



MINNESOTA DEPARTMENT OF TRANSPORTATION

METRO DIVISION - TRAFFIC ENGINEERING

SIGNAL WARRANTS ANALYSIS

LOCATION: Cedar Lake Rd at Ford Road

COUNTY: Hennepin

REF. POINT:

DATE: 11/24/2015

OPERATOR: RE

Speed	Approach Description	Lanes
35	Major App1: Cedar Lake Rd EB, west of Ford Rd.	2
35	Major App3: Cedar Lake Rd WB, east of Ford Rd.	2
0	Minor App2: n/a	0
30	Minor App4: Ford Rd SB, north of Cedar Laker Rd	1

0.70 FACTOR USED?

no

POPULATION < 10,000?

no

EXISTING SIGNAL ?

no

THRESHOLDS 1A/1B:

600/900

150/75

HOUR	MAJOR APP. 1	MAJOR APP. 3	TOTAL 1+3	MAJOR 1A/1B	MINOR APP. 2	MINOR 2 1A/1B	MINOR APP. 4	MINOR 4 1A/1B	MET SAME 1A/1B
0:00 - 1:00	0	0	0	/	0		0	/	/
1:00 - 2:00	0	0	0	/	0		0	/	/
2:00 - 3:00	0	0	0	/	0		0	/	/
3:00 - 4:00	0	0	0	/	0		0	/	/
4:00 - 5:00	0	0	0	/	0		0	/	/
5:00 - 6:00	246	168	414	/	0		28	/	/
6:00 - 7:00	662	477	1139	X/X	0		111	/X	/X
7:00 - 8:00	524	275	799	X/	0		93	/X	/
8:00 - 9:00	394	301	695	X/	0		53	/	/
9:00 - 10:00	318	301	619	X/	0		56	/	/
10:00 - 11:00	343	366	709	X/	0		43	/	/
11:00 - 12:00	398	390	788	X/	0		55	/	/
12:00 - 13:00	382	362	744	X/	0		39	/	/
13:00 - 14:00	552	531	1083	X/X	0		67	/	/
14:00 - 15:00	527	516	1043	X/X	0		92	/X	/X
15:00 - 16:00	522	598	1120	X/X	0		133	/X	/X
16:00 - 17:00	504	618	1122	X/X	0		152	X/X	X/X
17:00 - 18:00	455	482	937	X/X	0		81	/X	/X
18:00 - 19:00	0	0	0	/	0		0	/	/
19:00 - 20:00	0	0	0	/	0		0	/	/
20:00 - 21:00	0	0	0	/	0		0	/	/
21:00 - 22:00	0	0	0	/	0		0	/	/
22:00 - 23:00	0	0	0	/	0		0	/	/
23:00 - 24:00	0	0	0	/	0		0	/	/

Met (Hr) Required (Hr)

Warrant 1A	1	8	Not satisfied
Warrant 1B	5	8	Not satisfied
Warrant 2	2	4	Not satisfied
Warrant 3	0	1	Not satisfied
Warrant 7	7	8	Not satisfied

Four Hour Warrant				Peak Hour Warrant		
Major App	Minor App			Major App	Minor App	
	1 & 1	2 & 1	2 & 2		1 & 1	2 & 1
300	360	440	590	400	475	570
400	310	390	530	500	425	520
500	260	340	460	600	370	465
600	215	290	390	700	330	420
700	180	245	330	800	280	370
800	150	205	280	900	240	330
900	125	170	235	1000	204	285
1000	100	145	195	1100	175	250
1100	85	120	165	1200	150	220
1200	80	100	135	1300	130	190
1300	80	83	115	1400	115	160
1400	80	80	115	1500	100	140
1500	80	80	115	1600	100	115
1600	80	80	115	1700	100	100
1700	80	80	115	1800	100	100
1800	80	80	115			

Four Hour Warrant Factored				Peak Hour Warrant Factored		
Major App	Minor App			Major App	Minor App	
	1 & 1	2 & 1	2 & 2		1 & 1	2 & 1
200	250	320	420	300	320	380
300	210	265	350	400	270	335
400	170	215	285	500	225	285
500	130	170	230	600	180	240
600	93	130	175	700	145	200
700	70	100	135	800	115	160
800	60	80	103	900	90	135
900	60	65	80	1000	75	110
1000	60	60	80	1100	75	95
1100	60	60	80	1200	75	75
1200	60	60	80	1300	75	75
1300	60	60	80	1400	75	75
1400	60	60	80	1500	75	75
1500	60	60	80	1600	75	75
1600	60	60	80	1700	75	75
1700	60	60	80	1800	75	75
1800	60	60	80			

2 & 2
725
665
600
540
480
425
375
330
285
250
220
187
165
150
150

ctored

2 & 2
500
435
370
315
260
215
175
140
115
100
100
100
100
100
100
100

