



MnDOT Traffic Signal Warrant Analysis

Location: TH-7 at Minnewashta Pkwy / Co.Rd.15

County: Carver

Ref. Point: 180.171

Date: 1/5/2016

Operator: MC

Population < 10,000

Existing Signal?

| Approach | Description | Speed | # Thru | # LT Lanes | # RT Lanes |
|----------|-----------------------|-------|--------|------------|------------|
| Major 1 | TH-7 EB, west of Minn | 55 | 1 | 1 | 1 |
| Major 3 | TH-7 WB, east of Minn | 50 | 1 | 1 | 1 |
| Minor 2 | Church Rd SB, N of TH | 30 | 1 | 0 | 0 |
| Minor 4 | Minnewashta Pkwy NE | 30 | 1 | 0 | 0 |

Factor Used : 70%

| Hour | Major App. 1 | Major App. 3 | Total App. 1+3 | Min Volume | | % Right Turns | | Highest Minor App | Min Volume | |
|---------------|--------------|--------------|----------------|------------|--------|---------------|----|-------------------|-----------------|----------------|
| | | | | 420/630 | 105/52 | 50 | 30 | | Minor Met 1A/1B | Met Same 1A/1B |
| 0:00 - 1:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 1:00 - 2:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 2:00 - 3:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 3:00 - 4:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 4:00 - 5:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 5:00 - 6:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 6:00 - 7:00 | 565 | 122 | 687 | Y / Y | 59 | 44 | 30 | - / - | - / - | |
| 7:00 - 8:00 | 993 | 236 | 1229 | Y / Y | 81 | 126 | 88 | - / Y | - / Y | |
| 8:00 - 9:00 | 675 | 295 | 970 | Y / Y | 117 | 104 | 72 | - / Y | - / Y | |
| 9:00 - 10:00 | 396 | 267 | 663 | Y / Y | 49 | 62 | 43 | - / - | - / - | |
| 10:00 - 11:00 | 293 | 251 | 544 | Y / - | 53 | 29 | 26 | - / - | - / - | |
| 11:00 - 12:00 | 287 | 286 | 573 | Y / - | 38 | 47 | 32 | - / - | - / - | |
| 12:00 - 13:00 | 279 | 314 | 593 | Y / - | 33 | 44 | 30 | - / - | - / - | |
| 13:00 - 14:00 | 270 | 384 | 654 | Y / Y | 38 | 30 | 21 | - / - | - / - | |
| 14:00 - 15:00 | 277 | 474 | 751 | Y / Y | 40 | 44 | 30 | - / - | - / - | |
| 15:00 - 16:00 | 331 | 726 | 1057 | Y / Y | 65 | 57 | 39 | - / - | - / - | |
| 16:00 - 17:00 | 289 | 884 | 1173 | Y / Y | 64 | 65 | 45 | - / - | - / - | |
| 17:00 - 18:00 | 314 | 936 | 1250 | Y / Y | 55 | 67 | 46 | - / - | - / - | |
| 18:00 - 19:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 19:00 - 20:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 20:00 - 21:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 21:00 - 22:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 22:00 - 23:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |
| 23:00 - 24:00 | 0 | 0 | 0 | - / - | 0 | 0 | 0 | - / - | - / - | |

| Warrant | Hours Met | Warrant Satisfied | Notes: v1.0.1.3 |
|-------------|-------------|-------------------|--------------------|
| 1A | 0 of 8 Req. | No | |
| 1B | 2 of 8 Req. | No | |
| 2 | 5 of 4 Req. | Yes | |
| 3 | 1 of 1 Req. | Yes | |
| 7 | 5 of 8 Req. | No | |
| 1A Combined | 1 of 8 Req. | No | |
| 1B Combined | 5 of 8 Req. | | |



MnDOT Traffic AWS Warrant Analysis

Location: TH-7 at Minnewashta Pkwy / Co.Rd.15

County: Carver

Ref. Point: 180.171

Date: 1/5/2016

| Approach | Description | Speed |
|----------------|------------------------------|-------|
| <i>Major 1</i> | TH-7 EB, west of Minnewashta | 55 |
| <i>Major 3</i> | TH-7 WB, east of Minnewashta | 50 |
| <i>Minor 2</i> | Church Rd SB, N of TH-7 | 30 |
| <i>Minor 4</i> | Minnewashta Pkwy NB, S of | 30 |

Factor Used:
70% 80%
210/140 240/160

| Hour | Major App. 1 | Major App 3 | MINOR APP. 2 | MINOR APP. 4 | Major Total (App.1 + App. 3) | Minor App. Total (App.2 + App. 4) | Warrant Met | Warrant Met |
|---------------|--------------|-------------|--------------|--------------|------------------------------|-----------------------------------|-------------|-------------|
| 0:00 - 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 1:00 - 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 2:00 - 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 3:00 - 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 4:00 - 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 5:00 - 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 6:00 - 7:00 | 565 | 122 | 59 | 44 | 687 | 103 | X/ | X/ |
| 7:00 - 8:00 | 993 | 236 | 81 | 126 | 1229 | 207 | X/X | X/X |
| 8:00 - 9:00 | 675 | 295 | 117 | 104 | 970 | 221 | X/X | X/X |
| 9:00 - 10:00 | 396 | 267 | 49 | 62 | 663 | 111 | X/ | X/ |
| 10:00 - 11:00 | 293 | 251 | 53 | 29 | 544 | 82 | X/ | X/ |
| 11:00 - 12:00 | 287 | 286 | 38 | 47 | 573 | 85 | X/ | X/ |
| 12:00 - 13:00 | 279 | 314 | 33 | 44 | 593 | 77 | X/ | X/ |
| 13:00 - 14:00 | 270 | 384 | 38 | 30 | 654 | 68 | X/ | X/ |
| 14:00 - 15:00 | 277 | 474 | 40 | 44 | 751 | 84 | X/ | X/ |
| 15:00 - 16:00 | 331 | 726 | 65 | 57 | 1057 | 122 | X/ | X/ |
| 16:00 - 17:00 | 289 | 884 | 64 | 65 | 1173 | 129 | X/ | X/ |
| 17:00 - 18:00 | 314 | 936 | 55 | 67 | 1250 | 122 | X/ | X/ |
| 18:00 - 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 19:00 - 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 20:00 - 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 21:00 - 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 22:00 - 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |
| 23:00 - 24:00 | 0 | 0 | 0 | 0 | 0 | 0 | / | / |

Hours Conditions were met:

| Warrant Condition | Same Hours Met | Warrant Satisfied? |
|-------------------|----------------|--------------------|
| AWS@ 70% | 2 | No |
| AWS@ 80% | 2 | No |