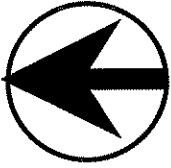


Date : 05/31/00

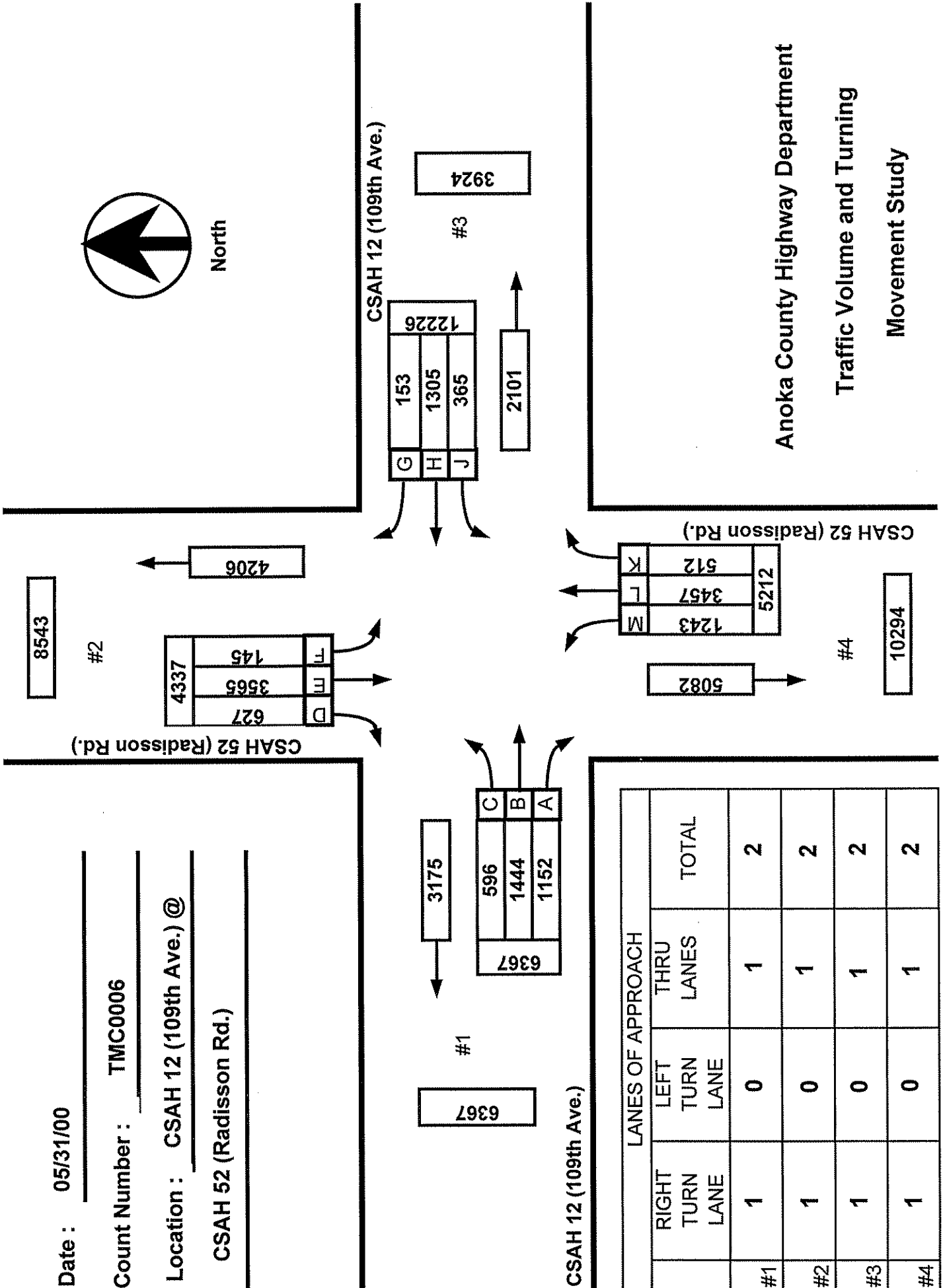
Count Number : TMC0006

Location : CSAH 12 (109th Ave.) @

CSAH 52 (Radisson Rd.)



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
Traffic Volume and Turning Movement Stud**

Weather: Sunny
 Inter TDC-8
 Counted by: Ryan & Justin

File Name : TMC0006
 Site Code : 00060101
 Start Date : 05/31/2000
 Page No : 1

Groups Printed- 1 - Unshifted

Start Time	CSAH 52 (Radisson Rd.) Southbound					CSAH 12 (109th Ave.) Westbound					CSAH 52 (Radisson Rd.) Northbound					CSAH 12 (109th Ave.) 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				
06:00	0	140	6	3	146	7	11	0	0	18	4	9	1	2	14	2	15	28	0	45	5	223	228
06:15	2	172	8	0	182	10	7	1	0	18	9	13	2	1	24	7	19	24	1	50	2	274	276
06:30	6	167	8	0	181	20	18	1	0	39	9	15	2	1	26	4	30	31	0	65	1	311	312
06:45	7	217	6	2	230	20	23	0	2	43	9	13	2	2	24	10	40	33	1	83	7	380	387
Total	15	696	28	5	739	57	59	2	2	118	31	50	7	6	88	23	104	116	2	243	15	1188	1203
07:00	7	202	8	1	217	14	20	0	0	34	9	14	5	3	28	6	27	34	0	67	4	346	350
07:15	6	166	15	0	187	16	22	1	3	39	11	16	5	5	32	5	40	33	2	78	10	336	346
07:30	4	161	6	2	171	18	21	3	3	42	14	17	11	4	42	3	46	41	3	90	12	345	357
07:45	2	163	11	1	176	22	27	1	0	50	10	9	6	0	25	11	43	29	3	83	4	334	338
Total	19	692	40	4	751	70	90	5	6	165	44	56	27	12	127	25	156	137	8	318	30	1361	1391
08:00	3	92	10	1	105	9	24	1	2	34	3	15	6	7	24	9	41	33	0	83	10	246	256
08:15	3	65	8	4	76	4	19	1	2	24	10	18	1	6	29	5	20	25	0	50	12	179	191
08:30	3	63	11	4	77	5	20	4	2	29	11	6	1	3	18	8	14	20	1	42	10	166	176
08:45	2	59	6	3	67	5	11	2	1	18	17	7	3	1	27	8	21	10	3	39	8	151	159
Total	11	279	35	12	325	23	74	8	7	105	41	46	11	17	98	30	96	88	4	214	40	742	782
09:00	3	38	5	2	46	5	12	3	0	20	2	16	3	1	21	7	14	16	0	37	3	124	127
09:15	1	54	5	2	60	3	13	1	1	17	17	11	1	2	29	9	13	17	3	39	8	145	153
09:30	0	42	8	2	50	6	11	5	0	22	13	16	5	1	34	4	5	11	1	20	4	126	130
09:45	1	47	6	2	54	9	16	1	0	26	6	20	3	2	29	3	10	9	1	22	5	131	136
Total	5	181	24	8	210	23	52	10	1	85	38	63	12	6	113	23	42	53	5	118	20	526	546
10:00	2	22	9	3	33	11	20	0	0	31	15	18	6	4	39	7	18	13	4	38	11	141	152
10:15	0	29	7	0	36	8	15	3	0	26	12	17	5	2	34	5	11	10	1	26	3	122	125
10:30	1	42	3	0	46	4	10	2	1	16	9	18	1	4	28	13	15	9	1	37	6	127	133
10:45	1	39	10	1	50	5	19	0	1	24	5	19	3	3	27	6	20	11	0	37	5	138	143
Total	4	132	29	4	165	28	64	5	2	97	41	72	15	13	128	31	64	43	6	138	25	528	553
11:00	3	27	18	2	48	6	10	0	2	16	10	25	1	1	36	4	36	17	1	57	6	157	163
11:15	3	42	14	0	59	4	11	2	2	17	13	22	4	3	39	6	19	15	0	40	5	155	160
11:30	3	53	17	0	73	3	12	1	0	16	9	19	2	3	30	12	22	14	0	48	3	167	170
11:45	2	29	10	2	41	3	22	5	3	30	14	36	9	3	59	14	17	15	0	46	8	176	184
Total	11	151	59	4	221	16	55	8	7	79	46	102	16	10	164	36	94	61	1	191	22	655	677
12:00	1	35	7	2	43	2	23	2	0	27	18	30	11	2	59	6	7	6	1	19	5	148	153
12:15	2	46	7	1	55	2	12	2	0	16	22	19	8	0	49	6	14	13	0	33	1	153	154
12:30	5	34	8	0	47	0	15	0	0	15	22	33	9	0	64	13	15	22	2	50	2	176	178
12:45	4	56	14	0	74	6	8	0	2	14	22	23	17	0	62	7	28	12	1	47	3	197	200
Total	12	171	36	3	219	10	58	4	2	72	84	105	45	2	234	32	64	53	4	149	11	674	685
13:00	1	37	5	2	43	8	14	0	1	22	12	30	0	2	42	10	15	12	3	37	8	144	152
13:15	5	25	11	1	41	8	17	1	1	26	9	40	1	0	50	8	15	14	1	37	3	154	157
13:30	3	36	12	0	51	1	19	3	0	23	13	34	11	2	58	7	18	20	2	45	4	177	181
13:45	3	35	7	1	45	2	15	1	2	18	14	37	9	1	60	6	19	20	1	45	5	168	173
Total	12	133	35	4	180	19	65	5	4	89	48	141	21	5	210	31	67	66	7	164	20	643	663
14:00	1	33	9	2	43	4	17	0	0	21	10	37	9	0	56	7	16	16	0	39	2	159	161
14:15	1	34	11	0	46	5	13	2	1	20	9	48	5	1	62	15	13	16	0	44	2	172	174
14:30	1	40	7	0	48	3	13	3	3	19	19	57	6	3	82	15	28	11	3	54	9	203	212
14:45	3	34	10	2	47	2	22	5	1	29	31	61	1	0	93	12	19	9	0	40	3	209	212
Total	6	141	37	4	184	14	65	10	5	89	69	203	21	4	293	49	76	52	3	177	16	743	759
15:00	1	50	8	1	59	1	39	5	1	45	30	73	5	2	108	9	10	18	2	37	6	249	255
15:15	1	37	9	1	47	7	21	1	2	29	23	81	9	4	113	11	26	12	1	49	8	238	246
15:30	4	36	18	3	58	11	29	2	2	42	56	108	9	3	173	10	38	11	0	59	8	332	340
15:45	3	46	16	0	65	2	18	4	2	24	40	134	16	6	190	16	29	26	0	71	8	350	358
Total	9	169	51	5	229	21	107	12	7	140	149	396	39	15	584	46	103	67	3	216	30	1169	1199
16:00	6	28	4	3	38	5	51	9	2	65	31	131	18	3	180	18	23	15	2	56	10	339	349
16:15	1	24	13	0	38	2	30	2	0	34	40	149	24	5	213	22	33	23	1	78	6	363	369
16:30	6	30	19	1	55	4	26	7	2	37	35	197	38	2	270	8	19	17	0	44	5	406	411
16:45	2	36	21	0	59	4	39	6	0	49	41	161	22	1	224	13	51	6	2	70	3	402	405
Total	15	118	57	4	190	15	146	24	4	185	147	638	102	11	887	61	126	61	5	248	24	1510	1534

**Anoka County Highway Department
Traffic Engineering
Traffic Volume and Turning Movement Stud**

Weather: Sunny
Counter TDC-8
Counted by: Ryan & Justin

File Name : TMC0006
Site Code : 00060101
Start Date : 05/31/2000
Page No : 2

Groups Printed- 1 - Unshifted

Start Time	CSAH 52 (Radisson Rd.) Southbound					CSAH 12 (109th Ave.) Westbound					CSAH 52 (Radisson Rd.) Northbound					CSAH 12 (109th Ave.) 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	3	50	23	2	76	1	38	8	0	47	46	180	18	3	244	13	41	22	0	76	5	443	448
17:15	1	38	11	1	50	11	40	5	0	56	56	173	22	0	251	8	21	18	0	47	1	404	405
17:30	2	41	9	2	52	3	31	4	1	38	40	183	24	2	247	13	33	12	1	58	6	395	401
17:45	2	64	12	1	78	5	36	3	0	44	37	185	24	2	246	16	22	19	1	57	4	425	429
Total	8	193	55	6	256	20	145	20	1	185	179	721	88	7	988	50	117	71	2	238	16	1657	1683
18:00	1	41	14	1	56	8	54	14	0	76	54	129	6	0	189	18	34	21	1	73	2	394	396
18:15	1	45	14	0	60	8	20	3	0	31	33	119	17	0	169	6	26	13	0	45	0	305	305
18:30	3	38	14	0	55	3	20	1	0	24	16	57	15	0	88	8	29	23	0	60	0	227	227
18:45	3	51	7	2	61	1	18	2	0	21	9	54	7	0	70	10	17	14	0	41	2	193	195
Total	8	175	49	3	232	20	112	20	0	152	112	359	45	0	516	42	106	71	1	219	4	1119	1123
19:00	1	40	13	0	54	3	12	2	0	17	18	52	9	0	79	6	12	22	0	40	0	190	190
19:15	2	32	7	0	41	4	25	5	0	34	16	47	3	0	66	14	21	16	0	51	0	192	192
19:30	0	31	7	2	38	5	43	1	0	49	14	66	5	0	85	8	16	13	0	37	2	209	211
19:45	2	30	7	0	39	4	13	3	0	20	18	38	6	1	62	9	23	10	0	42	1	163	164
Total	5	133	34	2	172	16	93	11	0	120	66	203	23	1	292	37	72	61	0	170	3	754	757
20:00	3	34	8	0	45	1	20	0	0	21	18	27	8	0	53	8	15	6	0	29	0	148	148
20:15	1	14	4	0	19	2	21	0	0	23	31	36	2	0	69	9	27	8	0	44	0	155	155
20:30	0	22	9	0	31	1	18	2	1	21	17	41	8	0	66	15	17	14	0	46	1	164	165
20:45	0	22	4	0	26	0	9	0	0	9	10	41	7	0	58	15	37	39	0	91	0	184	184
Total	4	92	25	0	121	4	68	2	1	74	76	145	25	0	246	47	96	67	0	210	1	651	652
21:00	1	32	8	0	41	3	21	3	0	27	9	43	8	0	60	17	15	31	0	63	0	191	191
21:15	0	25	11	0	36	1	12	1	0	14	18	39	2	1	59	6	18	14	0	38	1	147	148
21:30	0	25	7	0	32	2	9	2	0	13	24	37	3	1	64	5	13	23	0	41	1	150	151
21:45	0	27	7	0	34	3	10	1	0	14	21	38	2	0	61	5	15	17	0	37	0	146	146
Total	1	109	33	0	143	9	52	7	0	68	72	157	15	2	244	33	61	85	0	179	2	634	636
Grand Total	145	356	627	68	4337	365	1305	153	49	1823	1243	3457	512	111	5212	596	1444	1152	51	3192	279	14564	14843
Approch %	3.3	82.2	14.5			20.0	71.6	8.4			23.8	66.3	9.8			18.7	45.2	36.1					
Total %	1.0	24.5	4.3		29.8	2.5	9.0	1.1		12.5	8.5	23.7	3.5		35.8	4.1	9.9	7.9		21.9	1.9	98.1	

Major Street Approaches:

Eastbound:

CSAH 12 (109th Ave.)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0006.war
 Count Type: IMC. Channel: 0. Count Date: 5/31/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 3192

Westbound:

CSAH 12 (109th Ave.)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0006.war
 Count Type: IMC. Channel: 0. Count Date: 5/31/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 1823

Minor Street Approaches:

Northbound:

CSAH 52 (Radisson Rd.)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0006.war
 Count Type: IMC. Channel: 0. Count Date: 5/31/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 5212

Southbound:

CSAH 52 (Radisson Rd.)
 Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0006.war
 Count Type: IMC. Channel: 0. Count Date: 5/31/ 0
 Number of Lanes: 2
 Approach Speed: 55
 Total Approach Traffic: 4337

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	S	17		140		70		112
1	0	0	S	18		140		70		112
2	0	0	S	19		140		70		112
3	0	0	S	20		140		70		112
4	0	0	S	21		140		70		112
5	0	0	S	22		140		70		112
6	1827	2150		4	SIDE	140	SIDE	70	SIDE	112
7	1478	318	S	3	--BOTH--	140	SIDE	70	SIDE	112
8	1423	225	S	7	SIDE	140	SIDE	70	SIDE	112
9	323	220	S	14	SIDE	140	SIDE	70	SIDE	112
10	293	138	S	16	SIDE	140	SIDE	70	SIDE	112
11	385	191	S	13	SIDE	140	SIDE	70	SIDE	112
12	1453	149	N	12	SIDE	140	SIDE	70	SIDE	112
13	1390	164	N	15	SIDE	140	SIDE	70	SIDE	112
14	1477	177	N	8	SIDE	140	SIDE	70	SIDE	112
15	1813	216	N	5	SIDE	140	SIDE	70	SIDE	112
16	1107	248	N	2	--BOTH--	140	SIDE	70	SIDE	112
17	1124	338	N	1	--BOTH--	140	SIDE	70	SIDE	112
18	1748	219	N	6	SIDE	140	SIDE	70	SIDE	112
19	1467	170	N	9	SIDE	140	SIDE	70	SIDE	112
20	1367	210	N	10	SIDE	140	SIDE	70	SIDE	112
21	1387	179	N	11	SIDE	140	SIDE	70	SIDE	112
22	0	0	S	23		140		70		112
23	0	0	S	24		140		70		112

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 0 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. 8th-High Hour--Pedestrians: 13; Vehicles: 423. 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: 1667.

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

Warrant 9 - Four Hour Volumes

SATISFIED for 6 hours.

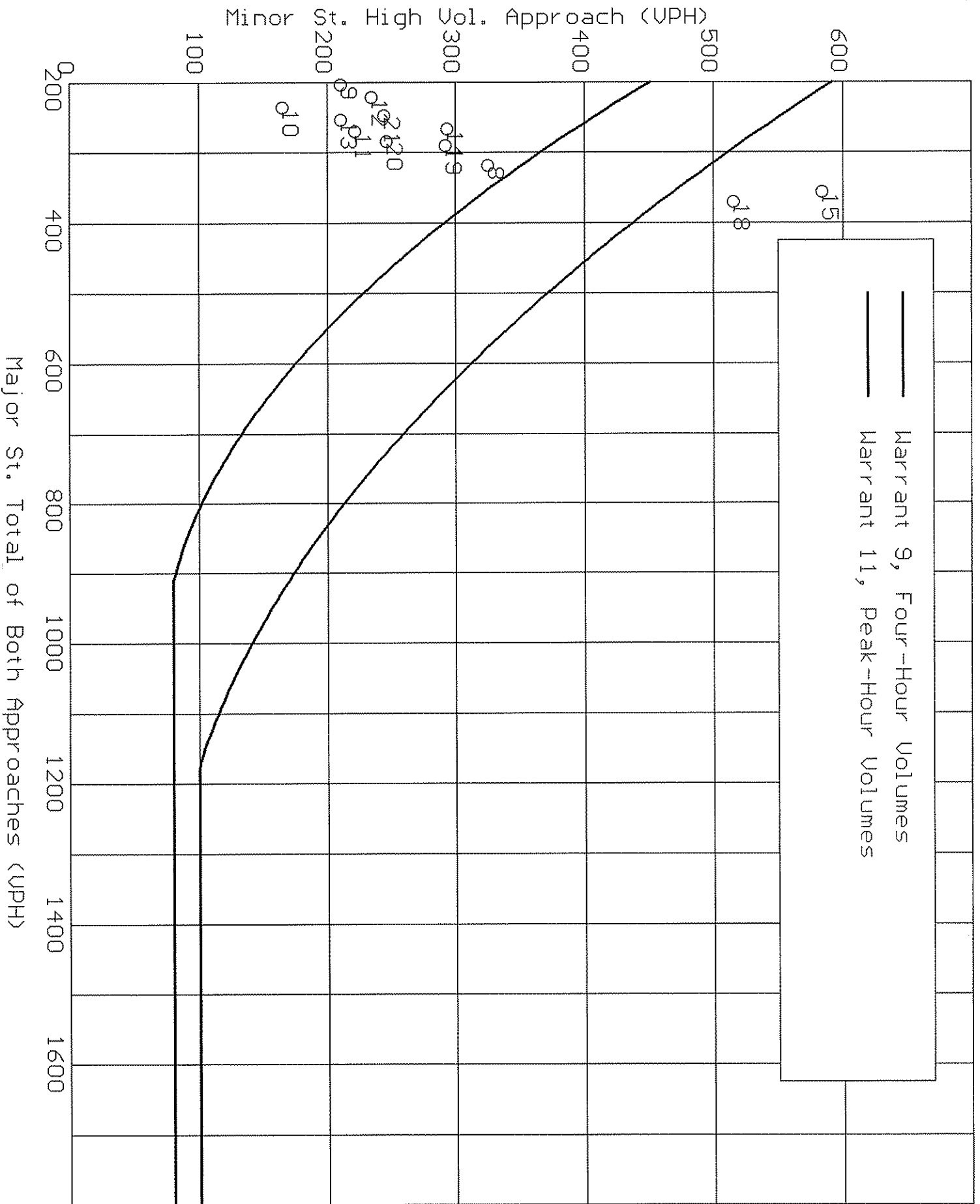
Warrant 10 - Peak Hour Delay

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

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

Warrant 11 - Peak Hour Volume

SATISFIED for 6 hours.

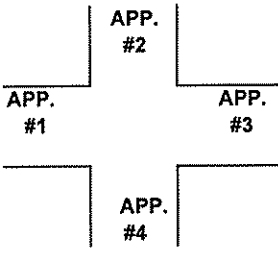




COUNT LOCATION: CSAH 12 (109th Ave.)@
 CSAH 52 (Radisson Road)

DATE: 5/31/00

APP. #1 = WB CSAH 12
 (109th Ave.)
 APP. #2 = NB CSAH 52
 (Radisson Road)
 APP. #3 = EB CSAH 12
 (109th Ave.)
 APP. #4 = SB CSAH 52
 (Radisson Road)



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.

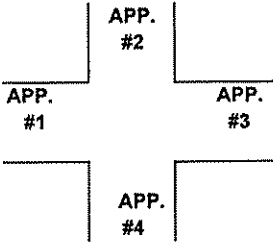
TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						5		
6:15-6:30						1		1
6:30-6:45						1		
6:45-7:00						5		2
HOURLY TOTAL						HOURLY TOTAL		15
7:00-7:15						3		1
7:15-7:30						8		2
7:30-7:45						8		3
7:45-8:00						4		1
HOURLY TOTAL						HOURLY TOTAL		30
8:00-8:15						5		4
8:15-8:30						10		2
8:30-8:45						5		5
8:45-9:00						8		
HOURLY TOTAL						HOURLY TOTAL		39
9:00-9:15						3		
9:15-9:30						8		
9:30-9:45						4		
9:45-10:00						5		
HOURLY TOTAL						HOURLY TOTAL		20
10:00-10:15						9		1
10:15-10:30						3		
10:30-10:45						5	1	
10:45-11:00						5		
HOURLY TOTAL						HOURLY TOTAL		24
11:00-11:15						6		
11:15-11:30						4		
11:30-11:45						5		
11:45-12:00						5		2
HOURLY TOTAL						HOURLY TOTAL		22
12:00-12:15						6		
12:15-12:30						1		
12:30-12:45						2		
12:45-1:00						3		
HOURLY TOTAL						HOURLY TOTAL		12
1:00-1:15						8		
1:15-1:30						2		
1:30-1:45						4		
1:45-2:00						5		
HOURLY TOTAL						HOURLY TOTAL		19

NORTH

APP. #1 = WB CSAH 12
(109th Ave.)
APP. #2 = NB CSAH 52
(Radisson Road)
APP. #3 = EB CSAH 12
(109th Ave.)
APP. #4 = SB CSAH 52
(Radisson Road)

COUNT LOCATION: CSAH 12 (109th Ave.)@
CSAH 52 (Radisson Road)

DATE: 6/5/00



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						2		
2:15-2:30						2		
2:30-2:45						7		2
2:45-3:00						3		
HOURLY TOTAL						HOURLY TOTAL		16
3:00-3:15						6		
3:15-3:30						7		1
3:30-3:45						7		1
3:45-4:00						6		2
HOURLY TOTAL						HOURLY TOTAL		30
4:00-4:15						9		1
4:15-4:30						7		
4:30-4:45						4		1
4:45-5:00						1		1
HOURLY TOTAL						HOURLY TOTAL		24
5:00-5:15						5		
5:15-5:30						1		
5:30-5:45						6		
5:45-6:00						4		
HOURLY TOTAL						HOURLY TOTAL		16
6:00-6:15						2		
6:15-6:30								
6:30-6:45								
6:45-7:00						2		
HOURLY TOTAL						HOURLY TOTAL		4
7:00-7:15								
7:15-7:30								
7:30-7:45						1	1	
7:45-8:00						1		
HOURLY TOTAL						HOURLY TOTAL		3
8:00-8:15								
8:15-8:30								
8:30-8:45						1		
8:45-9:00								
HOURLY TOTAL						HOURLY TOTAL		1
9:00-9:15								
9:15-9:30						1		
9:30-9:45						1		
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		2