

Date : 7/23/01

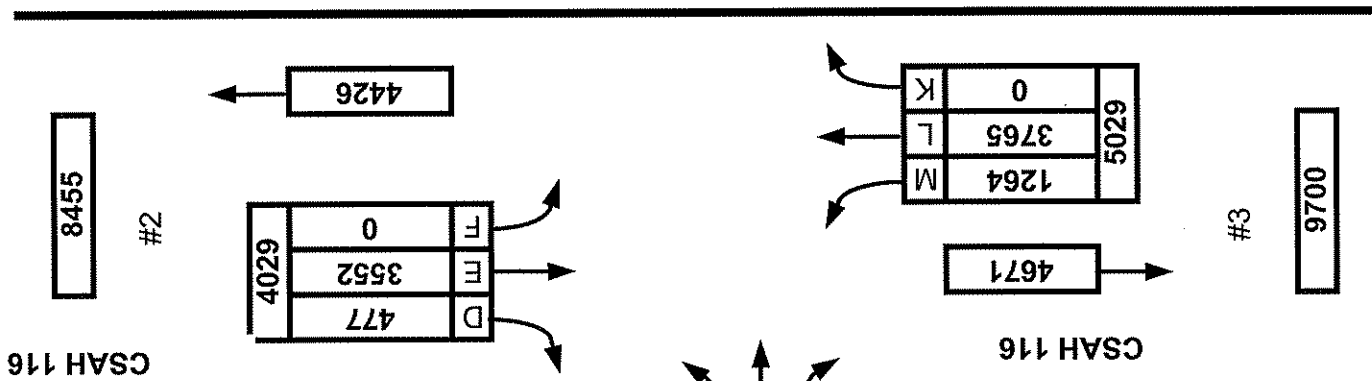
Count Number : TMC0122

Location : CSAH 116 (Bunker Lake Blvd.)

@ Prairie Rd.



North



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Anoka County Highway Department
Traffic Engineering

Weather: Warm, Sunny
Counter: TDC-8
Counted by: Jessica/Melissa

Traffic Volume and Turning Movement Stud

File Name : TMC0122
Site Code : 01220102
Start Date : 07/23/2001
Page No : 1

Groups Printed- 1 - Unshifted

Start Time	Prairie Rd. Southbound					CSAH 116 Westbound					none Northbound					CSAH 116 Eastbound					Exclu Total	Inclu Total	Int. Total
	Left	Thru	Rig ht	Hea vy	App. Total	Left	Thru	Rig ht	Hea vy	App. Total	Left	Thru	Rig ht	Hea vy	App. Total	Left	Thru	Rig ht	Hea vy	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
06:00	18	0	24	0	42	0	32	2	0	34	0	0	0	0	0	1	17	0	1	18	1	94	95
06:15	16	0	35	2	51	0	40	2	1	42	0	0	0	0	0	0	46	0	4	46	7	139	146
06:30	25	0	31	0	56	0	45	1	1	46	0	0	0	0	0	10	46	0	1	56	2	158	160
06:45	22	0	41	0	63	0	54	1	4	55	0	0	0	0	0	10	72	0	5	82	9	200	209
Total	81	0	131	2	212	0	171	6	6	177	0	0	0	0	0	21	181	0	11	202	19	591	610
07:00	27	0	35	0	62	0	62	4	5	66	0	0	0	0	0	9	72	0	5	81	10	209	219
07:15	33	0	42	3	75	0	51	2	1	53	0	0	0	0	0	9	76	0	5	85	9	213	222
07:30	33	0	44	0	77	0	63	6	3	69	0	0	0	0	0	9	75	0	6	84	9	230	239
07:45	29	0	30	3	59	0	60	5	3	65	0	0	0	0	0	10	97	0	9	107	15	231	246
Total	122	0	151	6	273	0	236	17	12	253	0	0	0	0	0	37	320	0	25	357	43	883	926
08:00	9	0	28	0	37	0	50	11	4	61	0	0	0	0	0	5	69	0	4	74	8	172	180
08:15	21	0	24	1	45	0	51	1	3	52	0	0	0	0	0	12	45	0	9	57	13	154	167
08:30	15	0	35	3	50	0	37	6	0	43	0	0	0	0	0	8	62	0	10	70	13	163	176
08:45	12	0	25	2	37	0	38	4	1	42	0	0	0	0	0	10	51	0	3	61	6	140	146
Total	57	0	112	6	169	0	176	22	8	198	0	0	0	0	0	35	227	0	26	262	40	629	669
09:00	6	0	15	1	21	0	41	1	3	42	0	0	0	0	0	10	49	0	5	59	9	122	131
09:15	13	0	14	2	27	0	40	1	1	41	0	0	0	0	0	9	65	0	6	74	9	142	151
09:30	9	0	15	0	24	0	49	6	5	55	0	0	0	0	0	14	44	0	3	58	8	137	145
09:45	8	0	18	3	26	0	42	4	3	46	0	0	0	0	0	10	47	0	6	57	12	129	141
Total	36	0	62	6	98	0	172	12	12	184	0	0	0	0	0	43	205	0	20	248	38	530	568
10:00	11	0	10	2	21	0	50	6	1	56	0	0	0	0	0	8	46	0	5	54	8	131	139
10:15	6	0	17	1	23	0	47	2	3	49	0	0	0	0	0	9	39	0	4	48	8	120	128
10:30	5	0	4	0	9	0	52	4	4	56	0	0	0	0	0	10	52	0	5	62	9	127	136
10:45	7	0	20	1	27	0	53	4	3	57	0	0	0	0	0	6	67	0	3	73	7	157	164
Total	29	0	51	4	80	0	202	16	11	218	0	0	0	0	0	33	204	0	17	237	32	535	567
11:00	4	0	12	1	16	0	48	1	5	49	0	0	0	0	0	29	51	0	5	80	11	145	156
11:15	5	0	13	0	18	0	50	2	2	52	0	0	0	0	0	7	58	0	2	65	4	135	139
11:30	6	0	18	0	24	0	57	10	5	67	0	0	0	0	0	15	47	0	8	62	13	153	166
11:45	7	0	11	1	18	0	67	11	6	78	0	0	0	0	0	15	45	0	2	60	9	156	165
Total	22	0	54	2	76	0	222	24	18	246	0	0	0	0	0	66	201	0	17	267	37	589	626
12:00	2	0	14	1	16	0	56	3	1	59	0	0	0	0	0	15	71	0	5	86	7	161	168
12:15	15	0	12	2	27	0	54	5	2	59	0	0	0	0	0	22	55	0	5	77	9	163	172
12:30	10	0	10	1	20	0	56	9	2	65	0	0	0	0	0	17	86	0	8	103	11	188	199
12:45	12	0	18	0	30	0	41	4	1	45	0	0	0	0	0	20	50	0	0	70	1	145	146
Total	39	0	54	4	93	0	207	21	6	228	0	0	0	0	0	74	262	0	18	336	28	657	685
13:00	5	0	11	1	16	0	56	15	5	71	0	0	0	0	0	12	45	0	2	57	8	144	152
13:15	8	0	8	0	16	0	52	7	0	59	0	0	0	0	0	14	53	0	5	67	5	142	147
13:30	12	0	23	3	35	0	41	5	4	46	0	0	0	0	0	13	53	0	10	66	17	147	164
13:45	10	0	18	3	28	0	48	6	2	54	0	0	0	0	0	14	55	0	8	69	13	151	164
Total	35	0	60	7	95	0	197	33	11	230	0	0	0	0	0	53	206	0	25	259	43	584	627
14:00	4	0	10	0	14	0	46	5	2	51	0	0	0	0	0	10	40	0	2	50	4	115	119
14:15	7	0	12	0	19	0	53	1	2	54	0	0	0	0	0	20	59	0	5	79	7	152	159
14:30	6	0	7	0	13	0	66	11	7	77	0	0	0	0	0	19	56	0	4	75	11	165	176
14:45	4	0	13	1	17	0	58	15	3	73	0	0	0	0	0	18	43	0	4	61	8	151	159
Total	21	0	42	1	63	0	223	32	14	255	0	0	0	0	0	67	198	0	15	265	30	583	613
15:00	9	0	13	0	22	0	65	11	4	76	0	0	0	0	0	33	77	0	4	110	8	208	216
15:15	2	0	9	0	11	0	46	6	0	52	0	0	0	0	0	29	75	0	6	104	6	167	173
15:30	11	0	16	1	27	0	61	7	3	68	0	0	0	0	0	20	65	0	3	85	7	180	187
15:45	7	0	9	0	16	0	70	13	4	83	0	0	0	0	0	27	82	0	5	109	9	208	217
Total	29	0	47	1	76	0	242	37	11	279	0	0	0	0	0	109	299	0	18	408	30	763	793
16:00	8	0	17	0	25	0	77	9	2	86	0	0	0	0	0	47	75	0	3	122	5	233	238
16:15	10	0	26	0	36	0	89	8	5	97	0	0	0	0	0	36	70	0	4	106	9	239	248
16:30	12	0	11	0	23	0	75	11	5	86	0	0	0	0	0	45	82	0	4	127	9	236	245
16:45	13	0	17	0	30	0	80	21	4	101	0	0	0	0	0	39	108	0	2	147	6	278	284
Total	43	0	71	0	114	0	321	49	16	370	0	0	0	0	0	167	335	0	13	502	29	986	1015
17:00	8	0	22	0	30	0	61	17	4	78	0	0	0	0	0	47	74	0	4	121	8	229	237
17:15	8	0	15	0	23	0	65	15	3	80	0	0	0	0	0	44	72	0	2	116	5	219	224
17:30	7	0	8	0	15	0	97	20	3	117	0	0	0	0	0	42	101	0	2	143	5	275	280
17:45	20	0	19	0	39	0	71	19	1	90	0	0	0	0	0	49	70	0	1	119	2	248	250
Total	43	0	64	0	107	0	294	71	11	365	0	0	0	0	0	182	317	0	9	499	20	971	991

Organization Title Goes Here

Heading Second Line

Heading Third Line

Study Name : TMC0122

Study Date : 12/10/03

Page No. : 1

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 116

Number of Lanes: 1

Approach Speed: 55

Total Approach Volume: 5,029

Westbound: CSAH 116

Number of Lanes: 2

Approach Speed: 55

Total Approach Volume: 4,029

Minor Street Approaches

Northbound: none

Number of Lanes: 1

Total Approach Volume: 0

Southbound: Prairie Rd.

Number of Lanes: 2

Total Approach Volume: 1,780

Warrant Summary (Rural values apply.)

Warrant 1 - Eight Hour Vehicular Volumes Not Satisfied

Warrant 1A - Minimum Vehicular Volume Not Satisfied

Required volumes reached for 2 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic Not Satisfied

Required volumes reached for 4 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants Not Satisfied

Required volumes reached for 2 hours, 8 are needed

Warrant 2 - Four Hour Volumes Not Satisfied

Number of hours (3) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour Satisfied

Warrant 3A - Peak Hour Volumes Not Satisfied

Volumes do not exceed minimums for any hour.

Warrant 3B - Peak Hour Delay Satisfied

Number of hours (3) volumes exceed minimum >= required (1). Delay data not evaluated.

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

Organization Title Goes Here

Heading Second Line

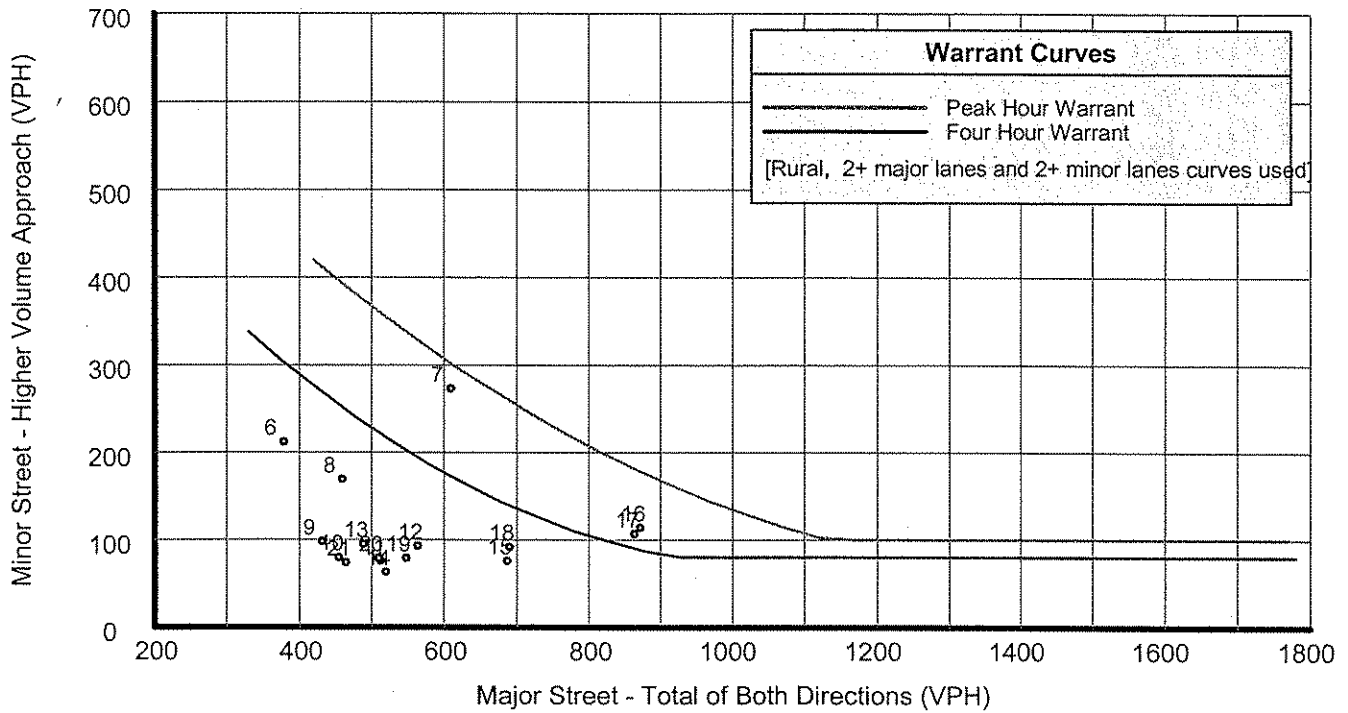
Heading Third Line

Study Name : TMC0122

Study Date : 12/10/03

Page No. : 2

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour Begin	Major Total	Higher Minor Vol	Dir	War-1A			War-1B			War-1A&B		
				Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
01:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
02:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
03:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
04:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
05:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
06:00	379	212	SB	420-No	140-Yes	Minor	630-No	70-Yes	Minor	504-No	112-Yes	Minor
07:00	610	273	SB	420-Yes	140-Yes	Both	630-No	70-Yes	Minor	504-Yes	112-Yes	Both
08:00	460	169	SB	420-Yes	140-Yes	Both	630-No	70-Yes	Minor	504-No	112-Yes	Minor
09:00	432	98	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-No	112-No	---
10:00	455	80	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-No	112-No	---
11:00	513	76	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-Yes	112-No	Major
12:00	564	93	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-Yes	112-No	Major
13:00	489	95	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-No	112-No	---
14:00	520	63	SB	420-Yes	140-No	Major	630-No	70-No	---	504-Yes	112-No	Major
15:00	687	76	SB	420-Yes	140-No	Major	630-Yes	70-Yes	Both	504-Yes	112-No	Major
16:00	872	114	SB	420-Yes	140-No	Major	630-Yes	70-Yes	Both	504-Yes	112-Yes	Both
17:00	864	107	SB	420-Yes	140-No	Major	630-Yes	70-Yes	Both	504-Yes	112-No	Major
18:00	690	92	SB	420-Yes	140-No	Major	630-Yes	70-Yes	Both	504-Yes	112-No	Major
19:00	548	79	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-Yes	112-No	Major
20:00	510	79	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-Yes	112-No	Major
21:00	465	74	SB	420-Yes	140-No	Major	630-No	70-Yes	Minor	504-No	112-No	---
22:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
23:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---

Organization Title Goes Here

Heading Second Line

Heading Third Line

Study Name : TMC0122

Study Date : 12/10/03

Multi-Way Stop Warrant Report

Major Street Approaches

Eastbound: CSAH 116

Total Approach Volume: 5,029

Approach Speed: 55

Westbound: CSAH 116

Total Approach Volume: 4,029

Approach Speed: 55

Minor Street Approaches

Northbound: none

Total Approach Volume: 0

Southbound: Prairie Rd.

Total Approach Volume: 1,780

Warrant Summary

Criteria A - Interim Measure Not Evaluated

If traffic signals are justified, stop signs can be installed as an interim measure.

Criteria B - Crash Experience Not Evaluated

Number of crashes (0) is less than the minimum required (5).

Criteria C - Minimum Volumes and Delays Not Satisfied

Delay data not evaluated

Required volumes reached for 3 hours, 8 are needed

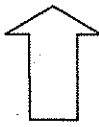
Criteria D - 80% of Volumes, Delays, and Crashes Not Evaluated

Delay data not evaluated

Required volumes reached for 0 hours, 8 are needed

Analysis of 8-Hour Volume Warrants:

Time	Major Crit	Minor	Crit C			Crit D		
	Total	Total	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00 - 01:00	0	0	210-No	140-No	No	240-No	160-No	No
01:00 - 02:00	0	0	210-No	140-No	No	240-No	160-No	No
02:00 - 03:00	0	0	210-No	140-No	No	240-No	160-No	No
03:00 - 04:00	0	0	210-No	140-No	No	240-No	160-No	No
04:00 - 05:00	0	0	210-No	140-No	No	240-No	160-No	No
05:00 - 06:00	0	0	210-No	140-No	No	240-No	160-No	No
06:00 - 07:00	379	212	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
07:00 - 08:00	610	273	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
08:00 - 09:00	460	169	210-Yes	140-Yes	Both	240-Yes	160-Yes	Both
09:00 - 10:00	432	98	210-Yes	140-No	Major	240-Yes	160-No	Major
10:00 - 11:00	455	80	210-Yes	140-No	Major	240-Yes	160-No	Major
11:00 - 12:00	513	76	210-Yes	140-No	Major	240-Yes	160-No	Major
12:00 - 13:00	564	93	210-Yes	140-No	Major	240-Yes	160-No	Major
13:00 - 14:00	489	95	210-Yes	140-No	Major	240-Yes	160-No	Major
14:00 - 15:00	520	63	210-Yes	140-No	Major	240-Yes	160-No	Major
15:00 - 16:00	687	76	210-Yes	140-No	Major	240-Yes	160-No	Major
16:00 - 17:00	872	114	210-Yes	140-No	Major	240-Yes	160-No	Major
17:00 - 18:00	864	107	210-Yes	140-No	Major	240-Yes	160-No	Major
18:00 - 19:00	690	92	210-Yes	140-No	Major	240-Yes	160-No	Major
19:00 - 20:00	548	79	210-Yes	140-No	Major	240-Yes	160-No	Major
20:00 - 21:00	510	79	210-Yes	140-No	Major	240-Yes	160-No	Major
21:00 - 22:00	465	74	210-Yes	140-No	Major	240-Yes	160-No	Major
22:00 - 23:00	0	0	210-No	140-No	No	240-No	160-No	No
23:00 - 00:00	0	0	210-No	140-No	No	240-No	160-No	No


NORTH
 APP. #1 = Prairie Rd.
 APP. #2 = CSAH 116
 APP. #3 =
 APP. #4 = CSAH 116

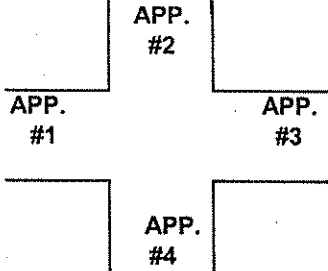
COUNT LOCATION:

CSAH 116 (Bunker Lake Blvd.) @

DATE:

7/23/01

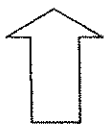
Prairie Rd.



HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT

- A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.
- B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.
- C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						2		
6:15-6:30						6		
6:30-6:45						2		
6:45-7:00						9		1
HOURLY TOTAL						HOURLY TOTAL		20
7:00-7:15	1	1			2	6		4
7:15-7:30						9		3
7:30-7:45						11		2
7:45-8:00						7		2
HOURLY TOTAL					2	HOURLY TOTAL		44
8:00-8:15						9		
8:15-8:30		1			1	12		
8:30-8:45						13		
8:45-9:00						4		1
HOURLY TOTAL					1	HOURLY TOTAL		39
9:00-9:15						10		
9:15-9:30				1	1	11		
9:30-9:45						5		
9:45-10:00						11		
HOURLY TOTAL					1	HOURLY TOTAL		37
10:00-10:15						8		
10:15-10:30		2			2	9		
10:30-10:45						9		
10:45-11:00		3			3	6		
HOURLY TOTAL					5	HOURLY TOTAL		32
11:00-11:15		2			2	11		
11:15-11:30						4		2
11:30-11:45						13		
11:45-12:00				1	1	8		1
HOURLY TOTAL					3	HOURLY TOTAL		39
12:00-12:15				1	1	5		1
12:15-12:30		2			2	7	1	1
12:30-12:45				3	3	9		2
12:45-1:00						1		
HOURLY TOTAL					6	HOURLY TOTAL		27
1:00-1:15						7		1
1:15-1:30		1			1	5		
1:30-1:45						16		1
1:45-2:00						13		
HOURLY TOTAL					1	HOURLY TOTAL		43



NORTH

COUNT LOCATION:

CSAH 116 (Bunker Lake Blvd.) @

DATE:

7/23/01

Prairie Rd.

APP. #1 = Prairie Rd.

APP. #2 = CSAH 116

APP. #3 =

APP. #4 = CSAH 116

APP. #2

APP. #1

APP. #3

APP. #4

HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT

A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.

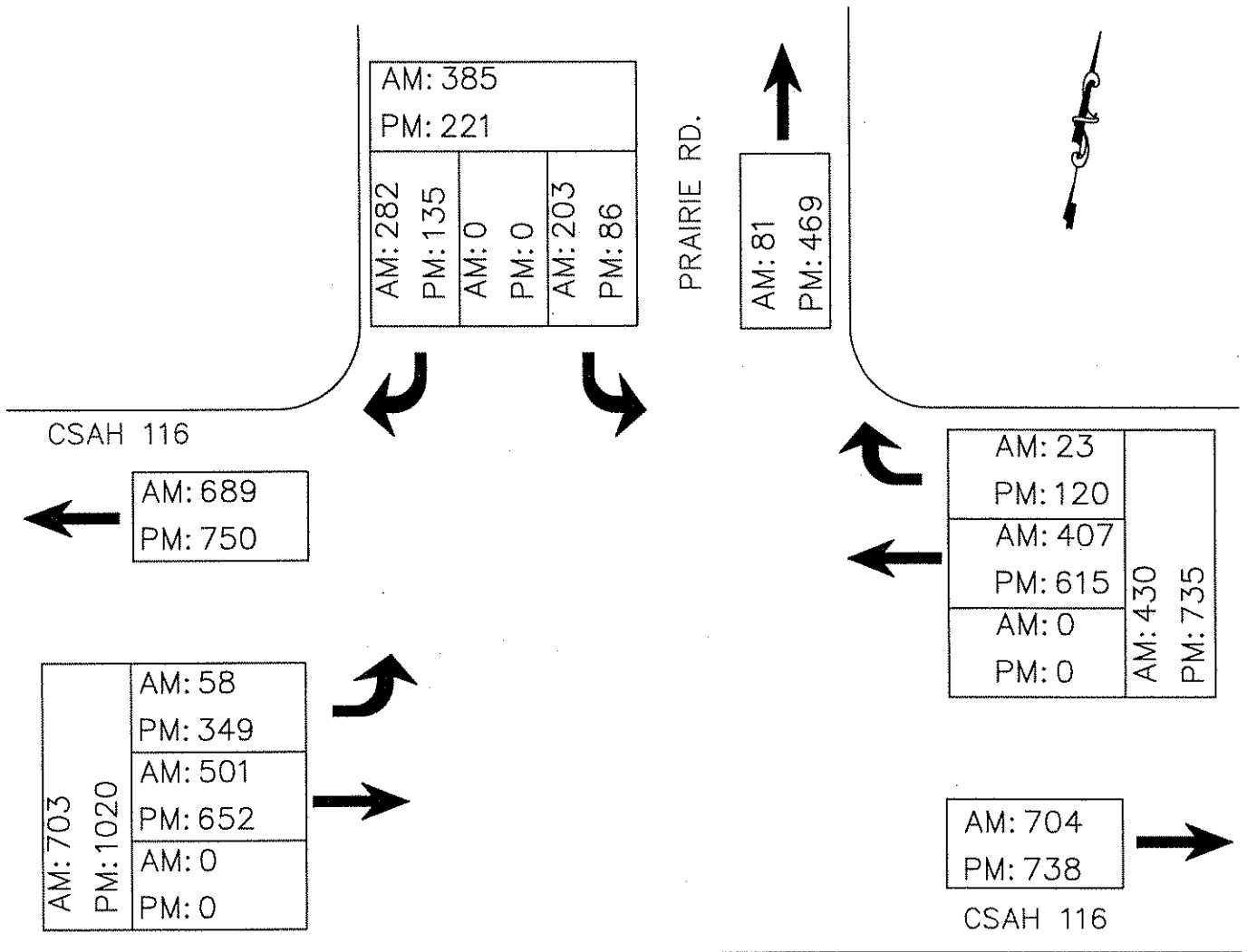
B. RV- A HEAVY VEHICLE OPERATED BY A PRIVATE MOTORIST AND INVOLVED IN THE TRANSPORT OF RECREATIONAL EQUIPMENT OR FACILITIES.

C. BUSES- A HEAVY VEHICLE INVOLVED IN THE TRANSPORTATION OF GROUPS OF PEOPLE.

TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
2:00-2:15PM						5		
2:15-2:30						6		
2:30-2:45		1			1	7		
2:45-3:00		3			3	7		
HOURLY TOTAL					4	HOURLY TOTAL		25
3:00-3:15						7	1	
3:15-3:30						8		
3:30-3:45	1	1			2	5		
3:45-4:00		1		1	2	10		
HOURLY TOTAL					4	HOURLY TOTAL		31
4:00-4:15		1		1	2	5		
4:15-4:30						9		
4:30-4:45		2			2	8		
4:45-5:00		2			2	4		
HOURLY TOTAL					6	HOURLY TOTAL		26
5:00-5:15		2			2	9		
5:15-5:30						4		
5:30-5:45		2			2	6		
5:45-6:00						1		
HOURLY TOTAL					4	HOURLY TOTAL		20
6:00-6:15						6		
6:15-6:30				1	1	4	1	
6:30-6:45						7		
6:45-7:00		2		4	6	5		
HOURLY TOTAL					7	HOURLY TOTAL		23
7:00-7:15						4		
7:15-7:30		4		2	6	2		
7:30-7:45						1	1	
7:45-8:00		2		2	4	1		
HOURLY TOTAL					10	HOURLY TOTAL		9
8:00-8:15		4		1	5	2		
8:15-8:30		4		4	8	2	1	
8:30-8:45		8		2	10	2		
8:45-9:00						1		
HOURLY TOTAL					23	HOURLY TOTAL		8
9:00-9:15						3		
9:15-9:30						1		
9:30-9:45						1		
9:45-10:00						1		
HOURLY TOTAL						HOURLY TOTAL		6

ANOKA COUNTY HIGHWAY DEPARTMENT
PEAK AM/PM TURNING MOVEMENT DIAGRAM

Location: C. S. A. H. 116 (BUNKER LAKE BLVD.) @ PRAIRIE RD.



*Comparison with TMC 0344
 CSAH 116 @ Sycamore St.*

Anoka County Highway Department
Traffic Engineering

Weather: Warm, Sunny
Counter: TDC-8
Counted by: Jessica/Melissa

Traffic Volume and Turning Movement Stud

File Name : TMC012~1
Site Code : 01220102
Start Date : 07/23/2001
Page No : 1

Groups Printed- 1 - Unshifted

Start Time	Prairie Rd. Southbound					CSAH 116 Westbound					none Northbound					CSAH 116 Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Rig ht	Hea vy	App. Total	Left	Thru	Rig ht	Hea vy	App. Total	Left	Thru	Rig ht	Hea vy	App. Total	Left	Thru	Rig ht	Hea vy	App. Total			
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0				
06:00	18	0	24	0	42	0	32	2	0	34	0	0	0	0	0	1	17	0	1	18	1	94	95
06:15	16	0	35	2	51	0	40	2	1	42	0	0	0	0	0	0	46	0	4	46	7	139	146
06:30	25	0	31	0	56	0	45	1	1	46	0	0	0	0	0	10	46	0	1	56	2	158	160
06:45	22	0	41	0	63	0	54	1	4	55	0	0	0	0	0	10	72	0	5	82	9	200	209
Total	81	0	131	2	212	0	171	6	6	177	0	0	0	0	0	21	181	0	11	202	19	591	610
07:00	27	0	35	0	62	0	62	4	5	66	0	0	0	0	0	9	72	0	5	81	10	209	219
07:15	33	0	42	3	75	0	51	2	1	53	0	0	0	0	0	9	76	0	5	85	9	213	222
07:30	33	0	44	0	77	0	63	6	3	69	0	0	0	0	0	9	75	0	6	84	9	230	239
07:45	29	0	30	3	59	0	60	5	3	65	0	0	0	0	0	10	97	0	9	107	15	231	246
Total	122	0	151	6	273	0	236	17	12	253	0	0	0	0	0	37	320	0	25	357	43	883	926
16:00	8	0	17	0	25	0	77	9	2	86	0	0	0	0	0	47	75	0	3	122	5	233	238
16:15	10	0	26	0	36	0	89	8	5	97	0	0	0	0	0	36	70	0	4	106	9	239	248
16:30	12	0	11	0	23	0	75	11	5	86	0	0	0	0	0	45	82	0	4	127	9	236	245
16:45	13	0	17	0	30	0	80	21	4	101	0	0	0	0	0	39	108	0	2	147	6	278	284
Total	43	0	71	0	114	0	321	49	16	370	0	0	0	0	0	167	335	0	13	502	29	986	1015
17:00	8	0	22	0	30	0	61	17	4	78	0	0	0	0	0	47	74	0	4	121	8	229	237
17:15	8	0	15	0	23	0	65	15	3	80	0	0	0	0	0	44	72	0	2	116	5	219	224
17:30	7	0	8	0	15	0	97	20	3	117	0	0	0	0	0	42	101	0	2	143	5	275	280
17:45	20	0	19	0	39	0	71	19	1	90	0	0	0	0	0	49	70	0	1	119	2	248	250
Total	43	0	64	0	107	0	294	71	11	365	0	0	0	0	0	182	317	0	9	499	20	971	991
Grand Total	289	0	417	8	706	0	1022	143	45	1165	0	0	0	0	0	407	1153	0	58	1560	111	3431	3542
Apprch %	40.9	0.0	59.1			0.0	87.7	12.3			0.0	0.0	0.0			26.1	73.9	0.0					
Total %	8.4	0.0	12.2		20.6	0.0	29.8	4.2		34.0	0.0	0.0	0.0		0.0	11.9	33.6	0.0		45.5	3.1	96.9	

Organization Title Goes Here

Heading Second Line

Heading Third Line

Existing & Proposed Geometrics - Warrant Analysis the Same

Study Name : TMC0122_peak

Study Date : 12/10/03

Page No. : 1

Signal Warrants - Summary

Major Street Approaches

Eastbound: CSAH 116

Number of Lanes: 1

Approach Speed: 55

Total Approach Volume: 1,560

Westbound: CSAH 116

Number of Lanes: 2

Approach Speed: 55

Total Approach Volume: 1,165

Minor Street Approaches

Northbound: none

Number of Lanes: 2

Total Approach Volume: 0

Southbound: Prairie Rd.

Number of Lanes: 2

Total Approach Volume: 706

Warrant Summary (Rural values apply.)

Warrant 1 - Eight Hour Vehicular Volumes Not Satisfied

Warrant 1A - Minimum Vehicular Volume Not Satisfied

Required volumes reached for 1 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic Not Satisfied

Required volumes reached for 2 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants Not Satisfied

Required volumes reached for 2 hours, 8 are needed

Warrant 2 - Four Hour Volumes Not Satisfied

Number of hours (3) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour Satisfied

Warrant 3A - Peak Hour Volumes Not Satisfied

Volumes do not exceed minimums for any hour.

Warrant 3B - Peak Hour Delay Satisfied

Number of hours (2) volumes exceed minimum >= required (1). Delay data not evaluated.

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

Organization Title Goes Here

Heading Second Line

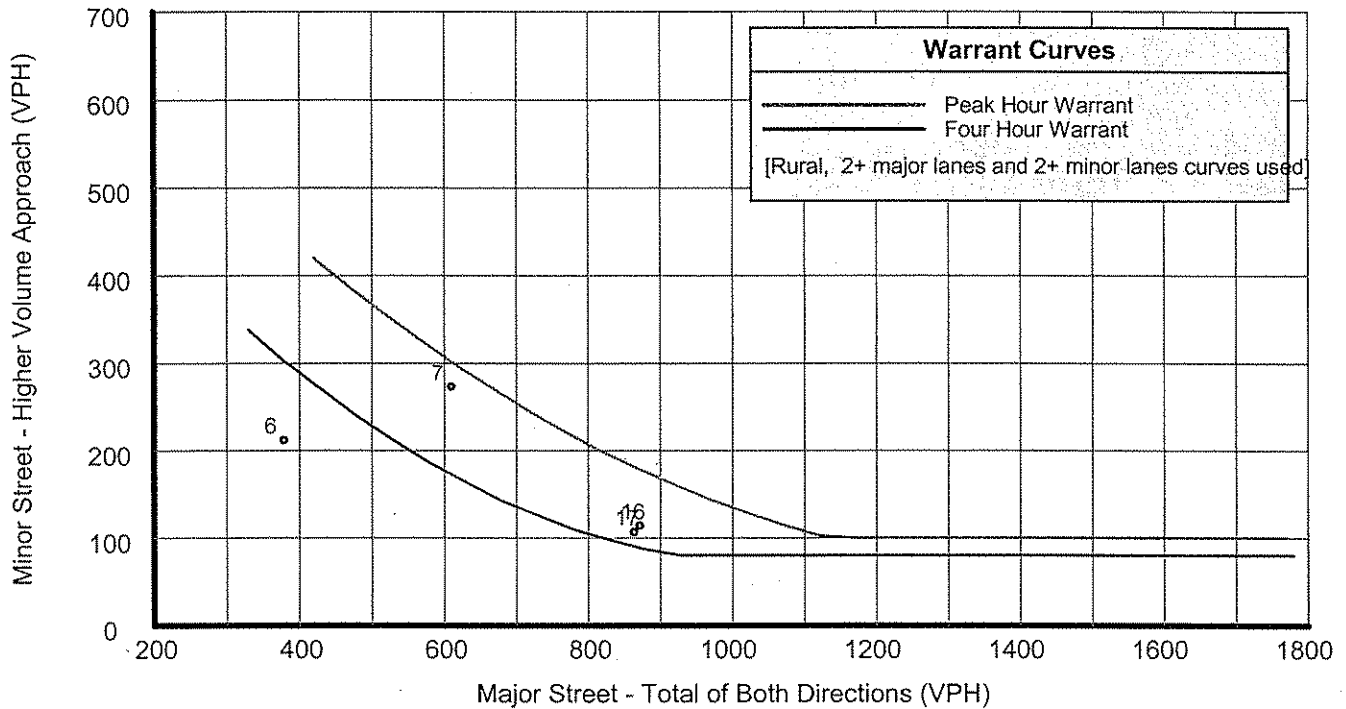
Heading Third Line

Study Name : TMC0122_peak

Study Date : 12/10/03

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Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour Begin	Major Total	Higher Minor		War-1A			War-1B			War-1A&B		
		Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
01:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
02:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
03:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
04:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
05:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
06:00	379	212	SB	420-No	140-Yes	Minor	630-No	70-Yes	Minor	504-No	112-Yes	Minor
07:00	610	273	SB	420-Yes	140-Yes	Both	630-No	70-Yes	Minor	504-Yes	112-Yes	Both
08:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
09:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
10:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
11:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
12:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
13:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
14:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
15:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
16:00	872	114	SB	420-Yes	140-No	Major	630-Yes	70-Yes	Both	504-Yes	112-Yes	Both
17:00	864	107	SB	420-Yes	140-No	Major	630-Yes	70-Yes	Both	504-Yes	112-No	Major
18:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
19:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
20:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
21:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
22:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
23:00	0	0	NB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---