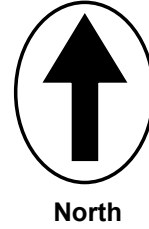


Date : 06/30/22

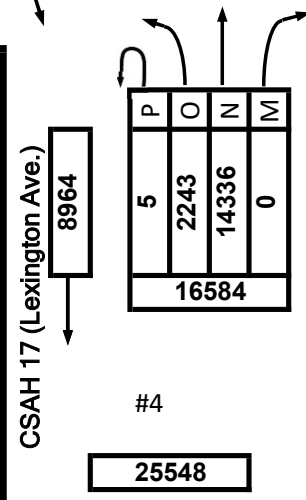
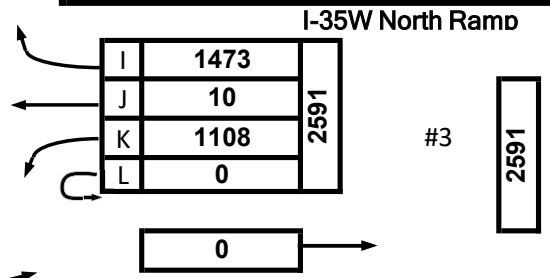
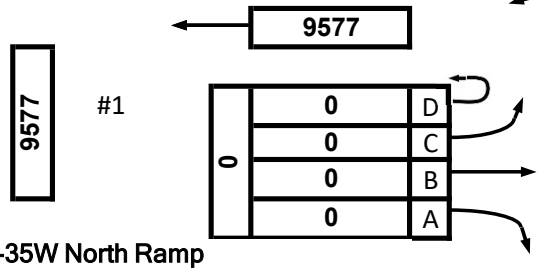
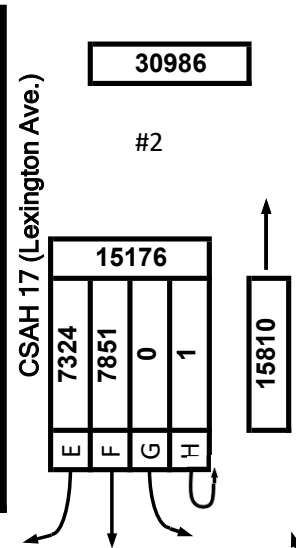
Count Number : TMC 2223

Location : CSAH 17 (Lexington Ave.)
@ I-35W North Ramp

Collection Period : 24 HR



North



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

Anoka County Highway Department

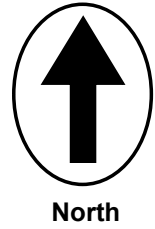
Traffic Volume and Turning Movement Study

Date : 06/30/22

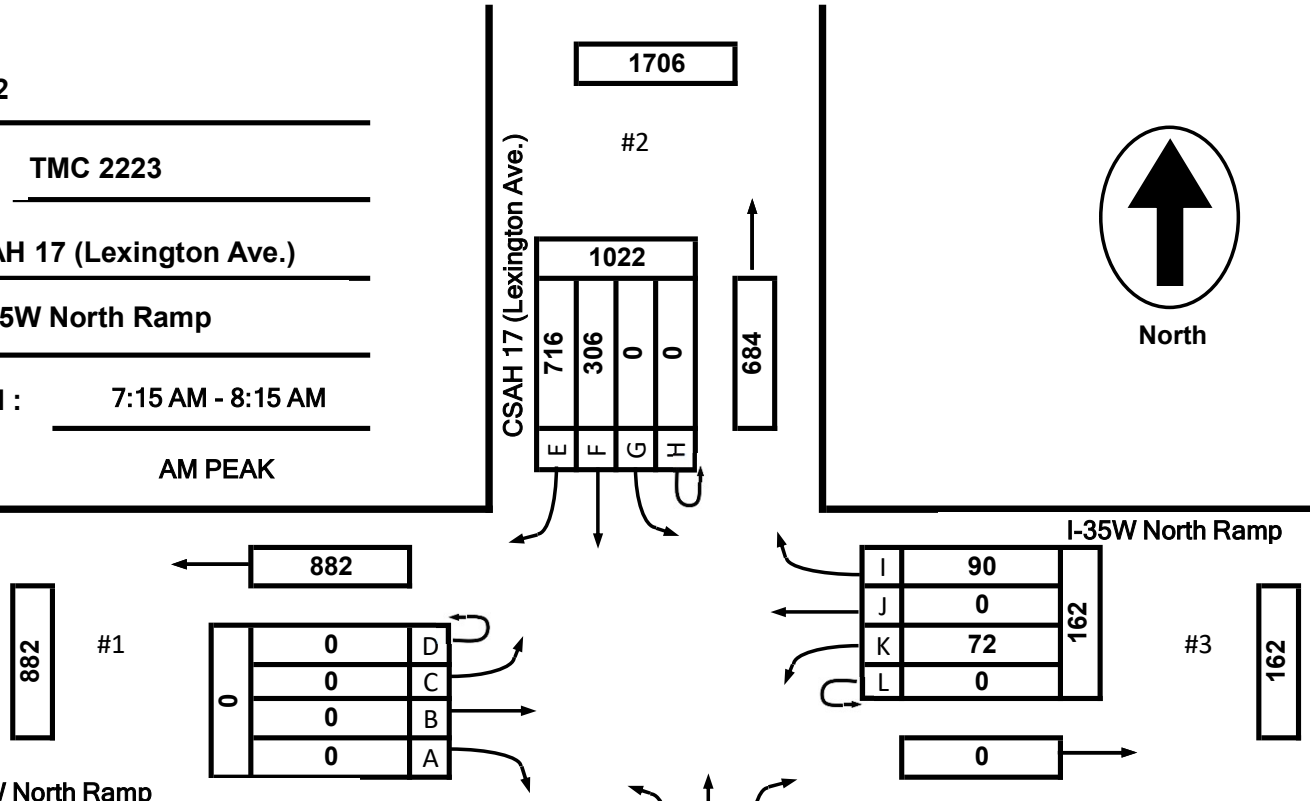
Count Number : TMC 2223

Location : CSAH 17 (Lexington Ave.)
@ I-35W North Ramp

Collection Period : 7:15 AM - 8:15 AM
AM PEAK



North



I-35W North Ramp

CSAH 17 (Lexington Ave.)

I-35W North Ramp

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

Anoka County Highway Department

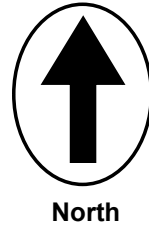
Traffic Volume and Turning Movement Study

Date : 06/30/22

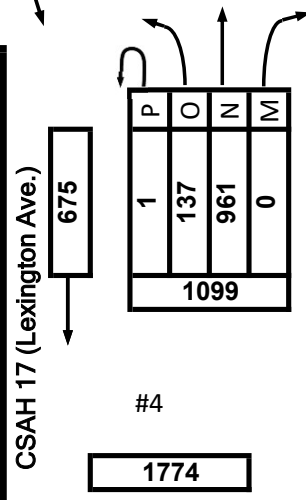
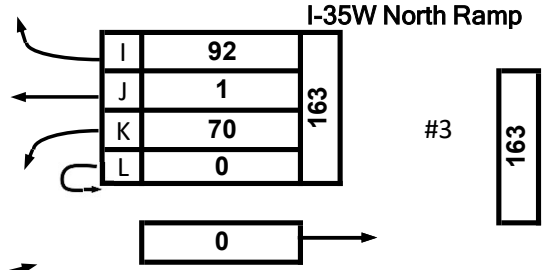
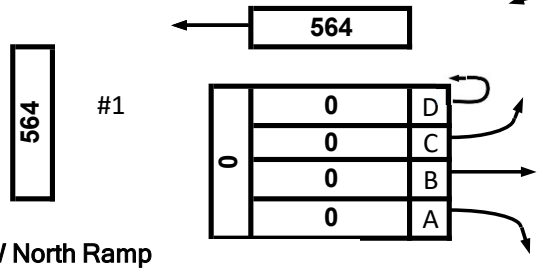
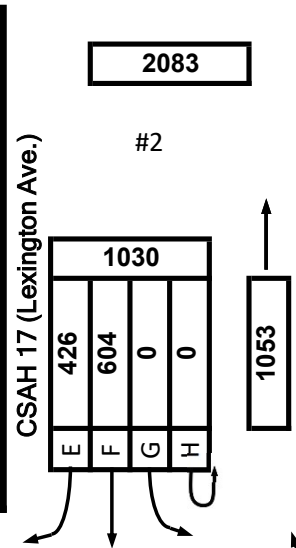
Count Number : TMC 2223

Location : CSAH 17 (Lexington Ave.)
@ I-35W North Ramp

Collection Period : 12 PM - 1 PM
MIDDAY PEAK



North



I-35W North Ramp

I-35W North Ramp

CSAH 17 (Lexington Ave.)

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

Anoka County Highway Department

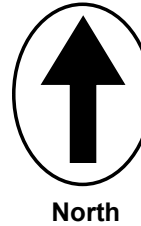
Traffic Volume and Turning Movement Study

Date : 06/30/22

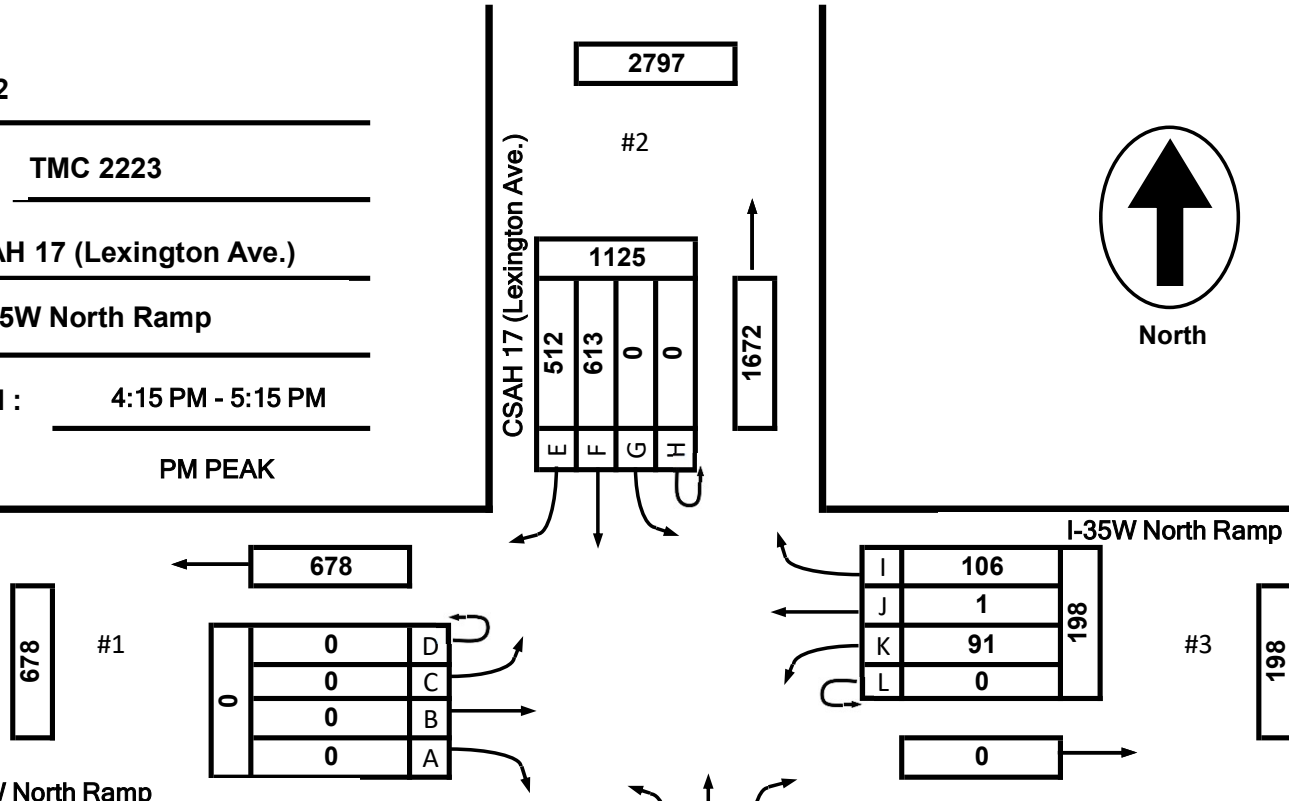
Count Number : TMC 2223

Location : CSAH 17 (Lexington Ave.)
@ I-35W North Ramp

Collection Period : 4:15 PM - 5:15 PM
PM PEAK



North



I-35W North Ramp

CSAH 17 (Lexington Ave.)

I-35W North Ramp

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

Anoka County Highway Department

Traffic Volume and Turning Movement Study



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2223
 Site Code :
 Start Date : 06/30/2022
 Page No : 1

Weather: Hot & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 17 Southbound						I-35W North Ramp Westbound						CSAH 17 Northbound						I-35W North Ramp Eastbound						Exclu. Total	Inclu. Total	Int. Total	
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total				
00:00	6	6	0	0	0	12	3	0	3	0	0	6	0	20	4	0	0	24	0	0	0	0	0	0	0	0	42	42
00:15	9	6	0	0	0	15	1	0	2	0	0	3	0	17	1	0	0	18	0	0	0	0	0	0	0	0	36	36
00:30	4	6	0	0	0	10	3	0	0	0	0	3	0	17	3	0	0	20	0	0	0	0	0	0	0	0	33	33
00:45	5	6	0	0	0	11	2	0	0	0	0	2	0	19	3	0	0	22	0	0	0	0	0	0	0	0	35	35
Total	24	24	0	0	0	48	9	0	5	0	0	14	0	73	11	0	0	84	0	0	0	0	0	0	0	0	146	146
01:00	5	8	0	0	0	13	1	0	3	0	0	4	0	10	1	0	0	11	0	0	0	0	0	0	0	0	28	28
01:15	16	5	0	0	0	21	3	0	2	0	0	5	0	8	2	0	0	10	0	0	0	0	0	0	0	0	36	36
01:30	11	4	0	0	0	15	1	0	0	0	0	1	0	7	1	0	0	8	0	0	0	0	0	0	0	0	24	24
01:45	4	6	0	0	0	10	2	0	0	0	0	2	0	8	1	0	0	9	0	0	0	0	0	0	0	0	21	21
Total	36	23	0	0	0	59	7	0	5	0	0	12	0	33	5	0	0	38	0	0	0	0	0	0	0	0	109	109
02:00	4	5	0	0	0	9	0	0	0	0	0	0	0	7	3	0	0	10	0	0	0	0	0	0	0	0	19	19
02:15	0	2	0	0	0	2	0	0	0	0	0	0	0	8	0	0	0	8	0	0	0	0	0	0	0	0	10	10
02:30	8	4	0	0	0	12	1	0	1	0	0	2	0	8	3	0	0	11	0	0	0	0	0	0	0	0	25	25
02:45	5	4	0	0	0	9	6	0	0	0	0	6	0	2	0	0	0	2	0	0	0	0	0	0	0	0	17	17
Total	17	15	0	0	0	32	7	0	1	0	0	8	0	25	6	0	0	31	0	0	0	0	0	0	0	0	71	71
03:00	10	2	0	0	0	12	1	0	1	0	0	2	0	3	2	0	0	5	0	0	0	0	0	0	0	0	19	19
03:15	8	0	0	0	0	8	0	0	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0	0	0	0	15	15
03:30	10	7	0	0	0	17	1	0	3	0	0	4	0	8	3	0	0	11	0	0	0	0	0	0	0	0	32	32
03:45	10	3	0	0	0	13	3	0	1	0	0	4	0	5	2	0	0	7	0	0	0	0	0	0	0	0	24	24
Total	38	12	0	0	0	50	5	0	5	0	0	10	0	23	7	0	0	30	0	0	0	0	0	0	0	0	90	90
04:00	18	2	0	0	0	20	1	0	1	0	0	2	0	7	5	0	0	12	0	0	0	0	0	0	0	0	34	34
04:15	23	6	0	0	0	29	1	0	3	0	0	4	0	6	8	0	0	14	0	0	0	0	0	0	0	0	47	47
04:30	32	12	0	0	0	44	5	0	8	0	0	13	0	18	11	0	0	29	0	0	0	0	0	0	0	0	86	86
04:45	19	16	0	0	0	35	6	0	4	0	0	10	0	32	3	0	0	35	0	0	0	0	0	0	0	0	80	80
Total	92	36	0	0	0	128	13	0	16	0	0	29	0	63	27	0	0	90	0	0	0	0	0	0	0	0	247	247
05:00	34	17	0	0	0	51	3	0	8	0	0	11	0	9	12	0	0	21	0	0	0	0	0	0	0	0	83	83
05:15	77	27	0	0	0	104	6	0	10	0	0	16	0	24	26	0	0	50	0	0	0	0	0	0	0	0	170	170
05:30	116	37	0	0	0	153	15	1	8	0	0	24	0	48	14	0	0	62	0	0	0	0	1	0	0	1	239	240
05:45	88	45	0	0	0	133	22	0	16	0	0	38	0	79	22	0	0	101	0	0	0	0	0	0	0	0	272	272
Total	315	126	0	0	0	441	46	1	42	0	0	89	0	160	74	0	0	234	0	0	0	0	1	0	1	764	765	



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2223
 Site Code :
 Start Date : 06/30/2022
 Page No : 2

Weather: Hot & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 17 Southbound						I-35W North Ramp Westbound						CSAH 17 Northbound						I-35W North Ramp Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
06:00	109	55	0	0	0	164	16	0	9	0	0	25	0	67	22	0	0	89	0	0	0	0	0	0	0	278	278
06:15	132	56	0	0	0	188	24	0	6	0	0	30	0	82	26	0	0	108	0	0	0	0	0	0	0	326	326
06:30	147	66	0	0	0	213	28	0	20	0	0	48	0	96	29	0	0	125	0	0	0	0	0	0	0	386	386
06:45	158	73	0	0	0	231	30	0	24	0	0	54	0	156	24	0	0	180	0	0	0	0	0	0	0	465	465
Total	546	250	0	0	0	796	98	0	59	0	0	157	0	401	101	0	0	502	0	0	0	0	0	0	0	1455	1455
07:00	163	61	0	0	0	224	15	0	15	0	0	30	0	118	38	0	0	156	0	0	0	0	1	0	1	410	411
07:15	209	71	0	0	0	280	16	0	22	0	0	38	0	128	47	0	0	175	0	0	0	0	0	0	0	493	493
07:30	212	96	0	0	0	308	22	0	14	0	0	36	0	130	51	0	0	181	0	0	0	0	0	0	0	525	525
07:45	139	70	0	0	0	209	26	0	21	0	0	47	0	176	27	0	0	203	0	0	0	0	1	0	1	459	460
Total	723	298	0	0	0	1021	79	0	72	0	0	151	0	552	163	0	0	715	0	0	0	0	2	0	2	1887	1889
08:00	156	69	0	0	0	225	26	0	15	0	0	41	0	160	41	0	0	201	0	0	0	0	2	0	2	467	469
08:15	128	60	0	0	0	188	19	0	17	0	0	36	0	154	35	0	0	189	0	0	0	0	0	0	0	413	413
08:30	114	86	0	0	0	200	29	0	11	0	0	40	0	146	36	0	0	182	0	0	0	0	0	0	0	422	422
08:45	101	110	0	0	0	211	31	0	17	0	0	48	0	153	35	0	0	188	0	0	0	0	0	0	0	447	447
Total	499	325	0	0	0	824	105	0	60	0	0	165	0	613	147	0	0	760	0	0	0	0	2	0	2	1749	1751
09:00	108	86	0	0	0	194	14	0	14	0	0	28	0	146	30	0	0	176	0	0	0	0	1	0	1	398	399
09:15	99	101	0	0	0	200	11	0	14	0	0	25	0	167	42	0	0	209	0	0	0	0	0	0	0	434	434
09:30	117	106	0	0	0	223	21	0	13	0	0	34	0	165	24	0	0	189	0	0	0	0	2	0	2	446	448
09:45	93	123	0	0	0	216	19	0	15	0	0	34	0	155	29	0	0	184	0	0	0	0	0	0	0	434	434
Total	417	416	0	0	0	833	65	0	56	0	0	121	0	633	125	0	0	758	0	0	0	0	3	0	3	1712	1715
10:00	84	112	0	0	0	196	17	1	14	0	0	32	0	187	45	0	0	232	0	0	0	0	1	0	1	460	461
10:15	115	123	0	0	0	238	14	0	13	0	0	27	0	180	19	0	0	199	0	0	0	0	1	0	1	464	465
10:30	110	107	0	0	0	217	18	0	13	0	0	31	0	179	25	0	0	204	0	0	0	0	0	0	0	452	452
10:45	100	118	0	0	0	218	19	0	12	0	0	31	0	179	22	0	0	201	0	0	0	0	0	0	0	450	450
Total	409	460	0	0	0	869	68	1	52	0	0	121	0	725	111	0	0	836	0	0	0	0	2	0	2	1826	1828
11:00	94	116	0	0	0	210	23	0	15	0	0	38	0	182	28	0	0	210	0	0	0	0	1	0	1	458	459
11:15	93	124	0	0	0	217	18	1	15	0	0	34	0	192	26	0	0	218	0	0	0	0	2	0	2	469	471
11:30	133	135	0	0	0	268	17	0	11	0	0	28	0	220	43	0	0	263	0	0	0	0	1	0	1	559	560
11:45	92	134	0	0	0	226	15	0	19	0	0	34	0	220	36	0	0	256	0	0	0	0	1	0	1	516	517
Total	412	509	0	0	0	921	73	1	60	0	0	134	0	814	133	0	0	947	0	0	0	0	5	0	5	2002	2007
12:00	86	151	0	0	0	237	20	0	15	0	0	35	0	249	41	1	0	291	0	0	0	0	0	0	0	563	563
12:15	125	155	0	0	0	280	28	1	20	0	0	49	0	261	25	0	0	286	0	0	0	0	0	0	0	615	615
12:30	107	159	0	0	0	266	20	0	17	0	0	37	0	226	43	0	0	269	0	0	0	0	0	0	0	572	572



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2223
 Site Code :
 Start Date : 06/30/2022
 Page No : 3

Weather: Hot & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 17 Southbound						I-35W North Ramp Westbound						CSAH 17 Northbound						I-35W North Ramp Eastbound						Exclu. Total	Inclu. Total	Int. Total	
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total				
12:45	108	139	0	0	0	247	24	0	18	0	0	42	0	225	28	0	0	253	0	0	0	0	0	0	0	0	542	542
Total	426	604	0	0	0	1030	92	1	70	0	0	163	0	961	137	1	0	1099	0	0	0	0	0	0	0	0	2292	2292
13:00	101	146	0	0	0	247	24	0	14	0	0	38	0	201	30	1	0	232	0	0	0	0	1	0	1	517	518	
13:15	103	152	0	0	0	255	19	0	16	0	0	35	0	233	32	1	0	266	0	0	0	0	0	0	0	556	556	
13:30	89	131	0	0	0	220	26	0	18	0	0	44	0	229	42	0	0	271	0	0	0	0	1	0	1	535	536	
13:45	117	156	0	0	0	273	19	0	14	0	0	33	0	253	26	0	0	279	0	0	0	0	1	0	1	585	586	
Total	410	585	0	0	0	995	88	0	62	0	0	150	0	916	130	2	0	1048	0	0	0	0	3	0	3	2193	2196	
14:00	105	135	0	0	0	240	18	1	29	0	0	48	0	259	44	0	0	303	0	0	0	0	1	0	1	591	592	
14:15	102	146	0	0	0	248	25	1	15	0	0	41	0	285	31	0	0	316	0	0	0	0	0	0	0	605	605	
14:30	125	137	0	0	0	262	20	0	13	0	1	33	0	281	26	0	0	307	0	0	0	0	1	0	2	602	604	
14:45	91	131	0	0	0	222	24	0	21	0	0	45	0	306	26	0	0	332	0	0	0	0	1	0	1	599	600	
Total	423	549	0	0	0	972	87	2	78	0	1	167	0	1131	127	0	0	1258	0	0	0	0	3	0	4	2397	2401	
15:00	109	135	0	0	0	244	19	0	13	0	0	32	0	281	39	0	0	320	0	0	0	0	0	0	0	596	596	
15:15	112	183	0	0	0	295	30	0	12	0	0	42	0	336	42	0	0	378	0	0	0	0	1	0	1	715	716	
15:30	158	189	0	0	0	347	24	0	19	0	0	43	0	333	51	0	0	384	0	0	0	0	2	0	2	774	776	
15:45	101	146	0	0	0	247	35	0	26	0	0	61	0	336	33	0	0	369	0	0	0	0	1	0	1	677	678	
Total	480	653	0	0	0	1133	108	0	70	0	0	178	0	1286	165	0	0	1451	0	0	0	0	4	0	4	2762	2766	
16:00	120	158	0	0	0	278	32	0	20	0	0	52	0	340	38	0	0	378	0	0	0	0	0	0	0	708	708	
16:15	112	147	0	0	0	259	25	0	17	0	0	42	0	405	50	0	0	455	0	0	0	0	0	0	0	756	756	
16:30	160	173	0	0	0	333	24	0	26	0	0	50	0	369	38	0	0	407	0	0	0	0	1	0	1	790	791	
16:45	128	147	0	0	0	275	29	1	15	0	0	45	0	392	34	0	0	426	0	0	0	0	0	0	0	746	746	
Total	520	625	0	0	0	1145	110	1	78	0	0	189	0	1506	160	0	0	1666	0	0	0	0	1	0	1	3000	3001	
17:00	112	146	0	0	0	258	28	0	33	0	0	61	0	400	43	0	0	443	0	0	0	0	1	0	1	762	763	
17:15	123	168	0	0	0	291	31	0	14	0	0	45	0	346	39	1	0	386	0	0	0	0	1	0	1	722	723	
17:30	102	140	0	0	0	242	16	0	24	0	0	40	0	311	38	0	0	349	0	0	0	0	2	0	2	631	633	
17:45	88	152	0	0	0	240	21	0	12	0	0	33	0	282	33	0	0	315	0	0	0	0	1	0	1	588	589	
Total	425	606	0	0	0	1031	96	0	83	0	0	179	0	1339	153	1	0	1493	0	0	0	0	5	0	5	2703	2708	
18:00	86	145	0	0	0	231	25	0	18	0	0	43	0	223	27	0	0	250	0	0	0	0	0	0	0	524	524	
18:15	89	126	0	0	0	215	20	0	29	0	0	49	0	220	31	1	0	252	0	0	0	0	1	0	1	516	517	
18:30	73	107	0	0	0	180	16	0	18	0	0	34	0	238	26	0	0	264	0	0	0	0	4	0	4	478	482	
18:45	57	114	0	0	0	171	15	0	13	0	0	28	0	191	41	0	0	232	0	0	0	0	1	0	1	431	432	
Total	305	492	0	0	0	797	76	0	78	0	0	154	0	872	125	1	0	998	0	0	0	0	6	0	6	1949	1955	



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2223
 Site Code :
 Start Date : 06/30/2022
 Page No : 1

Weather: Hot & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Trucks

Start Time	CSAH 17 Southbound					I-35W North Ramp Westbound					CSAH 17 Northbound					I-35W North Ramp Eastbound					Int. Total	
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total		
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
03:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
03:30	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
03:45	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	2	0	0	4	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	6
04:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2
Total	1	0	0	0	1	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	5
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
05:45	0	1	0	0	1	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	0	4
Total	1	3	0	0	4	0	0	1	0	1	0	2	1	0	3	0	0	0	0	0	0	8
06:00	1	1	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6
06:15	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6
06:30	4	0	0	0	4	0	0	0	0	0	0	4	3	0	7	0	0	0	0	0	0	11
06:45	6	2	0	0	8	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	15
Total	12	5	0	0	17	1	0	0	0	1	0	17	3	0	20	0	0	0	0	0	0	38
07:00	9	0	0	0	9	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	16
07:15	5	1	0	0	6	0	0	0	0	0	0	9	2	0	11	0	0	0	0	0	0	17
07:30	9	1	0	0	10	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	16
07:45	5	1	0	0	6	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	0	14
Total	28	3	0	0	31	1	0	0	0	1	0	29	2	0	31	0	0	0	0	0	0	63
08:00	10	1	0	0	11	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	17
08:15	7	0	0	0	7	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	14
08:30	6	0	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	10
08:45	5	1	0	0	6	1	0	0	0	1	0	8	1	0	9	0	0	0	0	0	0	16
Total	28	2	0	0	30	1	0	0	0	1	0	23	3	0	26	0	0	0	0	0	0	57
09:00	6	0	0	0	6	0	0	0	0	0	0	6	3	0	9	0	0	0	0	0	0	15



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2223
 Site Code :
 Start Date : 06/30/2022
 Page No : 3

Weather: Hot & Cloudy
 CountCAM 3
 Study Conducted by: Adam

Groups Printed- Trucks

Start Time	CSAH 17 Southbound					I-35W North Ramp Westbound					CSAH 17 Northbound					I-35W North Ramp Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
19:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
Total	2	2	0	0	4	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	7
20:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
20:15	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
20:30	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Total	1	2	0	0	3	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	7
21:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
Total	1	0	0	0	1	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	341	84	0	0	425	17	0	20	0	37	0	306	69	0	375	0	0	0	0	0	837
Apprch %	80.2	19.8	0	0		45.9	0	54.1	0		0	81.6	18.4	0		0	0	0	0		
Total %	40.7	10	0	0	50.8	2	0	2.4	0	4.4	0	36.6	8.2	0	44.8	0	0	0	0	0	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 17

Number of Lanes : 2+

Total Approach Volume: 16,584

Southbound: CSAH 17

Number of Lanes :2+

Total Approach Volume: 15,176

Minor Street Approaches

Eastbound: I-35W North Ramp

Number of Lanes :1

Total Approach Volume: 0

Westbound: I-35W North Ramp

Number of Lanes :1

Total Approach Volume: 2,591

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 15 hours, 8 are needed

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

Required volumes reached for 17 hours, 8 are needed

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

Required 1A volumes reached for 17 hours, 8 are needed

Required 1B volumes reached for 18 hours, 8 are needed

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

Number of hours (17) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (61) 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:

Study Date : 09/15/2022

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

15 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 = **420**

Veh/Hr Minor = **105**

Time	Major Road				Total	Minor EB	Minor Road		Met?
	Major NB	+	Major SB	=			Minor WB		
							CSAH 17		
							I-35W North Ramp		
16:30 - 17:30	1662	+	1157	=	2819	0	201		Yes
15:30 - 16:30	1586	+	1131	=	2717	0	198		Yes
14:30 - 15:30	1337	+	1023	=	2360	0	152		Yes
13:30 - 14:30	1169	+	981	=	2150	0	166		Yes
11:30 - 12:30	1096	+	1011	=	2107	0	146		Yes
17:30 - 18:30	1166	+	928	=	2094	0	165		Yes
12:30 - 13:30	1020	+	1015	=	2035	0	152		Yes
07:30 - 08:30	774	+	930	=	1704	0	160		Yes
10:30 - 11:30	833	+	862	=	1695	0	134		Yes
09:30 - 10:30	804	+	873	=	1677	0	127		Yes
18:30 - 19:30	917	+	740	=	1657	0	124		Yes
06:30 - 07:30	636	+	948	=	1584	0	170		Yes
08:30 - 09:30	755	+	805	=	1560	0	141		Yes
19:30 - 20:30	776	+	614	=	1390	0	117		Yes
05:30 - 06:30	360	+	638	=	998	0	117		Yes
20:30 - 21:30	576	+	456	=	1032	0	93		No
20:45 - 21:45	494	+	413	=	907	0	89		No
05:15 - 06:15	302	+	554	=	856	0	103		No
21:00 - 22:00	448	+	382	=	830	0	84		No
21:15 - 22:15	412	+	349	=	761	0	82		No
21:30 - 22:30	397	+	314	=	711	0	76		No
21:45 - 22:45	393	+	289	=	682	0	70		No
05:00 - 06:00	234	+	441	=	675	0	89		No
22:00 - 23:00	381	+	238	=	619	0	62		No
22:15 - 23:15	344		188		532	0	48		No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

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

17 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 EB	Minor Road		Met?
	Major NB	+	Major SB	=			Minor WB		
	CSAH 17						I-35W North Ramp		
16:00 - 17:00	1666	+	1145	=	2811	0	189	Yes	
15:00 - 16:00	1451	+	1133	=	2584	0	178	Yes	
17:00 - 18:00	1493	+	1031	=	2524	0	179	Yes	
14:00 - 15:00	1258	+	972	=	2230	0	167	Yes	
12:00 - 13:00	1099	+	1030	=	2129	0	163	Yes	
13:00 - 14:00	1048	+	995	=	2043	0	150	Yes	
11:00 - 12:00	947	+	921	=	1868	0	134	Yes	
18:00 - 19:00	998	+	797	=	1795	0	154	Yes	
07:00 - 08:00	715	+	1021	=	1736	0	151	Yes	
10:00 - 11:00	836	+	869	=	1705	0	121	Yes	
09:00 - 10:00	758	+	833	=	1591	0	121	Yes	
08:00 - 09:00	760	+	824	=	1584	0	165	Yes	
19:00 - 20:00	821	+	699	=	1520	0	118	Yes	
06:00 - 07:00	502	+	796	=	1298	0	157	Yes	
20:00 - 21:00	712	+	560	=	1272	0	111	Yes	
21:00 - 22:00	448	+	382	=	830	0	84	Yes	
05:00 - 06:00	234	+	441	=	675	0	89	Yes	
22:00 - 23:00	381	+	238	=	619	0	62	No	
22:15 - 23:15	344	+	188	=	532	0	48	No	
04:45 - 05:45	168	+	343	=	511	0	61	No	
22:30 - 23:30	303	+	181	=	484	0	41	No	
22:45 - 23:45	241	+	199	=	440	0	28	No	
04:30 - 05:30	135	+	234	=	369	0	50	No	
23:00 - 00:00	184	+	172	=	356	0	25	No	
23:15 - 00:15	122		146		268	0	18	No	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

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

17 hours meet 1A minimums.
18 hours meet 1B minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

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

Veh/Hr Minor = **84 42**

Major Road CSAH 17

Minor Road I-35W North Ramp

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:00 - 17:00	1666	+	1145	=	2811	0	189	Yes
15:00 - 16:00	1451	+	1133	=	2584	0	178	Yes
17:00 - 18:00	1493	+	1031	=	2524	0	179	Yes
14:00 - 15:00	1258	+	972	=	2230	0	167	Yes
12:00 - 13:00	1099	+	1030	=	2129	0	163	Yes
13:00 - 14:00	1048	+	995	=	2043	0	150	Yes
11:00 - 12:00	947	+	921	=	1868	0	134	Yes
18:00 - 19:00	998	+	797	=	1795	0	154	Yes
07:00 - 08:00	715	+	1021	=	1736	0	151	Yes
10:00 - 11:00	836	+	869	=	1705	0	121	Yes
09:00 - 10:00	758	+	833	=	1591	0	121	Yes
08:00 - 09:00	760	+	824	=	1584	0	165	Yes

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:45 - 16:45	1609	+	1117	=	2726	0	205	Yes
16:45 - 17:45	1604	+	1066	=	2670	0	191	Yes
14:45 - 15:45	1414	+	1108	=	2522	0	162	Yes
13:45 - 14:45	1205	+	1023	=	2228	0	155	Yes
11:45 - 12:45	1102	+	1009	=	2111	0	155	Yes
12:45 - 13:45	1022	+	969	=	1991	0	159	Yes
17:45 - 18:45	1081	+	866	=	1947	0	159	Yes
10:45 - 11:45	892	+	913	=	1805	0	131	Yes
06:45 - 07:45	692	+	1043	=	1735	0	158	Yes
09:45 - 10:45	819	+	867	=	1686	0	124	Yes
07:45 - 08:45	775	+	822	=	1597	0	164	Yes
08:45 - 09:45	762	+	828	=	1590	0	135	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

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.

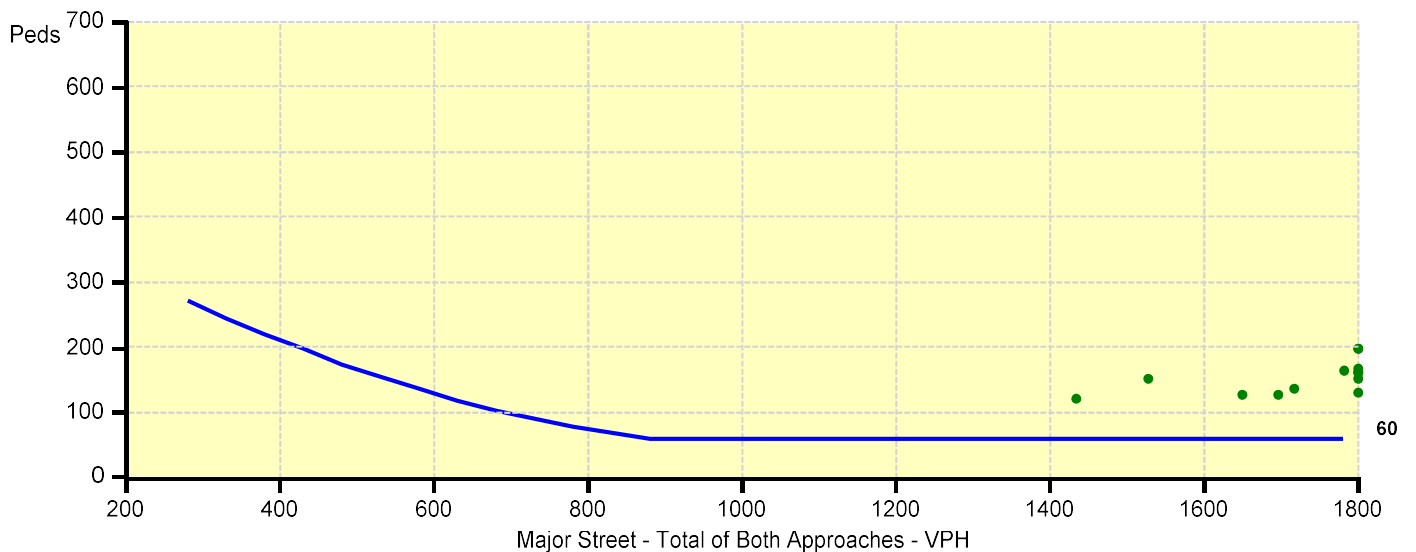
Summary

17 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				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 17					I-35W North Ramp		
16:15 - 17:15	1731	+	1125	=	2856	0	198	Yes
15:15 - 16:15	1509	+	1167	=	2676	0	198	Yes
17:15 - 18:15	1300	+	1004	=	2304	0	161	Yes
14:15 - 15:15	1275	+	976	=	2251	0	151	Yes
13:15 - 14:15	1119	+	988	=	2107	0	160	Yes
12:15 - 13:15	1040	+	1040	=	2080	0	166	Yes
11:15 - 12:15	1028	+	948	=	1976	0	131	Yes
07:15 - 08:15	760	+	1022	=	1782	0	162	Yes
18:15 - 19:15	957	+	761	=	1718	0	136	Yes
10:15 - 11:15	814	+	883	=	1697	0	127	Yes
09:15 - 10:15	814	+	835	=	1649	0	125	Yes
08:15 - 09:15	735	+	793	=	1528	0	152	Yes



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 09/15/2022

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

60 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				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
	CSAH 17					I-35W North Ramp		
16:15 - 17:15	1731	+	1125	=	2856	0	198	Yes
16:30 - 17:30	1662	+	1157	=	2819	0	201	Yes
16:00 - 17:00	1666	+	1145	=	2811	0	189	Yes
15:45 - 16:45	1609	+	1117	=	2726	0	205	Yes
15:30 - 16:30	1586	+	1131	=	2717	0	198	Yes
15:15 - 16:15	1509	+	1167	=	2676	0	198	Yes
16:45 - 17:45	1604	+	1066	=	2670	0	191	Yes
15:00 - 16:00	1451	+	1133	=	2584	0	178	Yes
17:00 - 18:00	1493	+	1031	=	2524	0	179	Yes
14:45 - 15:45	1414	+	1108	=	2522	0	162	Yes
14:30 - 15:30	1337	+	1023	=	2360	0	152	Yes
17:15 - 18:15	1300		1004		2304	0	161	Yes

