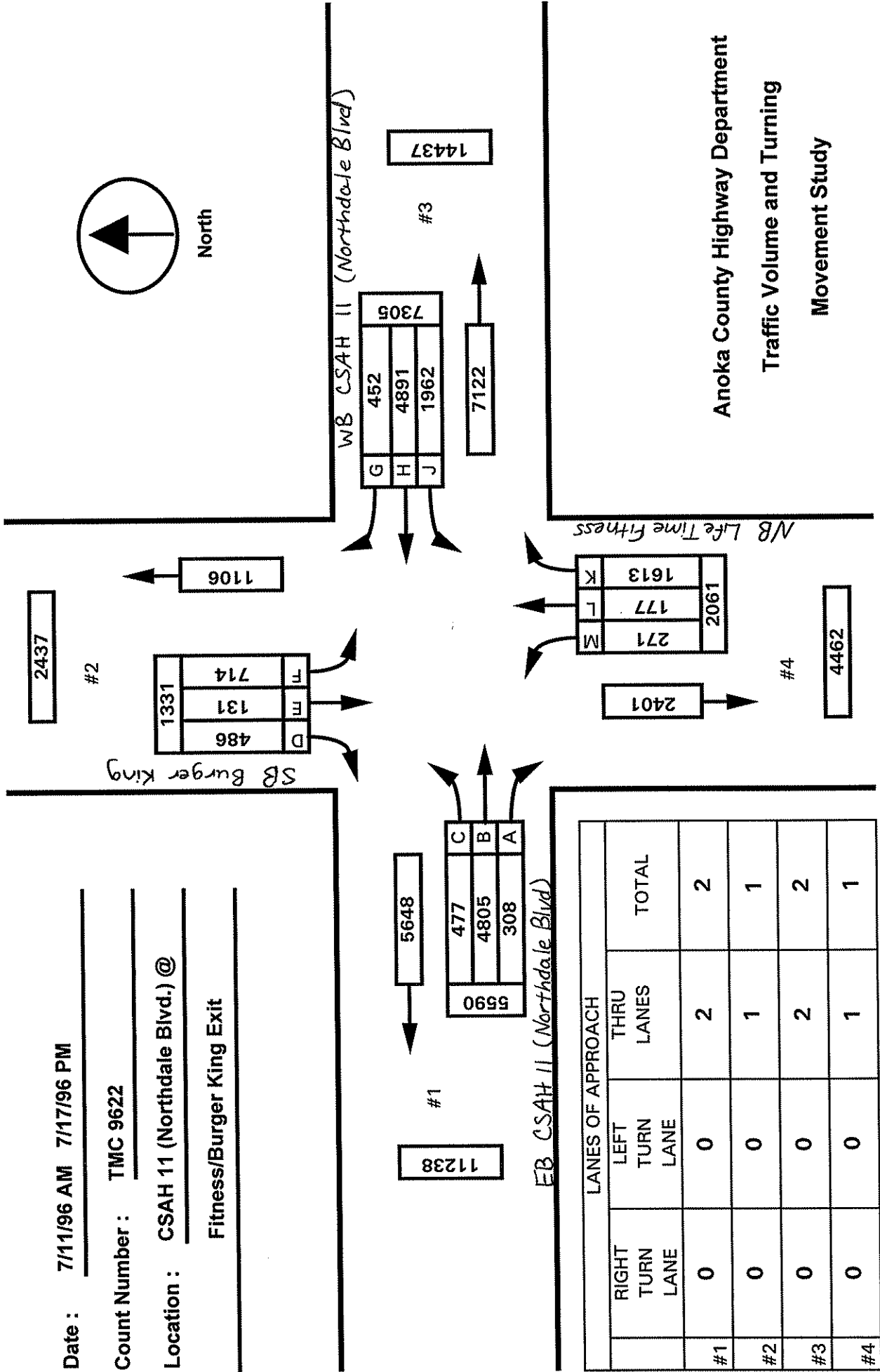


Date : 7/11/96 AM 7/17/96 PM

Count Number : TMC 9622

Location : CSAH 11 (Northdale Blvd.) @

Fitness/Burger King Exit



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

Anoka County Highway Department  
 Traffic Volume and Turning  
 Movement Study

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :sunny AM/rainy PM

Counted by:Ann and Gabe

Card # :

Other :

Study Name: TMC9622

Site Code : 96220202

Start Date: 07/11/96

Page : 1

Vehicle group 1

Start Time	Burger King/Super Amer				CSAH 11 (NORTHDALE BLV				Life Time Fitness				CSAH 11 (NORTHDALE BLV				Intvl	Exclu	Inclu
	From North		From East		From South		From West		From North		From East		From South		From West				
Time	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Total	Total	Total
07/11/96																			
06:00	2	0	3	0	0	11	9	1	7	3	0	0	0	39	3	6	84	7	77
06:15	0	0	9	0	2	22	21	0	4	4	2	0	4	50	5	1	124	1	123
06:30	4	0	7	0	3	30	16	2	4	2	4	0	3	60	5	2	142	4	138
06:45	5	1	7	1	5	26	23	1	13	1	1	0	4	73	4	2	167	4	163
Hour	11	1	26	1	10	89	69	4	28	10	7	0	11	222	17	11	517	16	501
07:00	5	1	10	2	3	53	14	3	18	3	0	1	1	79	10	4	207	10	197
07:15	4	2	6	0	3	28	27	1	25	4	0	0	2	77	8	1	188	2	186
07:30	3	3	14	0	8	41	15	4	15	1	3	1	2	70	9	1	190	6	184
07:45	2	4	11	1	2	56	31	1	12	2	1	0	2	77	11	2	215	4	211
Hour	14	10	41	3	16	178	87	9	70	10	4	2	7	303	38	8	800	22	778
08:00	7	1	5	0	5	53	27	3	18	2	1	2	2	67	8	0	201	5	196
08:15	2	1	18	1	3	46	21	0	14	1	3	0	1	66	9	1	187	2	185
08:30	4	0	7	0	8	54	37	4	12	2	0	0	0	58	9	1	196	5	191
08:45	5	2	16	0	6	77	28	1	16	0	5	2	2	53	4	1	218	4	214
Hour	18	4	46	1	22	230	113	8	60	5	9	4	5	244	30	3	802	16	786
09:00	6	0	8	4	4	59	38	4	24	2	1	1	2	64	4	5	226	14	212
09:15	3	0	6	0	0	37	24	1	15	1	3	1	4	59	3	4	161	6	155
09:30	3	2	11	0	4	45	18	3	15	1	1	0	2	59	2	3	169	6	163
09:45	2	6	2	0	1	45	31	6	21	3	4	0	4	52	4	2	183	8	175
Hour	14	8	27	4	9	186	111	14	75	7	9	2	12	234	13	14	739	34	705
10:00	6	1	8	0	6	69	23	5	14	1	1	1	3	70	6	3	217	9	208
10:15	6	4	9	1	6	55	34	1	16	4	5	0	6	59	5	1	212	3	209
10:30	5	3	15	1	4	58	34	1	25	1	4	1	9	62	6	1	230	4	226
10:45	6	1	9	1	6	45	20	2	30	3	8	0	3	57	5	4	200	7	193
Hour	23	9	41	3	22	227	111	9	85	9	18	2	21	248	22	9	859	23	836
11:00	3	4	7	1	8	73	32	3	28	2	4	1	4	63	3	3	239	8	231
11:15	4	2	17	0	9	79	21	2	19	8	7	0	3	59	4	1	235	3	232
11:30	8	4	11	1	11	91	34	2	16	1	8	0	4	77	11	1	280	4	276
11:45	10	3	17	1	8	75	46	4	25	2	5	0	4	64	11	3	278	8	270
Hour	25	13	52	3	36	318	133	11	88	13	24	1	15	263	29	8	1032	23	1009
12:00	8	3	19	1	20	77	40	5	34	2	2	1	8	72	11	4	307	11	296
12:15	14	2	19	0	21	89	48	4	47	2	4	1	10	86	11	5	363	10	353
12:30	4	2	21	0	12	73	27	1	34	3	5	0	8	71	6	1	268	2	266
12:45	10	2	17	1	14	81	37	4	32	0	5	0	9	63	10	0	285	5	280
Hour	36	9	76	2	67	320	152	14	147	7	16	2	35	292	38	10	1223	28	1195

ANOKA COUNTY HIGHWAY DEPARTMENT

Weather :sunny AM/rainy PM

TRAFFIC ENGINEERING SECTION

Study Name: TMC9622

Counted by:Ann and Gabe

TRAFFIC STUDY

Site Code : 96220202

Card # :

Start Date: 07/11/96

Other :

Page : 2

Vehicle group 1

Start Time	Burger King/Super Amer				CSAH 11 (NORTHDAL BLV				Life Time Fitness				CSAH 11 (NORTHDAL BLV				Intvl	Exclu	Inclu
	From North		From East		From South		From West		From North		From East		From South		From West				
Time	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Total	Total	Total
13:00	10	1	10	1	9	70	44	5	22	4	3	0	8	72	8	3	270	9	261
13:15	8	2	13	1	4	67	24	0	34	0	8	2	7	78	8	4	260	7	253
13:30	8	1	19	0	7	56	25	2	22	1	4	0	3	64	4	0	216	2	214
13:45	10	2	6	0	5	73	27	2	21	4	4	0	9	61	6	2	232	4	228
Hour	36	6	48	2	25	266	120	9	99	9	19	2	27	275	26	9	978	22	956
14:00	8	1	12	2	10	75	26	4	22	3	11	1	2	90	6	8	281	15	266
14:15	4	4	10	1	4	77	20	5	17	2	5	1	3	73	3	2	231	9	222
14:30	6	2	13	0	6	91	22	8	31	3	7	1	6	70	9	1	276	10	266
14:45	12	3	14	0	10	69	46	4	29	3	2	1	5	78	6	1	283	6	277
Hour	30	10	49	3	30	312	114	21	99	11	25	4	16	311	24	12	1071	40	1031
15:00	4	2	12	0	5	91	29	8	20	4	10	2	4	80	9	3	283	13	270
15:15	7	0	10	1	6	84	36	2	29	3	5	0	6	69	2	0	260	3	257
15:30	6	1	8	0	4	94	34	2	26	6	1	0	2	73	10	3	270	5	265
15:45	6	3	10	0	8	98	35	3	26	1	5	0	2	76	4	1	278	4	274
Hour	23	6	40	1	23	367	134	15	101	14	21	2	14	298	25	7	1091	25	1066
16:00	8	4	9	1	5	91	31	3	37	1	5	1	10	69	3	1	279	6	273
16:15	8	1	10	0	9	114	35	0	22	0	2	0	7	76	4	2	290	2	288
16:30	11	0	7	0	7	140	30	1	25	5	9	1	6	81	11	1	335	3	332
16:45	10	1	7	0	7	99	40	0	35	2	4	0	3	89	8	1	306	1	305
Hour	37	6	33	1	28	444	136	4	119	8	20	2	26	315	26	5	1210	12	1198
17:00	6	4	5	0	8	142	41	3	44	4	5	0	8	84	7	2	363	5	358
17:15	17	3	8	0	10	156	52	0	31	2	3	0	10	91	10	1	394	1	393
17:30	16	1	9	0	11	131	44	3	40	1	7	1	5	122	8	0	399	4	395
17:45	16	2	12	0	13	124	38	2	31	3	4	0	4	94	15	0	358	2	356
Hour	55	10	34	0	42	553	175	8	146	10	19	1	27	391	40	3	1514	12	1502
18:00	13	1	16	0	15	139	42	2	33	4	1	1	8	91	15	1	382	4	378
18:15	14	4	13	0	13	101	32	0	33	3	8	0	7	101	7	0	336	0	336
18:30	12	1	10	0	8	111	46	2	48	2	4	2	4	114	12	0	376	4	372
18:45	13	3	14	0	7	114	50	0	40	9	6	0	8	97	7	1	369	1	368
Hour	52	9	53	0	43	465	170	4	154	18	19	3	27	403	41	2	1463	9	1454
19:00	9	2	15	0	5	90	48	2	52	3	6	0	9	111	5	0	357	2	355
19:15	8	2	14	0	6	111	28	2	36	1	6	0	8	76	13	1	312	3	309
19:30	9	5	8	0	8	88	30	0	32	4	7	2	7	82	9	0	291	2	289
19:45	7	2	15	0	4	80	34	0	21	7	5	1	4	95	11	0	286	1	285
Hour	33	11	52	0	23	369	140	4	141	15	24	3	28	364	38	1	1246	8	1238

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :sunny AM/rainy PM

Counted by:Ann and Gabe

Card # :

Other :

Study Name: TMC9622

Site Code : 96220202

Start Date: 07/11/96

Page : 3

Vehicle group 1

Start Time	Burger King/Super Amer				CSAH 11 (NORTHDAL E BLV				Life Time Fitness				CSAH 11 (NORTHDAL E BLV				Intvl	Exclu	Inclu
	From North				From East				From South				From West						
Time	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Total	Total	Total
20:00	13	4	12	0	7	88	24	0	27	5	3	0	3	102	15	2	305	2	303
20:15	6	1	9	0	8	71	22	2	22	1	7	1	8	75	5	1	239	4	235
20:30	11	4	13	0	10	87	45	0	29	5	5	0	3	78	7	0	297	0	297
20:45	5	2	10	0	3	72	20	0	24	6	7	0	7	104	14	0	274	0	274
Hour	35	11	44	0	28	318	111	2	102	17	22	1	21	359	41	3	1115	6	1109
21:00	12	3	14	2	8	78	22	2	34	3	4	0	7	90	12	1	292	5	287
21:15	14	1	16	0	7	61	19	2	24	2	6	0	1	66	2	0	221	2	219
21:30	8	2	10	0	6	56	23	0	20	5	3	0	4	67	8	0	212	0	212
21:45	10	2	12	0	7	54	22	0	21	4	2	0	4	60	7	1	206	1	205
Hour	44	8	52	2	28	249	86	4	99	14	15	0	16	283	29	2	931	8	923
Total	486	131	714	26	452	4891	1962	140	1613	177	271	31	308	4805	477	107	16591	304	16287
% Apr.	35.8	9.6	52.6	1.9	6.0	65.6	26.3	1.8	77.1	8.4	12.9	1.4	5.4	84.3	8.3	1.8	-	-	-
% Int.	2.9	0.7	4.3	0.1	2.7	29.4	11.8	0.8	9.7	1.0	1.6	0.1	1.8	28.9	2.8	0.6	-	-	-

> Street Approaches:

Eastbound:

CSAH 11 (NORTHDALE BLVD)

Data File: C:\PETRA2\DATAFILE\TMC9622.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/11/96  
 Number of Lanes: 2  
 Approach Speed: 35  
 Total Approach Traffic: 5590

Westbound:

CSAH 11 (NORTHDALE BLVD)

Data File: C:\PETRA2\DATAFILE\TMC9622.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/11/96  
 Number of Lanes: 2  
 Approach Speed: 35  
 Total Approach Traffic: 7305

Minor Street Approaches:

Northbound:

Life Time Fitness

Data File: C:\PETRA2\DATAFILE\TMC9622.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/11/96  
 Number of Lanes: 1  
 Approach Speed: 0  
 Total Approach Traffic: 2061

Southbound:

Burger King/Super America

Data File: C:\PETRA2\DATAFILE\TMC9622.PDF  
 Count Type: IMC. Channel: 0. Count Date: 7/11/96  
 Number of Lanes: 1  
 Approach Speed: 0  
 Total Approach Traffic: 1331

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	418	45 N 16	150	75	120
7	529	84 N 14	MAIN 150	SIDE 75	120
8	644	74 N 15	MAIN 150	75	120
9	565	91 N 13	150	SIDE 75	120
10	651	112 N 12	MAIN 150	SIDE 75	120
11	794	125 N 11	MAIN 150	SIDE 75	--BOTH-- 120
12	904	170 N 4	--BOTH-- 150	--BOTH-- 75	--BOTH-- 120
13	739	127 N 10	MAIN 150	SIDE 75	--BOTH-- 120
14	807	135 N 8	MAIN 150	SIDE 75	--BOTH-- 120
15	861	136 N 7	MAIN 150	SIDE 75	--BOTH-- 120
16	975	147 N 5	MAIN 150	--BOTH-- 75	--BOTH-- 120
17	1228	175 N 3	--BOTH-- 150	--BOTH-- 75	--BOTH-- 120
18	1149	191 N 1	--BOTH-- 150	--BOTH-- 75	--BOTH-- 120
19	962	180 N 2	--BOTH-- 150	--BOTH-- 75	--BOTH-- 120
20	878	141 N 6	MAIN 150	SIDE 75	--BOTH-- 120
21	691	128 N 9	MAIN 150	SIDE 75	SIDE 120
22	0	0 S 23	150	75	120
23	0	0 S 24	150	75	120

## Warrant Summary:

an values apply.

## Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 4 hours. Criteria--Main St.: 600; Side St.: See Volume Summary.

## Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 5 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: 1502.

- 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

SATISFIED for 10 hours. Criteria--Main: 720; Side: See Volume Summary.

## Warrant 9 - Four Hour Volumes

SATISFIED for 5 hours.

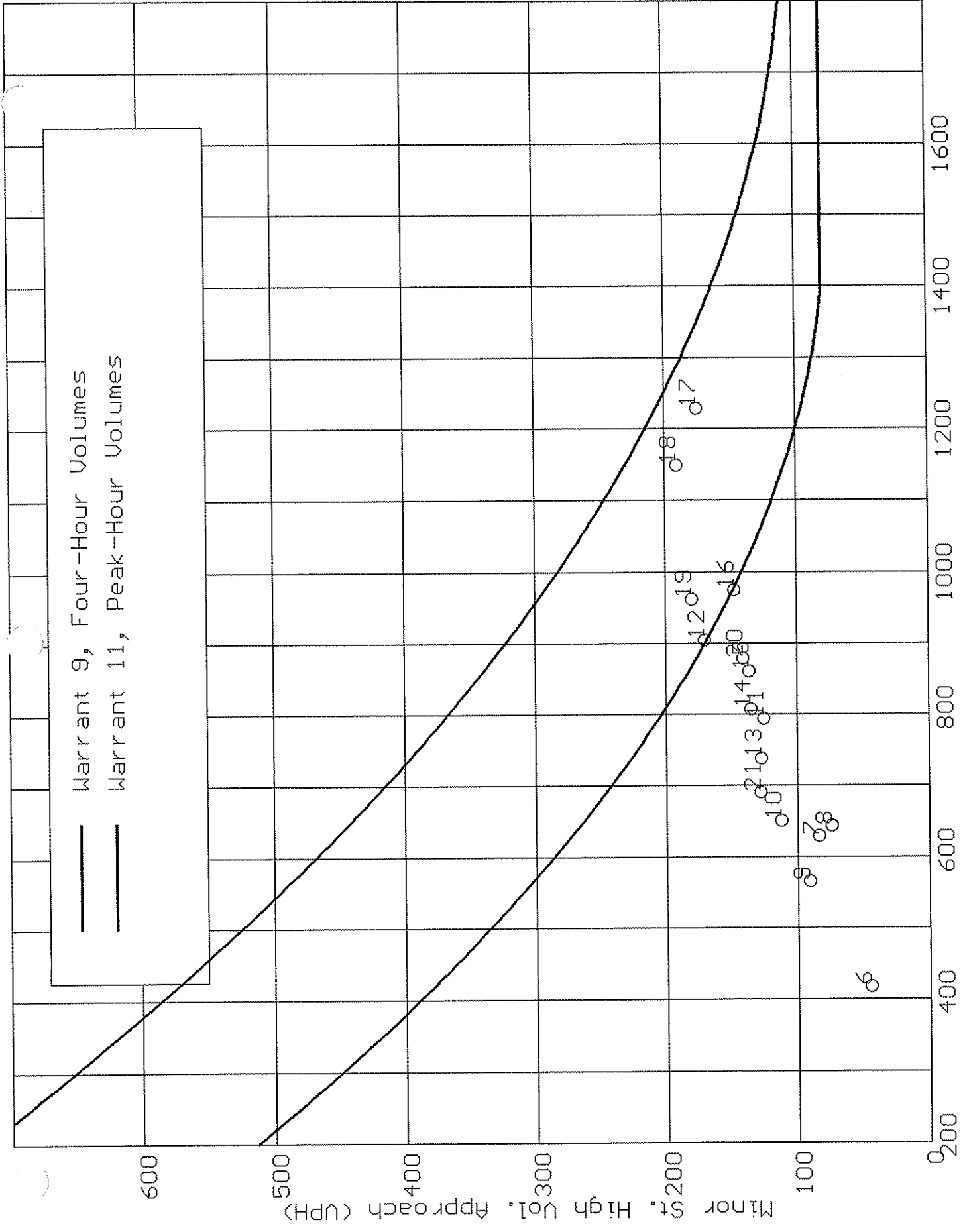
## Warrant 10 - Peak Hour Delay

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

NOT SATISFIED.



Major St. Total of Both Approaches (UPH)



**COUNT LOCATION:** CSAH 11 (Northdale Blvd.) @  
Burger King/Life Time Fitness Exits

**DATE:** 7/11/96

APP. #1=  
EB CSAH 11 (Northdale Blvd)  
APP. #2 =  
SB Burger King  
APP. #3=  
WB CSAH 11 (Northdale Blvd)  
APP. #4=  
Life Time Fitness

APP. #2  
APP. #1  
35mph  
APP. #3  
35mph  
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	2	4		3
6:15-6:30								1
6:30-6:45						2		2
6:45-7:00						2		2
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>16</b>
7:00-7:15						6		4
7:15-7:30						1		1
7:30-7:45						2		4
7:45-8:00						4		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>22</b>
8:00-8:15						5		
8:15-8:30				1	1	2		
8:30-8:45				3	3	5		
8:45-9:00				1	1	4		
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>16</b>
9:00-9:15						13		1
9:15-9:30						6		
9:30-9:45						6		
9:45-10:00						8		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>34</b>
10:00-10:15				1	1	5		4
10:15-10:30				1	1	2		1
10:30-10:45						4		
10:45-11:00						5		2
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>23</b>
11:00-11:15						7		1
11:15-11:30						3		
11:30-11:45			2			4		
11:45-12:00	2				2	7		1
<b>HOURLY TOTAL</b>					<b>2</b>	<b>HOURLY TOTAL</b>		<b>23</b>
12:00-12:15	2		2		4	9		2
12:15-12:30						6		4
12:30-12:45						2		
12:45-1:00						6		
<b>HOURLY TOTAL</b>					<b>4</b>	<b>HOURLY TOTAL</b>		<b>29</b>
1:00-1:15			2		2	6		3
1:15-1:30	1		2		3	6		1
1:30-1:45						1		1
1:45-2:00						3		1
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>22</b>





**COUNT LOCATION:** CSAH 11 (Northdale Blvd.) @  
Burger King/Life Time Fitness Exits

**DATE:** 7/17/96

APP. #1=  
EB CSAH 11 (Northdale Blvd)  
APP. #2 =  
SB Burger King  
APP. #3=  
WB CSAH 11 (Northdale Blvd)  
APP. #4=  
Life Time Fitness

APP. #2  
APP. #1  
35mph  
APP. #3  
35mph  
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						11		4
2:15-2:30	3		2		5	6		3
2:30-2:45	5		2		7	7		3
2:45-3:00						5		1
<b>HOURLY TOTAL</b>					<b>12</b>	<b>HOURLY TOTAL</b>		<b>40</b>
3:00-3:15	6				6	7		6
3:15-3:30	2	1			3	2		1
3:30-3:45	2				2	1	1	3
3:45-4:00						1		3
<b>HOURLY TOTAL</b>					<b>11</b>	<b>HOURLY TOTAL</b>		<b>25</b>
4:00-4:15	3				3	3		3
4:15-4:30			1		1	1		1
4:30-4:45	2				2	2		1
4:45-5:00			1		1	1		
<b>HOURLY TOTAL</b>					<b>7</b>	<b>HOURLY TOTAL</b>		<b>12</b>
5:00-5:15	6				6	2		3
5:15-5:30						1		
5:30-5:45	3	3	1	1	8	1		3
5:45-6:00	1	2			3	1		1
<b>HOURLY TOTAL</b>					<b>17</b>	<b>HOURLY TOTAL</b>		<b>12</b>
6:00-6:15	1				1	3		1
6:15-6:30			1		1			1
6:30-6:45		1			1	3	1	
6:45-7:00	1	1			2	1		
<b>HOURLY TOTAL</b>					<b>5</b>	<b>HOURLY TOTAL</b>		<b>10</b>
7:00-7:15	1				1	1		2
7:15-7:30	2				2	3		
7:30-7:45	2				2	2		
7:45-8:00				2	2	1		
<b>HOURLY TOTAL</b>					<b>7</b>	<b>HOURLY TOTAL</b>		<b>9</b>
8:00-8:15	1	2	2	1	6	1		1
8:15-8:30						4		
8:30-8:45	1	1			2			
8:45-9:00	1				1			
<b>HOURLY TOTAL</b>					<b>9</b>	<b>HOURLY TOTAL</b>		<b>6</b>
9:00-9:15						5		
9:15-9:30						2		
9:30-9:45								
9:45-10:00						1		
<b>HOURLY TOTAL</b>						<b>HOURLY TOTAL</b>		<b>8</b>