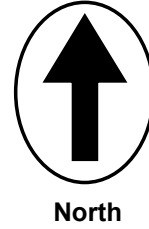


Date : 06/06/23

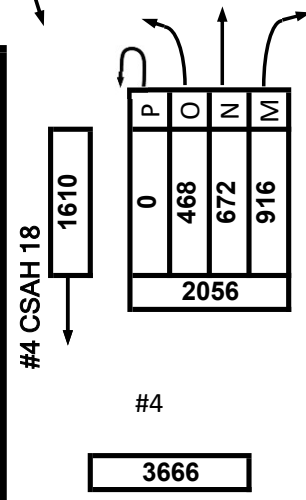
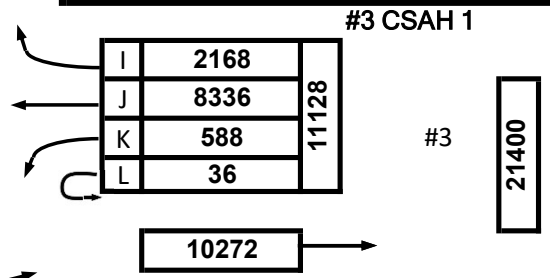
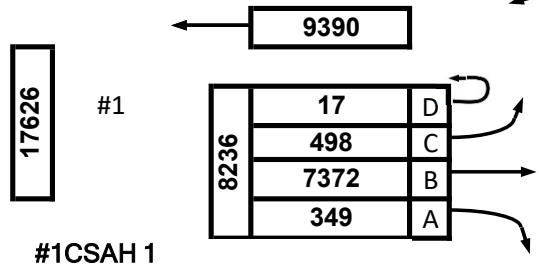
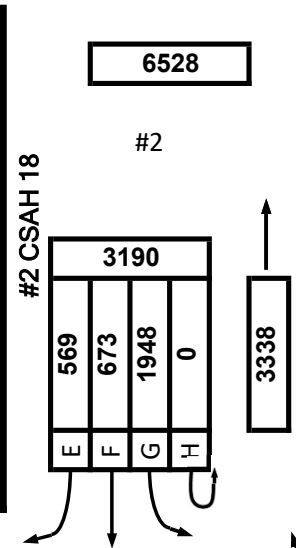
Count Number : TMC 2367

Location : CSAH 1
@ CSAH 18

Collection Period : 24 HR



North



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

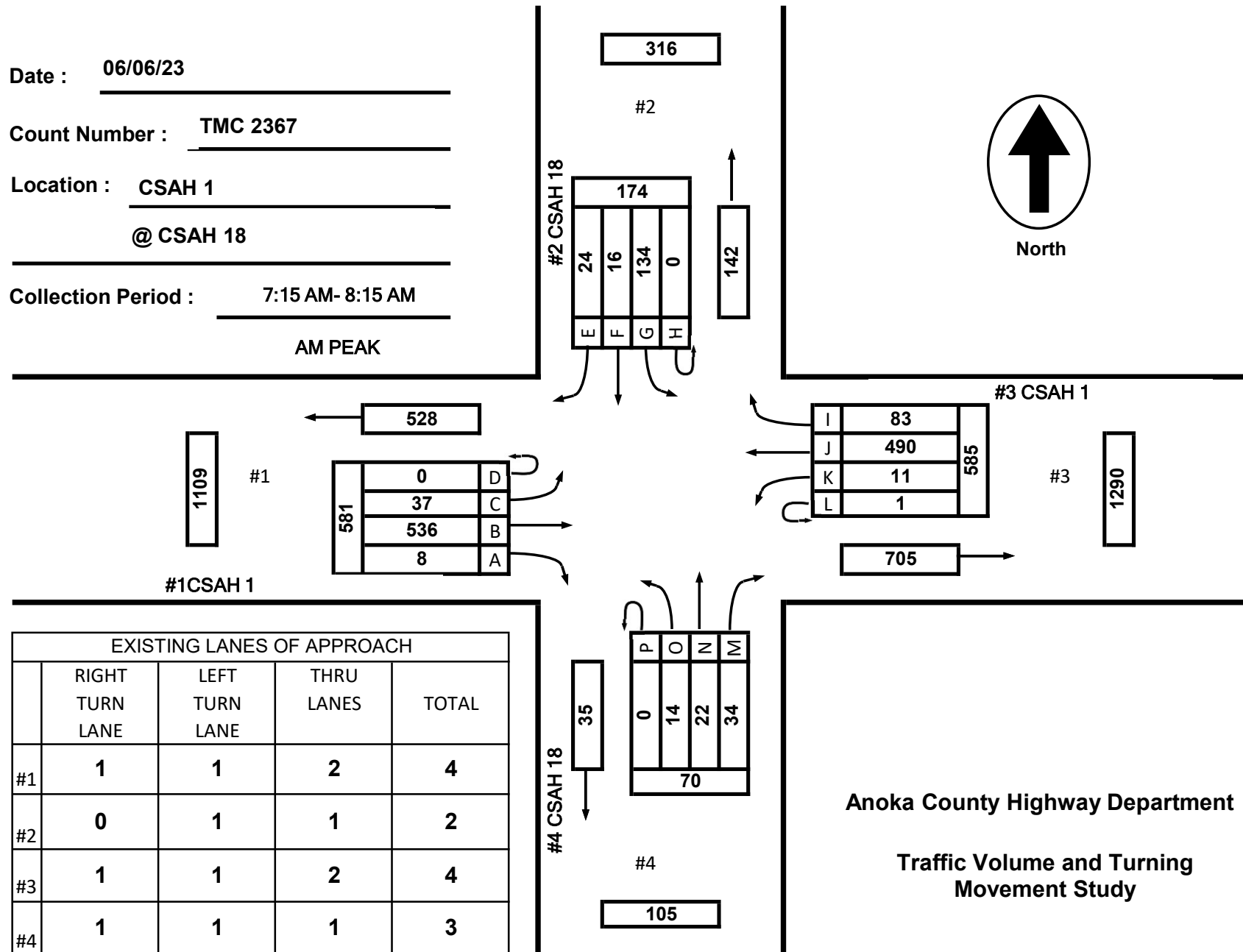
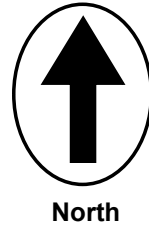
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 06/06/23

Count Number : TMC 2367

Location : CSAH 1
@ CSAH 18

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



1109

#1

#1CSAH 1

528

581	0	D
	37	C
	536	B
	8	A

316

#2

#2 CSAH 18

174			
24	16	134	0
E	F	G	H

142

#3 CSAH 1

I	83	585
J	490	
K	11	
L	1	

#3

1290

705

#4 CSAH 18

35

P	O	N	M
0	14	22	34
70			

#4

105

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

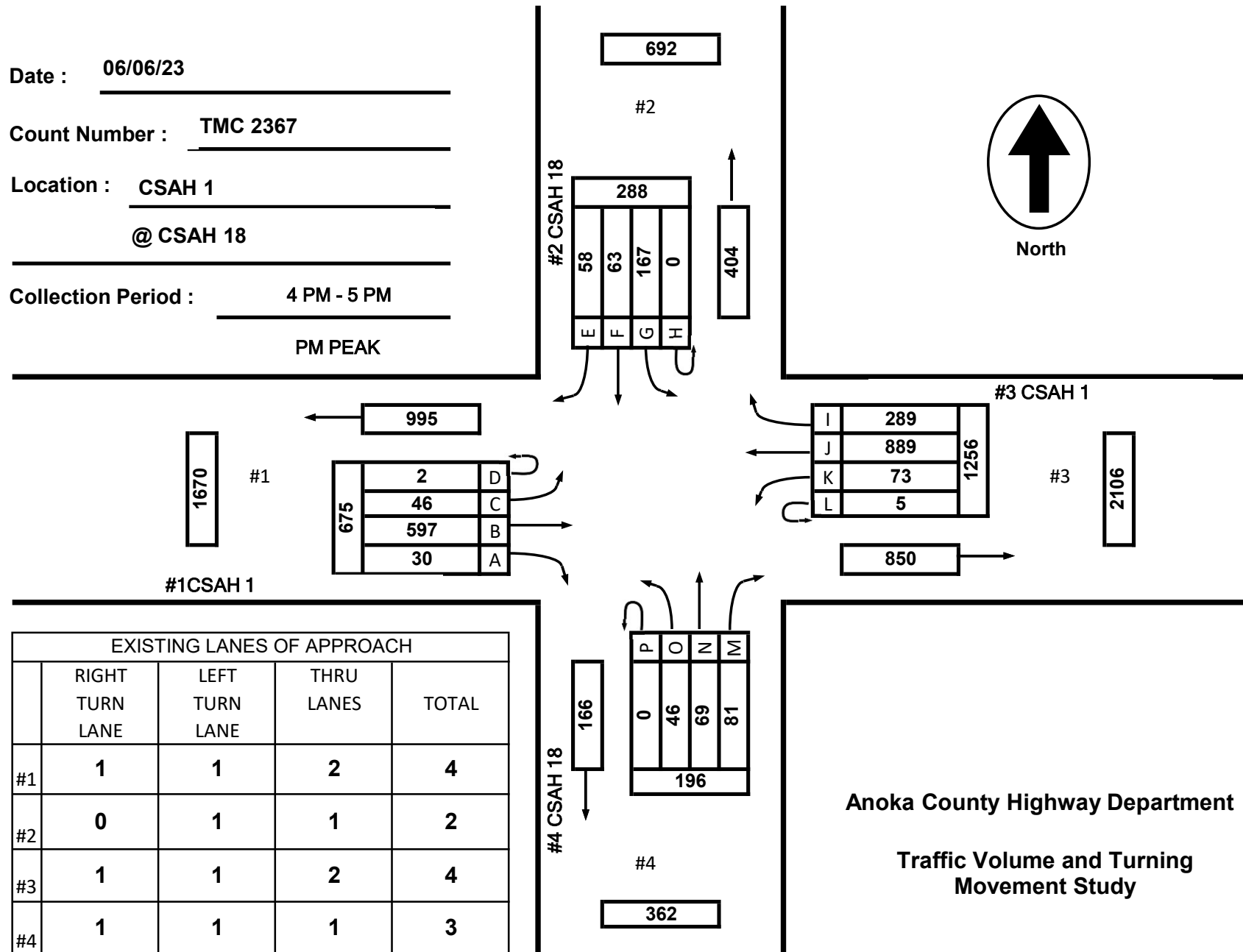
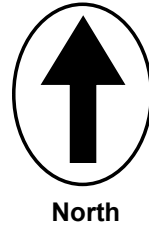
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 06/06/23

Count Number : TMC 2367

Location : CSAH 1
@ CSAH 18

Collection Period : 4 PM - 5 PM
PM PEAK



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

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

TMC 2367 - CSAH 1 @ CSAH 18

0 0

Tuesday, June 6, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						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	0	2	0	2	0	1	14	3	0	18	0	0	1	0	0	1	0	0	12	1	0	13	0	0	7	0	0	7	34
12:15 AM	0	2	0	1	0	3	0	1	14	2	0	17	0	0	1	2	0	3	0	0	7	0	0	7	0	0	12	0	0	12	25
12:30 AM	0	0	1	0	0	1	0	1	10	1	0	12	0	0	0	0	0	0	0	0	7	0	0	7	0	0	7	0	0	7	19
12:45 AM	0	0	2	0	0	2	0	0	7	2	0	9	0	0	0	1	0	1	0	0	7	0	0	7	0	0	7	0	0	7	19
Hourly Total	0	2	3	3	0	8	0	3	45	8	0	56	0	0	2	3	0	5	0	0	38	1	0	39	0	0	38	1	0	39	108
1:00 AM	0	1	0	0	0	1	0	1	8	2	0	11	0	0	0	0	0	0	0	0	6	1	0	7	0	0	6	1	0	7	19
1:15 AM	0	0	0	0	0	0	0	2	4	1	0	7	0	0	0	0	0	0	0	0	4	0	0	4	0	0	4	0	0	4	11
1:30 AM	0	1	0	0	0	1	0	1	3	3	0	7	0	0	2	0	0	2	0	0	7	0	0	7	0	0	7	0	0	7	17
1:45 AM	0	0	1	0	0	1	1	1	5	1	0	8	0	0	0	0	0	0	0	0	6	0	0	6	0	0	6	0	0	6	15
Hourly Total	0	2	1	0	0	3	1	5	20	7	0	33	0	0	2	0	0	2	0	0	23	1	0	24	0	0	23	1	0	24	62
2:00 AM	0	1	0	1	0	2	0	0	5	0	0	5	0	0	0	0	0	0	0	1	4	0	0	5	0	0	4	0	0	4	12
2:15 AM	0	0	0	0	0	0	0	1	7	0	0	8	0	0	0	1	0	1	0	0	5	0	0	5	0	0	5	0	0	5	14
2:30 AM	0	1	0	0	0	1	0	1	8	3	0	12	0	0	0	0	0	0	0	0	4	0	0	4	0	0	4	0	0	4	17
2:45 AM	0	1	0	0	0	1	0	0	7	1	0	8	0	0	0	0	0	0	0	0	5	0	0	5	0	0	5	0	0	5	14
Hourly Total	0	3	0	1	0	4	0	2	27	4	0	33	0	0	0	1	0	1	0	1	18	0	0	19	0	0	18	0	0	19	57
3:00 AM	0	2	1	0	0	3	0	0	5	1	0	6	0	0	0	0	0	0	0	0	10	1	0	11	0	0	10	1	0	11	20
3:15 AM	0	2	0	0	0	2	0	0	5	1	0	6	0	0	0	0	0	0	0	0	4	0	0	4	0	0	4	0	0	4	12
3:30 AM	0	2	1	0	0	3	0	0	6	0	0	6	0	0	0	1	0	1	0	0	7	0	0	7	0	0	7	0	0	7	17
3:45 AM	0	4	1	0	1	5	0	0	3	0	0	3	0	1	0	1	0	2	0	0	10	0	0	10	0	0	10	0	0	10	20
Hourly Total	0	10	3	0	1	13	0	0	19	2	0	21	0	1	0	2	0	3	0	0	31	1	0	32	0	0	31	1	0	32	69
4:00 AM	0	3	1	0	0	4	0	0	8	0	0	8	0	0	0	0	0	0	0	0	9	0	0	9	0	0	9	0	0	9	21
4:15 AM	0	4	1	0	0	5	0	0	9	1	0	10	0	0	1	2	0	3	0	0	14	0	0	14	0	0	14	0	0	14	32
4:30 AM	0	4	0	3	0	7	0	0	13	2	0	15	0	0	0	4	0	4	0	1	19	0	0	20	0	1	19	0	0	20	46
4:45 AM	0	3	1	5	0	9	0	0	13	3	0	16	0	0	1	1	1	2	0	0	24	0	0	24	0	0	24	0	0	24	51
Hourly Total	0	14	3	8	0	25	0	0	43	6	0	49	0	0	2	7	1	9	0	1	66	0	0	67	0	1	66	0	0	67	150
5:00 AM	0	8	0	2	0	10	0	3	10	5	0	18	0	3	0	4	0	7	0	1	30	0	0	31	0	1	30	0	0	31	66
5:15 AM	0	15	0	3	0	18	0	1	18	4	0	23	0	0	1	6	0	7	0	2	34	0	0	36	0	2	34	0	0	36	84
5:30 AM	0	12	0	4	0	16	0	1	45	5	0	51	0	3	3	4	0	10	0	0	62	0	0	62	0	0	62	0	0	62	139
5:45 AM	0	14	2	1	0	17	0	0	38	8	0	46	0	0	1	6	0	7	0	2	47	0	0	49	0	2	47	0	0	49	119
Hourly Total	0	49	2	10	0	61	0	5	111	22	0	138	0	6	5	20	0	31	0	5	173	0	0	178	0	5	173	0	0	178	408
6:00 AM	0	10	1	5	0	16	0	1	37	5	1	43	0	1	7	9	0	17	0	3	69	1	0	73	0	3	69	1	0	73	149
6:15 AM	0	17	3	3	0	23	0	0	64	5	0	69	0	0	3	6	1	9	0	1	90	1	0	92	0	1	90	1	0	92	193
6:30 AM	0	27	2	7	0	36	0	2	97	8	1	107	0	5	1	12	1	18	0	4	116	0	0	120	0	4	116	0	0	120	281
6:45 AM	0	26	5	6	0	37	1	4	107	11	0	123	0	4	7	17	0	28	0	2	89	0	0	91	0	2	89	0	0	91	279
Hourly Total	0	80	11	21	0	112	1	7	305	29	2	342	0	10	18	44	2	72	0	10	364	2	0	376	0	10	364	2	0	376	902
7:00 AM	0	28	3	4	0	35	0	5	75	16	0	96	0	1	4	18	0	23	1	7	126	1	0	135	1	7	126	1	0	135	289
7:15 AM	0	33	4	5	0	42	0	2	107	14	0	123	0	3	7	10	1	20	0	11	158	4	0	173	0	11	158	4	0	173	358
7:30 AM	0	48	3	5	0	56	0	4	129	18	0	151	0	5	6	8	0	19	0	11	154	2	0	167	0	11	154	2	0	167	393
7:45 AM	0	25	7	4	0	36	1	0	144	21	0	166	0	2	8	5	1	15	0	7	119	1	1	127	0	7	119	1	1	127	344
Hourly Total	0	134	17	18	0	169	1	11	455	69	0	536	0	11	25	41	2	77	1	36	557	8	1	602	1	36	557	8	1	602	1384

TMC 2367 - CSAH 1 @ CSAH 18

0 0

Tuesday, June 6, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						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	28	2	10	0	40	0	5	110	30	1	145	0	4	1	11	0	16	0	8	105	1	0	114	0	8	8	0	0	114	315
8:15 AM	0	24	1	6	0	31	0	7	90	15	1	112	0	3	10	14	0	27	0	6	115	8	0	129	0	6	115	8	0	129	299
8:30 AM	0	28	4	8	0	40	0	6	124	28	0	158	0	0	10	10	0	20	0	4	118	3	0	125	0	4	118	3	0	125	343
8:45 AM	0	26	16	11	0	53	0	8	96	23	0	127	0	4	10	13	1	27	0	9	95	12	1	116	0	9	95	12	1	116	323
Hourly Total	0	106	23	35	0	164	0	26	420	96	2	542	0	11	31	48	1	90	0	27	433	24	1	484	0	27	433	24	1	484	1280
9:00 AM	0	31	7	13	0	51	0	4	98	15	0	117	0	8	14	24	0	46	0	8	102	11	0	121	0	8	102	11	0	121	335
9:15 AM	0	36	5	13	1	54	0	3	115	28	0	146	0	10	13	15	4	38	0	4	85	2	2	91	0	4	85	2	2	91	329
9:30 AM	0	17	14	7	0	38	0	5	124	17	1	146	0	5	8	13	2	26	0	9	90	5	0	104	0	9	90	5	0	104	314
9:45 AM	0	20	3	6	2	29	1	7	132	21	0	161	0	4	12	13	0	29	0	3	102	8	0	113	0	3	102	8	0	113	332
Hourly Total	0	104	29	39	3	172	1	19	469	81	1	570	0	27	47	65	6	139	0	24	379	26	2	429	0	24	379	26	2	429	1310
10:00 AM	0	25	6	8	0	39	0	5	106	26	1	137	0	7	9	15	1	31	1	8	101	10	0	120	1	8	101	10	0	120	327
10:15 AM	0	13	8	7	1	28	0	7	109	38	0	154	0	11	7	6	0	24	0	7	90	2	0	99	0	7	90	2	0	99	305
10:30 AM	0	37	8	11	0	56	0	3	93	31	0	127	0	7	8	15	0	30	1	7	89	8	1	105	1	7	89	8	1	105	318
10:45 AM	0	29	8	7	0	44	0	6	113	32	0	151	0	8	20	15	0	43	1	7	88	6	0	102	1	7	88	6	0	102	340
Hourly Total	0	104	30	33	1	167	0	21	421	127	1	569	0	33	44	51	1	128	3	29	368	26	1	426	3	29	368	26	1	426	1290
11:00 AM	0	46	15	10	1	71	0	10	94	21	0	125	0	10	13	8	0	31	0	12	86	3	0	101	0	12	86	3	0	101	328
11:15 AM	0	26	18	11	0	55	2	13	105	44	0	164	0	5	9	11	0	25	1	11	84	5	1	101	1	11	84	5	1	101	345
11:30 AM	0	28	11	4	1	43	0	4	116	38	1	158	0	6	11	19	6	36	0	7	120	7	2	134	0	7	120	7	2	134	371
11:45 AM	0	15	6	12	1	33	0	12	117	31	0	160	0	9	11	9	0	29	0	10	120	3	1	133	0	10	120	3	1	133	355
Hourly Total	0	115	50	37	3	202	2	39	432	134	1	607	0	30	44	47	6	121	1	40	410	18	4	469	1	40	410	18	4	469	1399
12:00 PM	0	41	11	10	0	62	1	5	108	28	0	142	0	10	15	13	0	38	0	16	108	10	0	134	0	16	108	10	0	134	376
12:15 PM	0	23	3	11	0	37	1	7	110	25	0	143	0	15	5	11	2	31	0	8	116	5	0	129	0	8	116	5	0	129	340
12:30 PM	0	20	8	10	0	38	0	8	122	31	1	161	0	8	6	15	0	29	1	4	116	4	1	125	1	4	116	4	1	125	353
12:45 PM	0	44	20	14	0	78	3	7	133	27	0	170	0	11	5	20	0	36	0	7	98	7	0	112	0	7	98	7	0	112	396
Hourly Total	0	128	42	45	0	215	5	27	473	111	1	616	0	44	31	59	2	134	1	35	438	26	1	500	1	35	438	26	1	500	1465
1:00 PM	0	27	12	9	0	48	1	9	101	27	0	138	0	10	8	12	0	30	0	9	98	2	0	109	0	9	98	2	0	109	325
1:15 PM	0	27	9	8	0	44	0	7	119	29	0	155	0	8	9	10	0	27	1	8	118	8	1	135	1	8	118	8	1	135	361
1:30 PM	0	29	13	10	0	52	0	4	136	30	1	170	0	14	7	13	0	34	0	9	112	6	0	127	0	9	112	6	0	127	383
1:45 PM	0	27	14	12	1	53	1	13	128	35	1	177	0	9	13	11	1	33	0	15	115	5	0	135	0	15	115	5	0	135	398
Hourly Total	0	110	48	39	1	197	2	33	484	121	2	640	0	41	37	46	1	124	1	41	443	21	1	506	1	41	443	21	1	506	1467
2:00 PM	0	36	12	9	0	57	0	7	142	39	0	188	0	4	22	13	2	39	0	6	128	4	3	138	0	6	128	4	3	138	422
2:15 PM	0	27	6	8	0	41	0	9	180	37	1	226	0	6	6	14	1	26	0	7	135	3	1	145	0	7	135	3	1	145	438
2:30 PM	0	36	19	8	0	63	0	14	169	37	0	220	0	6	9	9	0	24	0	5	142	6	0	153	0	5	142	6	0	153	460
2:45 PM	0	41	9	15	0	65	0	11	163	43	0	217	0	7	12	12	0	31	1	7	126	10	0	144	1	7	126	10	0	144	457
Hourly Total	0	140	46	40	0	226	0	41	654	156	1	851	0	23	49	48	3	120	1	25	531	23	4	580	1	25	531	23	4	580	1777
3:00 PM	0	48	9	21	0	78	1	12	170	48	0	231	0	6	14	14	0	34	0	13	139	5	0	157	0	13	139	5	0	157	500
3:15 PM	0	37	21	12	2	70	0	12	181	57	3	250	0	12	10	11	2	33	0	10	157	12	0	179	0	10	157	12	0	179	532
3:30 PM	0	29	20	7	0	56	0	15	155	46	0	216	0	9	16	18	3	43	0	19	179	9	2	207	0	19	179	9	2	207	522
3:45 PM	0	25	14	10	0	49	1	21	225	64	0	311	0	15	20	25	3	60	0	15	134	11	0	160	0	15	134	11	0	160	580
Hourly Total	0	139	64	50	2	253	2	60	731	215	3	1008	0	42	60	68	8	170	0	57	609	37	2	703	0	57	609	37	2	703	2134

TMC 2367 - CSAH 1 @ CSAH 18

0 0

Tuesday, June 6, 2023

Time	Southbound 0						Westbound 0						Northbound 0						Eastbound 0						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	44	21	17	0	82	2	25	214	82	0	323	0	12	14	23	1	49	1	13	146	8	0	168	622
4:15 PM	0	38	8	12	0	58	0	13	216	59	0	288	0	13	17	17	0	47	1	11	153	10	0	175	568
4:30 PM	0	42	14	13	0	69	1	23	222	66	0	312	0	12	15	23	0	50	0	15	171	7	0	193	624
4:45 PM	0	43	20	16	0	79	2	12	237	82	0	333	0	9	23	18	1	50	0	7	127	5	1	139	601
Hourly Total	0	167	63	58	0	288	5	73	889	289	0	1256	0	46	69	81	2	196	2	46	597	30	1	675	2415
5:00 PM	0	43	13	11	0	67	2	20	222	63	0	307	0	11	14	16	0	41	0	11	169	11	0	191	606
5:15 PM	0	47	16	8	0	71	4	21	229	70	0	324	0	8	18	21	0	47	0	6	117	4	0	127	569
5:30 PM	0	41	18	13	0	72	2	11	193	62	0	268	0	7	12	11	0	30	2	14	143	9	0	168	538
5:45 PM	0	28	14	9	0	51	0	20	193	44	0	257	0	9	11	19	0	39	0	5	119	12	0	136	483
Hourly Total	0	159	61	41	0	261	8	72	837	239	0	1156	0	35	55	67	0	157	2	36	548	36	0	622	2196
6:00 PM	0	38	18	5	0	61	0	17	140	49	0	206	0	18	13	21	4	52	0	15	110	9	0	134	453
6:15 PM	0	30	12	6	0	48	0	12	120	39	0	171	0	11	15	16	0	42	0	7	87	8	0	102	363
6:30 PM	0	29	11	11	1	51	0	16	97	24	0	137	0	3	12	16	0	31	0	9	83	3	0	95	314
6:45 PM	0	21	9	9	0	39	1	11	102	34	0	148	0	3	10	18	1	31	0	5	88	4	0	97	315
Hourly Total	0	118	50	31	1	199	1	56	459	146	0	662	0	35	50	71	5	156	0	36	368	24	0	428	1445
7:00 PM	0	25	12	8	0	45	2	7	104	34	0	147	0	7	9	15	2	31	0	4	94	8	0	106	329
7:15 PM	0	33	14	5	0	52	0	10	83	23	2	116	0	7	8	7	5	22	1	3	67	2	1	73	263
7:30 PM	0	32	7	4	0	43	1	12	76	22	3	111	0	10	6	23	1	39	0	5	96	5	0	106	299
7:45 PM	0	25	10	5	0	40	2	7	88	29	1	126	0	7	17	17	3	41	0	3	64	2	1	69	276
Hourly Total	0	115	43	22	0	180	5	36	351	108	6	500	0	31	40	62	11	133	1	15	321	17	2	354	1167
8:00 PM	0	17	9	2	1	28	1	8	81	27	1	117	0	5	5	9	2	19	0	9	87	6	4	102	266
8:15 PM	0	19	11	3	0	33	0	7	81	23	2	111	0	6	6	8	2	20	0	4	78	4	0	86	250
8:30 PM	0	17	9	3	0	29	1	4	65	15	1	85	0	5	7	10	2	22	0	3	36	4	1	43	179
8:45 PM	0	14	9	5	0	28	0	7	54	13	0	74	0	8	13	7	2	28	0	1	68	3	0	72	202
Hourly Total	0	67	38	13	1	118	2	26	281	78	4	387	0	24	31	34	8	89	0	17	269	17	5	303	897
9:00 PM	0	16	11	3	0	30	0	5	67	22	1	94	0	8	8	11	5	27	0	7	53	2	1	62	213
9:15 PM	0	7	9	4	0	20	0	3	47	21	2	71	0	3	5	15	1	23	1	5	47	2	0	55	169
9:30 PM	0	10	8	3	0	21	0	1	53	16	0	70	0	2	3	9	0	14	0	1	31	2	0	34	139
9:45 PM	0	7	8	3	0	18	0	5	39	4	1	48	0	1	3	4	2	8	0	1	39	1	0	41	115
Hourly Total	0	40	36	13	0	89	0	14	206	63	4	283	0	14	19	39	8	72	1	14	170	7	1	192	636
10:00 PM	0	13	1	1	0	15	0	2	49	14	0	65	0	1	2	3	0	6	0	1	26	4	0	31	117
10:15 PM	0	6	0	1	0	7	0	3	42	11	0	56	0	1	1	4	0	6	0	1	35	0	0	36	105
10:30 PM	0	5	0	1	0	6	0	0	24	4	0	28	0	1	2	2	0	5	1	0	27	0	0	28	67
10:45 PM	0	2	2	2	0	6	0	1	30	12	0	43	0	0	3	1	0	4	0	1	28	0	0	29	82
Hourly Total	0	26	3	5	0	34	0	6	145	41	0	192	0	3	8	10	0	21	1	3	116	4	0	124	371
11:00 PM	0	8	1	1	0	10	0	3	26	4	0	33	0	1	2	1	0	4	1	0	32	0	0	33	80
11:15 PM	0	5	4	2	0	11	0	2	17	7	0	26	0	0	1	0	0	1	0	0	20	0	0	20	58
11:30 PM	0	2	0	0	0	2	0	1	9	3	0	13	0	0	0	0	0	0	0	0	25	0	0	25	40
11:45 PM	0	1	2	4	0	7	0	0	7	2	0	9	0	0	0	1	0	1	1	0	25	0	0	26	43
Hourly Total	0	16	7	7	0	30	0	6	59	16	0	81	0	1	3	2	0	6	2	0	102	0	0	104	221
DAILY TOTAL	0	1948	673	569	13	3190	36	588	8336	2168	28	11128	0	468	672	916	67	2056	17	498	7372	349	26	8236	24610
Cars	0	1922	659	555	9	3136	36	577	8165	2127	25	10905	0	458	661	905	29	2024	17	487	7203	340	14	8047	24112
Heavy Vehicles	0	26	14	14	4	54	0	11	171	41	3	223	0	10	11	11	38	32	0	11	169	9	12	189	498
Heavy Vehicle %	0.00%	1.33%	2.08%	2.46%	30.77%	1.69%	0.00%	1.87%	2.05%	1.89%	10.71%	2.00%	0.00%	2.14%	1.64%	1.20%	56.72%	1.56%	0.00%	2.21%	2.29%	2.58%	46.15%	2.29%	2.02%

TMC 2367 - CSAH 1 @ CSAH 18

0 0

Tuesday, June 6, 2023

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	
7:15 AM	0	33	4	5	0	42	0	2	107	14	0	123	0	3	7	10	1	20	0	11	158	4	0	173	358
7:30 AM	0	48	3	5	0	56	0	4	129	18	0	151	0	5	6	8	0	19	0	11	154	2	0	167	393
7:45 AM	0	25	7	4	0	36	1	0	144	21	0	166	0	2	8	5	1	15	0	7	119	1	1	127	344
8:00 AM	0	28	2	10	0	40	0	5	110	30	1	145	0	4	1	11	0	16	0	8	105	1	0	114	315
Peak Hour Total	0	134	16	24	0	174	1	11	490	83	1	585	0	14	22	34	2	70	0	37	536	8	1	581	1410
PHF	0.000	0.698	0.571	0.600	0.000	0.777	0.250	0.550	0.851	0.692	0.250	0.881	0.000	0.700	0.688	0.773	0.500	0.875	0.000	0.841	0.848	0.500	0.250	0.840	0.897

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	44	21	17	0	82	2	25	214	82	0	323	0	12	14	23	1	49	1	13	146	8	0	168	622
4:15 PM	0	38	8	12	0	58	0	13	216	59	0	288	0	13	17	17	0	47	1	11	153	10	0	175	568
4:30 PM	0	42	14	13	0	69	1	23	222	66	0	312	0	12	15	23	0	50	0	15	171	7	0	193	624
4:45 PM	0	43	20	16	0	79	2	12	237	82	0	333	0	9	23	18	1	50	0	7	127	5	1	139	601
Peak Hour Total	0	167	63	58	0	288	5	73	889	289	0	1256	0	46	69	81	2	196	2	46	597	30	1	675	2415
PHF	0.000	0.949	0.750	0.853	0.000	0.878	0.625	0.730	0.938	0.881	0.000	0.943	0.000	0.885	0.750	0.880	0.500	0.980	0.500	0.767	0.873	0.750	0.250	0.874	0.968

Total Vehicles On Leg				6528	
Vehicles Entering Intersection		3190	Vehicles Exiting Intersection		3338
Southbound					
Cars	555	659	1922	0	9
Heavy	14	14	26	0	4
Total	569	673	1948	0	13



Total Vehicles on Leg 17626	Vehicles Entering Intersection	Eastbound	Cars	Heavy	Total
	Vehicles Exiting Intersection 9390		14	12	26
			17	0	17
			487	11	498
			7203	169	7372
340	9	349			



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection	Total Vehicles on Leg 21400
2127	41	2168		11128	
8165	171	8336			
577	11	588			
36	0	36		Vehicles Exiting Intersection 10272	
25	3	28			



Cars	29	0	458	661	905
Heavy	38	0	10	11	11
Total	67	0	468	672	916
Northbound					
Vehicles Entering Intersection			Vehicles Exiting Intersection		
2056			1610		
Total Vehicles On Leg			3666		



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		
06/6/2023	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	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		
	0:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	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		
	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		
	1:30	0	0	0	0	0	0	0	0	1	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		
	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		
	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		
	2:30	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	
	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		
	3:00	0	0	0	0	0	0	0	0	0	1	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	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	0	0	0	0		
	3:45	0	0	0	0	0	1	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	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	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	0	0	0	0		
	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
	5:00	0	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
	5:15	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	5:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45	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	
	6:00	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	
	6:15	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	1	0	1	0	0	0	8	0	0	0	
	6:30	0	0	1	1	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	
	6:45	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	
	7:00	0	1	1	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	
	7:15	0	1	0	0	0	0	0	0	3	2	0	0	0	0	0	1	1	0	0	0	2	2	1	0	0	0
	7:30	0	2	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
	7:45	0	1	0	1	0	0	0	0	6	3	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0
	8:00	0	0	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	8:15	0	1	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0
	8:30	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0
	8:45	0	0	0	1	0	0	0	0	1	3	0	0	0	0	0	1	0	0	0	0	0	5	0	0	0	0
	9:00	0	1	1	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
	9:15	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
	9:30	0	0	2	0	0	0	0	0	7	1	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0
	9:45	0	0	0	0	1	0	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
	10:00	0	1	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
	10:15	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:30	0	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
	10:45	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
	11:00	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	11:15	0	0	1	0	0	0	0	0	1	4	0	0	0	0	0	1	0	0	0	0	0	5	0	0	0	0
	11:30	0	1	2	0	0	0	0	0	7	1	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0
	11:45	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	1	0	0	0	0	0	7	0	0	0	0

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2367

Study Date : 06/26/2023

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 1 (Coon Rapids Blvd)

Number of Lanes : 2+

Total Approach Volume: 8,236

Westbound: CSAH 1 (Coon Rapids Blvd)

Number of Lanes :2+

Total Approach Volume: 11,128

Minor Street Approaches

Northbound: CSAH 18 (Crooked Lake Blvd)

Number of Lanes :1

Total Approach Volume: 2,056

Southbound: CSAH 18 (Crooked Lake Blvd)

Number of Lanes :1

Total Approach Volume: 3,190

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 15 hours, 8 are needed

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

Required 1A volumes reached for 16 hours, 8 are needed

Required 1B volumes reached for 16 hours, 8 are needed

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

Number of hours (15) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (58) 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 2367

Study Date : 06/26/2023

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 Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 1 (Coon Rapids Blvd)					CSAH 18 (Crooked Lake Blvd)		
16:00 - 17:00	675	+	1256	=	1931	196	288	Yes
17:00 - 18:00	622	+	1156	=	1778	157	261	Yes
15:00 - 16:00	703	+	1008	=	1711	170	253	Yes
14:00 - 15:00	580	+	851	=	1431	120	226	Yes
13:00 - 14:00	506	+	640	=	1146	124	197	Yes
07:00 - 08:00	602	+	536	=	1138	77	169	Yes
12:00 - 13:00	500	+	616	=	1116	134	215	Yes
18:00 - 19:00	428	+	662	=	1090	156	199	Yes
11:00 - 12:00	469	+	607	=	1076	121	202	Yes
08:00 - 09:00	484	+	542	=	1026	90	164	Yes
09:00 - 10:00	429	+	570	=	999	139	172	Yes
10:00 - 11:00	426	+	569	=	995	128	167	Yes
19:00 - 20:00	354	+	500	=	854	133	180	Yes
06:00 - 07:00	376	+	342	=	718	72	112	Yes
20:00 - 21:00	303	+	387	=	690	89	118	Yes
05:45 - 06:45	334	+	265	=	599	51	92	No
05:30 - 06:30	276	+	209	=	485	43	72	No
21:00 - 22:00	192	+	283	=	475	72	89	No
21:15 - 22:15	161	+	254	=	415	51	74	No
05:15 - 06:15	220	+	163	=	383	41	67	No
21:30 - 22:30	142	+	239	=	381	34	61	No
21:45 - 22:45	136	+	197	=	333	25	46	No
05:00 - 06:00	178	+	138	=	316	31	61	No
22:00 - 23:00	124	+	192	=	316	21	34	No
22:15 - 23:15	126		160		286	19	29	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2367

Study Date : 06/26/2023

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

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 = **630**

Veh/Hr Minor = **53**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
	CSAH 1 (Coon Rapids Blvd)					CSAH 18 (Crooked Lake Blvd)		
16:00 - 17:00	675	+	1256	=	1931	196	288	Yes
17:00 - 18:00	622	+	1156	=	1778	157	261	Yes
15:00 - 16:00	703	+	1008	=	1711	170	253	Yes
14:00 - 15:00	580	+	851	=	1431	120	226	Yes
13:00 - 14:00	506	+	640	=	1146	124	197	Yes
07:00 - 08:00	602	+	536	=	1138	77	169	Yes
12:00 - 13:00	500	+	616	=	1116	134	215	Yes
18:00 - 19:00	428	+	662	=	1090	156	199	Yes
11:00 - 12:00	469	+	607	=	1076	121	202	Yes
08:00 - 09:00	484	+	542	=	1026	90	164	Yes
09:00 - 10:00	429	+	570	=	999	139	172	Yes
10:00 - 11:00	426	+	569	=	995	128	167	Yes
19:00 - 20:00	354	+	500	=	854	133	180	Yes
06:00 - 07:00	376	+	342	=	718	72	112	Yes
20:00 - 21:00	303	+	387	=	690	89	118	Yes
05:45 - 06:45	334	+	265	=	599	51	92	No
05:30 - 06:30	276	+	209	=	485	43	72	No
21:00 - 22:00	192	+	283	=	475	72	89	No
21:15 - 22:15	161	+	254	=	415	51	74	No
05:15 - 06:15	220	+	163	=	383	41	67	No
21:30 - 22:30	142	+	239	=	381	34	61	No
21:45 - 22:45	136	+	197	=	333	25	46	No
05:00 - 06:00	178	+	138	=	316	31	61	No
22:00 - 23:00	124	+	192	=	316	21	34	No
22:15 - 23:15	126		160		286	19	29	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2367

Study Date : 06/26/2023

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

16 hours meet 1A minimums.
16 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 1 (Coon Rapids Blvd)

Minor Road CSAH 18 (Crooked Lake Blvd)

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
15:45 - 16:45	696	+	1234	=	1930	206	258	Yes
16:45 - 17:45	625	+	1232	=	1857	168	289	Yes
14:45 - 15:45	687	+	914	=	1601	141	269	Yes
13:45 - 14:45	571	+	811	=	1382	122	214	Yes
17:45 - 18:45	467	+	771	=	1238	164	211	Yes
11:45 - 12:45	521	+	606	=	1127	127	170	Yes
12:45 - 13:45	483	+	633	=	1116	127	222	Yes
07:45 - 08:45	495	+	581	=	1076	78	147	Yes
06:45 - 07:45	566	+	493	=	1059	90	170	Yes
10:45 - 11:45	438	+	598	=	1036	135	213	Yes
09:45 - 10:45	437	+	579	=	1016	114	152	Yes
08:45 - 09:45	432	+	536	=	968	137	196	Yes

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
15:45 - 16:45	696	+	1234	=	1930	206	258	Yes
16:45 - 17:45	625	+	1232	=	1857	168	289	Yes
14:45 - 15:45	687	+	914	=	1601	141	269	Yes
13:45 - 14:45	571	+	811	=	1382	122	214	Yes
17:45 - 18:45	467	+	771	=	1238	164	211	Yes
11:45 - 12:45	521	+	606	=	1127	127	170	Yes
12:45 - 13:45	483	+	633	=	1116	127	222	Yes
07:45 - 08:45	495	+	581	=	1076	78	147	Yes
06:45 - 07:45	566	+	493	=	1059	90	170	Yes
10:45 - 11:45	438	+	598	=	1036	135	213	Yes
09:45 - 10:45	437	+	579	=	1016	114	152	Yes
08:45 - 09:45	432	+	536	=	968	137	196	Yes

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2367

Study Date : 06/26/2023

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.

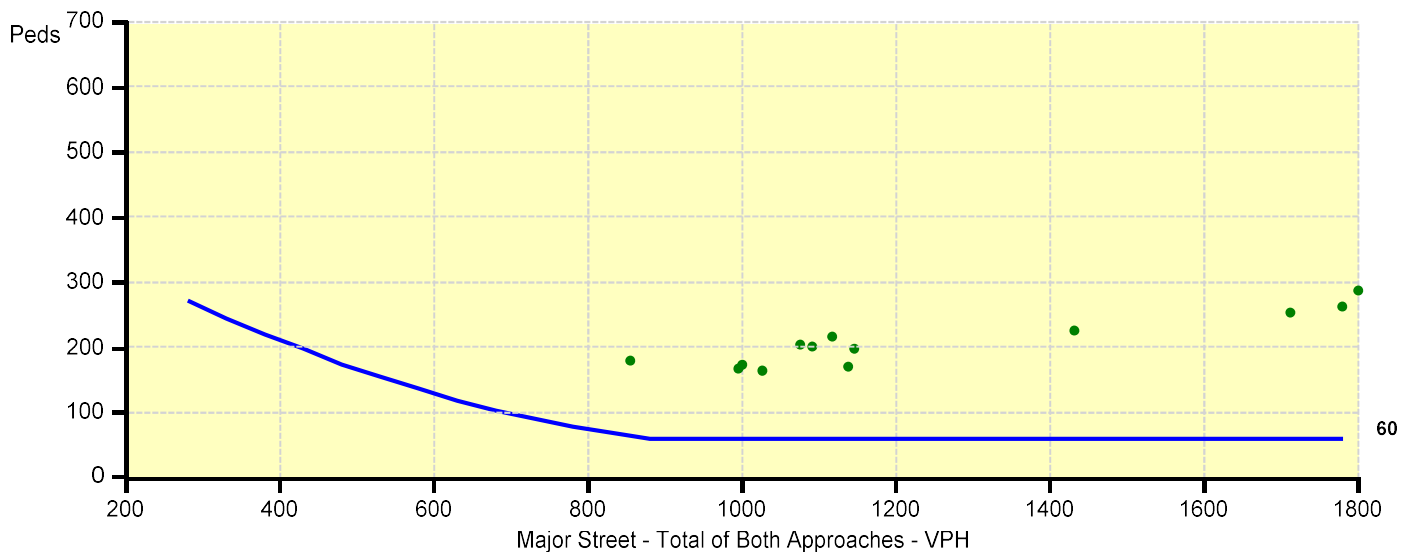
Summary

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**

Time	Major Road CSAH 1 (Coon Rapids Blvd)					Minor Road CSAH 18 (Crooked Lake Blvd)		Met?
	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	
16:00 - 17:00	675	+	1256	=	1931	196	288	Yes
17:00 - 18:00	622	+	1156	=	1778	157	261	Yes
15:00 - 16:00	703	+	1008	=	1711	170	253	Yes
14:00 - 15:00	580	+	851	=	1431	120	226	Yes
13:00 - 14:00	506	+	640	=	1146	124	197	Yes
07:00 - 08:00	602	+	536	=	1138	77	169	Yes
12:00 - 13:00	500	+	616	=	1116	134	215	Yes
18:00 - 19:00	428	+	662	=	1090	156	199	Yes
11:00 - 12:00	469	+	607	=	1076	121	202	Yes
08:00 - 09:00	484	+	542	=	1026	90	164	Yes
09:00 - 10:00	429	+	570	=	999	139	172	Yes
10:00 - 11:00	426	+	569	=	995	128	167	Yes



ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2367

Study Date : 06/26/2023

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

52 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 1 (Coon Rapids Blvd)				Total	Minor Road CSAH 18 (Crooked Lake Blvd)		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:15 - 17:15	698	+	1240	=	1938	188	273	Yes
16:00 - 17:00	675	+	1256	=	1931	196	288	Yes
15:45 - 16:45	696	+	1234	=	1930	206	258	Yes
16:30 - 17:30	650	+	1276	=	1926	188	286	Yes
16:45 - 17:45	625	+	1232	=	1857	168	289	Yes
15:30 - 16:30	710	+	1138	=	1848	199	245	Yes
15:15 - 16:15	714	+	1100	=	1814	185	257	Yes
17:00 - 18:00	622	+	1156	=	1778	157	261	Yes
15:00 - 16:00	703	+	1008	=	1711	170	253	Yes
17:15 - 18:15	565	+	1055	=	1620	168	255	Yes
14:45 - 15:45	687	+	914	=	1601	141	269	Yes
14:30 - 15:30	633	+	918	=	1551	122	276	Yes

