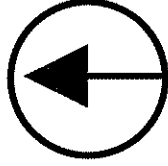


Date : 10/22/97 6-8AM 10/23/97 4-6PM

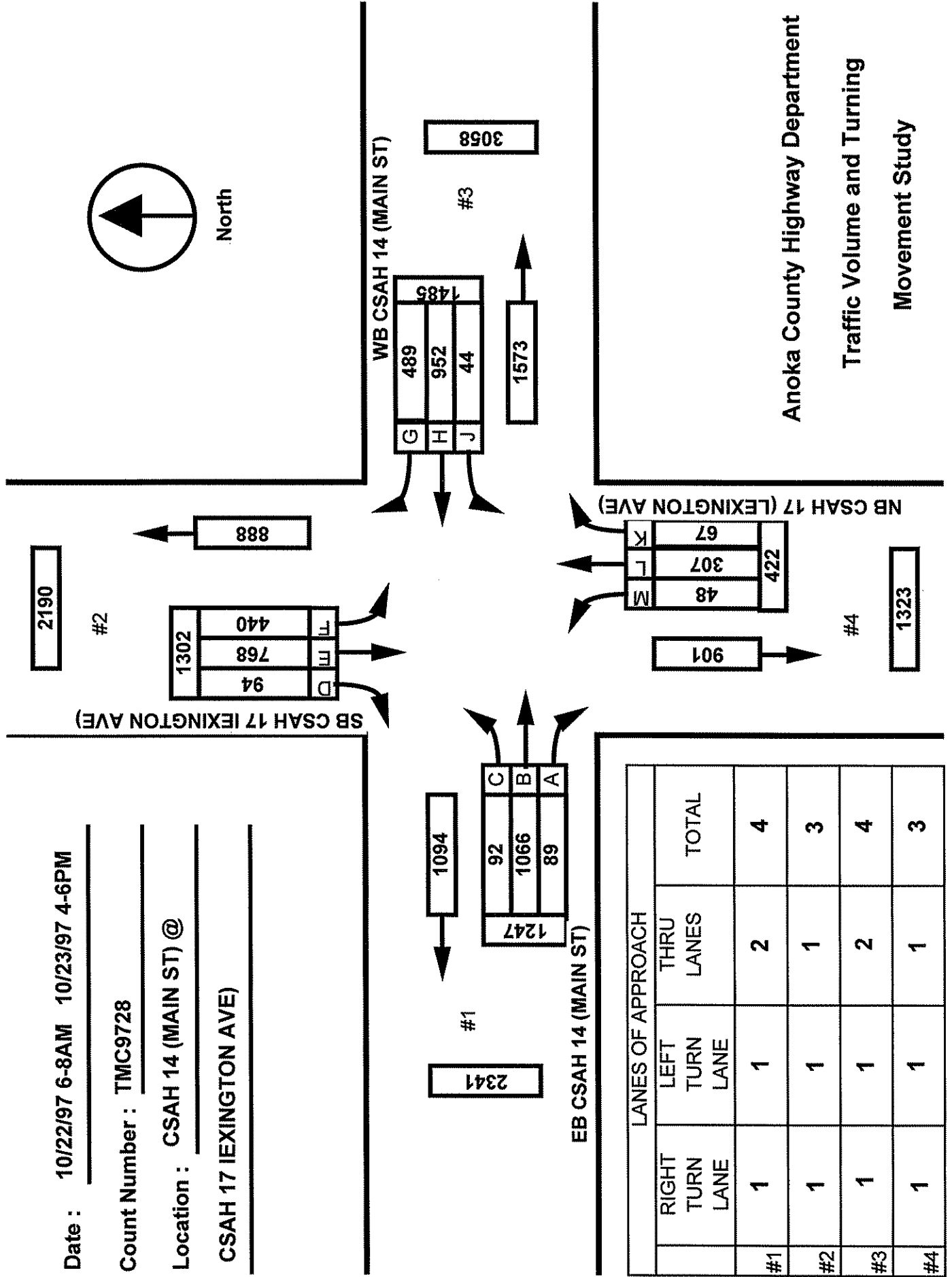
Count Number : TMC9728

Location : CSAH 14 (MAIN ST) @

CSAH 17 IEXINGTON AVE)



North



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Weather :  
 Counted by: Josie  
 Board # :  
 :her :

PETRA Software  
 Copyright (C) 1990, 1995  
 Jamar Technologies, Inc.  
 Horsham, PA.

Study Name: TMC9727  
 Site Code : 97270102  
 Start Date: 10/22/97  
 Page : 1

Vehicle group 1

Start Time	CSAH 17 (LEXINGTON AVE Southbound)				CSAH 14 (MAIN STREET) Westbound				CSAH 17 (LEXINGTON AVE Northbound)				CSAH 14 (MAIN STREET) Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
10/22/97																			
06:00	27	85	3	1	5	15	3	2	0	1	0	0	1	27	2	0	172	3	169
06:15	39	89	3	3	1	29	3	2	0	1	2	0	1	49	3	1	226	6	220
06:30	55	92	2	1	0	48	12	1	0	7	0	2	2	96	6	3	327	7	320
06:45	58	88	7	1	4	43	4	2	1	3	3	0	2	71	8	5	300	8	292
Hour	179	354	15	6	10	135	22	7	1	12	5	2	6	243	19	9	1025	24	1001
07:00	44	77	6	2	4	43	13	4	2	2	2	1	4	97	6	9	316	16	300
07:15	56	91	8	3	5	57	8	4	1	6	6	0	4	97	10	5	361	12	349
07:30	50	74	7	6	2	55	14	4	3	6	2	0	2	72	8	7	312	17	295
07:45	38	56	6	5	1	51	12	7	1	3	1	2	4	82	9	6	284	20	264
Hour	188	298	27	16	12	206	47	19	7	17	11	3	14	348	33	27	1273	65	1208
[BREAK	-----																		
16:00	7	11	6	3	3	69	58	3	6	30	8	1	8	50	8	5	276	12	264
16:15	9	12	12	2	4	80	64	9	3	29	3	0	5	65	3	2	302	13	289
16:30	9	14	2	0	1	84	47	2	10	33	13	3	8	58	5	3	292	8	284
16:45	10	10	4	0	6	58	49	3	3	40	2	0	12	66	5	2	270	5	265
Hour	35	47	24	5	14	291	218	17	22	132	26	4	33	239	21	12	1140	38	1102
17:00	11	15	4	0	2	110	59	8	6	38	7	3	9	57	3	0	332	11	321
17:15	10	16	5	1	2	77	53	2	4	47	6	3	11	55	5	2	299	8	291
17:30	7	18	6	2	3	65	50	4	4	40	9	2	8	67	5	2	292	10	282
17:45	10	20	13	0	1	68	40	2	4	21	3	0	11	57	3	3	256	5	251
Hour	38	69	28	3	8	320	202	16	18	146	25	8	39	236	16	7	1179	34	1145
Total	440	768	94	30	44	952	489	59	48	307	67	17	92	1066	89	55	4617	161	4456
% Apr.	33.0	57.6	7.0	2.2	2.8	61.6	31.6	3.8	10.9	69.9	15.2	3.8	7.0	81.8	6.8	4.2	-	-	-
% Int.	9.5	16.6	2.0	0.6	0.9	20.6	10.5	1.2	1.0	6.6	1.4	0.3	1.9	23.0	1.9	1.1	-	-	-

or Street Approaches:

Lastbound:

CSAH 14 (MAIN STTEET)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9727.PDF  
 Count Type: IMC. Channel: 0. Count Date: 10/22/97  
 Number of Lanes: 2  
 Approach Speed: 55  
 Total Approach Traffic: 1247

Westbound:

CSAH 14 (MAIN STTEET)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9727.PDF  
 Count Type: IMC. Channel: 0. Count Date: 10/22/97  
 Number of Lanes: 2  
 Approach Speed: 55  
 Total Approach Traffic: 1485

Minor Street Approaches:

Northbound:

CSAH 17 (LEXINGTON AVE)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9727.PDF  
 Count Type: IMC. Channel: 0. Count Date: 10/22/97  
 Number of Lanes: 2  
 Approach Speed: 55  
 Total Approach Traffic: 422

Southbound:

CSAH 17 (LEXINGTON AVE)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9727.PDF  
 Count Type: IMC. Channel: 0. Count Date: 10/22/97  
 Number of Lanes: 2  
 Approach Speed: 55  
 Total Approach Traffic: 1302

Analysis of 8-Hour Volume Warrants (Criteria refers to high volume side street for that hour):

Hour	Main	Side			Warrant 1		Warrant 2		Warrant 8	
Begin	(Total)	Vol.	Dir.	Rank	Meets?	Criteria	Meets?	Criteria	Meets?	Criteria
0	0	0	S	5		140		70		112
1	0	0	S	6		140		70		112
2	0	0	S	7		140		70		112
3	0	0	S	8		140		70		112
4	0	0	S	9		140		70		112
5	0	0	S	10		140		70		112
6	435	548	S	1	--BOTH--	140	SIDE	70	SIDE	112
7	660	513	S	2	--BOTH--	140	--BOTH--	70	--BOTH--	112
8	0	0	S	11		140		70		112
9	0	0	S	12		140		70		112
10	0	0	S	13		140		70		112
11	0	0	S	14		140		70		112
12	0	0	S	15		140		70		112
13	0	0	S	16		140		70		112
14	0	0	S	17		140		70		112
15	0	0	S	18		140		70		112
16	816	180	N	4	--BOTH--	140	--BOTH--	70	--BOTH--	112
17	821	189	N	3	--BOTH--	140	--BOTH--	70	--BOTH--	112
18	0	0	S	19		140		70		112
19	0	0	S	20		140		70		112
20	0	0	S	21		140		70		112
21	0	0	S	22		140		70		112
22	0	0	S	23		140		70		112
23	0	0	S	24		140		70		112

## Warrant Summary:

Rural values apply.

## Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 4 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

## Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

## Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. Ped volumes too low. Criteria--190 Peds in peak hour, 100 peds in 4th high hour.

## Warrant 4 - School Crossing

NOT APPLICABLE. Gap data has not been defined.

## Warrant 5 - Progressive Movement

NOT SATISFIED. Adjacent signals closer than 1000 feet and/or not part of coordinated system.

## Warrant 6 - Accident Experience

NOT SATISFIED. 0 correctable accidents is fewer than required 5.

Correctable Accidents: 0; Right Angle Accidents: 0; Left Turn Accidents: 0; Other Accidents: 0.

## Warrant 7 - Systems Warrant

NOT SATISFIED. At least one street has no major approaches. Peak hour total entering volume: 1208.

- Approaches which are part of the principal through traffic roadway network.
- Approaches which include rural or suburban highways outside, entering or traversing a city.
- Approaches which appear as a major route in an official transportation plan.

## Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main: 504; Side: See Volume Summary.

## Warrant 9 - Four Hour Volumes

SATISFIED for 4 hours.

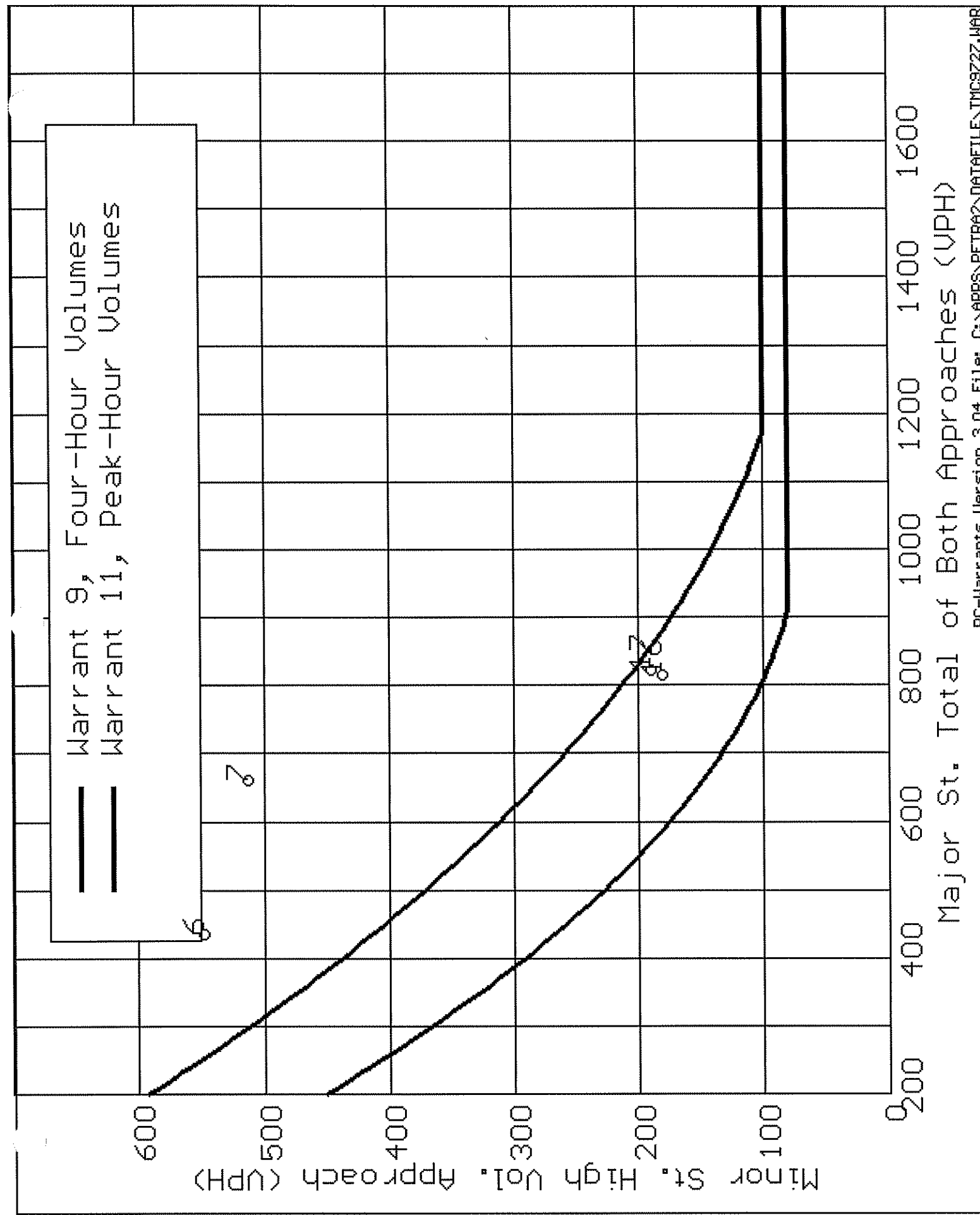
## Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (700 hours) volume not adequate.

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 150.

## Warrant 11 - Peak Hour Volume

SATISFIED for 2 hours.



Major St. Total of Both Approaches (UPH)



NORTH

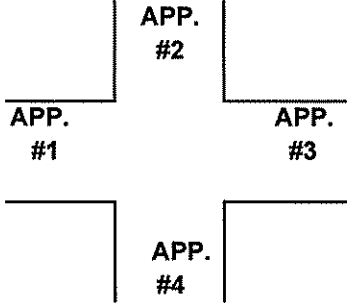
COUNT LOCATION:

CSAH 14 (MAIN ST) @  
CSAH 17 (LEXINGTON AVE)

DATE:

10/22/97

APP. #1=EB CSAH 14 (MAIN ST)
APP. #2 =SB CSAH 17 (LEXINGTON AVE)
APP. #3=WB CSAH 14 (MAIN ST)
APP. #4=NB CSAH 17 (LEXINGTON AVE)



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						3		
6:15-6:30						5		1
6:30-6:45						7		1
6:45-7:00						6		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>25</b>
7:00-7:15						13		3
7:15-7:30						9		2
7:30-7:45						17		1
7:45-8:00						17		3
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>65</b>
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
10:00-10:15								
10:15-10:30								
10:30-10:45								
10:45-11:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
11:00-11:15								
11:15-11:30								
11:30-11:45								
11:45-12:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
12:00-12:15								
12:15-12:30								
12:30-12:45								
12:45-1:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
1:00-1:15								
1:15-1:30								
1:30-1:45								
1:45-2:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		



**NORTH**

**COUNT LOCATION:**

CSAH 14 (MAIN ST) @  
CSAH 17 (LEXINGTON AVE)

**DATE:**

10/23/97

APP. #1=EB CSAH 14 (MAIN ST)
APP. #2 =SB CSAH 17 (LEXINGTON AVE)
APP. #3=WB CSAH 14 (MAIN ST)
APP. #4=NB CSAH 17 (LEXINGTON AVE)

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								
2:15-2:30								
2:30-2:45								
2:45-3:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
3:00-3:15								
3:15-3:30								
3:30-3:45								
3:45-4:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
4:00-4:15						9		3
4:15-4:30						11		2
4:30-4:45						7		1
4:45-5:00						5		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>38</b>
5:00-5:15						11		
5:15-5:30						6		1
5:30-5:45						9		1
5:45-6:00						3		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>33</b>
6:00-6:15								
6:15-6:30								
6:30-6:45								
6:45-7:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
7:00-7:15								
7:15-7:30								
7:30-7:45								
7:45-8:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		