

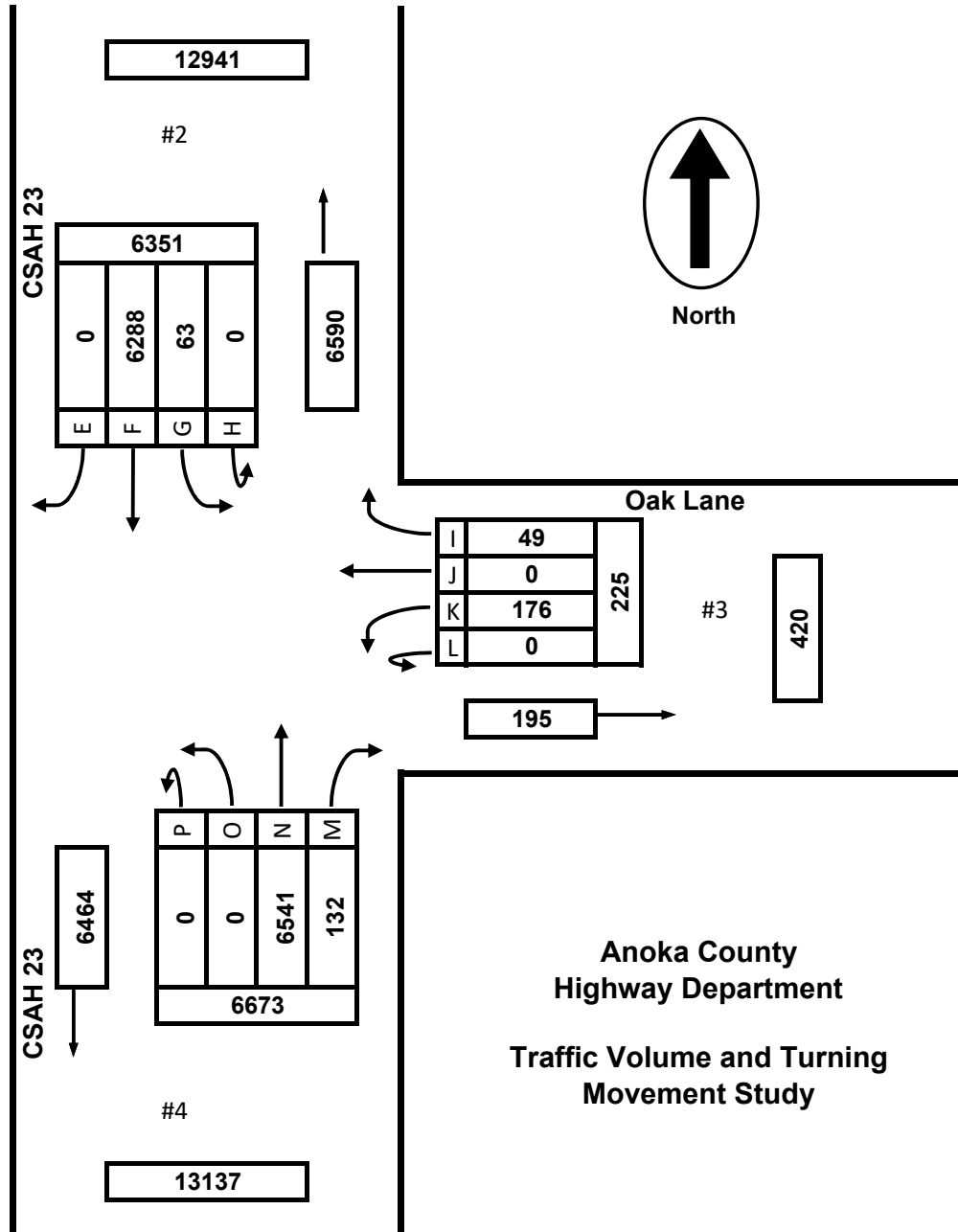
Date: 12/17/24

Count Number: TMC 2493

Location: CSAH 23
@ Oak Lane

Collection Period: 24 HR

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



Date: 12/17/24

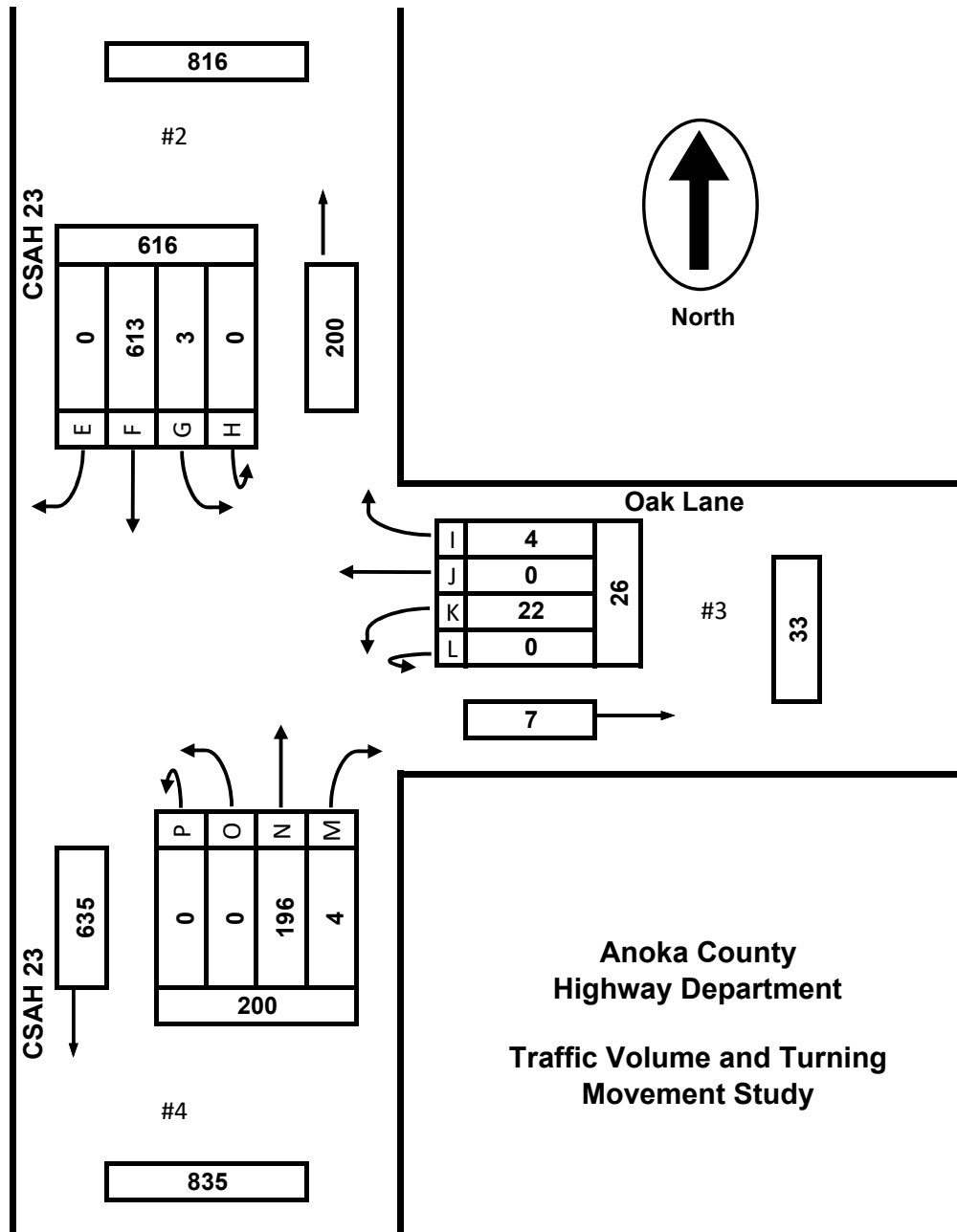
Count Number: TMC 2493

Location: CSAH 23
@ Oak Lane

Collection Period: 24 HR

Peak Hour: 7:00 - 8:00 AM

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



Date: 12/17/24

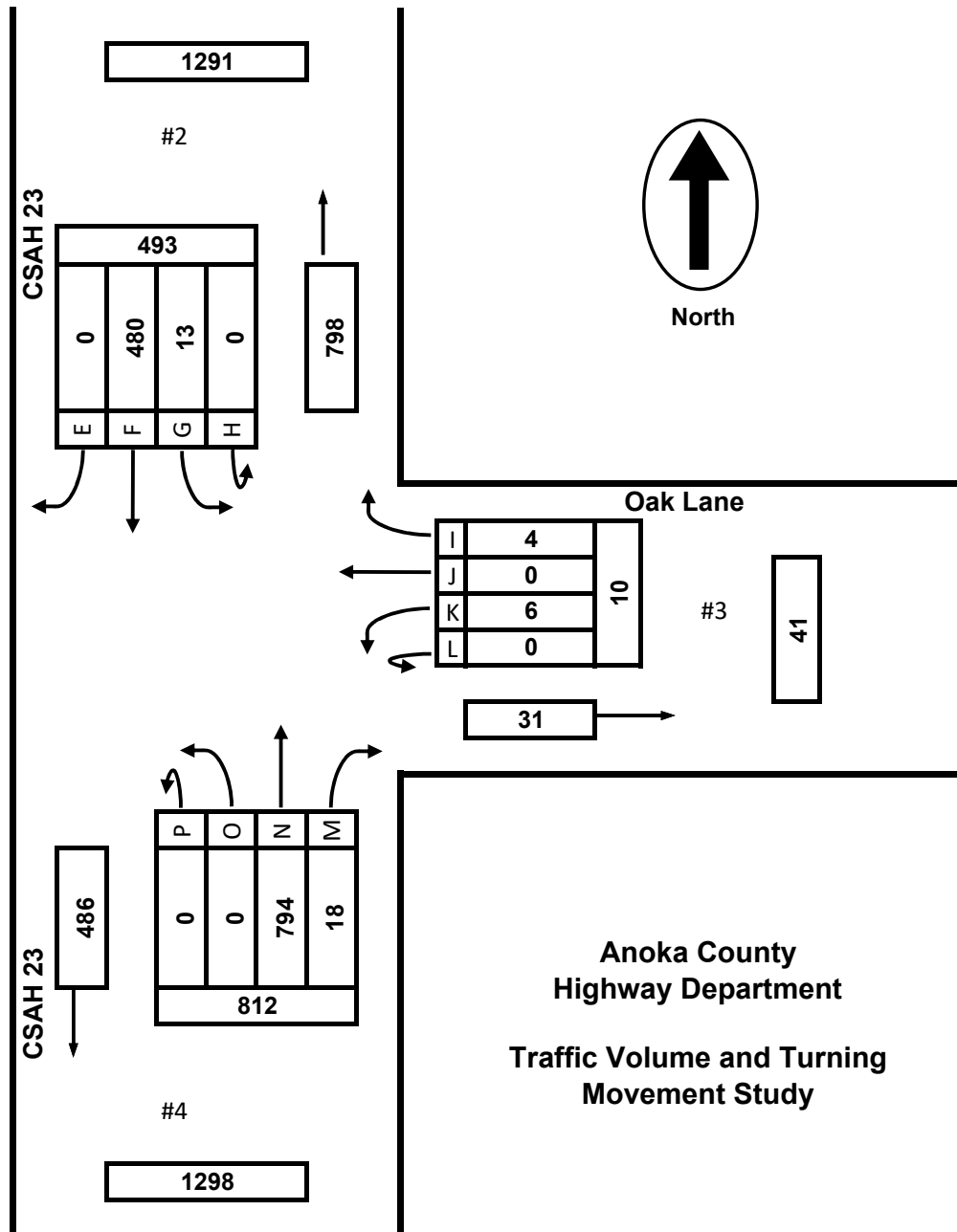
Count Number: TMC 2493

Location: CSAH 23
@ Oak Lane

Collection Period: 24 HR

Peak Hour: 3:45 - 4:45 PM

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



TMC 2493 - CSAH 23 @ Oak Lane
Lino Lakes MN
Tuesday, December 17, 2024

Time	Southbound CSAH 23						Westbound Oak Lane						Northbound CSAH 23						Eastbound 0						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
12:00 AM	0	0	7	0	0	7	0	0	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	18
12:15 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	15
12:30 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	11
12:45 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	13
Hourly Total	0	0	23	0	0	23	0	0	0	0	0	0	0	0	34	0	0	34	0	0	0	0	0	0	57
1:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4
1:30 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	11
1:45 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	9
Hourly Total	0	0	11	0	0	11	0	0	0	0	0	0	0	0	17	1	0	18	0	0	0	0	0	0	29
2:00 AM	0	0	5	0	0	5	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	9
2:15 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7
2:30 AM	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
2:45 AM	0	0	6	0	0	6	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	11
Hourly Total	0	0	16	0	0	16	0	0	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	31
3:00 AM	0	0	3	0	0	3	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6
3:15 AM	0	0	4	0	0	4	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7
3:30 AM	0	0	16	0	0	16	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	19
3:45 AM	0	0	11	0	0	11	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	13
Hourly Total	0	0	34	0	0	34	0	1	0	0	0	1	0	0	10	0	0	10	0	0	0	0	0	0	45
4:00 AM	0	0	12	0	0	12	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	15
4:15 AM	0	0	14	0	0	14	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	16
4:30 AM	0	0	18	0	0	18	0	0	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	24
4:45 AM	0	0	27	0	0	27	0	1	0	0	0	1	0	0	4	0	0	4	0	0	0	0	0	0	32
Hourly Total	0	0	71	0	0	71	0	1	0	0	0	1	0	0	15	0	0	15	0	0	0	0	0	0	87
5:00 AM	0	0	48	0	0	48	0	0	0	1	0	1	0	0	3	0	0	3	0	0	0	0	0	0	52
5:15 AM	0	0	55	0	0	55	0	2	0	0	0	2	0	0	9	0	0	9	0	0	0	0	0	0	66
5:30 AM	0	0	79	0	0	79	0	1	0	0	0	1	0	0	11	0	0	11	0	0	0	0	0	0	91
5:45 AM	0	0	77	0	0	77	0	1	0	1	0	2	0	0	9	0	0	9	0	0	0	0	0	0	88
Hourly Total	0	0	259	0	0	259	0	4	0	2	0	6	0	0	32	0	0	32	0	0	0	0	0	0	297
6:00 AM	0	0	73	0	0	73	0	6	0	0	0	6	0	0	25	0	0	25	0	0	0	0	0	0	104
6:15 AM	0	0	91	0	0	91	0	4	0	0	0	4	0	0	31	0	0	31	0	0	0	0	0	0	126
6:30 AM	0	1	125	0	0	126	0	1	0	1	0	2	0	0	29	1	0	30	0	0	0	0	0	0	158
6:45 AM	0	1	121	0	0	122	0	8	0	0	0	8	0	0	60	0	0	60	0	0	0	0	0	0	190
Hourly Total	0	2	410	0	0	412	0	19	0	1	0	20	0	0	145	1	0	146	0	0	0	0	0	0	578
7:00 AM	0	0	143	0	0	143	0	5	0	2	0	7	0	0	40	0	0	40	0	0	0	0	0	0	190
7:15 AM	0	0	152	0	0	152	0	3	0	1	0	4	0	0	37	1	0	38	0	0	0	0	0	0	194
7:30 AM	0	1	176	0	0	177	0	9	0	1	0	10	0	0	45	1	0	46	0	0	0	0	0	0	233
7:45 AM	0	2	142	0	0	144	0	5	0	0	0	5	0	0	74	2	0	76	0	0	0	0	0	0	225
Hourly Total	0	3	613	0	0	616	0	22	0	4	0	26	0	0	196	4	0	200	0	0	0	0	0	0	842

**TMC 2493 - CSAH 23 @ Oak Lane
Lino Lakes MN
Tuesday, December 17, 2024**

Time	Southbound CSAH 23						Westbound Oak Lane						Northbound CSAH 23						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	0	106	0	0	106	0	1	0	1	0	2	0	0	74	2	0	76	0	0	0	0	0	0	184
8:15 AM	0	1	98	0	0	99	0	0	0	1	0	1	0	0	65	1	0	66	0	0	0	0	0	0	166
8:30 AM	0	0	113	0	0	113	0	3	0	0	0	3	0	0	46	2	0	48	0	0	0	0	0	0	164
8:45 AM	0	0	99	0	0	99	0	4	0	1	0	5	0	0	58	1	0	59	0	0	0	0	0	0	163
Hourly Total	0	1	416	0	0	417	0	8	0	3	0	11	0	0	243	6	0	249	0	0	0	0	0	0	677
9:00 AM	0	0	135	0	1	135	0	3	0	0	0	3	0	0	65	1	0	66	0	0	0	0	0	0	204
9:15 AM	0	0	113	0	0	113	0	3	0	0	0	3	0	0	80	2	0	82	0	0	0	0	0	0	198
9:30 AM	0	0	93	0	0	93	0	2	0	0	0	2	0	0	81	3	0	84	0	0	0	0	0	0	179
9:45 AM	0	1	80	0	0	81	0	4	0	2	0	6	0	0	80	3	0	83	0	0	0	0	0	0	170
Hourly Total	0	1	421	0	1	422	0	12	0	2	0	14	0	0	306	9	0	315	0	0	0	0	0	0	751
10:00 AM	0	0	95	0	0	95	0	7	0	2	0	9	0	0	70	0	0	70	0	0	0	0	0	0	174
10:15 AM	0	2	89	0	0	91	0	4	0	1	0	5	0	0	76	3	0	79	0	0	0	0	0	0	175
10:30 AM	0	1	100	0	0	101	0	5	0	0	0	5	0	0	82	2	0	84	0	0	0	0	0	0	190
10:45 AM	0	0	72	0	0	72	0	1	0	0	0	1	0	0	85	1	0	86	0	0	0	0	0	0	159
Hourly Total	0	3	356	0	0	359	0	17	0	3	0	20	0	0	313	6	0	319	0	0	0	0	0	0	688
11:00 AM	0	0	106	0	0	106	0	3	0	0	0	3	0	0	75	2	0	77	0	0	0	0	0	0	186
11:15 AM	0	0	97	0	0	97	0	0	0	2	0	2	0	0	85	0	0	85	0	0	0	0	0	0	184
11:30 AM	0	2	108	0	0	110	0	4	0	2	0	6	0	0	82	1	0	83	0	0	0	0	0	0	199
11:45 AM	0	0	122	0	0	122	0	4	0	1	0	5	0	0	100	4	0	104	0	0	0	0	0	0	231
Hourly Total	0	2	433	0	0	435	0	11	0	5	0	16	0	0	342	7	0	349	0	0	0	0	0	0	800
12:00 PM	0	0	105	0	0	105	0	3	0	0	0	3	0	0	96	1	0	97	0	0	0	0	0	0	205
12:15 PM	0	0	130	0	0	130	0	6	0	0	0	6	0	0	100	6	0	106	0	0	0	0	0	0	242
12:30 PM	0	3	90	0	0	93	0	4	0	5	0	9	0	0	119	2	0	121	0	0	0	0	0	0	223
12:45 PM	0	0	115	0	0	115	0	2	0	0	0	2	0	0	79	1	0	80	0	0	0	0	0	0	197
Hourly Total	0	3	440	0	0	443	0	15	0	5	0	20	0	0	394	10	0	404	0	0	0	0	0	0	867
1:00 PM	0	0	100	0	0	100	0	1	0	1	0	2	0	0	110	2	0	112	0	0	0	0	0	0	214
1:15 PM	0	0	89	0	0	89	0	0	0	1	0	1	0	0	122	3	0	125	0	0	0	0	0	0	215
1:30 PM	0	3	82	0	0	85	0	3	0	0	0	3	0	0	106	2	0	108	0	0	0	0	0	0	196
1:45 PM	0	0	81	0	0	81	0	2	0	0	0	2	0	0	131	1	0	132	0	0	0	0	0	0	215
Hourly Total	0	3	352	0	0	355	0	6	0	2	0	8	0	0	469	8	0	477	0	0	0	0	0	0	840
2:00 PM	0	1	98	0	0	99	0	1	0	0	0	1	0	0	98	2	0	100	0	0	0	0	0	0	200
2:15 PM	0	1	81	0	0	82	0	2	0	0	0	2	0	0	118	2	0	120	0	0	0	0	0	0	204
2:30 PM	0	3	101	0	0	104	0	6	0	0	0	6	0	0	136	3	0	139	0	0	0	0	0	0	249
2:45 PM	0	3	117	0	0	120	0	0	0	0	0	0	0	0	152	4	0	156	0	0	0	0	0	0	276
Hourly Total	0	8	397	0	0	405	0	9	0	0	0	9	0	0	504	11	0	515	0	0	0	0	0	0	929
3:00 PM	0	2	82	0	0	84	0	2	0	1	0	3	0	0	190	5	0	195	0	0	0	0	0	0	282
3:15 PM	0	2	107	0	0	109	0	5	0	1	0	6	0	0	195	4	0	199	0	0	0	0	0	0	314
3:30 PM	0	2	125	0	0	127	0	5	0	1	0	6	0	0	161	4	0	165	0	0	0	0	0	0	298
3:45 PM	0	3	124	0	0	127	0	3	0	2	0	5	0	0	184	5	0	189	0	0	0	0	0	0	321
Hourly Total	0	9	438	0	0	447	0	15	0	5	0	20	0	0	730	18	0	748	0	0	0	0	0	0	1215

**TMC 2493 - CSAH 23 @ Oak Lane
Lino Lakes MN
Tuesday, December 17, 2024**

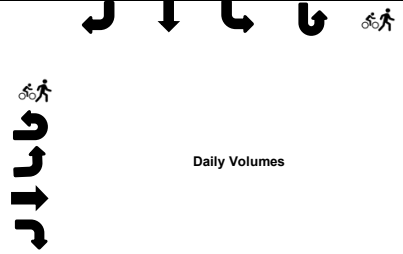
AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	Vehicle Approach Total	
7:00 AM	0	0	143	0	0	143	0	5	0	2	0	7	0	0	40	0	0	40	0	0	0	0	0	0	190
7:15 AM	0	0	152	0	0	152	0	3	0	1	0	4	0	0	37	1	0	38	0	0	0	0	0	0	194
7:30 AM	0	1	176	0	0	177	0	9	0	1	0	10	0	0	45	1	0	46	0	0	0	0	0	0	233
7:45 AM	0	2	142	0	0	144	0	5	0	0	0	5	0	0	74	2	0	76	0	0	0	0	0	0	225
Peak Hour Total	0	3	613	0	0	616	0	22	0	4	0	26	0	0	196	4	0	200	0	0	0	0	0	0	842
PHF	0.000	0.375	0.871	0.000	0.000	0.870	0.000	0.611	0.000	0.500	0.000	0.650	0.000	0.000	0.662	0.500	0.000	0.658	0.000	0.000	0.000	0.000	0.000	0.000	0.903

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	3	124	0	0	127	0	3	0	2	0	5	0	0	184	5	0	189	0	0	0	0	0	0	321
4:00 PM	0	2	111	0	0	113	0	1	0	0	0	1	0	0	202	5	0	207	0	0	0	0	0	0	321
4:15 PM	0	5	118	0	0	123	0	0	0	0	0	0	0	0	186	4	0	190	0	0	0	0	0	0	313
4:30 PM	0	3	127	0	0	130	0	2	0	2	0	4	0	0	222	4	0	226	0	0	0	0	0	0	360
Peak Hour Total	0	13	480	0	0	493	0	6	0	4	0	10	0	0	794	18	0	812	0	0	0	0	0	0	1315
PHF	0.000	0.650	0.945	0.000	0.000	0.948	0.000	0.500	0.000	0.500	0.000	0.500	0.000	0.000	0.894	0.900	0.000	0.898	0.000	0.000	0.000	0.000	0.000	0.000	0.913

Total Vehicles On Leg		12941	
Vehicles Entering Intersection	6351	Vehicles Exiting Intersection	6590
Southbound			
Cars	0	6021	60
Heavy	0	267	3
Total	0	6288	63



Total Vehicles on Leg 0	Vehicles Entering Intersection 0	Eastbound	Cars	Heavy	Total
			0	0	0
			0	0	0
			0	0	0
			0	0	0
Vehicles Exiting Intersection 0		Westbound	Cars	Heavy	Total
			0	0	0
			0	0	0
			0	0	0
			0	0	0

Cars	Heavy	Total	Westbound	Vehicles Entering Intersection	Total Vehicles on Leg 420
48	1	49		225	
0	0	0		0	
175	1	176		0	
0	0	0		195	
0	0	0			

Cars	0	0	0	6295	123
Heavy	0	0	0	246	9
Total	0	0	0	6541	132
Northbound					
Vehicles Entering Intersection	6673		Vehicles Exiting Intersection	6464	
Total Vehicles On Leg	13137				

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2493

Study Date : 01/09/2025

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 23

Number of Lanes : 1

Total Approach Volume: 6,673

Southbound: CSAH 23

Number of Lanes : 1

Total Approach Volume: 6,351

Minor Street Approaches

Westbound: Oak Lane

Number of Lanes : 1

Total Approach Volume: 225

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 0 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 0 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 2493

Study Date : 01/09/2025

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**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:45 - 16:45	812	+	493	=	1305	0	10	No
16:00 - 17:00	810	+	490	=	1300	0	8	No
16:15 - 17:15	803	+	497	=	1300	0	10	No
16:30 - 17:30	778	+	487	=	1265	0	12	No
15:30 - 16:30	751	+	490	=	1241	0	12	No
15:15 - 16:15	760	+	476	=	1236	0	18	No
15:00 - 16:00	748	+	447	=	1195	0	20	No
16:45 - 17:45	723	+	470	=	1193	0	16	No
14:45 - 15:45	715	+	440	=	1155	0	15	No
17:00 - 18:00	674	+	457	=	1131	0	18	No
14:30 - 15:30	689	+	417	=	1106	0	15	No
17:15 - 18:15	624	+	417	=	1041	0	19	No
14:15 - 15:15	610	+	390	=	1000	0	11	No
17:30 - 18:30	581	+	371	=	952	0	20	No
14:00 - 15:00	515	+	405	=	920	0	9	No
11:45 - 12:45	428	+	450	=	878	0	23	No
13:45 - 14:45	491	+	366	=	857	0	11	No
12:15 - 13:15	419	+	438	=	857	0	19	No
11:30 - 12:30	390	+	467	=	857	0	20	No
12:00 - 13:00	404	+	443	=	847	0	20	No
17:45 - 18:45	503	+	332	=	835	0	15	No
12:30 - 13:30	438	+	397	=	835	0	14	No
13:00 - 14:00	477	+	355	=	832	0	8	No
13:15 - 14:15	465	+	354	=	819	0	7	No
07:00 - 08:00	200		616		816	0	26	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2493

Study Date : 01/09/2025

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 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 = **525**
 Veh/Hr Minor = **52**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:45 - 16:45	812	+	493	=	1305	0	10	No
16:00 - 17:00	810	+	490	=	1300	0	8	No
16:15 - 17:15	803	+	497	=	1300	0	10	No
16:30 - 17:30	778	+	487	=	1265	0	12	No
15:30 - 16:30	751	+	490	=	1241	0	12	No
15:15 - 16:15	760	+	476	=	1236	0	18	No
15:00 - 16:00	748	+	447	=	1195	0	20	No
16:45 - 17:45	723	+	470	=	1193	0	16	No
14:45 - 15:45	715	+	440	=	1155	0	15	No
17:00 - 18:00	674	+	457	=	1131	0	18	No
14:30 - 15:30	689	+	417	=	1106	0	15	No
17:15 - 18:15	624	+	417	=	1041	0	19	No
14:15 - 15:15	610	+	390	=	1000	0	11	No
17:30 - 18:30	581	+	371	=	952	0	20	No
14:00 - 15:00	515	+	405	=	920	0	9	No
11:45 - 12:45	428	+	450	=	878	0	23	No
13:45 - 14:45	491	+	366	=	857	0	11	No
12:15 - 13:15	419	+	438	=	857	0	19	No
11:30 - 12:30	390	+	467	=	857	0	20	No
12:00 - 13:00	404	+	443	=	847	0	20	No
17:45 - 18:45	503	+	332	=	835	0	15	No
12:30 - 13:30	438	+	397	=	835	0	14	No
13:00 - 14:00	477	+	355	=	832	0	8	No
13:15 - 14:15	465	+	354	=	819	0	7	No
07:00 - 08:00	200		616		816	0	26	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2493

Study Date : 01/09/2025

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 0 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 23

Minor Road Oak Lane

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:45 - 16:45	812	+	493	=	1305	0	10	No
16:00 - 17:00	810	+	490	=	1300	0	8	No
16:15 - 17:15	803	+	497	=	1300	0	10	No
16:30 - 17:30	778	+	487	=	1265	0	12	No
15:30 - 16:30	751	+	490	=	1241	0	12	No
15:15 - 16:15	760	+	476	=	1236	0	18	No
15:00 - 16:00	748	+	447	=	1195	0	20	No
16:45 - 17:45	723	+	470	=	1193	0	16	No
14:45 - 15:45	715	+	440	=	1155	0	15	No
17:00 - 18:00	674	+	457	=	1131	0	18	No
14:30 - 15:30	689	+	417	=	1106	0	15	No
17:15 - 18:15	624		417		1041	0	19	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
15:45 - 16:45	812	+	493	=	1305	0	10	No
16:15 - 17:15	803	+	497	=	1300	0	10	No
16:00 - 17:00	810	+	490	=	1300	0	8	No
16:30 - 17:30	778	+	487	=	1265	0	12	No
15:30 - 16:30	751	+	490	=	1241	0	12	No
15:15 - 16:15	760	+	476	=	1236	0	18	No
15:00 - 16:00	748	+	447	=	1195	0	20	No
16:45 - 17:45	723	+	470	=	1193	0	16	No
14:45 - 15:45	715	+	440	=	1155	0	15	No
17:00 - 18:00	674	+	457	=	1131	0	18	No
14:30 - 15:30	689	+	417	=	1106	0	15	No
17:15 - 18:15	624		417		1041	0	19	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2493

Study Date : 01/09/2025

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.

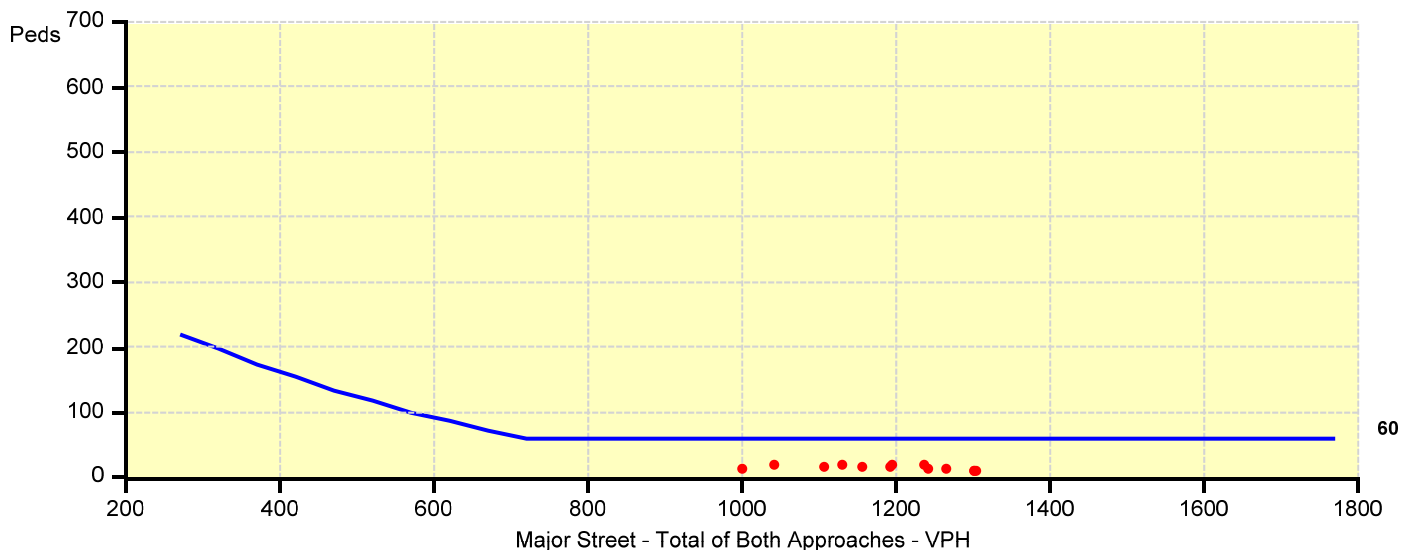
Summary

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**

Time	Major Road CSAH 23				Total	Minor Road Oak Lane		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:45 - 16:45	812	+	493	=	1305	0	10	No
16:00 - 17:00	810	+	490	=	1300	0	8	No
16:15 - 17:15	803	+	497	=	1300	0	10	No
16:30 - 17:30	778	+	487	=	1265	0	12	No
15:30 - 16:30	751	+	490	=	1241	0	12	No
15:15 - 16:15	760	+	476	=	1236	0	18	No
15:00 - 16:00	748	+	447	=	1195	0	20	No
16:45 - 17:45	723	+	470	=	1193	0	16	No
14:45 - 15:45	715	+	440	=	1155	0	15	No
17:00 - 18:00	674	+	457	=	1131	0	18	No
14:30 - 15:30	689	+	417	=	1106	0	15	No
17:15 - 18:15	624		417		1041	0	19	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2493

Study Date : 01/09/2025

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**

Time	Major Road CSAH 23				Total	Minor Road Oak Lane		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
15:45 - 16:45	812	+	493	=	1305	0	10	No
16:00 - 17:00	810	+	490	=	1300	0	8	No
16:15 - 17:15	803	+	497	=	1300	0	10	No
16:30 - 17:30	778	+	487	=	1265	0	12	No
15:30 - 16:30	751	+	490	=	1241	0	12	No
15:15 - 16:15	760	+	476	=	1236	0	18	No
15:00 - 16:00	748	+	447	=	1195	0	20	No
16:45 - 17:45	723	+	470	=	1193	0	16	No
14:45 - 15:45	715	+	440	=	1155	0	15	No
17:00 - 18:00	674	+	457	=	1131	0	18	No
14:30 - 15:30	689	+	417	=	1106	0	15	No
17:15 - 18:15	624	+	417	=	1041	0	19	No

