

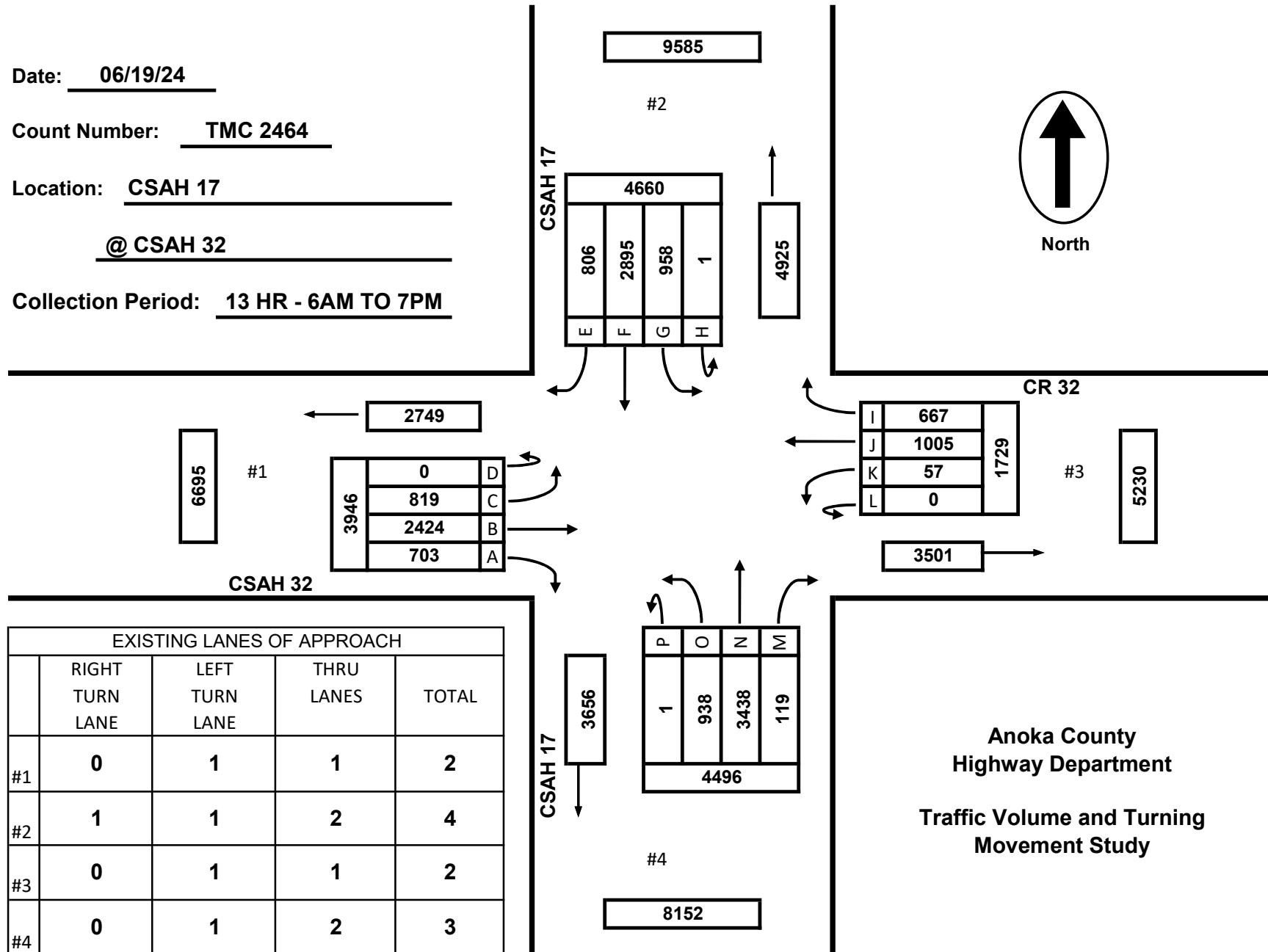
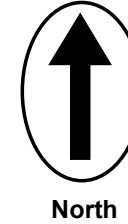
Date: 06/19/24

Count Number: TMC 2464

Location: CSAH 17

@ CSAH 32

Collection Period: 13 HR - 6AM TO 7PM



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

4660			
806	2895	958	1
E	F	G	H

3946	0	D
	819	C
	2424	B
	703	A

I	667	1729
J	1005	
K	57	
L	0	

P	O	N	M
1	938	3438	119
4496			

Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

Date: 06/19/24

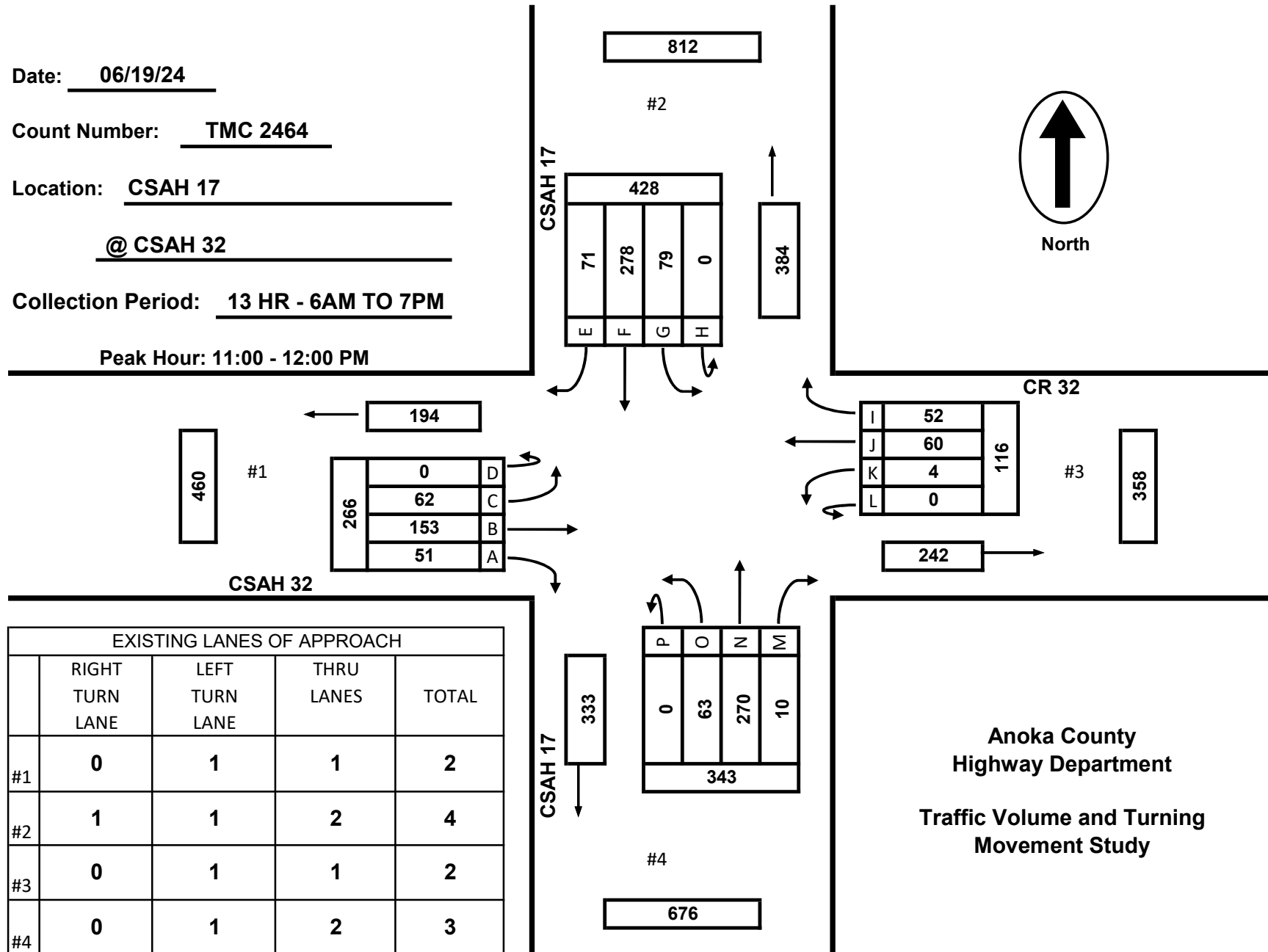
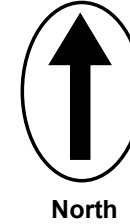
Count Number: TMC 2464

Location: CSAH 17

@ CSAH 32

Collection Period: 13 HR - 6AM TO 7PM

Peak Hour: 11:00 - 12:00 PM



Anoka County
Highway Department
Traffic Volume and Turning
Movement Study

Date: 06/19/24

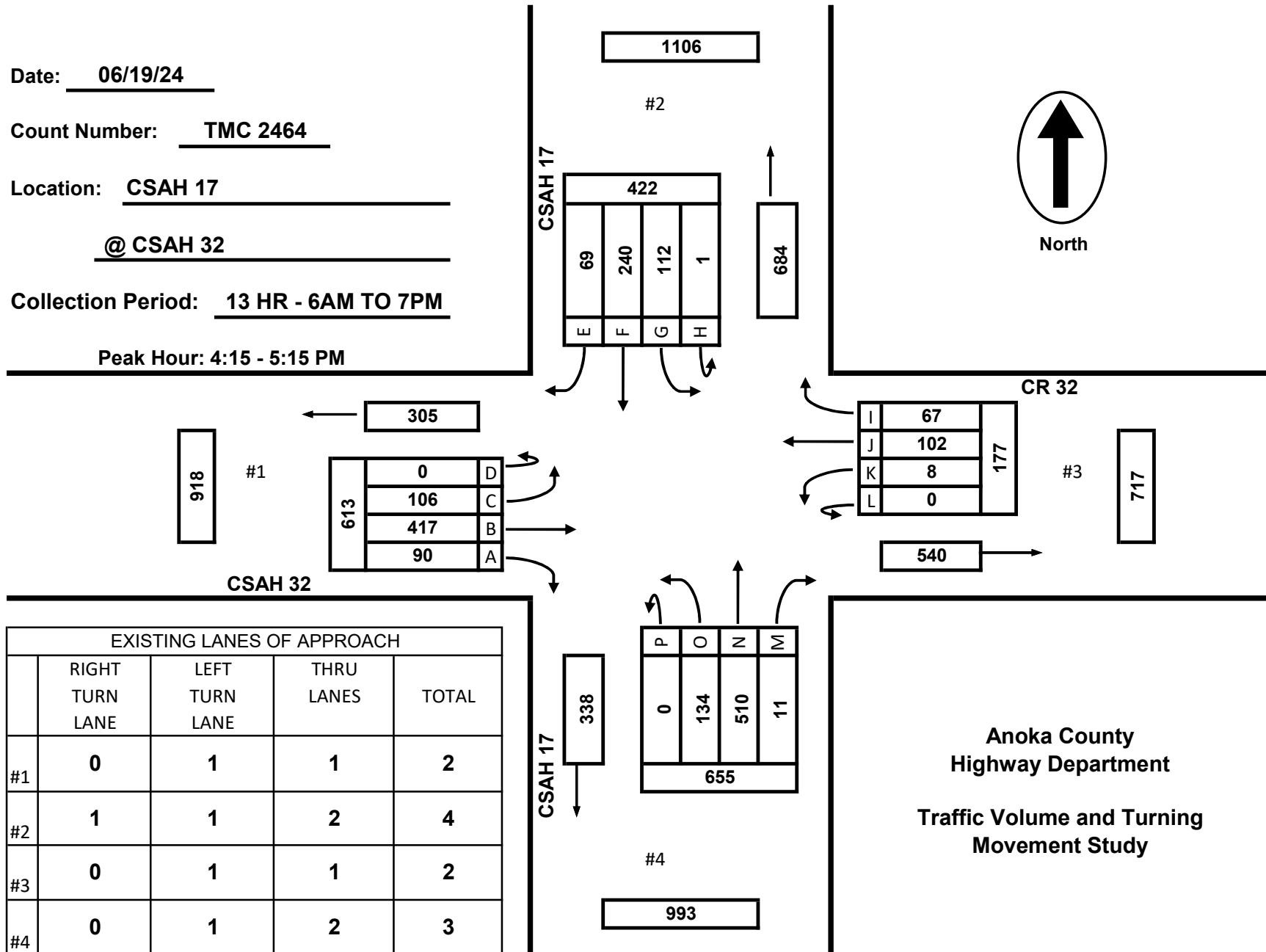
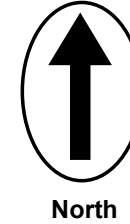
Count Number: TMC 2464

Location: CSAH 17

@ CSAH 32

Collection Period: 13 HR - 6AM TO 7PM

Peak Hour: 4:15 - 5:15 PM



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

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

TMC 2464 - CSAH 17 @ CSAH 32
Blaine MN
Wednesday, June 19, 2024

Time	Southbound CSAH 17						Westbound CR 32						Northbound CSAH 17						Eastbound CSAH 32						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 Total	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 Total	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	0	0	0	0	0	0
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 Total	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
3:00 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 Total	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	0	0	0	0	0
4:45 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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 Total	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
6:00 AM	0	4	25	6	0	35	0	0	18	1	0	19	0	4	11	1	0	16	0	3	15	6	0	24	94
6:15 AM	0	5	34	9	0	48	0	1	18	3	2	22	0	4	12	2	0	18	0	5	24	11	0	40	128
6:30 AM	0	3	35	16	0	54	0	0	17	6	0	23	0	5	15	0	0	20	0	4	20	7	0	31	128
6:45 AM	0	5	36	23	0	64	0	0	27	2	0	29	0	19	22	0	0	41	0	3	22	10	0	35	169
Hourly Total	0	17	130	54	0	201	0	1	80	12	2	93	0	32	60	3	0	95	0	15	81	34	0	130	519
7:00 AM	0	4	42	11	2	57	0	0	29	5	1	34	0	16	22	1	0	39	0	5	19	3	0	27	157
7:15 AM	0	7	55	15	0	77	0	1	30	7	1	38	0	8	16	1	0	25	0	9	25	11	0	45	185
7:30 AM	0	5	56	24	4	85	0	1	25	5	1	31	0	30	25	2	0	57	0	8	33	10	3	51	224
7:45 AM	0	18	64	20	1	102	0	3	39	8	0	50	0	15	29	3	0	47	0	12	30	15	0	57	256
Hourly Total	0	34	217	70	7	321	0	5	123	25	3	153	0	69	92	7	0	168	0	34	107	39	3	180	822

TMC 2464 - CSAH 17 @ CSAH 32
Blaine MN
Wednesday, June 19, 2024

Time	Southbound CSAH 17						Westbound CR 32						Northbound CSAH 17						Eastbound CSAH 32						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	12	47	17	1	76	0	2	27	11	1	40	0	13	21	1	0	35	0	10	35	8	1	53	204
8:15 AM	0	8	56	17	0	81	0	1	17	14	0	32	0	18	34	2	0	54	0	12	34	13	0	59	226
8:30 AM	0	9	52	20	2	81	0	0	28	16	0	44	0	20	44	2	0	66	0	11	27	3	0	41	232
8:45 AM	0	14	67	19	0	100	0	0	16	13	0	29	0	13	61	1	0	75	0	14	37	11	0	62	266
Hourly Total	0	43	222	73	3	338	0	3	88	54	1	145	0	64	160	6	0	230	0	47	133	35	1	215	928
9:00 AM	0	10	41	10	0	61	0	0	19	10	0	29	0	16	49	0	1	65	0	11	36	6	0	53	208
9:15 AM	0	9	49	11	1	69	0	0	21	12	2	33	0	10	40	4	1	54	0	11	21	9	1	41	197
9:30 AM	0	14	54	8	0	76	0	3	18	11	2	32	0	17	44	3	0	64	0	12	26	13	0	51	223
9:45 AM	0	15	59	15	0	89	0	4	14	9	1	27	0	15	45	1	2	61	0	10	31	9	0	50	227
Hourly Total	0	48	203	44	1	295	0	7	72	42	5	121	0	58	178	8	4	244	0	44	114	37	1	195	855
10:00 AM	0	19	44	13	0	76	0	2	18	13	2	33	0	14	49	3	2	66	0	14	32	10	0	56	231
10:15 AM	0	13	46	16	0	75	0	1	22	12	4	35	0	16	62	0	0	78	0	17	35	10	3	62	250
10:30 AM	0	18	53	13	0	84	0	0	9	12	3	21	0	18	35	2	12	55	0	11	32	16	0	59	219
10:45 AM	0	11	56	12	0	79	0	2	15	13	6	30	0	20	61	3	0	84	0	10	33	12	0	55	248
Hourly Total	0	61	199	54	0	314	0	5	64	50	15	119	0	68	207	8	14	283	0	52	132	48	3	232	948
11:00 AM	0	24	70	14	0	108	0	3	19	9	5	31	0	15	71	1	3	87	0	19	41	12	0	72	298
11:15 AM	0	14	78	21	0	113	0	1	11	10	1	22	0	17	60	1	0	78	0	14	35	9	0	58	271
11:30 AM	0	23	73	14	0	110	0	0	14	14	2	28	0	16	67	4	12	87	0	16	36	15	0	67	292
11:45 AM	0	18	57	22	4	97	0	0	16	19	3	35	0	15	72	4	0	91	0	13	41	15	2	69	292
Hourly Total	0	79	278	71	4	428	0	4	60	52	11	116	0	63	270	10	15	343	0	62	153	51	2	266	1153
12:00 PM	0	25	72	11	0	108	0	0	13	9	5	22	0	13	56	2	0	71	0	24	42	14	1	80	281
12:15 PM	0	24	49	28	0	101	0	0	12	19	1	31	0	14	82	1	0	97	0	18	45	11	0	74	303
12:30 PM	0	22	66	15	1	103	0	0	17	13	0	30	0	15	68	0	0	83	0	6	26	18	2	50	266
12:45 PM	0	25	58	17	0	100	0	0	10	20	2	30	0	19	61	2	1	82	0	14	38	8	1	60	272
Hourly Total	0	96	245	71	1	412	0	0	52	61	8	113	0	61	267	5	1	333	0	62	151	51	4	264	1122
1:00 PM	0	20	68	17	0	105	0	1	11	17	0	29	0	18	61	3	0	82	0	11	39	15	1	65	281
1:15 PM	0	28	79	13	3	120	0	1	13	13	6	27	0	14	76	4	0	94	0	16	45	9	0	70	311
1:30 PM	0	18	58	14	0	90	0	1	12	9	2	22	0	13	73	7	4	93	0	15	45	10	0	70	275
1:45 PM	0	21	59	10	1	90	0	2	17	8	1	27	0	13	82	0	0	95	0	15	48	16	2	79	291
Hourly Total	0	87	264	54	4	405	0	5	53	47	9	105	0	58	292	14	4	364	0	57	177	50	3	284	1158
2:00 PM	0	16	63	15	1	94	0	0	16	10	3	26	0	17	85	1	0	103	0	20	44	19	1	83	306
2:15 PM	0	30	64	18	0	112	0	1	35	16	1	52	0	15	88	2	1	105	0	16	50	9	0	75	344
2:30 PM	0	18	53	14	1	85	0	2	21	12	5	35	0	24	79	4	1	107	0	17	56	13	0	86	313
2:45 PM	0	18	41	17	0	76	0	2	16	16	2	36	0	22	63	4	5	89	0	24	53	17	2	94	295
Hourly Total	0	82	221	64	2	367	0	5	90	54	11	149	0	78	315	11	7	404	0	77	203	58	3	338	1258
3:00 PM	0	23	63	18	0	104	0	0	19	18	2	37	0	24	92	1	0	117	0	24	67	16	0	107	365
3:15 PM	0	21	50	15	0	86	0	0	32	16	4	48	0	37	113	2	3	152	0	32	78	25	0	135	421
3:30 PM	0	34	52	18	0	104	0	2	20	11	1	33	0	30	102	2	0	134	0	31	79	18	0	128	399
3:45 PM	0	24	72	21	0	117	0	4	13	15	1	32	1	23	128	5	1	157	0	23	69	25	0	117	423
Hourly Total	0	102	237	72	0	411	0	6	84	60	8	150	1	114	435	10	4	560	0	110	293	84	0	487	1608

TMC 2464 - CSAH 17 @ CSAH 32
Blaine MN
Wednesday, June 19, 2024

Time	Southbound CSAH 17						Westbound CR 32						Northbound CSAH 17						Eastbound CSAH 32						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	18	64	16	0	98	0	1	18	21	1	40	0	20	102	2	0	124	0	40	83	18	2	141	403
4:15 PM	0	24	51	21	0	96	0	2	25	19	2	46	0	31	127	2	0	160	0	31	99	27	0	157	459
4:30 PM	0	28	69	16	0	113	0	2	21	17	1	40	0	39	148	3	1	190	0	29	98	19	0	146	489
4:45 PM	0	30	71	12	0	113	0	1	24	17	1	42	0	29	114	3	0	146	0	27	112	21	0	160	461
Hourly Total	0	100	255	65	0	420	0	6	88	74	5	168	0	119	491	10	1	620	0	127	392	85	2	604	1812
5:00 PM	1	30	49	20	0	100	0	3	32	14	0	49	0	35	121	3	0	159	0	19	108	23	0	150	458
5:15 PM	0	31	62	21	0	114	0	1	20	13	2	34	0	20	122	4	2	146	0	18	68	36	0	122	416
5:30 PM	0	33	59	20	0	112	0	0	20	16	1	36	0	31	89	3	1	123	0	22	91	12	0	125	396
5:45 PM	0	21	44	17	0	82	0	0	18	24	3	42	0	12	77	3	2	92	0	19	49	13	1	81	297
Hourly Total	1	115	214	78	0	408	0	4	90	67	6	161	0	98	409	13	5	520	0	78	316	84	1	478	1567
6:00 PM	0	20	57	11	2	88	0	0	22	22	1	44	0	16	70	2	1	88	0	13	54	15	4	82	302
6:15 PM	0	27	60	10	0	97	0	3	9	18	2	30	0	15	77	6	0	98	0	14	43	12	2	69	294
6:30 PM	0	26	47	3	0	76	0	2	15	21	1	38	0	12	64	5	0	81	0	16	38	11	0	65	260
6:45 PM	0	21	46	12	0	79	0	1	15	8	3	24	0	13	51	1	2	65	0	11	37	9	0	57	225
Hourly Total	0	94	210	36	2	340	0	6	61	69	7	136	0	56	262	14	3	332	0	54	172	47	6	273	1081
7:00 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
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 Total	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
8:00 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 Total	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 Total	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 Total	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 Total	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 TOTAL	1	958	2895	806	24	4660	0	57	1005	667	91	1729	1	938	3438	119	58	4496	0	819	2424	703	29	3946	14831
Cars	1	931	2872	782	14	4586	0	56	986	664	35	1706	1	907	3403	119	9	4430	0	800	2380	675	15	3855	14577
Heavy Vehicles	0	27	23	24	10	74	0	1	19	3	56	23	0	31	35	0	49	66	0	19	44	28	14	91	254
Heavy Vehicle %	0.00%	2.82%	0.79%	2.98%	41.67%	1.59%	0.00%	1.75%	1.89%	0.45%	61.54%	1.33%	0.00%	3.30%	1.02%	0.00%	84.48%	1.47%	0.00%	2.32%	1.82%	3.98%	48.28%	2.31%	1.71%

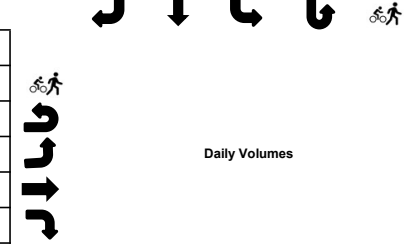
TMC 2464 - CSAH 17 @ CSAH 32
Blaine MN
Wednesday, June 19, 2024
AM Peak Hour

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							
11:00 AM	0	24	70	14	0	108	0	3	19	9	5	31	0	15	71	1	3	87	0	19	41	12	0	72	0	14	35	9	0	58	298
11:15 AM	0	14	78	21	0	113	0	1	11	10	1	22	0	17	60	1	0	78	0	14	35	9	0	58	0	16	67	4	12	87	271
11:30 AM	0	23	73	14	0	110	0	0	14	14	2	28	0	16	67	4	12	87	0	16	36	15	0	67	0	13	41	15	2	69	292
11:45 AM	0	18	57	22	4	97	0	0	16	19	3	35	0	15	72	4	0	91	0	13	41	15	2	69	0	13	41	15	2	69	292
Peak Hour Total	0	79	278	71	4	428	0	4	60	52	11	116	0	63	270	10	15	343	0	62	153	51	2	266	0	62	153	51	2	266	1153
PHF	0.000	0.823	0.891	0.807	0.250	0.947	0.000	0.333	0.789	0.684	0.550	0.829	0.000	0.926	0.938	0.625	0.313	0.942	0.000	0.816	0.933	0.850	0.250	0.924	0.000	0.816	0.933	0.850	0.250	0.924	0.967

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							
4:15 PM	0	24	51	21	0	96	0	2	25	19	2	46	0	31	127	2	0	160	0	31	99	27	0	157	0	29	98	19	0	146	459
4:30 PM	0	28	69	16	0	113	0	2	21	17	1	40	0	39	148	3	1	190	0	29	98	19	0	146	0	27	112	21	0	160	489
4:45 PM	0	30	71	12	0	113	0	1	24	17	1	42	0	29	114	3	0	146	0	27	112	21	0	160	0	19	108	23	0	150	461
5:00 PM	1	30	49	20	0	100	0	3	32	14	0	49	0	35	121	3	0	159	0	19	108	23	0	150	0	19	108	23	0	150	458
Peak Hour Total	1	112	240	69	0	422	0	8	102	67	4	177	0	134	510	11	1	655	0	106	417	90	0	613	0	106	417	90	0	613	1867
PHF	0.250	0.933	0.845	0.821	0.000	0.934	0.000	0.667	0.797	0.882	0.500	0.903	0.000	0.859	0.861	0.917	0.250	0.862	0.000	0.855	0.931	0.833	0.000	0.958	0.000	0.855	0.931	0.833	0.000	0.958	0.954

Total Vehicles On Leg				9585			
Vehicles Entering Intersection		4660		Vehicles Exiting Intersection		4925	
Southbound							
Cars	782	2872	931	1	14		
Heavy	24	23	27	0	10		
Total	806	2895	958	1	24		



Total Vehicles on Leg 6695	Eastbound	Vehicles Entering Intersection	3946
		Cars	15
		Heavy	14
		Total	29
		Vehicles Exiting Intersection	2749
		Cars	800
		Heavy	19
		Total	819
		Cars	2380
		Heavy	44
		Total	2424
		Cars	675
		Heavy	28
		Total	703

Total Vehicles on Leg 5230	Westbound	Vehicles Entering Intersection	1729
		Cars	664
		Heavy	3
		Total	667
		Vehicles Exiting Intersection	3501
		Cars	986
		Heavy	19
		Total	1005
		Cars	56
		Heavy	1
		Total	57
		Cars	0
		Heavy	0
		Total	0
		Cars	35
		Heavy	56
		Total	91

Cars	9	1	907	3403	119
Heavy	49	0	31	35	0
Total	58	1	938	3438	119
Northbound					
Vehicles Entering Intersection			4496		
Vehicles Exiting Intersection			3656		
Total Vehicles On Leg			8152		

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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	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	
06/19/2024	5:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
06/19/2024	5:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
06/19/2024	6:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0
06/19/2024	6:15	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
06/19/2024	6:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
06/19/2024	6:45	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
06/19/2024	7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
06/19/2024	7:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0
06/19/2024	7:30	0	0	1	2	3	0	0	0	2	0	0	0	0	1	0	0	0	0	0	1	1	0	3	0	0
06/19/2024	7:45	0	1	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0
06/19/2024	8:00	0	1	0	1	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0	0
06/19/2024	8:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
06/19/2024	8:30	0	1	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0
06/19/2024	8:45	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0
06/19/2024	9:00	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0
06/19/2024	9:15	0	1	0	1	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0
06/19/2024	9:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	0	0	0	0	1	0	1	0	0
06/19/2024	9:45	0	2	0	1	0	0	0	0	0	0	1	0	1	1	0	0	1	0	0	1	1	0	0	0	0
06/19/2024	10:00	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	1	2	0	0	0	0	0
06/19/2024	10:15	0	0	0	1	0	0	0	0	0	0	0	4	0	0	1	0	0	0	0	2	2	0	0	0	0
06/19/2024	10:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	12	0	0	2	2	0	0	0
06/19/2024	10:45	0	0	0	1	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	0
06/19/2024	11:00	0	0	1	0	0	0	0	0	0	0	3	2	0	2	1	0	3	0	0	0	3	0	0	0	0
06/19/2024	11:15	0	0	0	1	0	0	0	0	0	0	0	1	0	3	1	0	0	0	0	2	1	0	0	0	0
06/19/2024	11:30	0	0	1	1	0	0	0	0	0	0	2	0	0	1	1	0	12	0	0	1	1	1	0	0	0
06/19/2024	11:45	0	1	0	2	0	4	0	0	0	0	1	2	0	1	1	0	0	0	0	1	1	0	0	2	0
06/19/2024	12:00	0	2	0	1	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	2	1	0	0	0
06/19/2024	12:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0
06/19/2024	12:30	0	2	0	1	0	1	0	0	1	1	0	0	0	1	3	0	0	0	0	0	1	1	0	0	0
06/19/2024	12:45	0	0	1	0	0	0	0	0	1	0	1	1	0	0	1	0	0	1	0	0	1	0	1	0	0
06/19/2024	13:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
06/19/2024	13:15	0	1	2	0	0	0	0	0	1	0	0	4	0	0	1	0	0	0	0	0	1	2	0	0	0
06/19/2024	13:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	1	1	0	0	0	0
06/19/2024	13:45	0	1	1	0	0	0	0	0	1	0	0	1	0	1	2	0	0	0	0	0	1	1	2	0	0
06/19/2024	14:00	0	0	1	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1
06/19/2024	14:15	0	2	3	1	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
06/19/2024	14:30	0	0	0	1	0	0	0	0	0	0	1	2	0	2	3	0	1	0	0	1	0	1	0	0	0
06/19/2024	14:45	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0	2	2	0	0	1	0	0	0	0
06/19/2024	15:00	0	0	0	1	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
06/19/2024	15:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	1	3	0	0	0	0
06/19/2024	15:30	0	1	0	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	1	1	0	0	0
06/19/2024	15:45	0	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0
06/19/2024	16:00	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
06/19/2024	16:15	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	0	0	0	0	2	0	0	0
06/19/2024	16:30	0	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0
06/19/2024	16:45	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	0								

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2464

Study Date : 06/27/2024

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 17

Number of Lanes : 2+

Total Approach Volume: 4,496

Southbound: CSAH 17

Number of Lanes :2+

Total Approach Volume: 4,660

Minor Street Approaches

Eastbound: CSAH 32

Number of Lanes :2+

Total Approach Volume: 3,243

Westbound: CR 32

Number of Lanes :2+

Total Approach Volume: 1,062

Warrant Summary (Rural Values Apply)

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

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

Required volumes reached for 12 hours, 8 are needed

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

Required volumes reached for 8 hours, 8 are needed

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

Required 1A volumes reached for 12 hours, 8 are needed

Required 1B volumes reached for 11 hours, 8 are needed

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

Number of hours (9) volumes exceed minimum \geq minimum required (4).

Warrant 3 - Peak Hour.....Satisfied

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

Number of one hour periods (41) volumes exceed minimum \geq required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes.....Satisfied

Volumes exceed minimums for at least one hour period.

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

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

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

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

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

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

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2464

Study Date : 06/27/2024

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

12 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

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

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	620	+	420	=	1040	519	94	Yes
15:00 - 16:00	560	+	411	=	971	403	90	Yes
17:00 - 18:00	520	+	408	=	928	394	94	Yes
14:00 - 15:00	404	+	367	=	771	280	95	Yes
11:00 - 12:00	343	+	428	=	771	215	64	Yes
13:00 - 14:00	364	+	405	=	769	234	58	Yes
12:00 - 13:00	333	+	412	=	745	213	52	Yes
18:00 - 19:00	332	+	340	=	672	226	67	Yes
10:00 - 11:00	283	+	314	=	597	184	69	Yes
08:00 - 09:00	230	+	338	=	568	180	91	Yes
09:00 - 10:00	244	+	295	=	539	158	79	Yes
07:00 - 08:00	168	+	321	=	489	141	128	Yes
06:45 - 07:45	162	+	283	=	445	124	113	No
06:30 - 07:30	125	+	252	=	377	107	104	No
06:15 - 07:15	118	+	223	=	341	102	92	No
06:00 - 07:00	95	+	201	=	296	96	81	No
05:45 - 06:45	54	+	137	=	191	71	54	No
05:30 - 06:30	34	+	83	=	117	47	37	No
05:15 - 06:15	16	+	35	=	51	18	18	No
00:00 - 01:00	0	+	0	=	0	0	0	No
00:15 - 01:15	0	+	0	=	0	0	0	No
00:30 - 01:30	0	+	0	=	0	0	0	No
00:45 - 01:45	0	+	0	=	0	0	0	No
01:00 - 02:00	0	+	0	=	0	0	0	No
01:15 - 02:15	0	+	0	=	0	0	0	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2464

Study Date : 06/27/2024

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

8 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

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

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:15 - 17:15	655	+	422	=	1077	523	110	Yes
15:15 - 16:15	567	+	405	=	972	435	90	Yes
17:15 - 18:15	449	+	396	=	845	334	81	Yes
14:15 - 15:15	418	+	377	=	795	307	98	Yes
13:15 - 14:15	385	+	394	=	779	248	62	Yes
11:15 - 12:15	327	+	428	=	755	221	55	Yes
12:15 - 13:15	344	+	409	=	753	197	51	Yes
10:15 - 11:15	304	+	346	=	650	198	71	Yes
10:00 - 11:00	283	+	314	=	597	184	69	No
09:30 - 10:30	269	+	316	=	585	177	82	No
09:45 - 10:45	260	+	324	=	584	182	70	No
08:15 - 09:15	260	+	323	=	583	182	81	No
08:30 - 09:30	260	+	311	=	571	168	84	No
08:00 - 09:00	230	+	338	=	568	180	91	No
08:45 - 09:45	258	+	306	=	564	168	77	No
09:15 - 10:15	245	+	310	=	555	157	80	No
07:45 - 08:45	202	+	340	=	542	171	117	No
09:00 - 10:00	244	+	295	=	539	158	79	No
07:30 - 08:30	193	+	344	=	537	174	115	No
07:15 - 08:15	164	+	340	=	504	162	128	No
18:15 - 19:15	244	+	252	=	496	159	45	No
07:00 - 08:00	168	+	321	=	489	141	128	No
06:45 - 07:45	162	+	283	=	445	124	113	No
06:30 - 07:30	125	+	252	=	377	107	104	No
06:15 - 07:15	118		223		341	102	92	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2464

Study Date : 06/27/2024

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

12 hours meet 1A minimums.
11 hours meet 1B minimums.
Warrant IS met.

Site Data Required

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

Volume Requirements

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

Veh/Hr Minor = **112 56**

Major Road CSAH 17

Minor Road CSAH 32

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
15:45 - 16:45	631	+	424	=	1055	472	86	Yes
16:45 - 17:45	574	+	439	=	1013	465	101	Yes
14:45 - 15:45	492	+	370	=	862	388	93	Yes
13:45 - 14:45	410	+	381	=	791	266	94	Yes
12:45 - 13:45	351	+	415	=	766	223	49	Yes
11:45 - 12:45	342	+	409	=	751	215	58	Yes
10:45 - 11:45	336	+	410	=	746	204	65	Yes
17:45 - 18:45	359	+	343	=	702	246	69	Yes
09:45 - 10:45	260	+	324	=	584	182	70	Yes
08:45 - 09:45	258	+	306	=	564	168	77	Yes
07:45 - 08:45	202	+	340	=	542	171	117	Yes
06:45 - 07:45	162		283		445	124	113	Yes

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:15 - 17:15	655	+	422	=	1077	523	110	Yes
15:15 - 16:15	567	+	405	=	972	435	90	Yes
17:15 - 18:15	449	+	396	=	845	334	81	Yes
14:15 - 15:15	418	+	377	=	795	307	98	Yes
13:15 - 14:15	385	+	394	=	779	248	62	Yes
11:15 - 12:15	327	+	428	=	755	221	55	Yes
12:15 - 13:15	344	+	409	=	753	197	51	Yes
10:15 - 11:15	304	+	346	=	650	198	71	Yes
08:15 - 09:15	260	+	323	=	583	182	81	Yes
09:15 - 10:15	245	+	310	=	555	157	80	Yes
07:15 - 08:15	164	+	340	=	504	162	128	Yes
18:15 - 19:15	244		252		496	159	45	No

ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2464

Study Date : 06/27/2024

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.

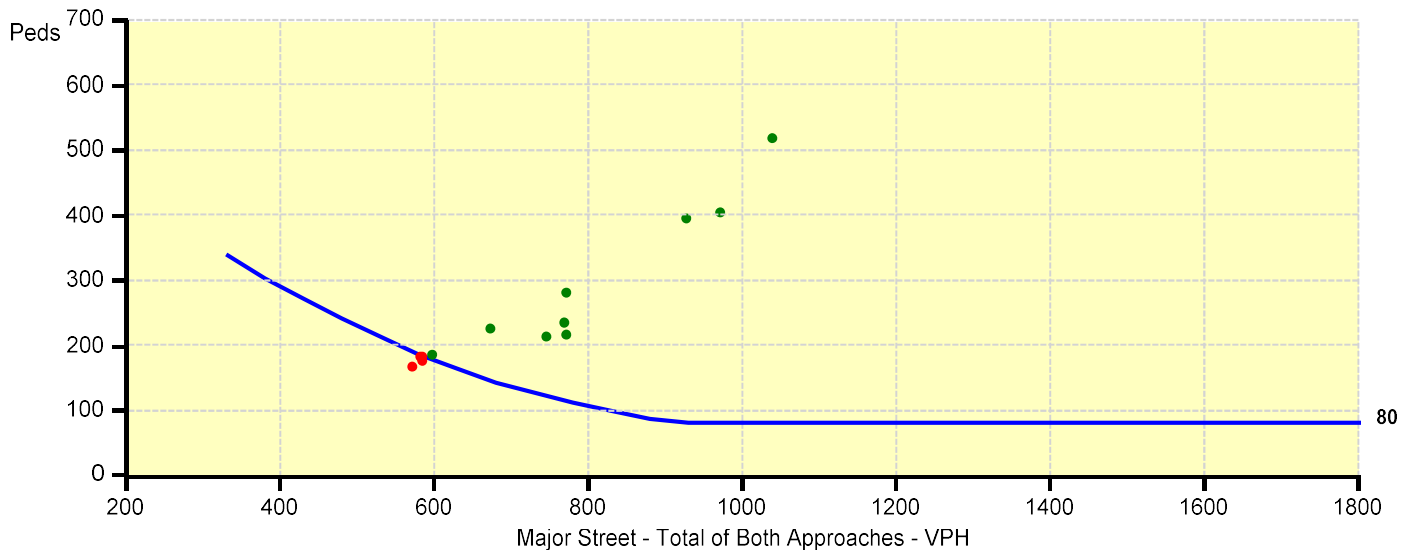
Summary

9 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 17				Total	Minor Road CSAH 32		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
16:00 - 17:00	620	+	420	=	1040	519	94	Yes
15:00 - 16:00	560	+	411	=	971	403	90	Yes
17:00 - 18:00	520	+	408	=	928	394	94	Yes
14:00 - 15:00	404	+	367	=	771	280	95	Yes
11:00 - 12:00	343	+	428	=	771	215	64	Yes
13:00 - 14:00	364	+	405	=	769	234	58	Yes
12:00 - 13:00	333	+	412	=	745	213	52	Yes
18:00 - 19:00	332	+	340	=	672	226	67	Yes
10:00 - 11:00	283	+	314	=	597	184	69	Yes
09:30 - 10:30	269	+	316	=	585	177	82	No
09:45 - 10:45	260	+	324	=	584	182	70	No
08:15 - 09:15	260	+	323	=	583	182	81	No



ANOKA COUNTY HIGHWAY

PC - WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2464

Study Date : 06/27/2024

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

21 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

Time	Major Road CSAH 17					Minor Road CSAH 32		Met?
	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	
16:30 - 17:30	641	+	440	=	1081	479	104	Yes
16:15 - 17:15	655	+	422	=	1077	523	110	Yes
15:45 - 16:45	631	+	424	=	1055	472	86	Yes
16:00 - 17:00	620	+	420	=	1040	519	94	Yes
16:45 - 17:45	574	+	439	=	1013	465	101	Yes
15:30 - 16:30	575	+	415	=	990	455	85	Yes
15:15 - 16:15	567	+	405	=	972	435	90	Yes
15:00 - 16:00	560	+	411	=	971	403	90	Yes
17:00 - 18:00	520	+	408	=	928	394	94	Yes
14:45 - 15:45	492	+	370	=	862	388	93	Yes
17:15 - 18:15	449	+	396	=	845	334	81	Yes
14:30 - 15:30	465		351		816	351	94	Yes

