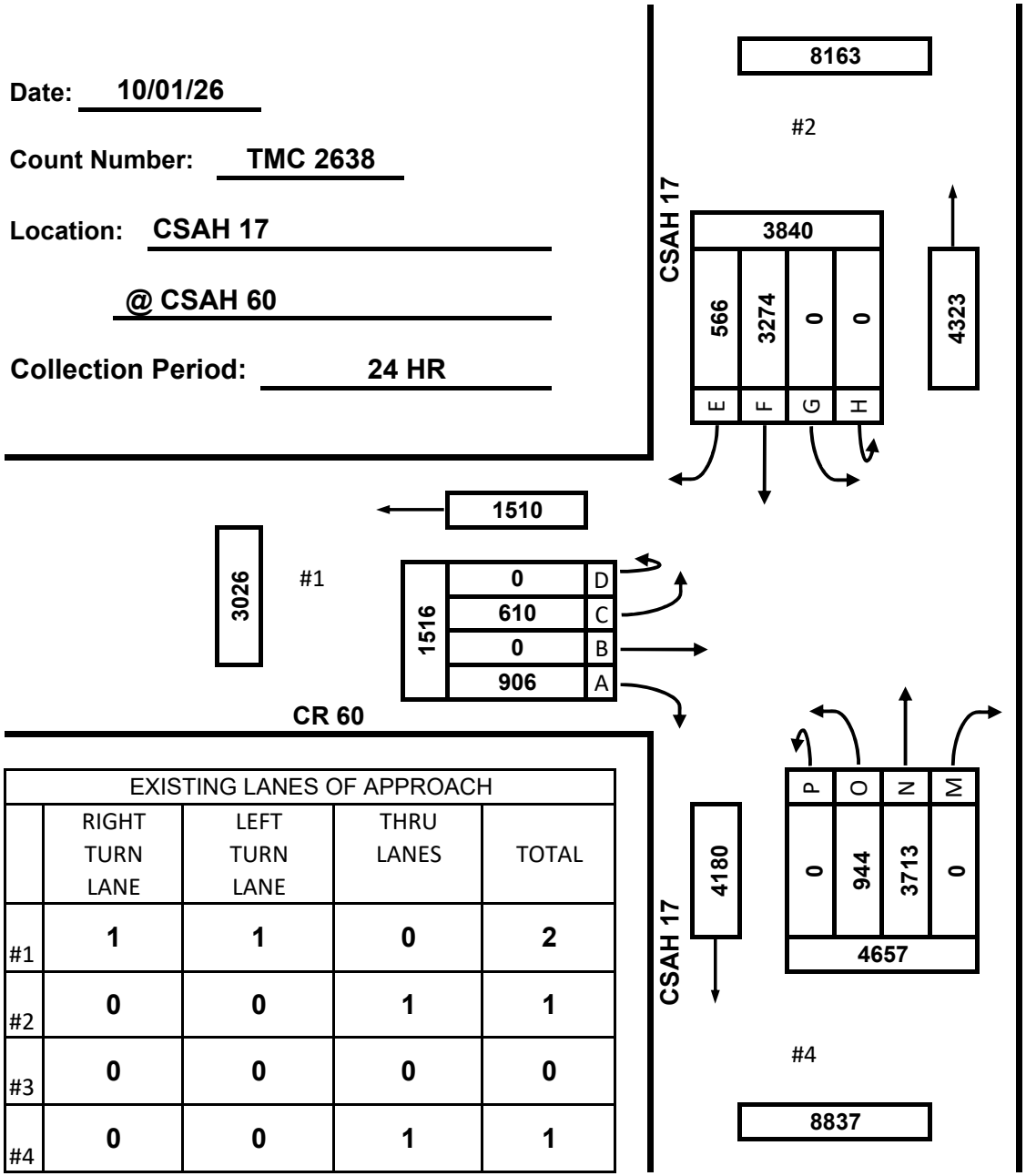
Date: 10/01/26

Count Number: TMC 2638

Location: CSAH 17

@ CSAH 60

Collection Period: 24 HR



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

North

Anoka County
Highway Department

Traffic Volume and Turning Movement Study

Date: 10/01/26

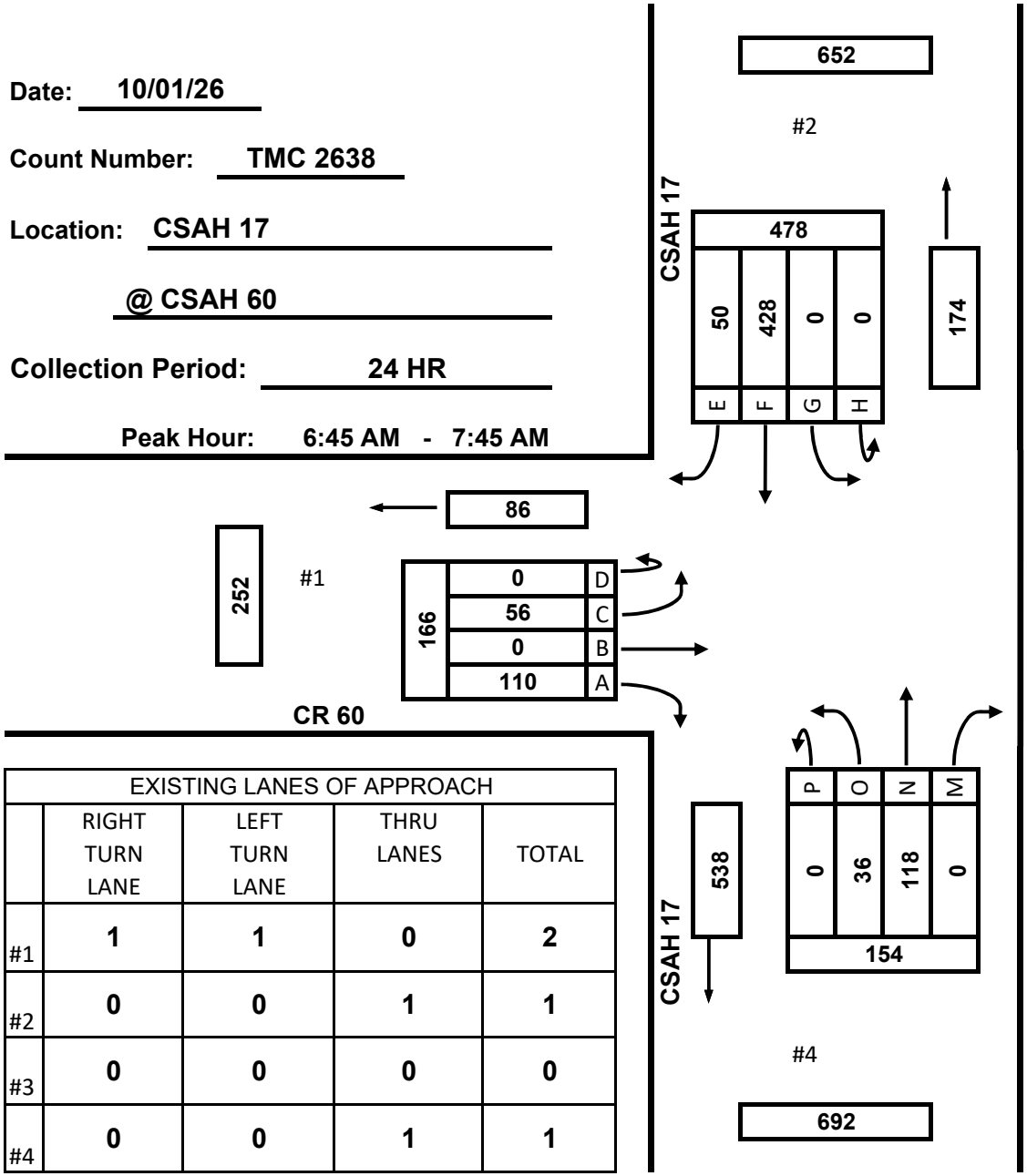
Count Number: TMC 2638

Location: CSAH 17

@ CSAH 60

Collection Period: 24 HR

Peak Hour: 6:45 AM - 7:45 AM



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

Anoka County
Highway Department

Traffic Volume and Turning Movement Study

Date: 10/01/26

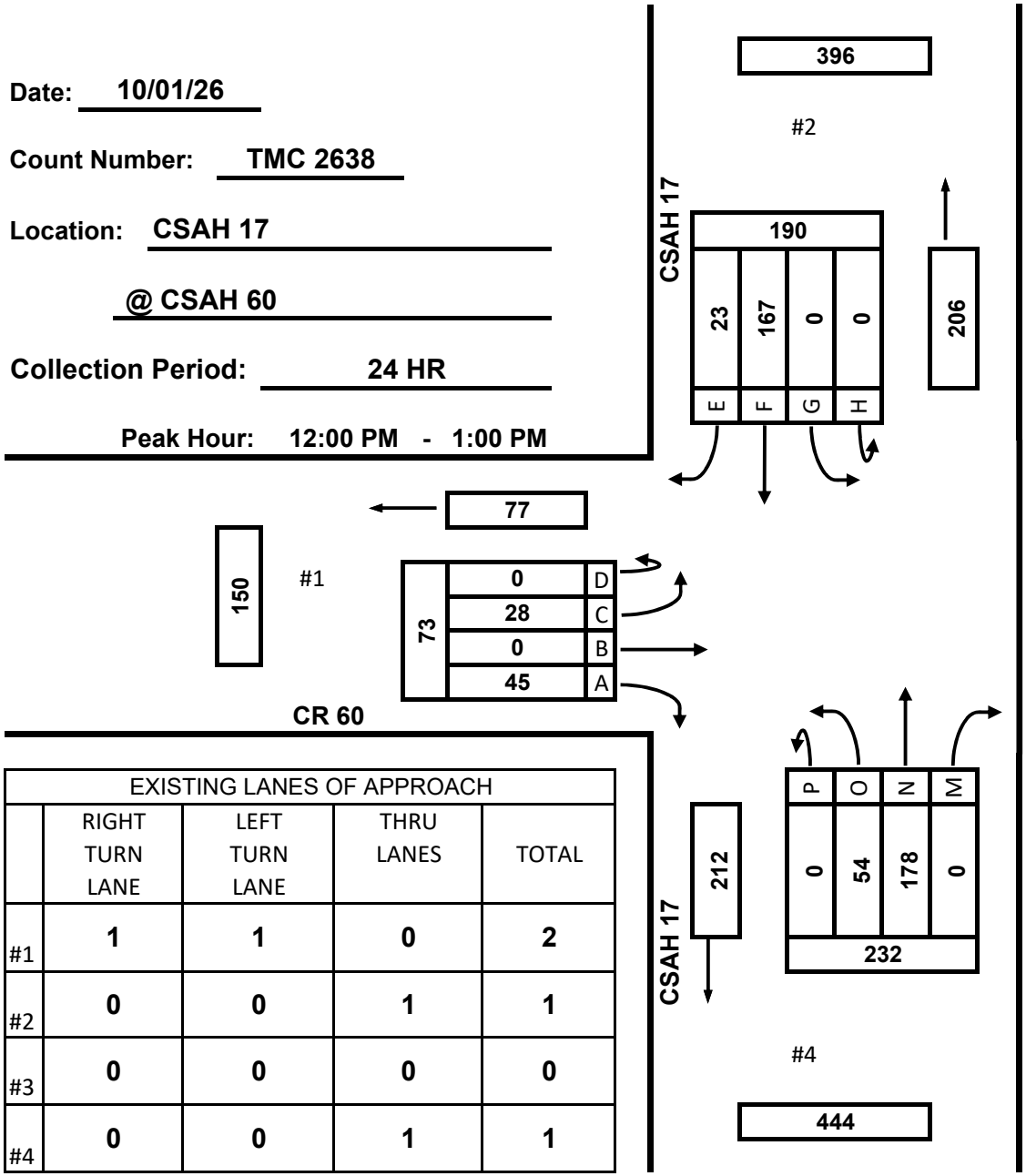
Count Number: TMC 2638

Location: CSAH 17

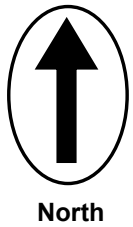
@ CSAH 60

Collection Period: 24 HR

Peak Hour: 12:00 PM - 1:00 PM



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



Anoka County
Highway Department

Traffic Volume and Turning Movement Study

Date: 10/01/26

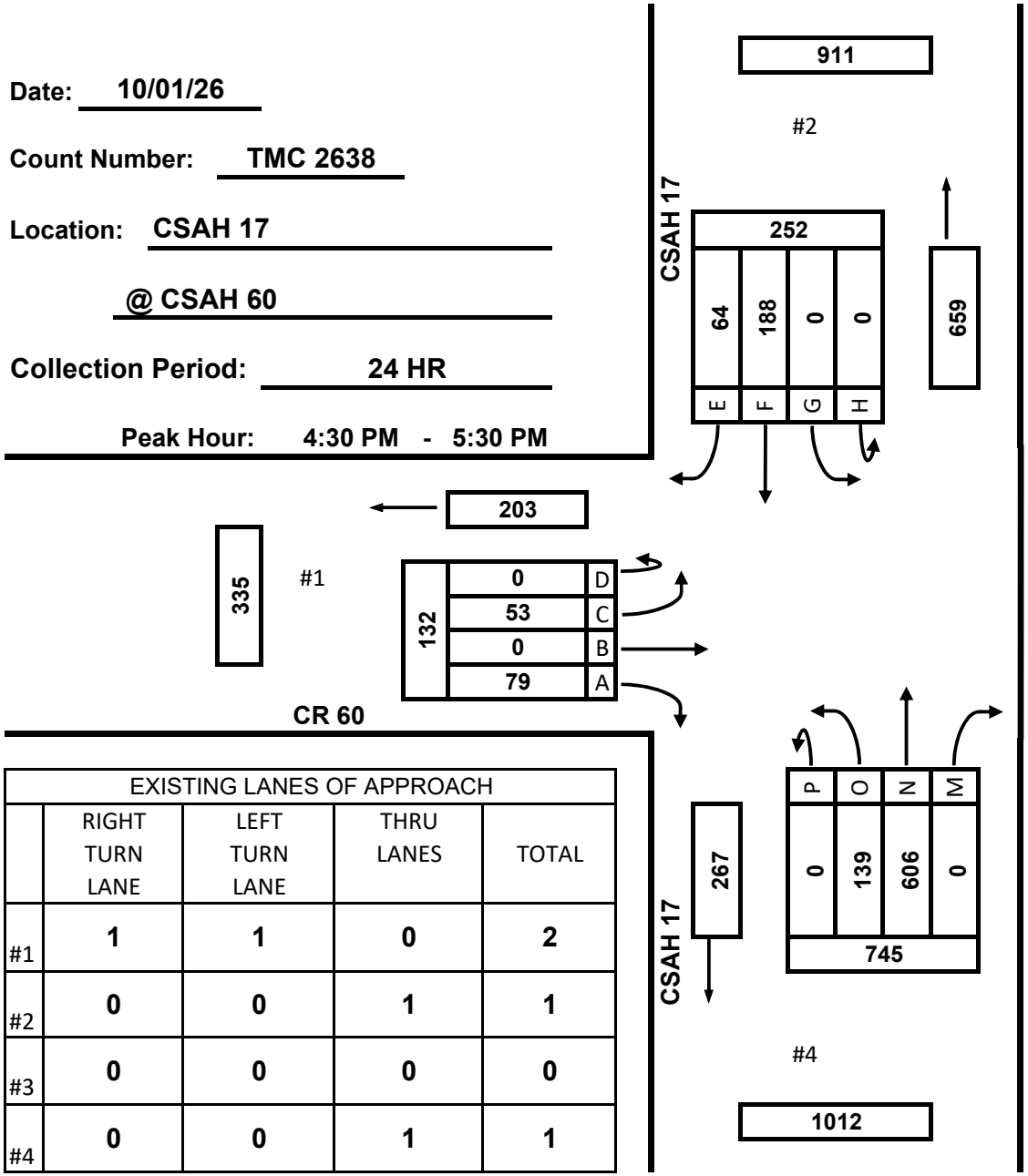
Count Number: TMC 2638

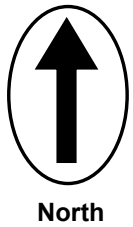
Location: CSAH 17

@ CSAH 60

Collection Period: 24 HR

Peak Hour: 4:30 PM - 5:30 PM





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

Anoka County
Highway Department

Traffic Volume and Turning Movement Study

TMC 2638 - CSAH 17 @ CSAH 60
Ham Lake MN
Thursday, October 1, 2026

Time	Southbound CSAH 17						Westbound None						Northbound CSAH 17						Eastbound CR 60						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	1	1	0	*2*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	1	0	1	0	*2*	**6**
12:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	1	0	0	*2*	0	1	0	0	0	*1*	**3**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	3	2	0	0	*5*	0	0	0	0	0	*0*	**5**
12:45 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	5	0	0	*5*	0	1	0	1	0	*2*	**8**
Hourly Total	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	4	10	0	0	*14*	0	3	0	2	0	*5*	**22**
1:00 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**3**
1:15 AM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	1	3	0	0	*4*	0	0	0	0	0	*0*	**7**
1:30 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**2**
1:45 AM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	5	0	0	*5*	0	0	0	0	0	*0*	**6**
Hourly Total	0	0	4	2	0	*6*	0	0	0	0	0	*0*	0	1	11	0	0	*12*	0	0	0	0	0	*0*	**18**
2:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**2**
2:15 AM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	1	2	0	0	*3*	0	1	0	0	0	*1*	**7**
2:30 AM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
2:45 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**
Hourly Total	0	0	7	1	0	*8*	0	0	0	0	0	*0*	0	1	6	0	0	*7*	0	1	0	0	0	*1*	**16**
3:00 AM	0	0	6	0	0	*6*	0	0	0	0	0	*0*	0	1	5	0	0	*6*	0	0	0	0	0	*0*	**12**
3:15 AM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	1	0	*1*	**5**
3:30 AM	0	0	4	0	0	*4*	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	0	0	3	0	*3*	**11**
3:45 AM	0	0	12	0	0	*12*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	2	0	1	0	*3*	**16**
Hourly Total	0	0	25	0	0	*25*	0	0	0	0	0	*0*	0	1	11	0	0	*12*	0	2	0	5	0	*7*	**44**
4:00 AM	0	0	3	1	0	*4*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	1	0	4	0	*5*	**10**
4:15 AM	0	0	19	0	0	*19*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	2	0	*2*	**22**
4:30 AM	0	0	18	3	0	*21*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	2	0	5	0	*7*	**31**
4:45 AM	0	0	20	4	0	*24*	0	0	0	0	0	*0*	0	1	6	0	0	*7*	0	1	0	6	0	*7*	**38**
Hourly Total	0	0	60	8	0	*68*	0	0	0	0	0	*0*	0	2	10	0	0	*12*	0	4	0	17	0	*21*	**101**
5:00 AM	0	0	40	2	0	*42*	0	0	0	0	0	*0*	0	1	4	0	0	*5*	0	4	0	13	0	*17*	**64**
5:15 AM	0	0	44	2	0	*46*	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	2	0	9	0	*11*	**61**
5:30 AM	0	0	82	5	0	*87*	0	0	0	0	0	*0*	0	3	7	0	0	*10*	0	5	0	16	0	*21*	**118**
5:45 AM	0	0	58	3	0	*61*	0	0	0	0	0	*0*	0	0	8	0	0	*8*	0	5	0	13	0	*18*	**87**
Hourly Total	0	0	224	12	0	*236*	0	0	0	0	0	*0*	0	4	23	0	0	*27*	0	16	0	51	0	*67*	**330**
6:00 AM	0	0	73	1	0	*74*	0	0	0	0	0	*0*	0	1	8	0	0	*9*	0	8	0	17	0	*25*	**108**
6:15 AM	0	0	92	7	0	*99*	0	0	0	0	0	*0*	0	4	23	0	0	*27*	0	3	0	17	0	*20*	**146**
6:30 AM	0	0	111	12	0	*123*	0	0	0	0	0	*0*	0	6	29	0	0	*35*	0	10	0	23	0	*33*	**191**
6:45 AM	0	0	103	11	0	*114*	0	0	0	0	0	*0*	0	13	34	0	0	*47*	0	8	0	26	0	*34*	**195**
Hourly Total	0	0	379	31	0	*410*	0	0	0	0	0	*0*	0	24	94	0	0	*118*	0	29	0	83	0	*112*	**640**
7:00 AM	0	0	114	13	0	*127*	0	0	0	0	0	*0*	0	7	19	0	0	*26*	0	15	0	23	0	*38*	**191**
7:15 AM	0	0	109	12	0	*121*	0	0	0	0	0	*0*	0	7	28	0	0	*35*	0	15	0	32	0	*47*	**203**
7:30 AM	0	0	102	14	0	*116*	0	0	0	0	0	*0*	0	9	37	0	0	*46*	0	18	0	29	0	*47*	**209**
7:45 AM	0	0	91	9	0	*100*	0	0	0	0	0	*0*	0	7	40	0	0	*47*	0	14	0	31	0	*45*	**192**
Hourly Total	0	0	416	48	0	*464*	0	0	0	0	0	*0*	0	30	124	0	0	*154*	0	62	0	115	0	*177*	**795**

TMC 2638 - CSAH 17 @ CSAH 60
Ham Lake MN
Thursday, October 1, 2026

	Southbound CSAH 17						Westbound None						Northbound CSAH 17						Eastbound CR 60						
Time	**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***	**VEHICLE TOTAL**
8:00 AM	0	0	73	11	0	*84*	0	0	0	0	0	*0*	0	8	31	0	0	*39*	0	10	0	15	0	*25*	**148**
8:15 AM	0	0	81	5	0	*86*	0	0	0	0	0	*0*	0	10	34	0	0	*44*	0	10	0	18	0	*28*	**158**
8:30 AM	0	0	76	6	0	*82*	0	0	0	0	0	*0*	0	7	35	0	0	*42*	0	11	0	16	0	*27*	**151**
8:45 AM	0	0	51	12	0	*63*	0	0	0	0	0	*0*	0	13	23	0	0	*36*	0	12	0	14	0	*26*	**125**
Hourly Total	0	0	281	34	0	*315*	0	0	0	0	0	*0*	0	38	123	0	0	*161*	0	43	0	63	0	*106*	**582**
9:00 AM	0	0	59	7	0	*66*	0	0	0	0	0	*0*	0	16	36	0	0	*52*	0	12	0	23	0	*35*	**153**
9:15 AM	0	0	42	7	0	*49*	0	0	0	0	0	*0*	0	11	26	0	0	*37*	0	8	0	23	0	*31*	**117**
9:30 AM	0	0	43	6	0	*49*	0	0	0	0	0	*0*	0	11	44	0	0	*55*	0	11	0	19	0	*30*	**134**
9:45 AM	0	0	48	8	0	*56*	0	0	0	0	0	*0*	0	4	39	0	0	*43*	0	10	0	7	0	*17*	**116**
Hourly Total	0	0	192	28	0	*220*	0	0	0	0	0	*0*	0	42	145	0	0	*187*	0	41	0	72	0	*113*	**520**
10:00 AM	0	0	35	4	0	*39*	0	0	0	0	0	*0*	0	5	28	0	0	*33*	0	8	0	13	0	*21*	**93**
10:15 AM	0	0	34	8	0	*42*	0	0	0	0	0	*0*	0	8	34	0	0	*42*	0	4	0	8	0	*12*	**96**
10:30 AM	0	0	28	6	0	*34*	0	0	0	0	0	*0*	0	4	33	0	0	*37*	0	5	0	12	0	*17*	**88**
10:45 AM	0	0	32	4	0	*36*	0	0	0	0	0	*0*	0	7	31	0	0	*38*	0	10	0	12	0	*22*	**96**
Hourly Total	0	0	129	22	0	*151*	0	0	0	0	0	*0*	0	24	126	0	0	*150*	0	27	0	45	0	*72*	**373**
11:00 AM	0	0	35	7	0	*42*	0	0	0	0	0	*0*	0	4	39	0	0	*43*	0	5	0	2	0	*7*	**92**
11:15 AM	0	0	29	4	0	*33*	0	0	0	0	0	*0*	0	10	41	0	0	*51*	0	8	0	9	0	*17*	**101**
11:30 AM	0	0	36	14	0	*50*	0	0	0	0	0	*0*	0	4	36	0	0	*40*	0	8	0	8	0	*16*	**106**
11:45 AM	0	0	38	9	0	*47*	0	0	0	0	0	*0*	0	9	36	0	0	*45*	0	9	0	10	0	*19*	**111**
Hourly Total	0	0	138	34	0	*172*	0	0	0	0	0	*0*	0	27	152	0	0	*179*	0	30	0	29	0	*59*	**410**
12:00 PM	0	0	36	6	0	*42*	0	0	0	0	0	*0*	0	6	41	0	0	*47*	0	6	0	19	0	*25*	**114**
12:15 PM	0	0	44	6	0	*50*	0	0	0	0	0	*0*	0	12	48	0	0	*60*	0	8	0	12	0	*20*	**130**
12:30 PM	0	0	46	5	0	*51*	0	0	0	0	0	*0*	0	18	51	0	0	*69*	0	7	0	6	0	*13*	**133**
12:45 PM	0	0	41	6	0	*47*	0	0	0	0	0	*0*	0	18	38	0	0	*56*	0	7	0	8	0	*15*	**118**
Hourly Total	0	0	167	23	0	*190*	0	0	0	0	0	*0*	0	54	178	0	0	*232*	0	28	0	45	0	*73*	**495**
1:00 PM	0	0	24	3	0	*27*	0	0	0	0	0	*0*	0	15	43	0	0	*58*	0	10	0	6	0	*16*	**101**
1:15 PM	0	0	39	3	0	*42*	0	0	0	0	0	*0*	0	12	40	0	0	*52*	0	5	0	5	0	*10*	**104**
1:30 PM	0	0	26	9	0	*35*	0	0	0	0	0	*0*	0	11	46	0	0	*57*	0	5	0	11	0	*16*	**108**
1:45 PM	0	0	38	10	0	*48*	0	0	0	0	0	*0*	0	19	47	0	0	*66*	0	12	0	7	0	*19*	**133**
Hourly Total	0	0	127	25	0	*152*	0	0	0	0	0	*0*	0	57	176	0	0	*233*	0	32	0	29	0	*61*	**446**
2:00 PM	0	0	30	7	0	*37*	0	0	0	0	0	*0*	0	10	49	0	0	*59*	0	10	0	14	0	*24*	**120**
2:15 PM	0	0	44	10	0	*54*	0	0	0	0	0	*0*	0	18	66	0	0	*84*	0	6	0	10	0	*16*	**154**
2:30 PM	0	0	42	9	0	*51*	0	0	0	0	0	*0*	0	10	84	0	0	*94*	0	4	0	9	0	*13*	**158**
2:45 PM	0	0	31	8	0	*39*	0	0	0	0	0	*0*	0	22	87	0	0	*109*	0	10	0	10	0	*20*	**168**
Hourly Total	0	0	147	34	0	*181*	0	0	0	0	0	*0*	0	60	286	0	0	*346*	0	30	0	43	0	*73*	**600**
3:00 PM	0	0	48	10	0	*58*	0	0	0	0	0	*0*	0	21	110	0	0	*131*	0	13	0	7	0	*20*	**209**
3:15 PM	0	0	41	13	0	*54*	0	0	0	0	0	*0*	0	29	107	0	0	*136*	0	21	0	6	0	*27*	**217**
3:30 PM	0	0	44	8	0	*52*	0	0	0	0	0	*0*	0	34	125	0	0	*159*	0	12	0	11	0	*23*	**234**
3:45 PM	0	0	50	14	0	*64*	0	0	0	0	0	*0*	0	35	131	0	0	*166*	0	13	0	13	0	*26*	**256**
Hourly Total	0	0	183	45	0	*228*	0	0	0	0	0	*0*	0	119	473	0	0	*592*	0	59	0	37	0	*96*	**916**

TMC 2638 - CSAH 17 @ CSAH 60
Ham Lake MN
Thursday, October 1, 2026

	Southbound CSAH 17						Westbound None						Northbound CSAH 17						Eastbound CR 60						
Time	**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***	**VEHICLE TOTAL**
4:00 PM	0	0	53	26	0	*79*	0	0	0	0	0	*0*	0	18	134	0	0	*152*	0	13	0	22	0	*35*	**266**
4:15 PM	0	0	43	12	0	*55*	0	0	0	0	0	*0*	0	32	137	0	0	*169*	0	13	0	18	0	*31*	**255**
4:30 PM	0	0	48	14	0	*62*	0	0	0	0	0	*0*	0	30	144	0	0	*174*	0	14	0	15	0	*29*	**265**
4:45 PM	0	0	40	16	0	*56*	0	0	0	0	0	*0*	0	39	157	0	0	*196*	0	10	0	13	0	*23*	**275**
Hourly Total	0	0	184	68	0	*252*	0	0	0	0	0	*0*	0	119	572	0	0	*691*	0	50	0	68	0	*118*	**1061**
5:00 PM	0	0	63	19	0	*82*	0	0	0	0	0	*0*	0	28	146	0	0	*174*	0	12	0	25	0	*37*	**293**
5:15 PM	0	0	37	15	0	*52*	0	0	0	0	0	*0*	0	42	159	0	0	*201*	0	17	0	26	0	*43*	**296**
5:30 PM	0	0	48	13	0	*61*	0	0	0	0	0	*0*	0	29	105	0	0	*134*	0	12	0	12	0	*24*	**219**
5:45 PM	0	0	42	8	0	*50*	0	0	0	0	0	*0*	0	25	92	0	0	*117*	0	9	0	12	0	*21*	**188**
Hourly Total	0	0	190	55	0	*245*	0	0	0	0	0	*0*	0	124	502	0	0	*626*	0	50	0	75	0	*125*	**996**
6:00 PM	0	0	42	10	0	*52*	0	0	0	0	0	*0*	0	22	78	0	0	*100*	0	15	0	16	0	*31*	**183**
6:15 PM	0	0	30	9	0	*39*	0	0	0	0	0	*0*	0	24	70	0	0	*94*	0	13	0	14	0	*27*	**160**
6:30 PM	0	0	36	11	0	*47*	0	0	0	0	0	*0*	0	20	58	0	0	*78*	0	14	0	13	0	*27*	**152**
6:45 PM	0	0	34	7	0	*41*	0	0	0	0	0	*0*	0	9	41	0	0	*50*	0	6	0	10	0	*16*	**107**
Hourly Total	0	0	142	37	0	*179*	0	0	0	0	0	*0*	0	75	247	0	0	*322*	0	48	0	53	0	*101*	**602**
7:00 PM	0	0	31	8	0	*39*	0	0	0	0	0	*0*	0	24	39	0	0	*63*	0	3	0	6	0	*9*	**111**
7:15 PM	0	0	19	4	0	*23*	0	0	0	0	0	*0*	0	9	42	0	0	*51*	0	5	0	5	0	*10*	**84**
7:30 PM	0	0	37	6	0	*43*	0	0	0	0	0	*0*	0	13	32	0	0	*45*	0	1	0	8	0	*9*	**97**
7:45 PM	0	0	25	11	0	*36*	0	0	0	0	0	*0*	0	6	28	0	0	*34*	0	4	0	8	0	*12*	**82**
Hourly Total	0	0	112	29	0	*141*	0	0	0	0	0	*0*	0	52	141	0	0	*193*	0	13	0	27	0	*40*	**374**
8:00 PM	0	0	25	3	0	*28*	0	0	0	0	0	*0*	0	14	32	0	0	*46*	0	4	0	10	0	*14*	**88**
8:15 PM	0	0	16	5	0	*21*	0	0	0	0	0	*0*	0	9	39	0	0	*48*	0	5	0	5	0	*10*	**79**
8:30 PM	0	0	20	4	0	*24*	0	0	0	0	0	*0*	0	14	37	0	0	*51*	0	1	0	4	0	*5*	**80**
8:45 PM	0	0	9	1	0	*10*	0	0	0	0	0	*0*	0	12	28	0	0	*40*	0	6	0	7	0	*13*	**63**
Hourly Total	0	0	70	13	0	*83*	0	0	0	0	0	*0*	0	49	136	0	0	*185*	0	16	0	26	0	*42*	**310**
9:00 PM	0	0	15	4	0	*19*	0	0	0	0	0	*0*	0	5	35	0	0	*40*	0	8	0	6	0	*14*	**73**
9:15 PM	0	0	13	4	0	*17*	0	0	0	0	0	*0*	0	5	24	0	0	*29*	0	1	0	4	0	*5*	**51**
9:30 PM	0	0	12	2	0	*14*	0	0	0	0	0	*0*	0	11	19	0	0	*30*	0	4	0	1	0	*5*	**49**
9:45 PM	0	0	5	0	0	*5*	0	0	0	0	0	*0*	0	2	17	0	0	*19*	0	7	0	5	0	*12*	**36**
Hourly Total	0	0	45	10	0	*55*	0	0	0	0	0	*0*	0	23	95	0	0	*118*	0	20	0	16	0	*36*	**209**
10:00 PM	0	0	8	2	0	*10*	0	0	0	0	0	*0*	0	1	14	0	0	*15*	0	0	0	0	0	*0*	**25**
10:15 PM	0	0	11	2	0	*13*	0	0	0	0	0	*0*	0	2	18	0	0	*20*	0	3	0	0	0	*3*	**36**
10:30 PM	0	0	10	1	0	*11*	0	0	0	0	0	*0*	0	2	10	0	0	*12*	0	1	0	0	0	*1*	**24**
10:45 PM	0	0	8	0	0	*8*	0	0	0	0	0	*0*	0	3	11	0	0	*14*	0	0	0	2	0	*2*	**24**
Hourly Total	0	0	37	5	0	*42*	0	0	0	0	0	*0*	0	8	53	0	0	*61*	0	4	0	2	0	*6*	**109**
11:00 PM	0	0	8	0	0	*8*	0	0	0	0	0	*0*	0	2	3	0	0	*5*	0	0	0	1	0	*1*	**14**
11:15 PM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	2	5	0	0	*7*	0	0	0	0	0	*0*	**10**
11:30 PM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	1	5	0	0	*6*	0	2	0	2	0	*4*	**12**
11:45 PM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	1	6	0	0	*7*	0	0	0	0	0	*0*	**8**
Hourly Total	0	0	13	1	0	*14*	0	0	0	0	0	*0*	0	6	19	0	0	*25*	0	2	0	3	0	*5*	**44**
DAILY TOTAL	**0**	**0**	**3274**	**566**	**0**	***3840***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**944**	**3713**	**0**	**0**	***4657***	**0**	**610**	**0**	**906**	**0**	***1516***	**10013**
Cars	0	0	3179	533	0	*3712*	0	0	0	0	0	*0*	0	917	3624	0	0	*4541*	0	584	0	881	0	*1465*	**9718**
Heavy Vehicles	0	0	95	33	0	*128*	0	0	0	0	0	*0*	0	27	89	0	0	*116*	0	26	0	25	0	*51*	**295**
Heavy Vehicle %	0.00%	0.00%	2.90%	5.83%	0.00%	*3.33%*	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	0.00%	2.86%	2.40%	0.00%	0.00%	*2.49%*	0.00%	4.26%	0.00%	2.76%	0.00%	*3.36%*	**2.95%**

TMC 2638 - CSAH 17 @ CSAH 60
Ham Lake MN
Thursday, October 1, 2026
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*	
6:45 AM	0	0	103	11	0	*114*	0	0	0	0	0	*0*	0	13	34	0	0	*47*	0	8	0	26	0	*34*	**195**
7:00 AM	0	0	114	13	0	*127*	0	0	0	0	0	*0*	0	7	19	0	0	*26*	0	15	0	23	0	*38*	**191**
7:15 AM	0	0	109	12	0	*121*	0	0	0	0	0	*0*	0	7	28	0	0	*35*	0	15	0	32	0	*47*	**203**
7:30 AM	0	0	102	14	0	*116*	0	0	0	0	0	*0*	0	9	37	0	0	*46*	0	18	0	29	0	*47*	**209**
Peak Hour Total	0	0	428	50	0	*478*	0	0	0	0	0	*0*	0	36	118	0	0	*154*	0	56	0	110	0	*166*	**798**
Peak Hour Heavy Vehicles	0	0	9	1	0	*10*	0	0	0	0	0	*0*	0	0	9	0	0	*9*	0	3	0	1	0	*4*	**23**
Peak Hour Heavy Vehicles %	0.00%	0.00%	2.10%	2.00%	0.00%	2.09%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.63%	0.00%	0.00%	5.84%	0.00%	5.36%	0.00%	0.91%	0.00%	2.41%	2.88%
PHF	0.000	0.000	0.939	0.893	0.000	*0.941*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.692	0.797	0.000	0.000	*0.819*	0.000	0.778	0.000	0.859	0.000	*0.883*	**0.955**

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*	
12:00 PM	0	0	36	6	0	*42*	0	0	0	0	0	*0*	0	6	41	0	0	*47*	0	6	0	19	0	*25*	**114**
12:15 PM	0	0	44	6	0	*50*	0	0	0	0	0	*0*	0	12	48	0	0	*60*	0	8	0	12	0	*20*	**130**
12:30 PM	0	0	46	5	0	*51*	0	0	0	0	0	*0*	0	18	51	0	0	*69*	0	7	0	6	0	*13*	**133**
12:45 PM	0	0	41	6	0	*47*	0	0	0	0	0	*0*	0	18	38	0	0	*56*	0	7	0	8	0	*15*	**118**
Peak Hour Total	0	0	167	23	0	*190*	0	0	0	0	0	*0*	0	54	178	0	0	*232*	0	28	0	45	0	*73*	**495**
Peak Hour Heavy Vehicles	0	0	6	2	0	*8*	0	0	0	0	0	*0*	0	6	7	0	0	*13*	0	3	0	1	0	*4*	**25**
Peak Hour Heavy Vehicles %	0.00%	0.00%	3.59%	8.70%	0.00%	4.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	11.11%	3.93%	0.00%	0.00%	5.60%	0.00%	10.71%	0.00%	2.22%	0.00%	5.48%	5.05%
PHF	0.000	0.000	0.908	0.958	0.000	*0.931*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.750	0.873	0.000	0.000	*0.841*	0.000	0.875	0.000	0.592	0.000	*0.730*	**0.930**

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*	
4:30 PM	0	0	48	14	0	*62*	0	0	0	0	0	*0*	0	30	144	0	0	*174*	0	14	0	15	0	*29*	**265**
4:45 PM	0	0	40	16	0	*56*	0	0	0	0	0	*0*	0	39	157	0	0	*196*	0	10	0	13	0	*23*	**275**
5:00 PM	0	0	63	19	0	*82*	0	0	0	0	0	*0*	0	28	146	0	0	*174*	0	12	0	25	0	*37*	**293**
5:15 PM	0	0	37	15	0	*52*	0	0	0	0	0	*0*	0	42	159	0	0	*201*	0	17	0	26	0	*43*	**296**
Peak Hour Total	0	0	188	64	0	*252*	0	0	0	0	0	*0*	0	139	606	0	0	*745*	0	53	0	79	0	*132*	**1129**
Peak Hour Heavy Vehicles	0	0	4	3	0	*7*	0	0	0	0	0	*0*	0	0	9	0	0	*9*	0	0	0	0	0	*0*	**16**
Peak Hour Heavy Vehicles %	0.00%	0.00%	2.13%	4.69%	0.00%	2.78%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.49%	0.00%	0.00%	1.21%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.42%
PHF	0.000	0.000	0.746	0.842	0.000	*0.768*	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.827	0.953	0.000	0.000	*0.927*	0.000	0.779	0.000	0.760	0.000	*0.767*	**0.954**

Total Vehicles On Leg		8163			
Vehicles Entering Intersection	3840	Vehicles Exiting Intersection		4323	
Southbound					
Cars	533	3179	0	0	0
Heavy	33	95	0	0	0
Total	**566**	**3274**	**0**	**0**	**0**

Total Vehicles on Leg	Vehicles Entering Intersection	Eastbound	Cars	Heavy	Total
3026	1516		0	0	**0**
			0	0	**0**
	Vehicles Exiting Intersection		584	26	**610**
	1510		0	0	**0**
			881	25	**906**

Daily Volumes

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

Cars	0	0	917	3624	0
Heavy	0	0	27	89	0
Total	**0**	**0**	**944**	**3713**	**0**
Northbound					
Vehicles Entering Intersection	4657	Vehicles Exiting Intersection		4180	
Total Vehicles On Leg		8837			

TMC 2638 - CSAH 17 @ CSAH 60
Ham Lake MN
Thursday, October 1, 2026

Time	Southbound Heavy CSAH 17						Westbound Heavy None						Northbound Heavy CSAH 17						Eastbound Heavy CR 60						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	1	0	0	0	*1*	0	0	0	0	0	*0*	**1**
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	1	0	0	0	*1*	0	0	0	0	0	*0*	**1**
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	1	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
1:30 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	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	1	0	0	*1*	0	0	0	0	0	*0*	**1**
Hourly 'Heavy Vehicles'	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**3**
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	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
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	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**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	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
Hourly 'Heavy Vehicles'	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
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 '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**
5:00 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**2**
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 'Heavy Vehicles'	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**2**
6:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	**1**
6:15 AM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**3**
6:30 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	1	0	0	0	*1*	**3**
6:45 AM	0	0	5	1	0	*6*	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	**10**
Hourly 'Heavy Vehicles'	0	0	9	1	0	*10*	0	0	0	0	0	*0*	0	1	4	0	0	*5*	0	1	0	1	0	*2*	**17**
7:00 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	2	0	0	0	*2*	**4**
7:15 AM	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	1	0	*1*	**4**
7:30 AM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	1	0	0	0	*1*	**5**
7:45 AM	0	0	6	0	0	*6*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	2	0	1	0	*3*	**10**
Hourly 'Heavy Vehicles'	0	0	10	0	0	*10*	0	0	0	0	0	*0*	0	0	6	0	0	*6*	0	5	0	2	0	*7*	**23**

TMC 2638 - CSAH 17 @ CSAH 60
Ham Lake MN
Thursday, October 1, 2026

	Southbound Heavy CSAH 17						Westbound Heavy None						Northbound Heavy CSAH 17						Eastbound Heavy CR 60						
Time	**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'***	**VEHICLE 'Heavy Vehicles'**
8:00 AM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	**4**
8:15 AM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**4**
8:30 AM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	1	0	2	0	*3*	**9**
8:45 AM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	1	2	0	0	*3*	0	2	0	1	0	*3*	**7**
Hourly 'Heavy Vehicles'	0	0	7	3	0	*10*	0	0	0	0	0	*0*	0	1	6	0	0	*7*	0	4	0	3	0	*7*	**24**
9:00 AM	0	0	3	2	0	*5*	0	0	0	0	0	*0*	0	4	2	0	0	*6*	0	1	0	1	0	*2*	**13**
9:15 AM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	1	3	0	0	*4*	0	0	0	2	0	*2*	**9**
9:30 AM	0	0	4	0	0	*4*	0	0	0	0	0	*0*	0	1	1	0	0	*2*	0	0	0	0	0	*0*	**6**
9:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	2	0	0	0	*2*	**2**
Hourly 'Heavy Vehicles'	0	0	9	3	0	*12*	0	0	0	0	0	*0*	0	6	6	0	0	*12*	0	3	0	3	0	*6*	**30**
10:00 AM	0	0	4	3	0	*7*	0	0	0	0	0	*0*	0	1	1	0	0	*2*	0	0	0	0	0	*0*	**9**
10:15 AM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**5**
10:30 AM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	1	0	*1*	**4**
10:45 AM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	1	0	0	0	*1*	**6**
Hourly 'Heavy Vehicles'	0	0	8	6	0	*14*	0	0	0	0	0	*0*	0	1	7	0	0	*8*	0	1	0	1	0	*2*	**24**
11:00 AM	0	0	3	1	0	*4*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	1	0	0	0	*1*	**6**
11:15 AM	0	0	0	2	0	*2*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	1	0	*1*	**5**
11:30 AM	0	0	3	1	0	*4*	0	0	0	0	0	*0*	0	1	2	0	0	*3*	0	0	0	0	0	*0*	**7**
11:45 AM	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	1	0	*1*	**4**
Hourly 'Heavy Vehicles'	0	0	8	4	0	*12*	0	0	0	0	0	*0*	0	1	6	0	0	*7*	0	1	0	2	0	*3*	**22**
12:00 PM	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	1	0	0	0	*1*	**6**
12:15 PM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	2	2	0	0	*4*	0	1	0	0	0	*1*	**7**
12:30 PM	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	2	1	0	0	*3*	0	0	0	1	0	*1*	**6**
12:45 PM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	2	1	0	0	*3*	0	1	0	0	0	*1*	**6**
Hourly 'Heavy Vehicles'	0	0	6	2	0	*8*	0	0	0	0	0	*0*	0	6	7	0	0	*13*	0	3	0	1	0	*4*	**25**
1:00 PM	0	0	2	2	0	*4*	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	**8**
1:15 PM	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	5	0	0	*5*	0	0	0	0	0	*0*	**7**
1:30 PM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	1	0	0	0	*1*	**3**
1:45 PM	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	1	0	*1*	**4**
Hourly 'Heavy Vehicles'	0	0	7	2	0	*9*	0	0	0	0	0	*0*	0	1	10	0	0	*11*	0	1	0	1	0	*2*	**22**
2:00 PM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	1	0	0	0	*1*	**3**
2:15 PM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	1	0	0	0	*1*	**5**
2:30 PM	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	1	0	1	0	*2*	**7**
2:45 PM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	1	2	0	0	*3*	0	0	0	0	0	*0*	**6**
Hourly 'Heavy Vehicles'	0	0	9	0	0	*9*	0	0	0	0	0	*0*	0	2	6	0	0	*8*	0	3	0	1	0	*4*	**21**
3:00 PM	0	0	3	1	0	*4*	0	0	0	0	0	*0*	0	1	1	0	0	*2*	0	0	0	1	0	*1*	**7**
3:15 PM	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	1	0	*1*	**6**
3:30 PM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	2	0	0	0	*2*	**5**
3:45 PM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	1	0	2	0	*3*	**6**
Hourly 'Heavy Vehicles'	0	0	7	3	0	*10*	0	0	0	0	0	*0*	0	2	5	0	0	*7*	0	3	0	4	0	*7*	**24**

TMC 2638 - CSAH 17 @ CSAH 60
Ham Lake MN
Thursday, October 1, 2026

	Southbound Heavy CSAH 17						Westbound Heavy None						Northbound Heavy CSAH 17						Eastbound Heavy CR 60						
Time	**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'***	**VEHICLE 'Heavy Vehicles'**
4:00 PM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	1	0	*2*	**5**
4:15 PM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	1	4	0	0	*5*	0	0	0	2	0	*2*	**10**
4:30 PM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**5**
4:45 PM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**3**
Hourly 'Heavy Vehicles'	0	0	5	4	0	*9*	0	0	0	0	0	*0*	0	1	9	0	0	*10*	0	1	0	3	0	*4*	**23**
5:00 PM	0	0	2	1	0	*3*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**5**
5:15 PM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**3**
5:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	**1**
5:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	2	0	0	*3*	0	0	0	0	0	*0*	**3**
Hourly 'Heavy Vehicles'	0	0	3	1	0	*4*	0	0	0	0	0	*0*	0	1	7	0	0	*8*	0	0	0	0	0	*0*	**12**
6:00 PM	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	1	0	*1*	**4**
6:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	2	0	0	*3*	0	0	0	0	0	*0*	**3**
6:30 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**
6:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	**2**
Hourly 'Heavy Vehicles'	0	0	1	1	0	*2*	0	0	0	0	0	*0*	0	1	5	0	0	*6*	0	0	0	1	0	*1*	**9**
7:00 PM	0	0	0	1	0	*1*	0	0	0	0	0	*0*	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	1	0	*1*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**4**
7:45 PM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
Hourly 'Heavy Vehicles'	0	0	1	2	0	*3*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	**6**
8:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	**1**
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	1	0	0	0	*1*	0	0	0	0	0	*0*	**1**
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	1	0	0	0	*1*	0	0	0	1	0	*1*	**2**
Hourly 'Heavy Vehicles'	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	1	0	0	0	*1*	0	0	0	1	0	*1*	**2**
10:00 PM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
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	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
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	1	0	*1*	**1**
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	1	0	*1*	**1**
DAILY 'Heavy Vehicles'	**0**	**0**	**95**	**33**	**0**	***128***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**27**	**89**	**0**	**0**	***116***	**0**	**26**	**0**	**25**	**0**	***51***	**295**

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2638

Study Date : 10/13/2026

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 17
Number of Lanes : 1

Total Approach Volume: 4,657

Southbound: CSAH 17
Number of Lanes :1

Total Approach Volume: 3,840

Minor Street Approaches

Eastbound: CR 60
Number of Lanes :1

Total Approach Volume: 1,516

Warrant Summary (Rural Values Apply)

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

Warrant 1A - Minimum Vehicular Volume.....**Satisfied**
Required volumes reached for 14 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....**Satisfied**
Required volumes reached for 14 hours, 8 are needed

Warrant 1C - Combination of Warrants.....**Satisfied**
Required 1A volumes reached for 14 hours, 8 are needed
Required 1B volumes reached for 16 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....**Satisfied**
Number of hours (6) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....**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.....**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 2638

Study Date : 10/13/2026

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

14 one hour periods meet minimums.
Warrant IS 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 = **210**

Veh/Hr Minor = **63**

	Major Road CSAH 17					Minor Road CR 60		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:15 - 17:15	713	+	255	=	968	120	0	Yes
15:15 - 16:15	613	+	249	=	862	111	0	Yes
17:15 - 18:15	552	+	215	=	767	119	0	Yes
14:15 - 15:15	418	+	202	=	620	69	0	Yes
07:00 - 08:00	154	+	464	=	618	177	0	Yes
06:00 - 07:00	118	+	410	=	528	112	0	Yes
08:00 - 09:00	161	+	315	=	476	106	0	Yes
18:15 - 19:15	285	+	166	=	451	79	0	Yes
12:15 - 13:15	243	+	175	=	418	64	0	Yes
09:00 - 10:00	187	+	220	=	407	113	0	Yes
13:15 - 14:15	234	+	162	=	396	69	0	Yes
11:15 - 12:15	183	+	172	=	355	77	0	Yes
10:00 - 11:00	150	+	151	=	301	72	0	Yes
05:00 - 06:00	27	+	236	=	263	67	0	Yes
11:00 - 12:00	179	+	172	=	351	59	0	No
19:15 - 20:15	176	+	130	=	306	45	0	No
19:30 - 20:30	173	+	128	=	301	45	0	No
19:45 - 20:45	179	+	109	=	288	41	0	No
20:00 - 21:00	185	+	83	=	268	42	0	No
20:15 - 21:15	179	+	74	=	253	42	0	No
20:30 - 21:30	160	+	70	=	230	37	0	No
04:45 - 05:45	26	+	199	=	225	56	0	No
20:45 - 21:45	139	+	60	=	199	37	0	No
21:00 - 22:00	118	+	55	=	173	36	0	No
04:30 - 05:30	19		133		152	42	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2638

Study Date : 10/13/2026

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

14 one hour periods meet minimums.
Warrant IS 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 = **315**

Veh/Hr Minor = **31**

	Major Road CSAH 17					Minor Road CR 60		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:45 - 17:45	705	+	251	=	956	127	0	Yes
15:45 - 16:45	661	+	260	=	921	121	0	Yes
14:45 - 15:45	535	+	203	=	738	90	0	Yes
06:30 - 07:30	143	+	485	=	628	152	0	Yes
17:45 - 18:45	389	+	188	=	577	106	0	Yes
07:30 - 08:30	176	+	386	=	562	145	0	Yes
13:45 - 14:45	303	+	190	=	493	72	0	Yes
08:30 - 09:30	167	+	260	=	427	119	0	Yes
11:45 - 12:45	221	+	190	=	411	77	0	Yes
05:30 - 06:30	54	+	321	=	375	84	0	Yes
12:45 - 13:45	223	+	151	=	374	57	0	Yes
09:30 - 10:30	173	+	186	=	359	80	0	Yes
18:45 - 19:45	209	+	146	=	355	44	0	Yes
10:45 - 11:45	172	+	161	=	333	62	0	Yes
10:30 - 11:30	169	+	145	=	314	63	0	No
05:15 - 06:15	31	+	268	=	299	75	0	No
19:45 - 20:45	179	+	109	=	288	41	0	No
20:00 - 21:00	185	+	83	=	268	42	0	No
05:00 - 06:00	27	+	236	=	263	67	0	No
20:15 - 21:15	179	+	74	=	253	42	0	No
20:30 - 21:30	160	+	70	=	230	37	0	No
04:45 - 05:45	26	+	199	=	225	56	0	No
20:45 - 21:45	139	+	60	=	199	37	0	No
21:00 - 22:00	118	+	55	=	173	36	0	No
04:30 - 05:30	19		133		152	42	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2638

Study Date : 10/13/2026

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

14 hours meet 1A minimums.
16 hours meet 1B minimums.
Warrant IS 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 =	**168**	**252**
Veh/Hr Minor =	**50**	**25**

Major Road	Minor Road
CSAH 17	CR 60

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
16:45 - 17:45	705	+	251	=	956	127	0	Yes
15:45 - 16:45	661	+	260	=	921	121	0	Yes
14:45 - 15:45	535	+	203	=	738	90	0	Yes
06:45 - 07:45	154	+	478	=	632	166	0	Yes
17:45 - 18:45	389	+	188	=	577	106	0	Yes
07:45 - 08:45	172	+	352	=	524	125	0	Yes
13:45 - 14:45	303	+	190	=	493	72	0	Yes
05:45 - 06:45	79	+	357	=	436	96	0	Yes
11:45 - 12:45	221	+	190	=	411	77	0	Yes
08:45 - 09:45	180	+	227	=	407	122	0	Yes
12:45 - 13:45	223	+	151	=	374	57	0	Yes
10:45 - 11:45	172	+	161	=	333	62	0	Yes

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
16:00 - 17:00	691	+	252	=	943	118	0	Yes
17:00 - 18:00	626	+	245	=	871	125	0	Yes
15:00 - 16:00	592	+	228	=	820	96	0	Yes
07:00 - 08:00	154	+	464	=	618	177	0	Yes
06:00 - 07:00	118	+	410	=	528	112	0	Yes
14:00 - 15:00	346	+	181	=	527	73	0	Yes
18:00 - 19:00	322	+	179	=	501	101	0	Yes
08:00 - 09:00	161	+	315	=	476	106	0	Yes
12:00 - 13:00	232	+	190	=	422	73	0	Yes
09:00 - 10:00	187	+	220	=	407	113	0	Yes
13:00 - 14:00	233	+	152	=	385	61	0	Yes
11:00 - 12:00	179	+	172	=	351	59	0	Yes

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2638

Study Date : 10/13/2026

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.

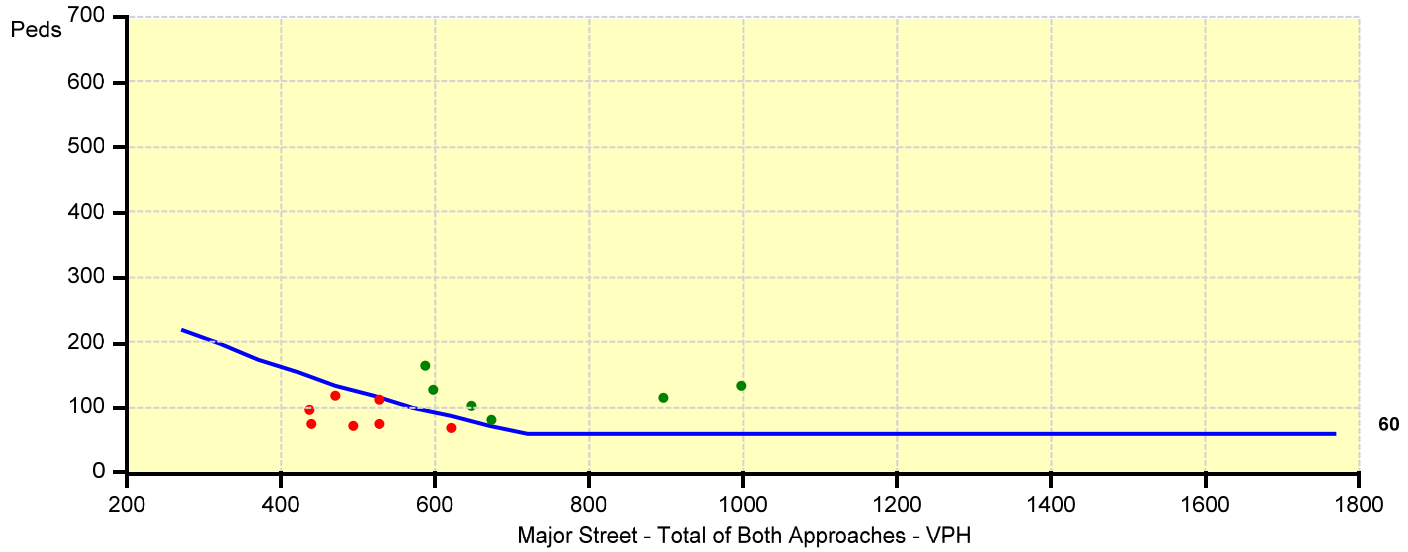
Summary

6 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

	Major Road					Minor Road		
	CSAH 17					CR 60		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:30 - 17:30	745	+	252	=	997	132	0	Yes
15:30 - 16:30	646	+	250	=	896	115	0	Yes
14:30 - 15:30	470	+	202	=	672	80	0	Yes
17:30 - 18:30	445	+	202	=	647	103	0	Yes
06:15 - 07:15	135	+	463	=	598	125	0	Yes
07:15 - 08:15	167	+	421	=	588	164	0	Yes
14:15 - 15:15	418	+	202	=	620	69	0	No
06:00 - 07:00	118	+	410	=	528	112	0	No
14:00 - 15:00	346	+	181	=	527	73	0	No
13:45 - 14:45	303	+	190	=	493	72	0	No
08:15 - 09:15	174	+	297	=	471	116	0	No
13:30 - 14:30	266		174		440	75	0	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 2638

Study Date : 10/13/2026

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

9 one hour periods meet minimums.
Warrant IS met.

Site Data Required

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

	Major Road CSAH 17					Minor Road CR 60		
Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met?
16:30 - 17:30	745	+	252	=	997	132	0	Yes
16:15 - 17:15	713	+	255	=	968	120	0	Yes
16:45 - 17:45	705	+	251	=	956	127	0	Yes
16:00 - 17:00	691	+	252	=	943	118	0	Yes
15:45 - 16:45	661	+	260	=	921	121	0	Yes
15:30 - 16:30	646	+	250	=	896	115	0	Yes
17:00 - 18:00	626	+	245	=	871	125	0	Yes
15:15 - 16:15	613	+	249	=	862	111	0	Yes
07:00 - 08:00	154	+	464	=	618	177	0	Yes
15:00 - 16:00	592	+	228	=	820	96	0	No
17:15 - 18:15	552	+	215	=	767	119	0	No
14:45 - 15:45	535		203		738	90	0	No

