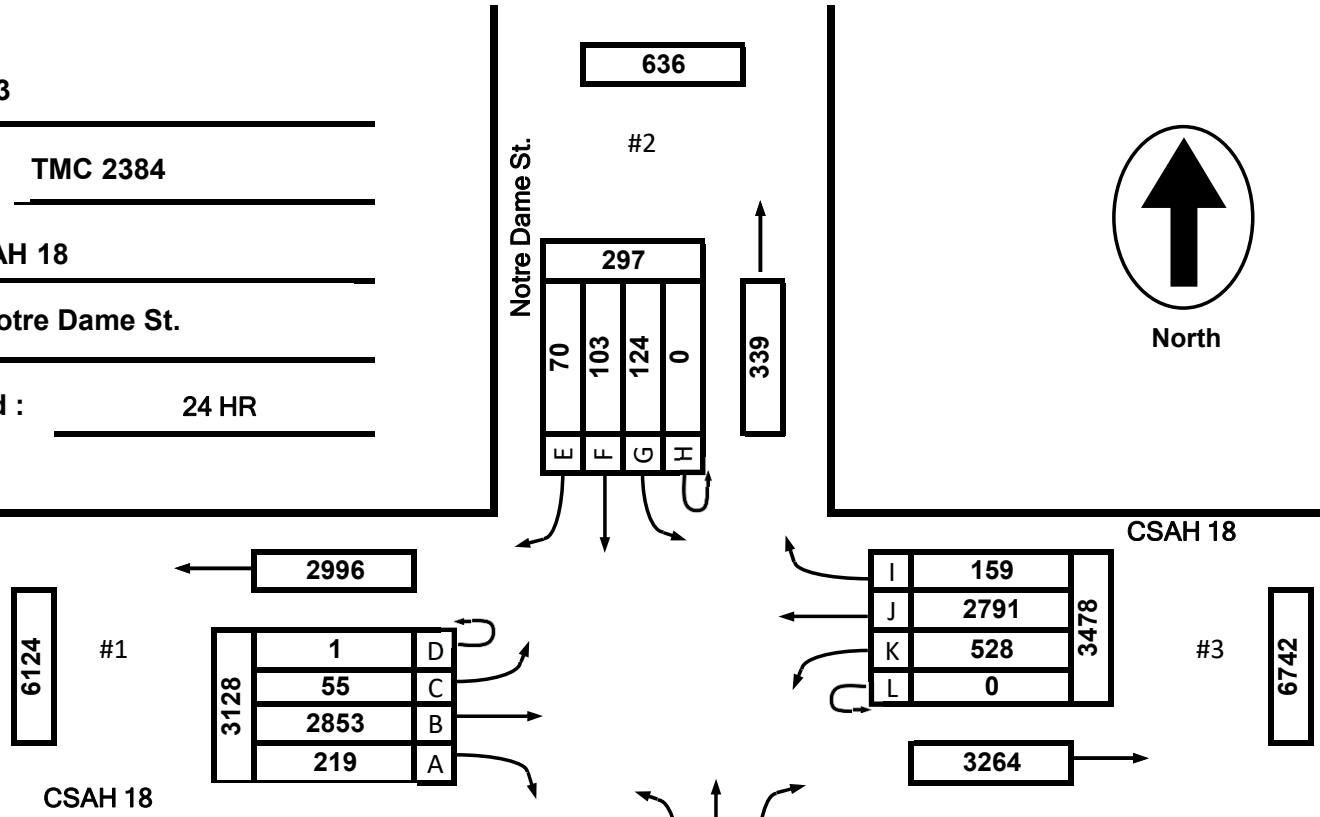
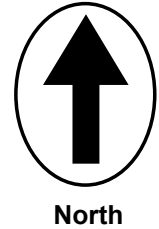


Date : 10/10/23

Count Number : TMC 2384

Location : CSAH 18
@ Notre Dame St.

Collection Period : 24 HR



CSAH 18

CSAH 18

Notre Dame St.

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

Anoka County Highway Department

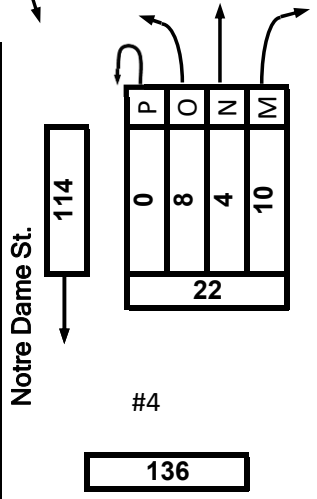
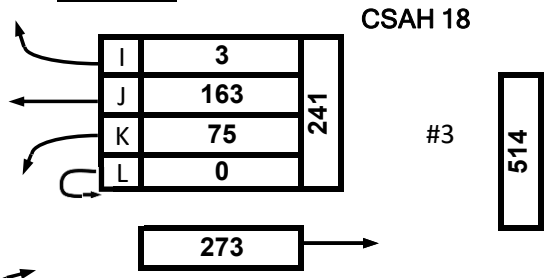
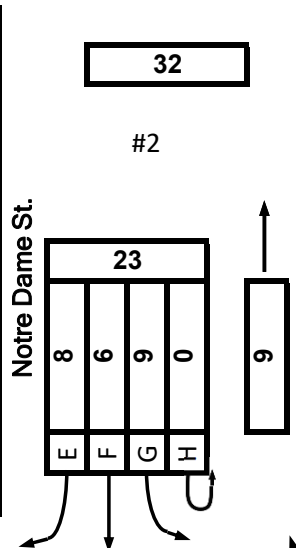
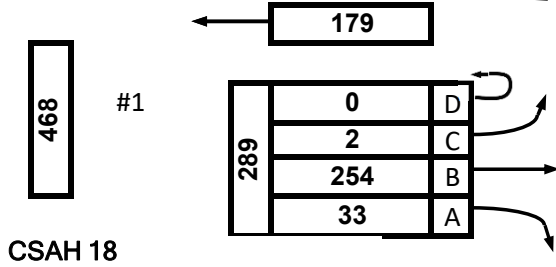
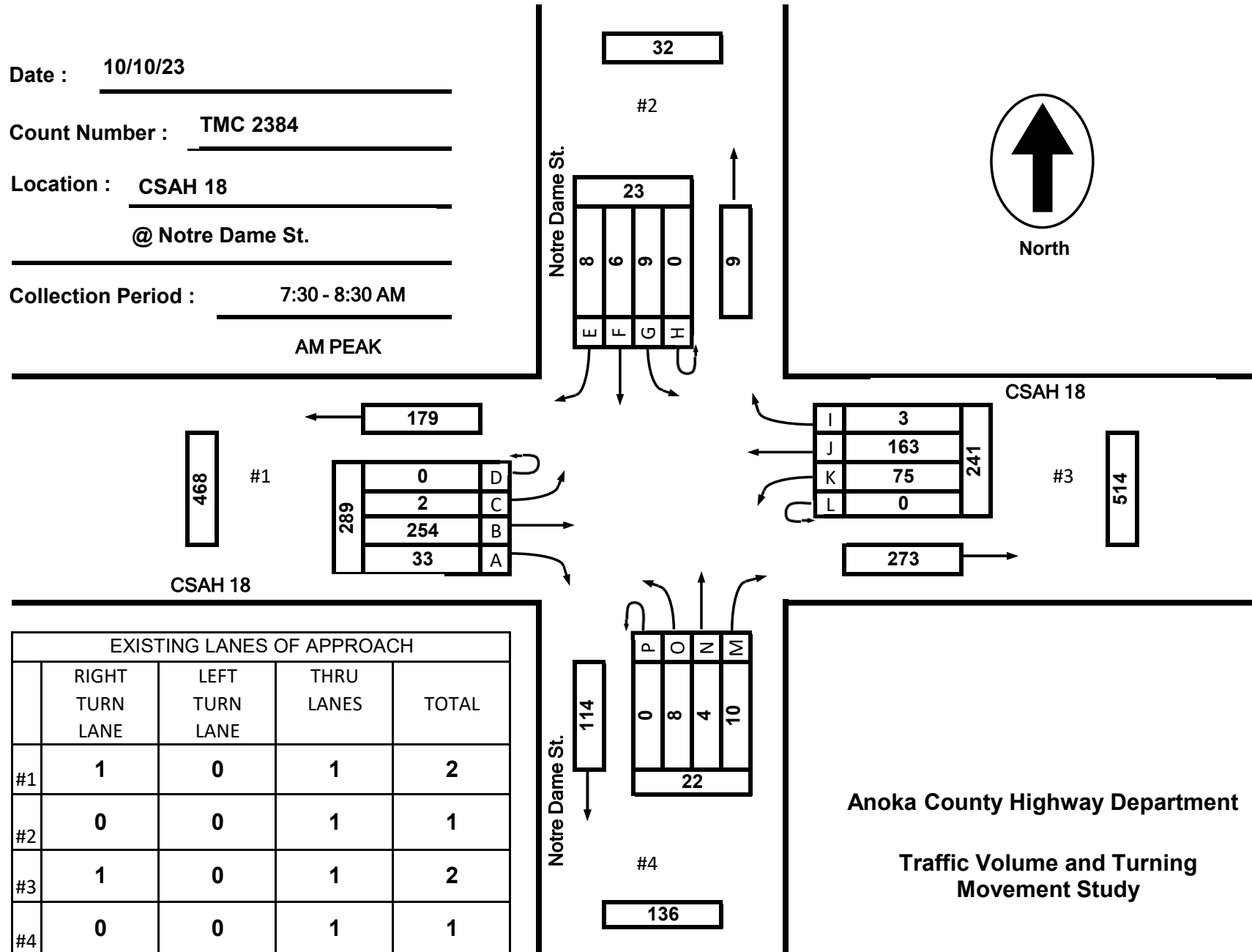
Traffic Volume and Turning Movement Study

Date : 10/10/23

Count Number : TMC 2384

Location : CSAH 18
@ Notre Dame St.

Collection Period : 7:30 - 8:30 AM
AM PEAK



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

Anoka County Highway Department

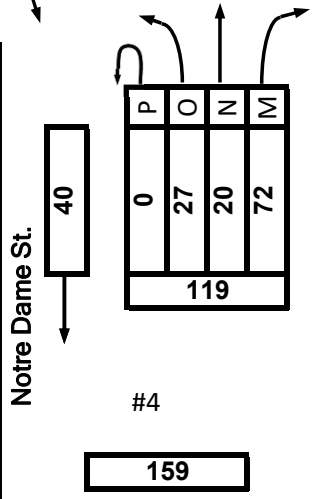
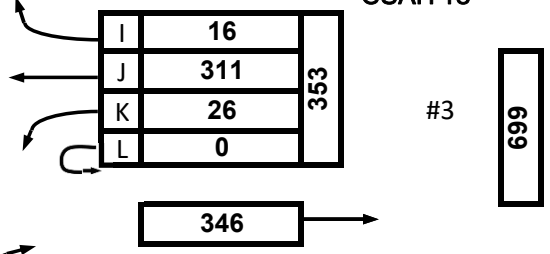
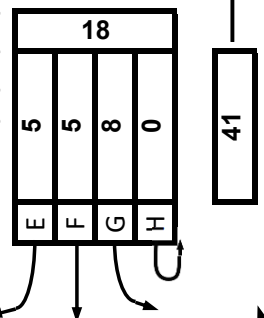
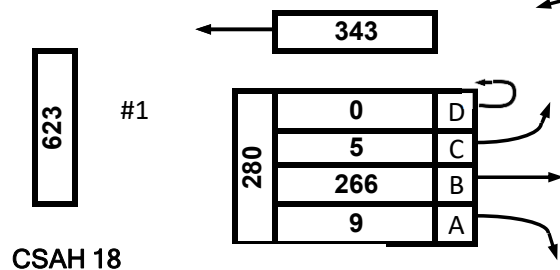
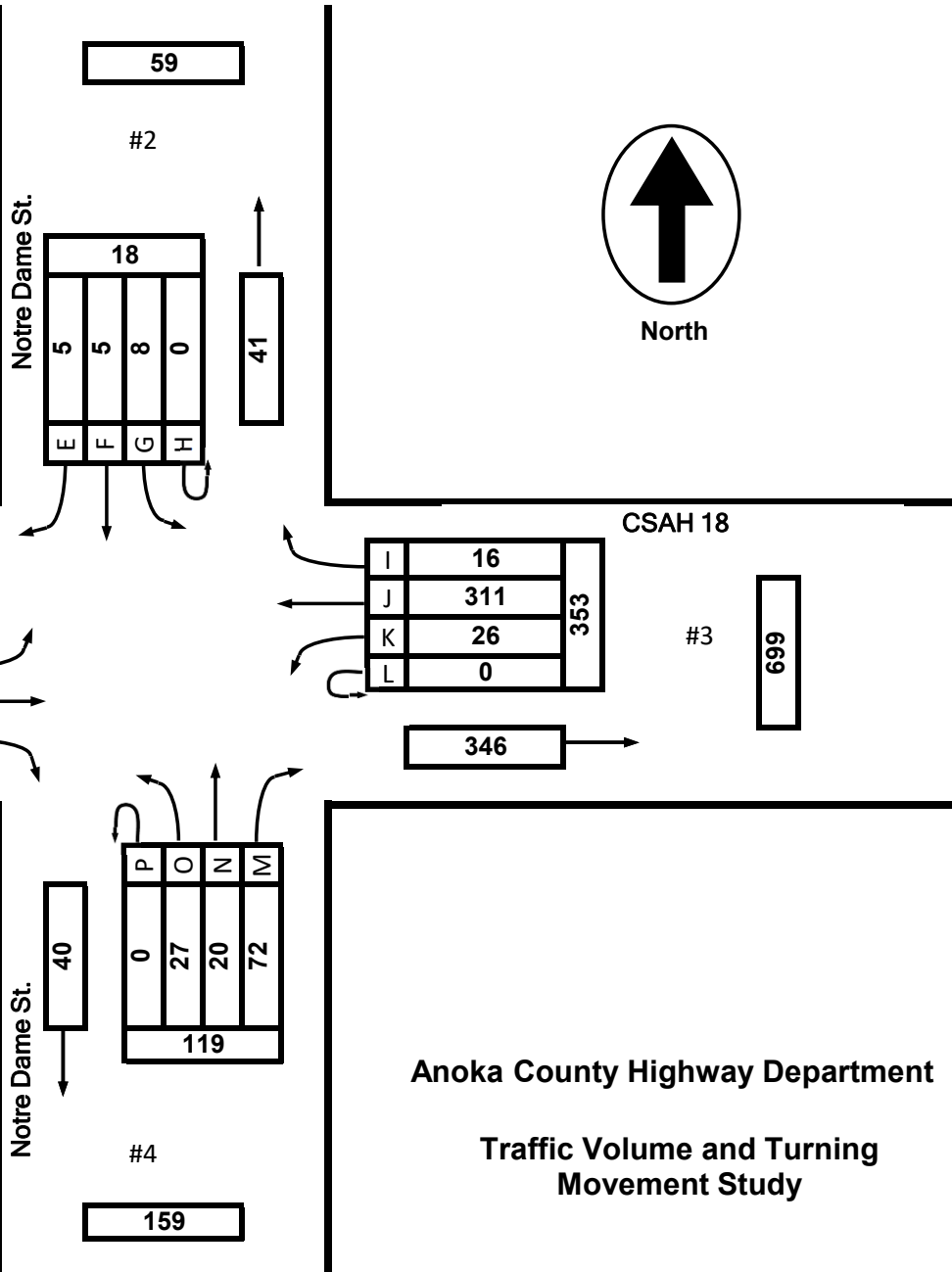
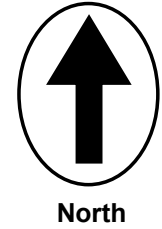
Traffic Volume and Turning Movement Study

Date : 10/10/23

Count Number : TMC 2384

Location : CSAH 18
@ Notre Dame St.

Collection Period : 3:45 - 4:45 PM
PM PEAK



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

Anoka County Highway Department
 Traffic Volume and Turning Movement Study

**TMC 2384 - CSAH 18 @ Notre Dame St.
Tuesday, October 10, 2023**

Time	Southbound Notre Dame St.						Westbound CSAH 18						Northbound Notre Dame St.						Eastbound CSAH 18						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	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	0	0	3	0	0	3	7
12:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	1	0	2	4
12:30 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	2	0	0	2	5
12:45 AM	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
Hourly Total	0	0	0	0	0	0	0	1	8	0	0	9	0	0	0	0	0	0	0	0	6	1	0	7	16
1:00 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	4
1:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
1:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	4	0	0	4	6
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Hourly Total	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	0	7	0	0	7	13
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	1	0	4	5
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	6	1	0	7	8
3:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2
3:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	4
3:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	0	0	4	5
Hourly Total	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	8	0	0	8	12
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
4:15 AM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	5	1	0	6	11
4:30 AM	0	1	0	0	0	1	0	0	3	0	0	3	0	0	0	0	0	0	0	0	8	0	0	8	12
4:45 AM	0	0	1	2	0	3	0	0	4	0	0	4	0	0	0	0	0	0	0	0	5	0	0	5	12
Hourly Total	0	1	1	2	0	4	0	0	12	0	0	12	0	0	0	0	0	0	0	0	20	1	0	21	37
5:00 AM	0	2	0	2	0	4	0	0	7	0	0	7	0	0	0	0	0	0	0	0	16	1	0	17	28
5:15 AM	0	1	1	0	0	2	0	0	10	0	0	10	0	0	0	1	0	1	0	0	14	1	0	15	28
5:30 AM	0	2	2	1	0	5	0	0	19	0	0	19	0	0	0	0	0	0	0	0	29	0	0	29	53
5:45 AM	0	0	1	1	0	2	0	2	18	0	0	20	0	0	0	0	0	0	0	0	33	2	0	35	57
Hourly Total	0	5	4	4	0	13	0	2	54	0	0	56	0	0	0	1	0	1	0	0	92	4	0	96	166
6:00 AM	0	4	0	0	0	4	0	0	19	0	0	19	0	1	0	0	0	1	0	0	22	0	0	22	46
6:15 AM	0	2	0	2	0	4	0	0	24	1	0	25	0	2	0	1	0	3	0	0	32	1	0	33	65
6:30 AM	0	4	3	1	0	8	0	4	36	0	0	40	0	0	1	1	0	2	0	1	37	3	0	41	91
6:45 AM	0	3	2	1	0	6	0	2	26	1	0	29	0	1	2	5	0	8	0	1	58	0	0	59	102
Hourly Total	0	13	5	4	0	22	0	6	105	2	0	113	0	4	3	7	0	14	0	2	149	4	0	155	304
7:00 AM	0	4	1	1	0	6	0	8	29	1	0	38	0	0	0	6	0	6	0	1	66	6	0	73	123
7:15 AM	0	2	3	1	0	6	0	7	31	0	0	38	0	0	0	4	0	4	0	0	90	1	0	91	139
7:30 AM	0	6	2	2	0	10	0	14	50	0	0	64	0	2	2	3	0	7	0	0	76	3	0	79	160
7:45 AM	0	1	2	0	0	3	0	12	35	1	0	48	0	1	1	6	0	8	0	0	70	6	0	76	135
Hourly Total	0	13	8	4	0	25	0	41	145	2	0	188	0	3	3	19	0	25	0	1	302	16	0	319	557

**TMC 2384 - CSAH 18 @ Notre Dame St.
Tuesday, October 10, 2023**

Time	Southbound Notre Dame St.						Westbound CSAH 18						Northbound Notre Dame St.						Eastbound CSAH 18						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	0	1	3	0	4	0	14	48	0	0	62	0	3	0	1	0	4	0	1	63	6	0	70	140
8:15 AM	0	2	1	3	0	6	0	35	30	2	0	67	0	2	1	0	0	3	0	1	45	18	0	64	140
8:30 AM	0	2	2	2	0	6	0	21	30	4	0	55	0	3	1	0	0	4	0	0	34	7	0	41	106
8:45 AM	0	2	6	0	0	8	0	19	24	3	0	46	0	2	4	8	0	14	0	0	65	11	0	76	144
Hourly Total	0	6	10	8	0	24	0	89	132	9	0	230	0	10	6	9	0	25	0	2	207	42	0	251	530
9:00 AM	0	3	4	3	0	10	0	23	24	4	0	51	0	6	1	44	0	51	0	2	47	14	0	63	175
9:15 AM	0	2	0	0	0	2	0	16	33	1	0	50	0	3	1	8	0	12	0	0	33	10	0	43	107
9:30 AM	0	2	1	1	0	4	0	12	27	0	0	39	0	0	1	3	0	4	0	1	44	2	0	47	94
9:45 AM	0	3	2	1	0	6	0	6	32	1	0	39	0	0	1	3	0	4	0	2	32	5	0	39	88
Hourly Total	0	10	7	5	0	22	0	57	116	6	0	179	0	9	4	58	0	71	0	5	156	31	0	192	464
10:00 AM	0	0	7	0	0	7	0	10	28	3	0	41	0	0	1	2	0	3	0	0	23	0	0	23	74
10:15 AM	0	1	0	0	0	1	0	18	28	2	0	48	0	3	2	2	0	7	0	2	47	7	0	56	112
10:30 AM	0	0	0	0	0	0	0	8	55	1	0	64	0	1	0	1	0	2	0	1	36	0	0	37	103
10:45 AM	0	2	0	1	0	3	0	8	26	0	0	34	0	2	2	1	0	5	0	0	36	7	0	43	85
Hourly Total	0	3	7	1	0	11	0	44	137	6	0	187	0	6	5	6	0	17	0	3	142	14	0	159	374
11:00 AM	0	1	5	2	0	8	0	3	33	1	0	37	0	1	0	2	0	3	0	0	45	4	0	49	97
11:15 AM	0	2	2	0	0	4	0	13	36	2	0	51	0	1	1	1	0	3	0	1	32	2	0	35	93
11:30 AM	0	2	4	1	0	7	0	13	39	4	0	56	0	2	1	4	0	7	0	2	37	3	0	42	112
11:45 AM	0	2	2	0	0	4	0	13	38	4	0	55	0	2	1	4	0	7	0	0	39	6	0	45	111
Hourly Total	0	7	13	3	0	23	0	42	146	11	0	199	0	6	3	11	0	20	0	3	153	15	0	171	413
12:00 PM	0	3	0	0	0	3	0	10	43	3	0	56	0	0	0	7	0	7	0	0	34	4	0	38	104
12:15 PM	0	1	2	0	0	3	0	11	38	5	0	54	0	0	3	3	0	6	0	1	41	1	0	43	106
12:30 PM	0	1	2	1	0	4	0	9	41	2	0	52	0	3	2	4	0	9	1	0	34	4	0	39	104
12:45 PM	0	4	1	1	0	6	0	14	41	2	0	57	0	2	0	4	0	6	0	1	40	1	0	42	111
Hourly Total	0	9	5	2	0	16	0	44	163	12	0	219	0	5	5	18	0	28	1	2	149	10	0	162	425
1:00 PM	0	1	0	1	0	2	0	6	33	3	0	42	0	0	3	2	0	5	0	1	44	0	0	45	94
1:15 PM	0	1	0	4	0	5	0	2	40	4	0	46	0	1	1	1	0	3	0	0	37	2	0	39	93
1:30 PM	0	4	1	1	0	6	0	8	51	3	0	62	0	1	6	4	0	11	0	0	38	3	0	41	120
1:45 PM	0	3	4	1	0	8	0	11	52	2	0	65	0	2	1	3	0	6	0	2	45	5	0	52	131
Hourly Total	0	9	5	7	0	21	0	27	176	12	0	215	0	4	11	10	0	25	0	3	164	10	0	177	438
2:00 PM	0	0	0	1	0	1	0	6	46	3	0	55	0	2	3	2	0	7	0	0	39	2	0	41	104
2:15 PM	0	0	1	4	0	5	0	12	53	1	0	66	0	1	3	2	0	6	0	1	39	1	0	41	118
2:30 PM	0	3	2	2	0	7	0	7	73	4	0	84	0	3	1	2	0	6	0	1	38	6	0	45	142
2:45 PM	0	2	6	1	0	9	0	12	70	7	0	89	0	1	3	1	0	5	0	1	31	2	0	34	137
Hourly Total	0	5	9	8	0	22	0	37	242	15	0	294	0	7	10	7	0	24	0	3	147	11	0	161	501
3:00 PM	0	0	1	3	0	4	0	17	62	3	0	82	0	3	2	1	0	6	0	1	35	3	0	39	131
3:15 PM	0	3	1	1	0	5	0	27	70	2	0	99	0	3	1	0	0	4	0	1	46	6	0	53	161
3:30 PM	0	3	2	3	0	8	0	17	56	4	0	77	0	7	6	4	0	17	0	0	57	10	0	67	169
3:45 PM	0	1	1	0	0	2	0	7	71	2	0	80	0	12	8	44	0	64	0	1	68	4	0	73	219
Hourly Total	0	7	5	7	0	19	0	68	259	11	0	338	0	25	17	49	0	91	0	3	206	23	0	232	680

**TMC 2384 - CSAH 18 @ Notre Dame St.
Tuesday, October 10, 2023**

Time	Southbound Notre Dame St.						Westbound CSAH 18						Northbound Notre Dame St.						Eastbound CSAH 18						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	3	0	1	0	4	0	11	82	3	0	96	0	8	7	6	0	21	0	1	54	1	0	56	177
4:15 PM	0	1	2	2	0	5	0	2	76	7	0	85	0	2	0	15	0	17	0	1	77	2	0	80	187
4:30 PM	0	3	2	2	0	7	0	6	82	4	0	92	0	5	5	7	0	17	0	2	67	2	0	71	187
4:45 PM	0	2	1	0	0	3	0	6	83	4	0	93	0	9	5	6	0	20	0	1	63	7	0	71	187
Hourly Total	0	9	5	5	0	19	0	25	323	18	0	366	0	24	17	34	0	75	0	5	261	12	0	278	738
5:00 PM	0	4	6	0	0	10	0	5	77	3	0	85	0	3	0	7	0	10	0	2	61	4	0	67	172
5:15 PM	0	2	0	1	0	3	0	6	78	5	0	89	0	3	3	5	0	11	0	3	59	1	0	63	166
5:30 PM	0	1	1	0	0	2	0	5	62	3	0	70	0	2	2	5	0	9	0	1	54	3	0	58	139
5:45 PM	0	3	3	0	0	6	0	3	62	3	0	68	0	5	5	4	0	14	0	1	48	2	0	51	139
Hourly Total	0	10	10	1	0	21	0	19	279	14	0	312	0	13	10	21	0	44	0	7	222	10	0	239	616
6:00 PM	0	2	2	1	0	5	0	9	42	4	0	55	0	1	2	7	0	10	0	2	48	3	0	53	123
6:15 PM	0	0	3	1	0	4	0	5	62	5	0	72	0	1	1	0	0	2	0	1	51	5	0	57	135
6:30 PM	0	4	0	2	0	6	0	2	35	1	0	38	0	0	3	1	0	4	0	2	32	0	0	34	82
6:45 PM	0	0	1	3	0	4	0	2	37	4	0	43	0	3	3	5	0	11	0	2	37	1	0	40	98
Hourly Total	0	6	6	7	0	19	0	18	176	14	0	208	0	5	9	13	0	27	0	7	168	9	0	184	438
7:00 PM	0	3	2	1	0	6	0	1	31	4	0	36	0	5	2	12	0	19	0	1	30	1	0	32	93
7:15 PM	0	2	1	0	0	3	0	0	34	4	0	38	0	3	1	3	0	7	0	2	18	1	0	21	69
7:30 PM	0	1	0	0	0	1	0	3	39	2	0	44	0	2	3	0	0	5	0	0	29	1	0	30	80
7:45 PM	0	1	0	0	0	1	0	0	28	5	0	33	0	0	4	0	0	4	0	0	21	0	0	21	59
Hourly Total	0	7	3	1	0	11	0	4	132	15	0	151	0	10	10	15	0	35	0	3	98	3	0	104	301
8:00 PM	0	0	0	0	0	0	0	2	28	2	0	32	0	1	2	2	0	5	0	3	21	0	0	24	61
8:15 PM	0	2	0	0	0	2	0	0	19	3	0	22	0	1	3	3	0	7	0	0	35	1	0	36	67
8:30 PM	0	0	0	0	0	0	0	0	16	1	0	17	0	0	4	0	0	4	0	0	13	0	0	13	34
8:45 PM	0	0	0	0	0	0	0	1	30	0	0	31	0	0	0	2	0	2	0	0	21	0	0	21	54
Hourly Total	0	2	0	0	0	2	0	3	93	6	0	102	0	2	9	7	0	18	0	3	90	1	0	94	216
9:00 PM	0	0	0	0	0	0	0	0	14	1	0	15	0	0	0	1	0	1	0	1	18	0	0	19	35
9:15 PM	0	0	0	0	0	0	0	0	19	2	0	21	0	0	0	0	0	0	0	0	18	0	0	18	39
9:30 PM	0	1	0	0	0	1	0	0	6	1	0	7	0	0	1	0	0	1	0	0	22	0	0	22	31
9:45 PM	0	1	0	0	0	1	0	0	9	0	0	9	0	0	0	0	0	0	0	1	9	1	0	11	21
Hourly Total	0	2	0	0	0	2	0	0	48	4	0	52	0	0	1	1	0	2	0	2	67	1	0	70	126
10:00 PM	0	0	0	0	0	0	0	1	7	0	0	8	0	0	0	0	0	0	0	1	17	0	0	18	26
10:15 PM	0	0	0	0	0	0	0	0	6	0	0	6	0	1	0	1	0	2	0	0	7	0	0	7	15
10:30 PM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	3	0	0	3	7
10:45 PM	0	0	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	0	0	2	0	0	2	9
Hourly Total	0	0	0	0	0	0	0	1	23	1	0	25	0	1	0	1	0	2	0	1	29	0	0	30	57
11:00 PM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
11:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	3
11:30 PM	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	0	0	0	0	0	3	0	0	3	8
11:45 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Hourly Total	0	0	0	1	0	1	0	0	13	0	0	13	0	0	1	0	0	1	0	0	4	0	0	4	19
DAILY TOTAL	0	124	103	70	0	297	0	528	2791	159	0	3478	0	134	125	287	0	546	1	55	2853	219	0	3128	7449
Cars	0	119	99	62	0	280	0	519	2679	149	0	3347	0	126	121	271	0	518	1	52	2738	203	0	2994	7139
Heavy Vehicles	0	5	4	8	0	17	0	9	112	10	0	131	0	8	4	16	0	28	0	3	115	16	0	134	310
Heavy Vehicle %	0.00%	4.03%	3.88%	11.43%	0.00%	5.72%	0.00%	1.70%	4.01%	6.29%	0.00%	3.77%	0.00%	5.97%	3.20%	5.57%	0.00%	5.13%	0.00%	5.45%	4.03%	7.31%	0.00%	4.28%	4.16%

**TMC 2384 - CSAH 18 @ Notre Dame St.
Tuesday, October 10, 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	
7:30 AM	0	6	2	2	0	10	0	14	50	0	0	64	0	2	2	3	0	7	0	0	76	3	0	79	160
7:45 AM	0	1	2	0	0	3	0	12	35	1	0	48	0	1	1	6	0	8	0	0	70	6	0	76	135
8:00 AM	0	0	1	3	0	4	0	14	48	0	0	62	0	3	0	1	0	4	0	1	63	6	0	70	140
8:15 AM	0	2	1	3	0	6	0	35	30	2	0	67	0	2	1	0	0	3	0	1	45	18	0	64	140
Peak Hour Total	0	9	6	8	0	23	0	75	163	3	0	241	0	8	4	10	0	22	0	2	254	33	0	289	575
PHF	0.000	0.375	0.750	0.667	0.000	0.575	0.000	0.536	0.815	0.375	0.000	0.899	0.000	0.667	0.500	0.417	0.000	0.688	0.000	0.500	0.836	0.458	0.000	0.915	0.898

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	
3:45 PM	0	1	1	0	0	2	0	7	71	2	0	80	0	12	8	44	0	64	0	1	68	4	0	73	219
4:00 PM	0	3	0	1	0	4	0	11	82	3	0	96	0	8	7	6	0	21	0	1	54	1	0	56	177
4:15 PM	0	1	2	2	0	5	0	2	76	7	0	85	0	2	0	15	0	17	0	1	77	2	0	80	187
4:30 PM	0	3	2	2	0	7	0	6	82	4	0	92	0	5	5	7	0	17	0	2	67	2	0	71	187
Peak Hour Total	0	8	5	5	0	18	0	26	311	16	0	353	0	27	20	72	0	119	0	5	266	9	0	280	770
PHF	0.000	0.667	0.625	0.625	0.000	0.643	0.000	0.591	0.948	0.571	0.000	0.919	0.000	0.563	0.625	0.409	0.000	0.465	0.000	0.625	0.864	0.563	0.000	0.875	0.879

Total Vehicles On Leg		636	
Vehicles Entering Intersection	297	Vehicles Exiting Intersection	339
Southbound			
Cars	62	99	119
Heavy	8	4	5
Total	70	103	124

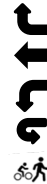


Total Vehicles on Leg 6124	Vehicles Entering Intersection 3128	Eastbound	Cars	Heavy	Total
			0	0	0
	1		0	1	
	52		3	55	
	2738		115	2853	
Vehicles Exiting Intersection 2996			203	16	219



Daily Volumes

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 3478	Total Vehicles on Leg 6742
149	10	159			
2679	112	2791			
519	9	528			
0	0	0			
0	0	0	Vehicles Exiting Intersection 3264		



Cars	0	0	126	121	271
Heavy	0	0	8	4	16
Total	0	0	134	125	287
Northbound					
Vehicles Entering Intersection	546	Vehicles Exiting Intersection	850		
Total Vehicles On Leg	1396				



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

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2384

Study Date : 10/16/2023

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 18

Number of Lanes : 1

Total Approach Volume: 3,128

Westbound: CSAH 18

Number of Lanes : 1

Total Approach Volume: 3,478

Minor Street Approaches

Northbound: Notre Dame St.

Number of Lanes : 1

Total Approach Volume: 546

Southbound: Notre Dame St.

Number of Lanes : 1

Total Approach Volume: 297

Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Not Satisfied

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

Required volumes reached for 1 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied

Required volumes reached for 2 hours, 8 are needed

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

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

Required 1B volumes reached for 4 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Not Satisfied

Number of hours (1) volumes exceed minimum < minimum required (4).

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

Warrant 3A - Peak Hour Delay.....Not Satisfied

Approach volumes on minor street don't exceed minimums for any one hour period. 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 2384

Study Date : 10/16/2023

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

Site Data Required

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

Volume Requirements

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

Veh/Hr Minor = **105**

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:15 - 16:15	249	+	352	=	601	106	19	Yes
16:15 - 17:15	289	+	355	=	644	64	25	No
16:30 - 17:30	272	+	359	=	631	58	23	No
16:45 - 17:45	259	+	337	=	596	50	18	No
15:00 - 16:00	232	+	338	=	570	91	19	No
17:00 - 18:00	239	+	312	=	551	44	21	No
14:45 - 15:45	193	+	347	=	540	32	26	No
07:30 - 08:30	289	+	241	=	530	22	23	No
07:15 - 08:15	316	+	212	=	528	23	23	No
14:30 - 15:30	171	+	354	=	525	21	25	No
07:00 - 08:00	319	+	188	=	507	25	25	No
17:15 - 18:15	225	+	282	=	507	44	16	No
17:30 - 18:30	219	+	265	=	484	35	17	No
07:45 - 08:45	251	+	232	=	483	19	19	No
08:00 - 09:00	251	+	230	=	481	25	24	No
14:15 - 15:15	159	+	321	=	480	23	25	No
06:45 - 07:45	302	+	169	=	471	25	28	No
08:15 - 09:15	244	+	219	=	463	72	30	No
14:00 - 15:00	161	+	294	=	455	24	22	No
13:45 - 14:45	179	+	270	=	449	25	21	No
17:45 - 18:45	195	+	233	=	428	30	21	No
08:30 - 09:30	223	+	202	=	425	81	26	No
13:30 - 14:30	175	+	248	=	423	30	20	No
08:45 - 09:45	229	+	186	=	415	81	24	No
06:30 - 07:30	264		145		409	20	26	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2384

Study Date : 10/16/2023

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

Only 2 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

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

Time	Major Road				Total	Minor Road		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:00 - 17:00	278	+	366	=	644	75	19	Yes
15:00 - 16:00	232	+	338	=	570	91	19	Yes
17:00 - 18:00	239	+	312	=	551	44	21	No
14:45 - 15:45	193	+	347	=	540	32	26	No
07:30 - 08:30	289	+	241	=	530	22	23	No
07:15 - 08:15	316	+	212	=	528	23	23	No
14:30 - 15:30	171	+	354	=	525	21	25	No
07:00 - 08:00	319	+	188	=	507	25	25	No
17:15 - 18:15	225	+	282	=	507	44	16	No
17:30 - 18:30	219	+	265	=	484	35	17	No
07:45 - 08:45	251	+	232	=	483	19	19	No
08:00 - 09:00	251	+	230	=	481	25	24	No
14:15 - 15:15	159	+	321	=	480	23	25	No
06:45 - 07:45	302	+	169	=	471	25	28	No
08:15 - 09:15	244	+	219	=	463	72	30	No
14:00 - 15:00	161	+	294	=	455	24	22	No
13:45 - 14:45	179	+	270	=	449	25	21	No
17:45 - 18:45	195	+	233	=	428	30	21	No
08:30 - 09:30	223	+	202	=	425	81	26	No
13:30 - 14:30	175	+	248	=	423	30	20	No
08:45 - 09:45	229	+	186	=	415	81	24	No
06:30 - 07:30	264	+	145	=	409	20	26	No
13:15 - 14:15	173	+	228	=	401	27	20	No
18:00 - 19:00	184	+	208	=	392	27	19	No
13:00 - 14:00	177		215		392	25	21	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2384

Study Date : 10/16/2023

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

Only 1 hours meet 1A minimums.
Only 4 hours meet 1B minimums.
Warrant is NOT met.

Site Data Required

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

Volume Requirements

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

Veh/Hr Minor = **84 42**

Major Road CSAH 18

Minor Road Notre Dame St.

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1A?
15:00 - 16:00	232	+	338	=	570	91	19	Yes
16:00 - 17:00	278	+	366	=	644	75	19	No
16:15 - 17:15	289	+	355	=	644	64	25	No
16:30 - 17:30	272	+	359	=	631	58	23	No
16:45 - 17:45	259	+	337	=	596	50	18	No
17:00 - 18:00	239	+	312	=	551	44	21	No
14:45 - 15:45	193	+	347	=	540	32	26	No
07:30 - 08:30	289	+	241	=	530	22	23	No
07:15 - 08:15	316	+	212	=	528	23	23	No
14:30 - 15:30	171	+	354	=	525	21	25	No
17:15 - 18:15	225	+	282	=	507	44	16	No
07:00 - 08:00	319	+	188	=	507	25	25	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:00 - 17:00	278	+	366	=	644	75	19	Yes
15:00 - 16:00	232	+	338	=	570	91	19	Yes
17:00 - 18:00	239	+	312	=	551	44	21	Yes
08:15 - 09:15	244	+	219	=	463	72	30	Yes
14:45 - 15:45	193	+	347	=	540	32	26	No
07:30 - 08:30	289	+	241	=	530	22	23	No
07:15 - 08:15	316	+	212	=	528	23	23	No
14:30 - 15:30	171	+	354	=	525	21	25	No
07:00 - 08:00	319	+	188	=	507	25	25	No
07:45 - 08:45	251	+	232	=	483	19	19	No
08:00 - 09:00	251	+	230	=	481	25	24	No
14:15 - 15:15	159	+	321	=	480	23	25	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2384

Study Date : 10/16/2023

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.

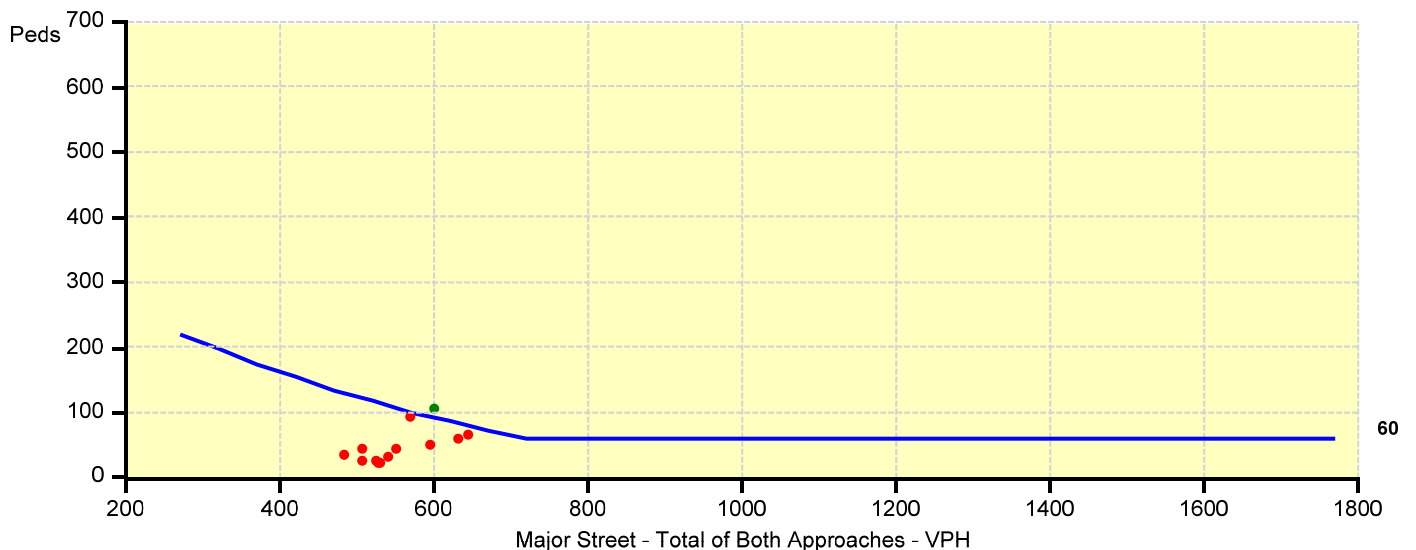
Summary

Only 1 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

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

Time	Major Road CSAH 18				Total	Minor Road Notre Dame St.		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:15 - 16:15	249	+	352	=	601	106	19	Yes
16:15 - 17:15	289	+	355	=	644	64	25	No
16:30 - 17:30	272	+	359	=	631	58	23	No
16:45 - 17:45	259	+	337	=	596	50	18	No
15:00 - 16:00	232	+	338	=	570	91	19	No
17:00 - 18:00	239	+	312	=	551	44	21	No
14:45 - 15:45	193	+	347	=	540	32	26	No
07:30 - 08:30	289	+	241	=	530	22	23	No
07:15 - 08:15	316	+	212	=	528	23	23	No
14:30 - 15:30	171	+	354	=	525	21	25	No
07:00 - 08:00	319	+	188	=	507	25	25	No
17:15 - 18:15	225	+	282	=	507	44	16	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2384

Study Date : 10/16/2023

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

Time	Major Road CSAH 18				Total	Minor Road Notre Dame St.		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:15 - 17:15	289	+	355	=	644	64	25	No
16:00 - 17:00	278	+	366	=	644	75	19	No
15:45 - 16:45	280	+	353	=	633	119	18	No
16:30 - 17:30	272	+	359	=	631	58	23	No
15:30 - 16:30	276	+	338	=	614	119	19	No
15:15 - 16:15	249	+	352	=	601	106	19	No
16:45 - 17:45	259	+	337	=	596	50	18	No
15:00 - 16:00	232	+	338	=	570	91	19	No
17:00 - 18:00	239	+	312	=	551	44	21	No
14:45 - 15:45	193	+	347	=	540	32	26	No
07:30 - 08:30	289	+	241	=	530	22	23	No
07:15 - 08:15	316	+	212	=	528	23	23	No

