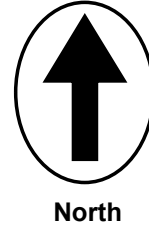


Date : 06/02/22

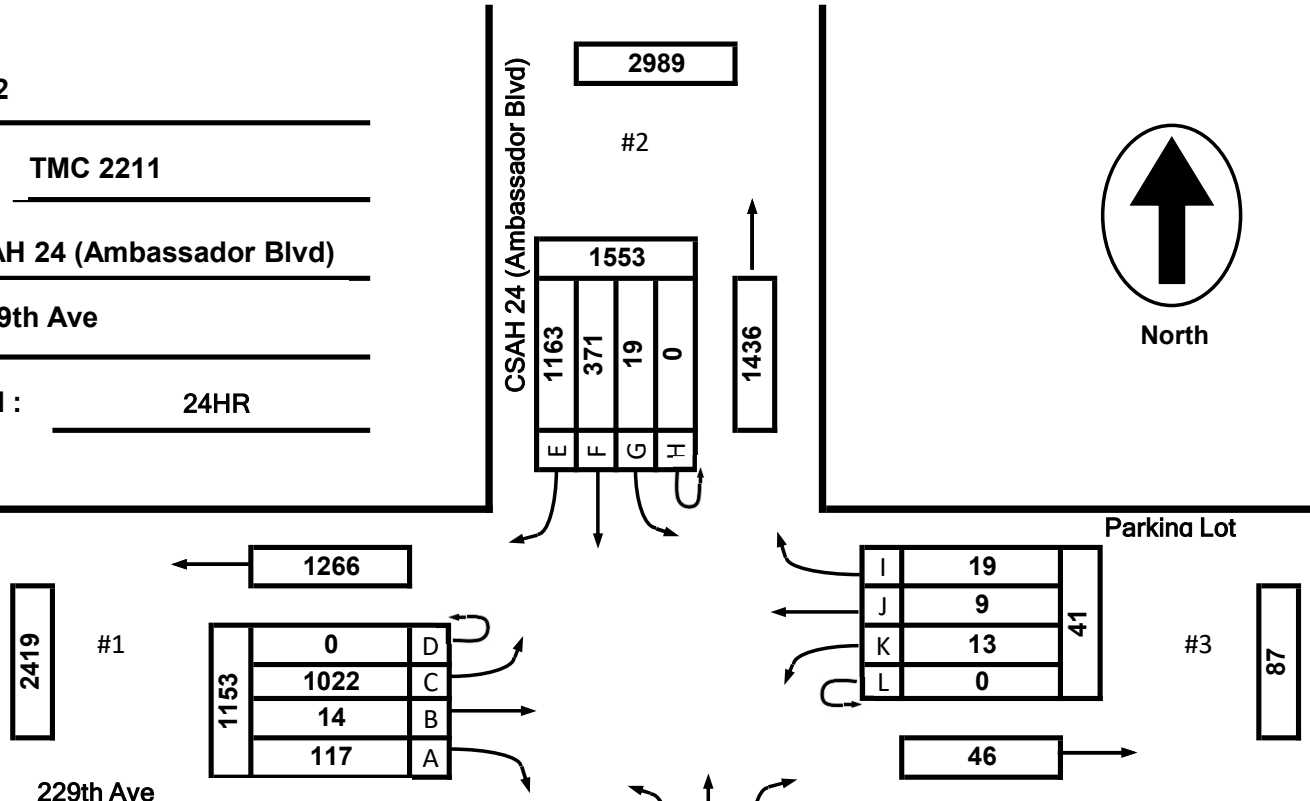
Count Number : TMC 2211

Location : CSAH 24 (Ambassador Blvd)
@ 229th Ave

Collection Period : 24HR



Parking Lot



0	D
1022	C
14	B
117	A

19	41
9	
13	
0	

P	O	N	M
0	94	395	13
502			

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	1	1
#4	0	0	1	1

Anoka County Highway Department

Traffic Volume and Turning Movement Study

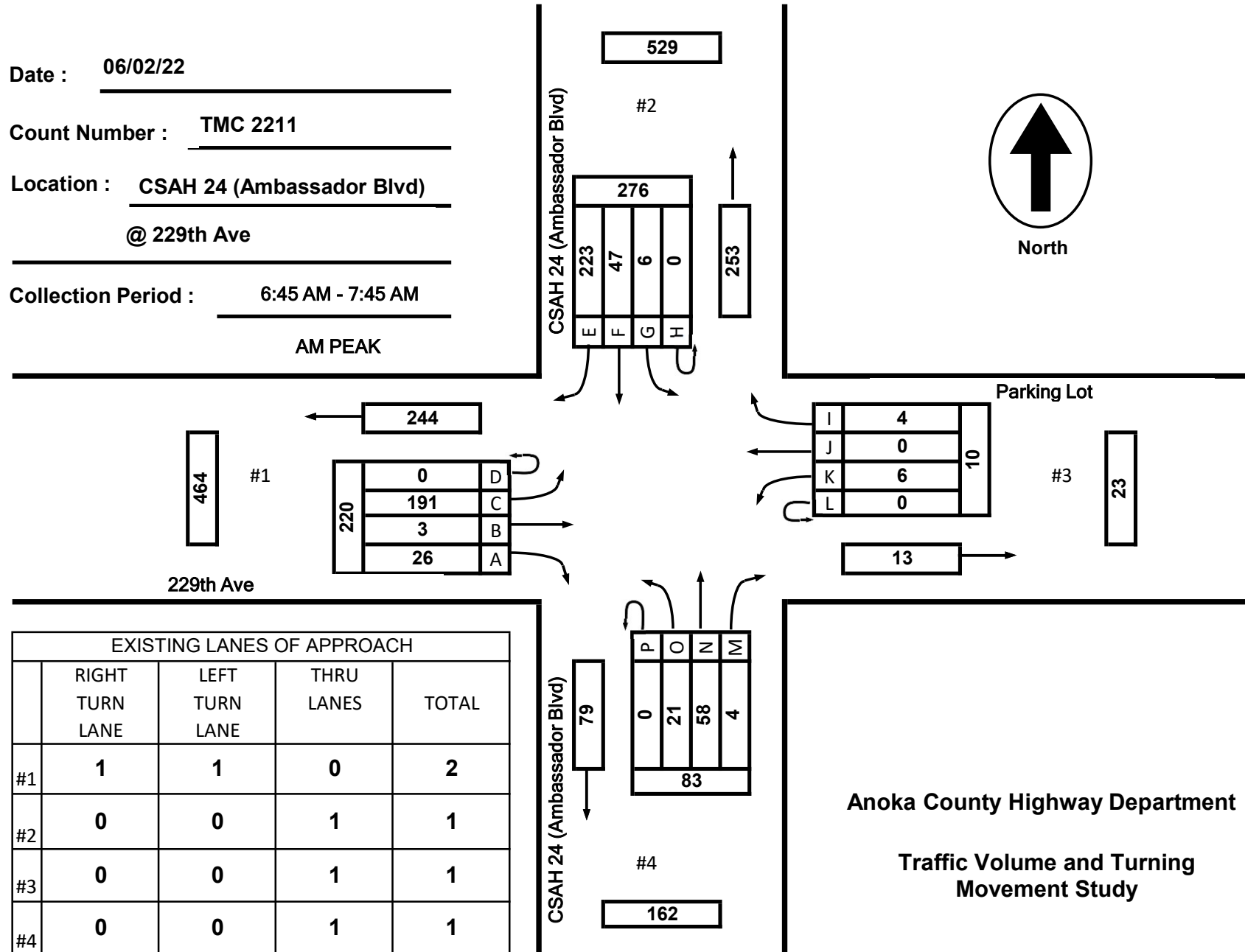
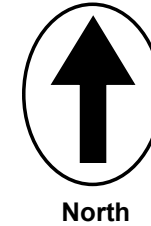
Date : 06/02/22

Count Number : TMC 2211

Location : CSAH 24 (Ambassador Blvd)
@ 229th Ave

Collection Period : 6:45 AM - 7:45 AM

AM PEAK



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	1	1
#4	0	0	1	1

Anoka County Highway Department

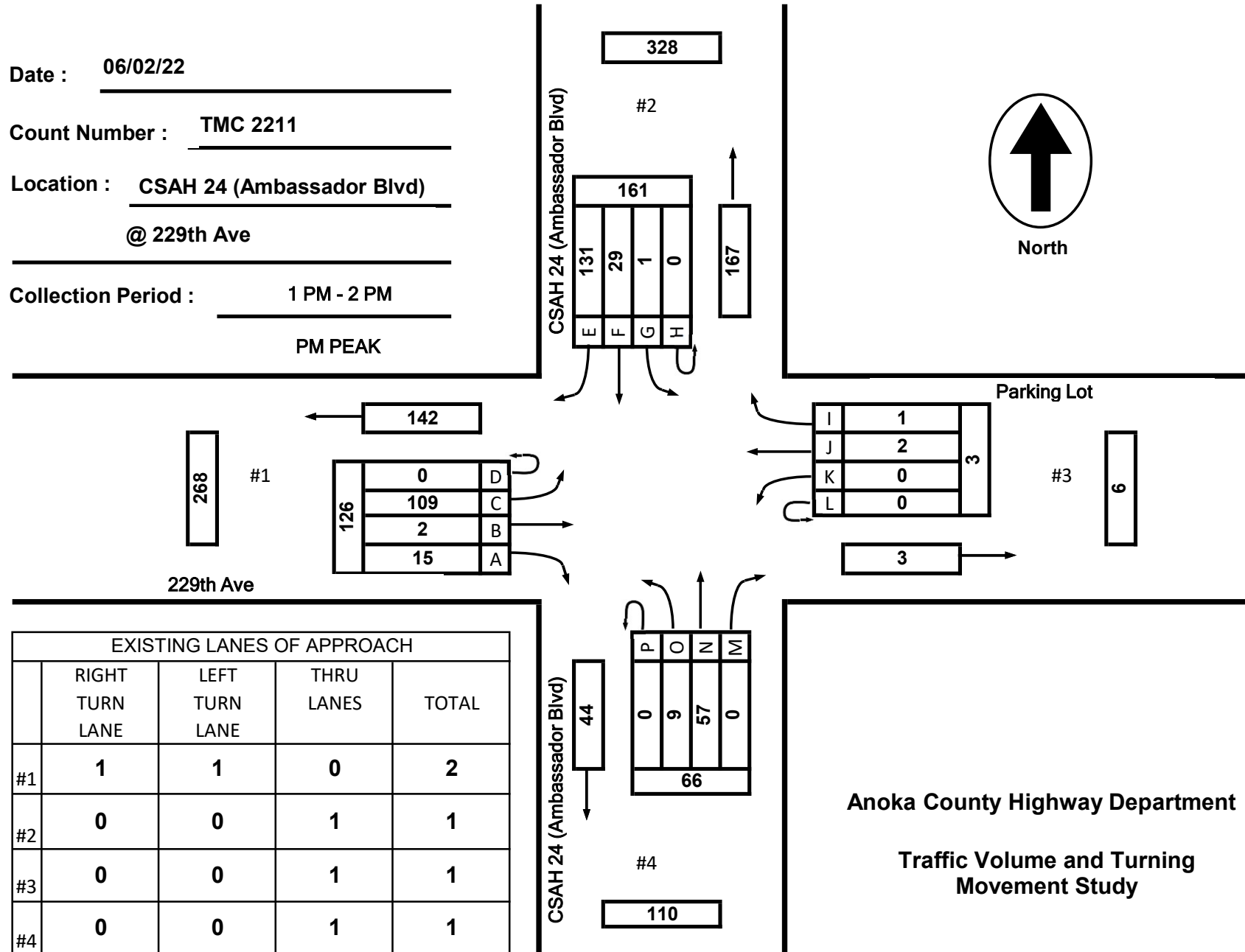
Traffic Volume and Turning Movement Study

Date : 06/02/22

Count Number : TMC 2211

Location : CSAH 24 (Ambassador Blvd)
@ 229th Ave

Collection Period : 1 PM - 2 PM
PM PEAK



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	1	1
#4	0	0	1	1

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2211
 Site Code :
 Start Date : 06/02/2022
 Page No : 1

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted By: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 24 Southbound						Parking Lot Westbound						CSAH 24 Northbound						229th Ave Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
05:45	5	1	0	0	0	6	0	1	0	0	0	1	2	1	0	0	0	3	0	1	3	0	0	4	0	14	14
Total	5	1	0	0	0	6	0	1	0	0	0	1	2	1	0	0	0	3	0	1	3	0	0	4	0	14	14
06:00	16	25	1	0	0	42	3	0	2	0	0	5	0	7	1	0	0	8	2	1	12	0	0	15	0	70	70
06:15	23	12	0	0	0	35	0	0	0	0	0	0	0	6	4	0	0	10	5	1	15	0	0	21	0	66	66
06:30	38	16	2	0	0	56	2	1	1	0	0	4	1	4	4	0	0	9	4	1	22	0	0	27	0	96	96
06:45	36	14	2	0	0	52	0	0	2	0	0	2	0	9	5	0	0	14	4	1	19	0	0	24	0	92	92
Total	113	67	5	0	0	185	5	1	5	0	0	11	1	26	14	0	0	41	15	4	68	0	0	87	0	324	324
07:00	83	11	0	0	0	94	0	0	2	0	0	2	1	8	6	0	0	15	10	2	38	0	0	50	0	161	161
07:15	69	9	2	0	0	80	1	0	0	0	0	1	1	22	8	0	0	31	7	0	73	0	0	80	0	192	192
07:30	45	13	2	0	0	60	3	0	2	0	0	5	2	19	2	0	0	23	5	0	61	0	0	66	0	154	154
07:45	40	6	1	0	0	47	1	0	2	0	0	3	2	9	2	0	0	13	2	1	24	0	0	27	0	90	90
Total	237	39	5	0	0	281	5	0	6	0	0	11	6	58	18	0	0	82	24	3	196	0	0	223	0	597	597
08:00	26	8	0	0	0	34	1	0	0	0	0	1	0	7	4	0	0	11	2	1	24	0	0	27	0	73	73
08:15	26	14	1	0	0	41	0	1	0	0	0	1	0	10	1	0	0	11	1	0	14	0	0	15	0	68	68
08:30	27	10	1	0	0	38	1	1	0	0	0	2	1	17	3	0	0	21	4	1	22	0	0	27	0	88	88
08:45	40	10	1	0	0	51	1	0	0	0	0	1	0	10	17	0	0	27	14	0	38	0	0	52	0	131	131
Total	119	42	3	0	0	164	3	2	0	0	0	5	1	44	25	0	0	70	21	2	98	0	0	121	0	360	360
09:00	39	6	1	0	0	46	1	0	0	0	0	1	0	11	4	0	0	15	5	1	31	0	0	37	0	99	99
09:15	26	6	1	0	0	33	0	0	1	0	0	1	1	12	0	0	0	13	1	0	26	0	0	27	0	74	74
09:30	25	11	0	0	0	36	0	0	0	0	0	0	0	16	0	0	0	16	2	0	20	0	0	22	0	74	74
09:45	19	4	1	0	0	24	1	0	0	0	0	1	0	13	1	0	0	14	3	0	16	0	0	19	0	58	58
Total	109	27	3	0	0	139	2	0	1	0	0	3	1	52	5	0	0	58	11	1	93	0	0	105	0	305	305
10:00	23	8	0	0	1	31	0	0	0	0	0	0	0	5	1	0	0	6	1	0	25	0	0	26	1	63	64
10:15	12	12	0	0	0	24	0	0	0	0	0	0	0	7	3	0	0	10	2	0	16	0	0	18	0	52	52
10:30	26	10	1	0	0	37	1	0	0	0	0	1	0	6	0	0	0	6	3	0	23	0	0	26	0	70	70
10:45	23	8	0	0	0	31	0	0	0	0	0	0	0	13	0	0	0	13	2	0	22	0	0	24	0	68	68
Total	84	38	1	0	1	123	1	0	0	0	0	1	0	31	4	0	0	35	8	0	86	0	0	94	1	253	254
11:00	25	10	0	0	0	35	0	0	0	0	0	0	0	8	1	0	0	9	1	0	37	0	0	38	0	82	82
11:15	22	9	0	0	0	31	0	1	0	0	0	1	0	14	2	0	0	16	0	0	27	0	0	27	0	75	75
11:30	37	5	0	0	0	42	0	0	0	0	0	0	0	6	3	0	0	9	3	0	23	0	0	26	0	77	77



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2211
 Site Code :
 Start Date : 06/02/2022
 Page No : 2

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted By: Adam

Groups Printed- Cars + - Trucks

Start Time	CSAH 24 Southbound						Parking Lot Westbound						CSAH 24 Northbound						229th Ave Eastbound						Exclu. Total	Inclu. Total	Int. Total
	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total	Right	Thru	Left	UTrn	Peds	App. Total			
11:45	37	12	0	0	0	49	0	1	0	0	0	1	0	5	1	0	0	6	2	1	36	0	0	39	0	95	95
Total	121	36	0	0	0	157	0	2	0	0	0	2	0	33	7	0	0	40	6	1	123	0	0	130	0	329	329
12:00	40	3	0	0	0	43	0	0	0	0	0	0	0	16	0	0	0	16	1	0	35	0	0	36	0	95	95
12:15	26	13	0	0	0	39	1	0	1	0	0	2	0	9	1	0	0	10	2	0	22	0	0	24	0	75	75
12:30	25	7	0	0	0	32	1	1	0	0	0	2	1	15	2	0	0	18	0	0	30	0	0	30	0	82	82
12:45	27	13	1	0	1	41	0	0	0	0	0	0	0	8	1	0	0	9	2	0	30	0	0	32	1	82	83
Total	118	36	1	0	1	155	2	1	1	0	0	4	1	48	4	0	0	53	5	0	117	0	0	122	1	334	335
13:00	35	8	1	0	0	44	1	1	0	0	0	2	0	14	2	0	0	16	4	1	36	0	0	41	0	103	103
13:15	28	9	0	0	0	37	0	1	0	0	0	1	0	15	3	0	0	18	4	0	26	0	0	30	0	86	86
13:30	27	6	0	0	0	33	0	0	0	0	0	0	0	14	1	0	0	15	6	1	22	0	0	29	0	77	77
13:45	41	6	0	0	0	47	0	0	0	0	0	0	0	14	3	0	0	17	1	0	25	0	0	26	0	90	90
Total	131	29	1	0	0	161	1	2	0	0	0	3	0	57	9	0	0	66	15	2	109	0	0	126	0	356	356
14:00	39	11	0	0	0	50	0	0	0	0	0	0	0	13	3	0	0	16	2	0	33	0	0	35	0	101	101
14:15	25	20	0	0	5	45	0	0	0	0	0	0	0	20	3	0	0	23	1	0	51	0	0	52	5	120	125
14:30	62	25	0	0	0	87	0	0	0	0	0	0	1	12	2	0	0	15	9	0	45	0	0	54	0	156	156
Grand Total	1163	371	19	0	7	1553	19	9	13	0	0	41	13	395	94	0	0	502	117	14	1022	0	0	1153	7	3249	3256
Apprch %	74.9	23.9	1.2	0			46.3	22	31.7	0			2.6	78.7	18.7	0			10.1	1.2	88.6	0					
Total %	35.8	11.4	0.6	0		47.8	0.6	0.3	0.4	0		1.3	0.4	12.2	2.9	0		15.5	3.6	0.4	31.5	0		35.5	0.2	99.8	
Cars +	1145	341	19	0		1512	19	9	13	0		41	13	273	94	0		380	115	14	1006	0		1135	0	0	3068
% Cars +	98.5	91.9	100	0	100	96.9	100	100	100	0	0	100	100	69.1	100	0	0	75.7	98.3	100	98.4	0	0	98.4	0	0	94.2
Trucks	18	30	0	0		48	0	0	0	0		0	0	122	0	0		122	2	0	16	0		18	0	0	188
% Trucks	1.5	8.1	0	0	0	3.1	0	0	0	0		0	0	30.9	0	0		24.3	1.7	0	1.6	0		1.6	0	0	5.8



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2211
 Site Code :
 Start Date : 06/02/2022
 Page No : 3

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted By: Adam

Start Time	CSAH 24 Southbound					Parking Lot Westbound					CSAH 24 Northbound					229th Ave Eastbound					Int. Total
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	
Peak Hour Analysis From 05:45 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45																					
06:45	36	14	2	0	52	0	0	2	0	2	0	9	5	0	14	4	1	19	0	24	92
07:00	83	11	0	0	94	0	0	2	0	2	1	8	6	0	15	10	2	38	0	50	161
07:15	69	9	2	0	80	1	0	0	0	1	1	22	8	0	31	7	0	73	0	80	192
07:30	45	13	2	0	60	3	0	2	0	5	2	19	2	0	23	5	0	61	0	66	154
Total Volume	233	47	6	0	286	4	0	6	0	10	4	58	21	0	83	26	3	191	0	220	599
% App. Total	81.5	16.4	2.1	0		40	0	60	0		4.8	69.9	25.3	0		11.8	1.4	86.8	0		
PHF	.702	.839	.750	.000	.761	.333	.000	.750	.000	.500	.500	.659	.656	.000	.669	.650	.375	.654	.000	.688	.780

Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 13:00																					
13:00	35	8	1	0	44	1	1	0	0	2	0	14	2	0	16	4	1	36	0	41	103
13:15	28	9	0	0	37	0	1	0	0	1	0	15	3	0	18	4	0	26	0	30	86
13:30	27	6	0	0	33	0	0	0	0	0	0	14	1	0	15	6	1	22	0	29	77
13:45	41	6	0	0	47	0	0	0	0	0	0	14	3	0	17	1	0	25	0	26	90
Total Volume	131	29	1	0	161	1	2	0	0	3	0	57	9	0	66	15	2	109	0	126	356
% App. Total	81.4	18	0.6	0		33.3	66.7	0	0		0	86.4	13.6	0		11.9	1.6	86.5	0		
PHF	.799	.806	.250	.000	.856	.250	.500	.000	.000	.375	.000	.950	.750	.000	.917	.625	.500	.757	.000	.768	.864

Peak Hour Analysis From 14:00 to 14:30 - Peak 1 of 1



Anoka County Highway Department

Traffic Engineering Section

Traffic Volume and Turning Movement Study

File Name : TMC 2211
 Site Code :
 Start Date : 06/02/2022
 Page No : 1

Weather: Warm & Sunny
 CountCAM 2
 Study Conducted By: Adam

Groups Printed- Trucks

Start Time	CSAH 24 Southbound					Parking Lot Westbound					CSAH 24 Northbound					229th Ave Eastbound					Int. Total		
	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total	Right	Thru	Left	UTrn	App. Total			
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	2	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
06:15	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
06:30	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	0	0	2
Total	5	3	0	0	8	0	0	0	0	0	0	8	0	0	8	0	0	2	0	2	0	0	2
07:00	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0
07:30	1	4	0	0	5	0	0	0	0	0	0	5	0	0	5	1	0	1	0	2	0	0	2
07:45	1	2	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0
Total	3	6	0	0	9	0	0	0	0	0	0	16	0	0	16	1	0	1	0	2	0	0	2
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1
08:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	0	1	0	1	0	0	1
08:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	16	0	0	16	0	0	3	0	3	0	0	3
09:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	2	0	2	0	0	2
09:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	19	0	0	19	0	0	2	0	2	0	0	2
10:00	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	0	1
10:15	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
10:30	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
10:45	1	0	0	0	1	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	0	0
Total	1	3	0	0	4	0	0	0	0	0	0	14	0	0	14	0	0	1	0	1	0	0	1
11:00	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	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	0	0	1
11:30	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
11:45	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Total	2	1	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	0	1
12:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	2	0	2	0	0	2
12:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	0	1
12:30	1	0	0	0	1	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0
12:45	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
Total	1	2	0	0	3	0	0	0	0	0	0	16	0	0	16	0	0	3	0	3	0	0	3
13:00	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0
13:15	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	1	0	1	0	2	0	0	2
13:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	1	0	1	0	0	1
Total	1	1	0	0	2	0	0	0	0	0	0	17	0	0	17	1	0	2	0	3	0	0	3
14:00	2	1	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0
14:15	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	0	1
14:30	2	10	0	0	12	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
Grand Total	18	30	0	0	48	0	0	0	0	0	0	122	0	0	122	2	0	16	0	18	0	0	188
Apprch %	37.5	62.5	0	0		0	0	0	0		0	100	0	0		11.1	0	88.9	0		0	0	
Total %	9.6	16	0	0	25.5	0	0	0	0	0	0	64.9	0	0	64.9	1.1	0	8.5	0	9.6	0	0	

Anoka County Highway Department
Traffic Engineering Section
Traffic Volume and Turning Movement Study

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 06/02/2022

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 24

Number of Lanes : 1

Total Approach Volume: 502

Southbound: CSAH 24

Number of Lanes : 1

Total Approach Volume: 1,553

Minor Street Approaches

Eastbound: 229th Ave

Number of Lanes : 1

Total Approach Volume: 1,153

Westbound: Parking Lot

Number of Lanes : 1

Total Approach Volume: 41

Warrant Summary (Urban 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:

Study Date : 06/02/2022

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 = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **500**

Veh/Hr Minor = **150**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
06:45 - 07:45	83	+	286	=	369	220	10	No
07:00 - 08:00	82	+	281	=	363	223	11	No
06:30 - 07:30	69	+	282	=	351	181	9	No
13:45 - 14:45	71	+	229	=	300	167	0	No
07:15 - 08:15	78	+	221	=	299	200	10	No
06:15 - 07:15	48	+	237	=	285	122	8	No
08:15 - 09:15	74	+	176	=	250	131	5	No
13:30 - 14:30	71	+	175	=	246	142	0	No
08:30 - 09:30	76	+	168	=	244	143	5	No
07:30 - 08:30	58	+	182	=	240	135	10	No
08:45 - 09:45	71	+	166	=	237	138	3	No
14:00 - 15:00	54	+	182	=	236	141	0	No
08:00 - 09:00	70	+	164	=	234	121	5	No
13:15 - 14:15	66	+	167	=	233	120	1	No
13:00 - 14:00	66	+	161	=	227	126	3	No
06:00 - 07:00	41	+	185	=	226	87	11	No
07:45 - 08:45	56	+	160	=	216	96	7	No
12:30 - 13:30	61	+	154	=	215	133	5	No
11:30 - 12:30	41	+	173	=	214	125	3	No
12:45 - 13:45	58	+	155	=	213	132	3	No
11:45 - 12:45	50	+	163	=	213	129	5	No
11:15 - 12:15	47	+	165	=	212	128	2	No
12:15 - 13:15	53	+	156	=	209	127	6	No
12:00 - 13:00	53	+	155	=	208	122	4	No
09:00 - 10:00	58		139		197	105	3	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 06/02/2022

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 = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Volume Requirements

Veh/Hr Major = **750**

Veh/Hr Minor = **75**

Time	Major Road				Total	Minor Road		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
06:45 - 07:45	83	+	286	=	369	220	10	No
07:00 - 08:00	82	+	281	=	363	223	11	No
06:30 - 07:30	69	+	282	=	351	181	9	No
13:45 - 14:45	71	+	229	=	300	167	0	No
07:15 - 08:15	78	+	221	=	299	200	10	No
06:15 - 07:15	48	+	237	=	285	122	8	No
08:15 - 09:15	74	+	176	=	250	131	5	No
13:30 - 14:30	71	+	175	=	246	142	0	No
08:30 - 09:30	76	+	168	=	244	143	5	No
07:30 - 08:30	58	+	182	=	240	135	10	No
08:45 - 09:45	71	+	166	=	237	138	3	No
14:00 - 15:00	54	+	182	=	236	141	0	No
08:00 - 09:00	70	+	164	=	234	121	5	No
13:15 - 14:15	66	+	167	=	233	120	1	No
13:00 - 14:00	66	+	161	=	227	126	3	No
06:00 - 07:00	41	+	185	=	226	87	11	No
07:45 - 08:45	56	+	160	=	216	96	7	No
12:30 - 13:30	61	+	154	=	215	133	5	No
11:30 - 12:30	41	+	173	=	214	125	3	No
12:45 - 13:45	58	+	155	=	213	132	3	No
11:45 - 12:45	50	+	163	=	213	129	5	No
11:15 - 12:15	47	+	165	=	212	128	2	No
12:15 - 13:15	53	+	156	=	209	127	6	No
12:00 - 13:00	53	+	155	=	208	122	4	No
09:00 - 10:00	58		139		197	105	3	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 06/02/2022

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 = **False**
Number of Major Lanes = **1**
Number of Minor Lanes = **1**

Volume Requirements

Warrant 1A 1B
Veh/Hr Major = **400 600**

Veh/Hr Minor = **120 60**

Major Road CSAH 24

Minor Road 229th Ave

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1A?
06:45 - 07:45	83	+	286	=	369	220	10	No
07:00 - 08:00	82	+	281	=	363	223	11	No
06:30 - 07:30	69	+	282	=	351	181	9	No
13:45 - 14:45	71	+	229	=	300	167	0	No
07:15 - 08:15	78	+	221	=	299	200	10	No
06:15 - 07:15	48	+	237	=	285	122	8	No
08:15 - 09:15	74	+	176	=	250	131	5	No
13:30 - 14:30	71	+	175	=	246	142	0	No
08:30 - 09:30	76	+	168	=	244	143	5	No
07:30 - 08:30	58	+	182	=	240	135	10	No
08:45 - 09:45	71	+	166	=	237	138	3	No
14:00 - 15:00	54		182		236	141	0	No

Time	Major NB	+	Major SB	=	Total	Minor EB	Minor WB	Met1B?
06:45 - 07:45	83	+	286	=	369	220	10	No
07:00 - 08:00	82	+	281	=	363	223	11	No
06:30 - 07:30	69	+	282	=	351	181	9	No
13:45 - 14:45	71	+	229	=	300	167	0	No
07:15 - 08:15	78	+	221	=	299	200	10	No
06:15 - 07:15	48	+	237	=	285	122	8	No
08:15 - 09:15	74	+	176	=	250	131	5	No
13:30 - 14:30	71	+	175	=	246	142	0	No
08:30 - 09:30	76	+	168	=	244	143	5	No
07:30 - 08:30	58	+	182	=	240	135	10	No
08:45 - 09:45	71	+	166	=	237	138	3	No
14:00 - 15:00	54		182		236	141	0	No

ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 06/02/2022

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.

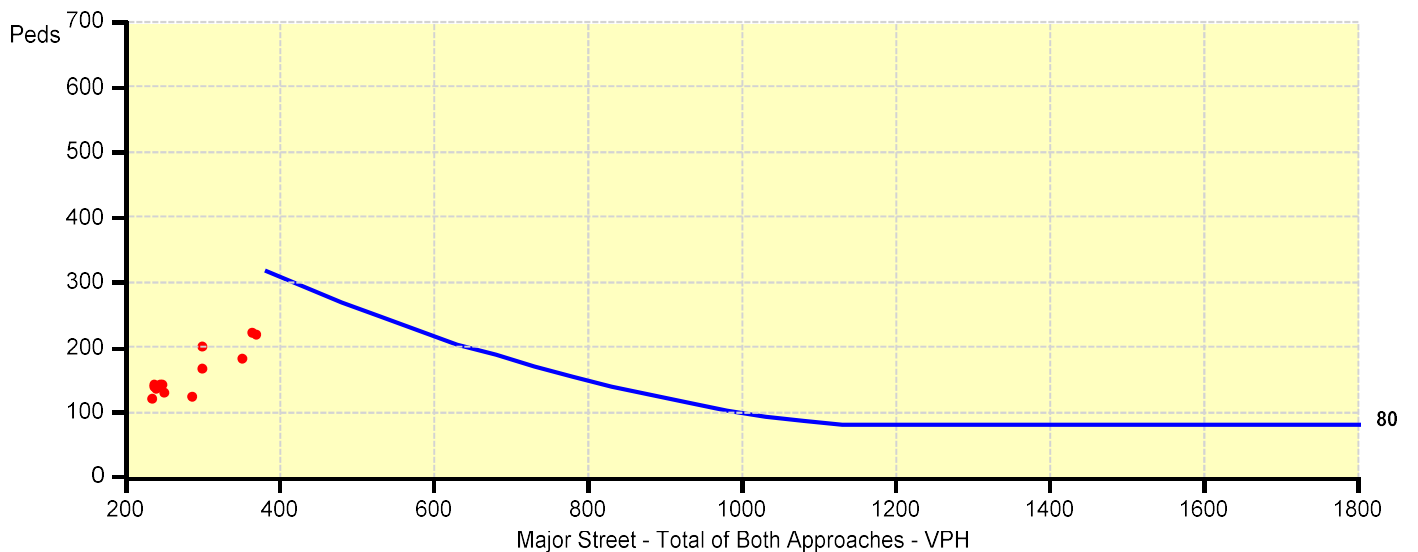
Summary

Only 0 one hour periods meet minimums.
Warrant is NOT met.

Site Data Required

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

Time	Major Road CSAH 24				Total	Minor Road 229th Ave		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
06:45 - 07:45	83	+	286	=	369	220	10	No
07:00 - 08:00	82	+	281	=	363	223	11	No
06:30 - 07:30	69	+	282	=	351	181	9	No
13:45 - 14:45	71	+	229	=	300	167	0	No
07:15 - 08:15	78	+	221	=	299	200	10	No
06:15 - 07:15	48	+	237	=	285	122	8	No
08:15 - 09:15	74	+	176	=	250	131	5	No
13:30 - 14:30	71	+	175	=	246	142	0	No
08:30 - 09:30	76	+	168	=	244	143	5	No
07:30 - 08:30	58	+	182	=	240	135	10	No
08:45 - 09:45	71	+	166	=	237	138	3	No
14:00 - 15:00	54		182		236	141	0	No



ANOKA COUNTY HIGHWAY

PC-WARRANTS

TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name:

Study Date : 06/02/2022

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 = **False**
 Number of Major Lanes = **1**
 Number of Minor Lanes = **1**

Time	Major Road CSAH 24				Total	Minor Road 229th Ave		Met?
	Major NB	+	Major SB	=		Minor EB	Minor WB	
06:45 - 07:45	83	+	286	=	369	220	10	No
07:00 - 08:00	82	+	281	=	363	223	11	No
06:30 - 07:30	69	+	282	=	351	181	9	No
13:45 - 14:45	71	+	229	=	300	167	0	No
07:15 - 08:15	78	+	221	=	299	200	10	No
06:15 - 07:15	48	+	237	=	285	122	8	No
08:15 - 09:15	74	+	176	=	250	131	5	No
13:30 - 14:30	71	+	175	=	246	142	0	No
08:30 - 09:30	76	+	168	=	244	143	5	No
07:30 - 08:30	58	+	182	=	240	135	10	No
08:45 - 09:45	71	+	166	=	237	138	3	No
14:00 - 15:00	54		182		236	141	0	No

