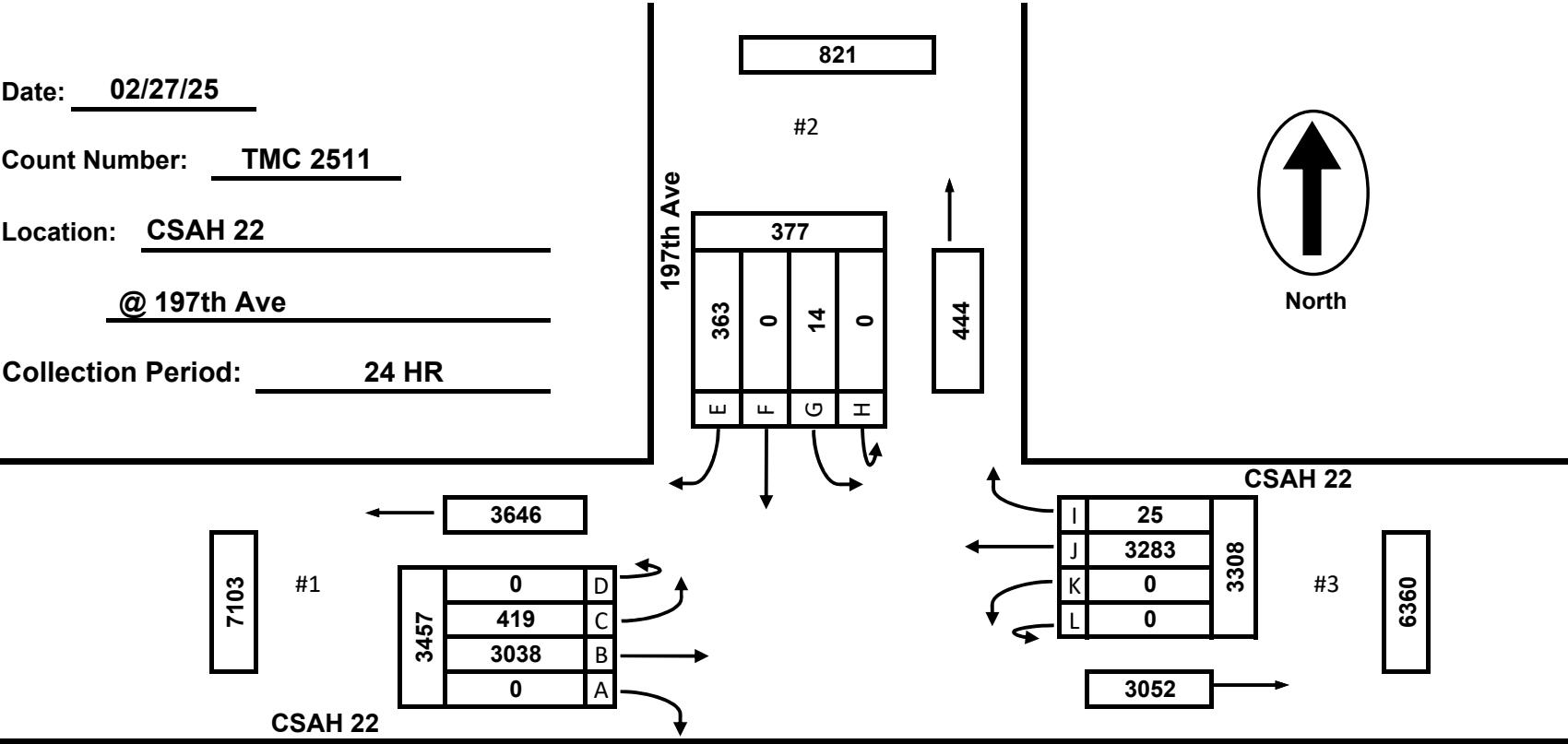


Date: 02/27/25

Count Number: TMC 2511

Location: CSAH 22
@ 197th Ave

Collection Period: 24 HR

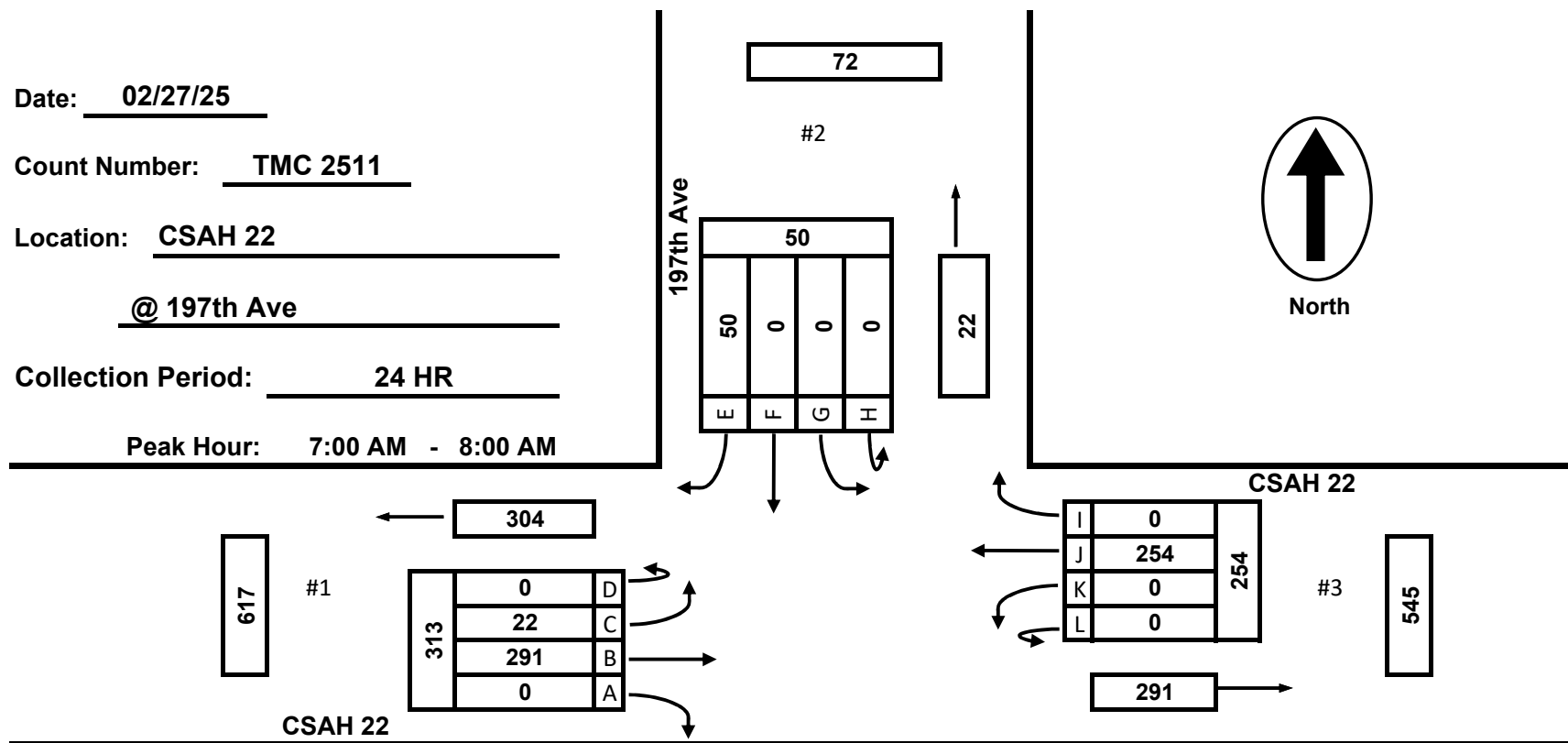


EXISTING LANES OF APPROACH				
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	TOTAL
#1	0	0	1	1
#2	1	0	0	1
#3	1	0	1	2
#4	0	0	0	0

Anoka County
Highway Department

Traffic Volume and Turning
Movement Study

Peak Hour: 7:00 AM - 8:00 AM



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

**Anoka County
Highway Department
Traffic Volume and Turning
Movement Study**

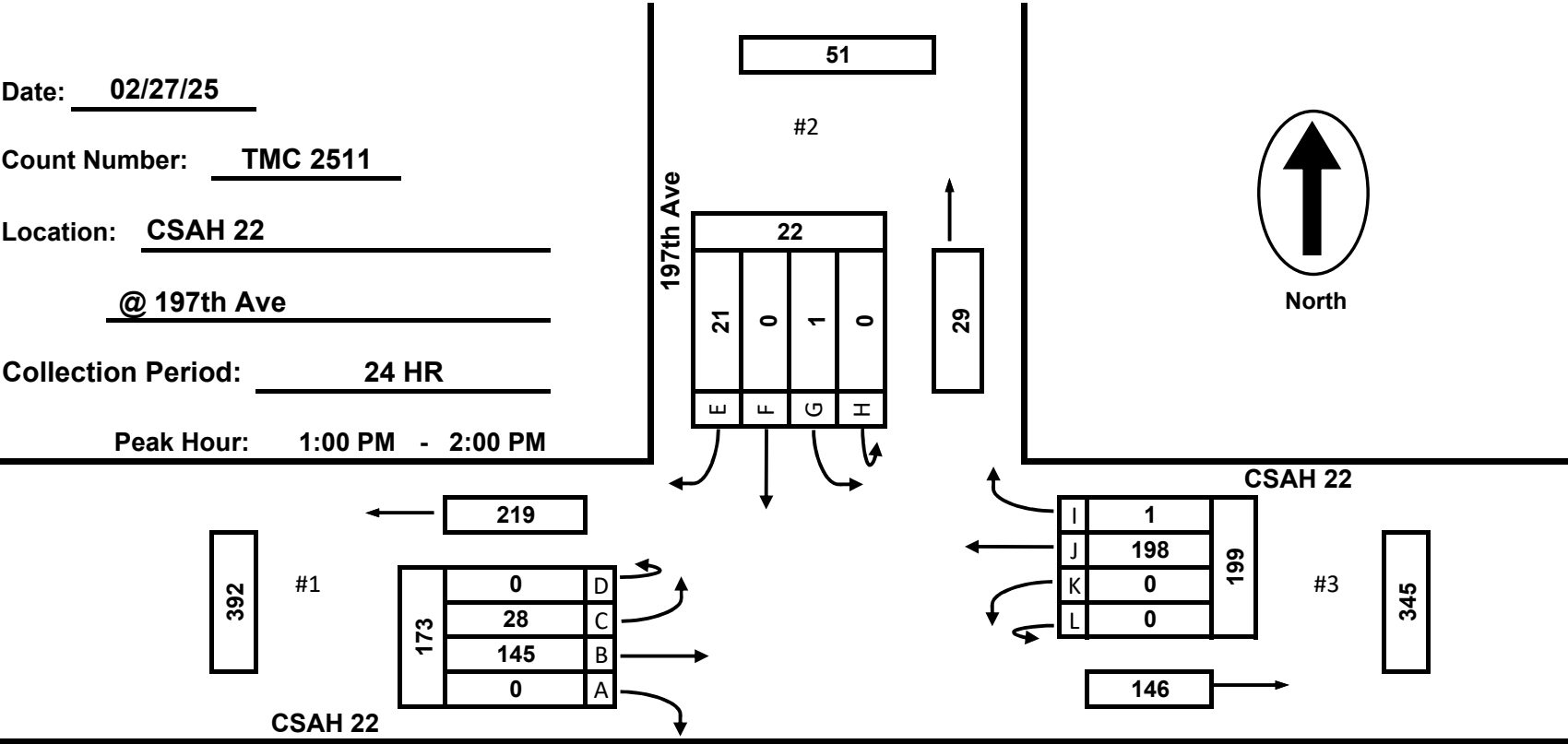
Date: 02/27/25

Count Number: TMC 2511

Location: CSAH 22
@ 197th Ave

Collection Period: 24 HR

Peak Hour: 1:00 PM - 2:00 PM



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

Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

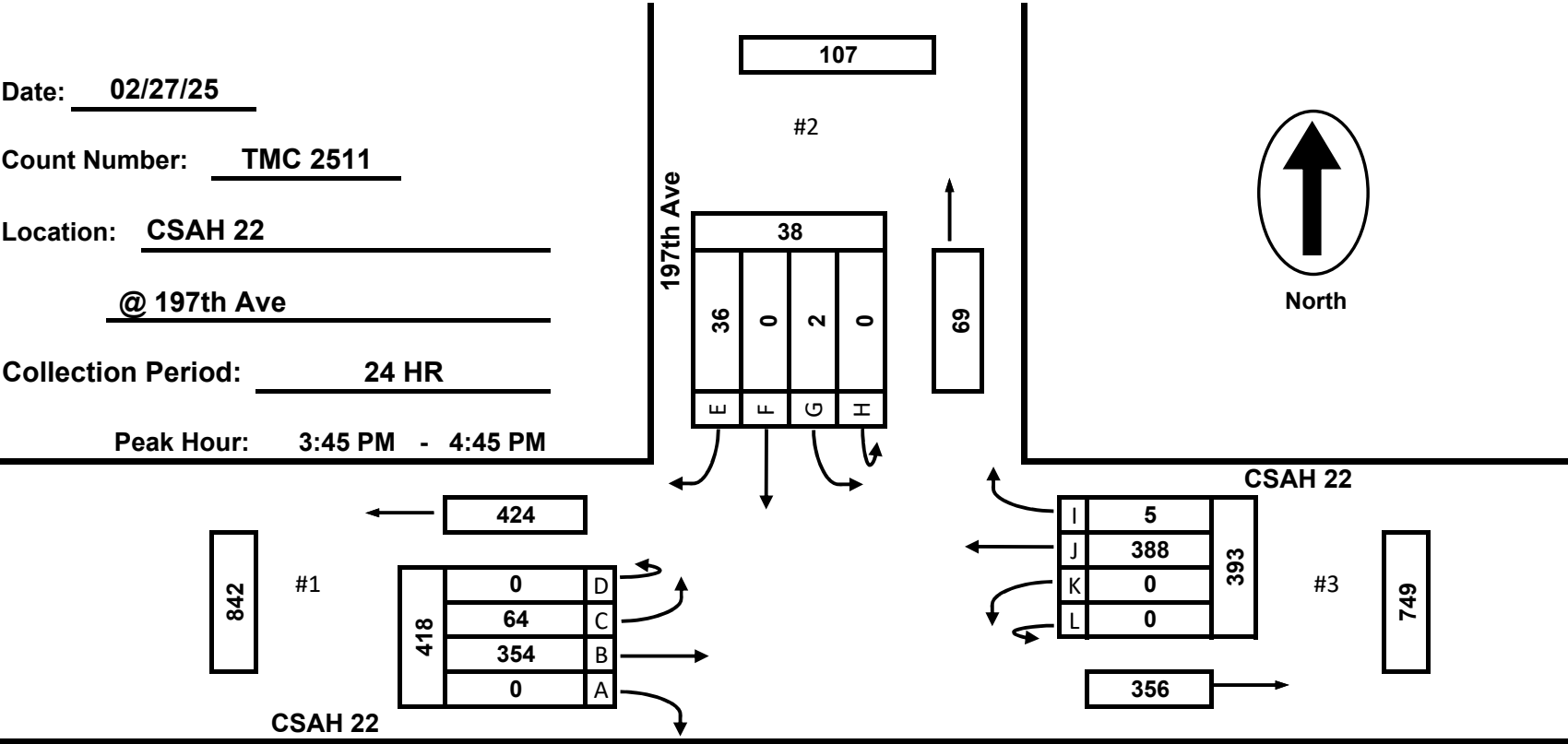
Date: 02/27/25

Count Number: TMC 2511

Location: CSAH 22
@ 197th Ave

Collection Period: 24 HR

Peak Hour: 3:45 PM - 4:45 PM



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

Anoka County
Highway Department

Traffic Volume and Turning
Movement Study

TMC 2511 - CSAH 22 @ 197th Ave
Oak Grove MN
Thursday, February 27, 2025

Time	Southbound 197th Ave						Westbound CSAH 22						Northbound None						Eastbound CSAH 22						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	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
12:15 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
12:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
12:45 AM	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hourly Total	0	0	0	1	0	1	0	0	3	0	0	3	0	0	0	0	0	0	0	1	4	0	0	5	9
1:00 AM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	1	0	0	1	5
1:15 AM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
1:30 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
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	9	0	0	9	0	0	0	0	0	0	0	0	2	0	0	2	11
2:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	3	0	0	4	6
2:15 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
2:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	2
2:45 AM	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	3
Hourly Total	0	0	0	1	0	1	0	0	5	0	0	5	0	0	0	0	0	0	0	2	7	0	0	9	15
3:00 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
3:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	0	0	5	8
3:30 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4
3:45 AM	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	8	0	0	8	0	0	0	0	0	0	0	0	9	0	0	9	18
4:00 AM	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	0	0	0	0	2	3	0	0	5	10
4:15 AM	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	7	0	0	7	17
4:30 AM	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	4	0	0	4	12
4:45 AM	0	0	0	1	0	1	0	0	9	0	0	9	0	0	0	0	0	0	0	0	14	0	0	14	24
Hourly Total	0	0	0	2	0	2	0	0	31	0	0	31	0	0	0	0	0	0	0	2	28	0	0	30	63
5:00 AM	0	0	0	4	0	4	0	0	11	0	0	11	0	0	0	0	0	0	0	0	14	0	0	14	29
5:15 AM	0	0	0	3	0	3	0	0	24	0	0	24	0	0	0	0	0	0	0	1	12	0	0	13	40
5:30 AM	0	0	0	7	0	7	0	0	22	0	0	22	0	0	0	0	0	0	0	0	28	0	0	28	57
5:45 AM	0	0	0	6	0	6	0	0	29	0	0	29	0	0	0	0	0	0	0	2	29	0	0	31	66
Hourly Total	0	0	0	20	0	20	0	0	86	0	0	86	0	0	0	0	0	0	0	3	83	0	0	86	192
6:00 AM	0	0	0	5	0	5	0	0	19	0	0	19	0	0	0	0	0	0	0	3	23	0	0	26	50
6:15 AM	0	0	0	13	0	13	0	0	41	0	0	41	0	0	0	0	0	0	0	4	30	0	0	34	88
6:30 AM	0	0	0	9	0	9	0	0	44	1	0	45	0	0	0	0	0	0	0	1	58	0	0	59	113
6:45 AM	0	0	0	12	0	12	0	0	64	0	0	64	0	0	0	0	0	0	0	2	43	0	0	45	121
Hourly Total	0	0	0	39	0	39	0	0	168	1	0	169	0	0	0	0	0	0	0	10	154	0	0	164	372
7:00 AM	0	0	0	17	0	17	0	0	73	0	0	73	0	0	0	0	0	0	0	3	61	0	0	64	154
7:15 AM	0	0	0	12	0	12	0	0	55	0	0	55	0	0	0	0	0	0	0	3	83	0	0	86	153
7:30 AM	0	0	0	12	0	12	0	0	67	0	0	67	0	0	0	0	0	0	0	8	82	0	0	90	169
7:45 AM	0	0	0	9	0	9	0	0	59	0	0	59	0	0	0	0	0	0	0	8	65	0	0	73	141
Hourly Total	0	0	0	50	0	50	0	0	254	0	0	254	0	0	0	0	0	0	0	22	291	0	0	313	617

TMC 2511 - CSAH 22 @ 197th Ave
Oak Grove MN
Thursday, February 27, 2025

Time	Southbound 197th Ave						Westbound CSAH 22						Northbound None						Eastbound CSAH 22						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	0	13	0	13	0	0	35	0	0	35	0	0	0	0	0	0	0	2	65	0	0	67	115
8:15 AM	0	0	0	4	0	4	0	0	35	1	0	36	0	0	0	0	0	0	0	4	62	0	0	66	106
8:30 AM	0	0	0	7	0	7	0	0	49	0	0	49	0	0	0	0	0	0	0	4	48	0	0	52	108
8:45 AM	0	0	0	6	0	6	0	0	38	0	0	38	0	0	0	0	0	0	0	6	67	0	0	73	117
Hourly Total	0	0	0	30	0	30	0	0	157	1	0	158	0	0	0	0	0	0	0	16	242	0	0	258	446
9:00 AM	0	0	0	7	0	7	0	0	43	0	0	43	0	0	0	0	0	0	0	7	50	0	0	57	107
9:15 AM	0	0	0	7	0	7	0	0	31	0	0	31	0	0	0	0	0	0	0	5	31	0	0	36	74
9:30 AM	0	0	0	5	0	5	0	0	33	0	0	33	0	0	0	0	0	0	0	5	26	0	0	31	69
9:45 AM	0	1	0	2	0	3	0	0	38	0	0	38	0	0	0	0	0	0	0	2	38	0	0	40	81
Hourly Total	0	1	0	21	0	22	0	0	145	0	0	145	0	0	0	0	0	0	0	19	145	0	0	164	331
10:00 AM	0	0	0	6	0	6	0	0	47	0	0	47	0	0	0	0	0	0	0	3	32	0	0	35	88
10:15 AM	0	0	0	6	0	6	0	0	53	0	0	53	0	0	0	0	0	0	0	5	35	0	0	40	99
10:30 AM	0	1	0	4	0	5	0	0	40	0	0	40	0	0	0	0	0	0	0	10	36	0	0	46	91
10:45 AM	0	3	0	2	0	5	0	0	34	1	0	35	0	0	0	0	0	0	0	3	45	0	0	48	88
Hourly Total	0	4	0	18	0	22	0	0	174	1	0	175	0	0	0	0	0	0	0	21	148	0	0	169	366
11:00 AM	0	1	0	1	0	2	0	0	33	0	0	33	0	0	0	0	0	0	0	6	36	0	0	42	77
11:15 AM	0	0	0	7	0	7	0	0	33	0	0	33	0	0	0	0	0	0	0	2	43	0	0	45	85
11:30 AM	0	0	0	2	0	2	0	0	34	0	0	34	0	0	0	0	0	0	0	0	31	0	0	31	67
11:45 AM	0	0	0	2	0	2	0	0	41	0	0	41	0	0	0	0	0	0	0	6	38	0	0	44	87
Hourly Total	0	1	0	12	0	13	0	0	141	0	0	141	0	0	0	0	0	0	0	14	148	0	0	162	316
12:00 PM	0	0	0	2	0	2	0	0	33	0	0	33	0	0	0	0	0	0	0	3	32	0	0	35	70
12:15 PM	0	1	0	4	0	5	0	0	52	0	0	52	0	0	0	0	0	0	0	5	46	0	0	51	108
12:30 PM	0	1	0	4	0	5	0	0	39	0	0	39	0	0	0	0	0	0	0	5	39	0	0	44	88
12:45 PM	0	1	0	5	0	6	0	0	42	1	0	43	0	0	0	0	0	0	0	3	46	0	0	49	98
Hourly Total	0	3	0	15	0	18	0	0	166	1	0	167	0	0	0	0	0	0	0	16	163	0	0	179	364
1:00 PM	0	1	0	3	0	4	0	0	43	0	0	43	0	0	0	0	0	0	0	8	26	0	0	34	81
1:15 PM	0	0	0	11	0	11	0	0	42	0	0	42	0	0	0	0	0	0	0	8	33	0	0	41	94
1:30 PM	0	0	0	6	0	6	0	0	47	1	0	48	0	0	0	0	0	0	0	5	38	0	0	43	97
1:45 PM	0	0	0	1	0	1	0	0	66	0	0	66	0	0	0	0	0	0	0	7	48	0	0	55	122
Hourly Total	0	1	0	21	0	22	0	0	198	1	0	199	0	0	0	0	0	0	0	28	145	0	0	173	394
2:00 PM	0	0	0	4	0	4	0	0	52	0	0	52	0	0	0	0	0	0	0	4	39	0	0	43	99
2:15 PM	0	0	0	4	0	4	0	0	40	0	0	40	0	0	0	0	0	0	0	14	47	0	0	61	105
2:30 PM	0	0	0	8	0	8	0	0	72	0	0	72	0	0	0	0	0	0	0	2	47	0	0	49	129
2:45 PM	0	0	0	4	0	4	0	0	61	1	0	62	0	0	0	0	0	0	0	15	59	0	0	74	140
Hourly Total	0	0	0	20	0	20	0	0	225	1	0	226	0	0	0	0	0	0	0	35	192	0	0	227	473
3:00 PM	0	0	0	6	0	6	0	0	54	1	0	55	0	0	0	0	0	0	0	11	66	0	0	77	138
3:15 PM	0	1	0	6	0	7	0	0	81	2	0	83	0	0	0	0	0	0	0	6	66	0	0	72	162
3:30 PM	0	0	0	5	0	5	0	0	78	2	0	80	0	0	0	0	0	0	0	8	61	0	0	69	154
3:45 PM	0	0	0	6	0	6	0	0	86	1	0	87	0	0	0	0	0	0	0	20	81	0	0	101	194
Hourly Total	0	1	0	23	0	24	0	0	299	6	0	305	0	0	0	0	0	0	0	45	274	0	0	319	648

TMC 2511 - CSAH 22 @ 197th Ave
Oak Grove MN
Thursday, February 27, 2025

Time	Southbound 197th Ave						Westbound CSAH 22						Northbound None						Eastbound CSAH 22						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	<i>Vehicle Approach Total</i>	
4:00 PM	0	0	0	8	0	8	0	0	115	1	0	116	0	0	0	0	0	0	0	14	75	0	0	89	213
4:15 PM	0	1	0	12	0	13	0	0	90	2	0	92	0	0	0	0	0	0	0	13	101	0	0	114	219
4:30 PM	0	1	0	10	0	11	0	0	97	1	0	98	0	0	0	0	0	0	0	17	97	0	0	114	223
4:45 PM	0	0	0	6	0	6	0	0	72	0	0	72	0	0	0	0	0	0	0	15	78	0	0	93	171
Hourly Total	0	2	0	36	0	38	0	0	374	4	0	378	0	0	0	0	0	0	0	59	351	0	0	410	826
5:00 PM	0	0	0	8	0	8	0	0	103	0	0	103	0	0	0	0	0	0	0	8	69	0	0	77	188
5:15 PM	0	0	0	10	0	10	0	0	82	2	0	84	0	0	0	0	0	0	0	17	62	0	0	79	173
5:30 PM	0	0	0	5	0	5	0	0	60	0	0	60	0	0	0	0	0	0	0	12	53	0	0	65	130
5:45 PM	0	0	0	5	0	5	0	0	72	0	0	72	0	0	0	0	0	0	0	5	56	0	0	61	138
Hourly Total	0	0	0	28	0	28	0	0	317	2	0	319	0	0	0	0	0	0	0	42	240	0	0	282	629
6:00 PM	0	0	0	4	0	4	0	0	62	1	0	63	0	0	0	0	0	0	0	9	52	0	0	61	128
6:15 PM	0	0	0	4	0	4	0	0	46	0	0	46	0	0	0	0	0	0	0	6	30	0	0	36	86
6:30 PM	0	0	0	3	0	3	0	0	51	1	0	52	0	0	0	0	0	0	0	5	31	0	0	36	91
6:45 PM	0	0	0	2	0	2	0	0	26	0	0	26	0	0	0	0	0	0	0	5	38	0	0	43	71
Hourly Total	0	0	0	13	0	13	0	0	185	2	0	187	0	0	0	0	0	0	0	25	151	0	0	176	376
7:00 PM	0	0	0	1	0	1	0	0	30	1	0	31	0	0	0	0	0	0	0	5	28	0	0	33	65
7:15 PM	0	1	0	0	0	1	0	0	31	1	0	32	0	0	0	0	0	0	0	4	25	0	0	29	62
7:30 PM	0	0	0	0	0	0	0	0	38	0	0	38	0	0	0	0	0	0	0	4	15	0	0	19	57
7:45 PM	0	0	0	1	0	1	0	0	31	0	0	31	0	0	0	0	0	0	0	8	22	0	0	30	62
Hourly Total	0	1	0	2	0	3	0	0	130	2	0	132	0	0	0	0	0	0	0	21	90	0	0	111	246
8:00 PM	0	0	0	2	0	2	0	0	16	1	0	17	0	0	0	0	0	0	0	7	20	0	0	27	46
8:15 PM	0	0	0	1	0	1	0	0	28	0	0	28	0	0	0	0	0	0	0	3	15	0	0	18	47
8:30 PM	0	0	0	0	0	0	0	0	26	0	0	26	0	0	0	0	0	0	0	6	21	0	0	27	53
8:45 PM	0	0	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	0	1	16	0	0	17	34
Hourly Total	0	0	0	3	0	3	0	0	87	1	0	88	0	0	0	0	0	0	0	17	72	0	0	89	180
9:00 PM	0	0	0	1	0	1	0	0	18	0	0	18	0	0	0	0	0	0	0	4	18	0	0	22	41
9:15 PM	0	0	0	1	0	1	0	0	15	0	0	15	0	0	0	0	0	0	0	2	11	0	0	13	29
9:30 PM	0	0	0	0	0	0	0	0	19	1	0	20	0	0	0	0	0	0	0	4	11	0	0	15	35
9:45 PM	0	0	0	2	0	2	0	0	9	0	0	9	0	0	0	0	0	0	0	2	13	0	0	15	26
Hourly Total	0	0	0	4	0	4	0	0	61	1	0	62	0	0	0	0	0	0	0	12	53	0	0	65	131
10:00 PM	0	0	0	1	0	1	0	0	14	0	0	14	0	0	0	0	0	0	0	4	8	0	0	12	27
10:15 PM	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	2	8	0	0	10	18
10:30 PM	0	0	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	0	0	10	0	0	10	15
10:45 PM	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	0	0	6	0	0	6	16
Hourly Total	0	0	0	1	0	1	0	0	36	1	0	37	0	0	0	0	0	0	0	6	32	0	0	38	76
11:00 PM	0	0	0	1	0	1	0	0	6	0	0	6	0	0	0	0	0	0	0	0	2	0	0	2	9
11:15 PM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	1	4	0	0	5	11
11:30 PM	0	0	0	1	0	1	0	0	4	0	0	4	0	0	0	0	0	0	0	1	4	0	0	5	10
11:45 PM	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	1	4	0	0	5	13
Hourly Total	0	0	0	2	0	2	0	0	24	0	0	24	0	0	0	0	0	0	0	3	14	0	0	17	43
DAILY TOTAL	0	14	0	363	0	377	0	0	3283	25	0	3308	0	0	0	0	0	0	0	419	3038	0	0	3457	7142
Cars	0	14	0	359	0	373	0	0	3152	24	0	3176	0	0	0	0	0	0	0	412	2907	0	0	3319	6868
Heavy Vehicles	0	0	0	4	0	4	0	0	131	1	0	132	0	0	0	0	0	0	0	7	131	0	0	138	274
Heavy Vehicle %	0.00%	0.00%	0.00%	1.10%	0.00%	1.06%	0.00%	0.00%	3.99%	4.00%	0.00%	3.99%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.67%	4.31%	0.00%	0.00%	3.99%	3.84%

TMC 2511 - CSAH 22 @ 197th Ave
Oak Grove MN
Thursday, February 27, 2025
AM Peak Hour (00:00 to 10:00)

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	0	0	0	17	0	17	0	0	73	0	0	73	0	0	0	0	0	0	0	3	61	0	0	64	154
7:15 AM	0	0	0	12	0	12	0	0	55	0	0	55	0	0	0	0	0	0	0	3	83	0	0	86	153
7:30 AM	0	0	0	12	0	12	0	0	67	0	0	67	0	0	0	0	0	0	0	8	82	0	0	90	169
7:45 AM	0	0	0	9	0	9	0	0	59	0	0	59	0	0	0	0	0	0	0	8	65	0	0	73	141
Peak Hour Total	0	0	0	50	0	50	0	0	254	0	0	254	0	0	0	0	0	0	0	22	291	0	0	313	617
Peak Hour Heavy Vehicles	0	0	0	1	0	1	0	0	19	0	0	19	0	0	0	0	0	0	0	1	15	0	0	16	36
Peak Hour Heavy Vehicles PHF	0.00%	0.00%	0.00%	2.00%	0.00%	2.00%	0.00%	0.00%	7.48%	0.00%	0.00%	7.48%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.55%	5.15%	0.00%	0.00%	5.11%	5.83%
	0.000	0.000	0.000	0.735	0.000	0.735	0.000	0.000	0.870	0.000	0.000	0.870	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.688	0.877	0.000	0.000	0.869	0.913

Mid Peak Hour (10:00 - 14:00)

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	
1:00 PM	0	1	0	3	0	4	0	0	43	0	0	43	0	0	0	0	0	0	0	8	26	0	0	34	81
1:15 PM	0	0	0	11	0	11	0	0	42	0	0	42	0	0	0	0	0	0	0	8	33	0	0	41	94
1:30 PM	0	0	0	6	0	6	0	0	47	1	0	48	0	0	0	0	0	0	0	5	38	0	0	43	97
1:45 PM	0	0	0	1	0	1	0	0	66	0	0	66	0	0	0	0	0	0	0	7	48	0	0	55	122
Peak Hour Total	0	1	0	21	0	22	0	0	198	1	0	199	0	0	0	0	0	0	0	28	145	0	0	173	394
Peak Hour Heavy Vehicles	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	1	4	0	0	5	10
Peak Hour Heavy Vehicles PHF	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.53%	0.00%	0.00%	2.51%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.57%	2.76%	0.00%	0.00%	2.89%	2.54%
	0.000	0.250	0.000	0.477	0.000	0.500	0.000	0.000	0.750	0.250	0.000	0.754	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.875	0.755	0.000	0.000	0.786	0.807

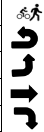
PM Peak Hour (14:00 - 24:00)

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	0	0	6	0	6	0	0	86	1	0	87	0	0	0	0	0	0	0	20	81	0	0	101	194
4:00 PM	0	0	0	8	0	8	0	0	115	1	0	116	0	0	0	0	0	0	0	14	75	0	0	89	213
4:15 PM	0	1	0	12	0	13	0	0	90	2	0	92	0	0	0	0	0	0	0	13	101	0	0	114	219
4:30 PM	0	1	0	10	0	11	0	0	97	1	0	98	0	0	0	0	0	0	0	17	97	0	0	114	223
Peak Hour Total	0	2	0	36	0	38	0	0	388	5	0	393	0	0	0	0	0	0	0	64	354	0	0	418	849
Peak Hour Heavy Vehicles	0	0	0	0	0	0	0	0	25	0	0	25	0	0	0	0	0	0	0	1	15	0	0	16	41
Peak Hour Heavy Vehicles PHF	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6.44%	0.00%	0.00%	6.36%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.56%	4.24%	0.00%	0.00%	3.83%	4.83%
	0.000	0.500	0.000	0.750	0.000	0.731	0.000	0.000	0.843	0.625	0.000	0.847	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.800	0.876	0.000	0.000	0.917	0.952

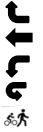
Total Vehicles On Leg			821		
Vehicles Entering Intersection 377			Vehicles Exiting Intersection 444		
Southbound					
Cars	359	0	14	0	0
Heavy	4	0	0	0	0
Total	363	0	14	0	0



Total Vehicles on Leg 7103	Vehicles Entering Intersection 3457	Eastbound	Cars	Heavy	Total
	Vehicles Exiting Intersection 3646		0	0	0
			0	0	0
			412	7	419
			2907	131	3038
			0	0	0



Daily Volumes



Cars	Heavy	Total	Westbound	Vehicles Entering Intersection 3308	Total Vehicles on Leg 6360
24	1	25		Vehicles Exiting Intersection 3052	
3152	131	3283			
0	0	0			
0	0	0			
0	0	0			

Cars	0	0	0	0	0
Heavy	0	0	0	0	0
Total	0	0	0	0	0
Northbound					
Vehicles Entering Intersection 0			Vehicles Exiting Intersection 0		
Total Vehicles On Leg			0		

TMC 2511 - CSAH 22 @ 197th Ave
Oak Grove MN
Thursday, February 27, 2025

Time	Southbound Heavy 197th Ave						Westbound Heavy CSAH 22						Northbound Heavy None						Eastbound Heavy CSAH 22						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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 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	
12:30 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	
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 'Heavy Vehicles'	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	
1:00 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	
1:15 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	
1:30 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	
1:45 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 'Heavy Vehicles'	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	
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	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	0	0	0	0	0	
2:30 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	
2:45 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 'Heavy Vehicles'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
3:00 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	
3:15 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	
3:30 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	
3:45 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 'Heavy Vehicles'	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	
4:00 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	
4:15 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	
4:30 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	
4:45 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 'Heavy Vehicles'	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	
5:00 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	
5:15 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	
5:30 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	
5:45 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 'Heavy Vehicles'	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	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
6:15 AM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	4	0	0	4	8	
6:30 AM	0	0	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	0	0	0	5	0	0	5	10	
6:45 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	5	
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	0	0	1	12	0	0	13	24
7:00 AM	0	0	0	1	0	1	0	0	5	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	7	
7:15 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	8	0	0	8	10	
7:30 AM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	1	2	0	0	3	8	
7:45 AM	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0	4	0	0	4	11	
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	19	0	0	19	0	0	0	0	0	0	0	0	1	15	0	0	16	36

TMC 2511 - CSAH 22 @ 197th Ave
Oak Grove MN
Thursday, February 27, 2025

Time	Southbound Heavy 197th Ave						Westbound Heavy CSAH 22						Northbound Heavy None						Eastbound Heavy CSAH 22						VEHICLE 'Heavy Vehicles'
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	
8:00 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	10	0	0	0	13
8:15 AM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	1	3	0	0	4	7
8:30 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
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	1	20	0	0	21	28
9:00 AM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	3	0	0	3	8
9:15 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
9:30 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
9:45 AM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	2	0	0	2	7
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	0	0	11	0	0	11	25
10:00 AM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10:15 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
10:30 AM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	3	0	0	3	5
10:45 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
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	4	0	0	4	12
11:00 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
11:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4
11:30 AM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	6
11:45 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	8	0	0	8	0	0	0	0	0	0	0	0	10	0	0	10	19
12:00 PM	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	3	0	0	3	5
12:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	4	0	0	5	6
12:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
12:45 PM	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
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	7	0	0	7	0	0	0	0	0	0	0	1	9	0	0	10	18
1:00 PM	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
1:15 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	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
1:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1	1	0	0	2	4
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	1	4	0	0	5	10
2:00 PM	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3	0	0	3	6
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
2:30 PM	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
2:45 PM	0	0	0	1	0	1	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	7
Hourly 'Heavy Vehicles'	0	0	0	1	0	1	0	0	12	0	0	12	0	0	0	0	0	0	0	0	8	0	0	8	21
3:00 PM	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
3:15 PM	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	1	0	0	1	6
3:30 PM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	4	0	0	4	8
3:45 PM	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	2	0	0	2	6
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	0	0	10	0	0	10	24

TMC 2511 - CSAH 22 @ 197th Ave
Oak Grove MN
Thursday, February 27, 2025

Time	Southbound Heavy 197th Ave						Westbound Heavy CSAH 22						Northbound Heavy None						Eastbound Heavy CSAH 22						VEHICLE 'Heavy Vehicles'
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach 'Heavy Vehicles'	
4:00 PM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	3	0	0	3	9
4:15 PM	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	1	6	0	0	7	13
4:30 PM	0	0	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	0	4	0	0	4	13
4:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	5	0	0	5	7
Hourly 'Heavy Vehicles'	0	0	0	0	0	0	0	0	23	0	0	23	0	0	0	0	0	0	0	1	18	0	0	19	42
5:00 PM	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
5:15 PM	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
5:30 PM	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
5:45 PM	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 'Heavy Vehicles'	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
6:00 PM	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
6:15 PM	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
6:30 PM	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
6:45 PM	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 'Heavy Vehicles'	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
7:00 PM	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
7:15 PM	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
7:30 PM	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
7:45 PM	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 'Heavy Vehicles'	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
8:00 PM	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
8:15 PM	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
8:30 PM	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
8:45 PM	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 'Heavy Vehicles'	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
9:00 PM	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
9:15 PM	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
9:30 PM	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
9:45 PM	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 'Heavy Vehicles'	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
10:00 PM	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
10:15 PM	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
10:30 PM	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
10:45 PM	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 'Heavy Vehicles'	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
11:00 PM	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
11:15 PM	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
11:30 PM	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
11:45 PM	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 'Heavy Vehicles'	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
DAILY 'Heavy Vehicles'	0	0	0	4	0	4	0	0	131	1	0	132	0	0	0	0	0	0	0	7	131	0	0	138	274

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2511

Study Date : 03/17/2025

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 3,457

Westbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 3,308

Minor Street Approaches

Southbound: 197th Ave

Number of Lanes : 1

Total Approach Volume: 377

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 0 hours, 8 are needed

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

Required volumes reached for 1 hours, 8 are needed

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

Required 1A volumes reached for 0 hours, 8 are needed

Required 1B volumes reached for 2 hours, 8 are needed

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

Number of hours (0) 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 2511

Study Date : 03/17/2025

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 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**

Volume Requirements

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

Veh/Hr Minor = **105**

Major Road						Minor Road			
CSAH 22						197th Ave			
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?	
15:45 - 16:45	418	+	393	=	811	0	38	No	
16:00 - 17:00	410	+	378	=	788	0	38	No	
16:15 - 17:15	398	+	365	=	763	0	38	No	
15:30 - 16:30	373	+	375	=	748	0	32	No	
16:30 - 17:30	363	+	357	=	720	0	35	No	
15:15 - 16:15	331	+	366	=	697	0	26	No	
16:45 - 17:45	314	+	319	=	633	0	29	No	
15:00 - 16:00	319	+	305	=	624	0	24	No	
17:00 - 18:00	282	+	319	=	601	0	28	No	
14:45 - 15:45	292	+	280	=	572	0	22	No	
07:00 - 08:00	313	+	254	=	567	0	50	No	
17:15 - 18:15	266	+	279	=	545	0	24	No	
06:45 - 07:45	285	+	259	=	544	0	53	No	
14:30 - 15:30	272	+	272	=	544	0	25	No	
07:15 - 08:15	316	+	216	=	532	0	46	No	
07:30 - 08:30	296	+	197	=	493	0	38	No	
06:30 - 07:30	254	+	237	=	491	0	50	No	
14:15 - 15:15	261	+	229	=	490	0	22	No	
17:30 - 18:30	223	+	241	=	464	0	18	No	
14:00 - 15:00	227	+	226	=	453	0	20	No	
13:45 - 14:45	208	+	230	=	438	0	17	No	
07:45 - 08:45	258	+	179	=	437	0	33	No	
17:45 - 18:45	194	+	233	=	427	0	16	No	
06:15 - 07:15	202	+	223	=	425	0	51	No	
08:00 - 09:00	258		158		416	0	30	No	

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2511

Study Date : 03/17/2025

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 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 = **525**

Veh/Hr Minor = **52**

Major Road						Minor Road		
CSAH 22						197th Ave		
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?
06:45 - 07:45	285	+	259	=	544	0	53	Yes
15:45 - 16:45	418	+	393	=	811	0	38	No
16:00 - 17:00	410	+	378	=	788	0	38	No
16:15 - 17:15	398	+	365	=	763	0	38	No
15:30 - 16:30	373	+	375	=	748	0	32	No
16:30 - 17:30	363	+	357	=	720	0	35	No
15:15 - 16:15	331	+	366	=	697	0	26	No
16:45 - 17:45	314	+	319	=	633	0	29	No
15:00 - 16:00	319	+	305	=	624	0	24	No
17:00 - 18:00	282	+	319	=	601	0	28	No
14:45 - 15:45	292	+	280	=	572	0	22	No
17:15 - 18:15	266	+	279	=	545	0	24	No
14:30 - 15:30	272	+	272	=	544	0	25	No
06:30 - 07:30	254	+	237	=	491	0	50	No
14:15 - 15:15	261	+	229	=	490	0	22	No
17:30 - 18:30	223	+	241	=	464	0	18	No
14:00 - 15:00	227	+	226	=	453	0	20	No
13:45 - 14:45	208	+	230	=	438	0	17	No
07:45 - 08:45	258	+	179	=	437	0	33	No
17:45 - 18:45	194	+	233	=	427	0	16	No
06:15 - 07:15	202	+	223	=	425	0	51	No
08:00 - 09:00	258	+	158	=	416	0	30	No
08:15 - 09:15	248	+	166	=	414	0	24	No
13:30 - 14:30	202	+	206	=	408	0	15	No
13:15 - 14:15	182		208		390	0	22	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2511

Study Date : 03/17/2025

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 0 hours meet 1A minimums.
Only 2 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						Minor Road					
CSAH 22						197th Ave					
Time	Major EB	+	Major WB	=	Total		Minor NB		Minor SB		Met1A?
15:45 - 16:45	418	+	393	=	811		0		38		No
16:00 - 17:00	410	+	378	=	788		0		38		No
16:15 - 17:15	398	+	365	=	763		0		38		No
15:30 - 16:30	373	+	375	=	748		0		32		No
16:30 - 17:30	363	+	357	=	720		0		35		No
15:15 - 16:15	331	+	366	=	697		0		26		No
16:45 - 17:45	314	+	319	=	633		0		29		No
15:00 - 16:00	319	+	305	=	624		0		24		No
17:00 - 18:00	282	+	319	=	601		0		28		No
14:45 - 15:45	292	+	280	=	572		0		22		No
07:00 - 08:00	313	+	254	=	567		0		50		No
17:15 - 18:15	266		279		545		0		24		No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
07:15 - 08:15	316	+	216	=	532	0	46	Yes
06:15 - 07:15	202	+	223	=	425	0	51	Yes
15:45 - 16:45	418	+	393	=	811	0	38	No
16:00 - 17:00	410	+	378	=	788	0	38	No
16:15 - 17:15	398	+	365	=	763	0	38	No
15:30 - 16:30	373	+	375	=	748	0	32	No
16:30 - 17:30	363	+	357	=	720	0	35	No
15:15 - 16:15	331	+	366	=	697	0	26	No
16:45 - 17:45	314	+	319	=	633	0	29	No
15:00 - 16:00	319	+	305	=	624	0	24	No
17:00 - 18:00	282	+	319	=	601	0	28	No
14:45 - 15:45	292	+	280	=	572	0	22	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2511

Study Date : 03/17/2025

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.

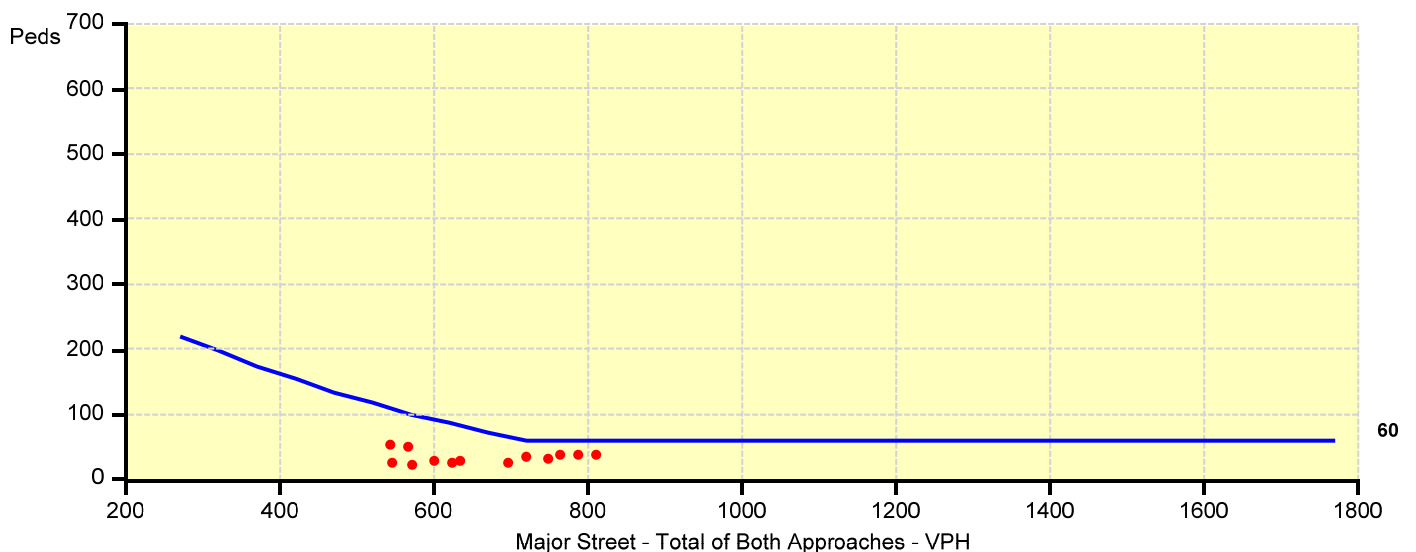
Summary

Only 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**

Major Road						Minor Road			
CSAH 22						197th Ave			
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?	
15:45 - 16:45	418	+	393	=	811	0	38	No	
16:00 - 17:00	410	+	378	=	788	0	38	No	
16:15 - 17:15	398	+	365	=	763	0	38	No	
15:30 - 16:30	373	+	375	=	748	0	32	No	
16:30 - 17:30	363	+	357	=	720	0	35	No	
15:15 - 16:15	331	+	366	=	697	0	26	No	
16:45 - 17:45	314	+	319	=	633	0	29	No	
15:00 - 16:00	319	+	305	=	624	0	24	No	
17:00 - 18:00	282	+	319	=	601	0	28	No	
14:45 - 15:45	292	+	280	=	572	0	22	No	
07:00 - 08:00	313	+	254	=	567	0	50	No	
17:15 - 18:15	266	+	279	=	545	0	24	No	



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2511

Study Date : 03/17/2025

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.

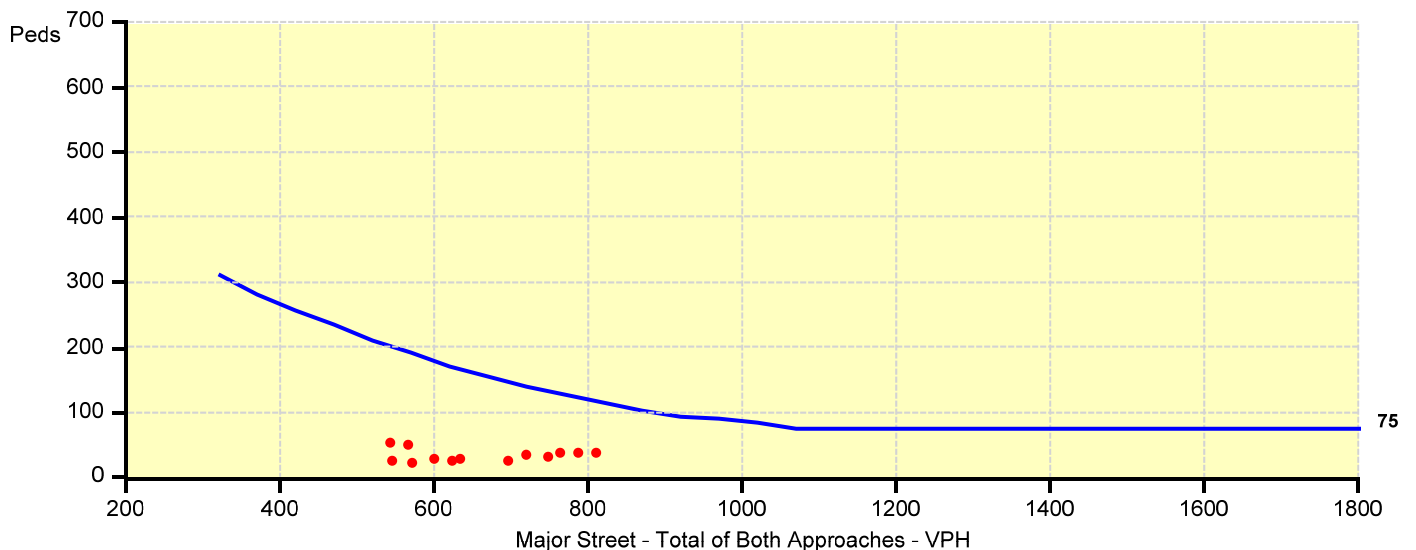
Summary

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**

Major Road						Minor Road			
CSAH 22						197th Ave			
Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met?	
15:45 - 16:45	418	+	393	=	811	0	38	No	
16:00 - 17:00	410	+	378	=	788	0	38	No	
16:15 - 17:15	398	+	365	=	763	0	38	No	
15:30 - 16:30	373	+	375	=	748	0	32	No	
16:30 - 17:30	363	+	357	=	720	0	35	No	
15:15 - 16:15	331	+	366	=	697	0	26	No	
16:45 - 17:45	314	+	319	=	633	0	29	No	
15:00 - 16:00	319	+	305	=	624	0	24	No	
17:00 - 18:00	282	+	319	=	601	0	28	No	
14:45 - 15:45	292	+	280	=	572	0	22	No	
07:00 - 08:00	313	+	254	=	567	0	50	No	
17:15 - 18:15	266	+	279	=	545	0	24	No	



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2511

Study Date : 03/17/2025

Multiway Stop Warrants - Summary

Major Street Approaches

Eastbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 3,457

Westbound: CSAH 22

Number of Lanes : 1

Total Approach Volume: 3,308

Minor Street Approaches

Northbound:

Number of Lanes :2+

Total Approach Volume: 0

Southbound: 197th Ave

Number of Lanes :1

Total Approach Volume: 377

Warrant Summary (Rural Values Apply)

Criteria A - Interim Measure..... **Not Evaluated**
If traffic signals are justified, stop signs can be installed as an interim measure.

Criteria B - Crash Experience..... **Not Satisfied**
Number of crashes (-1) is less than minimum required (5).

Criteria C - Minimum Volumes and Delays..... **Not Satisfied**
Average of 8 highest hours is less than volume criteria.

Criteria D - 80% of Volumes, Delays, and Crashes..... **Not Satisfied**
Number of crashes (-1) is less than minimum required (4).
Average of 8 highest hours is less than volume criteria.

Criteria C Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:45 - 16:45	811	527.4	38	27.8	210	140	No
16:45 - 17:45	633		29				
07:00 - 08:00	567		50				
14:45 - 15:45	572		22				
13:45 - 14:45	438		17				
08:00 - 09:00	416		30				
17:45 - 18:45	427		16				
12:15 - 13:15	355		20				
06:00 - 07:00	333		39				
10:00 - 11:00	344		22				
09:00 - 10:00	309		22				
11:00 - 12:00	303		13				

Criteria D Volume Summary

Time	Major Total	Major Avg	Minor Total	Minor Avg	Major Crit	Minor Crit	Meets?
15:45 - 16:45	811	527.4	38	27.8	240	160	No
16:45 - 17:45	633		29				
07:00 - 08:00	567		50				
14:45 - 15:45	572		22				
13:45 - 14:45	438		17				
08:00 - 09:00	416		30				
17:45 - 18:45	427		16				
12:15 - 13:15	355		20				
06:00 - 07:00	333		39				
10:00 - 11:00	344		22				
09:00 - 10:00	309		22				
11:00 - 12:00	303		13				