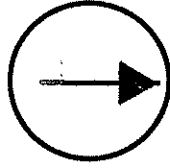


Date : 6/23/99AM 6/21/99PM

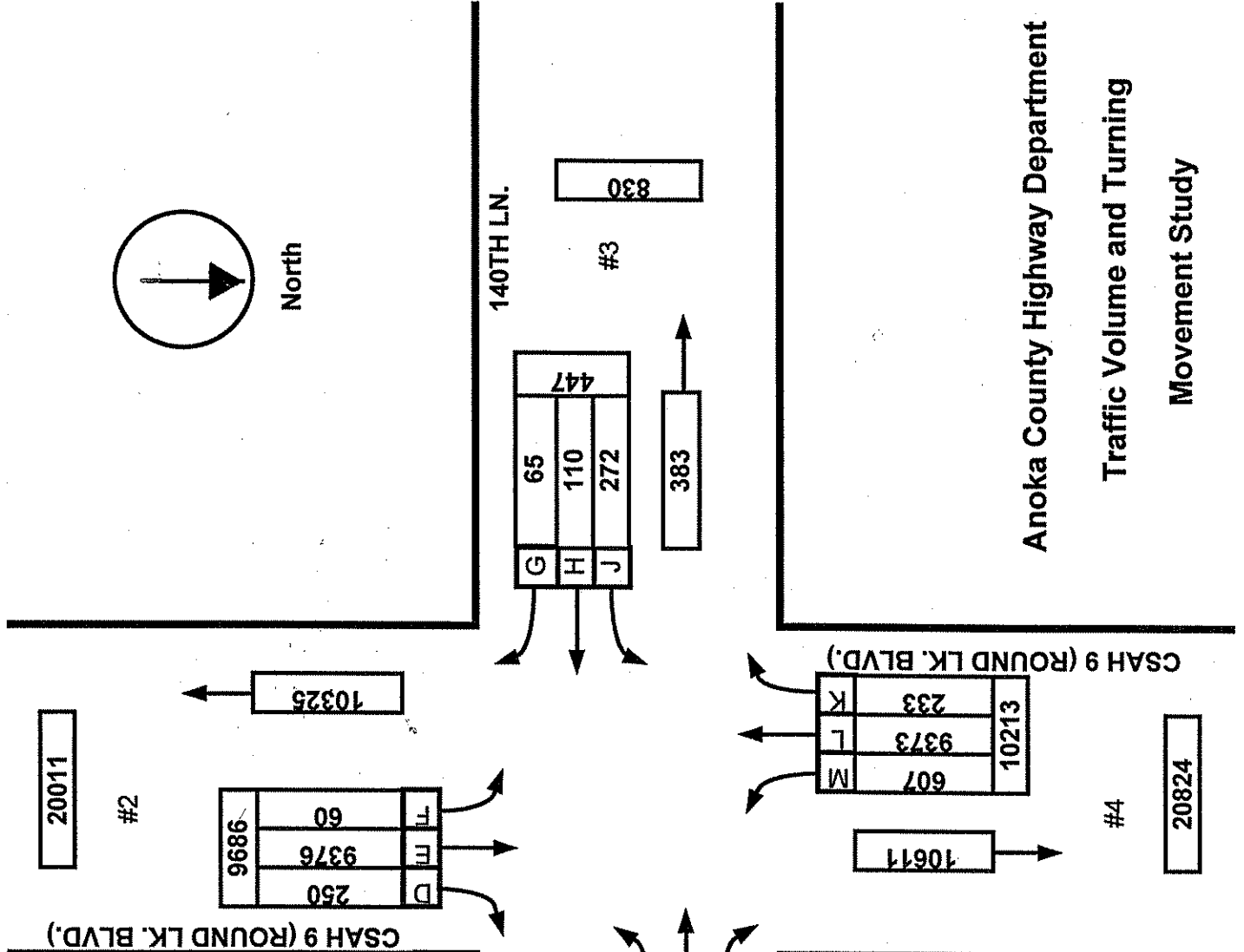
Count Number : TMC9912

Location : CSAH 9 (ROUND LK. BLVD.)

@ 140TH LN.



North



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

20824

Anoka County Highway Department Traffic Volume & Turning Movement Study

Comment Line 1
Comment Line 2
Comment Line 3
Comment Line 4

File Name : TMC 9912
Site Code : 99120201
Start Date : 06/21/1999
Page : 1

Groups Printed: 1 - 1 - Unshifted

Start Time	CSAH 9 (Round Lk. Blvd.) Southbound					140th. Lane Westbound					CSAH 9 (Round Lk. Blvd.) Northbound					140th. Lane Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Factor	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy			
06:00 AM	6	235	2	1	243	15	0	0	1	15	0	18	0	0	18	2	1	0	0	3	2	279	281
06:15 AM	20	231	4	3	255	16	0	1	0	17	0	31	0	0	31	1	0	1	0	2	3	305	308
06:30 AM	6	300	4	2	310	13	1	1	0	15	2	50	0	3	52	1	2	1	1	4	6	381	387
06:45 AM	5	284	7	7	296	15	1	3	0	19	0	39	1	3	40	6	0	1	0	7	10	362	372
Total	37	1050	17	13	1104	59	2	5	1	66	2	138	1	6	141	10	3	3	1	16	21	1327	1348
07:00 AM	6	240	2	6	248	25	0	7	1	32	0	63	1	3	64	7	0	0	0	7	10	351	361
07:15 AM	10	234	2	7	246	13	1	4	0	18	0	65	3	6	68	3	0	3	0	6	13	338	351
07:30 AM	13	243	6	1	262	19	0	5	0	24	0	63	0	3	63	4	1	1	0	6	4	355	359
07:45 AM	11	249	5	6	265	18	0	3	0	21	0	70	1	3	71	0	0	0	0	0	9	357	366
Total	40	966	15	20	1021	75	1	19	1	95	0	281	5	15	266	14	1	4	0	19	36	1401	1437
08:00 AM	6	164	2	7	172	10	0	6	0	16	2	60	1	4	63	1	0	1	0	2	11	253	264
08:15 AM	10	170	2	7	182	13	0	10	0	23	0	65	4	6	69	2	0	0	0	2	13	276	289
08:30 AM	10	159	0	4	169	11	1	6	1	18	0	60	4	3	64	2	0	3	1	5	9	256	265
08:45 AM	10	174	2	1	186	15	0	6	1	21	0	62	4	3	66	2	0	0	0	2	5	275	280
Total	36	667	6	19	709	49	1	28	2	78	2	247	13	16	262	7	0	4	1	11	38	1080	1098
09:00 AM	11	124	2	2	137	14	2	4	0	20	0	64	2	2	66	0	1	2	0	3	4	226	230
09:15 AM	5	139	1	8	145	16	6	11	2	33	1	62	0	2	63	3	1	0	0	4	12	245	257
09:30 AM	3	117	0	3	120	9	0	7	1	16	0	73	2	4	75	1	0	0	0	1	8	212	220
09:45 AM	9	126	3	2	138	15	0	9	2	24	0	70	4	3	74	4	0	0	0	4	7	240	247
Total	28	505	6	15	540	54	8	31	5	93	1	269	8	11	278	8	2	2	0	12	31	923	954
10:00 AM	10	105	4	3	119	16	1	6	0	23	1	69	6	1	76	2	1	0	0	3	4	221	225
10:15 AM	1	130	1	4	132	12	0	0	0	12	0	82	4	3	86	1	1	0	0	2	7	232	239
10:30 AM	8	126	1	1	135	12	0	5	1	17	0	86	1	3	87	1	0	1	0	2	5	241	246
10:45 AM	12	140	2	4	154	14	1	7	1	22	3	85	3	5	91	2	0	2	0	4	10	271	281
Total	31	501	8	12	540	54	2	18	2	74	4	322	14	12	340	6	2	3	0	11	26	965	991
11:00 AM	8	123	3	7	134	11	2	10	4	23	1	82	3	3	86	6	1	0	0	7	14	250	264
11:15 AM	6	168	3	5	177	13	0	13	0	26	3	100	7	5	110	0	0	0	0	0	10	313	323
11:30 AM	7	137	4	4	148	7	0	11	1	18	0	125	2	7	127	2	1	0	0	3	12	296	308
11:45 AM	8	153	2	7	163	11	1	7	4	19	0	102	2	4	104	0	4	0	1	4	16	290	306
Total	29	581	12	23	622	42	3	41	9	85	4	409	14	19	427	8	6	0	1	14	52	1149	1201
12:00 PM	11	156	2	4	169	16	0	10	1	26	3	141	3	3	147	4	6	1	0	11	8	353	361
12:15 PM	8	140	0	0	148	20	1	15	2	36	0	154	4	5	158	5	1	3	1	9	8	351	359
12:30 PM	7	149	3	3	159	8	0	17	0	25	1	172	3	2	176	2	0	1	0	3	5	363	368
12:45 PM	9	142	15	2	166	7	1	11	1	19	2	148	5	3	155	1	10	1	0	12	6	352	358
Total	35	587	20	9	642	51	2	53	4	106	6	615	15	13	636	12	17	6	1	35	27	1419	1446
01:00 PM	8	153	0	2	161	12	0	9	1	21	2	153	7	3	162	7	2	1	0	10	6	354	360
01:15 PM	8	111	4	1	123	17	1	9	0	27	1	124	4	5	129	4	0	1	1	5	7	284	291
01:30 PM	10	124	3	3	137	14	1	13	2	28	0	120	2	3	122	3	4	0	0	7	8	294	302
01:45 PM	9	122	2	3	133	20	0	13	1	33	0	142	6	2	148	3	0	1	1	4	7	318	325
Total	35	510	9	9	554	63	2	44	4	109	3	539	19	13	561	17	6	3	2	26	28	1250	1278
02:00 PM	5	118	1	4	124	12	1	11	1	24	0	131	3	7	134	1	0	3	0	4	12	286	298
02:15 PM	9	121	1	4	131	8	3	18	1	29	1	141	9	3	151	2	0	0	0	2	8	313	321
02:30 PM	11	135	3	3	149	7	1	9	3	17	3	131	7	6	141	4	0	0	0	4	12	311	323
02:45 PM	13	118	5	3	136	16	2	19	3	37	2	177	11	12	190	3	3	1	0	7	18	370	388
Total	38	492	10	14	540	43	7	57	8	107	6	580	30	28	616	10	3	4	0	17	50	1280	1330
03:00 PM	14	94	2	3	110	10	3	24	0	37	0	190	4	6	194	4	2	0	0	6	9	347	356
03:15 PM	6	125	4	4	135	12	0	29	0	41	2	214	2	6	218	7	0	2	0	9	10	403	413
03:30 PM	8	105	2	4	115	14	3	21	1	38	0	209	8	4	217	3	2	0	0	5	9	375	384
03:45 PM	9	125	2	2	136	7	1	27	1	35	1	252	7	4	260	5	2	2	0	9	7	440	447
Total	37	449	10	13	496	43	7	101	2	151	3	865	21	20	889	19	6	4	0	29	35	1555	1600
04:00 PM	9	107	4	6	120	12	3	42	1	57	1	283	2	6	286	14	2	2	0	18	13	481	494
04:15 PM	9	141	0	1	150	11	6	28	0	45	1	280	3	5	284	7	2	1	0	10	6	489	495
04:30 PM	4	150	5	0	159	24	4	26	0	54	3	262	5	4	270	15	4	2	1	21	5	504	509
04:45 PM	16	150	9	2	175	18	1	33	0	52	2	287	3	0	292	16	1	2	0	19	2	538	540
Total	38	548	18	9	604	65	14	129	1	208	7	1112	13	15	1132	52	9	7	1	68	26	2012</	

Anoka County Highway Department Traffic Volume & Turning Movement Study

File Name : TMC 9912
Site Code : 99120201
Start Date : 06/21/1999
Page : 2

Groups Printed: 1 - 1 - Unshifted

Start Time	CSAH 9 (Round Lk. Blvd.) Southbound					140th. Lane Westbound					CSAH 9 (Round Lk. Blvd.) Northbound					140th. Lane Eastbound					Exclu. Total	Inclu. Total	Int. Total		
	Left	Thru	Right	Heav y	App. Total	Left	Thru	Right	Heav y	App. Total	Left	Thru	Right	Heav y	App. Total	Left	Thru	Right	Heav y	App. Total					
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0						
08:00 PM	17	116	0	1	133	28	1	7	0	36	2	204	9	1	215	2	0	2	0	4	2	388	390		
08:15 PM	16	122	5	1	143	14	1	22	1	37	2	186	5	2	193	2	2	0	0	4	4	377	381		
08:30 PM	8	124	7	0	139	14	2	7	0	23	2	138	3	1	143	4	5	5	0	14	1	319	320		
08:45 PM	25	146	13	0	184	12	4	20	0	36	1	148	5	0	154	4	2	1	0	7	0	381	381		
Total	66	508	25	2	599	68	8	56	1	132	7	676	22	4	705	12	9	8	0	29	7	1465	1472		
09:00 PM	15	106	7	0	128	14	0	17	0	31	2	134	3	0	139	1	2	0	0	3	0	301	301		
09:15 PM	7	86	2	0	95	13	0	14	2	27	1	141	4	0	146	0	1	1	0	2	2	270	272		
09:30 PM	13	92	3	1	108	5	3	10	0	18	1	128	3	0	132	4	3	1	0	8	1	266	267		
09:45 PM	7	68	2	1	77	6	2	8	0	16	3	122	2	0	127	4	1	2	0	7	1	227	228		
Total	42	352	14	2	408	38	5	49	2	92	7	525	12	0	544	9	7	4	0	20	4	1064	1068		
Grand Total	607	9373	233	165	10213	887	90	963	50	1940	60	9376	250	185	9686	272	110	65	7	447	407	22286	22693		
Approch %	5.9	91.8	2.3			45.7	4.6	49.6			0.6	96.8	2.6			60.9	24.6	14.5			1.8	98.2			
Total %	2.7	42.1	1.0		45.8	4.0	0.4	4.3		8.7	0.3	42.1	1.1		43.5	1.2	0.5	0.3		2.0					

Major Street Approaches:

Northbound:

CSAH 9 (Round Lk. Blvd.)

Data File: C:\APPS\Data Files\TMC 9912.war
 Count Type: IMC. Channel: 0. Count Date: 6/21/99
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 10213

Southbound:

CSAH 9 (Round Lk. Blvd.)

Data File: C:\APPS\Data Files\TMC 9912.war
 Count Type: IMC. Channel: 0. Count Date: 6/21/99
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 9686

Minor Street Approaches:

Eastbound:

140th. Lane

Data File: C:\APPS\Data Files\TMC 9912.war
 Count Type: IMC. Channel: 0. Count Date: 6/21/99
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 1940

Westbound:

140th. Lane

Data File: C:\APPS\Data Files\TMC 9912.war
 Count Type: IMC. Channel: 0. Count Date: 6/21/99
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 447

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	1245	66 E 16	MAIN 105	--BOTH-- 52	MAIN 84
7	1287	95 E 10	MAIN 105	--BOTH-- 52	--BOTH-- 84
8	971	78 E 14	MAIN 105	--BOTH-- 52	MAIN 84
9	818	93 E 11	MAIN 105	--BOTH-- 52	--BOTH-- 84
10	880	74 E 15	MAIN 105	--BOTH-- 52	MAIN 84
11	1049	86 E 13	MAIN 105	--BOTH-- 52	--BOTH-- 84
12	1278	106 E 9	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
13	1115	109 E 7	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
14	1156	107 E 8	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
15	1385	151 E 5	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
16	1736	208 E 2	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
17	1773	222 E 1	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
18	1621	166 E 3	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
19	1329	155 E 4	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
20	1304	132 E 6	--BOTH-- 105	--BOTH-- 52	--BOTH-- 84
21	952	92 E 12	MAIN 105	--BOTH-- 52	--BOTH-- 84
22	0	0 W 23	105	52	84
23	0	0 W 24	105	52	84

Warrant Summary:

Plural values apply.

Warrant 1 - Minimum Vehicular Volumes

SATISFIED for 9 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

SATISFIED for 16 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: 2061.

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

Warrant 9 - Four Hour Volumes

SATISFIED for 16 hours.

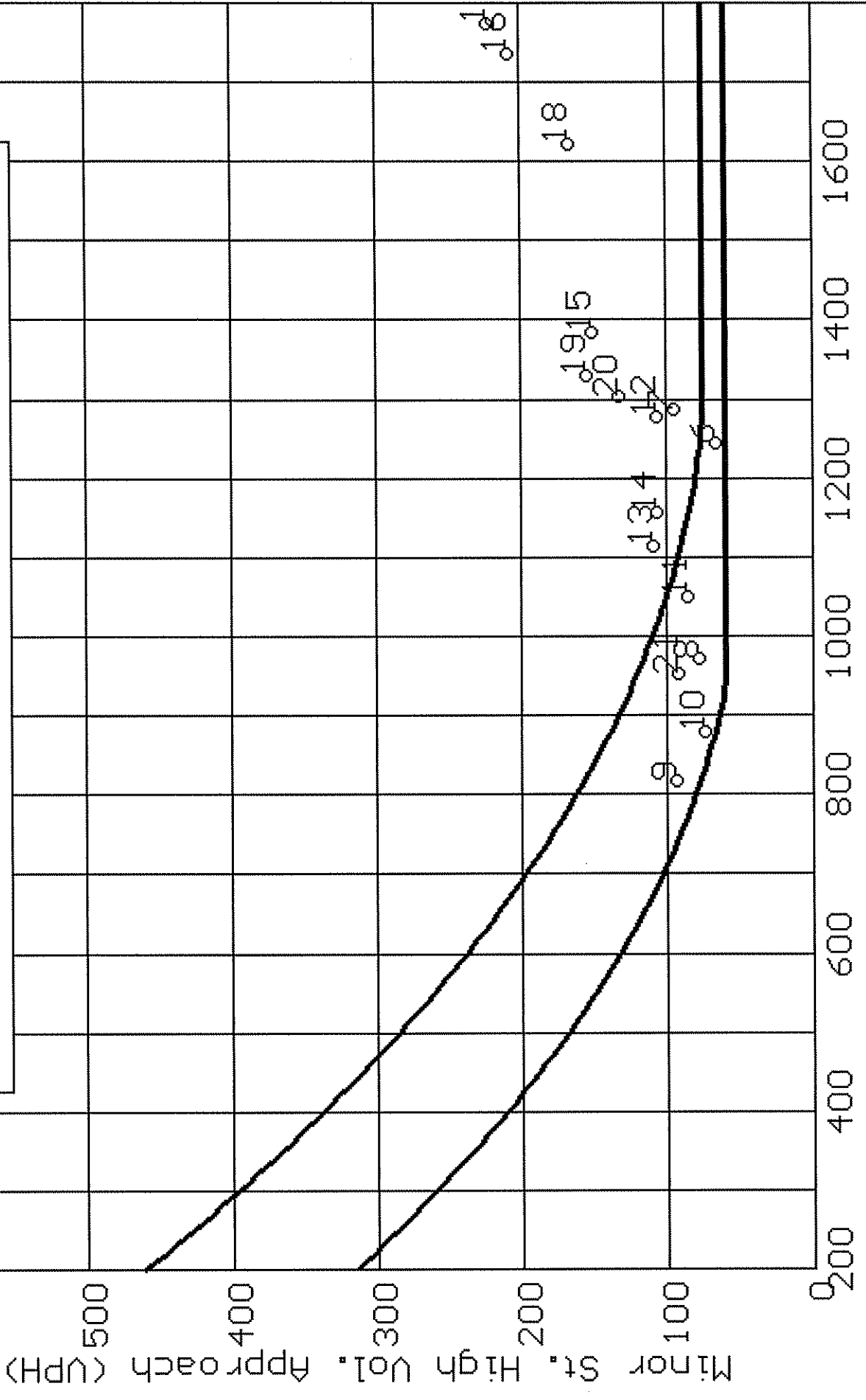
Warrant 10 - Peak Hour Delay

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 10 hours.



— Warrant 9, Four-Hour Volumes
 — Warrant 11, Peak-Hour Volumes

Major St. Total of Both Approaches (UPH)



COUNT LOCATION:

CSAH 9 (Round Lake Blvd.) @
140th Lane

DATE:

6/23/99

APP. #1= WB 140th Lane

APP. #2 = SB CSAH 9
(Round Lake Blvd.)

APP. #3= EB 140th Lane

APP. #4= NB CSAH 9
(Round Lake Blvd.)

APP.
#2

APP.
#1

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
6:00-6:15AM						2		
6:15-6:30						3		
6:30-6:45						2		4
6:45-7:00						9		1
HOURLY TOTAL						HOURLY TOTAL		21
7:00-7:15						12		
7:15-7:30						7		4
7:30-7:45						2		2
7:45-8:00						7		1
HOURLY TOTAL						HOURLY TOTAL		35
8:00-8:15						9		
8:15-8:30						10		2
8:30-8:45						6		3
8:45-9:00						5		
HOURLY TOTAL						HOURLY TOTAL		35
9:00-9:15						4		
9:15-9:30						11	1	
9:30-9:45						8		
9:45-10:00						5		2
HOURLY TOTAL						HOURLY TOTAL		31
10:00-10:15						4		
10:15-10:30						7		
10:30-10:45						4	1	
10:45-11:00						10		
HOURLY TOTAL						HOURLY TOTAL		26
11:00-11:15						11		3
11:15-11:30						7		2
11:30-11:45						12		
11:45-12:00						14	1	1
HOURLY TOTAL						HOURLY TOTAL		51
12:00-12:15	1			1	2	7		
12:15-12:30			2		2	4	1	3
12:30-12:45						5		
12:45-1:00	3	1			4	5		
HOURLY TOTAL					8	HOURLY TOTAL		25
1:00-1:15			1		1	6		
1:15-1:30	2		4		6	5		2
1:30-1:45		1	1	1	3	8		
1:45-2:00	1	1			2	7		
HOURLY TOTAL					12	HOURLY TOTAL		28



COUNT LOCATION:

CSAH 9 (Round Lake Blvd.) @
140th Lane

DATE:

6/21/99

APP. #1= WB 140th Lane

APP. #2 = SB CSAH 9
(Round Lake Blvd.)

APP. #3= EB 140th Lane

APP. #4= NB CSAH 9
(Round Lake Blvd.)

APP.
#2

APP.
#1

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				4	4	11		
2:15-2:30		2			2	8		1
2:30-2:45		2			2	11		
2:45-3:00		2			2	16		2
HOURLY TOTAL					10	HOURLY TOTAL		49
3:00-3:15						13		1
3:15-3:30	1				1	3	2	
3:30-3:45						9		
3:45-4:00						7		
HOURLY TOTAL					1	HOURLY TOTAL		35
4:00-4:15						13		
4:15-4:30						6		
4:30-4:45	1		2		3	3	2	
4:45-5:00						1		
HOURLY TOTAL					3	HOURLY TOTAL		25
5:00-5:15						6		
5:15-5:30				1	1	4		
5:30-5:45				1	1	1		
5:45-6:00	3			1	4	2		
HOURLY TOTAL					6	HOURLY TOTAL		13
6:00-6:15	1				1	2		
6:15-6:30		1		4	5	1		
6:30-6:45								
6:45-7:00	2			2	4			
HOURLY TOTAL					10	HOURLY TOTAL		3
7:00-7:15						2	1	
7:15-7:30	2				2	1	1	
7:30-7:45			1		1			
7:45-8:00				3	3			
HOURLY TOTAL					6	HOURLY TOTAL		5
8:00-8:15	2				2	2		
8:15-8:30		1			1	4		
8:30-8:45		1		2	3	1		
8:45-9:00								
HOURLY TOTAL					6	HOURLY TOTAL		7
9:00-9:15								
9:15-9:30		2		2	4	2		
9:30-9:45						1		
9:45-10:00						1		
HOURLY TOTAL					4	HOURLY TOTAL		4