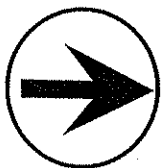


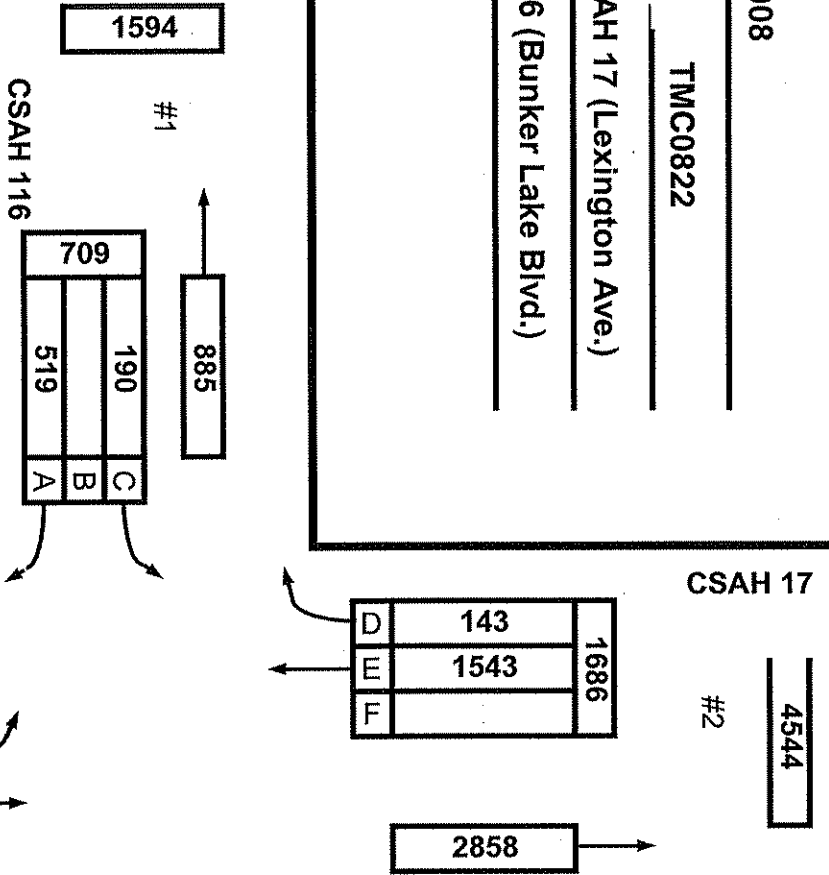
Date : 07/17/2008

Count Number : TMC0822

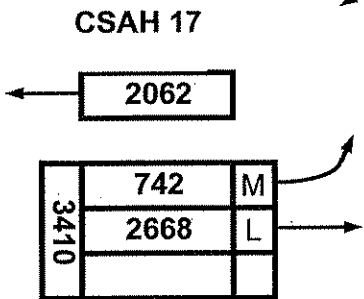
Location : CSAH 17 (Lexington Ave.)
@ CSAH 116 (Bunker Lake Blvd.)



North



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



Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

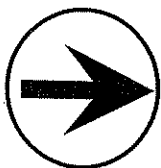
Date : 07/17/2008

Count Number : TMC0822

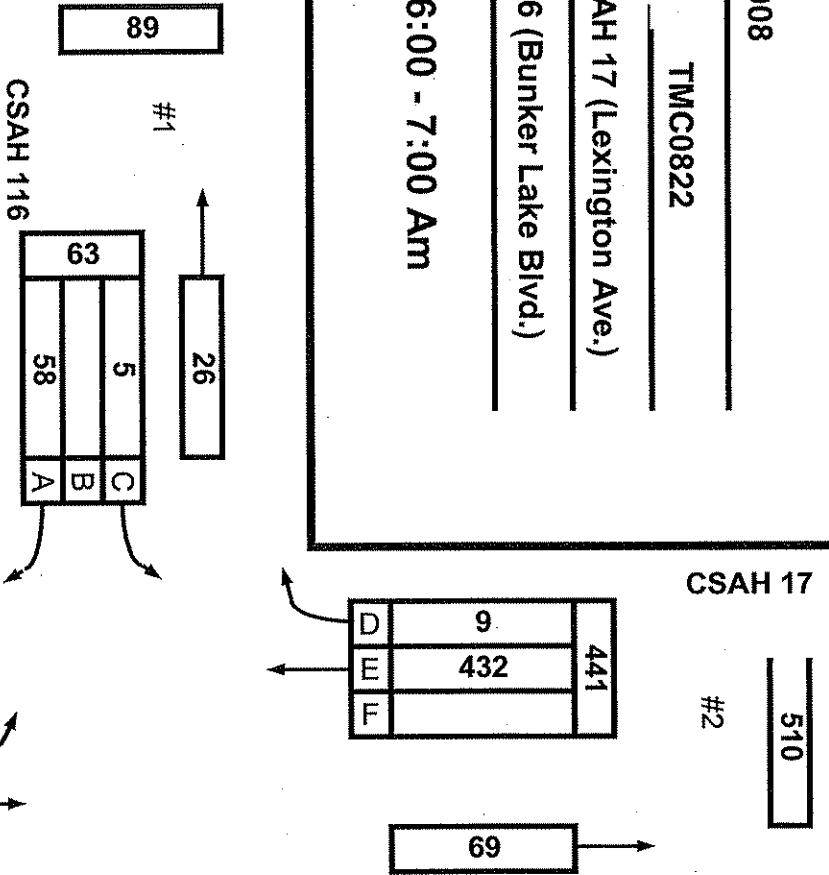
Location : CSAH 17 (Lexington Ave.)

@ CSAH 116 (Bunker Lake Blvd.)

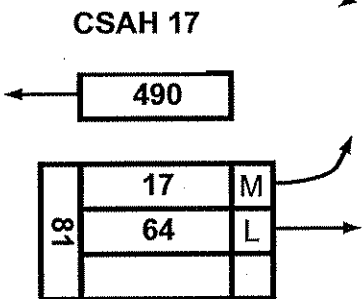
Hour: 6:00 - 7:00 Am



North



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



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Anoka County Highway Department

Traffic Volume and Turning

Movement Study

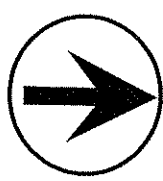
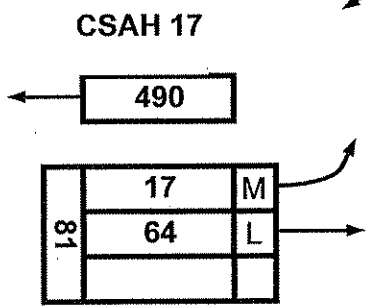
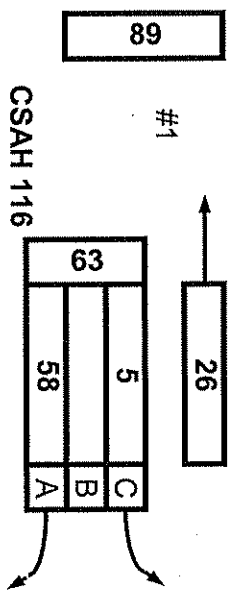
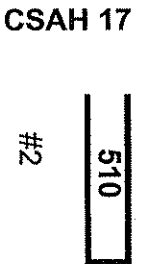
Date : 07/17/2008

Count Number : TMC0822

Location : CSAH 17 (Lexington Ave.)

@ CSAH 116 (Bunker Lake Blvd.)

Hour: 4:45 - 5:45 PM



North

LANES OF APPROACH

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

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Anoka County Highway Department

Traffic Engineering Section Traffic Volume and Turning Movement Study

File Name : TMC0822
 Site Code : 08220201
 Start Date : 07/17/2000
 Page No : 1

Weather: Warm and Sunny
 Counter: DB-400
 Counted by: Jake/Mike

Groups Printed- Unshifted - Bank 1

Start Time	CSAH 17 (Lexington Ave.) Southbound					CSAH 116 (Bunker Lake Blvd.) Westbound					CSAH 17 (Lexington Ave.) Northbound					CSAH 116 (Bunker Lake Blvd.) Eastbound					Exclu. Total	Inclu. Total	Inf. 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	0	107	0	0	107	0	0	0	0	0	1	13	0	1	14	0	0	9	1	9	2	130	132
06:15	0	160	6	2	166	0	0	0	0	0	1	14	0	3	15	0	0	11	0	11	5	192	197
06:30	0	121	3	3	124	0	0	0	0	0	4	16	0	4	20	2	0	19	3	21	10	165	175
06:45	0	44	0	0	44	0	0	0	0	0	11	21	0	0	32	3	0	19	2	22	2	98	100
Total	0	432	9	5	441	0	0	0	0	0	17	64	0	8	81	5	0	58	6	63	19	585	604
07:00	0	48	4	1	52	0	0	0	0	0	5	4	0	2	9	4	0	15	0	19	3	80	83
07:15	0	32	2	0	34	0	0	0	0	0	2	7	0	0	9	0	0	13	0	13	0	56	56
07:30	0	29	0	0	29	0	0	0	0	0	3	22	0	2	25	2	0	19	3	21	5	75	80
07:45	0	36	2	1	38	0	0	0	0	0	8	21	0	5	29	1	0	16	2	17	8	84	92
Total	0	145	8	2	153	0	0	0	0	0	18	54	0	9	72	7	0	63	5	70	16	295	311
08:00	0	31	1	2	32	0	0	0	0	0	2	12	0	1	14	0	0	13	0	13	3	59	62
08:15	0	15	0	0	15	0	0	0	0	0	5	5	0	1	10	3	0	15	2	18	3	43	46
08:30	0	35	2	3	37	0	0	0	0	0	4	12	0	5	16	2	0	11	0	13	8	66	74
08:45	0	40	6	4	46	0	0	0	0	0	4	14	0	2	18	2	0	4	2	6	8	70	78
Total	0	121	9	9	130	0	0	0	0	0	15	43	0	9	58	7	0	43	4	50	22	238	260
09:00	0	21	0	2	21	0	0	0	0	0	3	4	0	0	7	4	0	8	0	12	2	40	42
09:15	0	36	1	2	37	0	0	0	0	0	9	10	0	4	19	2	0	8	0	10	6	66	72
09:30	0	11	0	2	11	0	0	0	0	0	11	12	0	1	23	2	0	7	1	9	4	43	47
09:45	0	32	0	3	32	0	0	0	0	0	5	10	0	3	15	3	0	6	3	9	9	56	65
Total	0	100	1	9	101	0	0	0	0	0	28	36	0	8	64	11	0	29	4	40	21	205	226
10:00	0	24	2	3	28	0	0	0	0	0	4	15	0	2	19	5	0	9	2	14	7	59	66
10:15	0	9	1	0	10	0	0	0	0	0	0	10	0	0	10	1	0	2	2	3	2	23	25
10:30	0	13	1	1	14	0	0	0	0	0	6	3	0	3	9	4	0	8	2	12	6	35	41
10:45	0	9	3	0	12	0	0	0	0	0	4	13	0	3	17	1	0	6	1	7	4	36	40
Total	0	55	7	4	62	0	0	0	0	0	14	41	0	8	55	11	0	25	7	36	19	153	172
11:00	0	13	2	3	15	0	0	0	0	0	6	17	0	2	23	2	0	12	3	14	8	52	60
11:15	0	15	6	4	21	0	0	0	0	0	9	25	0	3	34	3	0	3	1	6	8	61	69
11:30	0	19	0	1	19	0	0	0	0	0	5	18	0	2	23	10	0	11	1	21	4	63	67
11:45	0	17	1	1	18	0	0	0	0	0	2	13	0	2	15	4	0	10	1	14	4	47	51
Total	0	64	9	9	73	0	0	0	0	0	22	73	0	9	95	19	0	36	6	55	24	223	247
12:00	0	3	1	0	4	0	0	0	0	0	17	23	0	8	40	2	0	4	2	6	10	50	60
12:15	0	10	2	0	12	0	0	0	0	0	14	21	0	5	35	2	0	8	0	10	5	57	62
12:30	0	10	1	2	11	0	0	0	0	0	4	19	0	1	23	3	0	7	1	10	4	44	48
12:45	0	7	0	3	7	0	0	0	0	0	15	28	0	7	43	2	0	2	1	4	11	54	65
Total	0	30	4	5	34	0	0	0	0	0	50	91	0	21	141	9	0	21	4	30	30	205	235
13:00	0	23	0	1	23	0	0	0	0	0	12	22	0	4	34	4	0	8	2	12	7	69	76
13:15	0	12	2	0	14	0	0	0	0	0	11	24	0	1	35	3	0	5	0	8	1	57	58
13:30	0	17	0	0	17	0	0	0	0	0	11	28	0	4	39	2	0	5	1	7	5	63	68
13:45	0	22	1	0	23	0	0	0	0	0	8	20	0	2	28	6	0	11	1	17	3	68	71
Total	0	74	3	1	77	0	0	0	0	0	42	94	0	11	136	15	0	29	4	44	16	257	273
14:00	0	11	0	1	11	0	0	0	0	0	4	13	0	0	17	0	0	2	1	2	2	30	32
14:15	0	25	3	3	28	0	0	0	0	0	6	33	0	1	39	2	0	4	1	6	5	73	78
14:30	0	26	1	2	27	0	0	0	0	0	16	49	0	6	65	0	0	3	0	3	8	95	103
14:45	0	15	4	2	19	0	0	0	0	0	19	82	0	9	101	1	0	3	1	4	12	124	136
Total	0	77	8	8	85	0	0	0	0	0	45	177	0	16	222	3	0	12	3	15	27	322	349
15:00	0	8	3	2	11	0	0	0	0	0	18	76	0	5	94	1	0	5	1	6	8	111	119
15:15	0	30	2	3	32	0	0	0	0	0	16	51	0	3	67	0	0	6	0	6	6	105	111
15:30	0	14	4	2	18	0	0	0	0	0	27	80	0	7	107	9	0	9	1	18	10	143	153
15:45	0	18	2	3	20	0	0	0	0	0	19	82	0	3	101	0	0	11	1	11	7	132	139
Total	0	70	11	10	81	0	0	0	0	0	80	289	0	18	369	10	0	31	3	41	31	491	522
16:00	0	22	3	0	25	0	0	0	0	0	21	75	0	6	96	10	0	8	1	18	7	139	146
16:15	0	38	2	0	40	0	0	0	0	0	31	112	0	4	143	8	0	3	1	11	5	194	199
16:30	0	13	4	0	17	0	0	0	0	0	35	83	0	5	118	6	0	15	0	21	5	156	161
16:45	0	26	1	1	27	0	0	0	0	0	35	151	0	5	166	5	0	2	0	7	6	220	226
Total	0	99	10	1	109	0	0	0	0	0	122	421	0	20	543	29	0	28	2	57	23	709	732
17:00	0	29	3	0	32	0	0	0	0	0	34	172	0	4	206	7	0	16	2	23	6	261	267
17:15	0	6	4	1	10	0	0	0	0	0	39	151	0	3	190	6	0	6	0	12	4	212	216
17:30	0	6	6	0	12	0	0	0	0	0	34	172	0	4	206	4	0	9	0	13	4	231	235
17:45	0	9	2	0	11	0	0	0	0	0	20	110	0	1	130	7	0	7	0	14	1	155	156
Total	0	50	15	1	65	0	0	0	0	0	127	605	0	12	732	24	0	38	2	62	15	859	874
18:00	0	14	4	0	18	0	0	0	0	0	23	92	0	2	115	3	0	13	0	16	2	149	151
18:15	0	13	8	0	21	0	0	0	0	0	24	88	0	4	112	0	0	9	0	9	4	142	146
18:30	0	26	8	0	34	0	0	0	0	0	13	78	0	3	91	5	0	9	0	14	3	139	142
18:45	0	21	2	0	23	0	0	0	0	0	10	37	0	0	47	3	0	6	0	9	0	79	79
Total	0	74	22	0	96	0	0	0	0	0	70	295	0	9	365	11	0	37	0	48	9	509	518

Anoka County Highway Department

Traffic Engineering Section Traffic Volume and Turning Movement Study

File Name : TMC0822
Site Code : 08220201
Start Date : 07/17/200
Page No : 2

Weather: Warm and Sunny
Counter: DB-400
Counted by: Jake/Mike

Groups Printed- Unshifted - Bank 1

Start Time	CSAH 17 (Lexington Ave.) Southbound					CSAH 116 (Bunker Lake Blvd.) Westbound					CSAH 17 (Lexington Ave.) Northbound					CSAH 116 (Bunker Lake Blvd.) Eastbound					Excl. Total	Incl. 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			
19:00	0	15	5	0	20	0	0	0	0	0	7	36	0	0	43	2	0	3	0	5	0	68	68
19:15	0	4	3	0	7	0	0	0	0	0	3	48	0	1	51	6	0	2	0	8	1	66	67
19:30	0	8	2	1	10	0	0	0	0	0	10	36	0	1	46	1	0	7	0	8	2	64	66
19:45	0	12	2	0	14	0	0	0	0	0	8	35	0	1	43	1	0	10	0	11	1	68	69
Total	0	39	12	1	51	0	0	0	0	0	28	155	0	3	183	10	0	22	0	32	4	266	270
20:00	0	1	0	0	1	0	0	0	0	0	7	31	0	0	38	3	0	5	0	8	0	47	47
20:15	0	12	3	0	15	0	0	0	0	0	15	32	0	0	47	1	0	5	0	6	0	68	68
20:30	0	11	2	1	13	0	0	0	0	0	9	33	0	0	42	3	0	4	0	7	1	62	63
20:45	0	23	0	0	23	0	0	0	0	0	8	33	0	1	41	3	0	6	0	9	1	73	74
Total	0	47	5	1	52	0	0	0	0	0	39	129	0	1	168	10	0	20	0	30	2	250	252
21:00	0	20	5	0	25	0	0	0	0	0	11	30	0	2	41	1	0	6	0	7	2	73	75
21:15	0	9	3	1	12	0	0	0	0	0	2	29	0	1	31	4	0	6	0	10	2	53	55
21:30	0	25	1	1	26	0	0	0	0	0	6	28	0	0	34	0	0	5	0	5	1	65	66
21:45	0	12	1	1	13	0	0	0	0	0	6	14	0	0	20	4	0	10	0	14	1	47	48
Total	0	66	10	3	76	0	0	0	0	0	25	101	0	3	126	9	0	27	0	36	6	238	244
Grand Total	0	1543	143	69	1686	0	0	0	0	0	742	2668	0	165	3410	190	0	519	50	709	284	5805	6089
Approch %	0	91.5	8.5			0	0	0			21.8	78.2	0			26.8	0	73.2					
Total %	0	26.6	2.5		29	0	0	0		0	12.8	46	0		58.7	3.3	0	8.9		12.2	4.7	95.3	
Unshifted	0	1543	143		1755	0	0	0		0	742	2668	0		3575	190	0	519		759	0	0	6089
% Unshifted	0	100	100	100	100	0	0	0	0	0	100	100	0	100	100	100	0	100	100	100	0	0	100
Bank 1	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0
% Bank 1	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0

Start Time	CSAH 17 (Lexington Ave.) Southbound				CSAH 116 (Bunker Lake Blvd.) Westbound				CSAH 17 (Lexington Ave.) Northbound				CSAH 116 (Bunker Lake Blvd.) Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 06:00 to 11:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:00																	
06:00	0	107	0	107	0	0	0	0	1	13	0	14	0	0	9	9	130
06:15	0	160	6	166	0	0	0	0	1	14	0	15	0	0	11	11	192
06:30	0	121	3	124	0	0	0	0	4	16	0	20	2	0	19	21	165
06:45	0	44	0	44	0	0	0	0	11	21	0	32	3	0	19	22	98
Total Volume	0	432	9	441	0	0	0	0	17	64	0	81	5	0	58	63	585
% App. Total	0	98	2		0	0	0		21	79	0		7.9	0	92.1		
PHF	.000	.675	.375	.664	.000	.000	.000	.000	.386	.762	.000	.633	.417	.000	.763	.716	.762

Peak Hour Analysis From 12:00 to 21:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	0	26	1	27	0	0	0	0	35	151	0	186	5	0	2	7	220
17:00	0	29	3	32	0	0	0	0	34	172	0	206	7	0	16	23	261
17:15	0	6	4	10	0	0	0	0	39	151	0	190	6	0	6	12	212
17:30	0	6	6	12	0	0	0	0	34	172	0	206	4	0	9	13	231
Total Volume	0	67	14	81	0	0	0	0	142	646	0	788	22	0	33	55	924
% App. Total	0	82.7	17.3		0	0	0		18	82	0		40	0	60		
PHF	.000	.578	.583	.633	.000	.000	.000	.000	.910	.939	.000	.956	.786	.000	.516	.598	.885

**ANOKA COUNTY HIGHWAY
PC-WARRANTS
TRAFFIC SIGNAL WARRANT ANALYSIS**

Study Name :
Study Date : 07/17/08
Page No. : 1

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 17 (Lexington Ave.)

Number of Lanes: 1
Approach Speed: 55
Total Approach Volume: 3,410

Southbound: CSAH 17 (Lexington Ave.)

Number of Lanes: 1
Approach Speed: 55
Total Approach Volume: 1,697

Minor Street Approaches

Eastbound: CSAH 116 (Bunker Lake Blvd.)

Number of Lanes: 1

Total Approach Volume: 709

Westbound: CSAH 116 (Bunker Lake Blvd.)

Number of Lanes: 1

Total Approach Volume: 0

Warrant Summary (Rural values apply.)

- Warrant 1 - Eight Hour Vehicular Volumes** Not Satisfied
 - Warrant 1A - Minimum Vehicular Volume** Not Satisfied
Required volumes reached for 0 hours, 8 are needed
 - Warrant 1B - Interruption of Continuous Traffic** Not Satisfied
Required volumes reached for 2 hours, 8 are needed
 - Warrant 1 A&B - Combination of Warrants** Not Satisfied
Required volumes reached for 0 hours, 8 are needed

- Warrant 2 - Four Hour Volumes** Not Satisfied
Number of hours (1) volumes exceed minimum < minimum required (4).

- Warrant 3 - Peak Hour** Not Satisfied
 - Warrant 3A - Peak Hour Delay** Not Satisfied
Approach volumes on minor street don't exceed minimums for any hour. Delay data not evaluated.
 - Warrant 3B - Peak Hour Volumes** Not Satisfied
Volumes do not exceed minimums for any hour.

- Warrant 4 - Pedestrian Volumes** Not Evaluated

- Warrant 5 - School Crossing** Not Evaluated

- Warrant 6 - Coordinated Signal System** Not Evaluated

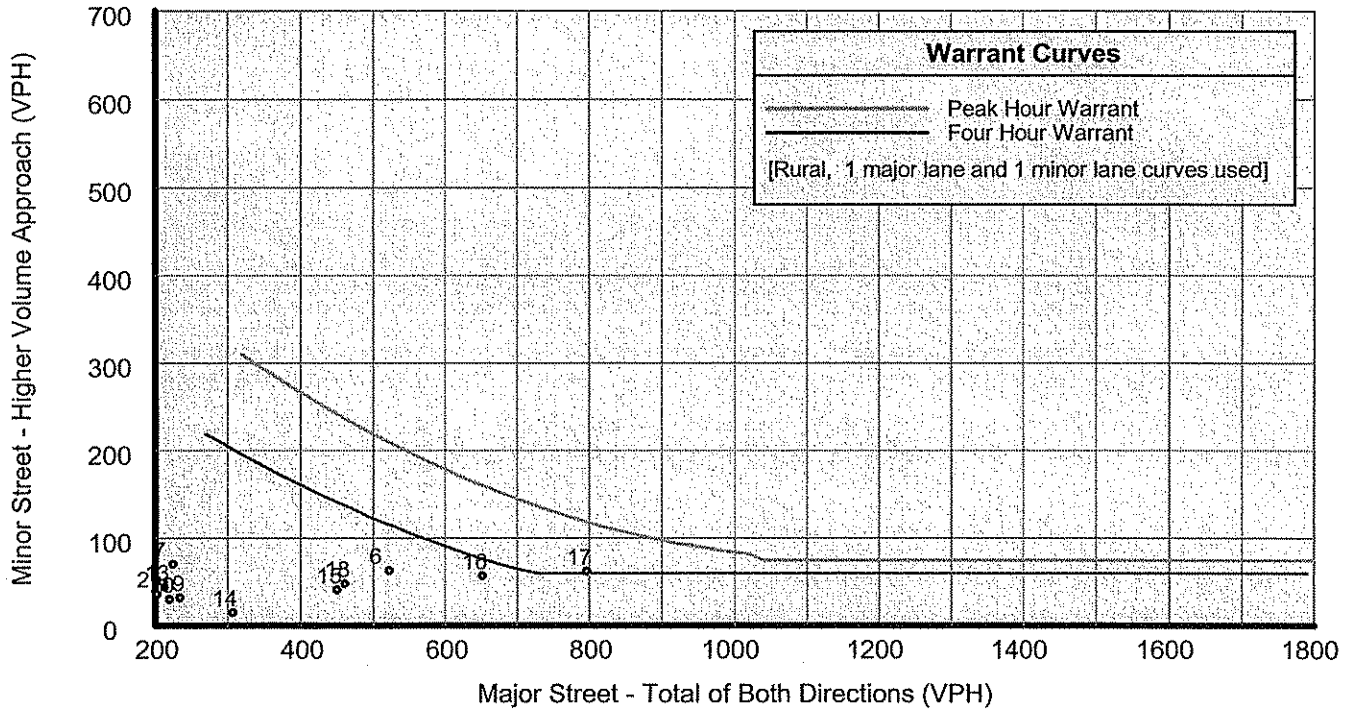
- Warrant 7 - Crash Experience** Not Evaluated

- Warrant 8 - Roadway Network** Not Evaluated

**ANOKA COUNTY HIGHWAY
PC-WARRANTS
TRAFFIC SIGNAL WARRANT ANALYSIS**

Study Name :
Study Date : 07/17/08
Page No. : 2

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour Begin	Major Total	Higher Minor		War-1A			War-1B			War-1A&B		
		Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
01:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
02:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
03:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
04:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
05:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
06:00	522	63	EB	350-Yes	105-No	Major	525-No	53-Yes	Minor	420-Yes	84-No	Major
07:00	225	70	EB	350-No	105-No	---	525-No	53-Yes	Minor	420-No	84-No	---
08:00	189	50	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
09:00	165	40	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
10:00	127	36	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
11:00	168	55	EB	350-No	105-No	---	525-No	53-Yes	Minor	420-No	84-No	---
12:00	175	30	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
13:00	213	44	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
14:00	307	15	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
15:00	450	41	EB	350-Yes	105-No	Major	525-No	53-No	---	420-Yes	84-No	Major
16:00	652	57	EB	350-Yes	105-No	Major	525-Yes	53-Yes	Both	420-Yes	84-No	Major
17:00	797	62	EB	350-Yes	105-No	Major	525-Yes	53-Yes	Both	420-Yes	84-No	Major
18:00	461	48	EB	350-Yes	105-No	Major	525-No	53-No	---	420-Yes	84-No	Major
19:00	234	32	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
20:00	220	30	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
21:00	202	36	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
22:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---
23:00	0	0	EB	350-No	105-No	---	525-No	53-No	---	420-No	84-No	---

**ANOKA COUNTY HIGHWAY
PC-WARRANTS
TRAFFIC SIGNAL WARRANT ANALYSIS**

Study Name : **TMC0822B**
Study Date : **08/13/08**
Page No. : **1**

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 17 (Lexington Ave.)
Number of Lanes: **2**
Approach Speed: **55**
Total Approach Volume: **3,410**

Southbound: CSAH 17 (Lexington Ave.)
Number of Lanes: **2**
Approach Speed: **55**
Total Approach Volume: **1,697**

Minor Street Approaches

Eastbound: CSAH 116 (Bunker Lake Blvd.)
Number of Lanes: **2**

Total Approach Volume: **709**

Westbound: CSAH 116 (Bunker Lake Blvd.)
Number of Lanes: **2**

Total Approach Volume: **0**

Warrant Summary (Rural values apply.)

- Warrant 1 - Eight Hour Vehicular Volumes** **Not Satisfied**
 - Warrant 1A - Minimum Vehicular Volume** **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed
 - Warrant 1B - Interruption of Continuous Traffic** **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed
 - Warrant 1 A&B - Combination of Warrants** **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed

- Warrant 2 - Four Hour Volumes** **Not Satisfied**
Number of hours (0) volumes exceed minimum < minimum required (4).

- Warrant 3 - Peak Hour** **Not Satisfied**
 - Warrant 3A - Peak Hour Delay** **Not Satisfied**
Approach volumes on minor street don't exceed minimums for any hour. Delay data not evaluated.
 - Warrant 3B - Peak Hour Volumes** **Not Satisfied**
Volumes do not exceed minimums for any hour.

- Warrant 4 - Pedestrian Volumes** **Not Evaluated**

- Warrant 5 - School Crossing** **Not Evaluated**

- Warrant 6 - Coordinated Signal System** **Not Evaluated**

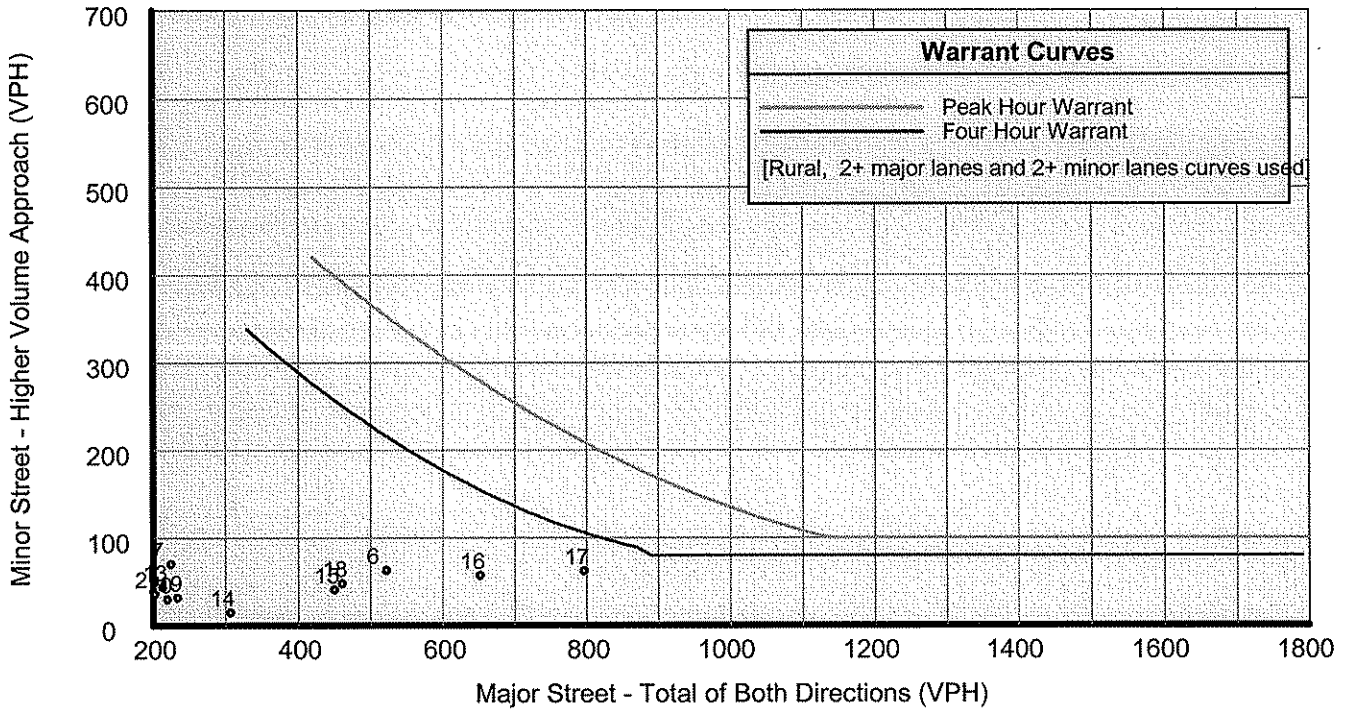
- Warrant 7 - Crash Experience** **Not Evaluated**

- Warrant 8 - Roadway Network** **Not Evaluated**

ANOKA COUNTY HIGHWAY PC-WARRANTS TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name : TMC0822B
Study Date : 08/13/08
Page No. : 2

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour Begin	Major Total	Higher Minor		War-1A			War-1B			War-1A&B		
		Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
01:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
02:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
03:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
04:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
05:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
06:00	522	63	EB	420-Yes	140-No	Major	630-No	70-No	---	504-Yes	112-No	Major
07:00	225	70	EB	420-No	140-No	---	630-No	70-Yes	Minor	504-No	112-No	---
08:00	189	50	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
09:00	165	40	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
10:00	127	36	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
11:00	168	55	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
12:00	175	30	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
13:00	213	44	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
14:00	307	15	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
15:00	450	41	EB	420-Yes	140-No	Major	630-No	70-No	---	504-No	112-No	---
16:00	652	57	EB	420-Yes	140-No	Major	630-Yes	70-No	Major	504-Yes	112-No	Major
17:00	797	62	EB	420-Yes	140-No	Major	630-Yes	70-No	Major	504-Yes	112-No	Major
18:00	461	48	EB	420-Yes	140-No	Major	630-No	70-No	---	504-No	112-No	---
19:00	234	32	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
20:00	220	30	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
21:00	202	36	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
22:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---
23:00	0	0	EB	420-No	140-No	---	630-No	70-No	---	504-No	112-No	---

**ANOKA COUNTY HIGHWAY
PC-WARRANTS
TRAFFIC SIGNAL WARRANT ANALYSIS**

Study Name :
Study Date : 07/17/08
Page No. : 1

Multi-Way Stop Warrant Report

Major Street Approaches

Northbound: CSAH 17 (Lexington Ave.)

Total Approach Volume: 3,410
Approach Speed: 55

Southbound: CSAH 17 (Lexington Ave.)

Total Approach Volume: 1,697
Approach Speed: 55

Minor Street Approaches

Eastbound: CSAH 116 (Bunker Lake Blvd.)

Total Approach Volume: 709

Westbound: CSAH 116 (Bunker Lake Blvd.)

Total Approach Volume: 0

Warrant Summary

Criteria A - Interim Measure Not Evaluated
If traffic signals are justified, stop signs can be installed as an interim measure.

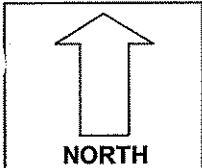
Criteria B - Crash Experience Not Evaluated

Criteria C - Minimum Volumes and Delays Not Satisfied
Delay data not evaluated
Required volumes reached for 0 hours, 8 are needed

Criteria D - 80% of Volumes, Delays, and Crashes Not Evaluated
Delay data not evaluated
Number of crashes (-1) is less than the minimum required (4).
Required volumes reached for 0 hours, 8 are needed

Analysis of 8 Hour Volume Warrants:

Time	Major Total	Minor Total	Crit C			Crit D		
			Major	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00 - 01:00	0	0	210-No	140-No	No	240-No	160-No	No
01:00 - 02:00	0	0	210-No	140-No	No	240-No	160-No	No
02:00 - 03:00	0	0	210-No	140-No	No	240-No	160-No	No
03:00 - 04:00	0	0	210-No	140-No	No	240-No	160-No	No
04:00 - 05:00	0	0	210-No	140-No	No	240-No	160-No	No
05:00 - 06:00	0	0	210-No	140-No	No	240-No	160-No	No
06:00 - 07:00	522	63	210-Yes	140-No	Major	240-Yes	160-No	Major
07:00 - 08:00	225	70	210-Yes	140-No	Major	240-No	160-No	No
08:00 - 09:00	189	50	210-No	140-No	No	240-No	160-No	No
09:00 - 10:00	165	40	210-No	140-No	No	240-No	160-No	No
10:00 - 11:00	127	36	210-No	140-No	No	240-No	160-No	No
11:00 - 12:00	168	55	210-No	140-No	No	240-No	160-No	No
12:00 - 13:00	175	30	210-No	140-No	No	240-No	160-No	No
13:00 - 14:00	213	44	210-Yes	140-No	Major	240-No	160-No	No
14:00 - 15:00	307	15	210-Yes	140-No	Major	240-Yes	160-No	Major
15:00 - 16:00	450	41	210-Yes	140-No	Major	240-Yes	160-No	Major
16:00 - 17:00	652	57	210-Yes	140-No	Major	240-Yes	160-No	Major
17:00 - 18:00	797	62	210-Yes	140-No	Major	240-Yes	160-No	Major
18:00 - 19:00	461	48	210-Yes	140-No	Major	240-Yes	160-No	Major
19:00 - 20:00	234	32	210-Yes	140-No	Major	240-No	160-No	No
20:00 - 21:00	220	30	210-Yes	140-No	Major	240-No	160-No	No
21:00 - 22:00	202	36	210-No	140-No	No	240-No	160-No	No
22:00 - 23:00	0	0	210-No	140-No	No	240-No	160-No	No
23:00 - 00:00	0	0	210-No	140-No	No	240-No	160-No	No



COUNT LOCATION:

CSAH 17 (Lexington Ave.) @

DATE:

07/17/2008

CSAH 116 (Bunker Lake Blvd.)

APP. #1 = CSAH 116
APP. #2 = CSAH 17
APP. #3 =
APP. #4 = CSAH 17

APP. #2	APP. #3
APP. #1	APP. #4

HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT

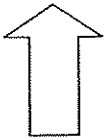
A. TRUCKS- A HEAVY VEHICLE INVOLVED PRIMARILY IN THE TRANSPORT OF GOODS OR IN THE DELIVERY OF A SERVICE.

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	1	
6:15-6:30						5		
6:30-6:45						8		
6:45-7:00						2		
HOURLY TOTAL						HOURLY TOTAL		17
7:00-7:15						3		
7:15-7:30								
7:30-7:45						3		
7:45-8:00						8		
HOURLY TOTAL						HOURLY TOTAL		14
8:00-8:15						3		
8:15-8:30						3		
8:30-8:45						6		1
8:45-9:00						7		2
HOURLY TOTAL						HOURLY TOTAL		22
9:00-9:15						2		
9:15-9:30						6		
9:30-9:45						3		
9:45-10:00						9		
HOURLY TOTAL						HOURLY TOTAL		20
10:00-10:15						7		1
10:15-10:30						3		
10:30-10:45						5		
10:45-11:00						3		
HOURLY TOTAL						HOURLY TOTAL		19
11:00-11:15						7		
11:15-11:30						7		
11:30-11:45						4		
11:45-12:00						4		
HOURLY TOTAL						HOURLY TOTAL		22
12:00-12:15						10		
12:15-12:30						4		1
12:30-12:45						1		
12:45-1:00						10		1
HOURLY TOTAL						HOURLY TOTAL		27
1:00-1:15						5	1	
1:15-1:30						1		
1:30-1:45						3	1	1
1:45-2:00						2		3
HOURLY TOTAL						HOURLY TOTAL		17
					TOTAL		TOTAL	158

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NORTH

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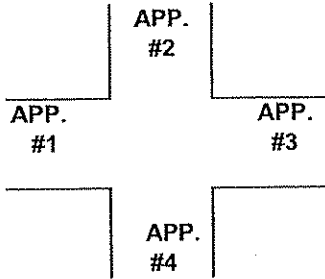
CSAH 17 (Lexington Ave.) @

DATE:

07/21/2008

CSAH 116 (Bunker Lake Blvd.)

APP. #1 = CSAH 116
APP. #2 = CSAH 17
APP. #3 =
APP. #4 = CSAH 17



- 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						5		
2:30-2:45						6		
2:45-3:00						11	1	
HOURLY TOTAL						HOURLY TOTAL		25
3:00-3:15						9		
3:15-3:30						7		
3:30-3:45						8		
3:45-4:00						6		
HOURLY TOTAL						HOURLY TOTAL		30
4:00-4:15						6		
4:15-4:30						5		
4:30-4:45						5		
4:45-5:00						6		
HOURLY TOTAL						HOURLY TOTAL		22
5:00-5:15						6		
5:15-5:30						1		
5:30-5:45						4		
5:45-6:00						1		
HOURLY TOTAL						HOURLY TOTAL		12
6:00-6:15						2		
6:15-6:30						4		
6:30-6:45						2		
6:45-7:00								
HOURLY TOTAL						HOURLY TOTAL		8
7:00-7:15								
7:15-7:30						1		
7:30-7:45						2		
7:45-8:00						1		
HOURLY TOTAL						HOURLY TOTAL		4
8:00-8:15								
8:15-8:30								
8:30-8:45						1		
8:45-9:00						1		
HOURLY TOTAL						HOURLY TOTAL		2
9:00-9:15						2		
9:15-9:30						2		1
9:30-9:45						1		1
9:45-10:00								
HOURLY TOTAL						HOURLY TOTAL		7
					TOTAL		TOTAL	268

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