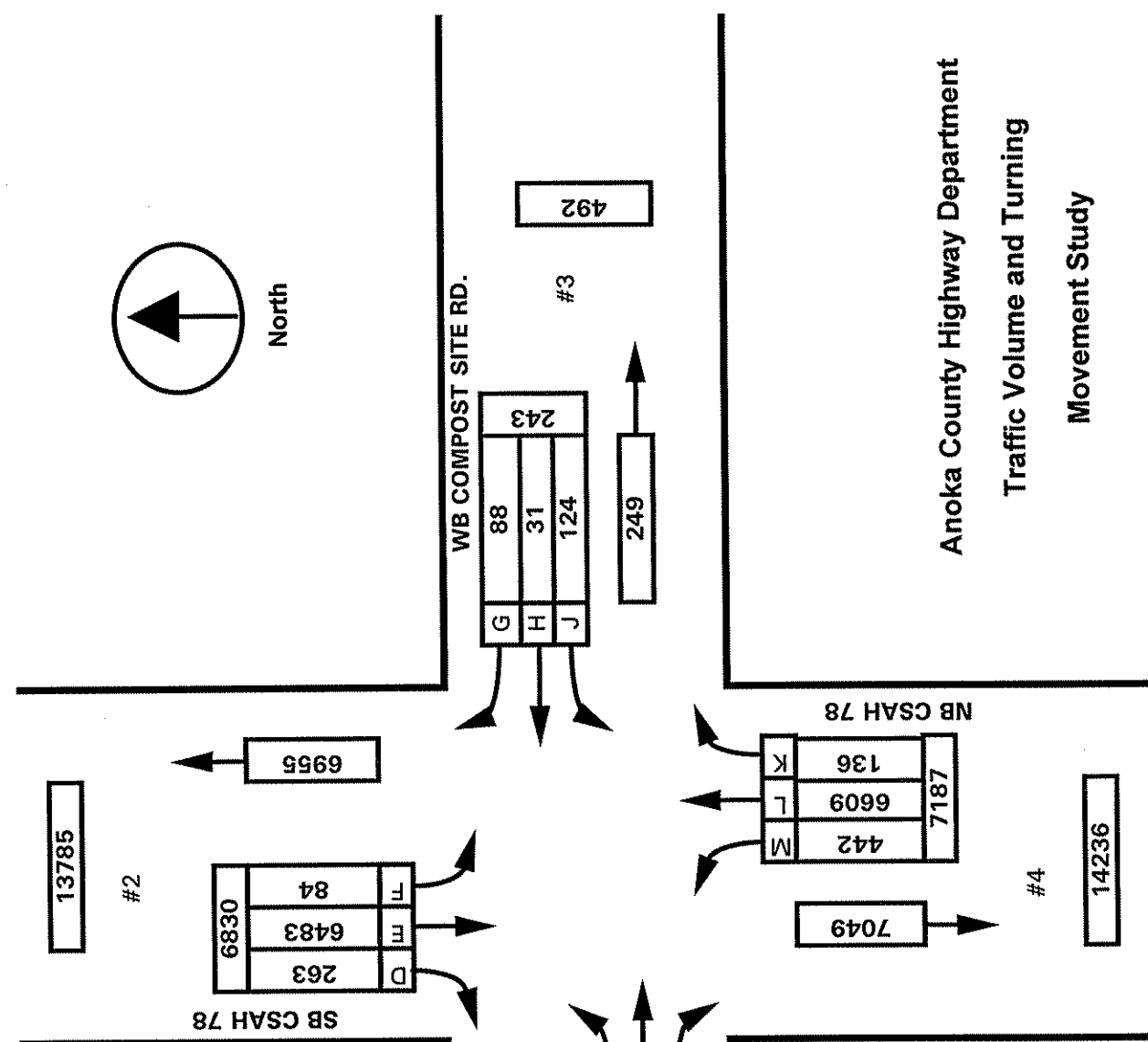
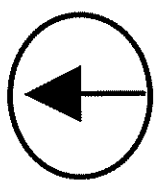


Date : 7/31/96AM 7/28/96PM
 Count Number : TMC 9618
 Location : CSAH 78 (HANSON BLVD) @
 133RD AVENUE/COMPOST SITE RD.



	LANES OF APPROACH			TOTAL
	RIGHT TURN LANE	LEFT TURN LANE	THRU LANES	
#1	0	0	1	1
#2	0	0	1	1
#3	0	0	1	1
#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 : Mostly Clear

Counted by: Ann and Gabe

Board # :

Character :

Study Name: TMC9618

Site Code : 96180202

Start Date: 07/29/96

Page : 2

Vehicle group 1

Start Time	CSAH 78 (Hanson Blvd) From North				Compost Site Rd. From East				CSAH 78 (Hanson Blvd) From South				133rd Ave. NW From West				Intvl	Exclu	Inclu
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
13:00	4	86	5	5	3	0	2	0	3	70	2	9	6	1	5	0	201	14	187
13:15	3	85	2	6	5	0	6	0	5	82	3	4	3	0	3	0	207	10	197
13:30	3	102	2	3	1	1	5	0	5	95	7	7	6	2	6	0	245	10	235
13:45	4	99	5	3	5	0	2	0	5	95	5	9	7	0	2	0	241	12	229
Hour	14	372	14	17	14	1	15	0	18	342	17	29	22	3	16	0	894	46	848
14:00	4	82	2	6	0	0	1	0	2	82	6	6	3	0	1	0	195	12	183
14:15	1	90	1	2	0	0	4	3	1	86	5	5	3	0	4	1	206	11	195
14:30	7	79	3	3	4	0	2	0	3	80	7	2	4	0	6	1	201	6	195
14:45	5	73	1	5	1	0	1	0	2	81	6	5	6	0	5	0	191	10	181
Hour	17	324	7	16	5	0	8	3	8	329	24	18	16	0	16	2	793	39	754
15:00	1	80	2	0	1	2	3	1	1	130	8	3	5	1	4	0	242	4	238
15:15	2	93	1	4	0	0	3	0	1	132	11	8	7	0	5	1	268	13	255
15:30	2	92	0	5	0	2	0	0	1	134	4	3	2	1	2	0	248	8	240
15:45	4	102	0	2	0	1	1	0	0	169	13	3	5	1	0	0	301	5	296
Hour	9	367	3	11	1	5	7	1	3	565	36	17	19	3	11	1	1059	30	1029
16:00	3	93	1	4	1	0	0	0	3	167	13	2	1	0	2	0	290	6	284
16:15	2	83	2	5	1	2	2	0	5	148	8	3	4	0	1	0	266	8	258
16:30	7	105	3	4	5	1	3	0	4	229	19	3	7	0	6	0	396	7	389
16:45	10	79	2	1	2	3	5	0	2	197	19	3	6	2	7	0	338	4	334
Hour	22	360	8	14	9	6	10	0	14	741	59	11	18	2	16	0	1290	25	1265
17:00	8	87	1	1	1	1	1	0	3	207	14	4	9	1	4	0	342	5	337
17:15	7	114	2	4	2	1	5	1	2	232	20	4	4	0	6	0	404	9	395
17:30	5	81	2	5	1	0	1	0	3	198	24	1	13	0	0	0	334	6	328
17:45	7	123	0	4	2	0	3	0	5	212	20	4	7	0	6	0	393	8	385
Hour	27	405	5	14	6	2	10	1	13	849	78	13	33	1	16	0	1473	28	1445
18:00	6	96	5	2	4	0	5	0	5	211	19	1	6	2	16	0	378	3	375
18:15	3	127	3	2	1	1	6	0	4	151	13	2	8	0	9	0	330	4	326
18:30	3	73	3	2	4	1	5	0	2	152	11	2	3	2	3	0	266	4	262
18:45	7	85	3	0	3	2	2	0	5	148	14	1	11	1	5	0	287	1	286
Hour	19	381	14	6	12	4	18	0	16	662	57	6	28	5	33	0	1261	12	1249
19:00	5	74	1	0	2	2	6	0	5	133	8	0	5	1	10	0	252	0	252
19:15	6	79	3	1	2	0	1	0	0	120	6	2	6	0	6	0	232	3	229
19:30	7	54	1	0	2	0	2	0	0	95	9	0	4	0	3	0	177	0	177
19:45	4	84	0	2	0	0	0	0	0	103	10	0	3	0	3	0	209	2	207
Hour	22	291	5	3	6	2	9	0	5	451	33	2	18	1	22	0	870	5	865

ANOKA COUNTY HIGHWAY DEPARTMENT

TRAFFIC ENGINEERING SECTION

TRAFFIC STUDY

Weather :Mostly Clear

Counted by:Ann and Gabe

Board # :

Character :

Study Name: TMC9618

Site Code : 96180202

Start Date: 07/29/96

Page : 3

Vehicle group 1

Start Time	CSAH 78 (Hanson Blvd) From North				Compost Site Rd. From East				CSAH 78 (Hanson Blvd) From South				133rd Ave. NW From West				Intvl Total	Exclu Total	Inclu Total
	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY	Right	Thru	Left	HEAVY			
20:00	10	69	0	1	0	0	0	0	0	88	9	0	9	0	4	0	190	1	189
20:15	3	51	0	0	0	0	0	0	0	94	10	0	6	0	2	0	166	0	166
20:30	4	61	0	0	0	0	0	0	0	84	10	2	5	0	2	0	168	2	166
20:45	6	53	0	0	0	0	0	0	0	97	7	1	4	0	4	0	172	1	171
Hour	23	234	0	1	0	0	0	0	0	363	36	3	24	0	12	0	696	4	692
21:00	6	57	0	1	0	0	0	0	1	97	2	1	1	0	0	0	166	2	164
21:15	4	59	0	0	1	0	0	0	0	124	6	2	7	0	4	0	207	2	205
21:30	4	74	0	0	0	0	0	0	0	89	7	0	1	0	5	0	180	0	180
21:45	7	58	0	0	0	0	0	0	0	67	2	2	4	0	1	0	141	2	139
Hour	21	248	0	1	1	0	0	0	1	377	17	5	13	0	10	0	694	6	688
Total	263	6483	84	233	88	31	124	7	136	6609	442	234	442	29	258	14	15477	488	14989
% Apr.	3.7	91.7	1.1	3.2	35.2	12.4	49.6	2.8	1.8	89.0	5.9	3.1	59.4	3.9	34.7	1.8	-	-	-
% Int.	1.6	41.8	0.5	1.5	0.5	0.2	0.8	-	0.8	42.7	2.8	1.5	2.8	0.1	1.6	-	-	-	-

Major Street Approaches:

Northbound:

CSAH 78 (Hanson Blvd)
 Data File: C:\PETRA2\DATAFILE\TMC9618.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/29/96
 Number of Lanes: 1
 Approach Speed: 55
 Total Approach Traffic: 7187

Southbound:

CSAH 78 (Hanson Blvd)
 Data File: C:\PETRA2\DATAFILE\TMC9618.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/29/96
 Number of Lanes: 1
 Approach Speed: 55
 Total Approach Traffic: 6830

Minor Street Approaches:

Eastbound:

133rd Ave. NW
 Data File: C:\PETRA2\DATAFILE\TMC9618.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/29/96
 Number of Lanes: 1
 Approach Speed: 40
 Total Approach Traffic: 729

Westbound:

Compost Site Rd.
 Data File: C:\PETRA2\DATAFILE\TMC9618.PDF
 Count Type: IMC. Channel: 0. Count Date: 7/29/96
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 243

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 W 17	105	52	84
1	0	0 W 18	105	52	84
2	0	0 W 19	105	52	84
3	0	0 W 20	105	52	84
4	0	0 W 21	105	52	84
5	0	0 W 22	105	52	84
6	1041	76 E 2	MAIN 105	--BOTH-- 52	MAIN 84
7	1054	93 E 1	MAIN 105	--BOTH-- 52	--BOTH-- 84
8	749	39 E 10	MAIN 105	MAIN 52	MAIN 84
9	636	46 E 5	MAIN 105	MAIN 52	MAIN 84
10	695	41 E 7	MAIN 105	MAIN 52	MAIN 84
11	782	30 E 15	MAIN 105	MAIN 52	MAIN 84
12	734	46 E 6	MAIN 105	MAIN 52	MAIN 84
13	777	41 E 8	MAIN 105	MAIN 52	MAIN 84
14	709	32 E 14	MAIN 105	MAIN 52	MAIN 84
15	983	33 E 13	MAIN 105	MAIN 52	MAIN 84
16	1204	36 E 11	MAIN 105	MAIN 52	MAIN 84
17	1377	50 E 4	MAIN 105	MAIN 52	MAIN 84
18	1149	66 E 3	MAIN 105	--BOTH-- 52	MAIN 84
19	807	41 E 9	MAIN 105	MAIN 52	MAIN 84
20	656	36 E 12	MAIN 105	MAIN 52	MAIN 84
21	664	23 E 16	MAIN 105	MAIN 52	MAIN 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.: 350; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main St.: 525; 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: 1445.

- 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 1 hours. Criteria--Main: 420; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 3 hours.

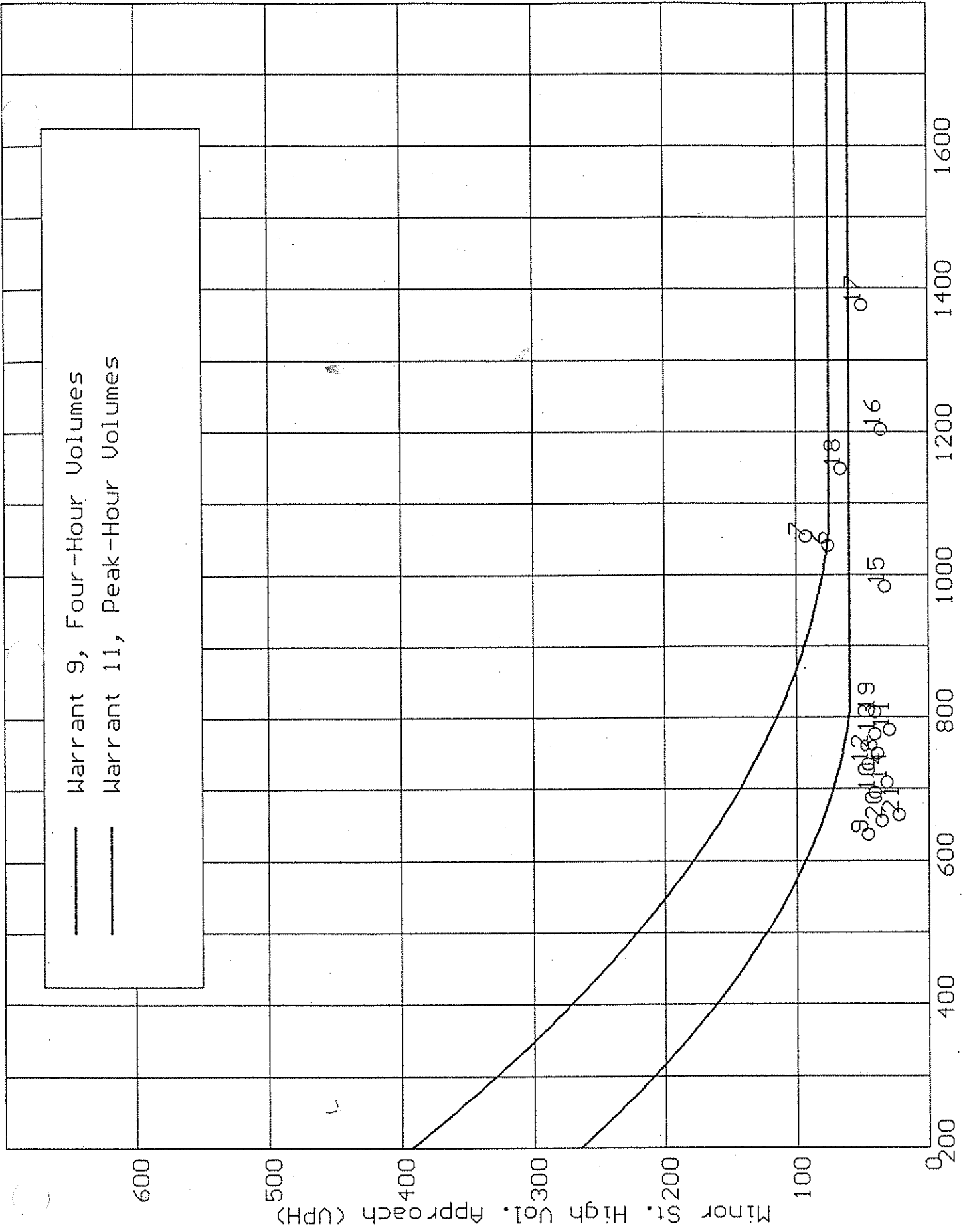
Warrant 10 - Peak Hour Delay

NOT SATISFIED. Peak hour (1700 hours) volume not adequate.


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 (UPH)


NORTH

APP. #1= NB CSAH 78

APP. #2 =EB 133rd Ave

APP. #3= SB CSAH 78

APP. #4=WB Compost Site Rd.

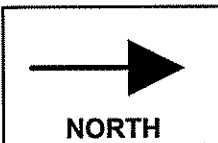
COUNT LOCATION: CSAH 78 (Hanson Blvd) @
133rd Ave./Compost Site Rd.

DATE: 7/31/96

APP. #2 40 MPH	APP. #3 55 MPH
APP. #1 55 MPH	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						5	1	
6:30-6:45						5	1	
6:45-7:00						6		2
HOURLY TOTAL						HOURLY TOTAL		23
7:00-7:15						4		4
7:15-7:30	1			1	2	8		8
7:30-7:45						9	1	4
7:45-8:00						5		1
HOURLY TOTAL					2	HOURLY TOTAL		44
8:00-8:15						9		3
8:15-8:30						7		
8:30-8:45				1	1	13		2
8:45-9:00						12	1	1
HOURLY TOTAL					1	HOURLY TOTAL		48
9:00-9:15						6		1
9:15-9:30						10	1	
9:30-9:45						9		
9:45-10:00						7		
HOURLY TOTAL						HOURLY TOTAL		34
10:00-10:15						7		1
10:15-10:30						13	1	3
10:30-10:45						10		2
10:45-11:00						7		11
HOURLY TOTAL						HOURLY TOTAL		55
11:00-11:15						14		
11:15-11:30						2		5
11:30-11:45						9		1
11:45-12:00						12		1
HOURLY TOTAL						HOURLY TOTAL		44
12:00-12:15						4		1
12:15-12:30						5	1	3
12:30-12:45						12		4
12:45-1:00						10		1
HOURLY TOTAL						HOURLY TOTAL		41
1:00-1:15						14		
1:15-1:30						10		
1:30-1:45						8		1
1:45-2:00						11		1
HOURLY TOTAL						HOURLY TOTAL		45



COUNT LOCATION: CSAH 78 (Hanson Blvd) @
133rd Ave/Compost Site Rd.

DATE: 7/28/96

- APP. #1= NB CSAH 78
- APP. #2 = EB 133rd Ave.
- APP. #3= SB CSAH 78
- APP. #4= WB Compost Site Rd.

- APP. #2
40 MPH
- APP. #1
55 MPH
- APP. #3
55 MPH
- 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.
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 - 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		1
2:15-2:30						10		1
2:30-2:45						5		1
2:45-3:00						9		1
HOURLY TOTAL						HOURLY TOTAL		39
3:00-3:15						4		
3:15-3:30						13		
3:30-3:45						9		1
3:45-4:00						5		
HOURLY TOTAL						HOURLY TOTAL		32
4:00-4:15						6		
4:15-4:30						8		
4:30-4:45						6		1
4:45-5:00						4		1
HOURLY TOTAL						HOURLY TOTAL		26
5:00-5:15						5		
5:15-5:30						9		
5:30-5:45						5		
5:45-6:00						7		1
HOURLY TOTAL						HOURLY TOTAL		27
6:00-6:15						3		
6:15-6:30						4		
6:30-6:45						4		
6:45-7:00						1		
HOURLY TOTAL						HOURLY TOTAL		12
7:00-7:15								
7:15-7:30						2	1	
7:30-7:45								
7:45-8:00							2	
HOURLY TOTAL						HOURLY TOTAL		5
8:00-8:15						1		
8:15-8:30		1			1			
8:30-8:45						1		
8:45-9:00						1		
HOURLY TOTAL					1	HOURLY TOTAL		3
9:00-9:15						1	1	
9:15-9:30						2		
9:30-9:45								
9:45-10:00						2		
HOURLY TOTAL						HOURLY TOTAL		6