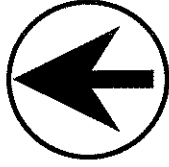


Date : 06/21/00

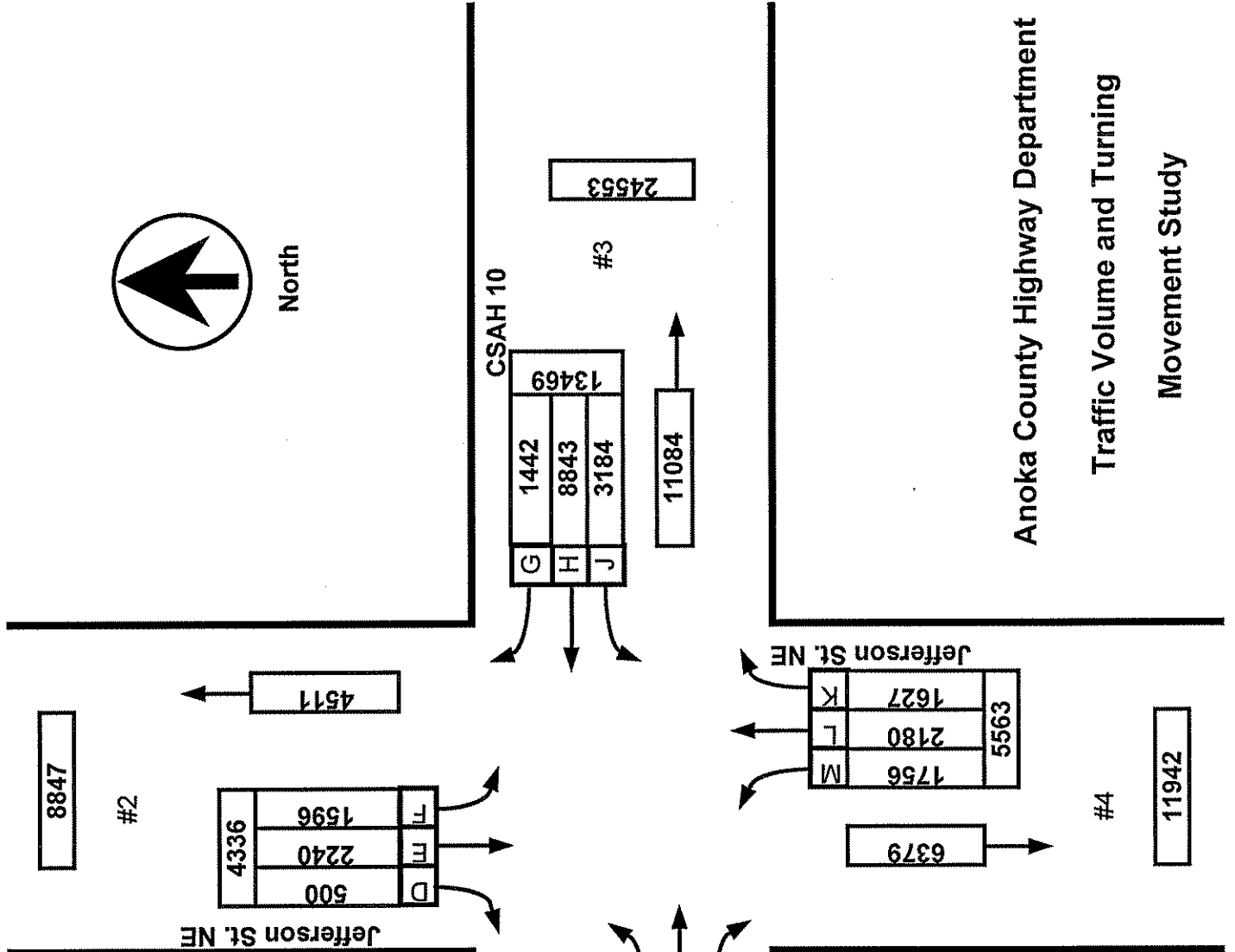
Count Number : TMC0012

Location : CSAH 10 @

Jefferson St. NE



North



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

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 Stud

File Name : TMC0012
 Site Code : 00120101
 Start Date : 06/28/2000
 Page No : 1

Groups Printed- 1 - Unshifted

Start Time	Jefferson St. NE Southbound					CSAH 10 Westbound					Jefferson St. NE Northbound					CSAH 10 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	7	2	2	1	11	1	22	2	0	25	4	5	6	0	15	0	31	1	0	32	1	83	84
06:15	8	6	1	2	15	7	50	4	3	61	5	6	9	3	20	4	114	3	2	121	10	217	227
06:30	3	5	1	1	9	9	62	7	0	78	2	2	1	2	5	2	141	14	1	157	4	249	253
06:45	7	13	1	2	21	19	77	3	2	99	2	2	14	1	18	3	182	8	1	193	6	331	337
Total	25	26	5	6	56	36	211	16	5	263	13	15	30	6	58	9	468	26	4	503	21	880	901
07:00	17	11	2	1	30	14	75	5	5	94	7	10	20	3	37	2	176	10	2	188	11	349	360
07:15	15	16	5	0	36	20	95	13	3	128	7	7	13	2	27	1	186	6	2	193	7	384	391
07:30	15	15	2	2	32	21	95	4	2	120	10	9	15	0	34	3	213	1	1	217	5	403	408
07:45	18	12	7	0	37	17	125	13	0	155	9	6	8	1	23	6	196	10	2	212	3	427	430
Total	65	54	16	3	135	72	390	35	10	497	33	32	56	6	121	12	771	27	7	810	26	1563	1589
08:00	20	11	5	1	36	18	105	8	2	131	7	7	16	2	30	4	151	10	2	165	7	362	369
08:15	13	16	15	1	44	21	95	7	3	123	8	9	11	0	28	6	172	12	0	190	4	385	389
08:30	18	11	6	0	35	19	96	14	4	129	8	12	12	0	32	6	116	8	5	130	9	326	335
08:45	13	23	4	1	40	23	118	16	1	157	10	12	9	0	31	11	94	15	3	120	5	348	353
Total	64	61	30	3	155	81	414	45	10	540	33	40	48	2	121	27	533	45	10	605	25	1421	1446
09:00	15	22	2	0	39	33	87	18	2	138	13	9	8	3	30	10	87	15	5	112	10	319	329
09:15	18	20	3	1	41	34	93	10	2	137	8	19	10	0	37	4	84	19	3	107	6	322	328
09:30	17	29	2	0	48	41	89	34	2	164	7	20	13	0	40	2	72	9	2	83	4	335	339
09:45	28	39	3	0	70	46	82	18	1	146	9	21	7	0	37	7	103	15	3	125	4	378	382
Total	78	110	10	1	198	154	351	80	7	585	37	69	38	3	144	23	346	58	13	427	24	1354	1378
10:00	21	22	5	0	48	44	85	10	2	139	15	22	10	0	47	4	84	8	1	96	3	330	333
10:15	27	20	1	0	48	57	112	20	5	189	7	33	18	0	58	10	76	18	3	104	8	399	407
10:30	32	25	2	1	59	37	89	14	4	140	13	29	11	1	53	6	93	10	2	109	8	361	369
10:45	21	34	3	0	58	54	116	18	3	188	27	31	14	1	72	14	99	6	1	119	5	437	442
Total	101	101	11	1	213	192	402	62	14	656	62	115	53	2	230	34	352	42	7	428	24	1527	1551
11:00	38	51	0	1	89	65	120	33	2	218	22	30	20	0	72	9	141	14	0	164	3	543	546
11:15	24	33	5	0	62	62	124	45	0	231	26	34	32	1	92	19	116	28	0	163	1	548	549
11:30	41	50	11	0	102	57	138	27	3	222	29	37	27	0	93	14	92	7	0	113	3	530	533
11:45	42	40	10	0	92	78	179	41	3	298	19	32	22	0	73	20	124	12	2	156	5	619	624
Total	145	174	26	1	345	262	561	146	8	969	96	133	101	1	330	62	473	61	2	596	12	2240	2252
12:00	27	48	5	1	80	62	147	25	3	234	43	47	22	2	112	28	141	9	2	178	8	604	612
12:15	28	53	7	0	88	96	194	45	1	335	23	41	15	0	79	22	126	8	3	156	4	658	662
12:30	51	30	15	0	96	63	158	40	3	261	30	57	40	2	127	38	119	29	2	186	7	670	677
12:45	54	72	20	0	146	60	147	43	1	250	44	43	20	0	107	26	119	17	3	162	4	665	669
Total	160	203	47	1	410	281	646	153	8	1080	140	188	97	4	425	114	505	63	10	682	23	2597	2620
13:00	34	43	11	0	88	62	151	22	4	235	39	49	28	0	116	25	167	18	2	210	6	649	655
13:15	21	63	12	0	96	72	152	29	1	253	32	45	32	0	109	27	146	18	2	191	3	649	652
13:30	25	59	8	0	92	61	154	27	1	242	26	43	19	0	88	23	150	25	3	198	4	620	624
13:45	19	69	11	0	99	59	157	35	3	251	26	47	23	0	96	22	155	19	2	196	5	642	647
Total	99	234	42	0	375	254	614	113	9	981	123	184	102	0	409	97	618	80	9	795	18	2560	2578
14:00	28	36	7	0	71	70	139	19	3	228	21	34	12	0	67	15	115	17	2	147	5	513	518
14:15	28	41	15	1	84	69	149	25	3	243	40	34	55	1	129	20	118	21	0	159	5	615	620
14:30	37	42	8	0	87	61	143	21	2	225	39	50	7	1	96	15	146	21	3	182	6	590	596
14:45	30	33	9	0	72	57	198	28	3	283	43	47	38	0	128	22	165	19	2	206	5	689	694
Total	123	152	39	1	314	257	629	93	11	979	143	165	112	2	420	72	544	78	7	694	21	2407	2428
15:00	37	32	5	0	74	70	163	21	3	254	59	62	46	1	167	23	131	26	2	180	6	675	681
15:15	26	25	15	0	66	77	252	56	4	385	44	46	43	1	133	22	143	18	2	183	7	767	774
15:30	20	33	7	0	60	74	262	31	0	367	33	38	31	0	102	11	148	24	3	183	3	712	715
15:45	19	45	13	0	77	62	247	59	1	368	37	47	48	0	132	13	152	24	3	189	4	766	770
Total	102	135	40	0	277	283	924	167	8	1374	173	193	168	2	534	69	574	92	10	735	20	2920	2940
16:00	27	37	26	0	90	59	254	22	1	335	38	49	37	0	124	26	155	12	1	193	2	742	744
16:15	41	48	13	1	102	44	315	34	1	393	26	54	36	1	116	15	199	50	2	264	5	875	880
16:30	27	58	20	0	105	65	304	31	0	400	18	60	44	1	122	16	150	24	9	190	10	817	827
16:45	31	59	15	1	105	60	283	27	0	370	49	24	46	2	119	27	140	24	1	191	4	785	789
Total	126	202	74	2	402	228	1156	114	2	1498	131	187	163	4	481	84	644	110	13	838	21	3219	3240

Anoka County Highway Department
Traffic Engineering

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

Traffic Volume and Turning Movement Stud

File Name : TMC0012
Site Code : 00120101
Start Date : 06/28/2000
Page No : 2

Groups Printed- 1 - Unshifted

Start Time	Jefferson St. NE Southbound					CSAH 10 Westbound					Jefferson St. NE Northbound					CSAH 10 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	34	63	27	1	124	45	254	33	1	332	70	60	40	1	170	16	132	17	1	165	4	791	795
17:15	40	46	9	0	95	72	219	27	1	318	59	63	28	2	150	32	136	8	0	176	3	739	742
17:30	29	66	13	1	108	84	232	23	0	339	51	48	22	1	121	22	124	21	0	167	2	735	737
17:45	25	69	7	0	101	87	194	44	0	325	31	79	34	1	144	23	107	14	2	144	3	714	717
Total	128	244	56	2	428	288	899	127	2	1314	211	250	124	5	585	93	499	60	3	652	12	2979	2991
18:00	36	53	4	2	93	80	181	22	0	283	35	68	47	1	150	22	115	11	1	148	4	674	678
18:15	25	39	6	0	70	61	164	24	2	249	46	30	30	1	106	15	118	20	2	153	5	578	583
18:30	40	46	3	0	89	76	159	51	0	286	28	48	25	1	101	23	107	21	1	151	2	627	629
18:45	44	48	14	0	106	54	128	15	0	197	21	41	36	0	98	18	99	15	0	132	0	533	533
Total	145	186	27	2	358	271	632	112	2	1015	130	187	138	3	455	78	439	67	4	584	11	2412	2423
19:00	17	48	5	0	70	79	102	26	1	207	26	44	39	1	109	16	102	20	1	138	3	524	527
19:15	24	51	14	0	89	66	127	13	0	206	28	36	25	0	89	22	110	10	0	142	0	526	526
19:30	22	37	8	0	67	52	111	11	0	174	46	26	53	0	125	15	111	20	0	146	0	512	512
19:45	26	43	4	0	73	70	101	33	0	204	45	65	26	0	136	9	119	12	1	140	1	553	554
Total	89	179	31	0	299	267	441	83	1	791	145	171	143	1	459	62	442	62	2	566	4	2115	2119
20:00	20	26	7	0	53	72	79	15	1	166	39	37	42	0	118	7	107	10	0	124	1	461	462
20:15	23	24	6	0	53	46	108	15	0	169	44	33	52	0	129	12	111	18	0	141	0	492	492
20:30	28	33	12	0	73	37	100	21	0	158	40	42	9	0	91	5	84	4	1	93	1	415	416
20:45	14	31	8	0	53	23	78	14	0	115	54	20	42	0	116	5	123	11	0	139	0	423	423
Total	85	114	33	0	232	178	365	65	1	608	177	132	145	0	454	29	425	43	1	497	2	1791	1793
21:00	17	13	2	0	32	14	48	11	1	73	39	34	45	1	118	4	59	21	0	84	2	307	309
21:15	17	18	4	0	39	18	62	3	0	83	27	36	21	0	84	12	61	12	0	85	0	291	291
21:30	14	17	4	0	35	23	47	6	0	76	21	24	25	0	70	5	57	4	0	66	0	247	247
21:45	13	17	3	0	33	25	51	11	0	87	22	25	18	0	65	3	51	4	0	58	0	243	243
Total	61	65	13	0	139	80	208	31	1	319	109	119	109	1	337	24	228	41	0	293	2	1088	1090
Grand Total	159	224	500	23	4336	318	884	144	99	13469	175	218	162	42	5563	889	786	955	102	9705	266	33073	33339
Apprch %	36.8	51.7	11.5			23.6	65.7	10.7			31.6	39.2	29.2			9.2	81.0	9.8			0.8	99.2	
Total %	4.8	6.8	1.5		13.1	9.6	26.7	4.4		40.7	5.3	6.6	4.9		16.8	2.7	23.8	2.9		29.3			

or Street Approaches:

Lastbound:

CSAH 10

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0012.war
 Count Type: IMC. Channel: 0. Count Date: 6/28/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 9705

Westbound:

CSAH 10

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0012.war
 Count Type: IMC. Channel: 0. Count Date: 6/28/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 13469

Minor Street Approaches:

Northbound:

Jefferson St. NE

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0012.war
 Count Type: IMC. Channel: 0. Count Date: 6/28/ 0
 Number of Lanes: 2
 Approach Speed: 35
 Total Approach Traffic: 5563

Southbound:

Jefferson St. NE

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0012.war
 Count Type: IMC. Channel: 0. Count Date: 6/28/ 0
 Number of Lanes: 2
 Approach Speed: 35
 Total Approach Traffic: 4336

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		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	766	58	N	16	MAIN	140	MAIN	70	MAIN	112
7	1307	135	S	15	MAIN	140	--BOTH--	70	--BOTH--	112
8	1145	155	S	14	--BOTH--	140	--BOTH--	70	--BOTH--	112
9	1012	198	S	13	--BOTH--	140	--BOTH--	70	--BOTH--	112
10	1084	230	N	12	--BOTH--	140	--BOTH--	70	--BOTH--	112
11	1565	345	S	10	--BOTH--	140	--BOTH--	70	--BOTH--	112
12	1762	425	N	7	--BOTH--	140	--BOTH--	70	--BOTH--	112
13	1776	409	N	9	--BOTH--	140	--BOTH--	70	--BOTH--	112
14	1673	420	N	8	--BOTH--	140	--BOTH--	70	--BOTH--	112
15	2109	534	N	2	--BOTH--	140	--BOTH--	70	--BOTH--	112
16	2336	481	N	3	--BOTH--	140	--BOTH--	70	--BOTH--	112
17	1966	585	N	1	--BOTH--	140	--BOTH--	70	--BOTH--	112
18	1599	455	N	5	--BOTH--	140	--BOTH--	70	--BOTH--	112
19	1357	459	N	4	--BOTH--	140	--BOTH--	70	--BOTH--	112
20	1105	454	N	6	--BOTH--	140	--BOTH--	70	--BOTH--	112
21	612	337	N	11	--BOTH--	140	SIDE	70	--BOTH--	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

SATISFIED for 14 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

SATISFIED for 14 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. 8th-High Hour--Pedestrians: 4; Vehicles: 1012. 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: 3219.

- 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

SATISFIED for 15 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

SATISFIED for 15 hours.

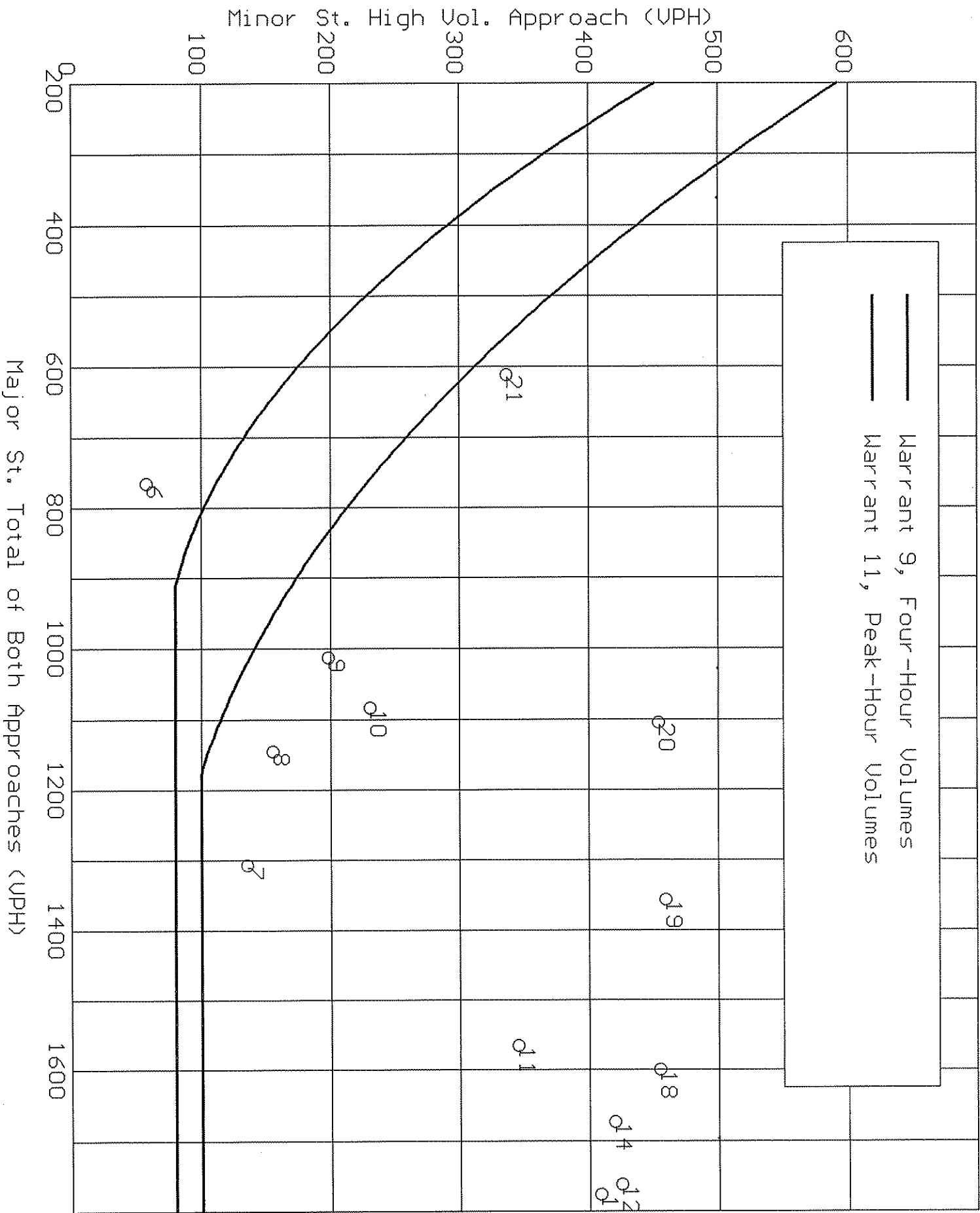
Warrant 10 - Peak Hour Delay

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 15 hours.



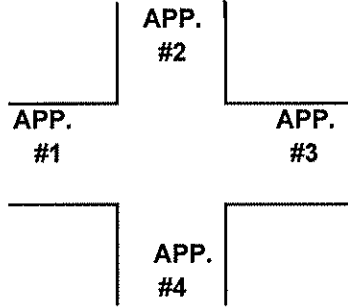
↑ NORTH
APP. #1= EB CSAH 10
APP. #2 = SB Jefferson
APP. #3= WB CSAH 10
APP. #4= NB Jefferson

COUNT LOCATION:

CSAH 10 @
Jefferson St. SE

DATE:

6/15/00



- 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
6:00-6:15AM								1
6:15-6:30						8		2
6:30-6:45						1		3
6:45-7:00						5		1
HOURLY TOTAL						HOURLY TOTAL		21
7:00-7:15						7		4
7:15-7:30						6		1
7:30-7:45						4		2
7:45-8:00						2		1
HOURLY TOTAL						HOURLY TOTAL		27
8:00-8:15						3		4
8:15-8:30						3		1
8:30-8:45						8		1
8:45-9:00						4		1
HOURLY TOTAL						HOURLY TOTAL		25
9:00-9:15						9		1
9:15-9:30						5		1
9:30-9:45						3		
9:45-10:00						4		
HOURLY TOTAL						HOURLY TOTAL		23
10:00-10:15						2		1
10:15-10:30						8		
10:30-10:45						6		1
10:45-11:00						5		
HOURLY TOTAL						HOURLY TOTAL		23
11:00-11:15						2		
11:15-11:30								
11:30-11:45						3		
11:45-12:00						5		
HOURLY TOTAL						HOURLY TOTAL		10
12:00-12:15						7		1
12:15-12:30						4		
12:30-12:45						7		1
12:45-1:00						3		
HOURLY TOTAL						HOURLY TOTAL		23
1:00-1:15						6		
1:15-1:30						3		
1:30-1:45						4		
1:45-2:00						5		
HOURLY TOTAL						HOURLY TOTAL		18

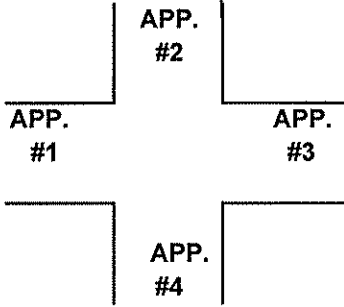
↑ NORTH
APP. #1= EB CSAH 10
APP. #2 = SB Jefferson
APP. #3= WB CSAH 10
APP. #4= NB Jefferson

COUNT LOCATION:

CSAH 10 @
Jefferson St. SE

DATE:

6/21/00



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						5		
2:15-2:30						4		1
2:30-2:45						3		3
2:45-3:00						5		
HOURLY TOTAL						HOURLY TOTAL		21
3:00-3:15						2		1
3:15-3:30						10		
3:30-3:45						3		
3:45-4:00						4		
HOURLY TOTAL						HOURLY TOTAL		20
4:00-4:15						3		
4:15-4:30						2		3
4:30-4:45						10		
4:45-5:00						2		2
HOURLY TOTAL						HOURLY TOTAL		24
5:00-5:15						1		3
5:15-5:30								3
5:30-5:45								2
5:45-6:00						1		2
HOURLY TOTAL						HOURLY TOTAL		12
6:00-6:15						1		3
6:15-6:30						3		2
6:30-6:45						1		1
6:45-7:00								
HOURLY TOTAL						HOURLY TOTAL		11
7:00-7:15						2		1
7:15-7:30								
7:30-7:45								
7:45-8:00						1		
HOURLY TOTAL						HOURLY TOTAL		4
8:00-8:15						1		
8:15-8:30								
8:30-8:45						1		
8:45-9:00								
HOURLY TOTAL						HOURLY TOTAL		2
9:00-9:15						2		
9:15-9:30								
9:30-9:45								
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		2