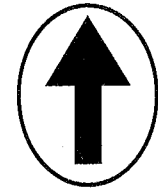
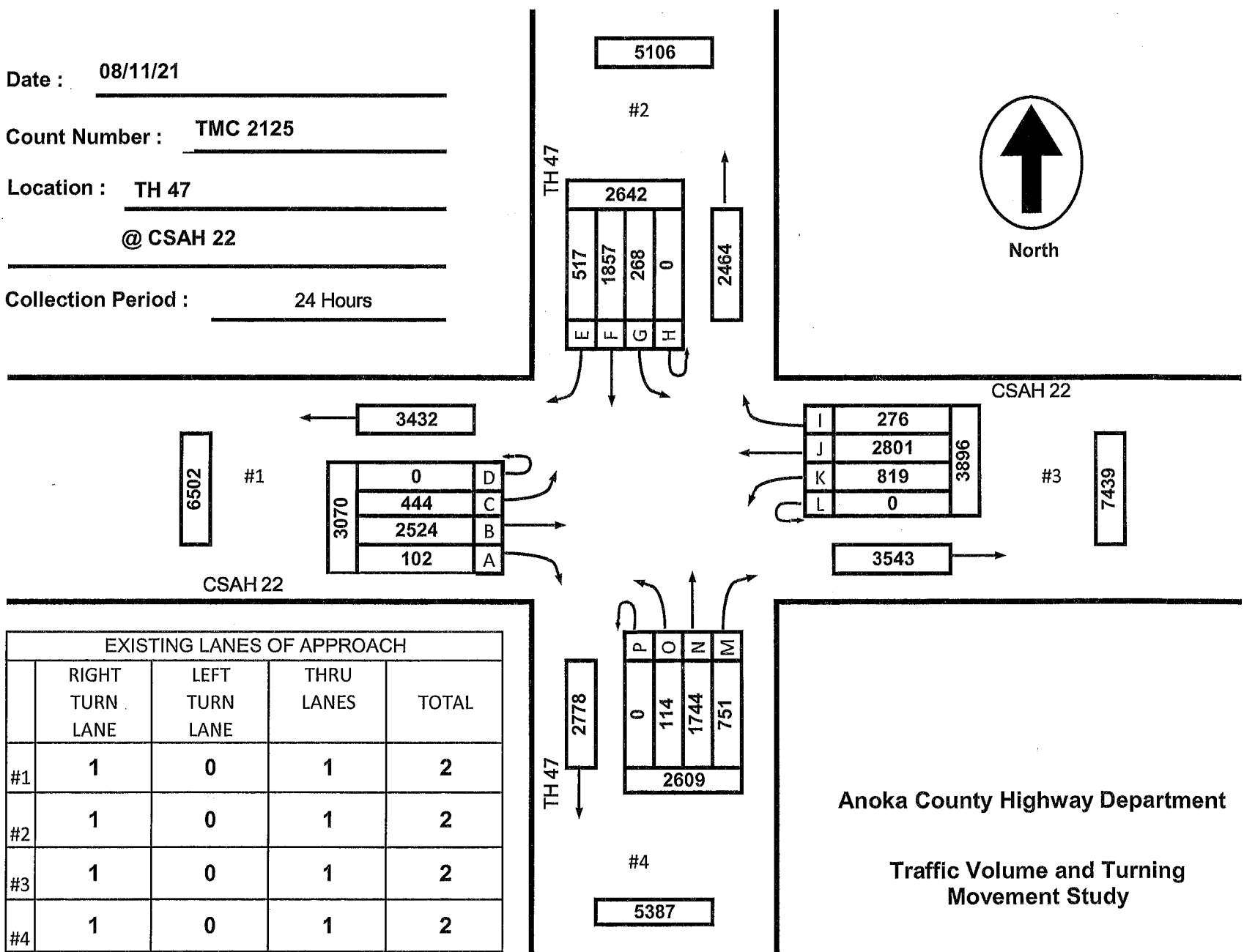


Date : 08/11/21
 Count Number : TMC 2125
 Location : TH 47
@ CSAH 22
 Collection Period : 24 Hours



North



5106

#2

TH 47

2642			
517	1857	268	0
E	F	G	H

2464

CSAH 22

3432

#1

6502

3070	0	D
	444	C
	2524	B
	102	A

CSAH 22

I	276	3896
J	2801	
K	819	
L	0	

#3

7439

3543

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

TH 47

2778

P	O	N	M
0	114	1744	751
2609			

#4

5387

Anoka County Highway Department

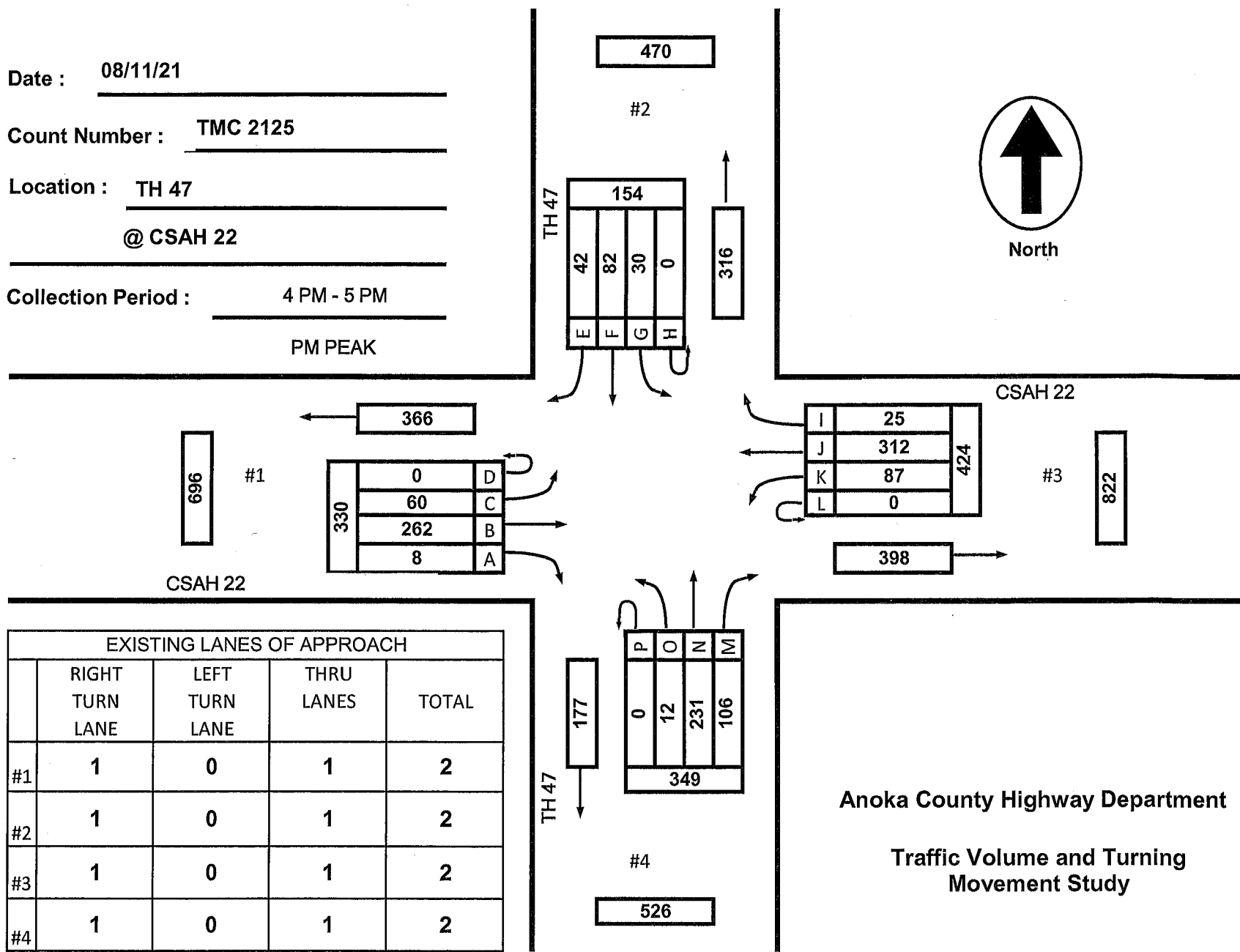
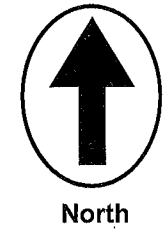
Traffic Volume and Turning Movement Study

Date : 08/11/21

Count Number : TMC 2125

Location : TH 47
@ CSAH 22

Collection Period : 4 PM - 5 PM
PM PEAK



TH 47

154			
42	82	30	0
E	F	G	H

316

CSAH 22

I	25	424
J	312	
K	87	
L	0	

822

CSAH 22

330		0	D
		60	C
		262	B
		8	A

TH 47

177

P	O	N	M
0	12	231	106
349			

#4

526

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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

**TH 47 @ CSAH 22
Nowthen Minnesota
Wednesday, August 11, 2021**

Time	Southbound TH 47						Westbound CSAH 22						Northbound TH 47						Eastbound CSAH 22						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	0	2	0	0	2	0	0	4	2	0	6	0	1	3	0	0	4	14
12:15 AM	0	0	2	0	0	2	0	2	2	0	0	4	0	0	3	1	0	4	0	0	1	0	0	1	11
12:30 AM	0	1	2	0	0	3	0	0	0	0	0	0	0	1	4	0	0	5	0	0	1	0	0	1	9
12:45 AM	0	0	1	0	0	1	0	1	4	0	0	5	0	0	2	0	0	2	0	1	3	0	0	4	12
Hourly Total	0	2	5	1	0	8	0	3	8	0	0	11	0	1	13	3	0	17	0	2	8	0	0	10	46
1:00 AM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	1	0	2	0	0	2	0	0	2	6
1:15 AM	0	0	1	1	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	2	0	0	0	2	7
1:30 AM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	3	1	0	4	0	0	0	0	0	0	7
1:45 AM	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	1	0	0	0	1	4
Hourly Total	0	0	3	1	0	4	0	0	3	2	0	5	0	0	8	2	0	10	0	3	2	0	0	5	24
2:00 AM	0	0	5	0	0	5	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	0	0	2	11
2:15 AM	0	0	3	0	0	3	0	1	3	0	0	4	0	0	3	1	0	4	0	0	2	0	0	2	13
2:30 AM	0	0	2	1	0	3	0	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
2:45 AM	0	0	3	0	0	3	0	1	2	0	0	3	0	0	3	2	0	5	0	3	0	0	0	3	14
Hourly Total	0	0	13	1	0	14	0	3	8	1	0	12	0	0	8	3	0	11	0	3	4	0	0	7	44
3:00 AM	0	0	5	0	0	5	0	0	2	0	0	2	0	0	0	2	0	2	0	0	1	0	0	1	10
3:15 AM	0	0	9	1	0	10	0	0	1	0	0	1	0	0	2	0	0	2	0	0	2	0	0	2	15
3:30 AM	0	1	2	0	0	3	0	3	1	1	0	5	0	0	0	0	0	0	0	0	2	0	0	2	10
3:45 AM	0	0	12	1	0	13	0	1	3	0	0	4	0	0	3	0	0	3	0	0	2	0	0	2	22
Hourly Total	0	1	28	2	0	31	0	4	7	1	0	12	0	0	5	2	0	7	0	0	7	0	0	7	57
4:00 AM	0	1	13	2	0	16	0	0	6	0	0	6	0	0	2	0	0	2	0	0	0	0	0	0	24
4:15 AM	0	1	14	6	0	21	0	3	5	1	0	9	0	0	0	1	0	1	0	0	7	0	0	7	38
4:30 AM	0	1	28	4	0	33	0	5	12	0	0	17	0	0	0	0	0	0	0	1	4	0	0	5	55
4:45 AM	0	3	28	5	0	36	0	4	19	0	0	23	0	0	2	1	0	3	0	1	8	1	0	10	72
Hourly Total	0	6	83	17	0	106	0	12	42	1	0	55	0	0	4	2	0	6	0	2	19	1	0	22	189
5:00 AM	0	0	42	4	0	46	0	9	14	0	0	23	0	0	4	4	0	8	0	1	19	1	0	21	98
5:15 AM	0	1	59	9	0	69	0	9	33	0	0	42	0	1	2	1	0	4	0	3	18	0	0	21	136
5:30 AM	0	4	57	11	0	72	0	15	44	0	0	59	0	1	1	3	0	5	0	0	23	1	0	24	160
5:45 AM	0	5	52	9	0	66	0	12	28	1	0	41	0	0	4	2	0	6	0	2	12	1	0	15	128
Hourly Total	0	10	210	33	0	253	0	45	119	1	0	165	0	2	11	10	0	23	0	6	72	3	0	81	522
6:00 AM	0	0	51	5	0	56	0	8	49	0	0	57	0	1	5	15	0	21	0	1	22	1	0	24	158
6:15 AM	0	2	50	16	0	68	0	13	53	2	0	68	0	0	7	5	0	12	0	1	25	0	0	26	174
6:30 AM	0	7	54	5	0	66	0	27	43	1	0	71	0	2	13	12	0	27	0	2	38	2	0	42	206
6:45 AM	0	3	55	8	0	66	0	19	44	6	0	69	0	2	9	3	0	14	0	6	37	0	0	43	192
Hourly Total	0	12	210	34	0	266	0	67	189	9	0	265	0	5	34	35	0	74	0	10	122	3	0	135	730
7:00 AM	0	4	55	14	0	73	0	19	40	6	0	65	0	0	10	8	0	18	0	6	45	0	0	51	207
7:15 AM	0	5	51	9	0	65	0	22	38	5	0	65	0	2	15	8	0	25	0	4	38	2	0	44	199
7:30 AM	0	3	38	3	0	44	0	27	46	2	0	75	0	3	13	10	0	26	0	1	50	0	0	51	196
7:45 AM	0	2	47	7	0	56	0	16	44	2	0	62	0	1	15	5	0	21	0	2	43	4	0	49	188
Hourly Total	0	14	191	33	0	238	0	84	168	15	0	267	0	6	53	31	0	90	0	13	176	6	0	195	790

TH 47 @ CSAH 22
Nowthen Minnesota
Wednesday, August 11, 2021

Time	Southbound TH 47						Westbound CSAH 22						Northbound TH 47						Eastbound CSAH 22						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	4	34	7	0	45	0	10	31	2	0	43	0	2	12	10	0	24	0	4	34	2	0	40	152
8:15 AM	0	5	32	9	0	46	0	9	24	3	0	36	0	1	7	10	0	18	0	6	32	2	0	40	140
8:30 AM	0	6	27	3	0	36	0	14	46	1	0	61	0	1	23	8	0	32	0	3	33	1	0	37	166
8:45 AM	0	5	22	6	0	33	0	5	33	4	0	42	0	0	15	6	0	21	0	2	31	2	0	35	131
Hourly Total	0	20	115	25	0	160	0	38	134	10	0	182	0	4	57	34	0	96	0	15	130	7	0	152	589
9:00 AM	0	4	20	5	0	29	0	12	28	2	0	42	0	1	17	14	0	32	0	7	30	1	0	38	141
9:15 AM	0	6	20	7	0	33	0	6	29	5	0	40	0	0	17	6	0	23	0	2	42	1	0	45	141
9:30 AM	0	5	19	5	0	29	0	6	34	2	0	42	0	1	20	4	0	25	0	5	29	1	0	35	131
9:45 AM	0	4	14	8	0	26	0	8	39	3	0	50	0	0	13	8	0	21	0	6	26	2	0	34	131
Hourly Total	0	19	73	25	0	117	0	32	130	12	0	174	0	2	67	32	0	101	0	20	127	5	0	152	544
10:00 AM	0	2	23	7	0	32	0	8	26	1	0	35	0	1	16	4	0	21	0	5	31	3	0	39	127
10:15 AM	0	4	34	6	0	44	0	4	36	4	0	44	0	0	17	6	0	23	0	2	29	1	0	32	143
10:30 AM	0	4	23	4	0	31	0	13	19	0	0	32	0	2	19	7	0	28	0	7	26	2	0	35	126
10:45 AM	0	3	18	6	0	27	0	7	41	2	0	50	0	0	13	10	0	23	0	3	31	0	0	34	134
Hourly Total	0	13	98	23	0	134	0	32	122	7	0	161	0	3	65	27	0	95	0	17	117	6	0	140	530
11:00 AM	0	5	20	5	0	30	0	4	28	4	0	36	0	0	17	13	0	30	0	9	33	0	0	42	138
11:15 AM	0	5	13	6	0	24	0	12	25	3	0	40	0	0	18	6	0	24	0	6	29	1	0	36	124
11:30 AM	0	5	16	6	0	27	0	6	36	6	0	48	0	2	17	9	0	28	0	5	30	3	0	38	141
11:45 AM	0	6	20	9	0	35	0	6	29	3	0	38	0	1	19	11	0	31	0	6	32	2	0	40	144
Hourly Total	0	21	69	26	0	116	0	28	118	16	0	162	0	3	71	39	0	113	0	26	124	6	0	156	547
12:00 PM	0	3	24	6	0	33	0	6	37	4	0	47	0	3	27	7	0	37	0	4	24	0	0	28	145
12:15 PM	0	7	20	7	0	34	0	8	23	0	0	31	0	2	26	10	0	38	0	3	27	1	0	31	134
12:30 PM	0	7	19	6	0	32	0	6	35	5	0	46	0	2	17	11	0	30	0	4	25	1	0	30	138
12:45 PM	0	3	27	7	0	37	0	5	30	5	0	40	0	1	16	9	0	26	0	4	37	2	0	43	146
Hourly Total	0	20	90	26	0	136	0	25	125	14	0	164	0	8	86	37	0	131	0	15	113	4	0	132	563
1:00 PM	0	5	27	6	0	38	0	9	36	7	0	52	0	4	19	6	0	29	0	3	32	1	0	36	155
1:15 PM	0	3	24	7	0	34	0	15	32	2	0	49	0	1	21	9	0	31	0	8	35	4	0	47	161
1:30 PM	0	6	17	6	0	29	0	8	49	3	0	60	0	4	21	10	0	35	0	15	37	4	0	56	180
1:45 PM	0	2	21	10	0	33	0	9	31	4	0	44	0	4	22	15	0	41	0	9	28	1	0	38	156
Hourly Total	0	16	89	29	0	134	0	41	148	16	0	205	0	13	83	40	0	136	0	35	132	10	0	177	652
2:00 PM	0	2	14	7	0	23	0	10	43	6	0	59	0	3	23	12	0	38	0	3	45	0	0	48	168
2:15 PM	0	2	20	4	0	26	0	9	41	5	0	55	0	6	37	11	0	54	0	8	36	2	0	46	181
2:30 PM	0	0	24	10	0	34	0	13	40	5	0	58	0	3	35	14	0	52	0	6	38	1	0	45	189
2:45 PM	0	0	20	13	0	33	0	10	45	9	0	64	0	0	39	11	0	50	0	8	42	1	0	51	198
Hourly Total	0	4	78	34	0	116	0	42	169	25	0	236	0	12	134	48	0	194	0	25	161	4	0	190	736
3:00 PM	0	7	22	5	0	34	0	10	53	8	0	71	0	2	39	14	0	55	0	8	48	0	0	56	216
3:15 PM	0	4	25	8	0	37	0	16	47	6	0	69	0	1	56	18	0	75	0	12	55	2	0	69	250
3:30 PM	0	4	22	6	0	32	0	18	64	8	0	90	0	3	56	24	0	83	0	13	62	2	0	77	282
3:45 PM	0	5	24	10	0	39	0	17	79	6	0	102	0	2	59	22	0	83	0	15	65	4	0	84	308
Hourly Total	0	20	93	29	0	142	0	61	243	28	0	332	0	8	210	78	0	296	0	48	230	8	0	286	1056

TH 47 @ CSAH 22
Nowthen Minnesota
Wednesday, August 11, 2021

Time	Southbound TH 47						Westbound CSAH 22						Northbound TH 47						Eastbound CSAH 22						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	11	17	10	0	38	0	21	74	9	0	104	0	1	52	19	0	72	0	16	67	3	0	86	300
4:15 PM	0	4	25	7	0	36	0	24	75	6	0	105	0	3	52	22	0	77	0	17	65	1	0	83	301
4:30 PM	0	6	20	17	0	43	0	18	84	4	0	106	0	5	69	33	0	107	0	13	62	0	0	75	331
4:45 PM	0	9	20	8	0	37	0	24	79	6	0	109	0	3	58	32	0	93	0	14	68	4	0	86	325
Hourly Total	0	30	82	42	0	164	0	87	312	25	0	424	0	12	231	106	0	349	0	60	262	8	0	330	1257
5:00 PM	0	7	22	5	0	34	0	16	82	11	0	109	0	7	50	19	0	76	0	10	55	1	0	66	285
5:15 PM	0	6	22	11	0	39	0	14	84	17	0	115	0	1	55	22	0	78	0	8	66	0	0	74	306
5:30 PM	0	6	26	7	0	39	0	14	74	9	0	97	0	1	53	16	0	70	0	9	50	0	0	59	265
5:45 PM	0	2	24	6	0	32	0	17	69	6	0	82	0	2	40	17	0	59	0	5	43	4	0	52	225
Hourly Total	0	21	94	29	0	144	0	61	299	43	0	403	0	11	198	74	0	283	0	32	214	5	0	251	1081
6:00 PM	0	2	11	7	0	20	0	14	66	8	0	88	0	2	34	11	0	47	0	12	48	3	0	63	218
6:15 PM	0	6	10	11	0	27	0	12	57	4	0	73	0	2	43	16	0	61	0	7	47	2	0	56	217
6:30 PM	0	4	16	8	0	28	0	9	35	5	0	49	0	2	30	9	0	41	0	7	35	4	0	46	164
6:45 PM	0	1	16	6	0	23	0	5	37	4	0	46	0	2	26	15	0	43	0	6	32	0	0	38	150
Hourly Total	0	13	53	32	0	98	0	40	195	21	0	256	0	8	133	51	0	192	0	32	162	9	0	203	749
7:00 PM	0	1	10	4	0	15	0	14	27	6	0	47	0	3	27	14	0	44	0	3	32	3	0	38	144
7:15 PM	0	1	16	11	0	28	0	3	25	2	0	30	0	1	27	3	0	31	0	11	31	1	0	43	132
7:30 PM	0	1	16	6	0	23	0	7	19	3	0	29	0	2	19	5	0	26	0	11	17	2	0	30	108
7:45 PM	0	0	20	9	0	29	0	5	24	1	0	30	0	2	18	7	0	27	0	2	27	2	0	31	117
Hourly Total	0	3	62	30	0	95	0	29	95	12	0	136	0	8	91	29	0	128	0	27	107	8	0	142	501
8:00 PM	0	4	18	2	0	24	0	6	13	2	0	21	0	0	18	8	0	26	0	11	20	0	0	31	102
8:15 PM	0	1	8	3	0	12	0	7	16	1	0	24	0	1	21	10	0	32	0	4	27	0	0	31	99
8:30 PM	0	1	15	3	0	19	0	6	18	1	0	25	0	1	14	7	0	22	0	1	29	2	0	32	98
8:45 PM	0	3	15	5	0	23	0	12	25	0	0	37	0	2	22	3	0	27	0	1	21	1	0	23	110
Hourly Total	0	9	56	13	0	78	0	31	72	4	0	107	0	4	75	28	0	107	0	17	97	3	0	117	409
9:00 PM	0	2	8	4	0	14	0	8	13	1	0	22	0	0	12	2	0	14	0	9	32	1	0	42	92
9:15 PM	0	2	13	6	0	21	0	7	14	6	0	27	0	0	16	9	0	25	0	6	17	1	0	24	97
9:30 PM	0	0	7	3	0	10	0	13	12	2	0	27	0	1	17	3	0	21	0	2	18	0	0	20	78
9:45 PM	0	4	3	3	0	10	0	6	16	1	0	23	0	0	8	6	0	14	0	2	11	2	0	15	62
Hourly Total	0	8	31	16	0	55	0	34	55	10	0	99	0	1	53	20	0	74	0	19	78	4	0	101	329
10:00 PM	0	0	6	3	0	9	0	4	7	0	0	11	0	1	9	5	0	15	0	4	6	0	0	10	45
10:15 PM	0	1	6	1	0	8	0	6	12	1	0	19	0	0	10	3	0	13	0	4	19	0	0	23	63
10:30 PM	0	2	6	0	0	8	0	2	5	0	0	7	0	2	3	4	0	9	0	2	15	0	0	17	41
10:45 PM	0	0	4	3	0	7	0	1	4	0	0	5	0	0	6	4	0	10	0	2	8	1	0	11	33
Hourly Total	0	3	22	7	0	32	0	13	28	1	0	42	0	3	28	16	0	47	0	12	48	1	0	61	182
11:00 PM	0	2	4	5	0	11	0	2	5	1	0	8	0	0	4	1	0	5	0	1	6	0	0	7	31
11:15 PM	0	0	2	3	0	5	0	1	4	0	0	5	0	0	10	0	0	10	0	2	2	0	0	4	24
11:30 PM	0	1	1	0	0	2	0	3	1	1	0	5	0	0	7	1	0	8	0	0	3	0	0	3	18
11:45 PM	0	0	2	1	0	3	0	1	2	0	0	3	0	0	5	2	0	7	0	2	1	1	0	4	17
Hourly Total	0	3	9	9	0	21	0	7	12	2	0	21	0	0	26	4	0	30	0	5	12	1	0	18	90
DAILY TOTAL	0	268	1857	517	0	2642	0	819	2801	276	0	3896	0	114	1744	751	0	2609	0	444	2524	102	0	3070	12217
Cars	0	259	1803	497	0	2559	0	802	2640	269	0	3711	0	104	1697	734	0	2535	0	433	2355	93	0	2881	11686
Heavy Vehicles	0	9	54	20	0	83	0	17	161	7	0	185	0	10	47	17	0	74	0	11	169	9	0	189	531
Heavy Vehicle %	0.00%	3.36%	2.91%	3.87%	0.00%	3.14%	0.00%	2.08%	5.75%	2.54%	0.00%	4.75%	0.00%	8.77%	2.69%	2.26%	0.00%	2.84%	0.00%	2.48%	6.70%	8.82%	0.00%	6.16%	4.35%

TH 47 @ CSAH 22
Nowthen Minnesota
Wednesday, August 11, 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	
6:30 AM	0	7	54	5	0	66	0	27	43	1	0	71	0	2	13	12	0	27	0	2	38	2	0	42	206
6:45 AM	0	3	55	8	0	66	0	19	44	6	0	69	0	2	9	3	0	14	0	6	37	0	0	43	192
7:00 AM	0	4	55	14	0	73	0	19	40	6	0	65	0	0	10	8	0	18	0	6	45	0	0	51	207
7:15 AM	0	5	51	9	0	65	0	22	38	5	0	65	0	2	15	8	0	25	0	4	38	2	0	44	199
Peak Hour Total	0	19	215	36	0	270	0	87	165	18	0	270	0	6	47	31	0	84	0	18	158	4	0	180	804
PHF	0.000	0.679	0.977	0.643	0.000	0.925	0.000	0.806	0.938	0.750	0.000	0.951	0.000	0.750	0.783	0.646	0.000	0.778	0.000	0.750	0.878	0.500	0.000	0.882	0.971

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	11	17	10	0	38	0	21	74	9	0	104	0	1	52	19	0	72	0	16	67	3	0	86	300
4:15 PM	0	4	25	7	0	36	0	24	75	6	0	105	0	3	52	22	0	77	0	17	65	1	0	83	301
4:30 PM	0	6	20	17	0	43	0	18	84	4	0	106	0	5	69	33	0	107	0	13	62	0	0	75	331
4:45 PM	0	9	20	8	0	37	0	24	79	6	0	109	0	3	58	32	0	93	0	14	68	4	0	86	325
Peak Hour Total	0	30	82	42	0	154	0	87	312	25	0	424	0	12	231	106	0	349	0	60	262	8	0	330	1257
PHF	0.000	0.682	0.820	0.618	0.000	0.895	0.000	0.906	0.929	0.694	0.000	0.972	0.000	0.600	0.837	0.803	0.000	0.815	0.000	0.882	0.963	0.500	0.000	0.959	0.949

Total Vehicles On Leg				5106	
Vehicles Entering Intersection		2642	Vehicles Exiting Intersection		2464
Southbound					
Cars	497	1803	259	0	0
Heavy	20	54	9	0	0
Total	517	1857	268	0	0



Total Vehicles on Leg 6502	Vehicles Entering Intersection 3070	Eastbound	Cars	Heavy	Total
			0	0	0
	0		0	0	
	433		11	444	
	2355		169	2524	
Vehicles Exiting Intersection 3432	93	9	102		



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 3896	Total Vehicles on Leg 7439
269	7	276			
2640	161	2801			
802	17	819			
0	0	0			
0	0	0	Vehicles Exiting Intersection 3543		



Cars	0	0	104	1697	734
Heavy	0	0	10	47	17
Total	0	0	114	1744	751
Northbound					
Vehicles Entering Intersection		2609	Vehicles Exiting Intersection		2778
Total Vehicles On Leg			5387		



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		
08/11/2021	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	1	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	1	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0		
	5:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0		
	5:45	0	1	3	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0		
	6:00	0	0	1	0	0	0	0	6	0	0	0	0	1	1	1	0	0	0	2	0	0	
	6:15	0	0	0	0	0	0	0	7	0	0	0	0	0	1	0	0	0	0	2	0	0	
	6:30	0	0	0	1	0	0	0	7	0	0	0	0	0	1	2	0	0	0	3	0	0	
	6:45	0	0	1	0	0	0	0	6	0	0	0	0	1	0	0	0	0	0	4	0	0	
	7:00	0	0	2	2	0	0	0	4	1	0	0	0	0	0	0	0	0	1	5	0	0	
	7:15	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	1	2	1	0	
	7:30	0	0	0	0	0	0	0	6	0	0	0	0	1	1	0	0	0	0	4	0	0	
	7:45	0	0	1	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	5	0	0	
	8:00	0	0	1	1	0	0	0	3	0	0	0	0	0	3	0	0	0	0	3	1	0	
	8:15	0	1	3	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	1	0	
	8:30	0	0	1	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	1	0	0	
	8:45	0	0	2	1	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3	0	0	
	9:00	0	0	0	1	0	0	0	3	0	0	0	0	0	2	0	0	0	0	1	1	0	
	9:15	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	4	0	0	
	9:30	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6	0	0	
	9:45	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	1	0	
	10:00	0	0	1	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	3	0	0	
	10:15	0	0	4	0	0	0	0	4	0	0	0	0	0	1	2	0	0	0	1	0	0	
	10:30	0	0	1	1	0	0	0	1	3	0	0	0	0	0	0	0	0	0	1	1	0	
	10:45	0	0	4	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	3	0	0
	11:00	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	
	11:15	0	1	1	1	0	0	0	3	0	0	0	0	0	1	0	0	0	0	1	2	0	0
	11:30	0	0	2	0	0	0	0	0	5	0	0	0	0	3	0	0	0	0	0	3	0	0
	11:45	0	2	1	0	0	0	0	0	4	0	0	0	0	2	1	0	0	0	0	1	0	0

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2125

Study Date : 08/11/2021

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 22 (Vikings Blvd. NW)

Number of Lanes : 1

Total Approach Volume: 3,070

Westbound: CSAH 22 (Vikings Blvd. NW)

Number of Lanes : 1

Total Approach Volume: 3,896

Minor Street Approaches

Northbound: TH 47 (Saint Francis Blvd. NW)

Number of Lanes : 1

Total Approach Volume: 2,609

Southbound: TH 47 (Saint Francis Blvd. NW)

Number of Lanes : 1

Total Approach Volume: 2,642

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.....Not Satisfied

Required volumes reached for 3 hours, 8 are needed

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

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

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

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

Number of hours (8) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (15) 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 2125

Study Date : 08/11/2021

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

8 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = True
Number of Major Lanes = 1
Number of Minor Lanes = 1

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = 350

Veh/Hr Minor = 105

Time	Major Road CSAH 22 (Vikings Blvd. NW)				Total	Minor Road TH 47 (Saint Francis Blvd. NW)		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:45 - 16:45	328	+	417	=	745	339	156	Yes
16:45 - 17:45	285	+	430	=	715	317	149	Yes
14:45 - 15:45	253	+	294	=	547	263	136	Yes
17:45 - 18:45	217	+	292	=	509	208	107	Yes
07:00 - 08:00	195	+	267	=	462	90	238	Yes
06:00 - 07:00	135	+	265	=	400	74	256	Yes
13:45 - 14:45	177	+	216	=	393	185	116	Yes
12:45 - 13:45	182	+	201	=	383	121	138	Yes
05:45 - 06:45	107	+	237	=	344	66	256	No
12:30 - 13:30	156	+	187	=	343	116	141	No
08:30 - 09:30	155	+	185	=	340	108	131	No
08:00 - 09:00	152	+	182	=	334	95	160	No
08:15 - 09:15	150	+	181	=	331	103	144	No
09:00 - 10:00	152	+	174	=	326	101	117	No
10:45 - 11:45	150	+	174	=	324	105	108	No
09:15 - 10:15	153	+	167	=	320	90	120	No
08:45 - 09:45	153	+	166	=	319	101	124	No
11:00 - 12:00	156	+	162	=	318	113	116	No
11:15 - 12:15	142	+	173	=	315	120	119	No
05:30 - 06:30	89	+	225	=	314	44	262	No
09:30 - 10:30	140	+	171	=	311	90	131	No
12:15 - 13:15	140	+	169	=	309	123	141	No
10:30 - 11:30	147	+	158	=	305	105	112	No
10:15 - 11:15	143	+	162	=	305	104	132	No
18:45 - 19:45	149	+	152	=	301	144	89	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2125

Study Date : 08/11/2021

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

Site Data Required

Rural Settings Apply = True
Number of Major Lanes = 1
Number of Minor Lanes = 1

Volume Requirements

Rural Factor of 70 % applied
Veh/Hr Major = 525
Veh/Hr Minor = 52

Time	Major Road CSAH 22 (Vikings Blvd. NW)				Total	Minor Road TH 47 (Saint Francis Blvd. NW)		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:45 - 16:45	328	+	417	=	745	339	156	Yes
16:45 - 17:45	285	+	430	=	715	317	149	Yes
14:45 - 15:45	253	+	294	=	547	263	136	Yes
17:45 - 18:45	217	+	292	=	509	208	107	No
14:30 - 15:30	221	+	262	=	483	232	138	No
06:45 - 07:45	189	+	274	=	463	83	248	No
07:00 - 08:00	195	+	267	=	462	90	238	No
18:00 - 19:00	203	+	256	=	459	192	98	No
06:30 - 07:30	180	+	270	=	450	84	270	No
14:15 - 15:15	198	+	248	=	446	211	127	No
06:15 - 07:15	162	+	273	=	435	71	273	No
07:15 - 08:15	184	+	245	=	429	96	210	No
14:00 - 15:00	190	+	236	=	426	194	116	No
13:30 - 14:30	188	+	218	=	406	168	111	No
13:15 - 14:15	189	+	212	=	401	145	119	No
06:00 - 07:00	135	+	265	=	400	74	256	No
07:30 - 08:30	180	+	216	=	396	89	191	No
18:15 - 19:15	178	+	215	=	393	189	93	No
13:45 - 14:45	177	+	216	=	393	185	116	No
12:45 - 13:45	182	+	201	=	383	121	138	No
13:00 - 14:00	177	+	205	=	382	136	134	No
07:45 - 08:45	166	+	202	=	368	95	183	No
05:45 - 06:45	107	+	237	=	344	66	256	No
12:30 - 13:30	156	+	187	=	343	116	141	No
08:30 - 09:30	155	+	185	=	340	108	131	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2125

Study Date : 08/11/2021

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

14 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 = **1**
Number of Minor Lanes = **1**

Volume Requirements

Rural Factor of 70% applied
Warrant 1A 1B
Veh/Hr Major = **280 420**

Veh/Hr Minor = **84 42**

Major Road CSAH 22 (Vikings Blvd. NW)

Minor Road TH 47 (Saint Francis Blvd. NW)

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:15 - 17:15	310	+	429	=	739	353	150	Yes
15:15 - 16:15	316	+	365	=	681	313	146	Yes
17:15 - 18:15	248	+	382	=	630	254	130	Yes
14:15 - 15:15	198	+	248	=	446	211	127	Yes
06:15 - 07:15	162	+	273	=	435	71	273	Yes
07:15 - 08:15	184	+	245	=	429	96	210	Yes
13:15 - 14:15	189	+	212	=	401	145	119	Yes
18:15 - 19:15	178	+	215	=	393	189	93	Yes
08:15 - 09:15	150	+	181	=	331	103	144	Yes
09:15 - 10:15	153	+	167	=	320	90	120	Yes
11:15 - 12:15	142	+	173	=	315	120	119	Yes
12:15 - 13:15	140	+	169	=	309	123	141	Yes

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:00 - 17:00	330	+	424	=	754	349	154	Yes
17:00 - 18:00	251	+	403	=	654	283	144	Yes
15:00 - 16:00	286	+	332	=	618	296	142	Yes
18:00 - 19:00	203	+	256	=	459	192	98	Yes
06:15 - 07:15	162	+	273	=	435	71	273	Yes
07:15 - 08:15	184	+	245	=	429	96	210	Yes
14:00 - 15:00	190	+	236	=	426	194	116	Yes
13:30 - 14:30	188	+	218	=	406	168	111	No
13:15 - 14:15	189	+	212	=	401	145	119	No
06:00 - 07:00	135	+	265	=	400	74	256	No
13:45 - 14:45	177	+	216	=	393	185	116	No
12:45 - 13:45	182	+	201	=	383	121	138	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2125

Study Date : 08/11/2021

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.

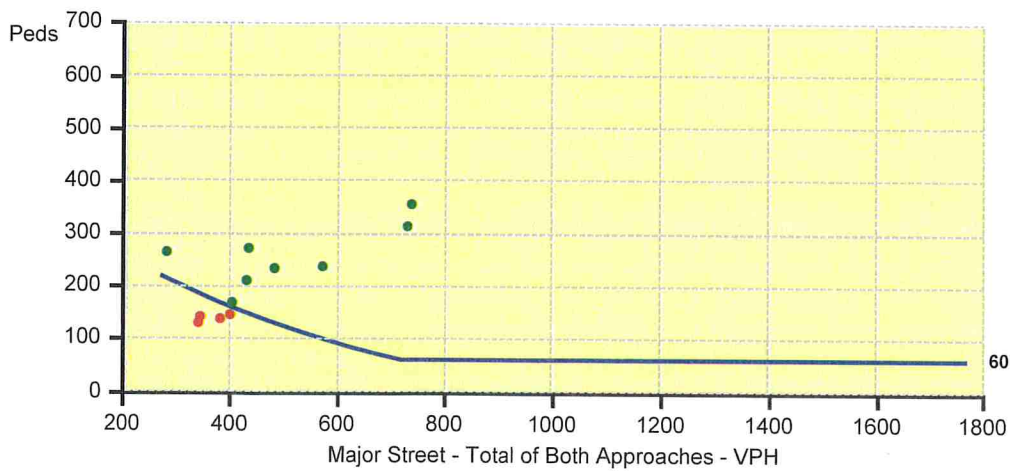
Summary

8 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = True
 Number of Major Lanes = 1
 Number of Minor Lanes = 1

Time	Major Road CSAH 22 (Vikings Blvd. NW)				Total	Minor Road TH 47 (Saint Francis Blvd. NW)		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:30 - 17:30	301	+	439	=	740	354	153	Yes
15:30 - 16:30	330	+	401	=	731	315	145	Yes
17:30 - 18:30	230	+	340	=	570	237	118	Yes
14:30 - 15:30	221	+	262	=	483	232	138	Yes
06:15 - 07:15	162	+	273	=	435	71	273	Yes
07:15 - 08:15	184	+	245	=	429	96	210	Yes
13:30 - 14:30	188	+	218	=	406	168	111	Yes
05:15 - 06:15	84	+	199	=	283	36	263	Yes
13:15 - 14:15	189	+	212	=	401	145	119	No
12:45 - 13:45	182	+	201	=	383	121	138	No
13:00 - 14:00	177	+	205	=	382	136	134	No
							141	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2125

Study Date : 08/11/2021

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

17 one hour periods meet minimums.
Warrant IS met.

Site Data Required

Rural Settings Apply = True
 Number of Major Lanes = 1
 Number of Minor Lanes = 1

Time	Major Road CSAH 22 (Vikings Blvd. NW)				Total	Minor Road TH 47 (Saint Francis Blvd. NW)		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:00 - 17:00	330	+	424	=	754	349	154	Yes
15:45 - 16:45	328	+	417	=	745	339	156	Yes
16:30 - 17:30	301	+	439	=	740	354	153	Yes
16:15 - 17:15	310	+	429	=	739	353	150	Yes
15:30 - 16:30	330	+	401	=	731	315	145	Yes
16:45 - 17:45	285	+	430	=	715	317	149	Yes
15:15 - 16:15	316	+	365	=	681	313	146	Yes
17:00 - 18:00	251	+	403	=	654	283	144	Yes
17:15 - 18:15	248	+	382	=	630	254	130	Yes
15:00 - 16:00	286	+	332	=	618	296	142	Yes
17:30 - 18:30	230	+	340	=	570	237	118	Yes
							136	Yes

