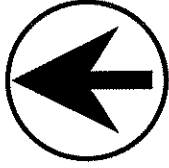


Date: 07/06/00

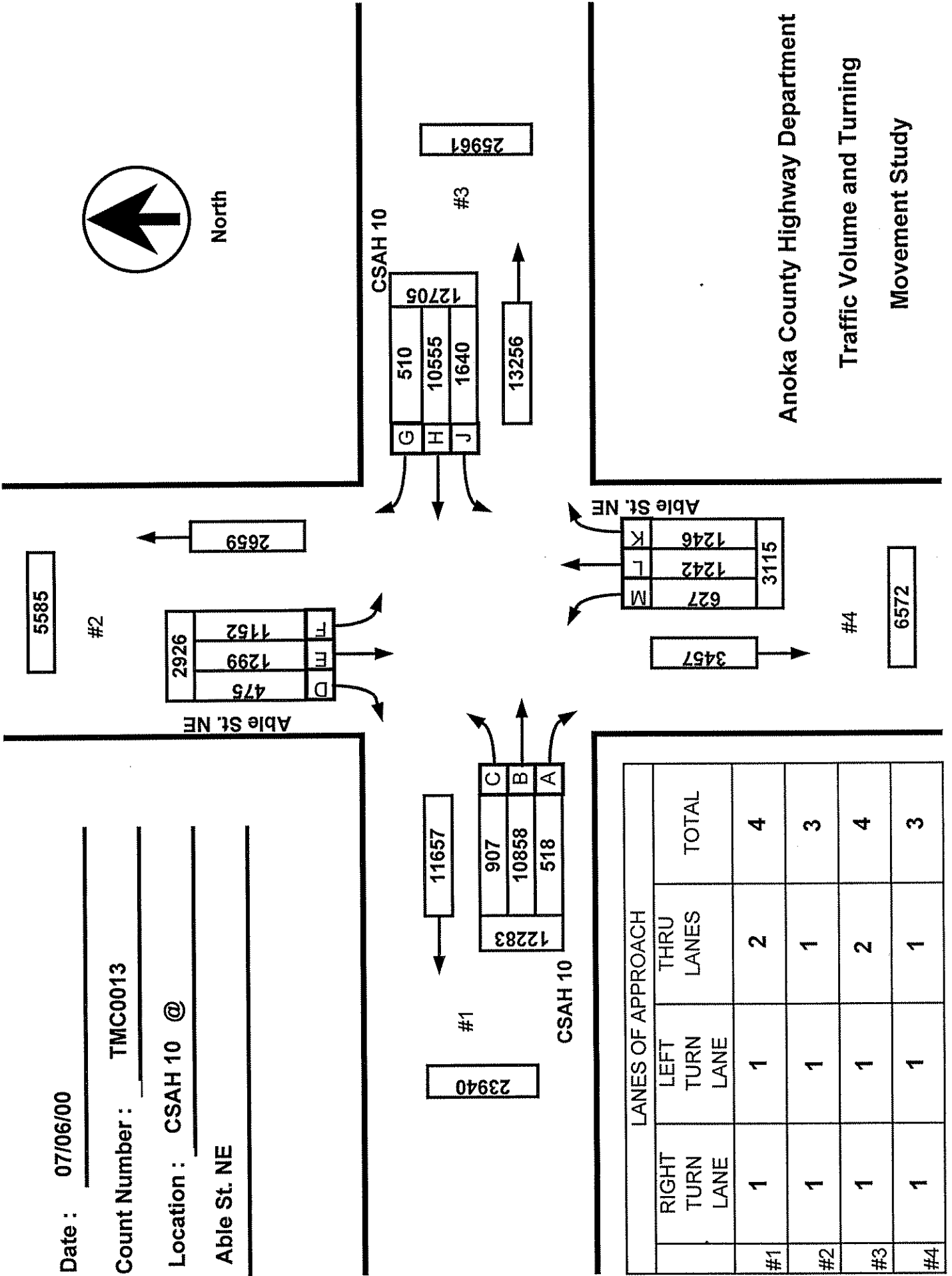
Count Number: TMC0013

Location: CSAH 10 @

Able St. NE



North



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Anoka County Highway Department
Traffic Engineering
Traffic Volume and Turning Movement Study

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

File Name : TMC0013
Site Code : 00130101
Start Date : 07/06/2000
Page No : 1

Groups Printed- 1 - Unshifted

Start Time	Able St. NE Southbound					CSAH 10 Westbound					Able 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			
06:00	11	6	1	0	18	9	37	1	1	47	0	3	12	0	15	0	94	2	3	96	4	176	180
06:15	18	23	1	0	42	1	65	3	3	69	6	4	14	0	24	1	127	3	1	131	4	266	270
06:30	23	22	2	0	47	3	55	4	2	62	2	4	22	0	28	0	165	4	1	169	3	306	309
06:45	33	29	2	0	64	6	105	4	3	115	2	3	21	0	26	0	171	2	2	173	5	378	383
Total	85	80	6	0	171	19	262	12	9	293	10	14	69	0	93	1	557	11	7	569	16	1126	1142
07:00	15	19	4	0	38	13	64	4	5	81	3	2	13	0	18	1	167	6	3	174	8	311	319
07:15	16	20	4	0	40	9	111	4	2	124	6	8	20	0	34	6	189	1	5	196	7	394	401
07:30	34	22	9	0	65	11	125	1	2	137	1	3	21	0	25	2	205	5	1	212	3	439	442
07:45	15	29	4	0	48	18	135	5	0	158	5	10	21	1	36	2	186	10	2	198	3	440	443
Total	80	90	21	0	191	51	435	14	9	500	15	23	75	1	113	11	747	22	11	780	21	1584	1605
08:00	14	16	5	0	35	19	119	1	6	139	7	3	23	1	33	6	135	9	3	150	10	357	367
08:15	20	13	3	0	36	11	95	5	1	111	5	8	18	0	31	5	128	6	2	139	3	317	320
08:30	16	21	2	2	39	15	122	8	3	145	6	13	14	2	33	3	97	10	1	110	8	327	335
08:45	11	22	4	0	37	14	133	3	3	150	8	19	22	0	49	9	116	5	2	130	5	366	371
Total	61	72	14	2	147	59	469	17	13	545	26	43	77	3	146	23	476	30	8	529	26	1367	1393
09:00	15	14	8	0	37	24	126	5	1	155	5	8	15	0	28	7	109	5	4	121	5	341	346
09:15	10	11	4	0	25	9	110	3	0	122	7	9	14	0	30	5	103	2	4	110	4	287	291
09:30	14	18	4	0	36	8	111	9	3	128	6	13	9	0	28	7	96	12	3	115	6	307	313
09:45	9	16	18	1	43	51	153	2	2	206	3	21	18	0	42	5	102	11	4	118	7	409	416
Total	48	59	34	1	141	92	500	19	6	611	21	51	56	0	128	24	410	30	15	464	22	1344	1366
10:00	14	19	4	0	37	19	135	14	5	168	6	16	22	0	44	7	126	6	5	139	10	388	398
10:15	12	15	11	0	38	18	115	2	0	135	16	12	13	0	41	7	111	6	2	124	2	338	340
10:30	7	14	7	0	28	13	145	0	2	158	14	11	20	0	45	14	116	5	4	135	6	366	372
10:45	28	21	6	0	55	17	145	5	0	167	4	13	10	0	27	15	121	12	2	148	2	397	399
Total	61	69	28	0	158	67	540	21	7	628	40	52	65	0	157	43	474	29	13	546	20	1489	1509
11:00	11	31	9	0	51	29	169	4	7	202	5	22	11	0	38	12	137	6	1	155	8	446	454
11:15	14	20	2	0	36	24	158	12	2	194	16	25	19	0	60	24	141	12	3	177	5	467	472
11:30	13	12	3	0	28	29	210	14	0	253	15	32	20	0	67	10	157	8	4	175	4	523	527
11:45	26	31	20	0	77	59	247	12	4	318	6	23	7	0	36	20	157	8	5	185	9	616	625
Total	64	94	34	0	192	141	784	42	13	967	42	102	57	0	201	66	592	34	13	692	26	2052	2078
12:00	20	17	5	0	42	34	196	30	3	260	17	26	14	0	57	32	200	9	4	241	7	600	607
12:15	23	18	12	0	53	14	211	23	3	248	6	19	22	0	47	45	216	14	1	275	4	623	627
12:30	19	45	9	0	73	42	186	15	3	243	18	26	22	0	66	22	198	7	1	227	4	609	613
12:45	34	41	13	2	88	27	191	14	6	232	23	24	14	1	61	30	215	7	5	252	14	633	647
Total	96	121	39	2	256	117	784	82	15	983	64	95	72	1	231	129	829	37	11	995	29	2465	2494
13:00	20	22	6	0	48	39	195	3	2	237	12	14	18	1	44	13	201	3	2	217	5	546	551
13:15	31	27	28	0	86	27	180	12	1	219	7	25	39	0	71	21	196	10	3	227	4	603	607
13:30	22	31	16	1	69	30	179	13	2	222	16	10	17	0	43	23	192	18	2	233	5	567	572
13:45	24	31	15	0	70	26	181	4	2	211	22	15	24	0	61	16	199	11	3	226	5	568	573
Total	97	111	65	1	273	122	735	32	7	889	57	64	98	1	219	73	788	42	10	903	19	2284	2303
14:00	17	18	5	0	40	22	213	11	2	246	14	17	19	0	50	15	206	9	5	230	7	566	573
14:15	20	18	11	0	49	20	211	18	5	249	8	20	21	0	49	18	203	12	4	233	9	580	589
14:30	15	18	10	0	43	17	205	12	0	234	5	24	17	0	46	11	192	11	1	214	1	537	538
14:45	18	15	6	0	39	39	207	20	1	266	17	13	13	0	43	20	178	5	3	203	4	551	555
Total	70	69	32	0	171	98	836	61	8	995	44	74	70	0	188	64	779	37	13	880	21	2234	2255
15:00	22	18	11	0	51	26	186	8	2	220	16	12	13	0	41	14	211	9	1	234	3	546	549
15:15	14	26	11	0	51	47	217	11	4	275	15	27	32	1	74	15	212	10	2	237	7	637	644
15:30	18	20	10	0	48	22	225	7	0	254	6	38	23	0	67	14	231	19	1	264	1	633	634
15:45	20	21	8	0	49	45	245	3	0	293	10	40	34	0	84	21	227	11	0	259	0	685	685
Total	74	85	40	0	199	140	873	29	6	1042	47	117	102	1	266	64	881	49	4	994	11	2501	2512
16:00	21	22	7	1	50	33	258	14	1	305	17	34	18	0	69	14	209	5	2	228	4	652	656
16:15	26	17	3	0	46	55	257	16	1	328	6	53	22	0	81	30	214	13	2	257	3	712	715
16:30	20	10	15	0	45	45	276	4	1	325	12	47	32	0	91	16	187	11	1	214	2	675	677
16:45	18	17	9	0	44	37	282	8	0	327	30	42	20	0	92	21	225	16	2	262	2	725	727
Total	85	66	34	1	185	170	1073	42	3	1285	65	176	92	0	333	81	835	45	7	961	11	2764	2775

Anoka County Highway Department Traffic Engineering

Traffic Volume and Turning Movement Stud

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

File Name : TMC0013
Site Code : 00130101
Start Date : 07/06/2000
Page No : 2

Groups Printed- 1 - Unshifted

Start Time	Able St. NE Southbound					CSAH 10 Westbound					Able 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	19	24	15	0	58	29	279	21	1	329	9	55	37	0	101	19	205	4	2	228	3	716	719
17:15	27	21	14	0	62	56	219	18	0	293	33	46	25	0	104	27	198	11	1	236	1	695	696
17:30	23	24	8	0	55	45	255	15	0	315	20	34	31	0	85	23	203	10	1	236	1	691	692
17:45	21	55	6	0	82	27	256	16	2	299	13	39	37	0	89	12	215	10	1	237	3	707	710
Total	90	124	43	0	257	157	1009	70	3	1236	75	174	130	0	379	81	821	35	5	937	8	2809	2817
18:00	27	23	8	0	58	15	189	3	3	207	14	18	23	0	55	12	198	3	2	213	5	533	538
18:15	22	11	7	0	40	33	176	7	2	216	13	12	26	0	51	20	173	7	1	200	3	507	510
18:30	15	16	9	0	40	36	191	8	0	235	8	11	21	0	40	22	172	13	0	207	0	522	522
18:45	15	18	4	0	37	25	206	11	0	242	6	20	11	0	37	25	153	8	0	186	0	502	502
Total	79	68	28	0	175	109	762	29	5	900	41	61	81	0	183	79	696	31	3	806	8	2064	2072
19:00	7	10	5	1	22	30	210	6	0	246	8	25	10	0	43	19	207	12	0	238	1	549	550
19:15	42	29	6	0	77	30	194	2	3	226	12	21	14	0	47	28	199	7	0	234	3	584	587
19:30	28	7	5	0	40	32	156	9	0	197	7	19	26	1	52	18	166	5	1	189	2	478	480
19:45	13	7	6	0	26	24	104	2	0	130	4	13	26	0	43	9	179	8	0	196	0	395	395
Total	90	53	22	1	165	116	664	19	3	799	31	78	76	1	185	74	751	32	1	857	6	2008	2012
20:00	6	27	7	0	40	14	107	3	1	124	8	19	16	0	43	15	179	9	0	203	1	410	411
20:15	23	24	18	0	65	27	119	4	0	150	6	20	15	0	41	6	143	7	0	156	0	412	412
20:30	8	31	1	0	40	23	117	3	0	143	2	17	14	0	33	13	150	6	0	169	0	385	385
20:45	11	15	3	0	29	27	108	4	0	139	12	14	11	0	37	10	169	9	0	188	0	393	393
Total	48	97	29	0	174	91	451	14	1	556	28	70	56	0	154	44	641	31	0	716	1	1600	1601
21:00	8	15	1	0	24	47	99	0	0	146	8	9	30	1	47	11	156	6	0	173	1	390	391
21:15	5	2	1	0	8	14	106	5	0	125	2	14	13	0	29	19	149	8	0	176	0	338	338
21:30	3	15	4	0	22	19	88	1	0	108	5	13	14	0	32	10	135	4	0	149	0	311	311
21:45	8	9	0	0	17	11	85	1	0	97	6	12	13	0	31	10	141	5	0	156	0	301	301
Total	24	41	6	0	71	91	378	7	0	476	21	48	70	1	139	50	581	23	0	654	1	1340	1341
Grand Total	115	129	475	8	2926	164	105	510	108	12705	627	124	124	9	3115	907	108	518	121	12283	246	31029	31275
Apprch %	39.4	44.4	16.2			12.9	83.1	4.0			20.1	39.9	40.0			7.4	88.4	4.2			0.8	99.2	
Total %	3.7	4.2	1.5		9.4	5.3	34.0	1.6		40.9	2.0	4.0	4.0		10.0	2.9	35.0	1.7		39.6			

For Street Approaches:

Lastbound:

CSAH 10

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0013.war
 Count Type: IMC. Channel: 0. Count Date: 7/ 6/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 12283

Westbound:

CSAH 10

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0013.war
 Count Type: IMC. Channel: 0. Count Date: 7/ 6/ 0
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 12705

Minor Street Approaches:

Northbound:

Able St. NE

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0013.war
 Count Type: IMC. Channel: 0. Count Date: 7/ 6/ 0
 Number of Lanes: 2
 Approach Speed: 35
 Total Approach Traffic: 3115

Southbound:

Able St. NE

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0013.war
 Count Type: IMC. Channel: 0. Count Date: 7/ 6/ 0
 Number of Lanes: 2
 Approach Speed: 35
 Total Approach Traffic: 2926

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.	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	862	171 S 12	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
7	1280	191 S 7	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
8	1074	147 S 14	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
9	1075	141 S 15	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
10	1174	158 S 13	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
11	1659	201 N 6	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
12	1978	256 S 5	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
13	1792	273 S 3	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
14	1875	188 N 8	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
15	2036	266 N 4	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
16	2246	333 N 2	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
17	2173	379 N 1	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
18	1706	183 N 10	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
19	1656	185 N 9	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
20	1272	174 S 11	--BOTH-- 140	--BOTH-- 70	--BOTH-- 112
21	1130	139 N 16	MAIN 140	--BOTH-- 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 15 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. 8th-High Hour--Pedestrians: 1; Vehicles: 2246. 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: 2809.

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

Warrant 9 - Four Hour Volumes

SATISFIED for 16 hours.

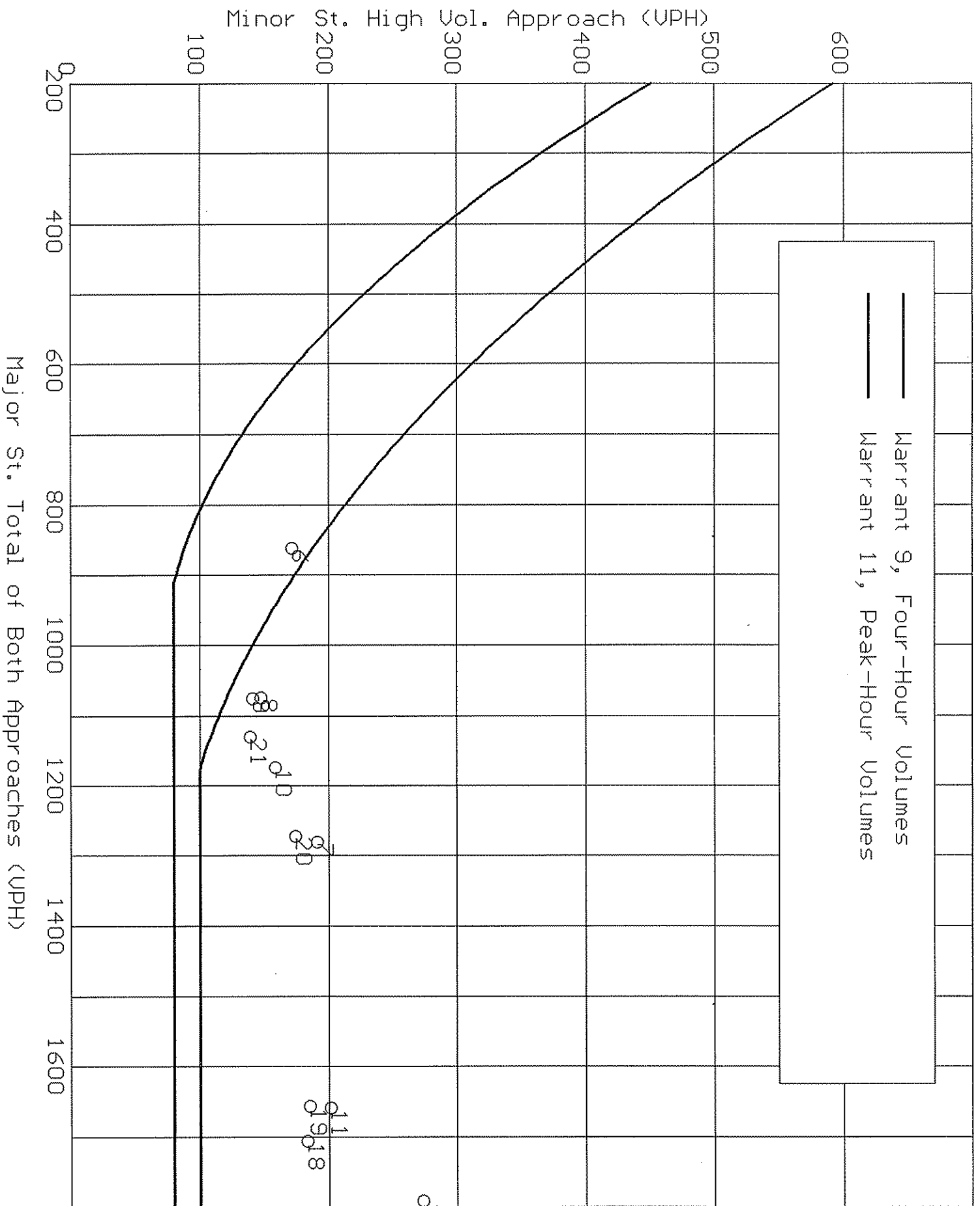
Warrant 10 - Peak Hour Delay

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

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

Warrant 11 - Peak Hour Volume

SATISFIED for 15 hours.



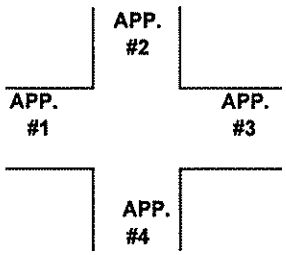


NORTH

COUNT LOCATION: CSAH 10 (OLD TH10)@
Able St. NE

DATE: 7/6/00

APP. #1 = WB CSAH 10 (OLD TH 10)
APP. #2 = NB Able St. NE
APP. #3 = EB CSAH 10 (OLD TH 10)
APP. #4 = SB Able St. NE



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.

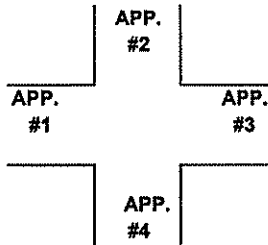
TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						4		
6:15-6:30						3		1
6:30-6:45						2		1
6:45-7:00						4		1
HOURLY TOTAL						HOURLY TOTAL		16
7:00-7:15						5		3
7:15-7:30						6		1
7:30-7:45						3		
7:45-8:00						2		1
HOURLY TOTAL						HOURLY TOTAL		21
8:00-8:15						9	1	
8:15-8:30						2		1
8:30-8:45						4		4
8:45-9:00						5		
HOURLY TOTAL						HOURLY TOTAL		26
9:00-9:15						5		
9:15-9:30						4		
9:30-9:45						6		
9:45-10:00						7		
HOURLY TOTAL						HOURLY TOTAL		22
10:00-10:15						9		1
10:15-10:30						1		1
10:30-10:45						6		
10:45-11:00						2		
HOURLY TOTAL						HOURLY TOTAL		20
11:00-11:15						8		
11:15-11:30						5		
11:30-11:45						4		
11:45-12:00						9		
HOURLY TOTAL						HOURLY TOTAL		26
12:00-12:15						6		1
12:15-12:30						4		
12:30-12:45						4		
12:45-1:00						10		4
HOURLY TOTAL						HOURLY TOTAL		29
1:00-1:15						4		1
1:15-1:30						4		
1:30-1:45						5		
1:45-2:00						5		
HOURLY TOTAL						HOURLY TOTAL		19

NORTH

COUNT LOCATION: CSAH 10 (OLD TH10)@
Able St. NE

DATE: 7/6/00

APP. #1 = WB CSAH 10
(OLD TH 10)
APP. #2 = NB Able St. NE
APP. #3 = EB CSAH 10
(OLD TH 10)
APP. #4 = SB Able St. NE



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