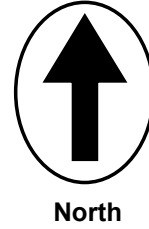


Date : 08/22/23

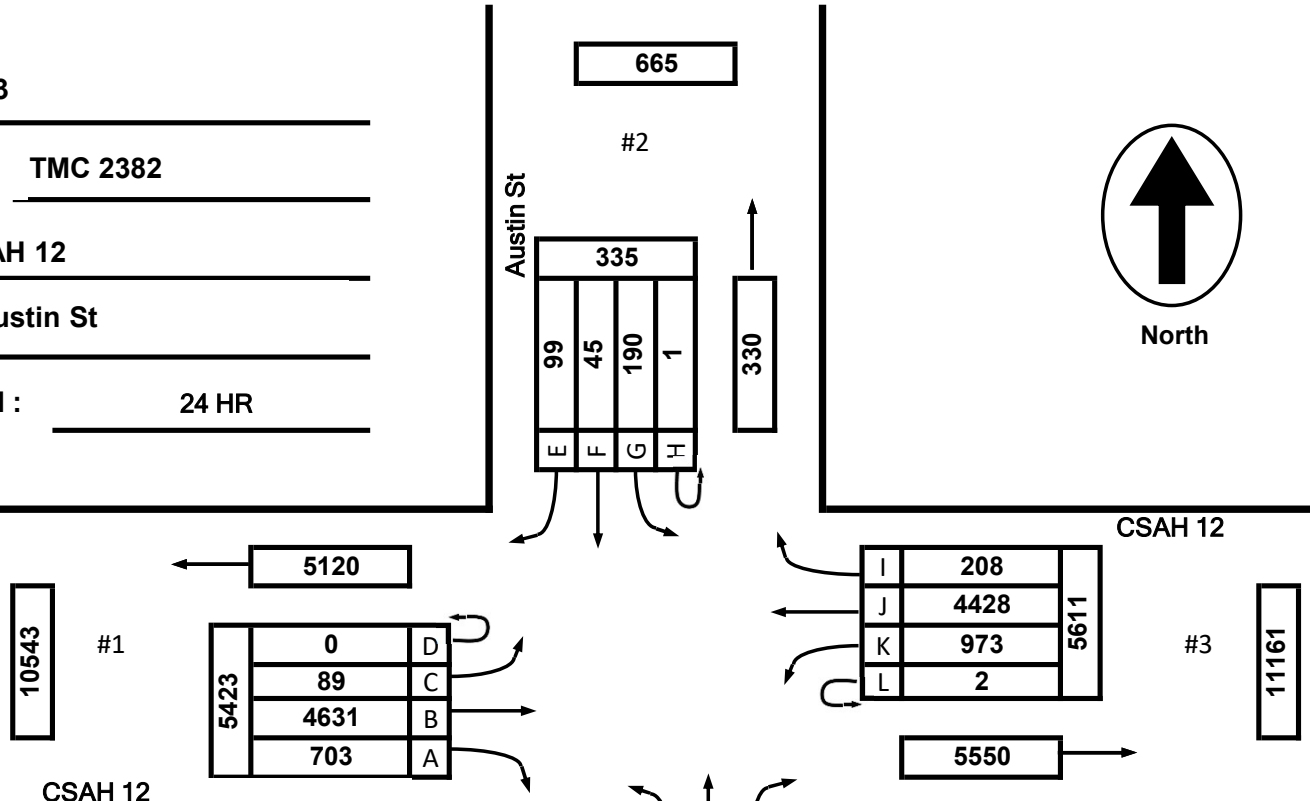
Count Number : TMC 2382

Location : CSAH 12  
@ Austin St

Collection Period : 24 HR



CSAH 12



0	D
89	C
4631	B
703	A

I	208
J	4428
K	973
L	2

P	2
O	593
N	32
M	727

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

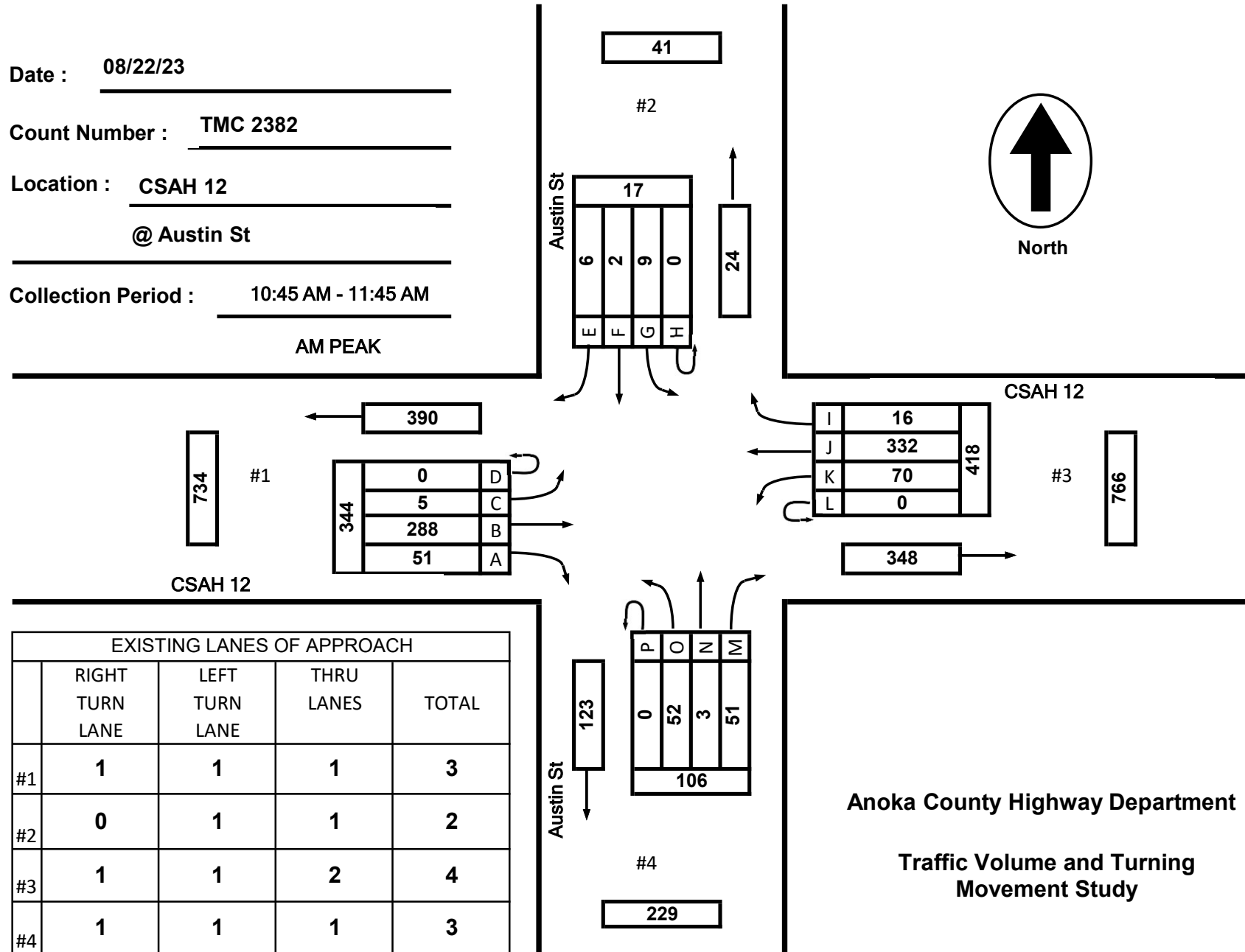
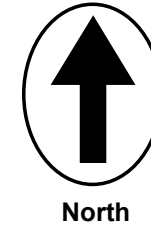
Date : 08/22/23

Count Number : TMC 2382

Location : CSAH 12  
@ Austin St

Collection Period : 10:45 AM - 11:45 AM

AM PEAK



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

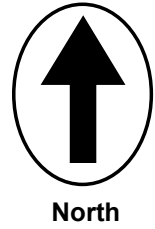
Anoka County Highway Department  
 Traffic Volume and Turning Movement Study

Date : 08/22/23

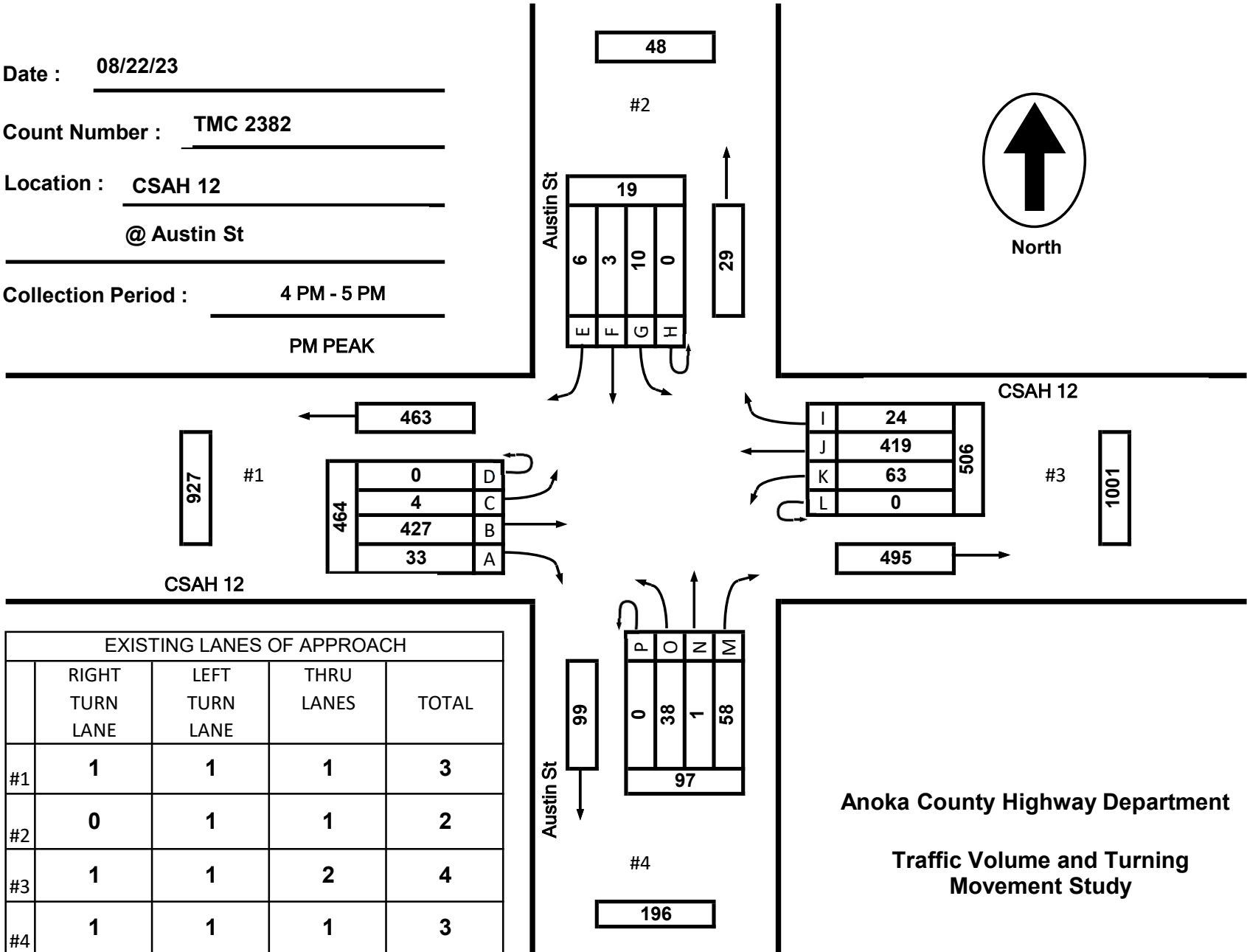
Count Number : TMC 2382

Location : CSAH 12  
@ Austin St

Collection Period : 4 PM - 5 PM  
PM PEAK



North



CSAH 12

CSAH 12

Austin St

EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	1	1	1	3
#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 2382 - CSAH 12 @ Austin St

0 0

Tuesday, August 22, 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	1	0	0	0	1	0	2	5	0	0	7	0	0	0	1	0	1	0	0	2	1	0	3	0	0	0	3	12
12:15 AM	0	0	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	5	10
12:30 AM	0	0	0	0	0	0	0	2	4	1	0	7	0	0	0	0	0	0	0	0	4	1	0	5	0	0	0	5	12
12:45 AM	0	0	0	0	0	0	0	0	5	1	0	6	0	2	0	2	0	4	0	0	3	2	0	5	0	0	0	5	15
Hourly Total	0	1	0	0	0	1	0	5	18	2	0	25	0	2	0	3	0	5	0	0	14	4	0	18	0	0	0	18	49
1:00 AM	0	0	0	0	0	0	0	2	5	0	0	7	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	4	12
1:15 AM	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	6	12
1:30 AM	0	0	0	0	0	0	0	1	7	0	0	8	0	1	0	1	0	2	0	0	1	0	0	1	0	0	0	1	11
1:45 AM	0	0	0	0	0	0	0	2	3	0	0	5	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	2	7
Hourly Total	0	0	0	0	0	0	0	5	20	1	0	26	0	1	0	2	0	3	0	0	12	1	0	13	0	0	0	13	42
2:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:15 AM	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	3	5
2:30 AM	0	0	0	0	0	0	0	2	2	0	0	4	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	6
2:45 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	1	0	0	1	1	0	2	0	0	0	2	6
Hourly Total	0	0	0	0	0	0	0	3	7	0	0	10	0	1	0	3	0	4	0	0	4	1	0	5	0	0	0	5	19
3:00 AM	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	0	0	1	0	0	4	0	0	4	0	0	0	4	7
3:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	3	6
3:30 AM	0	0	0	0	0	0	0	1	7	0	0	8	0	0	0	1	0	1	0	0	6	0	0	6	0	0	0	6	15
3:45 AM	0	1	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	2	5
Hourly Total	0	1	0	0	0	1	0	2	13	0	0	15	0	1	0	1	0	2	0	0	15	0	0	15	0	0	0	15	33
4:00 AM	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	1	0	1	0	0	3	2	0	5	0	0	0	5	9
4:15 AM	0	0	0	0	0	0	0	2	7	0	0	9	0	0	0	1	0	1	0	0	3	1	0	4	0	0	0	4	14
4:30 AM	0	1	0	0	0	1	0	4	11	0	0	15	0	0	0	2	0	2	0	0	12	2	0	14	0	0	0	14	32
4:45 AM	0	0	0	2	0	2	0	5	8	1	0	14	0	2	0	4	0	6	0	0	12	1	0	13	0	0	0	13	35
Hourly Total	0	1	0	2	0	3	0	13	27	1	0	41	0	2	0	8	0	10	0	0	30	6	0	36	0	0	0	36	90
5:00 AM	0	1	1	0	0	2	0	4	8	0	0	12	0	1	0	0	0	1	0	0	6	3	0	9	0	0	0	9	24
5:15 AM	0	1	1	0	0	2	0	3	13	0	0	16	0	4	0	1	0	5	0	0	22	0	0	22	0	0	0	22	45
5:30 AM	0	0	1	0	0	1	0	2	14	1	0	17	0	3	0	4	0	7	0	0	19	3	0	22	0	0	0	22	47
5:45 AM	0	6	0	1	0	7	0	8	25	0	0	33	0	1	0	4	0	5	0	0	33	3	0	36	0	0	0	36	81
Hourly Total	0	8	3	1	0	12	0	17	60	1	0	78	0	9	0	9	0	18	0	0	80	9	0	89	0	0	0	89	197
6:00 AM	0	3	0	0	0	3	0	9	21	0	0	30	0	2	0	6	0	8	0	0	19	7	0	26	0	0	0	26	67
6:15 AM	0	6	1	1	0	8	0	10	44	1	0	55	0	1	0	6	0	7	0	0	32	10	0	42	0	0	0	42	112
6:30 AM	0	3	0	1	0	4	0	15	27	1	0	43	0	4	1	10	0	15	0	0	52	9	1	61	0	0	0	61	123
6:45 AM	0	3	0	1	0	4	0	16	49	0	0	65	0	10	2	6	0	18	0	1	70	16	0	87	0	0	0	87	174
Hourly Total	0	15	1	3	0	19	0	50	141	2	0	193	0	17	3	28	0	48	0	1	173	42	1	216	0	0	0	216	476
7:00 AM	0	6	0	1	0	7	0	17	41	2	0	60	0	4	0	11	0	15	0	2	35	8	0	45	0	0	0	45	127
7:15 AM	0	2	0	4	0	6	0	20	54	0	0	74	0	6	0	11	0	17	0	1	51	17	0	69	0	0	0	69	166
7:30 AM	0	7	1	1	0	9	0	23	62	4	0	89	0	9	0	10	0	19	0	0	73	18	0	91	0	0	0	91	208
7:45 AM	0	4	0	1	0	5	0	28	64	4	0	96	0	8	1	10	0	19	0	2	61	20	0	83	0	0	0	83	203
Hourly Total	0	19	1	7	0	27	0	88	221	10	0	319	0	27	1	42	0	70	0	5	220	63	0	288	0	0	0	288	704

# TMC 2382 - CSAH 12 @ Austin St

0 0

Tuesday, August 22, 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	2	1	2	0	5	0	16	48	2	0	66	0	7	0	15	0	22	0	3	62	12	0	77	0	170
8:15 AM	0	3	3	1	0	7	0	15	42	1	0	58	0	7	2	16	0	25	0	2	50	14	0	66	0	156
8:30 AM	0	4	1	1	0	6	0	13	55	0	0	68	0	13	0	13	0	26	0	0	59	12	0	71	0	171
8:45 AM	0	5	1	1	0	7	0	7	45	2	0	54	0	11	1	7	0	19	0	5	58	9	0	72	0	152
Hourly Total	0	14	6	5	0	25	0	51	190	5	0	246	0	38	3	51	0	92	0	10	229	47	0	286	0	649
9:00 AM	1	1	1	5	0	8	0	12	62	3	0	77	0	8	0	7	0	15	0	0	35	12	0	47	0	147
9:15 AM	0	3	1	4	0	8	0	11	36	2	0	49	0	13	1	8	0	22	0	0	61	19	0	80	0	159
9:30 AM	0	2	4	1	0	7	0	11	56	4	0	71	0	11	1	11	0	23	0	1	66	16	0	83	0	184
9:45 AM	0	7	1	0	0	8	0	6	57	4	0	67	0	8	0	16	0	24	0	2	55	10	0	67	0	166
Hourly Total	1	13	7	10	0	31	0	40	211	13	0	264	0	40	2	42	0	84	0	3	217	57	0	277	0	656
10:00 AM	0	5	0	1	0	6	0	22	65	1	0	88	0	15	0	10	0	25	0	2	60	11	0	73	0	192
10:15 AM	0	5	1	0	0	6	0	8	63	1	0	72	0	9	0	7	0	16	0	1	63	13	0	77	0	171
10:30 AM	0	3	1	2	0	6	1	23	67	4	0	95	0	9	0	14	0	23	0	0	80	14	0	94	0	218
10:45 AM	0	4	0	0	0	4	0	17	83	6	0	106	0	13	0	15	0	28	0	2	68	11	0	81	0	219
Hourly Total	0	17	2	3	0	22	1	70	278	12	0	361	0	46	0	46	0	92	0	5	271	49	0	325	0	800
11:00 AM	0	2	2	2	0	6	0	23	82	3	0	108	0	10	2	6	0	18	0	1	61	2	0	64	0	196
11:15 AM	0	2	0	2	0	4	0	13	74	3	0	90	0	16	0	13	0	29	0	1	75	15	0	91	0	214
11:30 AM	0	1	0	2	0	3	0	17	93	4	0	114	0	13	1	17	0	31	0	1	84	23	0	108	0	256
11:45 AM	0	2	0	1	0	3	0	21	84	3	0	108	0	13	1	14	0	28	0	2	67	10	0	79	0	218
Hourly Total	0	7	2	7	0	16	0	74	333	13	0	420	0	52	4	50	0	106	0	5	287	50	0	342	0	884
12:00 PM	0	0	2	2	0	4	0	26	87	5	0	118	0	8	0	20	0	28	0	1	89	15	0	105	0	255
12:15 PM	0	1	0	4	0	5	0	25	78	5	0	108	1	8	0	12	0	21	0	0	84	17	0	101	0	235
12:30 PM	0	2	0	0	0	2	0	26	71	0	0	97	0	11	0	27	0	38	0	1	119	18	0	138	0	275
12:45 PM	0	7	2	2	0	11	0	22	78	3	0	103	0	19	1	14	0	34	0	1	85	11	0	97	0	245
Hourly Total	0	10	4	8	0	22	0	99	314	13	0	426	1	46	1	73	0	121	0	3	377	61	0	441	0	1010
1:00 PM	0	3	0	1	0	4	0	16	98	4	0	118	0	10	0	9	0	19	0	1	84	12	0	97	0	238
1:15 PM	0	2	1	4	0	7	0	20	77	4	0	101	0	17	2	6	0	25	0	1	68	9	0	78	0	211
1:30 PM	0	3	1	3	0	7	0	13	65	1	0	79	1	14	0	12	0	27	0	2	86	9	0	97	0	210
1:45 PM	0	3	0	1	0	4	0	13	68	3	0	84	0	13	0	12	0	25	0	1	89	21	0	111	0	224
Hourly Total	0	11	2	9	0	22	0	62	308	12	0	382	1	54	2	39	0	96	0	5	327	51	0	383	0	883
2:00 PM	0	2	1	2	0	5	0	15	68	2	0	85	0	11	0	12	0	23	0	0	77	11	0	88	0	201
2:15 PM	0	2	1	3	0	6	1	19	75	1	0	96	0	13	1	16	0	30	0	2	90	6	0	98	0	230
2:30 PM	0	6	0	0	0	6	0	13	68	4	0	85	0	15	1	14	0	30	0	0	86	13	0	99	0	220
2:45 PM	0	4	1	1	0	6	0	10	70	1	0	81	0	9	0	15	0	24	0	0	104	15	0	119	0	230
Hourly Total	0	14	3	6	0	23	1	57	281	8	0	347	0	48	2	57	0	107	0	2	357	45	0	404	0	881
3:00 PM	0	2	0	2	0	4	0	10	73	3	0	86	0	10	0	16	0	26	0	0	81	7	0	88	0	204
3:15 PM	0	4	0	2	0	6	0	20	80	2	0	102	0	12	0	10	0	22	0	4	78	14	0	96	0	226
3:30 PM	0	4	0	0	0	4	0	18	97	5	0	120	0	15	0	14	0	29	0	3	91	8	0	102	0	255
3:45 PM	0	1	1	4	0	6	0	16	101	8	0	125	0	8	2	16	0	26	0	4	71	17	0	92	0	249
Hourly Total	0	11	1	8	0	20	0	64	351	18	0	433	0	45	2	56	0	103	0	11	321	46	0	378	0	934

**TMC 2382 - CSAH 12 @ Austin St**  
**0 0**

**Tuesday, August 22, 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	1	1	2	0	4	0	21	99	5	0	125	0	7	0	15	0	22	0	2	91	10	0	103	254
4:15 PM	0	5	1	2	0	8	0	12	112	9	0	133	0	7	0	19	0	26	0	0	91	9	0	100	267
4:30 PM	0	4	1	2	0	7	0	15	89	7	0	111	0	13	0	9	0	22	0	1	137	6	0	144	284
4:45 PM	0	0	0	0	0	0	0	15	119	3	0	137	0	11	1	15	0	27	0	1	108	8	0	117	281
Hourly Total	0	10	3	6	0	19	0	63	419	24	0	506	0	38	1	58	0	97	0	4	427	33	0	464	1086
5:00 PM	0	3	1	1	0	5	0	20	102	13	0	135	0	5	0	15	0	20	0	1	79	10	0	90	250
5:15 PM	0	2	1	4	0	7	0	14	88	6	0	108	0	14	1	9	0	24	0	3	103	4	0	110	249
5:30 PM	0	1	1	1	0	3	0	14	85	1	0	100	0	7	3	10	0	20	0	0	85	6	0	91	214
5:45 PM	0	5	1	3	0	9	0	13	87	4	0	104	0	12	1	9	0	22	0	2	60	11	0	73	208
Hourly Total	0	11	4	9	0	24	0	61	362	24	0	447	0	38	5	43	0	86	0	6	327	31	0	364	921
6:00 PM	0	1	1	2	0	4	0	14	74	2	0	90	0	7	1	15	0	23	0	4	74	12	0	90	207
6:15 PM	0	1	1	2	0	4	0	13	62	1	0	76	0	8	0	7	0	15	0	0	79	10	0	89	184
6:30 PM	0	5	1	0	0	6	0	13	78	2	0	93	0	5	1	11	0	17	0	3	72	5	0	80	196
6:45 PM	0	3	0	0	0	3	0	10	68	3	0	81	0	5	0	8	0	13	0	0	70	8	0	78	175
Hourly Total	0	10	3	4	0	17	0	50	282	8	0	340	0	25	2	41	0	68	0	7	295	35	0	337	762
7:00 PM	0	2	0	0	0	2	0	8	68	3	0	79	0	5	1	5	0	11	0	4	60	1	0	65	157
7:15 PM	0	2	0	3	0	5	0	7	48	4	0	59	0	4	0	8	0	12	0	3	67	10	0	80	156
7:30 PM	0	1	0	0	0	1	0	7	46	3	0	56	0	7	0	5	0	12	0	0	50	5	0	55	124
7:45 PM	0	1	0	0	0	1	0	8	46	2	0	56	0	5	1	3	0	9	0	4	66	5	0	75	141
Hourly Total	0	6	0	3	0	9	0	30	208	12	0	250	0	21	2	21	0	44	0	11	243	21	0	275	578
8:00 PM	0	4	0	0	0	4	0	8	48	3	0	59	0	8	0	4	0	12	0	2	72	7	0	81	156
8:15 PM	0	0	0	1	0	1	0	4	49	0	0	53	0	5	0	12	0	17	0	0	51	4	0	55	126
8:30 PM	0	0	0	2	0	2	0	10	41	2	0	53	0	4	0	5	0	9	0	1	41	5	0	47	111
8:45 PM	0	1	1	1	0	3	0	6	32	2	0	40	0	9	0	6	0	15	0	0	31	5	0	36	94
Hourly Total	0	5	1	4	0	10	0	28	170	7	0	205	0	26	0	27	0	53	0	3	195	21	0	219	487
9:00 PM	0	1	0	1	0	2	0	4	25	4	0	33	0	0	0	3	0	3	0	1	32	5	0	38	76
9:15 PM	0	2	0	0	0	2	0	7	39	3	0	49	0	2	0	4	0	6	0	1	32	0	0	33	90
9:30 PM	0	0	0	0	0	0	0	2	24	3	0	29	0	4	0	3	0	7	0	1	14	5	0	20	56
9:45 PM	0	2	0	2	0	4	0	10	18	1	0	29	0	0	0	0	0	0	0	3	25	4	0	32	65
Hourly Total	0	5	0	3	0	8	0	23	106	11	0	140	0	6	0	10	0	16	0	6	103	14	0	123	287
10:00 PM	0	0	1	1	0	2	0	9	18	1	0	28	0	6	1	2	0	9	0	1	15	0	0	16	55
10:15 PM	0	0	1	0	0	1	0	2	19	4	0	25	0	2	1	4	0	7	0	0	20	1	0	21	54
10:30 PM	0	1	0	0	0	1	0	0	14	1	0	15	0	0	0	5	0	5	0	0	18	8	0	26	47
10:45 PM	0	0	0	0	0	0	0	2	12	1	0	15	0	0	0	3	0	3	0	0	19	2	0	21	39
Hourly Total	0	1	2	1	0	4	0	13	63	7	0	83	0	8	2	14	0	24	0	1	72	11	0	84	195
11:00 PM	0	0	0	0	0	0	0	2	10	3	0	15	0	0	0	2	0	2	0	0	10	3	0	13	30
11:15 PM	0	0	0	0	0	0	0	1	7	1	0	9	0	0	0	1	0	1	0	0	9	1	0	10	20
11:30 PM	0	0	0	0	0	0	0	0	21	0	0	21	0	1	0	0	0	1	0	1	8	1	0	10	32
11:45 PM	0	0	0	0	0	0	0	2	7	0	0	9	0	1	0	0	0	1	0	0	8	0	0	8	18
Hourly Total	0	0	0	0	0	0	0	5	45	4	0	54	0	2	0	3	0	5	0	1	35	5	0	41	100
<b>DAILY TOTAL</b>	<b>1</b>	<b>190</b>	<b>45</b>	<b>99</b>	<b>0</b>	<b>335</b>	<b>2</b>	<b>973</b>	<b>4428</b>	<b>208</b>	<b>0</b>	<b>5611</b>	<b>2</b>	<b>593</b>	<b>32</b>	<b>727</b>	<b>0</b>	<b>1354</b>	<b>0</b>	<b>89</b>	<b>4631</b>	<b>703</b>	<b>1</b>	<b>5423</b>	<b>12723</b>
<b>Cars</b>	1	185	45	96	0	327	2	952	4363	203	0	5520	2	588	31	717	0	1338	0	88	4542	698	0	5328	12513
<b>Heavy Vehicles</b>	0	5	0	3	0	8	0	21	65	5	0	91	0	5	1	10	0	16	0	1	89	5	1	95	210
<b>Heavy Vehicle %</b>	0.00%	2.63%	0.00%	3.03%	0.00%	2.39%	0.00%	2.16%	1.47%	2.40%	0.00%	1.62%	0.00%	0.84%	3.13%	1.38%	0.00%	1.18%	0.00%	1.12%	1.92%	0.71%	100.00%	1.75%	1.65%

# TMC 2382 - CSAH 12 @ Austin St

0 0

Tuesday, August 22, 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							
10:45 AM	0	4	0	0	0	4	0	17	83	6	0	106	0	13	0	15	0	28	0	2	68	11	0	81	0	2	68	11	0	81	219
11:00 AM	0	2	2	2	0	6	0	23	82	3	0	108	0	10	2	6	0	18	0	1	61	2	0	64	0	1	61	2	0	64	196
11:15 AM	0	2	0	2	0	4	0	13	74	3	0	90	0	16	0	13	0	29	0	1	75	15	0	91	0	1	75	15	0	91	214
11:30 AM	0	1	0	2	0	3	0	17	93	4	0	114	0	13	1	17	0	31	0	1	84	23	0	108	0	1	84	23	0	108	256
Peak Hour Total	0	9	2	6	0	17	0	70	332	16	0	418	0	52	3	51	0	106	0	5	288	51	0	344	0	5	288	51	0	344	885
PHF	0.000	0.563	0.250	0.750	0.000	0.708	0.000	0.761	0.892	0.667	0.000	0.917	0.000	0.813	0.375	0.750	0.000	0.855	0.000	0.625	0.857	0.554	0.000	0.796	0.000	0.625	0.857	0.554	0.000	0.796	0.864

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL						
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total							
4:00 PM	0	1	1	2	0	4	0	21	99	5	0	125	0	7	0	15	0	22	0	2	91	10	0	103	0	2	91	10	0	103	254
4:15 PM	0	5	1	2	0	8	0	12	112	9	0	133	0	7	0	19	0	26	0	0	91	9	0	100	0	0	91	9	0	100	267
4:30 PM	0	4	1	2	0	7	0	15	89	7	0	111	0	13	0	9	0	22	0	1	137	6	0	144	0	1	137	6	0	144	284
4:45 PM	0	0	0	0	0	0	0	15	119	3	0	137	0	11	1	15	0	27	0	1	108	8	0	117	0	1	108	8	0	117	281
Peak Hour Total	0	10	3	6	0	19	0	63	419	24	0	506	0	38	1	58	0	97	0	4	427	33	0	464	0	4	427	33	0	464	1086
PHF	0.000	0.500	0.750	0.750	0.000	0.594	0.000	0.750	0.880	0.667	0.000	0.923	0.000	0.731	0.250	0.763	0.000	0.898	0.000	0.500	0.779	0.825	0.000	0.806	0.000	0.500	0.779	0.825	0.000	0.806	0.956

Total Vehicles On Leg				665		
Vehicles Entering Intersection			335		Vehicles Exiting Intersection	330
<b>Southbound</b>						
Cars	96	45	185	1	0	
Heavy	3	0	5	0	0	
<b>Total</b>	<b>99</b>	<b>45</b>	<b>190</b>	<b>1</b>	<b>0</b>	

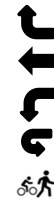


Total Vehicles on Leg 10543	Vehicles Entering Intersection 5423	Eastbound	Cars	Heavy	Total
			0	1	1
			0	0	0
	88		1	89	
	Vehicles Exiting Intersection 5120		4542	89	4631
		698	5	703	



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 5611	Total Vehicles on Leg 11161
203	5	208			
4363	65	4428			
952	21	973			
2	0	2			
0	0	0	Vehicles Exiting Intersection 5550		



Cars	0	2	588	31	717
Heavy	0	0	5	1	10
<b>Total</b>	<b>0</b>	<b>2</b>	<b>593</b>	<b>32</b>	<b>727</b>
<b>Northbound</b>					
Vehicles Entering Intersection			1354		
Vehicles Exiting Intersection			1723		
Total Vehicles On Leg			3077		

# 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
08/22/2023	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	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	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	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	0	0	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0
	3:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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	1	0	0	0
	4:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	6:15	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0
	6:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	1	0	0
	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
	7:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
	7:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
	8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	8:30	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	8:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	9:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	9:15	0	0	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0
	9:30	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	9:45	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	10:00	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	10:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0
	10:30	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0
	10:45	0	0	0	0	0	0	0	2	4	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0
	11:00	0	1	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0
	11:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	11:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	11:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0





# ANOKA COUNTY HIGHWAY

## PC - WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2382

Study Date : 08/25/2023

## Signal Warrants - Summary

### Major Street Approaches

Eastbound: CSAH 12

Number of Lanes : 1

Total Approach Volume: 5,423

Westbound: CSAH 12

Number of Lanes :2+

Total Approach Volume: 5,611

### Minor Street Approaches

Northbound: Austin St

Number of Lanes :1

Total Approach Volume: 1,354

Southbound: Austin St

Number of Lanes :1

Total Approach Volume: 335

### Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 4 hours, 8 are needed

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

Required volumes reached for 10 hours, 8 are needed

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

Required 1A volumes reached for 10 hours, 8 are needed

Required 1B volumes reached for 13 hours, 8 are needed

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

Number of hours (7) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (18) volumes exceed minimum >= required (1). Delay data not evaluated.

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

Volumes do not exceed minimums for any one hour period.

Warrant 4 - Pedestrian Volumes.....Not Evaluated

Warrant 5 - School Crossing.....Not Evaluated

Warrant 6 - Coordinated Signal System.....Not Evaluated

Warrant 7 - Crash Experience.....Not Evaluated

Warrant 8 - Roadway Network.....Not Evaluated

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

# ANOKA COUNTY HIGHWAY

## PC - WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2382

Study Date : 08/25/2023

## 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

Only 4 one hour periods meet minimums.  
Warrant is NOT met.

#### Site Data Required

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

#### Volume Requirements

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

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
11:45 - 12:45	423	+	431	=	854	115	14	Yes
12:45 - 13:45	369	+	401	=	770	105	29	Yes
10:45 - 11:45	344	+	418	=	762	106	17	Yes
13:45 - 14:45	396	+	350	=	746	108	21	Yes
16:00 - 17:00	464	+	506	=	970	97	19	No
16:15 - 17:15	451	+	516	=	967	95	20	No
16:30 - 17:30	461	+	491	=	952	93	19	No
15:45 - 16:45	439	+	494	=	933	96	25	No
15:30 - 16:30	397	+	503	=	900	103	22	No
16:45 - 17:45	408	+	480	=	888	91	15	No
15:15 - 16:15	393	+	472	=	865	99	20	No
15:00 - 16:00	378	+	433	=	811	103	20	No
17:00 - 18:00	364	+	447	=	811	86	24	No
14:45 - 15:45	405	+	389	=	794	101	20	No
17:15 - 18:15	364	+	402	=	766	89	23	No
10:30 - 11:30	330	+	399	=	729	98	20	No
17:30 - 18:30	343	+	370	=	713	80	20	No
10:15 - 11:15	316	+	381	=	697	85	22	No
17:45 - 18:45	332	+	363	=	695	77	23	No
10:00 - 11:00	325	+	361	=	686	92	22	No
18:00 - 19:00	337	+	340	=	677	68	17	No
07:15 - 08:15	320	+	325	=	645	77	25	No
18:15 - 19:15	312	+	329	=	641	56	15	No
09:45 - 10:45	311	+	322	=	633	88	26	No
07:30 - 08:30	317		309		626	85	26	No

# ANOKA COUNTY HIGHWAY

## PC - WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2382

Study Date : 08/25/2023

## 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

10 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	
15:45 - 16:45	439	+	494	=	933	96	25	Yes
16:45 - 17:45	408	+	480	=	888	91	15	Yes
11:45 - 12:45	423	+	431	=	854	115	14	Yes
14:45 - 15:45	405	+	389	=	794	101	20	Yes
12:45 - 13:45	369	+	401	=	770	105	29	Yes
10:45 - 11:45	344	+	418	=	762	106	17	Yes
13:45 - 14:45	396	+	350	=	746	108	21	Yes
17:45 - 18:45	332	+	363	=	695	77	23	Yes
07:15 - 08:15	320	+	325	=	645	77	25	Yes
09:45 - 10:45	311	+	322	=	633	88	26	Yes
07:00 - 08:00	288	+	319	=	607	70	27	No
09:30 - 10:30	300	+	298	=	598	88	27	No
06:45 - 07:45	292	+	288	=	580	69	26	No
09:15 - 10:15	303	+	275	=	578	94	29	No
18:45 - 19:45	278	+	275	=	553	48	11	No
09:00 - 10:00	277	+	264	=	541	84	31	No
08:45 - 09:45	282	+	251	=	533	79	30	No
19:00 - 20:00	275	+	250	=	525	44	9	No
19:15 - 20:15	291	+	230	=	521	45	11	No
08:30 - 09:30	270	+	248	=	518	82	29	No
08:15 - 09:15	256	+	257	=	513	85	28	No
06:30 - 07:30	262	+	242	=	504	65	21	No
19:30 - 20:30	266	+	224	=	490	50	7	No
19:45 - 20:45	258	+	221	=	479	47	8	No
06:15 - 07:15	235		223		458	55	23	No

# ANOKA COUNTY HIGHWAY

## PC - WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2382

Study Date : 08/25/2023

## 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

10 hours meet 1A minimums.  
13 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 12

#### Minor Road Austin St

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
16:00 - 17:00	464	+	506	=	970	97	19	Yes
12:00 - 13:00	441	+	426	=	867	121	22	Yes
15:00 - 16:00	378	+	433	=	811	103	20	Yes
17:00 - 18:00	364	+	447	=	811	86	24	Yes
13:00 - 14:00	383	+	382	=	765	96	22	Yes
11:00 - 12:00	342	+	420	=	762	106	16	Yes
14:00 - 15:00	404	+	347	=	751	107	23	Yes
10:00 - 11:00	325	+	361	=	686	92	22	Yes
07:30 - 08:30	317	+	309	=	626	85	26	Yes
09:00 - 10:00	277	+	264	=	541	84	31	Yes
18:00 - 19:00	337	+	340	=	677	68	17	No
07:15 - 08:15	320	+	325	=	645	77	25	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:30 - 17:30	461	+	491	=	952	93	19	Yes
15:30 - 16:30	397	+	503	=	900	103	22	Yes
11:30 - 12:30	393	+	448	=	841	108	15	Yes
12:30 - 13:30	410	+	419	=	829	116	24	Yes
14:30 - 15:30	402	+	354	=	756	102	22	Yes
13:30 - 14:30	394	+	344	=	738	105	22	Yes
10:30 - 11:30	330	+	399	=	729	98	20	Yes
17:30 - 18:30	343	+	370	=	713	80	20	Yes
07:30 - 08:30	317	+	309	=	626	85	26	Yes
18:30 - 19:30	303	+	312	=	615	53	16	Yes
09:30 - 10:30	300	+	298	=	598	88	27	Yes
08:30 - 09:30	270	+	248	=	518	82	29	Yes

# ANOKA COUNTY HIGHWAY

## PC - WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2382

Study Date : 08/25/2023

## 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.

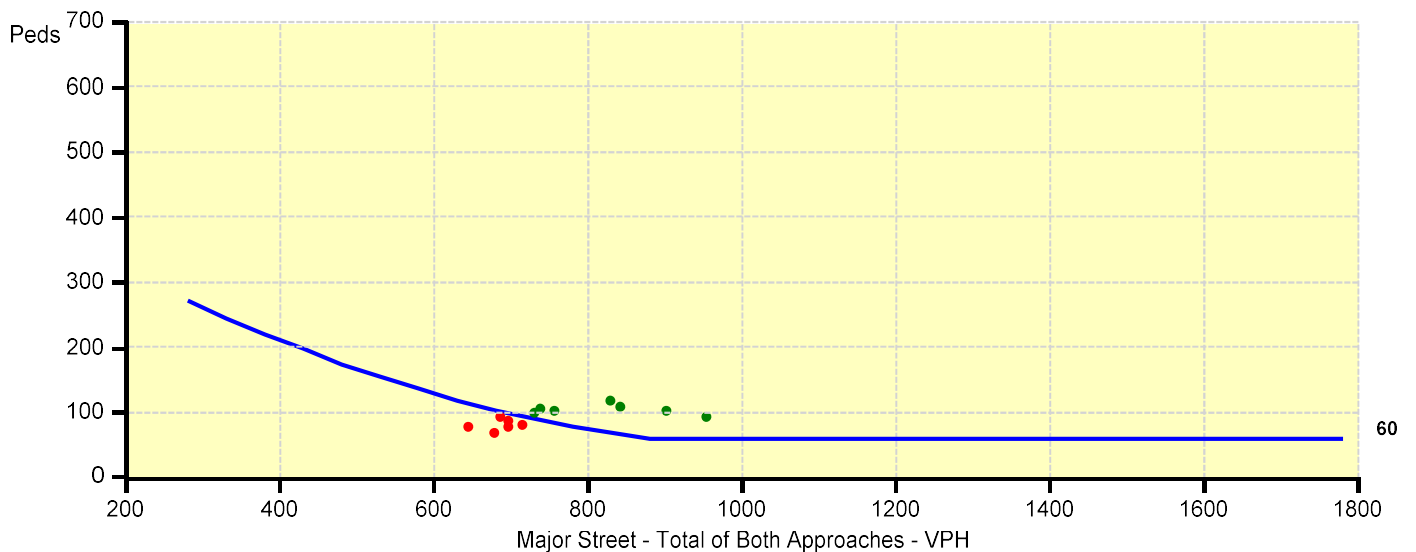
#### Summary

7 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 12				Total	Minor Road Austin St		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:30 - 17:30	461	+	491	=	952	93	19	Yes
15:30 - 16:30	397	+	503	=	900	103	22	Yes
11:30 - 12:30	393	+	448	=	841	108	15	Yes
12:30 - 13:30	410	+	419	=	829	116	24	Yes
14:30 - 15:30	402	+	354	=	756	102	22	Yes
13:30 - 14:30	394	+	344	=	738	105	22	Yes
10:30 - 11:30	330	+	399	=	729	98	20	Yes
17:30 - 18:30	343	+	370	=	713	80	20	No
10:15 - 11:15	316	+	381	=	697	85	22	No
17:45 - 18:45	332	+	363	=	695	77	23	No
10:00 - 11:00	325	+	361	=	686	92	22	No
18:00 - 19:00	337	+	340	=	677	68	17	No



# ANOKA COUNTY HIGHWAY

## PC - WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2382

Study Date : 08/25/2023

## 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

Only 0 one hour periods meet minimums.  
Warrant is NOT met.

#### Site Data Required

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

Time	Major Road CSAH 12				Total	Minor Road Austin St		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:00 - 17:00	464	+	506	=	970	97	19	No
16:15 - 17:15	451	+	516	=	967	95	20	No
16:30 - 17:30	461	+	491	=	952	93	19	No
15:45 - 16:45	439	+	494	=	933	96	25	No
15:30 - 16:30	397	+	503	=	900	103	22	No
16:45 - 17:45	408	+	480	=	888	91	15	No
12:00 - 13:00	441	+	426	=	867	121	22	No
15:15 - 16:15	393	+	472	=	865	99	20	No
12:15 - 13:15	433	+	426	=	859	112	22	No
11:45 - 12:45	423	+	431	=	854	115	14	No
11:30 - 12:30	393	+	448	=	841	108	15	No
12:30 - 13:30	410	+	419	=	829	116	24	No

