

Date : 04/18/23

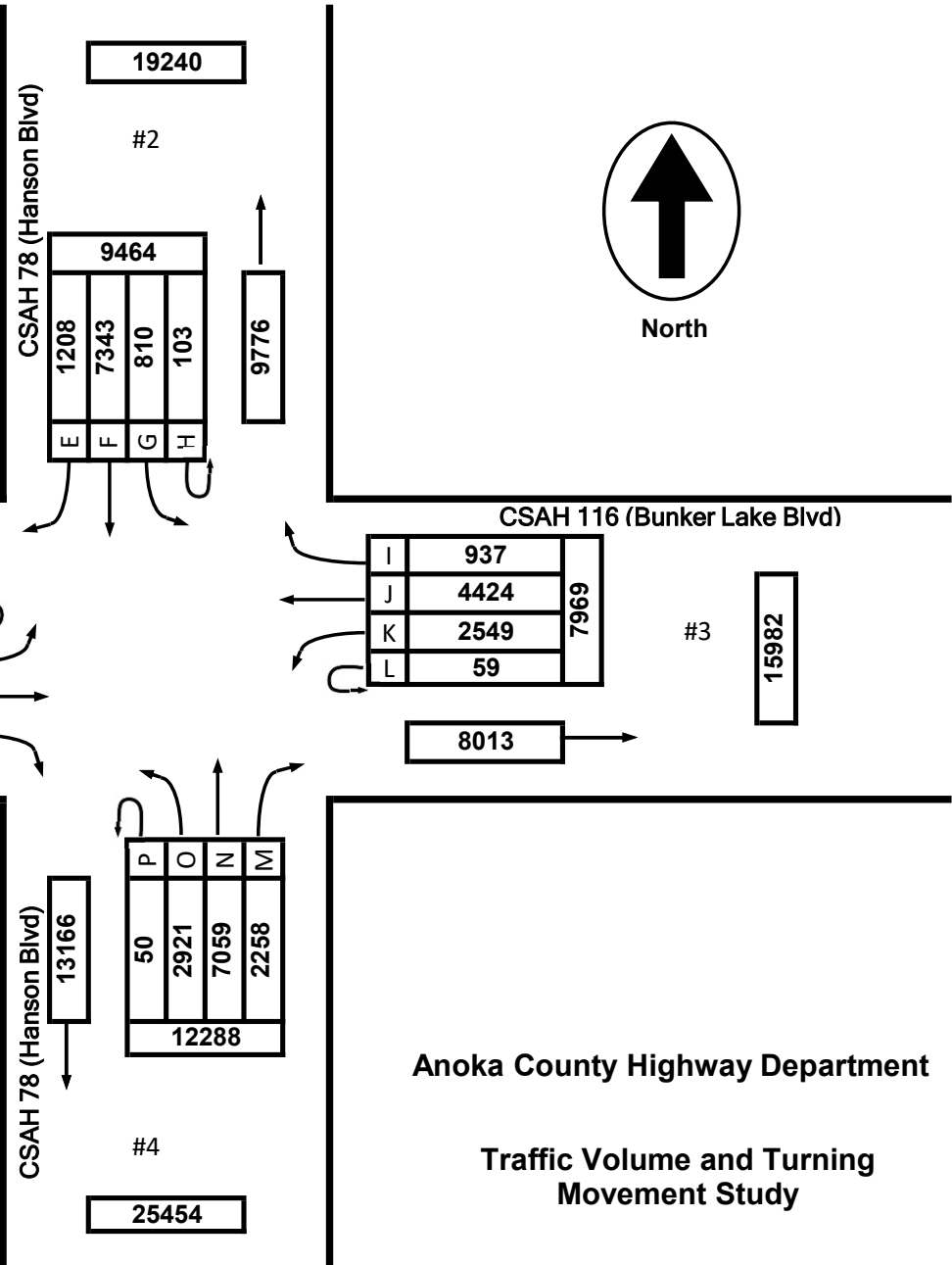
Count Number : TMC 2305

Location : CSAH 78 (Hanson Blvd)
@ CSAH 116 (Bunker Lake

Collection Period : 24 HR



North



CSAH 116 (Bunker Lake Blvd)

CSAH 116 (Bunker Lake Blvd)

CSAH 78 (Hanson Blvd)

EXISTING LANES OF APPROACH

	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	2	2	5
#2	1	2	2	5
#3	1	2	2	5
#4	1	2	2	5

Anoka County Highway Department

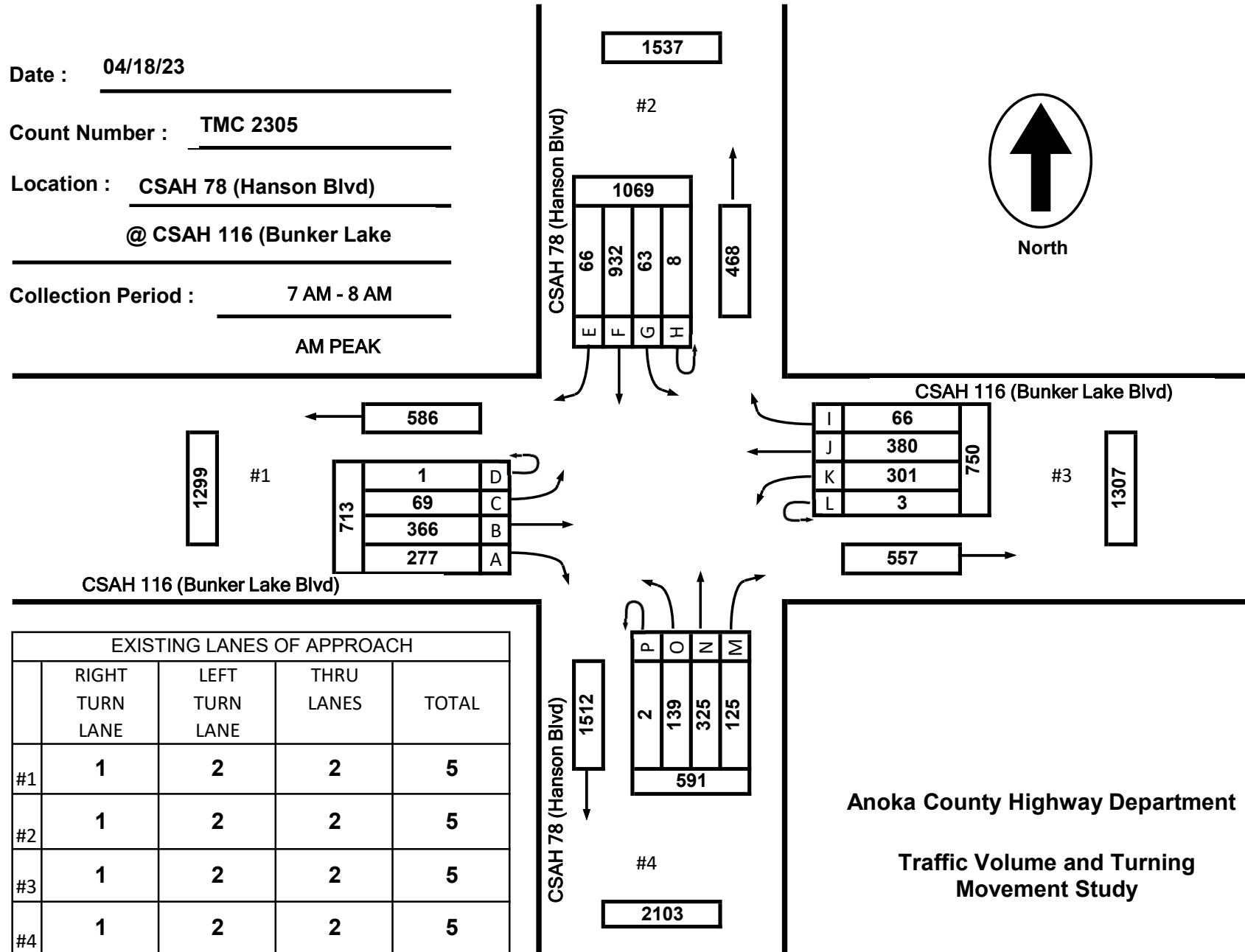
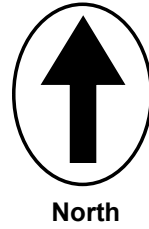
Traffic Volume and Turning Movement Study

Date : 04/18/23

Count Number : TMC 2305

Location : CSAH 78 (Hanson Blvd)
@ CSAH 116 (Bunker Lake

Collection Period : 7 AM - 8 AM
AM PEAK



EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	2	2	5
#2	1	2	2	5
#3	1	2	2	5
#4	1	2	2	5

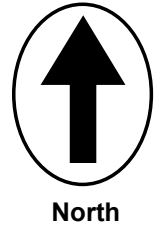
Anoka County Highway Department
 Traffic Volume and Turning Movement Study

Date : 04/18/23

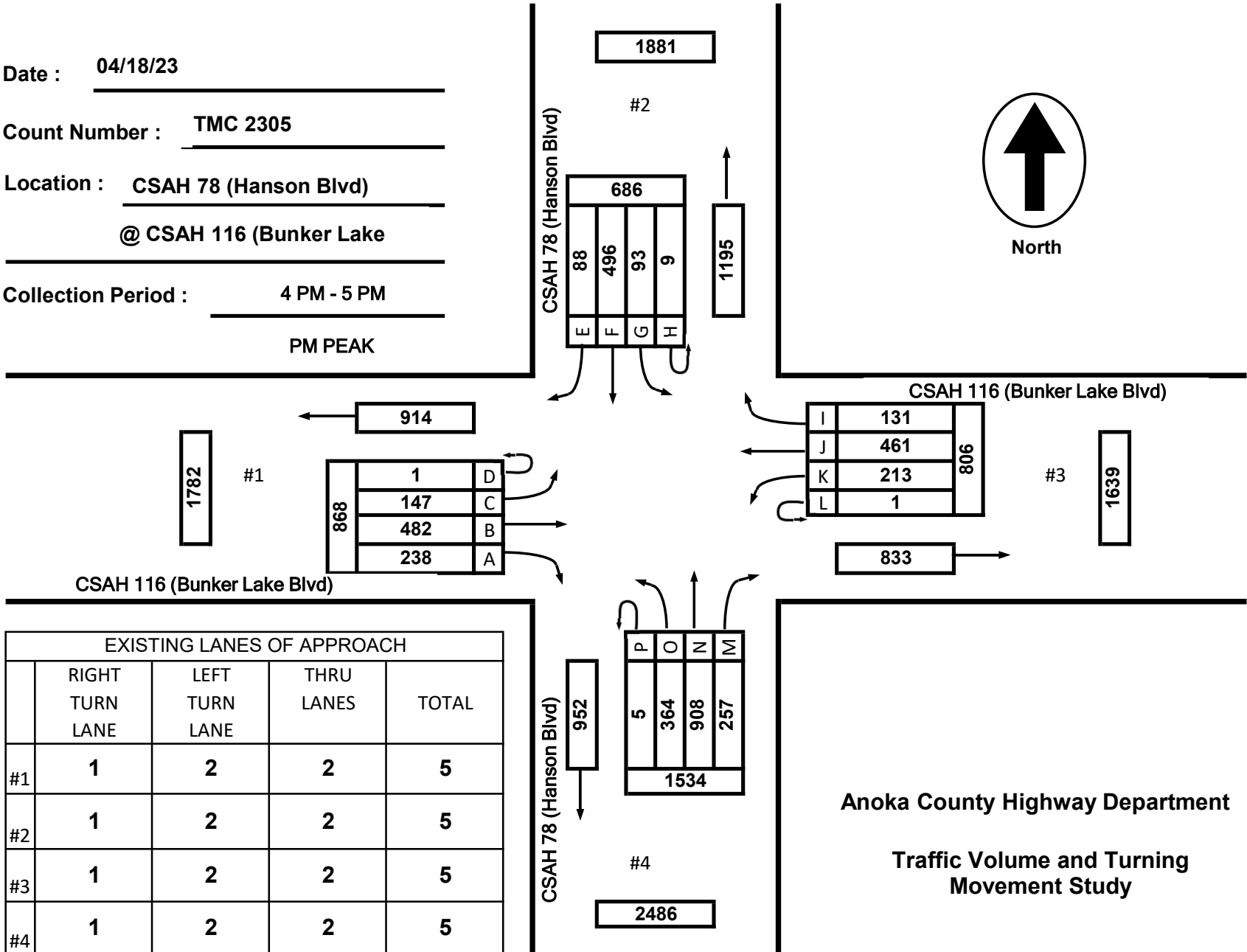
Count Number : TMC 2305

Location : CSAH 78 (Hanson Blvd)
@ CSAH 116 (Bunker Lake

Collection Period : 4 PM - 5 PM
PM PEAK



North



CSAH 116 (Bunker Lake Blvd)

CSAH 78 (Hanson Blvd)

CSAH 116 (Bunker Lake Blvd)

CSAH 78 (Hanson Blvd)

EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	2	2	5
#2	1	2	2	5
#3	1	2	2	5
#4	1	2	2	5

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

TMC 2305 - CSAH 78 @ CSAH 116

0 0

Tuesday, April 18, 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	6	1	0	7	0	1	3	1	0	5	0	6	13	2	0	21	0	2	1	1	0	4	0	37
12:15 AM	0	1	5	0	0	6	0	2	1	1	0	4	0	1	9	8	0	18	0	2	3	2	0	7	0	35
12:30 AM	1	0	3	0	0	4	0	1	0	1	0	2	0	1	7	3	0	11	0	1	1	1	0	3	0	20
12:45 AM	0	0	0	0	0	0	0	2	4	0	0	6	0	0	12	2	0	14	0	3	1	3	0	7	0	27
Hourly Total	1	1	14	1	0	17	0	6	8	3	0	17	0	8	41	15	0	64	0	8	6	7	0	21	0	119
1:00 AM	0	0	0	0	0	0	0	3	1	0	0	4	0	1	8	0	0	9	0	4	6	6	0	16	0	29
1:15 AM	0	0	2	0	0	2	0	3	1	0	0	4	0	1	6	0	0	7	0	0	4	2	0	6	0	19
1:30 AM	0	0	2	1	0	3	0	1	2	0	0	3	0	1	4	1	0	6	0	1	0	0	0	1	0	13
1:45 AM	0	1	3	0	0	4	0	1	2	0	0	3	0	2	3	0	0	5	0	1	2	0	0	3	0	15
Hourly Total	0	1	7	1	0	9	0	8	6	0	0	14	0	5	21	1	0	27	0	6	12	8	0	26	0	76
2:00 AM	0	0	2	0	0	2	0	2	1	0	0	3	0	2	2	2	0	6	0	1	2	3	0	6	0	17
2:15 AM	0	1	2	0	0	3	0	2	1	0	0	3	0	0	4	2	0	6	0	0	2	2	0	4	0	16
2:30 AM	0	0	4	0	0	4	0	4	2	0	0	6	0	2	0	1	0	3	0	1	1	0	0	2	0	15
2:45 AM	0	0	6	1	0	7	0	0	1	0	0	1	0	2	4	0	0	6	0	0	1	1	0	2	0	16
Hourly Total	0	1	14	1	0	16	0	8	5	0	0	13	0	6	10	5	0	21	0	2	6	6	0	14	0	64
3:00 AM	0	0	5	0	0	5	0	2	1	0	0	3	0	1	2	1	0	4	0	0	1	2	0	3	0	15
3:15 AM	1	1	11	2	0	15	0	1	2	1	0	4	0	3	4	1	0	8	0	0	1	3	0	4	0	31
3:30 AM	0	0	15	1	0	16	0	6	3	0	0	9	0	0	5	0	0	5	0	3	0	0	0	3	0	33
3:45 AM	0	0	17	2	0	19	0	3	5	0	0	8	0	2	4	2	0	8	0	0	5	5	0	10	0	45
Hourly Total	1	1	48	5	0	55	0	12	11	1	0	24	0	6	15	4	0	25	0	3	7	10	0	20	0	124
4:00 AM	1	2	19	2	0	24	1	5	3	0	0	9	0	2	5	0	0	7	0	2	2	3	0	7	0	47
4:15 AM	1	0	30	0	0	31	0	6	4	2	0	12	0	3	5	2	0	10	0	0	4	5	0	9	0	62
4:30 AM	0	1	42	7	0	50	0	6	9	2	0	17	0	5	7	1	0	13	0	1	8	10	0	19	0	99
4:45 AM	0	3	34	6	0	43	0	7	17	1	0	25	0	8	8	6	0	22	0	2	7	6	0	15	0	105
Hourly Total	2	6	125	15	0	148	1	24	33	5	0	63	0	18	25	9	0	52	0	5	21	24	0	50	0	313
5:00 AM	2	3	64	6	0	75	0	18	7	2	0	27	0	5	12	5	0	22	0	1	8	9	0	18	0	142
5:15 AM	1	2	102	3	0	108	0	18	9	1	0	28	0	6	8	5	0	19	1	2	8	9	0	20	0	175
5:30 AM	0	8	118	13	0	139	0	34	23	1	0	58	0	7	10	8	0	25	1	1	17	16	0	35	0	257
5:45 AM	0	7	118	9	0	134	0	36	23	4	0	63	0	10	22	8	0	40	0	4	29	20	0	53	0	290
Hourly Total	3	20	402	31	0	456	0	106	62	8	0	176	0	28	52	26	0	106	2	8	62	54	0	126	0	864
6:00 AM	1	2	122	14	0	139	1	35	38	1	0	75	1	6	22	7	0	36	0	10	34	34	0	78	0	328
6:15 AM	1	7	191	10	0	209	1	43	30	2	0	76	0	14	25	10	0	49	2	10	47	37	0	96	0	430
6:30 AM	1	12	209	14	0	236	0	51	48	6	0	105	0	21	53	19	0	93	0	12	52	68	0	132	0	566
6:45 AM	1	15	193	14	0	223	2	59	42	15	0	118	1	24	63	26	0	114	0	19	63	89	0	171	0	626
Hourly Total	4	36	715	52	0	807	4	188	158	24	0	374	2	65	163	62	0	292	2	51	196	228	0	477	0	1950
7:00 AM	1	14	246	16	0	277	3	77	66	15	0	161	0	31	66	20	0	117	0	5	69	62	0	136	0	691
7:15 AM	1	13	207	18	0	239	0	82	131	21	0	234	1	31	78	35	0	145	1	25	81	75	0	182	0	800
7:30 AM	2	22	247	19	0	290	0	79	100	14	0	193	1	40	84	37	0	162	0	20	109	69	0	198	0	843
7:45 AM	4	14	232	13	0	263	0	63	83	16	0	162	0	37	97	33	0	167	0	19	107	71	0	197	0	789
Hourly Total	8	63	932	66	0	1069	3	301	380	66	0	750	2	139	325	125	0	591	1	69	366	277	0	713	0	3123

TMC 2305 - CSAH 78 @ CSAH 116

0 0

Tuesday, April 18, 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	1	13	177	17	0	208	0	55	59	14	0	128	1	24	80	29	0	134	0	19	69	68	0	156	626
8:15 AM	1	17	159	21	0	198	0	53	56	15	0	124	0	27	55	24	0	106	2	11	67	50	0	130	558
8:30 AM	1	16	129	17	0	163	0	42	61	15	0	118	0	29	76	21	0	126	1	23	53	36	0	113	520
8:45 AM	4	5	96	18	0	123	3	46	71	13	0	133	2	27	54	23	0	106	3	16	78	36	0	133	495
Hourly Total	7	51	561	73	0	692	3	196	247	57	0	503	3	107	265	97	0	472	6	69	267	190	0	532	2199
9:00 AM	2	4	125	16	0	147	0	40	45	11	0	96	2	35	78	18	0	133	3	15	45	31	0	94	470
9:15 AM	0	8	177	35	0	220	0	37	55	17	0	109	0	27	54	17	0	98	2	23	58	42	0	125	552
9:30 AM	1	18	121	12	0	152	1	45	45	10	0	101	2	36	75	13	0	126	1	18	45	38	0	102	481
9:45 AM	0	10	91	17	0	118	0	33	59	13	0	105	0	22	59	13	0	94	0	16	64	49	0	129	446
Hourly Total	3	40	514	80	0	637	1	155	204	51	0	411	4	120	266	61	0	451	6	72	212	160	0	450	1949
10:00 AM	2	12	88	20	0	122	0	17	62	9	0	88	0	33	66	14	0	113	0	27	41	31	0	99	422
10:15 AM	3	5	83	13	0	104	2	33	66	16	0	117	3	38	53	15	0	109	1	24	42	18	0	85	415
10:30 AM	2	9	88	27	0	126	0	38	54	20	0	112	3	52	65	18	0	138	1	24	55	44	0	124	500
10:45 AM	0	7	83	14	0	104	2	41	52	13	0	108	0	35	78	20	0	133	0	18	57	47	0	122	467
Hourly Total	7	33	342	74	0	456	4	129	234	58	0	425	6	158	262	67	0	493	2	93	195	140	0	430	1804
11:00 AM	1	10	96	17	0	124	0	28	61	15	0	104	0	43	80	24	0	147	1	21	62	34	0	118	493
11:15 AM	2	13	93	27	0	135	0	33	67	11	0	111	1	44	59	28	0	132	1	27	70	34	0	132	510
11:30 AM	0	14	77	19	0	110	0	50	44	10	0	104	3	48	64	18	0	133	0	33	73	52	0	158	505
11:45 AM	4	8	99	22	0	133	0	43	64	8	0	115	1	35	77	34	0	147	1	32	55	29	0	117	512
Hourly Total	7	45	365	85	0	502	0	154	236	44	0	434	5	170	280	104	0	559	3	113	260	149	0	525	2020
12:00 PM	3	7	87	31	0	128	1	36	66	7	0	110	1	37	55	12	0	105	0	23	72	30	0	125	468
12:15 PM	0	7	77	20	0	104	2	32	62	3	2	99	0	47	82	25	2	154	2	14	61	52	0	129	486
12:30 PM	2	5	66	16	1	89	0	32	62	5	0	99	3	41	88	38	0	170	1	35	71	42	0	149	507
12:45 PM	3	12	80	23	0	118	0	32	46	8	0	86	0	45	80	35	0	160	1	24	64	37	0	126	490
Hourly Total	8	31	310	90	1	439	3	132	236	23	2	394	4	170	305	110	2	589	4	96	268	161	0	529	1951
1:00 PM	2	10	63	20	0	95	1	32	61	8	0	102	0	55	65	28	0	148	0	22	63	54	0	139	484
1:15 PM	0	7	81	24	0	112	1	30	57	4	0	92	0	31	85	23	0	139	0	21	74	51	0	146	489
1:30 PM	3	5	74	17	0	99	0	32	71	7	0	110	3	39	78	32	0	152	1	36	76	49	0	162	523
1:45 PM	3	8	78	17	0	106	2	14	76	14	0	106	1	45	78	22	0	146	0	23	71	74	0	168	526
Hourly Total	8	30	296	78	0	412	4	108	265	33	0	410	4	170	306	105	0	585	1	102	284	228	0	615	2022
2:00 PM	2	8	88	19	0	117	1	38	81	17	0	137	0	46	111	27	0	184	0	27	76	73	0	176	614
2:15 PM	2	17	82	14	0	115	1	40	71	13	0	125	3	38	101	37	0	179	0	31	105	59	0	195	614
2:30 PM	0	14	94	17	0	125	1	42	74	13	1	130	1	55	127	47	0	230	0	29	97	56	0	182	667
2:45 PM	2	15	104	19	0	140	0	30	64	13	0	107	2	67	174	49	0	292	0	33	92	58	0	183	722
Hourly Total	6	54	368	69	0	497	3	150	290	56	1	499	6	206	513	160	0	885	0	120	370	246	0	736	2617
3:00 PM	4	5	95	15	0	119	1	60	98	19	0	178	0	82	162	69	0	313	1	31	103	51	0	186	796
3:15 PM	1	15	92	18	0	126	3	42	89	15	0	149	0	63	202	64	1	329	1	22	114	54	0	191	795
3:30 PM	0	20	121	26	0	167	0	45	99	19	0	163	3	69	200	45	0	317	0	44	106	57	0	207	854
3:45 PM	1	11	83	20	0	115	0	36	99	25	0	160	2	97	237	79	0	415	1	44	115	71	0	231	921
Hourly Total	6	51	391	79	0	527	4	183	385	78	0	650	5	311	801	257	1	1374	3	141	438	233	0	815	3366

TMC 2305 - CSAH 78 @ CSAH 116

0 0

Tuesday, April 18, 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	3	25	134	23	0	185	1	56	88	32	0	177	0	77	189	58	0	324	0	43	126	64	0	233	919
4:15 PM	3	25	120	24	0	172	0	47	115	35	0	197	2	105	199	78	0	384	0	34	122	58	0	214	967
4:30 PM	2	26	126	22	0	176	0	55	121	31	0	207	2	85	240	55	0	382	0	29	107	62	0	198	963
4:45 PM	1	17	116	19	0	153	0	55	137	33	0	225	1	97	280	66	0	444	1	41	127	54	0	223	1045
Hourly Total	9	93	496	88	0	686	1	213	461	131	0	806	5	364	908	257	0	1534	1	147	482	238	0	868	3894
5:00 PM	0	6	102	22	0	130	3	42	104	26	0	175	2	83	196	49	0	330	1	51	126	70	0	248	883
5:15 PM	3	16	102	19	0	140	1	43	97	23	0	164	0	112	224	86	0	422	1	41	101	70	1	213	939
5:30 PM	0	13	104	20	0	137	4	30	103	16	0	153	1	70	188	52	0	311	1	43	97	54	0	195	796
5:45 PM	1	14	123	21	0	159	2	30	74	21	0	127	0	58	192	58	0	308	1	32	101	47	0	181	775
Hourly Total	4	49	431	82	0	566	10	145	378	86	0	619	3	323	800	245	0	1371	4	167	425	241	1	837	3393
6:00 PM	1	12	96	21	0	130	3	44	104	19	0	170	0	66	151	55	0	272	0	34	70	56	0	160	732
6:15 PM	3	13	80	26	0	122	2	34	83	31	0	150	0	48	144	61	0	253	0	31	95	79	0	205	730
6:30 PM	2	15	87	25	2	129	1	26	51	13	0	91	0	55	170	39	0	264	0	39	76	38	2	153	637
6:45 PM	1	19	98	22	0	140	0	19	73	24	0	116	0	45	120	43	0	208	1	29	71	53	0	154	618
Hourly Total	7	59	361	94	2	521	6	123	311	87	0	527	0	214	585	198	0	997	1	133	312	226	2	672	2717
7:00 PM	1	10	67	13	0	91	2	18	42	12	0	74	0	42	106	20	0	168	0	31	84	42	2	157	490
7:15 PM	0	9	71	12	1	92	1	17	52	16	1	86	0	43	99	31	0	173	0	23	62	43	0	128	479
7:30 PM	1	16	58	20	0	95	1	26	56	15	0	98	0	34	90	27	0	151	0	24	67	33	1	124	468
7:45 PM	1	9	54	12	0	76	1	19	39	11	0	70	0	30	86	44	0	160	0	26	52	18	0	96	402
Hourly Total	3	44	250	57	1	354	5	80	189	54	1	328	0	149	381	122	0	652	0	104	265	136	3	505	1839
8:00 PM	1	22	71	13	0	107	0	25	53	12	0	90	0	26	83	29	0	138	0	32	72	50	0	154	489
8:15 PM	0	16	59	12	0	87	2	15	36	8	0	61	0	20	81	21	0	122	0	18	61	31	0	110	380
8:30 PM	0	8	33	17	0	58	1	18	34	8	0	61	1	19	76	26	0	122	0	18	51	31	0	100	341
8:45 PM	0	13	55	10	0	78	0	13	40	4	0	57	0	23	68	29	0	120	0	18	43	19	0	80	335
Hourly Total	1	59	218	52	0	330	3	71	163	32	0	269	1	88	308	105	0	502	0	86	227	131	0	444	1545
9:00 PM	0	12	37	3	0	52	0	5	18	7	0	30	0	14	69	18	0	101	0	18	43	28	0	89	272
9:15 PM	1	5	28	4	0	38	0	6	24	2	0	32	0	20	70	17	0	107	0	5	29	22	0	56	233
9:30 PM	1	4	27	9	0	41	0	7	23	6	0	36	0	10	61	15	0	86	0	9	23	8	0	40	203
9:45 PM	2	8	15	4	0	29	0	3	24	6	0	33	0	14	32	8	0	54	0	8	26	18	0	52	168
Hourly Total	4	29	107	20	0	160	0	21	89	21	0	131	0	58	232	58	0	348	0	40	121	76	0	237	876
10:00 PM	1	5	12	0	0	18	2	6	21	2	0	31	0	10	32	13	0	55	0	11	26	16	0	53	157
10:15 PM	0	4	14	5	0	23	1	7	15	2	0	25	0	10	30	15	0	55	0	9	12	5	0	26	129
10:30 PM	2	2	11	1	0	16	0	5	7	5	0	17	0	5	32	11	0	48	0	5	17	7	0	29	110
10:45 PM	0	0	10	0	0	10	1	3	6	2	0	12	0	4	21	7	0	32	0	7	9	10	0	26	80
Hourly Total	3	11	47	6	0	67	4	21	49	11	0	85	0	29	115	46	0	190	0	32	64	38	0	134	476
11:00 PM	1	1	8	4	0	14	0	3	7	1	0	11	0	2	23	6	0	31	0	4	9	7	0	20	76
11:15 PM	0	0	5	2	0	7	0	2	9	4	0	15	0	2	19	7	0	28	0	3	3	5	0	11	61
11:30 PM	0	1	8	3	0	12	0	5	6	1	0	12	0	4	15	4	0	23	0	0	4	4	0	8	55
11:45 PM	0	0	8	0	0	8	0	5	2	2	0	9	0	1	23	2	0	26	0	3	4	1	0	8	51
Hourly Total	1	2	29	9	0	41	0	15	24	8	0	47	0	9	80	19	0	108	0	10	20	17	0	47	243
DAILY TOTAL	103	810	7343	1208	4	9464	59	2549	4424	937	4	7969	50	2921	7059	2258	3	12288	36	1677	4886	3224	6	9823	39544
Cars	101	801	7174	1197	4	9273	59	2472	4341	920	4	7792	50	2865	6926	2230	3	12071	36	1654	4754	3076	6	9520	38656
Heavy Vehicles	2	9	169	11	0	191	0	77	83	17	0	177	0	56	133	28	0	217	0	23	132	148	0	303	888
Heavy Vehicle %	1.94%	1.11%	2.30%	0.91%	0.00%	2.02%	0.00%	3.02%	1.88%	1.81%	0.00%	2.22%	0.00%	1.92%	1.88%	1.24%	0.00%	1.77%	0.00%	1.37%	2.70%	4.59%	0.00%	3.08%	2.25%

TMC 2305 - CSAH 78 @ CSAH 116

0 0

Tuesday, April 18, 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	
7:00 AM	1	14	246	16	0	277	3	77	66	15	0	161	0	31	66	20	0	117	0	5	69	62	0	136	691
7:15 AM	1	13	207	18	0	239	0	82	131	21	0	234	1	31	78	35	0	145	1	25	81	75	0	182	800
7:30 AM	2	22	247	19	0	290	0	79	100	14	0	193	1	40	84	37	0	162	0	20	109	69	0	198	843
7:45 AM	4	14	232	13	0	263	0	63	83	16	0	162	0	37	97	33	0	167	0	19	107	71	0	197	789
Peak Hour Total	8	63	932	66	0	1069	3	301	380	66	0	750	2	139	325	125	0	591	1	69	366	277	0	713	3123
PHF	0.500	0.716	0.943	0.868	0.000	0.922	0.250	0.918	0.725	0.786	0.000	0.801	0.500	0.869	0.838	0.845	0.000	0.885	0.250	0.690	0.839	0.923	0.000	0.900	0.926

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	3	25	134	23	0	185	1	56	88	32	0	177	0	77	189	58	0	324	0	43	126	64	0	233	919
4:15 PM	3	25	120	24	0	172	0	47	115	35	0	197	2	105	199	78	0	384	0	34	122	58	0	214	967
4:30 PM	2	26	126	22	0	176	0	55	121	31	0	207	2	85	240	55	0	382	0	29	107	62	0	198	963
4:45 PM	1	17	116	19	0	153	0	55	137	33	0	225	1	97	280	66	0	444	1	41	127	54	0	223	1045
Peak Hour Total	9	93	496	88	0	686	1	213	461	131	0	806	5	364	908	257	0	1534	1	147	482	238	0	868	3894
PHF	0.750	0.894	0.925	0.917	0.000	0.927	0.250	0.951	0.841	0.936	0.000	0.896	0.625	0.867	0.811	0.824	0.000	0.864	0.250	0.855	0.949	0.930	0.000	0.931	0.932

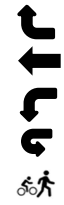
Total Vehicles On Leg				19240			
Vehicles Entering Intersection		9464		Vehicles Exiting Intersection		9776	
Southbound							
Cars	1197	7174	801	101	4		
Heavy	11	169	9	2	0		
Total	1208	7343	810	103	4		



Total Vehicles on Leg 18412	Vehicles Entering Intersection	Eastbound	Cars	Heavy	Total	
	9823		6	0	6	
			36	0	36	
	Vehicles Exiting Intersection		1654	23	1677	
	8589		4754	132	4886	
	3076	148	3224			

Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection	Total Vehicles on Leg 15982
920	17	937		7969	
4341	83	4424			
2472	77	2549		Vehicles Exiting Intersection	
59	0	59		8013	
4	0	4			



Cars	3	50	2865	6926	2230
Heavy	0	0	56	133	28
Total	3	50	2921	7059	2258
Northbound					
Vehicles Entering Intersection			12288		
Vehicles Exiting Intersection			13166		
Total Vehicles On Leg			25454		



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	
04/18/2023	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	1	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	1	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	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	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	2:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	2:45	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15	1	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	
	3:45	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	1	0	0	0	0	0	0	0	0	0	
	4:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	5:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	
	5:30	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	
	6:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	8	2	0	0	
	6:15	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	4	2	0	0	
	6:30	0	0	5	0	0	0	0	0	1	0	0	0	0	0	2	3	1	0	0	0	1	6	12	0	0
	6:45	0	0	1	1	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	2	2	22	0	0	
	7:00	0	0	1	0	0	0	0	3	4	2	0	0	0	3	1	0	0	0	0	0	1	1	0	0	
	7:15	0	0	0	1	0	0	0	2	4	0	0	0	0	1	5	0	0	0	0	2	5	2	0	0	
	7:30	0	0	9	0	0	0	0	0	0	0	0	0	0	1	2	4	0	0	0	1	6	2	0	0	
	7:45	0	0	3	1	0	0	0	9	1	1	0	0	0	1	1	2	0	0	0	3	1	1	0	0	
	8:00	0	0	6	1	0	0	0	3	1	1	0	0	0	1	4	0	0	0	0	0	3	3	0	0	
	8:15	0	1	3	0	0	0	0	1	1	0	0	0	0	1	2	1	0	0	0	0	5	2	0	0	
	8:30	0	0	3	0	0	0	0	1	2	0	0	0	0	1	0	2	0	0	0	0	5	0	0	0	
	8:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	1	0	0	
	9:00	0	1	2	0	0	0	0	0	2	2	0	0	0	2	0	2	0	0	0	0	2	1	0	0	
	9:15	0	1	18	1	0	0	0	3	2	1	0	0	0	1	3	0	0	0	0	0	2	2	0	0	
	9:30	0	0	10	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	1	0	1	0	0	
	9:45	0	0	0	0	0	0	0	1	0	0	0	0	0	3	5	1	0	0	0	0	1	3	0	0	
	10:00	0	0	6	1	0	0	0	0	3	0	0	0	0	0	2	0	0	0	0	0	3	1	0	0	
	10:15	0	0	4	0	0	0	0	0	4	0	0	0	0	0	3	0	0	0	0	0	2	2	0	0	
	10:30	0	0	0	0	0	0	0	0	2	1	0	0	0	1	2	1	0	0	0	0	3	2	0	0	
	10:45	0	0	4	0	0	0	0	2	3	0	0	0	0	0	2	0	0	0	0	0	1	5	0	0	
	11:00	0	0	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	1	0	0	
	11:15	0	0	4	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	1	2	0	0	0	
	11:30	0	0	3	0	0	0	0	3	2	0	0	0	0	2	3	0	0	0	0	1	2	1	0	0	
	11:45	0	0	3	0	0	0	0	0	1	0	0	0	0	3	5	0	0	0	0	0	2	0	0	0	

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	
12:00	0	0	4	2	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	4	2	0	0
12:15	0	0	3	0	0	0	0	2	2	0	0	0	0	0	1	2	1	0	0	0	0	4	0	0	0
12:30	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	4	0	0	0	0	0	5	2	0	0
12:45	0	0	3	2	0	0	0	3	1	0	0	0	0	0	2	3	0	0	0	0	0	2	2	0	0
13:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	1	1	0	0
13:15	0	0	1	0	0	0	0	1	2	0	0	0	0	0	1	4	0	0	0	0	0	5	4	0	0
13:30	0	0	4	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	1	2	8	0	0
13:45	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	5	0	0	0	0	0	4	18	0	0
14:00	0	0	6	0	0	0	0	2	1	0	0	0	0	0	6	4	0	0	0	0	0	2	20	0	0
14:15	0	0	5	0	0	0	0	1	1	0	0	0	0	0	1	4	0	0	0	0	0	4	5	0	0
14:30	0	0	1	0	0	0	0	0	3	0	0	0	0	0	0	5	0	0	0	0	0	5	5	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	4	3	0	0
15:00	0	0	3	0	0	0	0	2	4	0	0	0	0	0	1	5	3	0	0	0	1	3	2	0	0
15:15	0	1	3	0	0	0	0	2	3	0	0	0	0	0	1	2	1	0	0	0	0	2	1	0	0
15:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	7	0	0	0	0	0	2	0	0	0
15:45	0	1	0	0	0	0	0	1	2	0	0	0	0	0	1	3	1	0	0	0	0	0	2	0	0
16:00	0	2	2	0	0	0	0	3	3	2	0	0	0	0	1	3	0	0	0	0	1	2	0	0	0
16:15	0	0	2	0	0	0	0	2	5	0	0	0	0	0	1	3	2	0	0	0	0	1	0	0	0
16:30	0	0	8	1	0	0	0	3	2	1	0	0	0	0	0	1	1	0	0	0	0	2	0	0	0
16:45	0	0	6	0	0	0	0	7	1	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0
17:00	0	0	2	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
17:15	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
17:30	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
17:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
18:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	0	0	0	2	0	0	0
18:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
19:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
19:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
20:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
20:30	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
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
21:00	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
21:15	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
21:30	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
21:45	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
22:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
23:00	1	0	1	0	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	1	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	0	0	0	0
23:45	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2305

Study Date : 05/02/2023

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 78

Number of Lanes : 2+

Total Approach Volume: 12,288

Southbound: CSAH 78

Number of Lanes :2+

Total Approach Volume: 9,464

Minor Street Approaches

Eastbound: CSAH 116

Number of Lanes :2+

Total Approach Volume: 9,823

Westbound: CSAH 116

Number of Lanes :2+

Total Approach Volume: 7,969

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 17 hours, 8 are needed

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

Required volumes reached for 16 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 17 hours, 8 are needed

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

Number of hours (16) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (65) 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 2305

Study Date : 05/02/2023

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

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 = **2 or more**

Volume Requirements

Rural Factor of 70 % applied
 Veh/Hr Major = **420**
 Veh/Hr Minor = **140**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	1534	+	686	=	2220	868	806	Yes
17:00 - 18:00	1371	+	566	=	1937	837	619	Yes
15:00 - 16:00	1374	+	527	=	1901	815	650	Yes
07:00 - 08:00	591	+	1069	=	1660	713	750	Yes
18:00 - 19:00	997	+	521	=	1518	672	527	Yes
14:00 - 15:00	885	+	497	=	1382	736	499	Yes
08:00 - 09:00	472	+	692	=	1164	532	503	Yes
06:00 - 07:00	292	+	807	=	1099	477	374	Yes
09:00 - 10:00	451	+	637	=	1088	450	411	Yes
11:00 - 12:00	559	+	502	=	1061	525	434	Yes
12:00 - 13:00	589	+	439	=	1028	529	394	Yes
19:00 - 20:00	652	+	354	=	1006	505	328	Yes
13:00 - 14:00	585	+	412	=	997	615	410	Yes
10:00 - 11:00	493	+	456	=	949	430	425	Yes
20:00 - 21:00	502	+	330	=	832	444	269	Yes
05:00 - 06:00	106	+	456	=	562	126	176	Yes
21:00 - 22:00	348	+	160	=	508	237	131	Yes
04:45 - 05:45	88	+	365	=	453	88	138	No
04:30 - 05:30	76	+	276	=	352	72	97	No
04:15 - 05:15	67	+	199	=	266	61	81	No
22:00 - 23:00	190	+	67	=	257	134	85	No
22:15 - 23:15	166	+	63	=	229	101	65	No
04:00 - 05:00	52	+	148	=	200	50	63	No
22:30 - 23:30	139	+	47	=	186	86	55	No
03:45 - 04:45	38		124		162	45	46	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2305

Study Date : 05/02/2023

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

16 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 = **2 or more**

Volume Requirements

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

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	1540	+	631	=	2171	883	804	Yes
15:15 - 16:15	1385	+	593	=	1978	862	649	Yes
17:15 - 18:15	1313	+	566	=	1879	749	614	Yes
07:15 - 08:15	608	+	1000	=	1608	733	717	Yes
14:15 - 15:15	1014	+	499	=	1513	746	540	Yes
18:15 - 19:15	893	+	482	=	1375	669	431	Yes
06:15 - 07:15	373	+	945	=	1318	535	460	Yes
08:15 - 09:15	471	+	631	=	1102	470	471	Yes
13:15 - 14:15	621	+	434	=	1055	652	445	Yes
09:15 - 10:15	431	+	612	=	1043	455	403	Yes
12:15 - 13:15	632	+	406	=	1038	543	386	Yes
11:15 - 12:15	517	+	506	=	1023	532	440	Yes
19:15 - 20:15	622	+	370	=	992	502	344	Yes
10:15 - 11:15	527	+	458	=	985	449	441	Yes
20:15 - 21:15	465	+	275	=	740	379	209	Yes
05:15 - 06:15	120	+	520	=	640	186	224	Yes
05:00 - 06:00	106	+	456	=	562	126	176	No
04:45 - 05:45	88	+	365	=	453	88	138	No
21:15 - 22:15	302	+	126	=	428	201	132	No
21:30 - 22:30	250	+	111	=	361	171	125	No
04:30 - 05:30	76	+	276	=	352	72	97	No
21:45 - 22:45	212	+	86	=	298	160	106	No
04:15 - 05:15	67	+	199	=	266	61	81	No
22:00 - 23:00	190	+	67	=	257	134	85	No
22:15 - 23:15	166		63		229	101	65	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2305

Study Date : 05/02/2023

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

17 hours meet 1A minimums.
17 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 = **2 or more**

Volume Requirements

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

Veh/Hr Minor = **112 56**

Major Road CSAH 78

Minor Road CSAH 116

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:45 - 16:45	1505	+	648	=	2153	876	741	Yes
16:45 - 17:45	1507	+	560	=	2067	879	717	Yes
14:45 - 15:45	1251	+	552	=	1803	767	597	Yes
17:45 - 18:45	1097	+	540	=	1637	699	538	Yes
06:45 - 07:45	538	+	1029	=	1567	687	706	Yes
07:45 - 08:45	533	+	832	=	1365	596	532	Yes
13:45 - 14:45	739	+	463	=	1202	721	498	Yes
18:45 - 19:45	700	+	418	=	1118	563	374	Yes
08:45 - 09:45	463	+	642	=	1105	454	439	Yes
11:45 - 12:45	576	+	454	=	1030	520	423	Yes
12:45 - 13:45	599	+	424	=	1023	573	390	Yes
10:45 - 11:45	545	+	473	=	1018	530	427	Yes

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:00 - 17:00	1534	+	686	=	2220	868	806	Yes
17:00 - 18:00	1371	+	566	=	1937	837	619	Yes
15:00 - 16:00	1374	+	527	=	1901	815	650	Yes
07:00 - 08:00	591	+	1069	=	1660	713	750	Yes
18:00 - 19:00	997	+	521	=	1518	672	527	Yes
14:00 - 15:00	885	+	497	=	1382	736	499	Yes
08:00 - 09:00	472	+	692	=	1164	532	503	Yes
06:00 - 07:00	292	+	807	=	1099	477	374	Yes
09:00 - 10:00	451	+	637	=	1088	450	411	Yes
11:00 - 12:00	559	+	502	=	1061	525	434	Yes
12:00 - 13:00	589	+	439	=	1028	529	394	Yes
19:00 - 20:00	652	+	354	=	1006	505	328	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2305

Study Date : 05/02/2023

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.

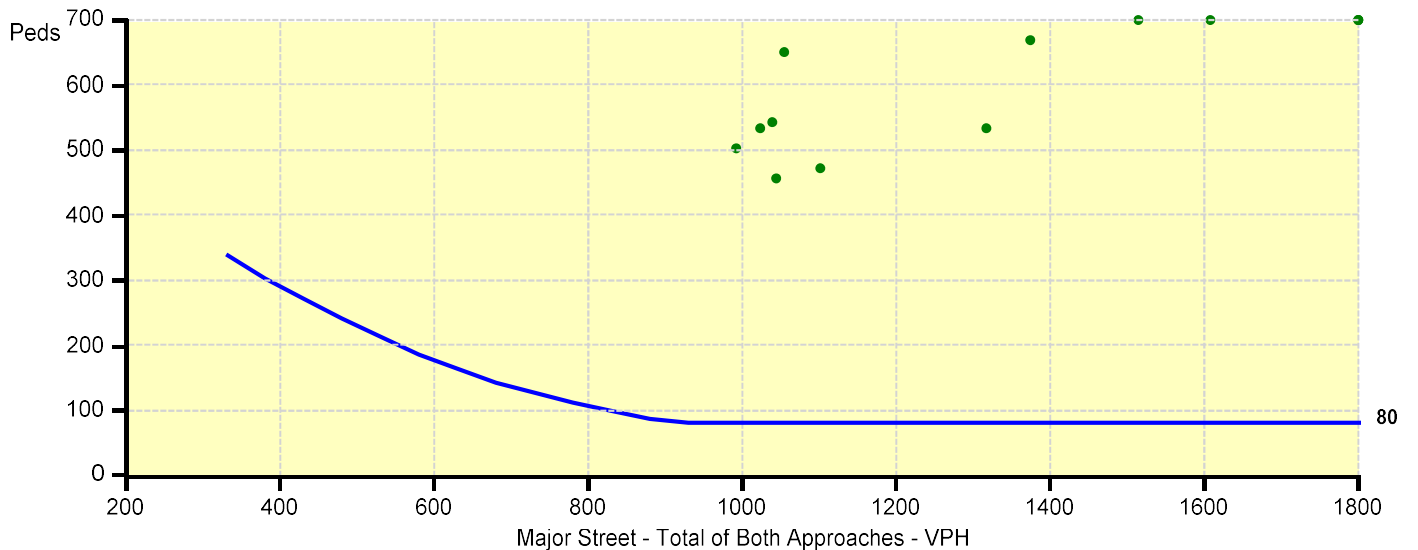
Summary

16 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 = **2 or more**

Time	Major Road CSAH 78					Minor Road CSAH 116		Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:15 - 17:15	1540	+	631	=	2171	883	804	Yes
15:15 - 16:15	1385	+	593	=	1978	862	649	Yes
17:15 - 18:15	1313	+	566	=	1879	749	614	Yes
07:15 - 08:15	608	+	1000	=	1608	733	717	Yes
14:15 - 15:15	1014	+	499	=	1513	746	540	Yes
18:15 - 19:15	893	+	482	=	1375	669	431	Yes
06:15 - 07:15	373	+	945	=	1318	535	460	Yes
08:15 - 09:15	471	+	631	=	1102	470	471	Yes
13:15 - 14:15	621	+	434	=	1055	652	445	Yes
09:15 - 10:15	431	+	612	=	1043	455	403	Yes
12:15 - 13:15	632	+	406	=	1038	543	386	Yes
11:15 - 12:15	517	+	506	=	1023	532	440	Yes



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2305

Study Date : 05/02/2023

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

61 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 = **2 or more**

Time	Major Road CSAH 78				Total	Minor Road CSAH 116		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	1534	+	686	=	2220	868	806	Yes
16:30 - 17:30	1578	+	599	=	2177	882	771	Yes
16:15 - 17:15	1540	+	631	=	2171	883	804	Yes
15:45 - 16:45	1505	+	648	=	2153	876	741	Yes
15:30 - 16:30	1440	+	639	=	2079	885	697	Yes
16:45 - 17:45	1507	+	560	=	2067	879	717	Yes
15:15 - 16:15	1385	+	593	=	1978	862	649	Yes
17:00 - 18:00	1371	+	566	=	1937	837	619	Yes
15:00 - 16:00	1374	+	527	=	1901	815	650	Yes
17:15 - 18:15	1313	+	566	=	1879	749	614	Yes
14:45 - 15:45	1251	+	552	=	1803	767	597	Yes
17:30 - 18:30	1144		548		1692	741	600	Yes

