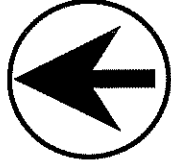


Date : 06/14/00

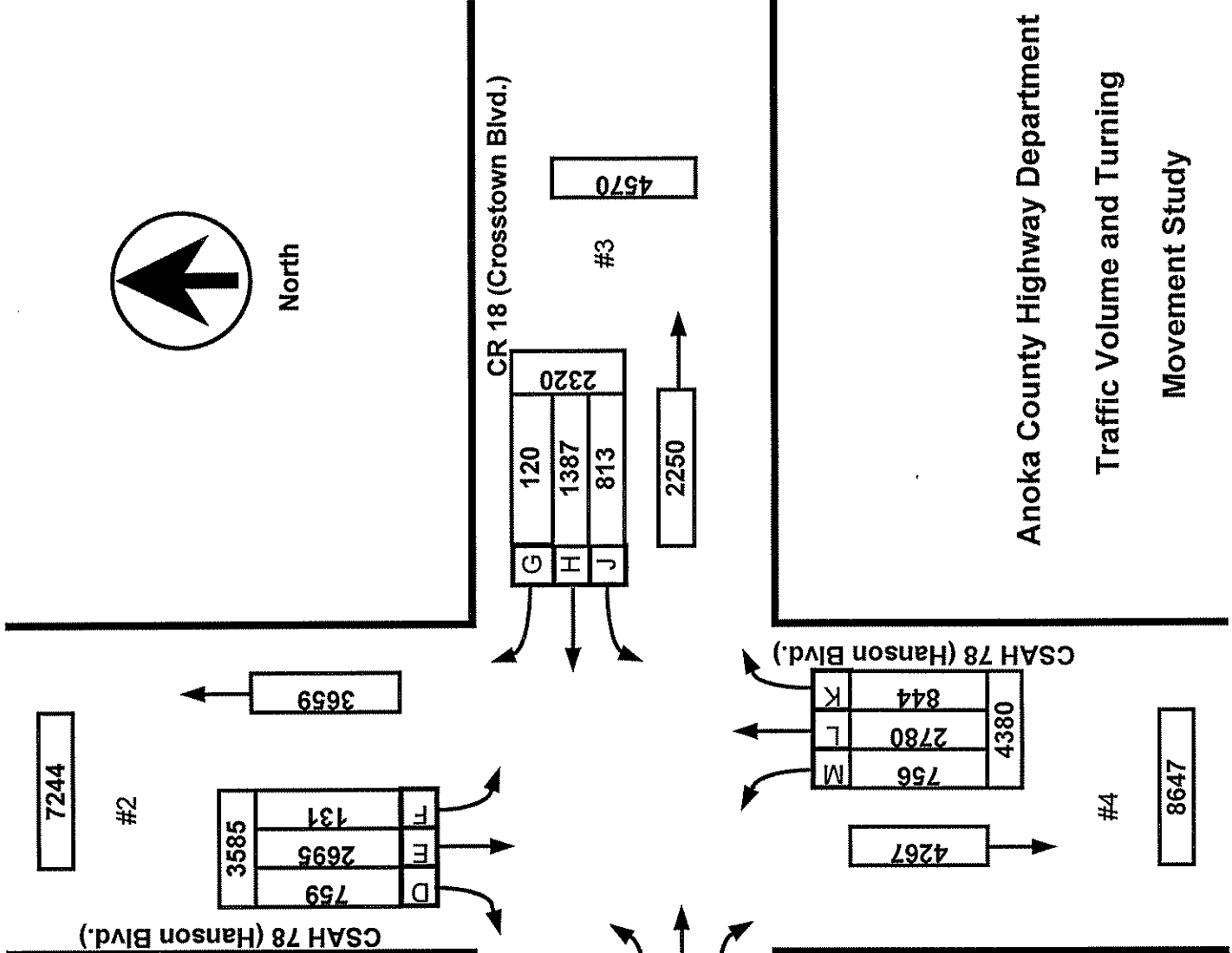
Count Number : TMC0010

Location : CSAH 78 (Hanson Blvd.) @

CR 18 (Crosstown Blvd.)



North



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Anoka County Highway Department Traffic Engineering

Weather: Partly Cloudy
 Inter TDC-8
 Counted by: Ryan & Justin

Traffic Volume and Turning Movement Study

File Name : TMC0010
 Site Code : 00100101
 Start Date : 06/14/2000
 Page No : 1

Groups Printed- 1 - Unshifted

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CR 18 (Crosstown Blvd.) Westbound					CSAH 78 (Hanson Blvd.) Northbound					CR 18 (Crosstown Blvd.) 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				App. Total	
06:00	1.0	0	59	3	2	62	1.0	17	16	0	2	1.0	2	6	5	0	1.0	2	2	7	0	11	4	119	123
06:15	1.0	0	58	5	0	63	1.0	21	32	0	1	1.0	4	14	7	0	1.0	5	8	3	1	16	2	157	159
06:30	1.0	0	61	7	0	68	1.0	27	27	0	6	1.0	2	17	13	1	1.0	3	14	5	1	22	8	176	184
06:45	1.0	2	90	3	0	95	1.0	30	30	1	4	1.0	8	30	12	4	1.0	4	18	3	3	25	11	231	242
Total		2	268	18	2	288		95	105	1	13		16	67	37	5		14	42	18	5	74	25	683	708
07:00	1.0	0	68	3	1	71	1.0	15	29	0	5	1.0	4	23	5	0	1.0	10	24	5	7	39	13	186	199
07:15	1.0	2	75	6	0	83	1.0	20	34	0	6	1.0	5	33	7	0	1.0	8	10	6	3	24	9	206	215
07:30	1.0	2	69	7	0	78	1.0	14	27	3	4	1.0	6	35	10	1	1.0	12	24	13	9	49	14	222	236
07:45	1.0	2	64	17	3	83	1.0	20	25	2	9	1.0	6	33	9	1	1.0	23	21	4	3	48	16	226	242
Total		6	276	33	4	315		69	115	5	24		21	124	31	2		53	79	28	22	160	52	840	892
08:00	1.0	0	50	18	0	68	1.0	11	26	1	4	1.0	7	28	11	2	1.0	12	16	6	5	34	11	186	197
08:15	1.0	0	52	11	4	63	1.0	22	16	2	7	1.0	9	29	6	1	1.0	7	18	7	7	32	19	179	198
08:30	1.0	0	58	12	2	60	1.0	23	25	1	6	1.0	8	29	10	1	1.0	11	12	11	5	34	14	180	194
08:45	1.0	2	53	3	0	58	1.0	23	21	2	6	1.0	7	18	7	1	1.0	7	20	7	7	34	14	170	184
Total		2	193	44	6	239		79	88	6	23		31	104	34	5		37	66	31	24	134	58	715	773
09:00	1.0	1	27	7	0	35	1.0	11	18	0	6	1.0	10	22	10	0	1.0	3	13	7	5	23	11	129	140
09:15	1.0	1	38	8	1	47	1.0	15	28	4	5	1.0	5	31	18	0	1.0	14	18	15	7	47	13	195	208
09:30	1.0	2	38	7	1	47	1.0	9	18	3	7	1.0	10	25	13	2	1.0	14	12	9	5	35	15	160	175
09:45	1.0	4	41	7	0	52	1.0	11	24	6	7	1.0	8	24	10	0	1.0	9	18	4	7	31	14	166	180
Total		8	144	29	2	181		46	88	13	25		33	102	51	2		40	61	35	24	136	53	650	703
10:00	1.0	1	29	15	0	45	1.0	14	17	4	7	1.0	4	29	11	1	1.0	10	11	18	3	39	11	163	174
10:15	1.0	4	19	11	2	34	1.0	8	19	2	4	1.0	2	35	11	0	1.0	10	20	10	6	40	12	151	163
10:30	1.0	2	36	5	1	43	1.0	19	23	2	5	1.0	4	20	7	1	1.0	7	20	14	3	41	10	159	169
10:45	1.0	1	26	6	1	33	1.0	18	21	3	4	1.0	11	18	3	2	1.0	5	19	12	6	36	13	143	156
Total		8	110	37	4	155		59	80	11	20		21	102	32	4		32	70	54	18	156	46	616	662
11:00	1.0	5	53	31	2	89	1.0	20	22	1	5	1.0	4	32	3	2	1.0	14	14	6	2	34	11	205	216
11:15	1.0	2	22	11	0	35	1.0	7	18	1	3	1.0	5	34	12	1	1.0	5	19	9	6	33	10	145	155
11:30	1.0	14	29	15	1	58	1.0	19	24	1	6	1.0	2	29	7	0	1.0	7	24	12	6	43	13	183	196
11:45	1.0	1	30	10	0	41	1.0	6	13	2	4	1.0	1	34	9	0	1.0	17	24	12	6	53	10	159	169
Total		22	134	67	3	223		52	77	5	18		12	129	31	3		43	81	39	20	163	44	692	736
12:00	1.0	2	44	14	1	60	1.0	15	21	0	5	1.0	2	32	12	0	1.0	9	22	8	5	39	11	181	192
12:15	1.0	3	23	5	2	31	1.0	8	10	1	4	1.0	7	34	13	2	1.0	16	20	12	4	48	12	152	164
12:30	1.0	5	46	12	0	63	1.0	12	18	2	6	1.0	7	28	8	0	1.0	13	29	7	3	49	9	187	196
12:45	1.0	1	18	6	0	25	1.0	11	16	3	3	1.0	8	37	14	0	1.0	11	29	8	4	48	7	162	169
Total		11	131	37	3	179		46	65	6	18		24	131	47	2		49	100	35	16	184	39	682	721
13:00	1.0	3	34	12	0	49	1.0	14	21	1	8	1.0	5	31	10	0	1.0	17	8	6	4	31	12	162	174
13:15	1.0	2	31	11	1	44	1.0	15	24	4	7	1.0	7	33	19	2	1.0	14	25	9	5	48	15	194	209
13:30	1.0	2	26	12	0	40	1.0	8	18	3	7	1.0	5	44	17	1	1.0	7	23	11	4	41	12	176	188
13:45	1.0	2	32	12	2	46	1.0	9	19	7	8	1.0	3	41	11	0	1.0	9	26	10	5	45	15	181	196
Total		9	123	47	3	179		46	82	15	30		20	149	57	3		47	82	36	18	165	54	713	767
14:00	1.0	0	27	13	2	40	1.0	6	18	1	8	1.0	8	39	12	1	1.0	8	15	13	6	36	17	160	177
14:15	1.0	3	36	7	3	46	1.0	12	16	1	7	1.0	8	43	16	3	1.0	12	27	8	5	47	18	189	207
14:30	1.0	3	34	7	2	44	1.0	10	27	3	7	1.0	8	37	18	4	1.0	8	22	4	9	34	22	181	203
14:45	1.0	2	51	13	2	66	1.0	12	25	2	9	1.0	8	31	19	3	1.0	9	14	10	0	33	14	196	210
Total		8	148	40	9	196		40	86	7	31		32	150	65	11		37	78	35	20	150	71	726	797
15:00	1.0	2	37	6	3	45	1.0	9	20	0	10	1.0	8	34	19	0	1.0	7	20	12	5	39	18	174	192
15:15	1.0	3	43	10	1	56	1.0	8	16	3	6	1.0	10	59	19	6	1.0	4	19	12	3	35	16	206	222
15:30	1.0	2	48	14	1	64	1.0	11	23	2	10	1.0	10	72	14	2	1.0	29	27	6	3	62	16	258	274
15:45	1.0	4	26	6	2	36	1.0	11	32	0	7	1.0	12	67	20	0	1.0	7	22	17	7	46	16	224	240
Total		11	154	36	7	201		39	91	5	33		40	232	72	8		47	88	47	18	182	66	862	928
16:00	1.0	0	50	14	1	64	1.0	1	31	6	7	1.0	13	76	28	3	1.0	19	27	8	0	54	11	273	284
16:15	1.0	1	42	14	4	57	1.0	12	30	1	7	1.0	7	69	28	3	1.0	5	20	17	4	42	18	246	264
16:30	1.0	2	49	4	1	55	1.0	7	22	2	3	1.0	6	62	27	1	1.0	18	15	6	3	39	8	220	228
16:45	1.0	3	38	10	0	51	1.0	19	27	1	2	1.0	11	91	22	3	1.0	24	37	16	5	77	10	299	309
Total		6	179	42	6	227		39	110	10	19		37	298	105	10		66	99	47	12	212	47	1038	1085

Anoka County Highway Department Traffic Engineering

Weather: Partly Cloudy
Counter TDC-8
Counted by: Ryan & Justin

Traffic Volume and Turning Movement Stud

File Name : TMC0010
Site Code : 00100101
Start Date : 06/14/2000
Page No : 2

Groups Printed- 1 - Unshifted

Start Time	CSAH 78 (Hanson Blvd.) Southbound					CR 18 (Crosstown Blvd.) Westbound					CSAH 78 (Hanson Blvd.) Northbound					CR 18 (Crosstown Blvd.) Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	App. Total	Left	Thru	Right	Heavy	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				
17:00	6	36	7	3	49	14	20	6	1	40	11	69	15	1	95	12	14	8	3	34	8	218	228
17:15	2	39	13	1	54	11	22	1	0	34	12	96	23	0	131	13	27	5	3	45	4	264	268
17:30	1	34	16	0	51	12	31	1	1	44	29	97	22	2	148	12	20	10	1	42	4	285	289
17:45	4	63	41	3	108	12	39	1	1	52	38	89	15	0	142	21	40	6	1	67	5	369	374
Total	13	172	77	7	262	49	112	9	3	170	90	351	75	3	516	58	101	29	8	188	21	1136	1157
18:00	3	29	11	1	43	9	12	6	0	27	39	101	12	0	152	28	25	6	1	59	2	281	283
18:15	0	56	13	1	69	9	17	6	0	32	31	100	24	1	155	23	20	8	2	51	4	307	311
18:30	7	35	26	0	68	16	32	3	0	51	40	54	23	0	117	2	32	15	0	49	0	285	285
18:45	1	52	8	0	61	14	20	2	0	36	52	73	16	0	141	11	27	20	0	58	0	296	296
Total	11	172	58	2	241	48	81	17	0	146	162	328	75	1	565	64	104	49	3	217	6	1169	1175
19:00	1	58	23	0	82	14	41	1	0	56	51	68	9	0	128	20	13	26	0	59	0	325	325
19:15	3	44	17	0	64	13	10	0	0	23	29	55	12	0	96	34	28	31	0	93	0	276	276
19:30	2	42	15	0	59	3	18	0	0	21	16	54	13	0	83	7	17	25	0	49	0	212	212
19:45	0	34	15	0	49	6	16	2	0	24	19	45	12	0	76	36	21	32	0	89	0	238	238
Total	6	178	70	0	254	36	85	3	0	124	115	222	46	0	383	97	79	114	0	290	0	1051	1051
20:00	2	45	21	0	68	3	27	0	0	30	24	40	5	0	69	16	23	14	0	53	0	220	220
20:15	0	59	38	0	97	19	12	0	0	31	16	41	12	0	69	14	21	23	0	58	0	255	255
20:30	0	43	5	0	48	4	13	4	0	21	15	56	20	0	91	17	29	56	0	102	0	262	262
20:45	1	36	36	0	73	10	21	0	0	31	12	37	16	0	65	11	12	16	0	39	0	208	208
Total	3	183	100	0	286	36	73	4	0	113	67	174	53	0	294	58	85	109	0	252	0	945	945
21:00	4	36	13	0	53	12	9	0	0	21	11	28	7	0	46	11	30	23	0	64	0	184	184
21:15	0	35	6	0	41	5	14	0	0	19	10	27	13	0	50	3	9	10	0	22	0	132	132
21:30	0	32	2	0	34	8	9	0	0	17	6	30	8	0	44	2	9	15	0	26	0	121	121
21:45	1	27	3	0	31	9	17	3	0	29	8	32	5	1	45	1	12	5	0	18	1	123	124
Total	5	130	24	0	159	34	49	3	0	86	35	117	33	1	185	17	60	53	0	130	1	580	581
Grand Total	131	269	759	58	3585	813	1387	120	257	2320	756	2780	844	60	4380	759	1275	759	208	2793	583	13078	13661
Apprch %	3.7	75.2	21.2			35.0	59.8	5.2			17.3	63.5	19.3			27.2	45.6	27.2			4.3	95.7	
Total %	1.0	20.6	5.8		27.4	6.2	10.6	0.9		17.7	5.8	21.3	6.5		33.5	5.8	9.7	5.8		21.4			

or Street Approaches:

Northbound:

CSAH 78 (Hanson Blvd.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0010.war
 Count Type: IMC. Channel: 0. Count Date: 6/14/ 0
 Number of Lanes: 2
 Approach Speed: 55
 Total Approach Traffic: 4380

Southbound:

CSAH 78 (Hanson Blvd.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0010.war
 Count Type: IMC. Channel: 0. Count Date: 6/14/ 0
 Number of Lanes: 2
 Approach Speed: 55
 Total Approach Traffic: 3585

Minor Street Approaches:

Eastbound:

CR 18 (Crosstown Blvd.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0010.war
 Count Type: IMC. Channel: 0. Count Date: 6/14/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 2793

Westbound:

CR 18 (Crosstown Blvd.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0010.war
 Count Type: IMC. Channel: 0. Count Date: 6/14/ 0
 Number of Lanes: 2
 Approach Speed: 45
 Total Approach Traffic: 2338

Analysis of 8-Hour Volume Warrants (Criteria refers to high volume side street for that hour):

Hour	Main (Total)	Side Vol.	Dir.	Rank	Warrant 1 Meets?	Warrant 1 Criteria	Warrant 2 Meets?	Warrant 2 Criteria	Warrant 8 Meets?	Warrant 8 Criteria
0	0	0	W	18		140		70		112
1	0	0	W	19		140		70		112
2	0	18	W	17		140		70		112
3	0	0	W	20		140		70		112
4	0	0	W	21		140		70		112
5	0	0	W	22		140		70		112
6	408	201	W	5	SIDE	140	SIDE	70	SIDE	112
7	491	189	W	6	--BOTH--	140	SIDE	70	SIDE	112
8	408	173	W	10	SIDE	140	SIDE	70	SIDE	112
9	367	147	W	15	SIDE	140	SIDE	70	SIDE	112
10	310	156	E	13	SIDE	140	SIDE	70	SIDE	112
11	395	163	E	12	SIDE	140	SIDE	70	SIDE	112
12	381	184	E	8	SIDE	140	SIDE	70	SIDE	112
13	405	165	E	11	SIDE	140	SIDE	70	SIDE	112
14	443	150	E	14	--BOTH--	140	SIDE	70	SIDE	112
15	545	182	E	9	--BOTH--	140	SIDE	70	--BOTH--	112
16	667	212	E	4	--BOTH--	140	--BOTH--	70	--BOTH--	112
17	778	188	E	7	--BOTH--	140	--BOTH--	70	--BOTH--	112
18	806	217	E	3	--BOTH--	140	--BOTH--	70	--BOTH--	112
19	637	290	E	1	--BOTH--	140	--BOTH--	70	--BOTH--	112
20	580	252	E	2	--BOTH--	140	SIDE	70	--BOTH--	112
21	344	130	E	16		140	SIDE	70	SIDE	112
22	0	0	W	23		140		70		112
23	0	0	W	24		140		70		112

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

SATISFIED for 8 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 4 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. 8th-High Hour--Pedestrians: 38; Vehicles: 395. Criteria--Pedestrians: 105; Vehicles: 420.

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: 1169.

- Approaches which are part of the principal through traffic roadway network.
- Approaches which connect areas of principal traffic generation.
- Approaches which include rural or suburban highways outside, entering or traversing a city.
- Approaches which have surface street freeway or expressway ramp terminals.
- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 6 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

SATISFIED for 5 hours.

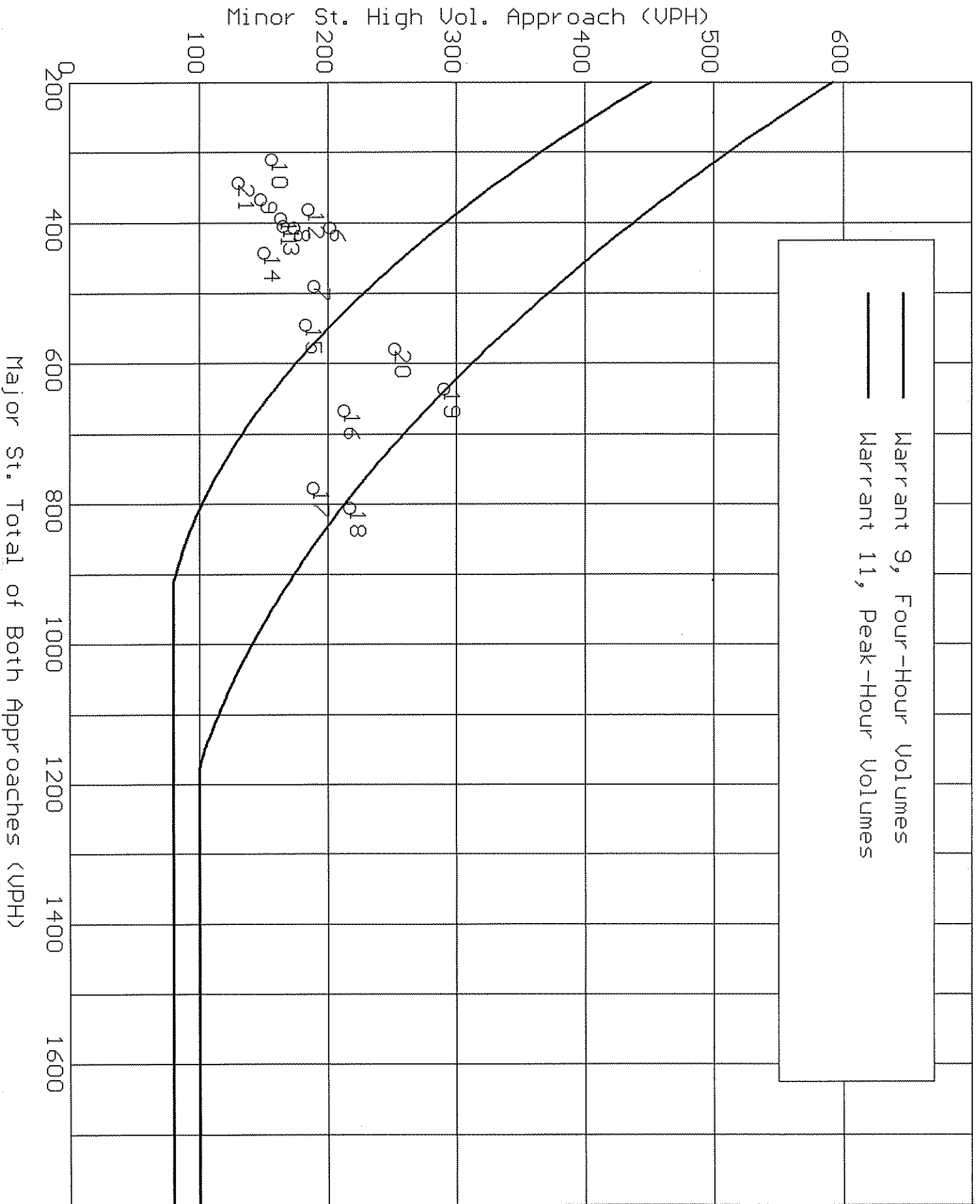
Warrant 10 - Peak Hour Delay

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

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 150.

Warrant 11 - Peak Hour Volume

SATISFIED for 2 hours.





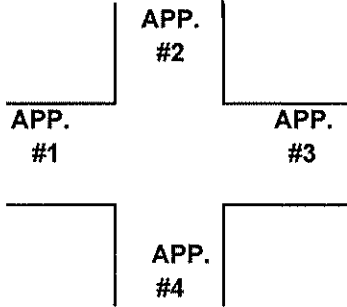
COUNT LOCATION:

CSAH 78 (Hanson Blvd.) @
CR 18 (Crosstown Blvd.)

DATE:

6/14/00

APP. #1=SB CSAH 78 (Hanson Blvd.)
APP. #2 =WB CR 18 (Crosstown Blvd.)
APP. #3=NB CSAH 78 (Hanson Blvd.)
APP. #4=EB CR 18 (Crosstown Blvd.)



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						4		
6:15-6:30						2		
6:30-6:45						8		
6:45-7:00						8		2
HOURLY TOTAL						HOURLY TOTAL		24
7:00-7:15						13		
7:15-7:30						9		
7:30-7:45						13		1
7:45-8:00						11		5
HOURLY TOTAL						HOURLY TOTAL		53
8:00-8:15						10		1
8:15-8:30						18		1
8:30-8:45						14		
8:45-9:00						14		
HOURLY TOTAL						HOURLY TOTAL		58
9:00-9:15						11		
9:15-9:30						13		
9:30-9:45						15		
9:45-10:00						14		
HOURLY TOTAL						HOURLY TOTAL		53
10:00-10:15						11		
10:15-10:30						12		
10:30-10:45						10		
10:45-11:00						11		2
HOURLY TOTAL						HOURLY TOTAL		46
11:00-11:15						8		2
11:15-11:30						9		
11:30-11:45						12		
11:45-12:00						9		1
HOURLY TOTAL						HOURLY TOTAL		41
12:00-12:15						11		
12:15-12:30						12		
12:30-12:45						9		
12:45-1:00						7		
HOURLY TOTAL						HOURLY TOTAL		39
1:00-1:15						12		
1:15-1:30						16		
1:30-1:45						12		
1:45-2:00						8		
HOURLY TOTAL						HOURLY TOTAL		48



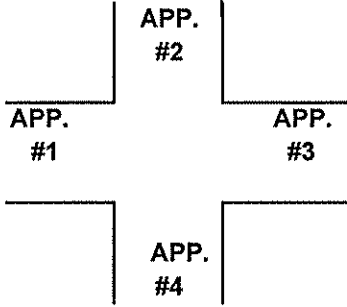
COUNT LOCATION:

CSAH 78 (Hanson Blvd.) @
CR 18 (Crosstown Blvd.)

DATE:

6/14/00

APP. #1=SB CSAH 78 (Hanson Blvd.)
APP. #2 =WB CR 18 (Crosstown Blvd.)
APP. #3=NB CSAH 78 (Hanson Blvd.)
APP. #4=EB CR 18 (Crosstown Blvd.)



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						15		
2:15-2:30						16		1
2:30-2:45						21		
2:45-3:00						14		
HOURLY TOTAL						HOURLY TOTAL		67
3:00-3:15						19		
3:15-3:30						17		
3:30-3:45						16		
3:45-4:00						16		
HOURLY TOTAL						HOURLY TOTAL		68
4:00-4:15						11		
4:15-4:30						17		1
4:30-4:45						7		
4:45-5:00						9		
HOURLY TOTAL						HOURLY TOTAL		45
5:00-5:15						6		1
5:15-5:30						4		
5:30-5:45						4		
5:45-6:00						5		
HOURLY TOTAL						HOURLY TOTAL		20
6:00-6:15						2		
6:15-6:30						4		
6:30-6:45								
6:45-7:00								
HOURLY TOTAL						HOURLY TOTAL		6
7:00-7:15								
7:15-7:30								
7:30-7:45								
7:45-8:00								
HOURLY TOTAL						HOURLY TOTAL		
8:00-8:15								
8:15-8:30								
8:30-8:45								
8:45-9:00								
HOURLY TOTAL						HOURLY TOTAL		
9:00-9:15								
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		