



ANOKA COUNTY HIGHWAY DEPARTMENT  
 TRAFFIC ENGINEERING SECTION  
 TRAFFIC VOLUME AND  
 TURNING MOVEMENT STUDY

Counter : JDC EIGHT  
 Counted by ANN/LAURIE  
 PARTLY SUNNY

Site Code : 95080101  
 Start Date: 08/23/95  
 File I.D. : TMC9508  
 Page : 1

Vehicle group 1

Date 08/23/95	CSAH 17 (LEXINGTON AVE.) Southbound		CSAH 10 (NORTH RD.) Westbound		CSAH 17 (LEXINGTON AVE.) Northbound		Vehicle Total	Other Total
	Other Thru	Left	Other Right	Left	Other Right	Thru		
06:00	0	21	1	17	10	15	67	3
06:15	0	24	2	16	15	21	79	2
06:30	1	57	5	36	21	30	153	3
06:45	1	52	11	27	21	32	148	3
Hr Total	2	154	19	96	67	98	447	11
07:00	0	38	8	36	19	28	134	7
07:15	1	63	9	39	15	34	178	2
07:30	3	54	10	22	22	40	160	4
07:45	1	66	12	15	10	19	135	1
Hr Total	5	221	39	112	66	121	607	14
08:00	1	42	9	12	19	28	124	2
08:15	1	36	9	24	15	22	116	2
08:30	5	38	11	14	24	22	119	7
08:45	0	31	11	17	18	32	121	6
Hr Total	7	147	40	67	76	104	480	17
09:00	1	34	7	10	17	22	103	3
09:15	3	29	7	14	15	24	97	7
09:30	1	27	6	12	14	20	91	3
09:45	3	25	7	8	15	25	94	7
Hr Total	8	115	27	44	61	91	385	20
10:00	1	27	17	9	21	22	107	2
10:15	3	25	16	9	16	25	110	8
10:30	4	28	8	18	13	22	103	8
10:45	7	24	9	5	14	21	87	13
Hr Total	15	104	50	41	64	90	407	31
11:00	5	31	18	13	16	40	134	11
11:15	3	28	11	21	18	28	130	8
11:30	1	41	9	15	22	26	136	6
11:45	7	38	8	21	36	40	169	13
Hr Total	16	138	46	70	92	134	569	38
12:00	1	36	15	17	30	27	160	6
12:15	4	39	7	26	27	33	158	8
12:30	2	35	16	13	23	32	147	5
12:45	3	28	10	12	19	36	124	10
Hr Total	10	138	48	68	99	128	589	29

Counted by ANN/LAURIE  
 PARTLY SUNNY

Vehicle group 1

Date	CSAH 17 (LEXINGTON AVE.)				CSAH 10 (NORTH RD.)				CSAH 17 (LEXINGTON AVE.)				Vehicle Total	Other Total
	Other	Thru	Left	Southbound	Other	Right	Left	Westbound	Other	Right	Thru	Northbound		
13:00	1	28	7		1	9	19		3	18	39		120	5
13:15	4	38	17		0	5	21		1	35	32		148	5
13:30	2	28	12		0	14	17		3	44	38		153	5
13:45	3	27	6		0	10	18		5	20	32		113	8
Hr Total	10	121	42		1	38	75		12	117	141		534	23
14:00	0	19	11		1	12	13		0	22	32		109	1
14:15	0	25	12		1	23	23		3	19	29		131	4
14:30	3	30	22		1	14	20		1	18	33		137	5
14:45	1	35	10		0	14	22		1	17	39		137	2
Hr Total	4	109	55		3	63	78		5	76	133		514	12
15:00	2	41	5		0	16	24		0	16	31		133	2
15:15	1	27	15		0	19	10		3	24	44		139	4
15:30	3	37	19		0	12	15		3	30	55		168	6
15:45	0	40	27		1	17	15		3	33	67		199	4
Hr Total	6	145	66		1	64	64		9	103	197		639	16
16:00	0	37	17		1	16	19		1	32	63		184	2
16:15	0	41	19		0	14	24		1	39	60		197	1
16:30	1	46	23		1	15	19		1	43	69		215	3
16:45	1	53	21		1	19	31		3	42	78		244	5
Hr Total	2	177	80		3	64	93		6	156	270		840	11
17:00	0	49	22		2	21	29		4	50	76		247	6
17:15	2	46	18		0	30	32		4	48	68		242	6
17:30	1	49	25		0	21	30		4	48	73		246	5
17:45	3	38	14		0	16	21		2	24	65		178	5
Hr Total	6	182	79		2	88	112		14	170	282		913	22
18:00	0	34	32		3	18	37		1	39	53		213	4
18:15	0	37	30		1	16	32		1	36	57		208	2
18:30	2	34	26		1	29	31		1	33	50		203	4
18:45	0	33	16		1	18	30		0	27	40		164	1
Hr Total	2	138	104		6	81	130		3	135	200		788	11
19:00	0	37	19		1	13	38		1	42	34		183	2
19:15	2	19	30		0	16	28		1	33	44		170	3
19:30	0	41	15		0	24	18		2	27	42		167	2
19:45	0	30	9		0	27	29		0	29	33		157	0
Hr Total	2	127	73		1	80	113		4	131	153		677	7

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 Page : 3

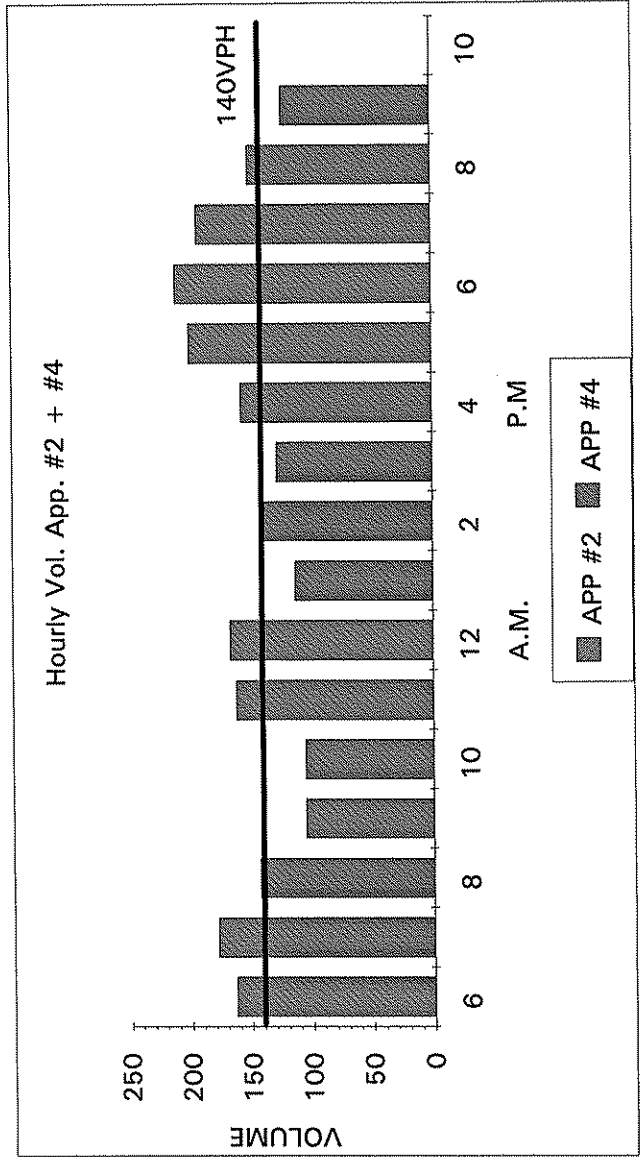
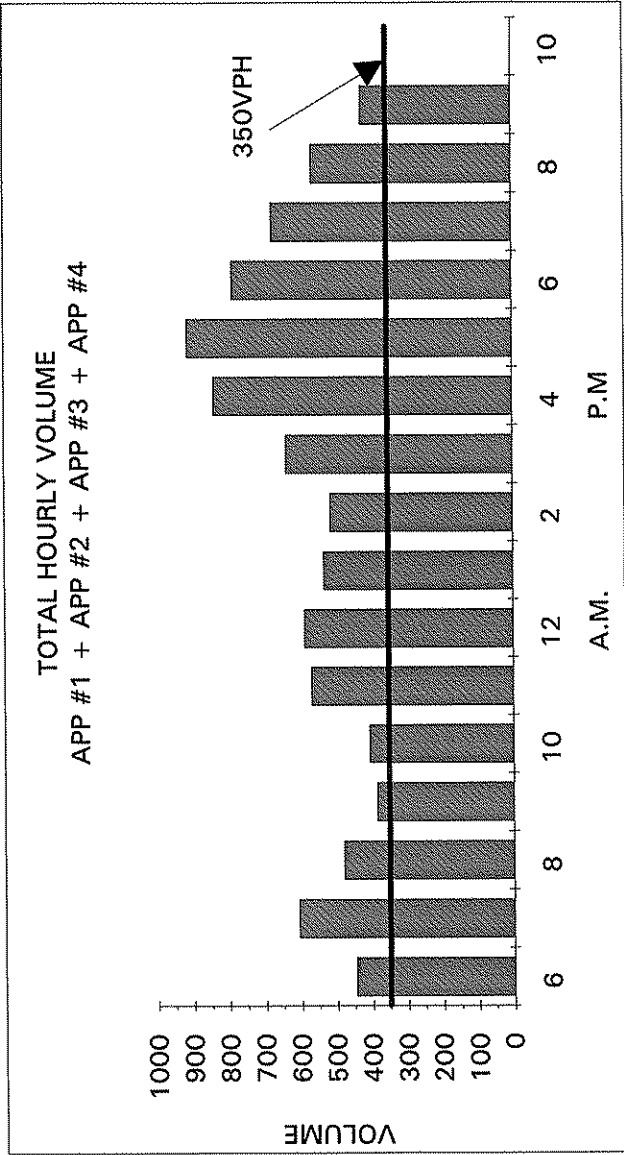
Counter : TDC EIGHT  
 Counted by ANN/LAURIE  
 PARTLY SUNNY

Vehicle group 1

Date 08/23/95	CSAH 17 (LEXINGTON AVE.) Southbound		CSAH 10 (NORTH RD.) Westbound		CSAH 17 (LEXINGTON AVE.) Northbound		Vehicle Total	Other Total
	Thru	Left	Other	Right	Other	Right		
20:00	0	23	9	14	27	34	136	1
20:15	0	27	16	8	34	21	141	1
20:30	1	29	31	8	17	30	142	2
20:45	0	22	14	13	29	25	145	0
Hr Total	1	101	70	43	107	110	564	4
21:00	0	20	10	23	21	22	119	0
21:15	0	26	10	10	21	21	113	1
21:30	0	21	13	11	17	29	106	0
21:45	1	11	14	10	9	26	86	2
Hr Total	1	78	47	54	68	98	424	3

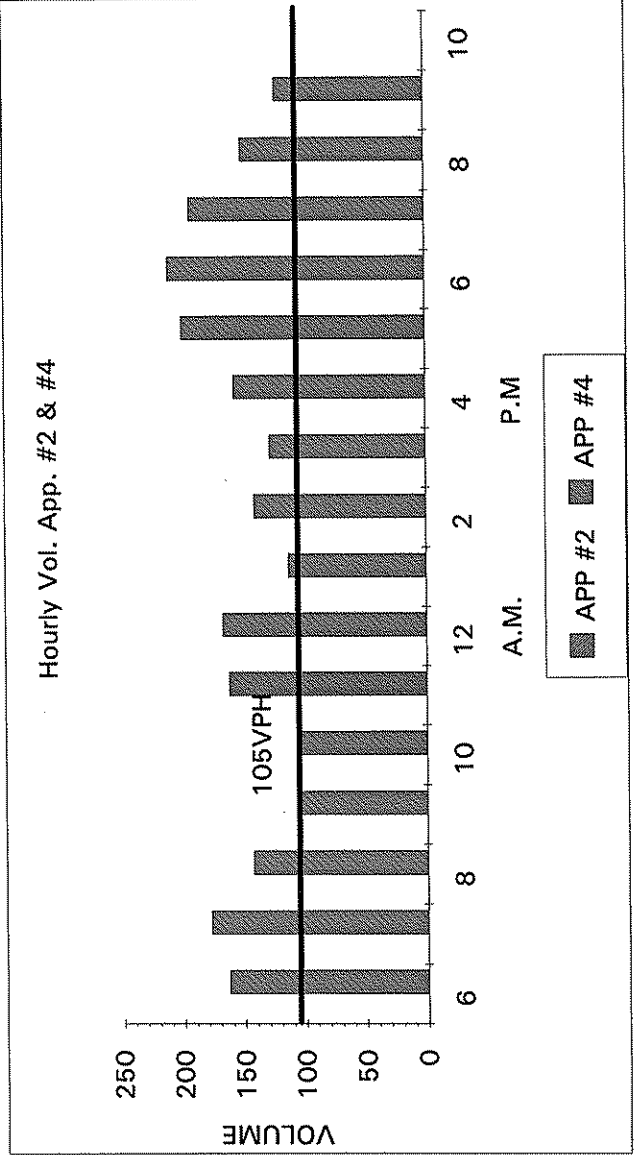
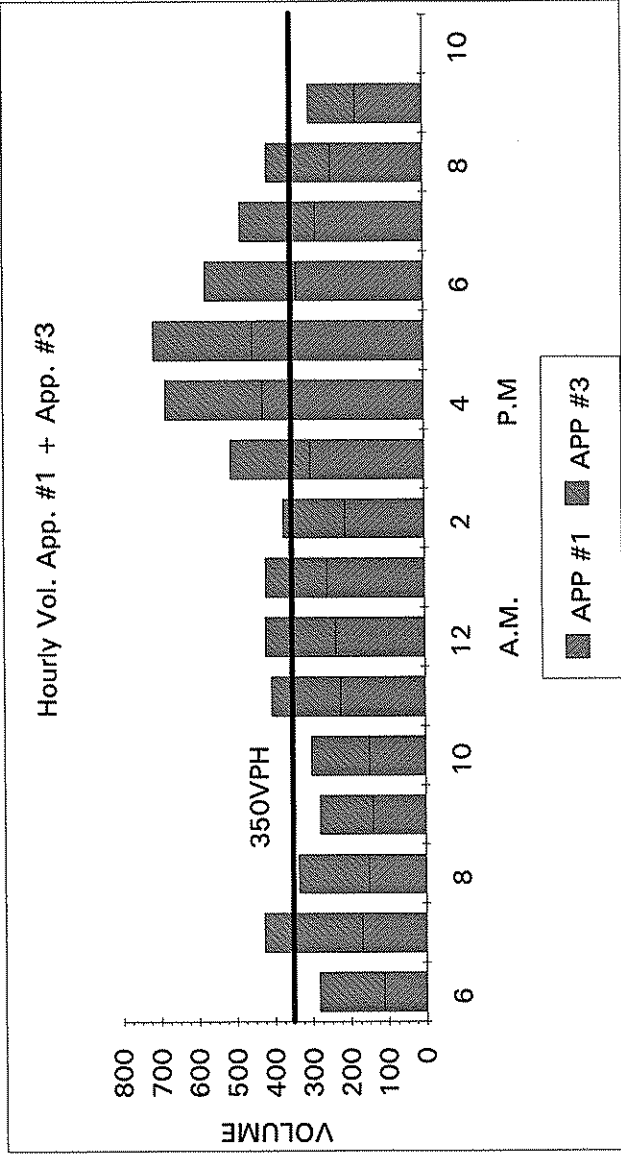
\*TOTAL\* 97 2195 885 54 1073 1365 118 1505 2354 9377 269

TMC9508 STOP WARRANT STUDY



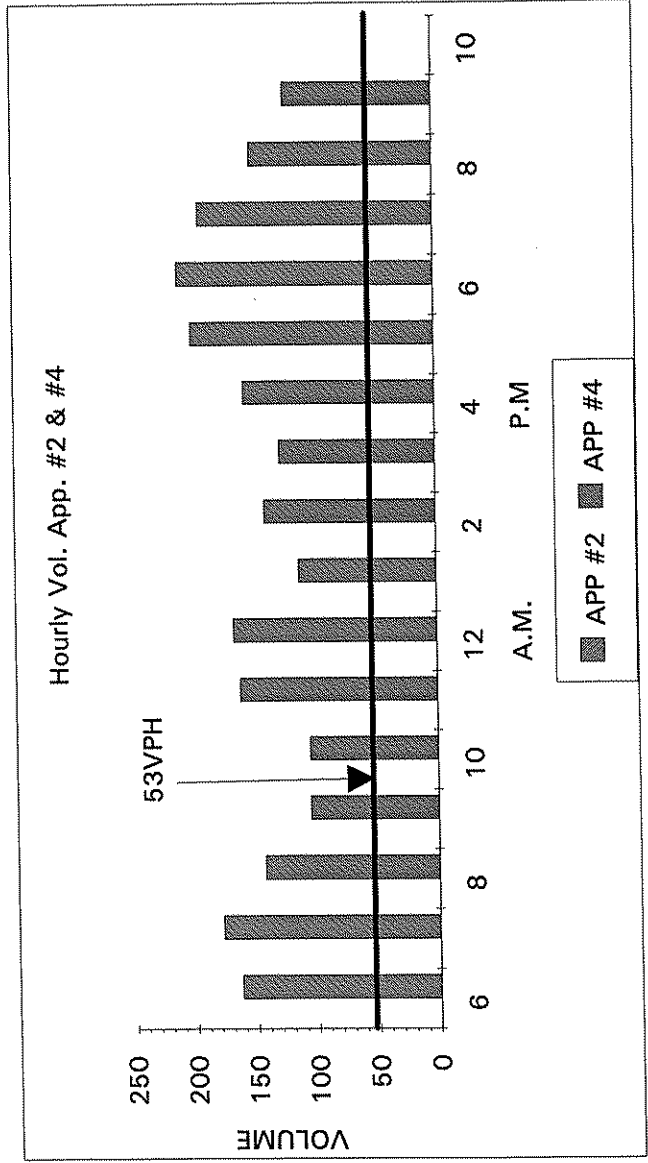
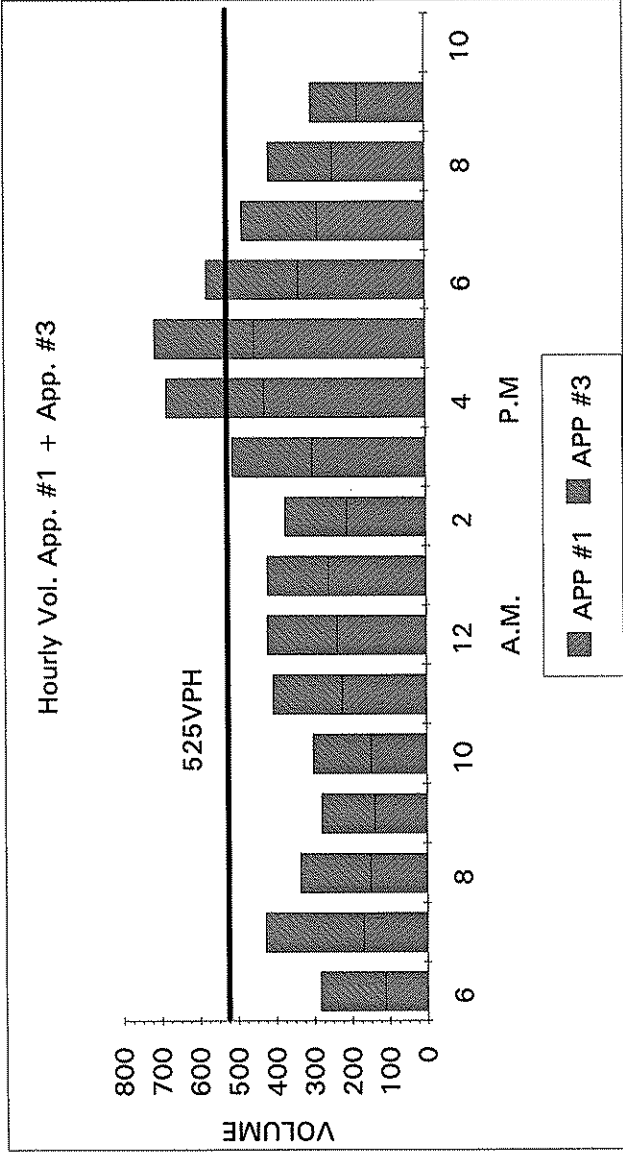
CSAH 17 (LEXINGTON AVE) @ CSAH 10 (NORTH ROAD)

TMC9508 SIGNAL WARRANT 1 STUDY



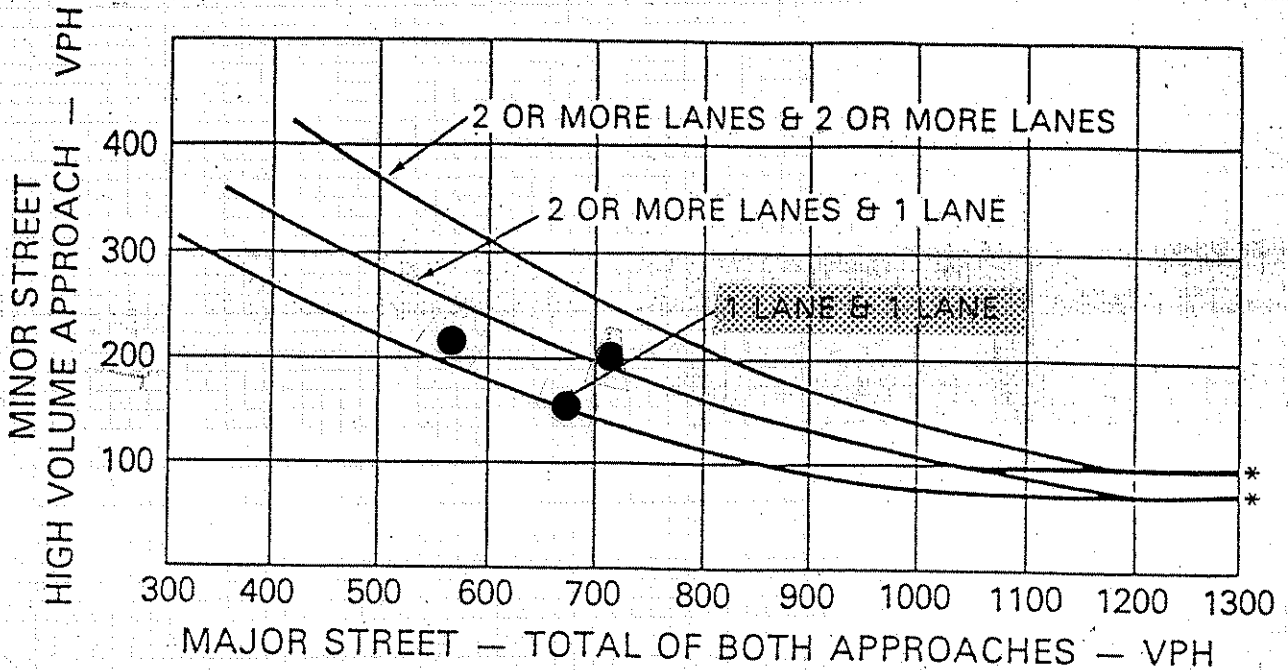
CSAH 17 (LEXINGTON AVE) @ CSAH 10 (NORTH ROAD)

TMC9508 SIGNAL WARRANT 2 STUDY



# FIGURE 4-6. PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

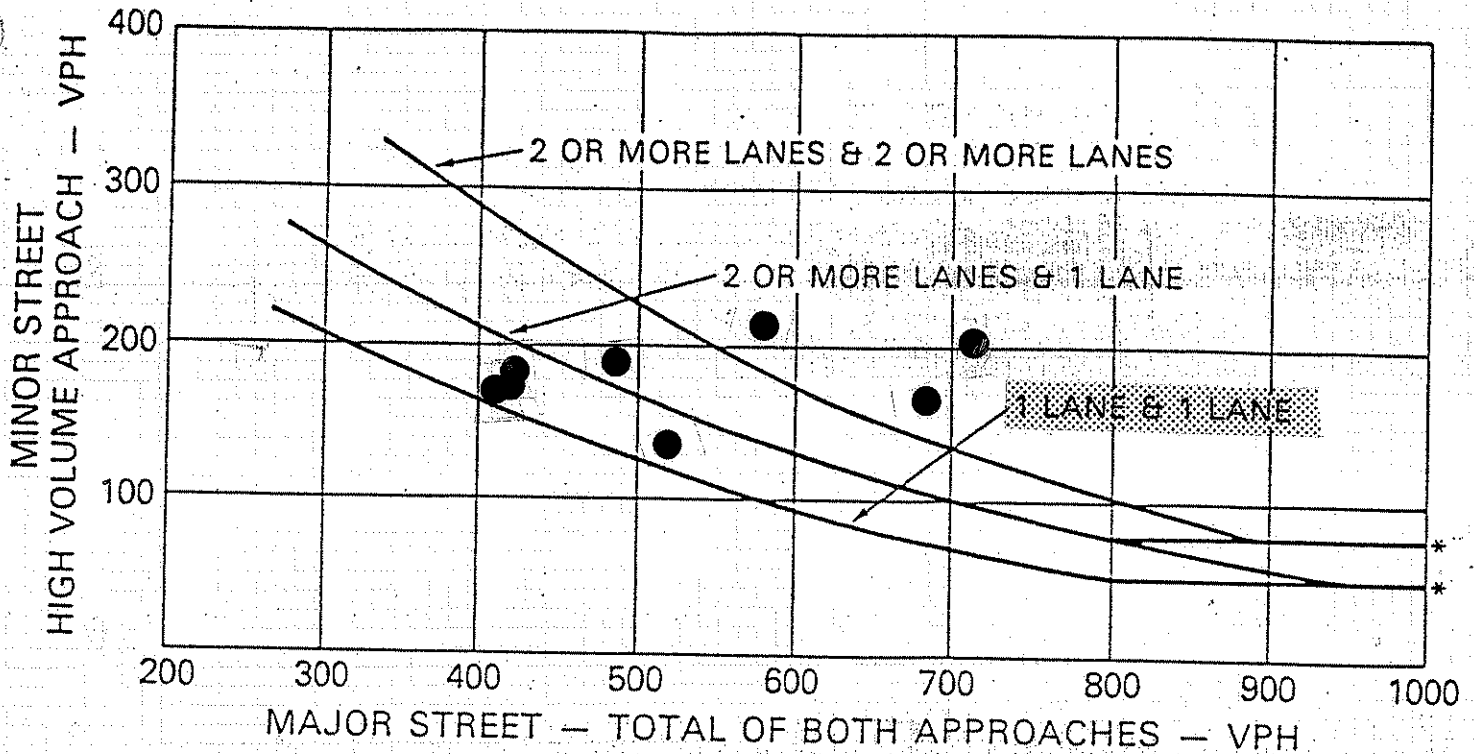
★ = VOLUMES WHICH EXCEED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	284	163
7-8 am	429	178
8-9 am	337	143
9-10 am	280	105
10-11 am	302	105
11-12 pm	407	162
12-1 pm	422	167
1-2 pm	421	113
2-3 pm	373	141
3-4 pm	511	128
● 4-5 pm	683	157
● 5-6 pm	713	200
● 6-7 pm	577	211
7-8 pm	484	193
8-9 pm	414	150
9-10 pm	302	122

TMC 9508 CSAH 17 (LEXINGTON AVE) @ CSAH 10 (NORTH ROAD)



**FIGURE 4-8. FOUR HOUR VOLUME WARRANT**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)




\*NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

● = VOLUMES WHICH EXCEEDED THE THRESHOLD AND ARE REPRESENTED ON THE GRAPH.

★ = VOLUMES WHICH EXCEEDED THE THRESHOLD BUT CANNOT BE REPRESENTED ON THE GRAPH.

TIME	MAJOR STREETS (VPH)	MINOR STREET (VPH)
6-7 am	284	163
● 7-8 am	429	178
8-9 am	337	143
9-10 am	280	105
10-11 am	302	105
● 11-12 pm	407	162
● 12-1 pm	422	167
1-2 pm	421	113
2-3 pm	373	141
● 3-4 pm	511	128
● 4-5 pm	683	157
● 5-6 pm	713	200
● 6-7 pm	577	211
● 7-8 pm	484	193
8-9 pm	414	150
9-10 pm	302	122

 <b>NORTH</b>
APP. #1= WB CSAH 10
APP. #2= NB CSAH 17
APP. #4=SB CSAH 17

**COUNT LOCATION:** CSAH 17 (LEXINGTON AVE)  
@ CSAH 10 (NORTH ROAD)

**DATE:** 8/23/95

APP. #2
APP. #1
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
6:00-6:15AM						2		1
6:15-6:30				1	1			2
6:30-6:45						2		1
6:45-7:00				1	1	2		1
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>11</b>
7:00-7:15						4		3
7:15-7:30						2		1
7:30-7:45						3		
7:45-8:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>14</b>
8:00-8:15						2		
8:15-8:30						2		
8:30-8:45						7		
8:45-9:00						5		1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>17</b>
9:00-9:15						3		
9:15-9:30						7		
9:30-9:45						3		
9:45-10:00						7		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>20</b>
10:00-10:15						2		
10:15-10:30						7		
10:30-10:45						8		1
10:45-11:00						14		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>32</b>
11:00-11:15						8		
11:15-11:30						8		
11:30-11:45						5		
11:45-12:00						13		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>34</b>
12:00-12:15						6		
12:15-12:30						8		
12:30-12:45				1	1	5		
12:45-1:00						11		
<b>HOURLY TOTAL</b>				<b>1</b>	<b>1</b>	<b>HOURLY TOTAL</b>		<b>30</b>
1:00-1:15				1	1	6		
1:15-1:30						5		
1:30-1:45						5		
1:45-2:00						8		
<b>HOURLY TOTAL</b>				<b>1</b>	<b>1</b>	<b>HOURLY TOTAL</b>		<b>24</b>

↓  
**NORTH**

APP. #1=WB CSAH 10
APP. #2= NB CSAH 17
APP. #4= SB CSAH 17

**COUNT LOCATION:** CSAH 17 (LEXINGTON AVE)  
@ CSAH 10 (NORTH RD)

**DATE:** 8/21/95

APP. #2	APP. #1	APP. #4
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- 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						1		
2:15-2:30						3		1
2:30-2:45						5		
2:45-3:00						2		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>12</b>
3:00-3:15						2		
3:15-3:30						4		
3:30-3:45						6		
3:45-4:00						4		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>16</b>
4:00-4:15						1		
4:15-4:30						1		
4:30-4:45						2		
4:45-5:00						3		2
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>9</b>
5:00-5:15						4		2
5:15-5:30						5		1
5:30-5:45						2	1	2
5:45-6:00						3	1	1
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>22</b>
6:00-6:15						4		
6:15-6:30						2		
6:30-6:45						4		
6:45-7:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>11</b>
7:00-7:15						1		
7:15-7:30						3		
7:30-7:45							1	
7:45-8:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>5</b>
8:00-8:15						1		
8:15-8:30						1		
8:30-8:45						2		
8:45-9:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>4</b>
9:00-9:15								
9:15-9:30						1		
9:30-9:45								
9:45-10:00								
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>1</b>