

Date: 11/18/97AM 11/19/97PM

Count Number: TMC9730

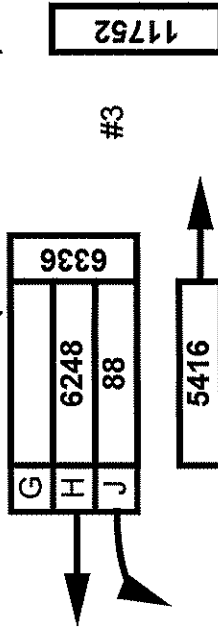
Location: CSAH 51 (UNIVERSITY AVE) @

92ND LANE

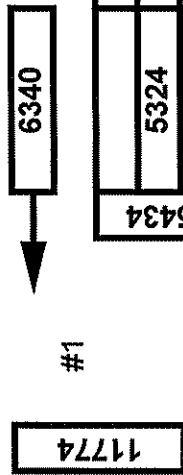


North

SB CSAH 51 (UNIVERSITY AVE)



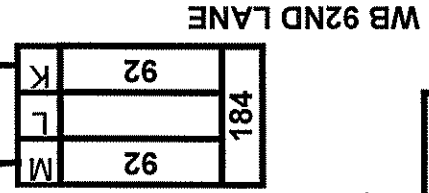
#3



#1

NB CSAH 51 (UNIVERSITY AVE)

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



#4

WB 92ND LANE

Anoka County Highway Department  
Traffic Volume and Turning

Movement Study

Weather : CLOUDY 32  
 Counted by: RANDY AND JOSIE  
 Board # : 1  
 Cher :

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 Horsham, PA.

Study Name: TMC9730  
 Site Code : 97300102  
 Start Date: 11/18/97  
 Page : 1

Vehicle group 1

Start Time	CSAH 51 (UNIVERSITY AV Southbound)			92ND LANE Westbound			CSAH 51 (UNIVERSITY AV Northbound)			Intrvl. Total	Exclude Total	Include Total
	Left	Thru	Other	Left	Right	Other	Thru	Right	Other			
11/18/97												
06:00	0	143	2	4	1	0	6	1	0	157	2	155
06:15	1	221	0	4	1	1	16	1	1	246	2	244
06:30	2	227	2	4	2	0	18	0	0	255	2	253
06:45	4	320	5	3	1	0	24	0	2	359	7	352
Hour	7	911	9	15	5	1	64	2	3	1017	13	1004
07:00	1	343	4	2	4	0	26	0	1	381	5	376
07:15	3	263	4	3	1	0	35	1	3	313	7	306
07:30	3	267	4	4	1	0	38	1	2	320	6	314
07:45	3	267	6	2	4	1	38	0	0	321	7	314
Hour	10	1140	18	11	10	1	137	2	6	1335	25	1310
08:00	1	153	3	4	0	0	32	1	2	196	5	191
08:15	0	125	5	0	1	1	28	1	5	166	11	155
08:30	0	125	6	2	3	2	41	0	2	181	10	171
08:45	2	125	2	3	0	2	47	0	3	184	7	177
Hour	3	528	16	9	4	5	148	2	12	727	33	694
09:00	1	112	2	2	1	0	46	2	6	172	8	164
09:15	0	112	2	1	0	0	47	0	1	163	3	160
09:30	0	97	3	3	0	0	41	0	2	146	5	141
09:45	2	122	6	4	2	0	56	4	3	199	9	190
Hour	3	443	13	10	3	0	190	6	12	680	25	655
10:00	1	105	5	3	0	1	48	1	3	167	9	158
10:15	0	92	3	2	1	0	62	1	4	165	7	158
10:30	2	91	3	1	2	0	75	0	3	177	6	171
10:45	0	90	3	0	1	0	69	1	6	170	9	161
Hour	3	378	14	6	4	1	254	3	16	679	31	648
11:00	0	86	4	1	1	0	75	1	4	172	8	164
11:15	3	95	5	1	1	1	75	4	1	186	7	179
11:30	0	90	3	5	4	0	68	0	4	174	7	167
11:45	4	95	7	1	1	0	100	2	2	212	9	203
Hour	7	366	19	8	7	1	318	7	11	744	31	713
12:00	8	89	3	1	0	0	106	3	3	213	6	207
12:15	2	91	0	1	0	0	104	0	4	202	4	198
12:30	1	88	0	0	2	0	95	2	2	190	2	188
12:45	5	124	7	0	3	0	94	5	4	242	11	231
Hour	16	392	10	2	5	0	399	10	13	847	23	824

Weather : CLOUDY 32  
 Counted by: RANDY AND JOSIE  
 Board # : 1  
 Cher :

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Study Name: TMC9730  
 Site Code : 97300102  
 Start Date: 11/18/97  
 Page : 2

Vehicle group 1

Start Time	CSAH 51 (UNIVERSITY AV Southbound)			92ND LANE Westbound			CSAH 51 (UNIVERSITY AV Northbound)			Intrvl. Total	Exclude Total	Include Total
	Left	Thru	Other	Left	Right	Other	Thru	Right	Other			
13:00	0	90	3	5	1	0	99	5	2	205	5	200
13:15	2	85	2	1	1	0	86	0	0	177	2	175
13:30	3	87	3	2	2	1	107	4	3	212	7	205
13:45	0	93	2	1	2	0	109	4	7	218	9	209
Hour	5	355	10	9	6	1	401	13	12	812	23	789
14:00	2	84	3	3	1	1	118	4	8	224	12	212
14:15	0	82	1	2	1	0	131	4	3	224	4	220
14:30	3	103	7	1	2	1	124	5	1	247	9	238
14:45	2	107	3	4	3	0	136	3	0	258	3	255
Hour	7	376	14	10	7	2	509	16	12	953	28	925
15:00	2	111	5	1	1	0	158	5	2	285	7	278
15:15	1	96	3	2	2	1	192	1	2	300	6	294
15:30	3	108	0	0	2	0	200	3	2	318	2	316
15:45	4	126	2	2	5	1	225	5	2	372	5	367
Hour	10	441	10	5	10	2	775	14	8	1275	20	1255
16:00	1	105	2	2	2	0	228	4	4	348	6	342
16:15	2	103	1	2	1	0	272	6	3	390	4	386
16:30	3	118	1	0	5	1	283	4	2	417	4	413
16:45	3	127	1	0	2	2	295	3	2	435	5	430
Hour	9	453	5	4	10	3	1078	17	11	1590	19	1571
17:00	2	128	3	2	6	1	274	4	2	422	6	416
17:15	2	126	0	0	5	2	267	4	1	407	3	404
17:30	1	109	0	1	3	0	268	6	2	390	2	388
17:45	3	102	1	0	7	1	242	4	0	360	2	358
Hour	8	465	4	3	21	4	1051	18	5	1579	13	1566
Total	88	6248	142	92	92	21	5324	110	121	12238	284	11954
% Apr.	1.3	96.4	2.1	44.8	44.8	10.2	95.8	1.9	2.1	-	-	-
% Int.	0.7	51.0	1.1	0.7	0.7	0.1	43.5	0.8	0.9	-	-	-

or Street Approaches:

Northbound:

CSAH 51 (UNIVERSITY AVE)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9730.PDF  
 Count Type: IMC. Channel: 0. Count Date: 11/18/97  
 Number of Lanes: 2  
 Approach Speed: 45  
 Total Approach Traffic: 5434

Southbound:

CSAH 51 (UNIVERSITY AVE)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9730.PDF  
 Count Type: IMC. Channel: 0. Count Date: 11/18/97  
 Number of Lanes: 2  
 Approach Speed: 45  
 Total Approach Traffic: 6336

Minor Street Approaches:

Eastbound:

92ND LANE

Data File: C:\APPS\PETRA2\DATAFILE\TMC9730.PDF  
 Count Type: IMC. Channel: 0. Count Date: 11/18/97  
 Number of Lanes: 1  
 Approach Speed: 0  
 Total Approach Traffic: 0

Westbound:

92ND LANE

Data File: C:\APPS\PETRA2\DATAFILE\TMC9730.PDF  
 Count Type: IMC. Channel: 0. Count Date: 11/18/97  
 Number of Lanes: 1  
 Approach Speed: 0  
 Total Approach Traffic: 184

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

Hour	Main (Total)	Side			Warrant 1		Warrant 2		Warrant 8	
		Vol.	Dir.	Rank	Meets?	Criteria	Meets?	Criteria	Meets?	Criteria
0	0	0	W	13		105		52		84
1	0	0	W	14		105		52		84
2	0	0	W	15		105		52		84
3	0	0	W	16		105		52		84
4	0	0	W	17		105		52		84
5	0	0	W	18		105		52		84
6	984	20	W	3	MAIN	105	MAIN	52	MAIN	84
7	1289	21	W	2	MAIN	105	MAIN	52	MAIN	84
8	681	13	W	9	MAIN	105	MAIN	52	MAIN	84
9	642	13	W	10	MAIN	105	MAIN	52	MAIN	84
10	638	10	W	11	MAIN	105	MAIN	52	MAIN	84
11	698	15	W	5	MAIN	105	MAIN	52	MAIN	84
12	817	7	W	12	MAIN	105	MAIN	52	MAIN	84
13	774	15	W	6	MAIN	105	MAIN	52	MAIN	84
14	908	17	W	4	MAIN	105	MAIN	52	MAIN	84
15	1240	15	W	7	MAIN	105	MAIN	52	MAIN	84
16	1557	14	W	8	MAIN	105	MAIN	52	MAIN	84
17	1542	24	W	1	MAIN	105	MAIN	52	MAIN	84
18	0	0	W	19		105		52		84
19	0	0	W	20		105		52		84
20	0	0	W	21		105		52		84
21	0	0	W	22		105		52		84
22	0	0	W	23		105		52		84
23	0	0	W	24		105		52		84

## Warrant Summary:

Rural values apply.

## Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

## Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 0 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: 1571.

- 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 0 hours. Criteria--Main: 504; Side: See Volume Summary.

## Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 0 hours.

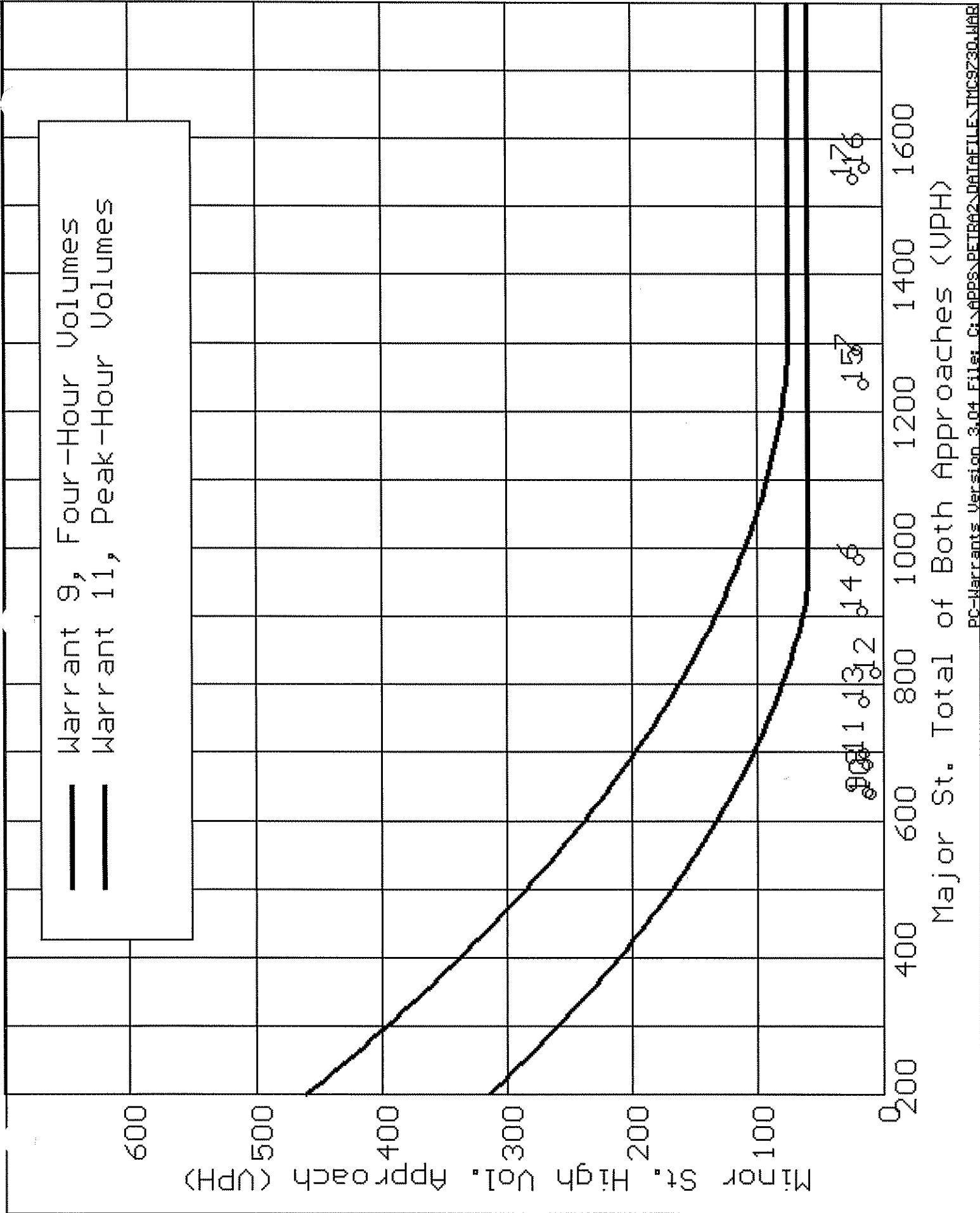
## Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1600 hours) volume not adequate.

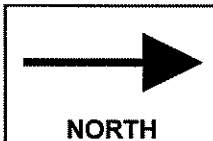
Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 100.

## Warrant 11 - Peak Hour Volume

NOT SATISFIED.



Major St. Total of Both Approaches (VPH)



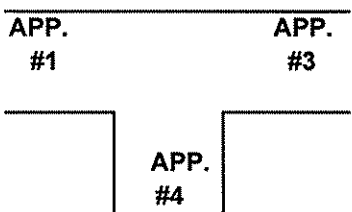
**COUNT LOCATION:**

CSAH 51 (UNIVERSITY AVE) @  
92 LANE

**DATE:**

11/18/97

APP. #1=NB CSAH 51  
(UNIVERSITY AVE)  
APP. #3 =SB CSAH 51  
(UNIVERSITY AVE)  
APP. #4=92ND LANE



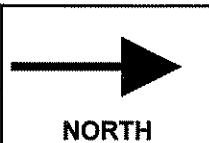
HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT

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						1		1
6:15-6:30						1		1
6:30-6:45								3
6:45-7:00						3		4
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>14</b>
7:00-7:15						2		3
7:15-7:30						4		3
7:30-7:45						2		4
7:45-8:00						3		6
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>27</b>
8:00-8:15						4		1
8:15-8:30						5		6
8:30-8:45						6		4
8:45-9:00						5		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>33</b>
9:00-9:15						7		1
9:15-9:30						3		2
9:30-9:45						2		
9:45-10:00						7		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>24</b>
10:00-10:15						8		1
10:15-10:30						7		
10:30-10:45						5		1
10:45-11:00						8		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>31</b>
11:00-11:15						6		2
11:15-11:30						7		1
11:30-11:45						5		
11:45-12:00						8		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>31</b>
12:00-12:15						4		2
12:15-12:30						3		1
12:30-12:45								1
12:45-1:00						7		4
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>22</b>
1:00-1:15						4		1
1:15-1:30						1		1
1:30-1:45						7		
1:45-2:00						7		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>23</b>



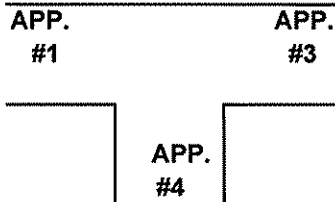
COUNT LOCATION:

CSAH 51 (UNIVERSITY AVE) @  
92 LANE

DATE:

11/19/97

APP. #1=NB CSAH 51  
(UNIVERSITY AVE)  
APP. #3 =SB CSAH 51  
(UNIVERSITY AVE)  
APP. #4=92ND LANE



- 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						8		4
2:15-2:30						3		1
2:30-2:45						5		4
2:45-3:00						1		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>28</b>
3:00-3:15						5		3
3:15-3:30						2		3
3:30-3:45						1		1
3:45-4:00				1	1	2		2
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>19</b>
4:00-4:15						2		4
4:15-4:30				3	3	1		3
4:30-4:45						2		2
4:45-5:00						2		3
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>19</b>
5:00-5:15						2		4
5:15-5:30						1		1
5:30-5:45						1		1
5:45-6:00								2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>12</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>		