



MINNESOTA DEPARTMENT OF TRANSPORTATION

METRO DIVISION - TRAFFIC ENGINEERING

SIGNAL WARRANTS ANALYSIS

LOCATION: TH-282 & CREEK LANE
 COUNTY: SCOTT
 REF. POINT: 000.258
 DATE: 4/30/1997
 OPERATOR: DR

Speed	Approach Description	Lanes
30	Major App1: TH-282 EB, W OF CREEK LANE	1
30	Major App3: TH-282 WB, E OF CREEK LANE	1
30	Minor App2: CREEK LANE NB, S OF TH-282	1
30	Minor App4: CREEK LANE SB, N OF TH-282	1

0.70 FACTOR USED? YES
 POPULATION < 10,000? YES
 EXISTING SIGNAL ? NO

HOUR	350/525				105/52		105/52		MET SAME HOURS
	MAJOR APP. 1	MAJOR APP. 3	TOTAL 1+3	WARRANT MET	MINOR APP. 2	MINOR APP. 4	WARRANT MET APP. 2	WARRANT MET APP. 4	
0:00 - 1:00	23	24	47	/	0	5	/	/	/
1:00 - 2:00	11	12	23	/	1	1	/	/	/
2:00 - 3:00	4	12	16	/	0	1	/	/	/
3:00 - 4:00	8	9	17	/	0	0	/	/	/
4:00 - 5:00	9	10	19	/	0	1	/	/	/
5:00 - 6:00	58	76	134	/	1	5	/	/	/
6:00 - 7:00	120	131	251	/	1	7	/	/	/
7:00 - 8:00	218	272	490	X/	5	18	/	/	/
8:00 - 9:00	193	264	457	X/	2	28	/	/	/
9:00 - 10:00	175	199	374	X/	2	34	/	/	/
10:00 - 11:00	182	207	389	X/	6	38	/	/	/
11:00 - 12:00	210	273	483	X/	6	52	/	/X	/
12:00 - 13:00	230	257	487	X/	2	56	/	/X	/
13:00 - 14:00	217	230	447	X/	8	43	/	/	/
14:00 - 15:00	238	262	500	X/	11	51	/	/	/
15:00 - 16:00	280	347	627	X/X	9	55	/	/X	/X
16:00 - 17:00	313	365	678	X/X	5	75	/	/X	/X
17:00 - 18:00	293	313	606	X/X	5	69	/	/X	/X
18:00 - 19:00	240	263	503	X/	4	36	/	/	/
19:00 - 20:00	175	214	389	X/	4	25	/	/	/
20:00 - 21:00	145	177	322	/	1	22	/	/	/
21:00 - 22:00	103	120	223	/	0	21	/	/	/
22:00 - 23:00	58	65	123	/	1	12	/	/	/
23:00 - 24:00	34	40	74	/	0	7	/	/	/

	Met (Hr)	Required (Hr)	
Warrant 1	0	8	Not satisfied
Warrant 2	3	8	Not satisfied
Warrant 6	7	8	Not satisfied
Warrant 8	0	8	Not satisfied
Warrant 9	0	4	Not satisfied
Warrant 11	0	1	Not satisfied

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 EXISTING SIGNAL ? NO

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30	Minor App4: CREEK LANE SB, N OF TH-282	1

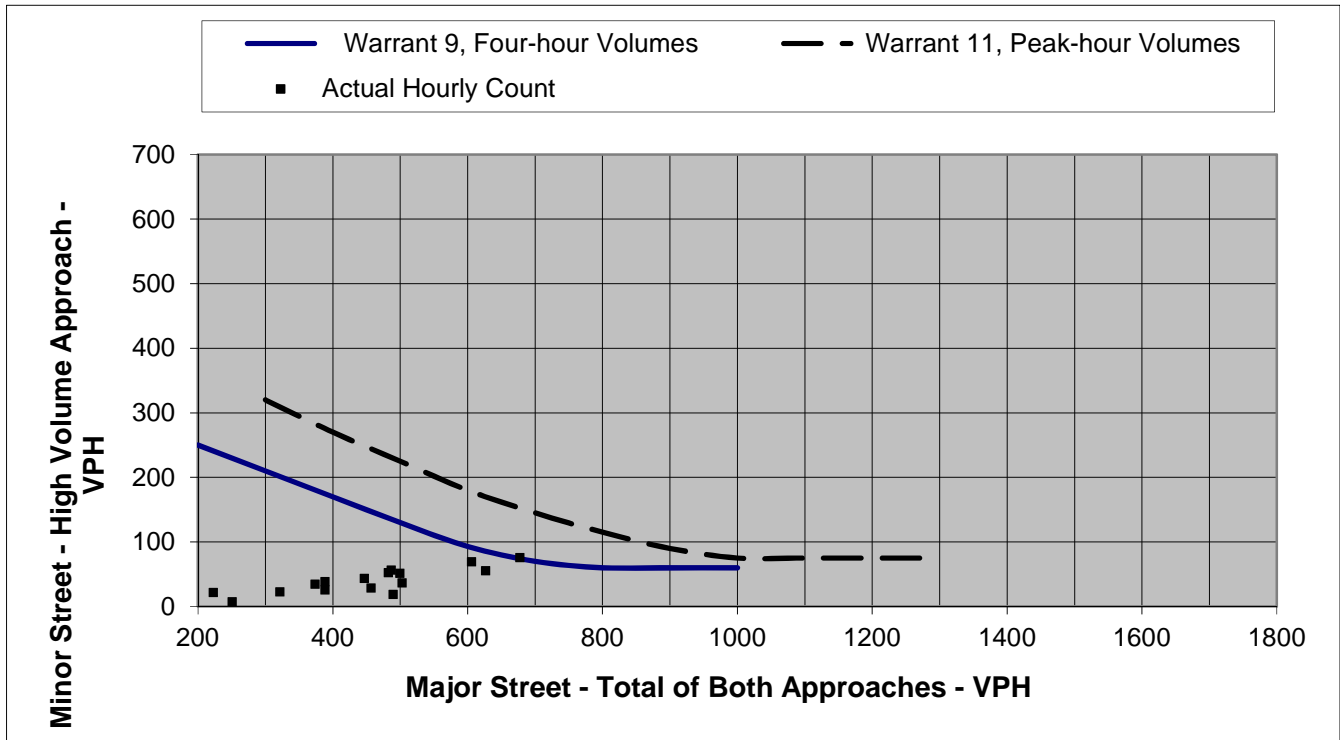


Figure 1. Four Hour and Peak Hour Warrant Analysis

Note: For data points outside the graph range, check the minor street volume against the lower thresholds

Major	Warrant Criteria		Actual Hourly Count	
	Warrant 9, F	Warrant 11, P	Major	Actual Hourly Count
200	250		47	5
300	210	320	23	1
400	170	270	16	1
500	130	225	17	0
600	93	180	19	1
700	70	145	134	5
800	60	115	251	7
900	60	90	490	18
1000	60	75	457	28
1100		75	374	34
1200		75	389	38
1300		75	483	52
1400			487	56
1500			447	43
1600			500	51
1700			627	55
1800			678	75
			606	69
			503	36
			389	25
			322	22
			223	21
			123	12
			74	7

Four Hour Warrant

Major App	Minor App		
	1 & 1	2 & 1	2 & 2
300	360	440	590
400	310	390	530
500	260	340	460
600	215	290	390
700	180	245	330
800	150	205	280
900	125	170	235
1000	100	145	195
1100	85	120	165
1200	80	100	135
1300	80	83	110
1400	80	80	110

Peak Hour

Major App	1 & 1
400	475
500	425
600	370
700	330
800	280
900	240
1000	204
1100	175
1200	150
1300	130
1400	115
1500	100
1600	100
1700	100
1800	100

Four Hour Warrant Factored

Major App	Minor App		
	1 & 1	2 & 1	2 & 2
200	250	320	420
300	210	265	350
400	170	215	285
500	130	170	230
600	93	130	175
700	70	100	135
800	60	80	103
900	60	65	80
1000	60	60	80

Peak Hour

Major App	1 & 1
300	320
400	270
500	225
600	180
700	145
800	115
900	90
1000	75
1100	75
1200	75
1300	75

Warrant

Minor App

2 & 1	2 & 2
570	725
520	665
465	600
420	540
370	480
330	425
285	375
250	330
220	285
190	250
160	220
140	187
115	165
100	150
100	150

Warrant Factored

Minor App

2 & 1	2 & 2
380	500
335	435
285	370
240	315
200	260
160	215
135	175
110	140
95	115
75	100
75	100



MINNESOTA DEPARTMENT OF TRANSPORTATION

METRO DIVISION - TRAFFIC ENGINEERING

ALL WAY STOP WARRANT

LOCATION: TH-282 & CREEK LANE

COUNTY: SCOTT

REF. POINT: 000.258

DATE: 4/30/1997

OPERATOR: DR

Speed	Approach Description	Lanes
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30	Minor App2: CREEK LANE NB, S OF TH-282	1
30	Minor App4: CREEK LANE SB, N OF TH-282	1

0.70 FACTOR USED? No

HOUR	MAJOR APP. 1	MAJOR APP. 3	MINOR APP. 2	MINOR APP. 4	500	200	WARRANT MET
					TOTAL Σ (APP.1 to APP. 4)	MINOR TOTAL APP. 2 + APP. 4	
0:00 - 1:00	23	24	0	5	52	5	/
1:00 - 2:00	11	12	1	1	25	2	/
2:00 - 3:00	4	12	0	1	17	1	/
3:00 - 4:00	8	9	0	0	17	0	/
4:00 - 5:00	9	10	0	1	20	1	/
5:00 - 6:00	58	76	1	5	140	6	/
6:00 - 7:00	120	131	1	7	259	8	/
7:00 - 8:00	218	272	5	18	513	23	X/
8:00 - 9:00	193	264	2	28	487	30	/
9:00 - 10:00	175	199	2	34	410	36	/
10:00 - 11:00	182	207	6	38	433	44	/
11:00 - 12:00	210	273	6	52	541	58	X/
12:00 - 13:00	230	257	2	56	545	58	X/
13:00 - 14:00	217	230	8	43	498	51	/
14:00 - 15:00	238	262	11	51	562	62	X/
15:00 - 16:00	280	347	9	55	691	64	X/
16:00 - 17:00	313	365	5	75	758	80	X/
17:00 - 18:00	293	313	5	69	680	74	X/
18:00 - 19:00	240	263	4	36	543	40	X/
19:00 - 20:00	175	214	4	25	418	29	/
20:00 - 21:00	145	177	1	22	345	23	/
21:00 - 22:00	103	120	0	21	244	21	/
22:00 - 23:00	58	65	1	12	136	13	/
23:00 - 24:00	34	40	0	7	81	7	/

Allway Stop Warrant: Met (Hr) 0 Required (Hr) 8 Not satisfied

REMARKS: _____

