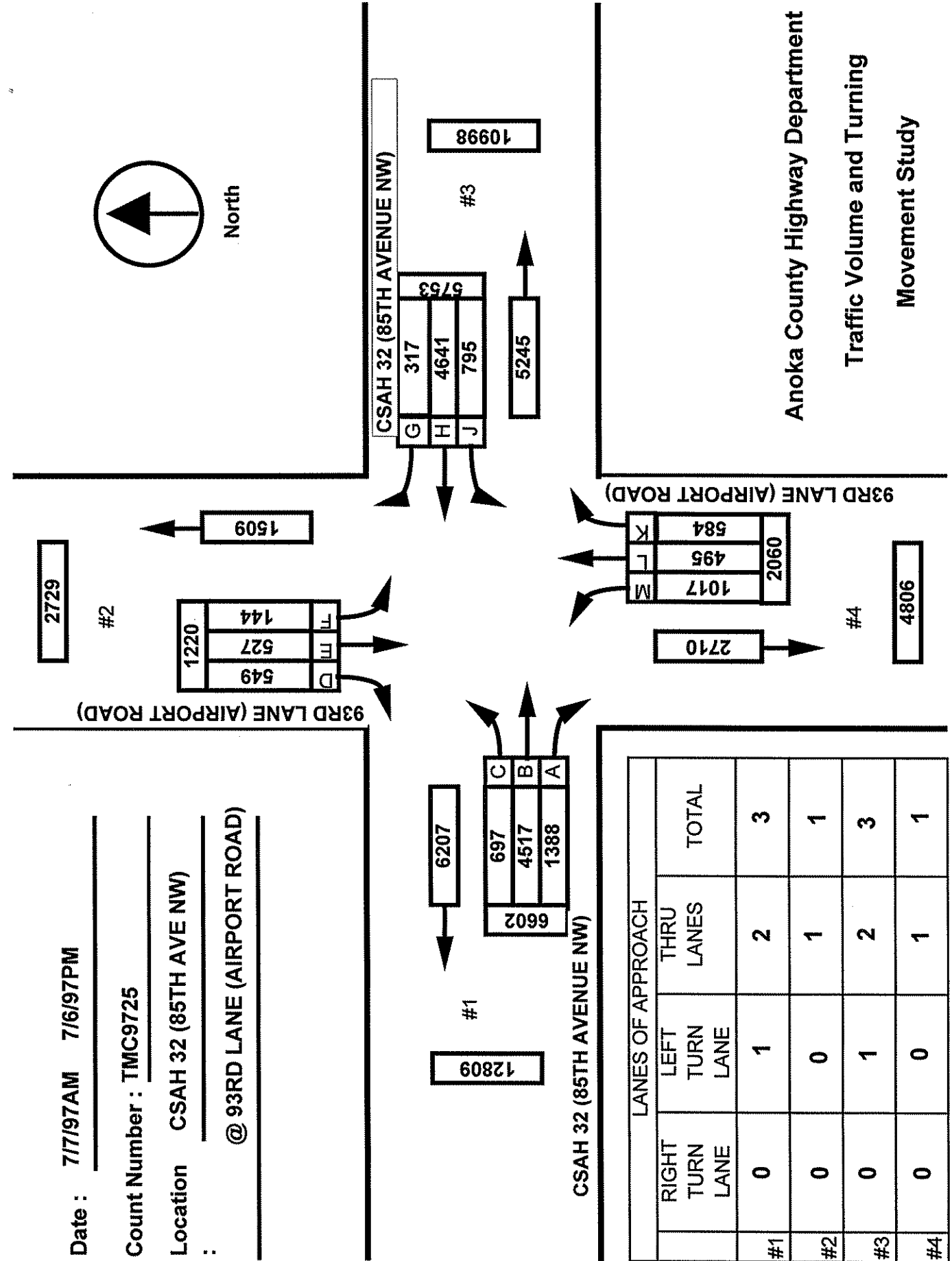


Date : 7/7/97AM 7/6/97PM

Count Number : TMC9725

Location CSAH 32 (85TH AVE NW)  
 : @ 93RD LANE (AIRPORT ROAD)



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

Weather : OVERCAST  
 Counted by: SARAH AND JANELLE  
 Board # :  
 ther :

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Study Name: TMC9725  
 Site Code : 97250202  
 Start Date: 08/06/97  
 Page : 1

Vehicle group 1

Start Time	93RD LANE EX (AIRPORT Southbound)				CSAH 32 (85TH AVENUE N Westbound)				93RD LANE EX (AIRPORT Northbound)				CSAH 32 (85TH AVENUE N Eastbound)				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
08/06/97																			
06:00	6	7	3	0	13	27	5	3	7	1	3	2	6	64	22	10	179	15	164
06:15	1	4	5	0	27	34	4	1	10	2	5	3	9	51	30	8	194	12	182
06:30	0	10	5	0	21	35	2	3	16	2	3	0	25	115	56	7	300	10	290
06:45	1	12	4	2	22	24	0	3	13	15	8	1	21	111	56	6	299	12	287
Hour	8	33	17	2	83	120	11	10	46	20	19	6	61	341	164	31	972	49	923
07:00	0	5	7	0	24	40	3	6	39	38	33	4	76	188	36	10	509	20	489
07:15	1	5	7	0	15	46	5	1	37	46	38	7	76	162	47	13	506	21	485
07:30	2	10	8	0	21	66	2	3	31	19	7	1	61	155	60	13	459	17	442
07:45	0	13	6	1	16	60	5	8	18	8	6	4	40	161	60	12	418	25	393
Hour	3	33	28	1	76	212	15	18	125	111	84	16	253	666	203	48	1892	83	1809
08:00	0	4	4	0	20	43	0	5	22	3	7	0	21	110	35	11	285	16	269
08:15	1	4	4	1	18	38	0	6	20	5	7	2	5	54	13	9	187	18	169
08:30	2	6	5	0	15	45	8	5	13	4	8	4	7	61	11	7	201	16	185
08:45	1	5	4	0	8	33	3	10	11	2	6	5	6	55	17	5	171	20	151
Hour	4	19	17	1	61	159	11	26	66	14	28	11	39	280	76	32	844	70	774
09:00	3	5	4	0	8	30	4	5	13	3	6	1	5	43	9	5	144	11	133
09:15	2	6	5	0	4	37	4	6	16	4	2	2	2	63	6	5	164	13	151
09:30	2	7	6	1	8	33	2	1	14	0	5	4	4	54	14	5	160	11	149
09:45	2	4	1	0	3	40	3	6	16	4	7	6	5	54	14	4	169	16	153
Hour	9	22	16	1	23	140	13	18	59	11	20	13	16	214	43	19	637	51	586
10:00	4	8	1	0	6	29	4	3	12	5	3	3	4	60	14	5	161	11	150
10:15	2	7	2	1	4	38	1	3	19	6	7	4	2	56	11	5	168	13	155
10:30	1	2	9	0	3	53	7	4	14	4	4	3	8	64	11	9	196	16	180
10:45	2	5	9	1	14	43	4	5	11	6	7	2	3	56	11	4	183	12	171
Hour	9	22	21	2	27	163	16	15	56	21	21	12	17	236	47	23	708	52	656
11:00	2	6	2	0	8	53	3	5	13	6	2	4	6	63	10	3	186	12	174
11:15	1	5	9	1	7	56	2	4	13	7	6	3	5	67	21	4	211	12	199
11:30	2	3	7	1	8	59	7	9	18	6	9	1	7	85	15	10	247	21	226
11:45	3	7	10	1	10	71	6	6	20	9	17	6	11	68	14	4	263	17	246
Hour	8	21	28	3	33	239	18	24	64	28	34	14	29	283	60	21	907	62	845
12:00	1	4	10	1	13	70	7	3	15	8	18	3	8	75	15	7	258	14	244
12:15	3	8	9	1	18	63	2	9	13	2	6	2	3	69	13	5	226	17	209
12:30	1	6	11	1	11	59	8	10	18	11	10	5	5	65	19	6	246	22	224
12:45	5	7	7	1	18	67	4	9	25	4	9	6	7	65	14	8	256	24	232
Hour	10	25	37	4	60	259	21	31	71	25	43	16	23	274	61	26	986	77	909

PETRA Software

Weather : OVERCAST  
 Counted by: SARAH AND JANELLE  
 Board # :  
 ther :

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Study Name: TMC9725  
 Site Code : 97250202  
 Start Date: 08/06/97  
 Page : 2

Vehicle group 1

Start Time	93RD LANE EX (AIRPORT Southbound)				CSAH 32 (85TH AVENUE N Westbound)				93RD LANE EX (AIRPORT Northbound)				CSAH 32 (85TH AVENUE N Eastbound)				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
13:00	1	10	8	1	12	72	4	6	18	6	11	5	3	61	20	6	244	18	226
13:15	2	9	13	1	6	69	9	5	19	5	7	4	3	67	6	2	227	12	215
13:30	0	3	5	0	12	74	1	2	21	6	13	6	4	76	15	5	243	13	230
13:45	3	7	7	0	3	70	4	3	6	4	12	1	2	56	15	6	199	10	189
Hour	6	29	33	2	33	285	18	16	64	21	43	16	12	260	56	19	913	53	860
14:00	1	6	4	2	13	54	2	7	16	8	16	4	6	67	13	6	225	19	206
14:15	0	8	2	2	12	83	8	10	8	4	7	3	5	58	10	5	225	20	205
14:30	2	9	10	0	14	94	3	13	12	5	11	3	2	71	21	9	279	25	254
14:45	0	2	5	0	18	82	4	5	14	1	7	5	4	73	23	7	250	17	233
Hour	3	25	21	4	57	313	17	35	50	18	41	15	17	269	67	27	979	81	898
15:00	1	5	5	1	13	91	3	9	18	7	9	2	5	60	20	7	256	19	237
15:15	0	8	15	0	19	125	6	9	17	5	15	1	7	65	27	8	327	18	309
15:30	1	7	8	1	12	122	5	5	24	7	9	1	3	56	29	9	299	16	283
15:45	3	10	18	1	17	129	8	7	17	7	10	4	9	84	26	7	357	19	338
Hour	5	30	46	3	61	467	22	30	76	26	43	8	24	265	102	31	1239	72	1167
16:00	3	13	12	0	14	136	6	6	20	12	12	5	9	69	28	7	352	18	334
16:15	4	12	15	0	14	132	8	3	23	10	11	4	8	78	27	6	355	13	342
16:30	3	19	10	0	22	142	5	10	19	4	11	1	15	79	32	3	375	14	361
16:45	3	21	29	0	27	159	13	7	23	10	14	2	11	77	34	4	434	13	421
Hour	13	65	66	0	77	569	32	26	85	36	48	12	43	303	121	20	1516	58	1458
17:00	3	15	23	0	23	157	8	7	17	10	17	2	14	83	32	6	417	15	402
17:15	3	28	25	1	21	161	9	4	11	15	11	0	10	66	43	6	414	11	403
17:30	2	21	30	0	26	125	12	4	15	8	9	1	12	79	27	3	374	8	366
17:45	11	21	26	1	15	152	7	7	17	4	10	1	15	82	28	5	402	14	388
Hour	19	85	104	2	85	595	36	22	60	37	47	4	51	310	130	20	1607	48	1559
18:00	3	17	13	1	11	131	13	4	19	8	13	3	6	67	27	3	339	11	328
18:15	5	11	17	0	11	102	5	4	21	6	7	3	16	88	27	3	326	10	316
18:30	1	11	9	0	10	75	7	1	13	4	7	0	11	70	21	3	243	4	239
18:45	4	6	10	1	8	58	5	3	13	8	8	2	16	92	19	1	254	7	247
Hour	13	45	49	2	40	366	30	12	66	26	35	8	49	317	94	10	1162	32	1130
19:00	7	14	6	0	15	73	3	3	16	7	6	1	3	57	17	2	230	6	224
19:15	0	10	6	1	9	56	5	0	16	14	9	3	6	61	13	3	212	7	205
19:30	3	3	3	1	11	57	5	3	11	6	1	0	3	51	21	0	179	4	175
19:45	0	6	5	0	4	85	8	2	12	10	7	0	8	44	7	2	200	4	196
Hour	10	33	20	2	39	271	21	8	55	37	23	4	20	213	58	7	821	21	800

Weather :OVERCAST  
 Counted by:SARAH AND JANELLE  
 Board # :  
 ther :

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Study Name: TMC9725  
 Site Code : 97250202  
 Start Date: 08/06/97  
 Page : 3

Vehicle group 1

Start Time	93RD LANE EX (AIRPORT Southbound				CSAH 32 (85TH AVENUE N Westbound				93RD LANE EX (AIRPORT Northbound				CSAH 32 (85TH AVENUE N Eastbound				Intvl	Exclu	Inclu
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other			
20:00	1	7	9	0	4	60	11	1	5	8	8	1	5	37	11	0	168	2	166
20:15	5	6	4	0	4	69	1	4	7	7	5	0	5	38	13	2	170	6	164
20:30	4	5	7	0	7	73	4	1	18	8	8	0	9	39	23	1	207	2	205
20:45	4	4	5	0	9	77	7	0	9	9	3	0	7	35	12	1	182	1	181
Hour	14	22	25	0	24	279	23	6	39	32	24	1	26	149	59	4	727	11	716
21:00	2	4	3	0	6	66	7	0	7	11	7	1	4	42	15	0	175	1	174
21:15	0	5	10	0	2	65	2	1	8	11	13	1	2	42	11	1	174	3	171
21:30	5	5	3	0	6	46	3	0	16	8	7	0	4	35	9	1	148	1	147
21:45	3	4	5	0	2	27	1	0	4	2	4	0	7	18	12	1	90	1	89
Hour	10	18	21	0	16	204	13	1	35	32	31	2	17	137	47	3	587	6	581
Total	144	527	549	29	795	4641	317	298	1017	495	584	158	697	4517	1388	341	16497	826	15671
% Apr.	11.5	42.1	43.9	2.3	13.1	76.6	5.2	4.9	45.1	21.9	25.9	7.0	10.0	65.0	19.9	4.9	-	-	-
% Int.	0.8	3.1	3.3	0.1	4.8	28.1	1.9	1.8	6.1	3.0	3.5	0.9	4.2	27.3	8.4	2.0	-	-	-

or Street Approaches:

Lastbound:

CSAH 32 (85TH AVENUE NW)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9725.PDF  
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/97  
 Number of Lanes: 2  
 Approach Speed: 40  
 Total Approach Traffic: 6602

Westbound:

CSAH 32 (85TH AVENUE NW)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9725.PDF  
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/97  
 Number of Lanes: 2  
 Approach Speed: 40  
 Total Approach Traffic: 5753

Minor Street Approaches:

Northbound:

93RD LANE EX (AIRPORT ROAD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9725.PDF  
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/97  
 Number of Lanes: 1  
 Approach Speed: 0  
 Total Approach Traffic: 2096

Southbound:

93RD LANE EX (AIRPORT ROAD)

Data File: C:\APPS\PETRA2\DATAFILE\TMC9725.PDF  
 Count Type: IMC. Channel: 0. Count Date: 8/ 6/97  
 Number of Lanes: 1  
 Approach Speed: 0  
 Total Approach Traffic: 1220

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	17		150		75		120
1		0	0	S	18		150		75		120
2		0	0	S	19		150		75		120
3		0	0	S	20		150		75		120
4		0	0	S	21		150		75		120
5		0	0	S	22		150		75		120
6		780	85	N	16	MAIN	150	SIDE	75	MAIN	120
7		1425	320	N	1	--BOTH--	150	--BOTH--	75	--BOTH--	120
8		626	108	N	11	MAIN	150	SIDE	75		120
9		449	90	N	15		150	SIDE	75		120
10		506	98	N	12		150	SIDE	75		120
11		662	126	N	8	MAIN	150	SIDE	75	SIDE	120
12		698	139	N	5	MAIN	150	SIDE	75	SIDE	120
13		664	128	N	6	MAIN	150	SIDE	75	SIDE	120
14		740	109	N	10	MAIN	150	SIDE	75	MAIN	120
15		941	145	N	4	MAIN	150	--BOTH--	75	--BOTH--	120
16		1145	169	N	3	--BOTH--	150	--BOTH--	75	--BOTH--	120
17		1207	208	S	2	--BOTH--	150	--BOTH--	75	--BOTH--	120
18		896	127	N	7	MAIN	150	SIDE	75	--BOTH--	120
19		622	115	N	9	MAIN	150	SIDE	75		120
20		560	95	N	14		150	SIDE	75		120
21		434	98	N	13		150	SIDE	75		120
22		0	0	S	23		150		75		120
23		0	0	S	24		150		75		120

## Warrant Summary:

Urban values apply.

## Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main St.: 600; Side St.: See Volume Summary.

## Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 4 hours. Criteria--Main St.: 900; 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: 1809.

- 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 5 hours. Criteria--Main: 720; Side: See Volume Summary.

## Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 3 hours.

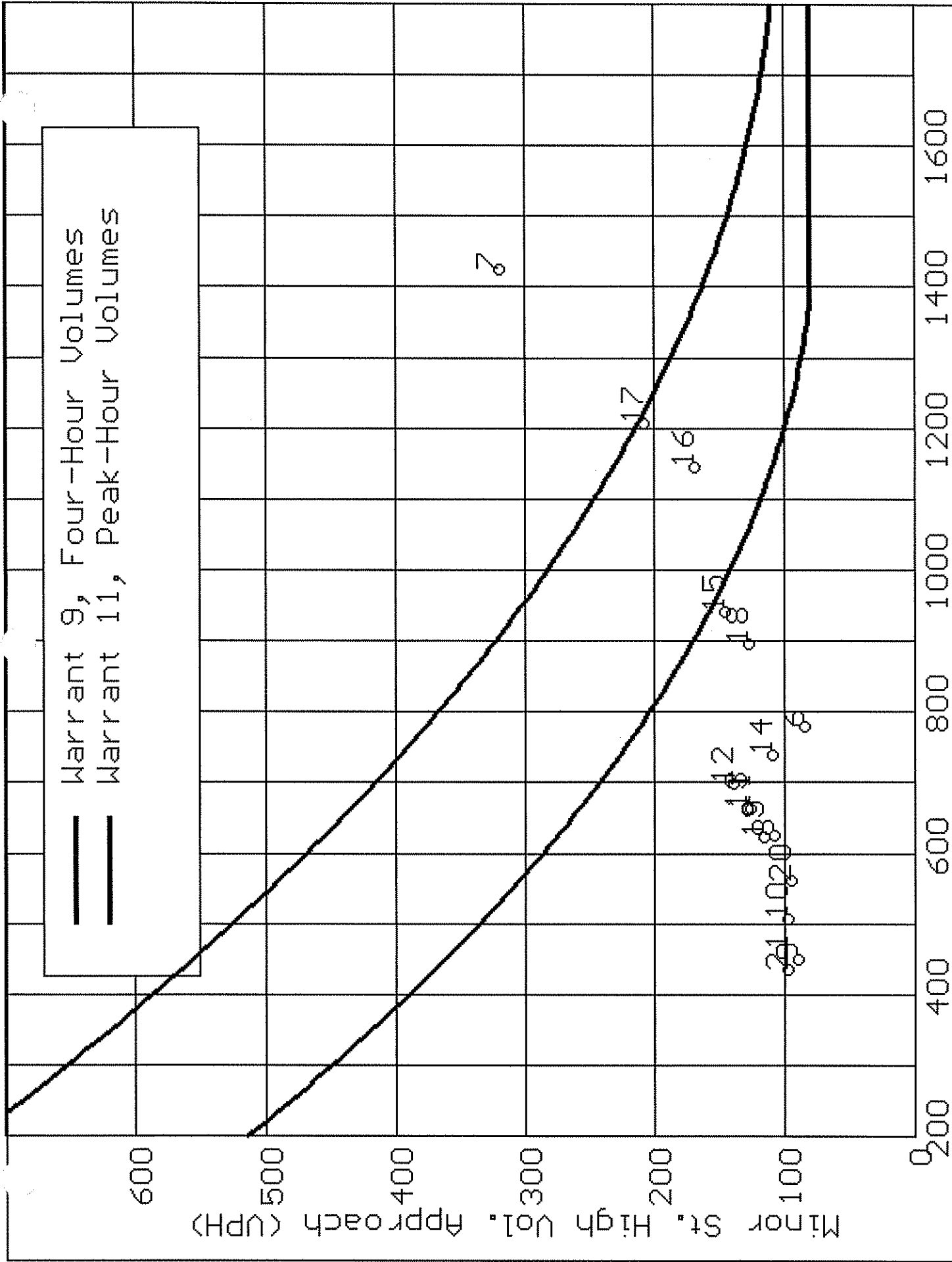
## Warrant 10 - Peak Hour Delay

NOT APPLICABLE. Volume requirements satisfied, but side street peak hour delay not defined.

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

## Warrant 11 - Peak Hour Volume

SATISFIED for 2 hours.



Major St. Total of Both Approaches (VPH)

**↑**  
**NORTH**

APP. #1=EB CSAH 32  
(85TH AVE NW)

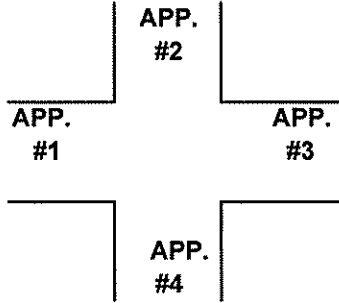
APP. #2 =SB 93RD LANE  
(AIRPORT ROAD)

APP. #3=WB CSAH 32  
(85TH AVE NW)

APP. #4=NB 93RD LANE  
(AIRPORT ROAD)

**COUNT LOCATION:** TMC 9725 CSAH 32 (85TH AVE NW)  
@ 93RD LANE EX(AIRPORT ROAD)

**DATE:** 8/7/97



- 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						14		2
6:15-6:30			1	2	3	11		1
6:30-6:45						8		
6:45-7:00						9		3
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>1</b>
7:00-7:15						16		2
7:15-7:30						14		
7:30-7:45	1				1	16		
7:45-8:00						22		
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>70</b>
8:00-8:15						14	1	1
8:15-8:30						16		1
8:30-8:45						15		
8:45-9:00		1			1	20		
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>68</b>
9:00-9:15						10		
9:15-9:30						12		
9:30-9:45						10		1
9:45-10:00						15		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>48</b>
10:00-10:15		1	1		2	11		
10:15-10:30						12		
10:30-10:45						16		
10:45-11:00			1		1	12		
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>51</b>
11:00-11:15						12		
11:15-11:30						11		
11:30-11:45						20		
11:45-12:00						16		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>59</b>
12:00-12:15						14		
12:15-12:30						17		
12:30-12:45						18	1	
12:45-1:00						18		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>70</b>
1:00-1:15						16		
1:15-1:30						13		
1:30-1:45						14		
1:45-2:00						7		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>50</b>





**NORTH**

**COUNT LOCATION:** TMC 9725 CSAH 32 (85TH AVE NW)  
@ 93RD LANE EX(AIRPORT ROAD)

**DATE:**

8/6/97

APP. #1=EB CSAH 32 (85TH AVE NW)
APP. #2 =SB 93RD LANE (AIRPORT ROAD)
APP. #3=WB CSAH 32 (85TH AVE NW)
APP. #4=NB 93RD LANE (AIRPORT ROAD)

APP. #1	APP. #2	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						19		
2:15-2:30						20	1	
2:30-2:45			1	1	2	18		
2:45-3:00						12		1
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>71</b>
3:00-3:15		1			1	17		
3:15-3:30						12		
3:30-3:45		1	1		2	7		
3:45-4:00						9		1
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>46</b>
4:00-4:15			1		1	3	1	
4:15-4:30				2	2			1
4:30-4:45			2		2	8		2
4:45-5:00						10		1
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>26</b>
5:00-5:15						1		
5:15-5:30						5		
5:30-5:45						7		
5:45-6:00				1	1	5		
<b>HOURLY TOTAL</b>					<b>1</b>	<b>HOURLY TOTAL</b>		<b>18</b>
6:00-6:15						5		3
6:15-6:30						4		1
6:30-6:45						4		1
6:45-7:00						4		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>24</b>
7:00-7:15						3	1	
7:15-7:30						5	1	
7:30-7:45						2		
7:45-8:00	3				3			
<b>HOURLY TOTAL</b>					<b>3</b>	<b>HOURLY TOTAL</b>		<b>12</b>
8:00-8:15			1		1			
8:15-8:30				2	2	2		
8:30-8:45	1	1			2			
8:45-9:00						1		
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>3</b>
9:00-9:15								
9:15-9:30						2		
9:30-9:45								
9:45-10:00								1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>3</b>