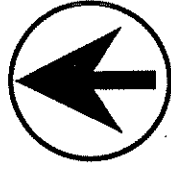


Date : 08/17/00

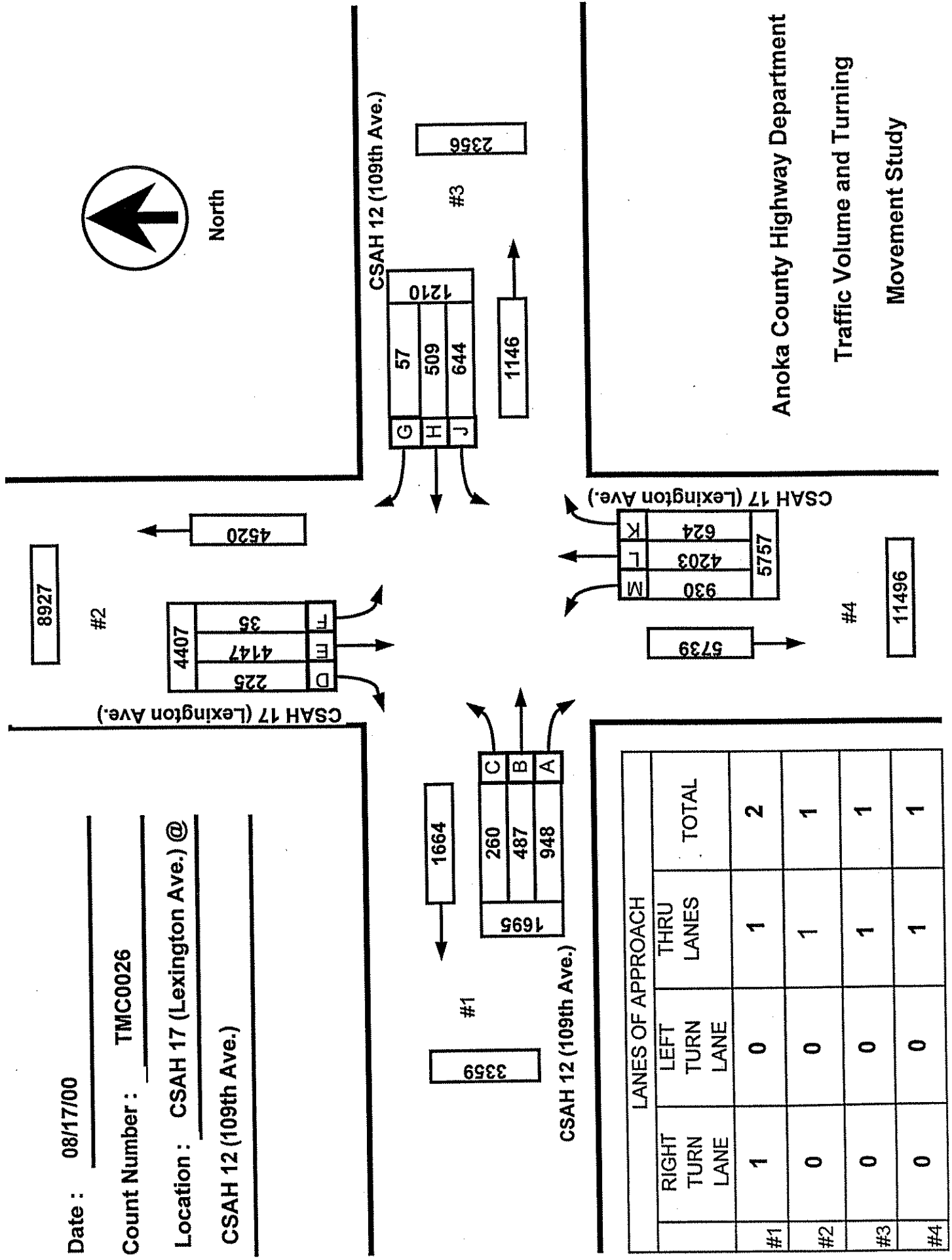
Count Number : TMC0026

Location : CSAH 17 (Lexington Ave.) @

CSAH 12 (109th Ave.)



North



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

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

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

File Name : TMC0026
 Site Code : 00260101
 Start Date : 08/17/2000
 Page No : 1

Groups Printed- 1 - 1 - Unshifted

Start Time	CSAH 17 (Lexington Ave.) Southbound					CSAH 12 (109th Ave.) Westbound					CSAH 17 (Lexington Ave.) Northbound					CSAH 12 (109th Ave.) 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	0	170	3	0	173	24	2	1	0	27	5	7	1	0	13	0	3	8	1	11	1	224	225
06:15	1	228	6	1	235	27	9	0	0	36	8	14	4	0	26	4	5	17	0	26	1	323	324
06:30	0	216	9	1	225	15	18	0	0	33	11	31	5	0	47	2	11	24	0	37	1	342	343
06:45	6	238	15	0	259	26	16	0	0	42	19	19	6	0	44	0	15	50	0	65	0	410	410
Total	7	852	33	2	892	92	45	1	0	138	43	71	16	0	130	6	34	99	1	139	3	1299	1302
07:00	0	207	4	0	211	15	13	0	0	28	17	16	12	0	45	1	10	21	2	32	2	316	318
07:15	0	200	7	1	207	21	18	0	0	39	16	26	5	0	47	1	6	19	0	26	1	319	320
07:30	0	209	12	1	221	26	17	3	0	46	13	34	5	0	52	1	8	28	0	37	1	356	357
07:45	0	198	7	1	205	15	13	0	0	28	13	42	12	0	67	0	5	26	0	31	1	331	332
Total	0	814	30	3	844	77	61	3	0	141	59	118	34	0	211	3	29	94	2	126	5	1322	1327
08:00	0	127	8	0	135	12	3	1	0	16	7	20	8	0	35	2	13	24	0	39	0	225	225
08:15	0	117	6	0	123	25	4	0	0	29	26	27	8	0	61	0	10	22	0	32	0	245	245
08:30	0	95	8	0	103	14	12	2	0	28	11	22	12	1	45	1	4	20	0	25	1	201	202
08:45	0	102	5	0	107	22	3	2	0	27	18	28	3	0	49	3	2	21	0	26	0	209	209
Total	0	441	27	0	468	73	22	5	0	100	62	97	31	1	190	6	29	87	0	122	1	880	881
09:00	1	63	1	0	65	4	4	0	0	8	11	18	4	0	33	2	10	5	0	17	0	123	123
09:15	0	48	5	0	53	11	4	0	0	15	8	26	3	0	37	0	3	10	1	13	1	118	119
09:30	0	52	6	0	58	9	6	1	0	16	3	16	4	0	23	0	4	11	0	15	0	112	112
09:45	0	55	4	0	59	5	2	0	1	7	2	22	6	1	30	3	3	23	1	29	3	125	128
Total	1	218	16	0	235	29	16	1	1	46	24	82	17	1	123	5	20	49	2	74	4	478	482
10:00	1	43	2	1	46	8	12	1	0	21	10	30	2	0	42	3	3	16	0	22	1	131	132
10:15	0	58	3	2	61	14	3	0	0	17	8	28	6	0	42	2	6	7	0	15	2	135	137
10:30	0	32	1	0	33	4	6	2	0	12	6	26	6	0	38	3	3	10	1	16	1	99	100
10:45	1	26	0	1	27	3	8	1	0	12	5	41	2	0	48	1	9	5	0	15	1	102	103
Total	2	159	6	4	167	29	29	4	0	62	29	125	16	0	170	9	21	38	1	68	5	467	472
11:00	2	30	0	0	32	6	2	2	0	10	12	38	12	0	62	2	8	3	0	13	0	117	117
11:15	0	28	0	0	28	9	7	0	0	16	19	16	2	1	37	1	4	19	0	24	1	105	106
11:30	0	34	3	0	37	13	3	0	0	16	6	31	4	0	41	0	6	1	1	7	1	101	102
11:45	2	47	1	1	50	6	2	0	0	8	8	39	6	1	53	3	3	7	0	13	2	124	126
Total	4	139	4	1	147	34	14	2	0	50	45	124	24	2	193	6	21	30	1	57	4	447	451
12:00	0	34	1	0	35	6	8	0	0	14	7	37	4	1	48	3	0	6	0	9	1	106	107
12:15	1	47	7	0	55	11	3	0	1	14	9	40	6	0	55	0	7	18	0	25	1	149	150
12:30	1	36	0	0	37	4	5	0	0	9	9	35	5	0	49	1	8	11	0	20	0	115	115
12:45	1	47	1	0	49	7	2	2	0	11	12	49	4	0	65	4	7	6	0	17	0	142	142
Total	3	164	9	0	176	28	18	2	1	48	37	161	19	1	217	8	22	41	0	71	2	512	514
13:00	0	56	7	0	63	5	0	2	0	7	15	46	8	0	69	3	8	15	0	26	0	165	165
13:15	0	36	1	0	37	9	5	0	0	14	14	40	8	0	62	3	14	16	0	33	0	146	146
13:30	1	56	2	0	59	8	5	3	0	16	17	37	8	0	62	3	6	11	0	20	0	157	157
13:45	0	54	1	0	55	9	5	1	0	15	14	45	8	0	67	3	7	12	0	22	0	159	159
Total	1	202	11	0	214	31	15	6	0	52	60	168	32	0	260	12	35	54	0	101	0	627	627
14:00	1	45	2	0	48	8	1	4	0	13	13	45	4	1	62	1	2	18	1	21	2	144	146
14:15	2	35	2	0	39	9	5	0	0	14	13	63	12	1	88	4	3	10	0	17	1	158	159
14:30	1	54	1	1	56	10	11	2	0	23	11	69	13	2	93	6	8	20	0	34	3	206	209
14:45	3	34	4	0	41	8	8	4	0	20	13	76	9	0	98	1	14	13	1	28	1	187	188
Total	7	168	9	1	184	35	25	10	0	70	50	253	38	4	341	12	27	61	2	100	7	695	702
15:00	0	36	2	0	38	10	13	0	1	23	28	100	16	0	144	6	15	11	1	32	2	237	239
15:15	1	35	3	1	39	7	11	2	0	20	19	130	11	2	160	6	7	7	0	20	3	239	242
15:30	2	39	4	0	45	8	18	0	0	26	27	135	10	1	172	14	12	27	1	53	2	296	298
15:45	0	28	7	0	35	10	18	1	0	29	27	150	16	2	193	4	8	16	1	28	3	285	288
Total	3	138	16	1	157	35	60	3	1	98	101	515	53	5	669	30	42	61	3	133	10	1057	1067
16:00	0	24	5	0	29	11	18	0	0	29	11	156	14	1	181	11	8	16	0	35	1	274	275
16:15	2	36	4	0	42	17	12	2	1	31	24	163	11	0	198	16	27	18	0	61	1	332	333
16:30	0	51	2	0	53	14	8	1	0	23	25	235	28	0	288	14	14	21	1	49	1	413	414
16:45	1	38	7	1	46	10	20	1	0	31	30	173	7	0	210	11	18	15	0	44	1	331	332
Total	3	149	18	1	170	52	58	4	1	114	90	727	60	1	877	52	67	70	1	189	4	1350	1354

Anoka County Highway Department

Traffic Engineering

Traffic Volume and Turning Movement Study

Weather: Partly Cloudy

Counter TDC-8

Counted by: Ryan & Justin

File Name : TMC0026

Site Code : 00260101

Start Date : 08/17/2000

Page No : 2

Groups Printed- 1 - 1 - Unshifted

Start Time	CSAH 17 (Lexington Ave.) Southbound					CSAH 12 (109th Ave.) Westbound					CSAH 17 (Lexington Ave.) 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	0	44	8	0	52	8	24	3	0	35	21	170	6	0	197	10	9	25	0	44	0	328	328
17:15	0	39	5	0	44	6	20	3	0	29	29	224	24	0	277	10	8	21	0	39	0	389	389
17:30	1	53	4	0	58	4	8	0	0	12	37	194	16	0	247	2	6	19	0	27	0	344	344
17:45	0	48	7	0	55	8	6	0	0	14	28	141	17	0	184	8	10	15	0	33	0	286	286
Total	1	184	24	0	209	26	58	6	0	90	113	729	63	0	905	30	33	80	0	143	0	1347	1347
18:00	0	46	3	0	49	14	7	1	0	22	24	154	12	1	190	9	10	23	0	42	1	303	304
18:15	0	50	1	0	51	7	4	0	0	11	21	101	13	0	135	12	6	21	0	39	0	236	236
18:30	0	31	2	1	33	6	6	0	0	12	19	89	16	0	124	8	3	10	0	21	1	190	191
18:45	0	40	1	1	41	8	8	0	0	16	20	81	10	0	111	0	12	15	0	27	1	195	196
Total	0	167	7	2	174	35	25	1	0	61	84	425	51	1	560	29	31	69	0	129	3	924	927
19:00	0	42	3	0	45	1	5	2	0	8	27	65	12	0	104	3	4	11	0	18	0	175	175
19:15	0	25	4	0	29	7	5	1	0	13	18	61	12	0	91	9	4	6	0	19	0	152	152
19:30	0	40	0	0	40	10	9	0	0	19	9	57	17	0	83	1	4	7	0	12	0	154	154
19:45	0	33	1	0	34	5	6	1	0	12	12	41	14	0	67	3	12	12	0	27	0	140	140
Total	0	140	8	0	148	23	25	4	0	52	66	224	55	0	345	16	24	36	0	76	0	621	621
20:00	1	39	1	0	41	2	3	2	0	7	4	37	9	0	50	4	0	7	0	11	0	109	109
20:15	0	25	1	0	26	5	6	0	0	11	10	72	12	0	94	2	1	13	0	16	0	147	147
20:30	1	26	0	0	27	10	1	1	0	12	18	60	19	0	97	3	12	12	1	27	1	163	164
20:45	0	28	1	0	29	6	2	0	0	8	10	40	21	0	71	4	13	10	0	27	0	135	135
Total	2	118	3	0	123	23	12	3	0	38	42	209	61	0	312	13	26	42	1	81	1	554	555
21:00	0	29	1	0	30	7	2	0	0	9	6	56	18	0	80	7	6	18	0	31	0	150	150
21:15	1	24	0	0	25	7	9	1	0	17	7	45	6	0	58	1	10	7	0	18	0	118	118
21:30	0	21	1	0	22	4	12	0	0	16	4	39	19	0	62	6	5	8	0	19	0	119	119
21:45	0	20	2	0	22	4	3	1	0	8	8	35	11	0	54	9	5	4	0	18	0	102	102
Total	1	94	4	0	99	22	26	2	0	50	25	175	54	0	254	23	26	37	0	86	0	489	489
Grand Total	35	414	225	15	4407	644	509	57	4	1210	930	4203	624	16	5757	260	487	948	14	1695	49	13069	13118
Approch %	0.8	94.1	5.1			53.2	42.1	4.7			16.2	73.0	10.8			15.3	28.7	55.9					
Total %	0.3	31.7	1.7		33.7	4.9	3.9	0.4		9.3	7.1	32.2	4.8		44.1	2.0	3.7	7.3		13.0	0.4	99.6	

Major Street Approaches:

Northbound:

CSAH 17 (Lexington Ave.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0026.war

Count Type: IMC. Channel: 0. Count Date: 8/17/ 0

Number of Lanes: 1

Approach Speed: 45

Total Approach Traffic: 5757

Southbound:

CSAH 17 (Lexington Ave.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0026.war

Count Type: IMC. Channel: 0. Count Date: 8/17/ 0

Number of Lanes: 1

Approach Speed: 55

Total Approach Traffic: 4407

Minor Street Approaches:

Eastbound:

CSAH 12 (109th Ave.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0026.war

Count Type: IMC. Channel: 0. Count Date: 8/17/ 0

Number of Lanes: 2

Approach Speed: 55

Total Approach Traffic: 1695

Westbound:

CSAH 12 (109th Ave.)

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0026.war

Count Type: IMC. Channel: 0. Count Date: 8/17/ 0

Number of Lanes: 1

Approach Speed: 55

Total Approach Traffic: 1210

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

Hour	Main Begin (Total)	Side			Warrant 1		Warrant 2		Warrant 8	
		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	1022	139	E	4	MAIN	140	--BOTH--	70	--BOTH--	112
7	1055	141	W	3	--BOTH--	105	--BOTH--	52	--BOTH--	84
8	658	122	E	7	MAIN	140	--BOTH--	70	--BOTH--	112
9	358	74	E	13	MAIN	140	SIDE	70		112
10	337	68	E	15		140		70		112
11	340	57	E	16		140		70		112
12	393	71	E	14	MAIN	140	SIDE	70		112
13	474	101	E	8	MAIN	140	SIDE	70	MAIN	112
14	525	100	E	9	MAIN	140	--BOTH--	70	MAIN	112
15	826	133	E	5	MAIN	140	--BOTH--	70	--BOTH--	112
16	1047	189	E	1	--BOTH--	140	--BOTH--	70	--BOTH--	112
17	1114	143	E	2	--BOTH--	140	--BOTH--	70	--BOTH--	112
18	734	129	E	6	MAIN	140	--BOTH--	70	--BOTH--	112
19	493	76	E	12	MAIN	140	SIDE	70	MAIN	112
20	435	81	E	11	MAIN	140	SIDE	70	MAIN	112
21	353	86	E	10	MAIN	140	SIDE	70		112
22	0	0	W	23		105		52		84
23	0	0	W	24		105		52		84

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 3 hours. Criteria--Main St.: 350; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

SATISFIED for 8 hours. Criteria--Main St.: 525; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. 8th-High Hour--Pedestrians: 1; Vehicles: 340. 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: 1350.

- 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 7 hours. Criteria--Main: 420; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

SATISFIED for 7 hours.

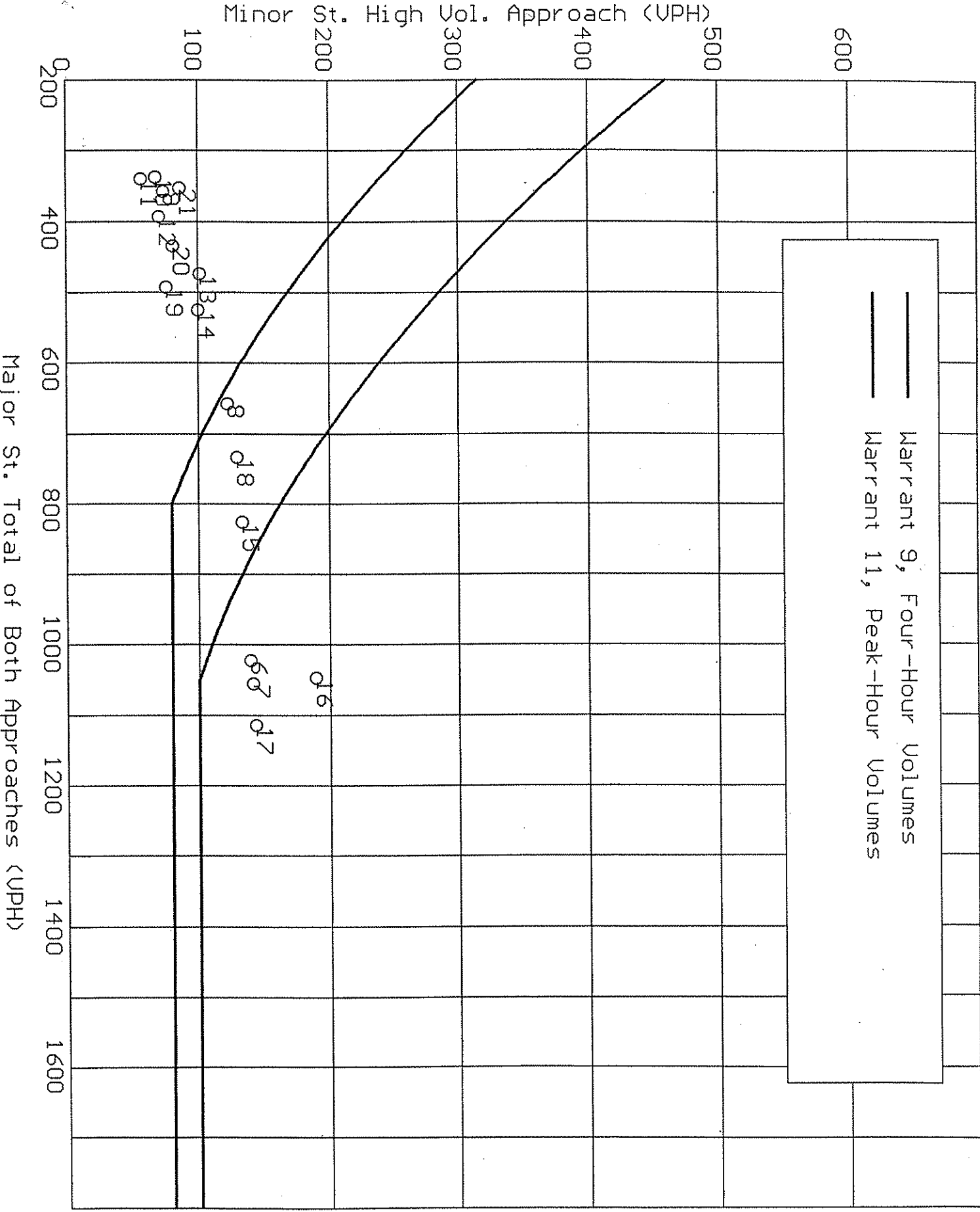
Warrant 10 - Peak Hour Delay

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 3 hours.





NORTH

APP. #1 = EB CSAH 12
(109th Ave.)
 APP. #2 = SB CSAH 17
(Lexington Ave.)
 APP. #3 = WB CSAH 12
(109th Ave.)
 APP. #4 = NB CSAH 17
(Lexington Ave.)

COUNT LOCATION: CSAH 17 (Lexington Ave.)@
 CSAH 12 (109th Ave.)

DATE: 8/17/00

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.

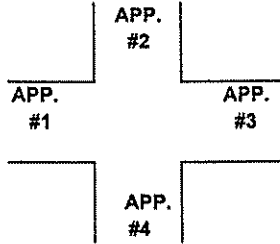
TIME	PEDESTRIANS					HEAVY VEHICLES		
	APP. #1	APP. #2	APP. #3	APP. #4	15 MIN TOT	TRUCKS	RV	BUS
6:00-6:15AM						1		
6:15-6:30						1		
6:30-6:45						1		
6:45-7:00								
HOURLY TOTAL						HOURLY TOTAL		3
7:00-7:15						2		
7:15-7:30						2		
7:30-7:45						1		
7:45-8:00						1		
HOURLY TOTAL					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



COUNT LOCATION: CSAH 17 (Lexington Ave.)@
CSAH 12 (109th Ave.)

DATE: 8/15/00

APP. #1 = EB CSAH 12
(109th Ave.)
 APP. #2 = SB CSAH 17
(Lexington Ave.)
 APP. #3 = WB CSAH 12
(109th Ave.)
 APP. #4 = NB CSAH 17
(Lexington Ave.)



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