
14:00 - 15:00	362	+	204	=	566	48	62	No
18:15 - 19:15	331	+	199	=	530	51	60	No
13:45 - 14:45	319	+	202	=	521	47	63	No
18:30 - 19:30	285	+	173	=	458	46	46	No
13:30 - 14:30	254	+	180	=	434	43	58	No
18:45 - 19:45	272	+	157	=	429	44	47	No
08:15 - 09:15	169		249		418	52	85	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2157

Study Date : 12/14/2021

Warrant 1B - Interruption of Continuous Traffic

Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

Summary

Only 5 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

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

Time	Major Road				Minor Road		Met?	
	Major NB	+	Major SB	=	Total	Minor EB		Minor WB
16:15 - 17:15	684	+	285	=	969	91	97	Yes
17:15 - 18:15	537	+	249	=	786	70	89	Yes
15:15 - 16:15	521	+	229	=	750	84	95	Yes
06:45 - 07:45	136	+	507	=	643	76	158	Yes
14:15 - 15:15	422	+	215	=	637	62	71	Yes
14:00 - 15:00	362	+	204	=	566	48	62	No
06:30 - 07:30	97	+	448	=	545	59	141	No
18:15 - 19:15	331	+	199	=	530	51	60	No
13:45 - 14:45	319	+	202	=	521	47	63	No
07:45 - 08:45	166	+	309	=	475	57	101	No
06:15 - 07:15	74	+	400	=	474	59	105	No
18:30 - 19:30	285	+	173	=	458	46	46	No
13:30 - 14:30	254	+	180	=	434	43	58	No
08:00 - 09:00	166	+	267	=	433	43	94	No
18:45 - 19:45	272	+	157	=	429	44	47	No
08:15 - 09:15	169	+	249	=	418	52	85	No
08:30 - 09:30	178	+	235	=	413	45	86	No
08:45 - 09:45	180	+	229	=	409	44	75	No
09:00 - 10:00	181	+	216	=	397	49	63	No
11:30 - 12:30	221	+	175	=	396	40	61	No
12:00 - 13:00	231	+	162	=	393	43	51	No
13:15 - 14:15	224	+	165	=	389	44	64	No
19:00 - 20:00	250	+	136	=	386	39	42	No
06:00 - 07:00	64	+	322	=	386	46	80	No
12:15 - 13:15	222		160		382	34	53	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2157

Study Date : 12/14/2021

Warrant 1C Combination of Warrants

Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

Summary

Only 6 hours meet 1A minimums.
Only 7 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

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

Veh/Hr Minor = **84 42**

Major Road CSAH 52

Minor Road 129th Ave.

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:45 - 16:45	668	+	271	=	939	97	97	Yes
16:45 - 17:45	632	+	269	=	901	72	103	Yes
07:15 - 08:15	159	+	465	=	624	71	154	Yes
14:45 - 15:45	430	+	193	=	623	80	85	Yes
06:15 - 07:15	74	+	400	=	474	59	105	Yes
08:15 - 09:15	169	+	249	=	418	52	85	Yes
14:30 - 15:30	449	+	207	=	656	73	82	No
14:15 - 15:15	422	+	215	=	637	62	71	No
17:45 - 18:45	403	+	230	=	633	59	67	No
18:00 - 19:00	382	+	216	=	598	56	64	No
14:00 - 15:00	362	+	204	=	566	48	62	No
18:15 - 19:15	331	+	199	=	530	51	60	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:45 - 16:45	668	+	271	=	939	97	97	Yes
16:45 - 17:45	632	+	269	=	901	72	103	Yes
17:45 - 18:45	403	+	230	=	633	59	67	Yes
14:45 - 15:45	430	+	193	=	623	80	85	Yes
07:30 - 08:30	171	+	399	=	570	73	120	Yes
06:30 - 07:30	97	+	448	=	545	59	141	Yes
13:45 - 14:45	319	+	202	=	521	47	63	Yes
06:15 - 07:15	74	+	400	=	474	59	105	No
13:30 - 14:30	254	+	180	=	434	43	58	No
18:45 - 19:45	272	+	157	=	429	44	47	No
08:30 - 09:30	178	+	235	=	413	45	86	No
08:45 - 09:45	180	+	229	=	409	44	75	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2157

Study Date : 12/14/2021

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.

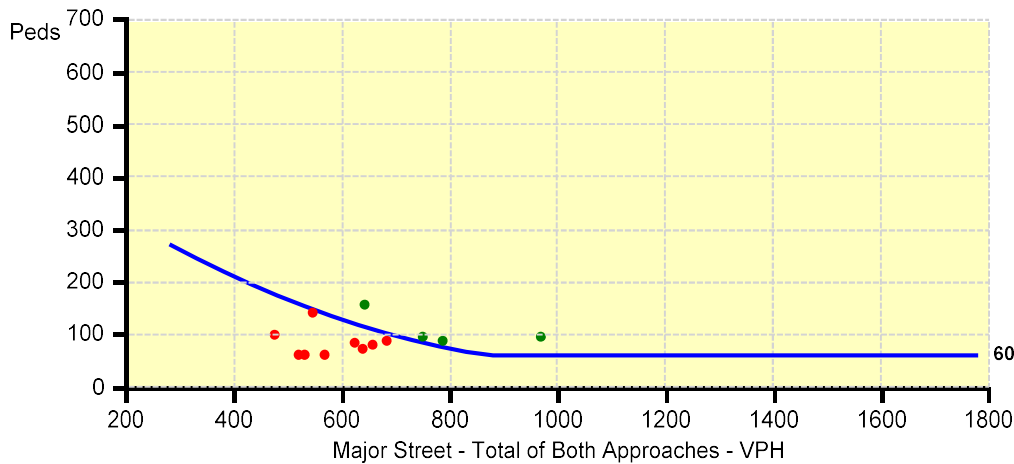
Summary

4 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 52				=	Total	Minor Road 129th Ave.		Met?
	Major NB	+	Major SB				Minor EB	Minor WB	
16:15 - 17:15	684	+	285	=	969	91	97	Yes	
17:15 - 18:15	537	+	249	=	786	70	89	Yes	
15:15 - 16:15	521	+	229	=	750	84	95	Yes	
06:45 - 07:45	136	+	507	=	643	76	158	Yes	
15:00 - 16:00	473	+	211	=	684	87	85	No	
14:30 - 15:30	449	+	207	=	656	73	82	No	
14:15 - 15:15	422	+	215	=	637	62	71	No	
14:45 - 15:45	430	+	193	=	623	80	85	No	
14:00 - 15:00	362	+	204	=	566	48	62	No	
06:30 - 07:30	97	+	448	=	545	59	141	No	
18:15 - 19:15	331	+	199	=	530	51	60	No	
							63	No	



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2157

Study Date : 12/14/2021

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

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**

Time	Major Road CSAH 52				Total	Minor Road 129th Ave.		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	689	+	291	=	980	95	101	No
16:15 - 17:15	684	+	285	=	969	91	97	No
15:45 - 16:45	668	+	271	=	939	97	97	No
16:30 - 17:30	636	+	270	=	906	81	98	No
16:45 - 17:45	632	+	269	=	901	72	103	No
15:30 - 16:30	608	+	250	=	858	92	98	No
17:00 - 18:00	572	+	248	=	820	67	99	No
17:15 - 18:15	537	+	249	=	786	70	89	No
15:15 - 16:15	521	+	229	=	750	84	95	No
17:30 - 18:30	491	+	247	=	738	67	85	No
15:00 - 16:00	473	+	211	=	684	87	85	No
							166	No

