

Date : 12/18/18

Count Number : TMC 1858

Location : CR 132 (85th Ave.)

@ Evergreen Blvd./Springbrook Nature Center

Collection Period : 6 AM - 8 PM

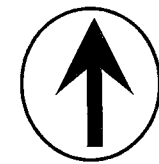
Evergreen Blvd.

2011

#2

1033			
379	10	644	0
E	F	G	H

978



North

7858

#1

3902	0	D
	347	C
	3511	B
	44	A

CR 132

3956

I	621	4257
J	3535	
K	98	
L	3	

CR 132

#3

8513

4256

152

P	O	N	M
0	42	10	98
150			

#4

302

Springbrook

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

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Date : 12/18/18

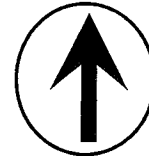
Count Number : TMC 1858

Location : CR 132 (85th Ave.)

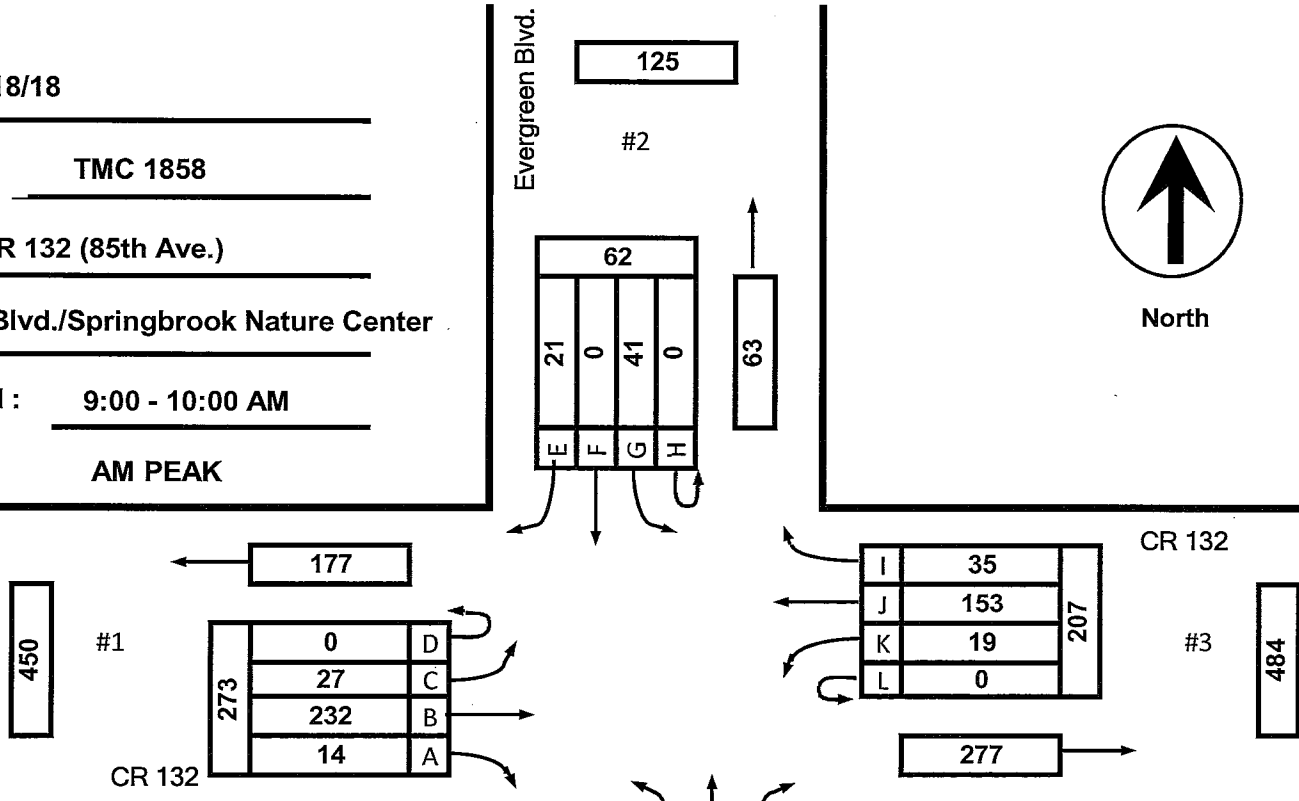
@ Evergreen Blvd./Springbrook Nature Center

Collection Period : 9:00 - 10:00 AM

**AM PEAK**



North



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

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

Date : 12/18/18

Count Number : TMC 1858

Location : CR 132 (85th Ave.)

@ Evergreen Blvd./Springbrook Nature Center

Collection Period : 11:45 AM - 12:45 PM

**MID PEAK**

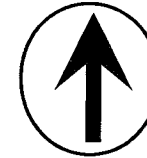
Evergreen Blvd.

232

#2

113			
32	3	78	0
E	F	G	H

119



North

674

#1

329	
0	D
30	C
311	B
4	A

CR 132

345

I	88	392
J	287	
K	17	
L	0	

CR 132

#3

802

410

Springbrook Nature Center

24

P	O	N	M
0	10	1	21
32			

#4

56

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

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Date : 12/18/18

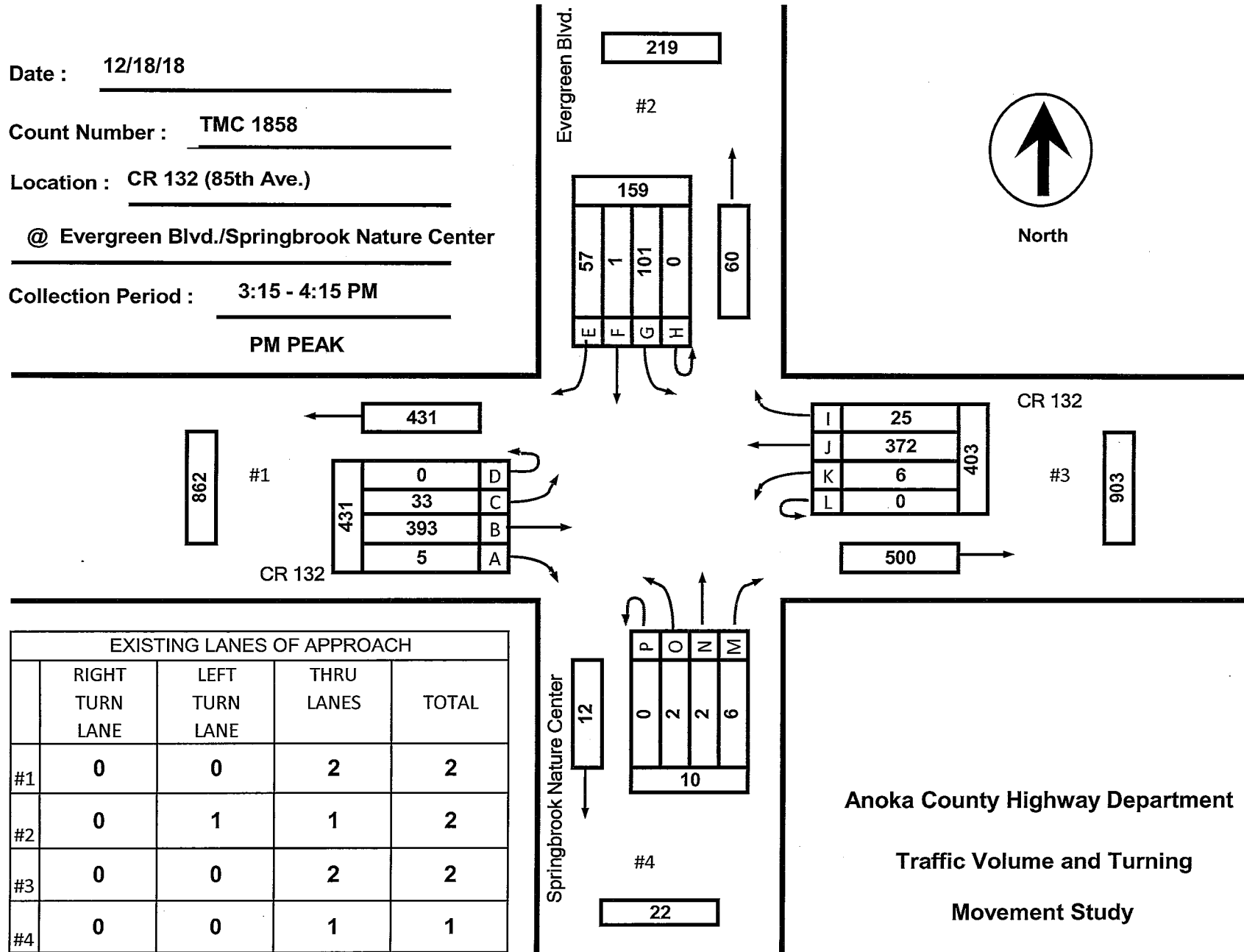
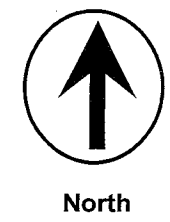
Count Number : TMC 1858

Location : CR 132 (85th Ave.)

@ Evergreen Blvd./Springbrook Nature Center

Collection Period : 3:15 - 4:15 PM

**PM PEAK**



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

Weather: Cold & Cloudy  
 CountCam200  
 Study Conducted By: Andrea

File Name : TMC 1858  
 Site Code :  
 Start Date : 12/18/2018  
 Page No : 1

Groups Printed- Cars + - Trucks

Start Time	Evergreen Blvd. Southbound						CR 132 Westbound						Springbrook Nature Center Parking Lot Northbound						CR 132 Eastbound						Exclu. Total	Inclu. Total	Int. Total
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total			
06:00	0	4	0	3	0	7	0	0	15	10	0	25	0	0	0	0	0	0	0	4	28	0	0	32	0	64	64
06:15	0	5	0	4	0	9	0	1	17	15	0	33	0	0	1	0	0	1	0	1	22	0	0	23	0	66	66
06:30	0	8	0	4	0	12	0	2	24	8	0	34	0	0	0	0	0	0	0	5	25	0	0	30	0	76	76
06:45	0	6	0	6	0	12	0	0	29	9	0	38	0	0	0	2	0	2	0	20	46	0	0	66	0	118	118
<b>Total</b>	0	23	0	17	0	40	0	3	85	42	0	130	0	0	1	2	0	3	0	30	121	0	0	151	0	324	324
07:00	0	7	0	5	0	12	0	1	31	18	0	50	0	1	0	0	0	1	0	7	26	0	0	33	0	96	96
07:15	0	6	0	5	0	11	0	1	34	15	0	50	0	0	0	0	0	0	0	11	50	0	0	61	0	122	122
07:30	0	11	0	6	0	17	0	1	34	23	0	58	0	2	0	0	0	2	0	9	53	0	0	62	0	139	139
07:45	0	7	0	2	0	9	0	1	48	16	0	65	0	0	0	0	0	0	0	10	63	0	0	73	0	147	147
<b>Total</b>	0	31	0	18	0	49	0	4	147	72	0	223	0	3	0	0	0	3	0	37	192	0	0	229	0	504	504
08:00	0	10	0	5	0	15	0	1	42	13	0	56	0	0	0	0	0	0	0	5	42	0	0	47	0	118	118
08:15	0	7	0	2	0	9	0	1	22	17	0	40	0	1	0	0	0	1	0	8	37	1	0	46	0	96	96
08:30	0	8	0	7	0	15	0	3	26	6	0	35	0	0	0	0	1	0	0	8	44	1	0	53	1	103	104
08:45	0	7	1	6	0	14	0	4	25	11	0	40	0	0	0	1	0	1	0	6	40	1	0	47	0	102	102
<b>Total</b>	0	32	1	20	0	53	0	9	115	47	0	171	0	1	0	1	1	2	0	27	163	3	0	193	1	419	420
09:00	0	6	0	7	0	13	0	3	34	9	0	46	0	2	0	0	0	2	0	10	61	2	0	73	0	134	134
09:15	0	10	0	4	0	14	0	3	35	8	0	46	0	0	0	3	0	3	0	8	62	2	0	72	0	135	135
09:30	0	9	0	6	0	15	0	4	49	5	0	58	0	1	1	0	0	2	0	8	50	4	0	62	0	137	137
09:45	0	16	0	4	0	20	0	9	35	13	0	57	0	0	0	1	0	1	0	1	59	6	0	66	0	144	144
<b>Total</b>	0	41	0	21	0	62	0	19	153	35	0	207	0	3	1	4	0	8	0	27	232	14	0	273	0	550	550
10:00	0	1	0	4	0	5	0	4	32	10	0	46	0	0	0	1	0	1	0	9	40	2	0	51	0	103	103
10:15	0	9	0	5	0	14	0	1	52	4	0	57	0	0	0	0	0	0	0	7	55	0	0	62	0	133	133
10:30	0	2	0	4	0	6	0	1	34	7	0	42	0	2	0	3	0	5	0	4	58	1	0	63	0	116	116
10:45	0	16	0	8	0	24	0	1	47	20	0	68	0	1	1	2	0	4	0	8	62	0	0	70	0	166	166
<b>Total</b>	0	28	0	21	0	49	0	7	165	41	0	213	0	3	1	6	0	10	0	28	215	3	0	246	0	518	518
11:00	0	18	0	4	0	22	0	5	52	12	0	69	0	0	0	0	0	0	0	8	62	1	0	71	0	162	162
11:15	0	17	0	9	0	26	0	0	68	15	0	83	0	0	0	1	0	1	0	6	62	0	0	68	0	178	178
11:30	0	25	0	8	0	33	0	1	63	23	0	87	0	2	0	4	0	6	0	7	67	1	2	75	2	201	203
11:45	0	20	0	6	0	26	0	1	63	20	0	84	0	1	0	2	0	3	0	6	86	2	2	94	2	207	209
<b>Total</b>	0	80	0	27	0	107	0	7	246	70	0	323	0	3	0	7	0	10	0	27	277	4	4	308	4	748	752



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Cold & Cloudy  
 CountCam200  
 Study Conducted By: Andrea

File Name : TMC 1858  
 Site Code :  
 Start Date : 12/18/2018  
 Page No : 2

Groups Printed- Cars + - Trucks

Start Time	Evergreen Blvd. Southbound						CR 132 Westbound						Springbrook Nature Center Parking Lot Northbound						CR 132 Eastbound						Exclu. Total	Inclu. Total	Int. Total	
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total				
12:00	0	30	0	12	0	42	0	5	71	17	0	93	0	0	0	5	0	5	0	9	82	0	0	91	0	0	231	231
12:15	0	17	2	8	1	27	0	3	73	29	0	105	0	6	1	7	0	14	0	9	66	2	0	77	1	0	223	224
12:30	0	11	1	6	0	18	0	8	80	22	0	110	0	3	0	7	0	10	0	6	77	0	0	83	0	0	221	221
12:45	0	10	0	9	0	19	0	2	74	15	0	91	0	1	1	7	0	9	0	6	64	2	0	72	0	0	191	191
Total	0	68	3	35	1	106	0	18	298	83	0	399	0	10	2	26	0	38	0	30	289	4	0	323	1	0	866	867
13:00	0	8	0	11	0	19	0	0	83	13	0	96	0	1	0	5	0	6	0	8	62	0	0	70	0	0	191	191
13:15	0	7	1	6	0	14	0	2	65	11	0	78	0	3	1	6	0	10	0	7	51	0	0	58	0	0	160	160
13:30	0	14	0	11	0	25	0	0	70	18	0	88	0	0	0	2	0	2	0	6	66	1	0	73	0	0	188	188
13:45	0	6	0	4	0	10	2	2	66	9	0	79	0	0	0	2	0	2	0	7	63	0	0	70	0	0	161	161
Total	0	35	1	32	0	68	2	4	284	51	0	341	0	4	1	15	0	20	0	28	242	1	0	271	0	0	700	700
14:00	0	15	1	6	0	22	0	1	75	17	0	93	0	0	0	0	0	0	0	5	63	0	0	68	0	0	183	183
14:15	0	15	0	5	0	20	0	4	69	12	0	85	0	2	0	1	0	3	0	5	70	2	0	77	0	0	185	185
14:30	0	14	1	8	0	23	0	1	92	21	0	114	0	2	0	5	0	7	0	7	85	1	0	93	0	0	237	237
14:45	0	12	0	7	0	19	0	1	110	24	0	135	0	0	1	2	0	3	0	3	57	2	1	62	1	0	219	220
Total	0	56	2	26	0	84	0	7	346	74	0	427	0	4	1	8	0	13	0	20	275	5	1	300	1	0	824	825
15:00	0	17	1	7	0	25	0	2	93	14	0	109	0	1	0	4	0	5	0	3	69	0	0	72	0	0	211	211
15:15	0	12	0	7	0	19	0	2	105	12	0	119	0	0	0	0	0	0	0	10	94	0	0	104	0	0	242	242
15:30	0	43	0	23	0	66	0	0	74	4	0	78	0	0	2	2	0	4	0	6	112	2	0	120	0	0	268	268
15:45	0	27	1	11	0	39	0	2	102	5	0	109	0	1	0	2	0	3	0	9	77	1	0	87	0	0	238	238
Total	0	99	2	48	0	149	0	6	374	35	0	415	0	2	2	8	0	12	0	28	352	3	0	383	0	0	959	959
16:00	0	19	0	16	0	35	0	2	91	4	0	97	0	1	0	2	0	3	0	8	110	2	0	120	0	0	255	255
16:15	0	16	0	13	0	29	0	3	90	7	0	100	0	1	0	4	0	5	0	4	77	1	0	82	0	0	216	216
16:30	0	28	0	17	1	45	0	2	103	9	0	114	0	1	0	1	0	2	0	7	89	0	0	96	1	0	257	258
16:45	0	14	0	10	0	24	0	0	107	8	0	115	0	0	0	1	0	1	0	6	101	0	0	107	0	0	247	247
Total	0	77	0	56	1	133	0	7	391	28	0	426	0	3	0	8	0	11	0	25	377	3	0	405	1	0	975	976
17:00	0	17	0	11	0	28	0	0	94	4	0	98	0	1	0	4	0	5	0	7	95	1	0	103	0	0	234	234
17:15	0	9	0	7	0	16	0	1	106	6	0	113	0	1	0	5	0	6	0	3	75	1	0	79	0	0	214	214
17:30	0	5	1	4	0	10	0	0	101	3	0	104	0	1	0	1	0	2	0	2	86	0	0	88	0	0	204	204
17:45	0	8	0	10	0	18	0	0	88	3	0	91	0	0	0	0	0	0	0	1	73	0	0	74	0	0	183	183
Total	0	39	1	32	0	72	0	1	389	16	0	406	0	3	0	10	0	13	0	13	329	2	0	344	0	0	835	835
18:00	0	9	0	4	0	13	0	1	84	2	0	87	0	1	0	0	0	1	0	1	76	0	0	77	0	0	178	178
18:15	0	1	0	7	0	8	0	2	78	8	0	88	0	0	0	3	0	3	0	2	69	1	0	72	0	0	171	171
18:30	0	2	0	2	0	4	1	2	61	2	0	66	0	1	1	0	0	2	0	3	66	1	0	70	0	0	142	142



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Cold & Cloudy  
 CountCam200  
 Study Conducted By: Andrea

File Name : TMC 1858  
 Site Code :  
 Start Date : 12/18/2018  
 Page No : 3

Groups Printed- Cars + - Trucks

Start Time	Evergreen Blvd. Southbound						CR 132 Westbound						Springbrook Nature Center Parking Lot Northbound						CR 132 Eastbound						Exclu. Total	Inclu. Total	Int. Total			
	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total	UTrn	Left	Thru	Right	Peds	App. Total						
18:45	0	3	0	4	0	7	0	0	69	2	0	71	0	0	0	0	0	0	0	5	67	0	0	72	0	150	150			
Total	0	15	0	17	0	32	1	5	292	14	0	312	0	2	1	3	0	6	0	11	278	2	0	291	0	641	641			
19:00	0	11	0	3	0	14	0	0	61	2	0	63	0	0	0	0	0	0	0	6	47	0	0	53	0	130	130			
19:15	0	3	0	2	0	5	0	1	55	7	0	63	0	1	0	0	0	1	0	2	46	0	0	48	0	117	117			
19:30	0	3	0	2	0	5	0	0	66	1	0	67	0	0	0	0	0	0	0	3	30	0	0	33	0	105	105			
19:45	0	3	0	2	0	5	0	0	68	3	0	71	0	0	0	0	0	0	0	5	46	0	0	51	0	127	127			
Total	0	20	0	9	0	29	0	1	250	13	0	264	0	1	0	0	0	1	0	16	169	0	0	185	0	479	479			
Grand Total	0	644	10	379	2	1033	3	98	3535	621	0	4257	0	42	10	98	1	150	0	347	3511	44	5	3902	8	9342	9350			
Apprch %	0	62.3	1	36.7			0.1	2.3	83	14.6			0	28	6.7	65.3			0	8.9	90	1.1								
Total %	0	6.9	0.1	4.1		11.1	0	1	37.8	6.6		45.6	0	0.4	0.1	1		1.6	0	3.7	37.6	0.5		41.8	0.1	99.9				
Cars +	0	542	10	317		871	3	98	3458	517		4076	0	42	10	98		151	0	273	3437	44		3759	0	0	8857			
% Cars +	0	84.2	100	83.6	100	84.2	100	100	97.8	83.3	0	95.7	0	100	100	100	100	100	0	78.7	97.9	100	100	96.2	0	0	94.7			
Trucks	0	102	0	62		164	0	0	77	104		181	0	0	0	0		0	0	74	74	0		148	0	0	493			
% Trucks	0	15.8	0	16.4	0	15.8	0	0	2.2	16.7	0	4.3	0	0	0	0	0	0	0	21.3	2.1	0	0	3.8	0	0	5.3			

Start Time	Evergreen Blvd. Southbound						CR 132 Westbound						Springbrook Nature Center Parking Lot Northbound						CR 132 Eastbound						Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total					
Peak Hour Analysis From 06:00 to 09:45 - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 09:00																									
09:00	0	6	0	7	13	0	3	34	9	46	0	2	0	0	2	0	10	61	2	73	134				
09:15	0	10	0	4	14	0	3	35	8	46	0	0	0	3	3	0	8	62	2	72	135				
09:30	0	9	0	6	15	0	4	49	5	58	0	1	1	0	2	0	8	50	4	62	137				
09:45	0	16	0	4	20	0	9	35	13	57	0	0	0	1	1	0	1	59	6	66	144				
Total Volume	0	41	0	21	62	0	19	153	35	207	0	3	1	4	8	0	27	232	14	273	550				
% App. Total	0	66.1	0	33.9		0	9.2	73.9	16.9		0	37.5	12.5	50		0	9.9	85	5.1						
PHF	.000	.641	.000	.750	.775	.000	.528	.781	.673	.892	.000	.375	.250	.333	.667	.000	.675	.935	.583	.935	.955				



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Cold & Cloudy  
 CountCam200  
 Study Conducted By: Andrea

File Name : TMC 1858  
 Site Code :  
 Start Date : 12/18/2018  
 Page No : 4

Start Time	Evergreen Blvd. Southbound					CR 132 Westbound					Springbrook Nature Center Parking Lot Northbound					CR 132 Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
Peak Hour Analysis From 10:00 to 13:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45																					
11:45	0	20	0	6	26	0	1	63	20	84	0	1	0	2	3	0	6	86	2	94	207
12:00	0	30	0	12	42	0	5	71	17	93	0	0	0	5	5	0	9	82	0	91	231
12:15	0	17	2	8	27	0	3	73	29	105	0	6	1	7	14	0	9	66	2	77	223
12:30	0	11	1	6	18	0	8	80	22	110	0	3	0	7	10	0	6	77	0	83	221
Total Volume	0	78	3	32	113	0	17	287	88	392	0	10	1	21	32	0	30	311	4	345	882
% App. Total	0	69	2.7	28.3		0	4.3	73.2	22.4		0	31.2	3.1	65.6		0	8.7	90.1	1.2		
PHF	.000	.650	.375	.667	.673	.000	.531	.897	.759	.891	.000	.417	.250	.750	.571	.000	.833	.904	.500	.918	.955

Peak Hour Analysis From 14:00 to 19:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 15:15																					
15:15	0	12	0	7	19	0	2	105	12	119	0	0	0	0	0	0	10	94	0	104	242
15:30	0	43	0	23	66	0	0	74	4	78	0	0	2	2	4	0	6	112	2	120	268
15:45	0	27	1	11	39	0	2	102	5	109	0	1	0	2	3	0	9	77	1	87	238
16:00	0	19	0	16	35	0	2	91	4	97	0	1	0	2	3	0	8	110	2	120	255
Total Volume	0	101	1	57	159	0	6	372	25	403	0	2	2	6	10	0	33	393	5	431	1003
% App. Total	0	63.5	0.6	35.8		0	1.5	92.3	6.2		0	20	20	60		0	7.7	91.2	1.2		
PHF	.000	.587	.250	.620	.602	.000	.750	.886	.521	.847	.000	.500	.250	.750	.625	.000	.825	.877	.625	.898	.936





# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Cold & Cloudy  
 CountCam200  
 Study Conducted By: Andrea

File Name : TMC 1858  
 Site Code :  
 Start Date : 12/18/2018  
 Page No : 1

Groups Printed- Trucks

Start Time	Evergreen Blvd. Southbound					CR 132 Westbound					Springbrook Nature Center Parking Lot Northbound					CR 132 Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
06:00	0	0	0	2	2	0	0	0	1	1	0	0	0	0	0	0	0	2	0	2	5
06:15	0	1	0	2	3	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	5
06:30	0	2	0	1	3	0	0	1	2	3	0	0	0	0	0	0	1	0	0	1	7
06:45	0	5	0	2	7	0	0	2	3	5	0	0	0	0	0	0	3	3	0	6	18
Total	0	8	0	7	15	0	0	3	8	11	0	0	0	0	0	0	4	5	0	9	35
07:00	0	5	0	1	6	0	0	1	3	4	0	0	0	0	0	0	0	1	0	1	11
07:15	0	2	0	1	3	0	0	4	1	5	0	0	0	0	0	0	1	1	0	2	10
07:30	0	3	0	2	5	0	0	1	3	4	0	0	0	0	0	0	1	5	0	6	15
07:45	0	2	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	1	0	1	5
Total	0	12	0	4	16	0	0	6	9	15	0	0	0	0	0	0	2	8	0	10	41
08:00	0	3	0	2	5	0	0	2	2	4	0	0	0	0	0	0	0	2	0	2	11
08:15	0	3	0	0	3	0	0	0	3	3	0	0	0	0	0	0	2	1	0	3	9
08:30	0	4	0	1	5	0	0	2	1	3	0	0	0	0	0	0	3	1	0	4	12
08:45	0	3	0	2	5	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	9
Total	0	13	0	5	18	0	0	6	8	14	0	0	0	0	0	0	5	4	0	9	41
09:00	0	1	0	0	1	0	0	2	1	3	0	0	0	0	0	0	2	5	0	7	11
09:15	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	4
09:30	0	4	0	0	4	0	0	1	1	2	0	0	0	0	0	0	1	2	0	3	9
09:45	0	5	0	2	7	0	0	4	2	6	0	0	0	0	0	0	0	1	0	1	14
Total	0	12	0	2	14	0	0	8	4	12	0	0	0	0	0	0	3	9	0	12	38
10:00	0	0	0	1	1	0	0	0	4	4	0	0	0	0	0	0	1	1	0	2	7
10:15	0	4	0	0	4	0	0	1	2	3	0	0	0	0	0	0	1	0	0	1	8
10:30	0	1	0	1	2	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	4
10:45	0	4	0	1	5	0	0	2	5	7	0	0	0	0	0	0	4	4	0	8	20
Total	0	9	0	3	12	0	0	3	12	15	0	0	0	0	0	0	6	6	0	12	39
11:00	0	3	0	2	5	0	0	3	3	6	0	0	0	0	0	0	4	4	0	8	19
11:15	0	4	0	1	5	0	0	1	4	5	0	0	0	0	0	0	3	1	0	4	14
11:30	0	0	0	1	1	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0	7
11:45	0	3	0	0	3	0	0	5	6	11	0	0	0	0	0	0	2	5	0	7	21
Total	0	10	0	4	14	0	0	10	18	28	0	0	0	0	0	0	9	10	0	19	61
12:00	0	4	0	6	10	0	0	1	0	1	0	0	0	0	0	0	3	2	0	5	16
12:15	0	3	0	0	3	0	0	0	4	4	0	0	0	0	0	0	1	0	0	1	8
12:30	0	2	0	2	4	0	0	1	3	4	0	0	0	0	0	0	2	1	0	3	11
12:45	0	2	0	7	9	0	0	1	4	5	0	0	0	0	0	0	3	1	0	4	18
Total	0	11	0	15	26	0	0	3	11	14	0	0	0	0	0	0	9	4	0	13	53
13:00	0	0	0	2	2	0	0	3	5	8	0	0	0	0	0	0	3	2	0	5	15
13:15	0	2	0	1	3	0	0	1	1	2	0	0	0	0	0	0	1	0	0	1	6
13:30	0	4	0	4	8	0	0	2	2	4	0	0	0	0	0	0	1	0	0	1	13
13:45	0	2	0	1	3	0	0	1	0	1	0	0	0	0	0	0	3	1	0	4	8
Total	0	8	0	8	16	0	0	7	8	15	0	0	0	0	0	0	8	3	0	11	42
14:00	0	3	0	4	7	0	0	1	4	5	0	0	0	0	0	0	0	1	0	1	13
14:15	0	1	0	0	1	0	0	3	2	5	0	0	0	0	0	0	1	0	0	1	7
14:30	0	1	0	1	2	0	0	4	3	7	0	0	0	0	0	0	1	1	0	2	11
14:45	0	2	0	0	2	0	0	1	1	2	0	0	0	0	0	0	1	1	0	2	6
Total	0	7	0	5	12	0	0	9	10	19	0	0	0	0	0	0	3	3	0	6	37



# Anoka County Highway Department

## Traffic Engineering Section

### Traffic Volume and Turning Movement Study

Weather: Cold & Cloudy  
 CountCam200  
 Study Conducted By: Andrea

File Name : TMC 1858  
 Site Code :  
 Start Date : 12/18/2018  
 Page No : 2

Groups Printed- Trucks

Start Time	Evergreen Blvd. Southbound					CR 132 Westbound					Springbrook Nature Center Parking Lot Northbound					CR 132 Eastbound					Int. Total
	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	UTrn	Left	Thru	Right	App. Total	
15:00	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	2	0	2	4
15:15	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	2	1	0	3	6
15:30	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3
15:45	0	1	0	0	1	0	0	3	1	4	0	0	0	0	0	0	3	0	0	3	8
Total	0	1	0	1	2	0	0	7	2	9	0	0	0	0	0	0	6	4	0	10	21
16:00	0	1	0	2	3	0	0	0	2	2	0	0	0	0	0	0	2	4	0	6	11
16:15	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	4	0	4	7
16:30	0	3	0	0	3	0	0	1	3	4	0	0	0	0	0	0	3	2	0	5	12
16:45	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	0	0	2	4
Total	0	4	0	2	6	0	0	4	7	11	0	0	0	0	0	0	7	10	0	17	34
17:00	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:15	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	1	3	0	4	6
17:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
17:45	0	1	0	1	2	0	0	1	0	1	0	0	0	0	0	0	0	2	0	2	5
Total	0	2	0	2	4	0	0	1	3	4	0	0	0	0	0	0	1	5	0	6	14
18:00	0	1	0	1	2	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	4
18:15	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	0	2	0	0	2	6
18:30	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	1	0	0	1	3
18:45	0	0	0	1	1	0	0	2	0	2	0	0	0	0	0	0	3	0	0	3	6
Total	0	1	0	2	3	0	0	5	4	9	0	0	0	0	0	0	6	1	0	7	19
19:00	0	2	0	2	4	0	0	3	0	3	0	0	0	0	0	0	1	1	0	2	9
19:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
19:45	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	0	0	3	5
Total	0	4	0	2	6	0	0	5	0	5	0	0	0	0	0	0	5	2	0	7	18
Grand Total	0	102	0	62	164	0	0	77	104	181	0	0	0	0	0	0	74	74	0	148	493
Apprch %	0	62.2	0	37.8		0	0	42.5	57.5		0	0	0	0		0	50	50	0		
Total %	0	20.7	0	12.6	33.3	0	0	15.6	21.1	36.7	0	0	0	0	0	0	15	15	0	30	

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: TMC 1858

Study Date: 01/14/2019

Page No: 1

## Signal Warrants - Summary

### Major Street Approaches

#### Eastbound: CR 132

Number of Lanes : 2

Total Approach Volume: 3,902

#### Westbound: CR 132

Number of Lanes : 2

Total Approach Volume: 4,257

### Minor Street Approaches

#### Northbound: Springbrook Nature Center Parking Lot

Number of Lanes : 1

Total Approach Volume: 150

#### Southbound: Evergreen Blvd.

Number of Lanes : 1

Total Approach Volume: 1,033

### Warrant Summary (Rural Values Apply)

Warrant 1 - Eight Hour Vehicular Volumes.....Not Satisfied

Warrant 1A - Minimum Vehicular Volume.....Not Satisfied

Required volumes reached for 4 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic.....Not Satisfied

Required volumes reached for 6 hours, 8 are needed

Warrant 1C - Combination of Warrants.....Not Satisfied

Required 1A volumes reached for 5 hours, 8 are needed

Required 1B volumes reached for 8 hours, 8 are needed

Warrant 2 - Four Hour Volumes.....Satisfied

Number of hours (4) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour.....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.....Satisfied

Volumes exceed minimums for at least one 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

Warrant 9 - Intersection Near a Grade Crossing.....Not Evaluated

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 1858**

Study Date: **01/14/2019**

Page No: **2**

## Warrant 1A - Minimum Volumes

### Description

Intended for sites where the volume of intersecting traffic is the principal reason for consideration of a signal installation.

### Summary

Only 4 hours meet minimums.  
Warrant is NOT met.

### Site Data Required

Rural Settings Apply = **True**  
Number of Major Lanes = **2 or more**  
Number of Minor Lanes = **1**

### Volume Requirements

Rural Factor of 70 % applied  
Veh/Hr Major = **420**  
  
Veh/Hr Minor = **105**

Time	Major Road CR 132				Total	Minor Road Springbrook Nature Center Parking Lot		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:45 - 16:45	385	+	420	=	805	13	148	Yes
14:45 - 15:45	358	+	441	=	799	12	129	Yes
11:45 - 12:45	345	+	392	=	737	32	113	Yes
10:45 - 11:45	284	+	307	=	591	11	105	Yes
14:30 - 15:30	331	+	477	=	808	15	86	No
16:45 - 17:45	377	+	430	=	807	14	78	No
17:00 - 18:00	344	+	406	=	750	13	72	No
14:15 - 15:15	304	+	443	=	747	18	87	No
14:00 - 15:00	300	+	427	=	727	13	84	No
17:15 - 18:15	318	+	395	=	713	9	57	No
17:30 - 18:30	311	+	370	=	681	6	49	No
13:45 - 14:45	308	+	371	=	679	12	75	No
13:30 - 14:30	288	+	345	=	633	7	77	No
12:45 - 13:45	273	+	353	=	626	27	77	No
17:45 - 18:45	293	+	332	=	625	6	43	No
13:00 - 14:00	271	+	341	=	612	20	68	No
13:15 - 14:15	269	+	338	=	607	14	71	No
18:00 - 19:00	291	+	312	=	603	6	32	No
18:15 - 19:15	267	+	288	=	555	5	33	No
10:30 - 11:30	272	+	262	=	534	10	78	No
18:30 - 19:30	243	+	263	=	506	3	30	No
10:15 - 11:15	266	+	236	=	502	9	66	No
09:00 - 10:00	273	+	207	=	480	8	62	No
07:15 - 08:15	243	+	229	=	472	2	52	No
18:45 - 19:45	206		264		470	1	31	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 1858**

Study Date: **01/14/2019**

Page No: **3**

## Warrant 1B - Interruption of Continuous Traffic

### Description

Intended for sites where the volume of the major street is so heavy that traffic on the minor street suffers excessive delay or hazard.

### Summary

Only 6 hours meet minimums.  
Warrant is NOT met.

### Site Data Required

Rural Settings Apply = **True**  
 Number of Major Lanes = **2 or more**  
 Number of Minor Lanes = **1**

### Volume Requirements

Rural Factor of 70 % applied  
 Veh/Hr Major = **630**

Veh/Hr Minor = **53**

Time	Major Road CR 132				Total	Minor Road Springbrook Nature Center Parking Lot		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:30 - 17:30	385	+	440	=	825	14	113	Yes
14:30 - 15:30	331	+	477	=	808	15	86	Yes
15:30 - 16:30	409	+	384	=	793	15	169	Yes
12:00 - 13:00	323	+	399	=	722	38	106	Yes
13:30 - 14:30	288	+	345	=	633	7	77	Yes
11:00 - 12:00	308	+	323	=	631	10	107	Yes
17:30 - 18:30	311	+	370	=	681	6	49	No
17:45 - 18:45	293	+	332	=	625	6	43	No
13:00 - 14:00	271	+	341	=	612	20	68	No
13:15 - 14:15	269	+	338	=	607	14	71	No
18:00 - 19:00	291	+	312	=	603	6	32	No
10:45 - 11:45	284	+	307	=	591	11	105	No
18:15 - 19:15	267	+	288	=	555	5	33	No
10:30 - 11:30	272	+	262	=	534	10	78	No
18:30 - 19:30	243	+	263	=	506	3	30	No
10:15 - 11:15	266	+	236	=	502	9	66	No
09:00 - 10:00	273	+	207	=	480	8	62	No
07:15 - 08:15	243	+	229	=	472	2	52	No
18:45 - 19:45	206	+	264	=	470	1	31	No
10:00 - 11:00	246	+	213	=	459	10	49	No
09:30 - 10:30	241	+	218	=	459	4	54	No
09:15 - 10:15	251	+	207	=	458	7	54	No
07:00 - 08:00	229	+	223	=	452	3	49	No
19:00 - 20:00	185	+	264	=	449	1	29	No
07:30 - 08:30	228		219		447	3	50	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 1858**

Study Date: **01/14/2019**

Page No: **4**

## Warrant 1C Combination of Warrants

### Description

Intended for sites where the traffic volumes don't meet individual warrants but where Warrants 1A and 1B are both met to 80% of their stated values.

### Summary

Only 5 hours meet 1A minimums.  
8 hours meet 1B minimums.  
Warrant is NOT met.

### Site Data Required

Rural Settings Apply = **True**  
Number of Major Lanes = **2 or more**  
Number of Minor Lanes = **1**

### Volume Requirements

Rural Factor of 70% applied  
Warrant 1A 1B  
Veh/Hr Major = **336 504**

Veh/Hr Minor = **84 42**

Time	Major Road CR 132				Total	Minor Road Springbrook Nature Center Parking Lot		Met1A?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
16:00 - 17:00	405	+	426	=	831	11	133	Yes
15:00 - 16:00	383	+	415	=	798	12	149	Yes
11:45 - 12:45	345	+	392	=	737	32	113	Yes
14:00 - 15:00	300	+	427	=	727	13	84	Yes
10:45 - 11:45	284	+	307	=	591	11	105	Yes
17:00 - 18:00	344	+	406	=	750	13	72	No
17:15 - 18:15	318	+	395	=	713	9	57	No
17:30 - 18:30	311	+	370	=	681	6	49	No
13:45 - 14:45	308	+	371	=	679	12	75	No
13:30 - 14:30	288	+	345	=	633	7	77	No
12:45 - 13:45	273	+	353	=	626	27	77	No
17:45 - 18:45	293	+	332	=	625	6	43	No

Time	Major EB	+	Major WB	=	Total	Minor NB	Minor SB	Met1B?
16:30 - 17:30	385	+	440	=	825	14	113	Yes
14:30 - 15:30	331	+	477	=	808	15	86	Yes
15:30 - 16:30	409	+	384	=	793	15	169	Yes
11:30 - 12:30	337	+	369	=	706	28	128	Yes
17:30 - 18:30	311	+	370	=	681	6	49	Yes
12:30 - 13:30	283	+	375	=	658	35	70	Yes
13:30 - 14:30	288	+	345	=	633	7	77	Yes
10:30 - 11:30	272	+	262	=	534	10	78	Yes
18:30 - 19:30	243	+	263	=	506	3	30	No
10:15 - 11:15	266	+	236	=	502	9	66	No
09:00 - 10:00	273	+	207	=	480	8	62	No
07:15 - 08:15	243	+	229	=	472	2	52	No

# ANOKA COUNTY HIGHWAY

## PC-WARRANTS

### TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 1858**

Study Date: **01/14/2019**

Page No: **5**

## Warrant 2 - Four Hour Volumes

### Description

Intended for sites where the volume of intersecting traffic during any four hours of the day is the principal reason for consideration of a signal installation.

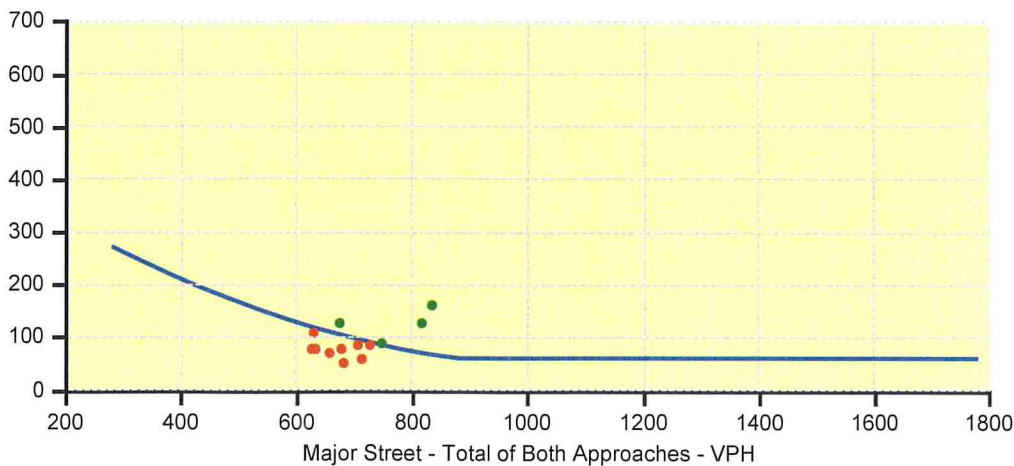
### Summary

4 hours meet minimums.  
Warrant IS met.

### Site Data Required

Rural Settings Apply = **True**  
 Number of Major Lanes = **2 or more**  
 Number of Minor Lanes = **1**

Time	Major Road CR 132				Total	Minor Road Springbrook Nature Center Parking Lot		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:15 - 16:15	431	+	403	=	834	10	159	Yes
16:15 - 17:15	388	+	427	=	815	13	126	Yes
14:15 - 15:15	304	+	443	=	747	18	87	Yes
11:15 - 12:15	328	+	347	=	675	15	127	Yes
14:00 - 15:00	300	+	427	=	727	13	84	No
17:15 - 18:15	318	+	395	=	713	9	57	No
12:15 - 13:15	302	+	402	=	704	39	83	No
17:30 - 18:30	311	+	370	=	681	6	49	No
13:45 - 14:45	308	+	371	=	679	12	75	No
12:30 - 13:30	283	+	375	=	658	35	70	No
13:30 - 14:30	288	+	345	=	633	7	77	No
							107	No



# ANOKA COUNTY HIGHWAY PC-WARRANTS TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name: **TMC 1858**  
 Study Date: **01/14/2019**  
 Page No: **6**

## Warrant 3B - Peak Hour Volumes

### Description

Intended for sites where the volume of intersecting traffic during one hour of the day is the principal reason for consideration of a signal installation.

### Summary

2 hours meet minimums.  
 Warrant IS met.

### Site Data Required

Rural Settings Apply = **True**  
 Number of Major Lanes = **2 or more**  
 Number of Minor Lanes = **1**

Time	Major Road CR 132				Total	Minor Road Springbrook Nature Center Parking Lot		Met?
	Major EB	+	Major WB	=		Minor NB	Minor SB	
15:15 - 16:15	431	+	403	=	834	10	159	Yes
15:30 - 16:30	409	+	384	=	793	15	169	Yes
16:00 - 17:00	405	+	426	=	831	11	133	No
16:30 - 17:30	385	+	440	=	825	14	113	No
16:15 - 17:15	388	+	427	=	815	13	126	No
14:30 - 15:30	331	+	477	=	808	15	86	No
16:45 - 17:45	377	+	430	=	807	14	78	No
15:45 - 16:45	385	+	420	=	805	13	148	No
14:45 - 15:45	358	+	441	=	799	12	129	No
15:00 - 16:00	383	+	415	=	798	12	149	No
17:00 - 18:00	344	+	406	=	750	13	72	No
							87	No

