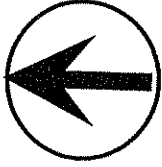


Date : 05/29/08

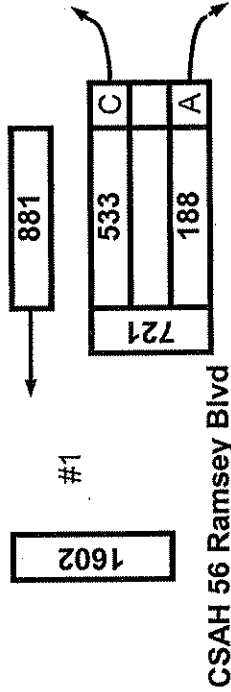
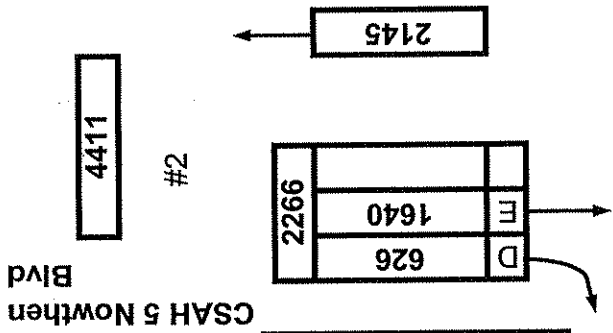
Count Number : TMC0810

Location : CSAH 5 Nowthen Blvd

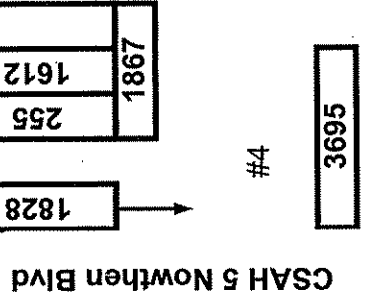
@CSAH 56 Ramsey Blvd



North



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



Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

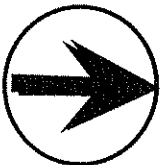
Date : 05/29/08

Count Number : TMC0810

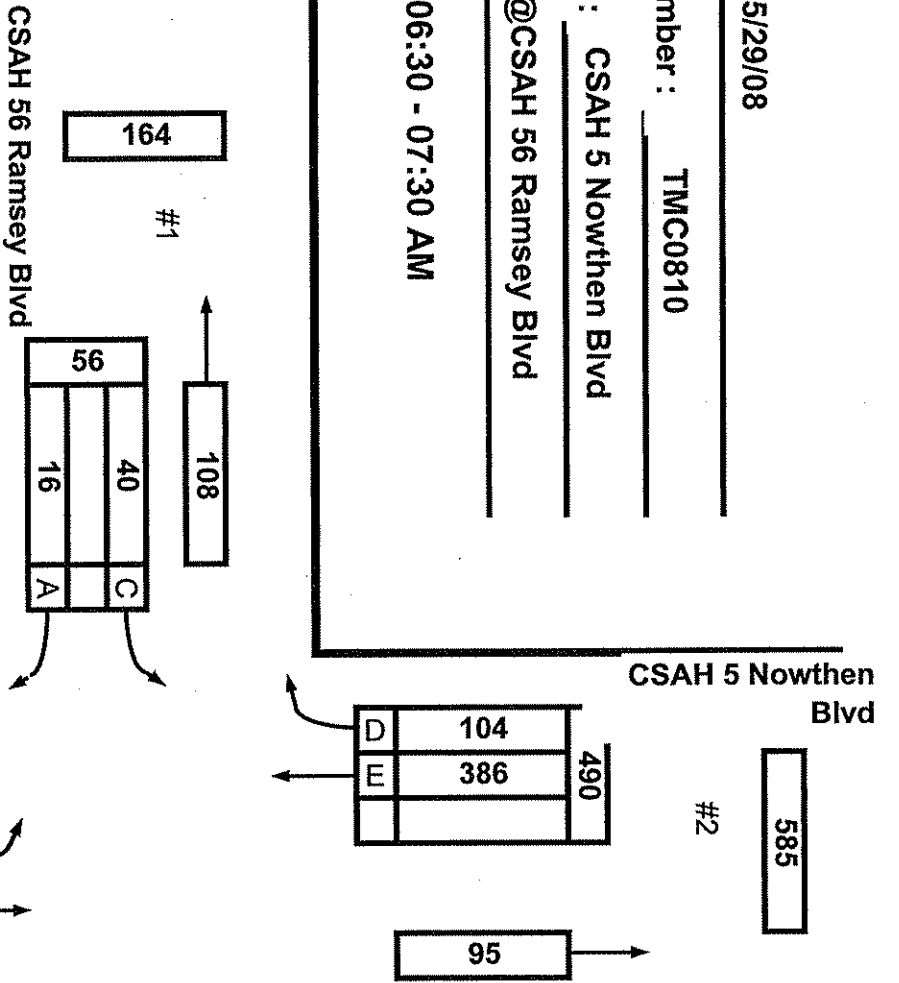
Location : CSAH 5 Nowthen Blvd

@CSAH 56 Ramsey Blvd

Hour: 06:30 - 07:30 AM

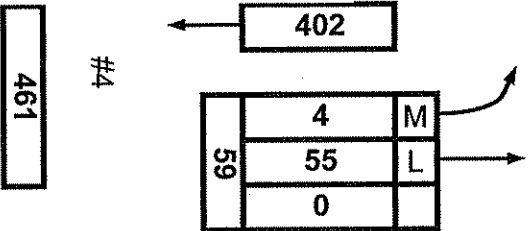


North



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

CSAH 5 Nowthen Blvd



Anoka County Highway Department

Traffic Volume and Turning

Movement Study

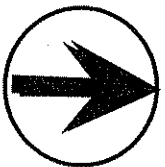
Date : 05/29/08

Count Number : TMC0810

Location : CSAH 5 Nowthen Blvd

@CSAH 56 Ramsey Blvd

Hour: 4:45 - 5:45 PM



North

CSAH 56 Ramsey Blvd

179

#1

74

| | | |
|-----|----|---|
| 105 | 81 | C |
| | 24 | A |

CSAH 5 Nowthen Blvd

480

#2

| | |
|----|-----|
| 50 | 163 |
| D | E |

317

CSAH 5 Nowthen Blvd

137

#4

397

| | | |
|-----|---|---|
| 24 | M | L |
| 236 | | |
| 260 | | |

LANES OF APPROACH

| | RIGHT TURN LANE | LEFT TURN LANE | THRU LANES | TOTAL |
|----|-----------------|----------------|------------|-------|
| #1 | 1 | 1 | 0 | 2 |
| #2 | 1 | 0 | 1 | 2 |
| #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 : tmc0810
 Site Code : 08100101
 Start Date : 06/03/200
 Page No : 1

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

Groups Printed- Unshifted - Bank 1

| Start Time | CSAH 5 Nowthen Blvd Southbound | | | | | CSAH 56 Ramsey Blvd Westbound | | | | | CSAH 5 Nowthen Blvd Northbound | | | | | CSAH 56 Ramsey Blvd Eastbound | | | | | Exclu. Total | Inclu. 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 | | | |
| 06:00 | 0 | 53 | 15 | 0 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 | 2 | 0 | 3 | 0 | 5 | 0 | 85 | 85 |
| 06:15 | 0 | 87 | 13 | 3 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 3 | 11 | 2 | 0 | 2 | 0 | 4 | 6 | 115 | 121 |
| 06:30 | 0 | 99 | 33 | 2 | 132 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 1 | 8 | 7 | 0 | 3 | 1 | 10 | 4 | 150 | 154 |
| 06:45 | 0 | 83 | 31 | 5 | 114 | 0 | 0 | 0 | 0 | 0 | 2 | 14 | 0 | 2 | 16 | 5 | 0 | 3 | 1 | 8 | 8 | 138 | 146 |
| Total | 0 | 322 | 92 | 10 | 414 | 0 | 0 | 0 | 0 | 0 | 2 | 45 | 0 | 6 | 47 | 16 | 0 | 11 | 2 | 27 | 18 | 488 | 506 |
| 07:00 | 0 | 106 | 20 | 7 | 126 | 0 | 0 | 0 | 0 | 0 | 1 | 13 | 0 | 0 | 14 | 9 | 0 | 3 | 2 | 12 | 9 | 152 | 161 |
| 07:15 | 0 | 98 | 20 | 4 | 118 | 0 | 0 | 0 | 0 | 0 | 1 | 20 | 0 | 1 | 21 | 19 | 0 | 7 | 3 | 26 | 8 | 165 | 173 |
| 07:30 | 0 | 68 | 22 | 4 | 90 | 0 | 0 | 0 | 0 | 0 | 1 | 15 | 0 | 3 | 16 | 10 | 0 | 11 | 4 | 21 | 11 | 127 | 138 |
| 07:45 | 0 | 62 | 23 | 6 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 3 | 15 | 8 | 0 | 3 | 2 | 11 | 11 | 111 | 122 |
| Total | 0 | 334 | 85 | 21 | 419 | 0 | 0 | 0 | 0 | 0 | 3 | 63 | 0 | 7 | 66 | 46 | 0 | 24 | 11 | 70 | 39 | 555 | 594 |
| 08:00 | 0 | 42 | 11 | 5 | 53 | 0 | 0 | 0 | 0 | 0 | 1 | 12 | 0 | 1 | 13 | 5 | 0 | 1 | 0 | 6 | 6 | 72 | 78 |
| 08:15 | 0 | 40 | 10 | 7 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 3 | 13 | 2 | 0 | 2 | 0 | 4 | 10 | 67 | 77 |
| 08:30 | 0 | 46 | 8 | 3 | 54 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 0 | 1 | 9 | 8 | 0 | 3 | 2 | 11 | 6 | 74 | 80 |
| 08:45 | 0 | 19 | 6 | 1 | 25 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 3 | 10 | 5 | 0 | 0 | 2 | 5 | 6 | 40 | 46 |
| Total | 0 | 147 | 35 | 16 | 182 | 0 | 0 | 0 | 0 | 0 | 5 | 40 | 0 | 8 | 45 | 20 | 0 | 6 | 4 | 26 | 28 | 253 | 281 |
| 09:00 | 0 | 19 | 5 | 5 | 24 | 0 | 0 | 0 | 0 | 0 | 2 | 10 | 0 | 2 | 12 | 8 | 0 | 3 | 1 | 11 | 8 | 47 | 55 |
| 09:15 | 0 | 27 | 11 | 5 | 38 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 0 | 1 | 9 | 8 | 0 | 2 | 2 | 10 | 8 | 57 | 65 |
| 09:30 | 0 | 22 | 4 | 2 | 26 | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 0 | 0 | 10 | 1 | 0 | 2 | 0 | 3 | 2 | 39 | 41 |
| 09:45 | 0 | 29 | 8 | 2 | 37 | 0 | 0 | 0 | 0 | 0 | 3 | 15 | 0 | 1 | 18 | 9 | 0 | 0 | 2 | 9 | 5 | 64 | 69 |
| Total | 0 | 97 | 28 | 14 | 125 | 0 | 0 | 0 | 0 | 0 | 11 | 38 | 0 | 4 | 49 | 26 | 0 | 7 | 5 | 33 | 23 | 207 | 230 |
| 10:00 | 0 | 24 | 6 | 4 | 30 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 0 | 3 | 9 | 1 | 0 | 3 | 0 | 4 | 7 | 43 | 50 |
| 10:15 | 0 | 9 | 11 | 4 | 20 | 0 | 0 | 0 | 0 | 0 | 2 | 16 | 0 | 3 | 18 | 3 | 0 | 1 | 0 | 4 | 7 | 42 | 49 |
| 10:30 | 0 | 15 | 6 | 5 | 21 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 2 | 11 | 3 | 0 | 3 | 0 | 6 | 7 | 38 | 45 |
| 10:45 | 0 | 13 | 3 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 4 | 12 | 0 | 1 | 16 | 7 | 0 | 3 | 1 | 10 | 2 | 42 | 44 |
| Total | 0 | 61 | 26 | 13 | 87 | 0 | 0 | 0 | 0 | 0 | 9 | 45 | 0 | 9 | 54 | 14 | 0 | 10 | 1 | 24 | 23 | 165 | 188 |
| 11:00 | 0 | 11 | 3 | 4 | 14 | 0 | 0 | 0 | 0 | 0 | 4 | 13 | 0 | 2 | 17 | 6 | 0 | 2 | 0 | 8 | 6 | 39 | 45 |
| 11:15 | 0 | 20 | 8 | 4 | 28 | 0 | 0 | 0 | 0 | 0 | 4 | 13 | 0 | 0 | 17 | 8 | 0 | 1 | 2 | 9 | 6 | 54 | 60 |
| 11:30 | 0 | 23 | 6 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 2 | 20 | 0 | 3 | 22 | 7 | 0 | 1 | 1 | 8 | 4 | 59 | 63 |
| 11:45 | 0 | 17 | 6 | 3 | 23 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 3 | 13 | 10 | 0 | 3 | 2 | 13 | 8 | 49 | 57 |
| Total | 0 | 71 | 23 | 11 | 94 | 0 | 0 | 0 | 0 | 0 | 12 | 57 | 0 | 8 | 69 | 31 | 0 | 7 | 5 | 38 | 24 | 201 | 225 |
| 12:00 | 0 | 15 | 8 | 4 | 23 | 0 | 0 | 0 | 0 | 0 | 3 | 11 | 0 | 1 | 14 | 11 | 0 | 1 | 2 | 12 | 7 | 49 | 56 |
| 12:15 | 0 | 15 | 6 | 2 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 1 | 8 | 6 | 0 | 3 | 2 | 9 | 5 | 38 | 43 |
| 12:30 | 0 | 17 | 4 | 3 | 21 | 0 | 0 | 0 | 0 | 0 | 2 | 21 | 0 | 3 | 23 | 6 | 0 | 0 | 1 | 6 | 7 | 50 | 57 |
| 12:45 | 0 | 14 | 5 | 1 | 19 | 0 | 0 | 0 | 0 | 0 | 4 | 15 | 0 | 3 | 19 | 6 | 0 | 2 | 1 | 8 | 5 | 46 | 51 |
| Total | 0 | 61 | 23 | 10 | 84 | 0 | 0 | 0 | 0 | 0 | 9 | 55 | 0 | 8 | 64 | 29 | 0 | 6 | 6 | 35 | 24 | 183 | 207 |
| 13:00 | 0 | 19 | 6 | 2 | 25 | 0 | 0 | 0 | 0 | 0 | 2 | 20 | 0 | 1 | 22 | 9 | 0 | 5 | 2 | 14 | 5 | 61 | 66 |
| 13:15 | 0 | 20 | 5 | 2 | 25 | 0 | 0 | 0 | 0 | 0 | 5 | 23 | 0 | 1 | 28 | 11 | 0 | 4 | 0 | 15 | 3 | 68 | 71 |
| 13:30 | 0 | 23 | 10 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 0 | 6 | 40 | 10 | 0 | 3 | 2 | 13 | 8 | 86 | 94 |
| 13:45 | 0 | 13 | 8 | 2 | 21 | 0 | 0 | 0 | 0 | 0 | 2 | 20 | 0 | 4 | 22 | 4 | 0 | 4 | 1 | 8 | 7 | 51 | 58 |
| Total | 0 | 75 | 29 | 6 | 104 | 0 | 0 | 0 | 0 | 0 | 14 | 98 | 0 | 12 | 112 | 34 | 0 | 16 | 5 | 50 | 23 | 266 | 289 |
| 14:00 | 0 | 5 | 5 | 1 | 10 | 0 | 0 | 0 | 0 | 0 | 2 | 9 | 0 | 2 | 11 | 1 | 0 | 0 | 0 | 1 | 3 | 22 | 25 |
| 14:15 | 0 | 19 | 7 | 3 | 26 | 0 | 0 | 0 | 0 | 0 | 5 | 31 | 0 | 4 | 36 | 4 | 0 | 1 | 1 | 5 | 8 | 67 | 75 |
| 14:30 | 0 | 24 | 6 | 2 | 30 | 0 | 0 | 0 | 0 | 0 | 8 | 26 | 0 | 2 | 34 | 1 | 0 | 0 | 0 | 1 | 4 | 65 | 69 |
| 14:45 | 0 | 18 | 9 | 3 | 27 | 0 | 0 | 0 | 0 | 0 | 6 | 42 | 0 | 4 | 48 | 0 | 0 | 1 | 0 | 1 | 7 | 76 | 83 |
| Total | 0 | 66 | 27 | 9 | 93 | 0 | 0 | 0 | 0 | 0 | 21 | 108 | 0 | 12 | 129 | 6 | 0 | 2 | 1 | 8 | 22 | 230 | 252 |
| 15:00 | 0 | 17 | 9 | 8 | 26 | 0 | 0 | 0 | 0 | 0 | 12 | 61 | 0 | 3 | 73 | 7 | 0 | 1 | 0 | 8 | 11 | 107 | 118 |
| 15:15 | 0 | 15 | 10 | 4 | 25 | 0 | 0 | 0 | 0 | 0 | 24 | 58 | 0 | 3 | 82 | 0 | 0 | 0 | 0 | 0 | 7 | 107 | 114 |
| 15:30 | 0 | 14 | 9 | 1 | 23 | 0 | 0 | 0 | 0 | 0 | 18 | 57 | 0 | 5 | 75 | 4 | 0 | 1 | 1 | 5 | 7 | 103 | 110 |
| 15:45 | 0 | 10 | 12 | 6 | 22 | 0 | 0 | 0 | 0 | 0 | 8 | 63 | 0 | 7 | 71 | 7 | 0 | 0 | 1 | 7 | 14 | 100 | 114 |
| Total | 0 | 56 | 40 | 19 | 96 | 0 | 0 | 0 | 0 | 0 | 62 | 239 | 0 | 18 | 301 | 18 | 0 | 2 | 2 | 20 | 39 | 417 | 456 |
| 16:00 | 0 | 9 | 10 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 12 | 51 | 0 | 4 | 63 | 11 | 0 | 5 | 4 | 16 | 8 | 98 | 106 |
| 16:15 | 0 | 14 | 9 | 2 | 23 | 0 | 0 | 0 | 0 | 0 | 4 | 60 | 0 | 3 | 64 | 20 | 0 | 2 | 0 | 22 | 5 | 109 | 114 |
| 16:30 | 0 | 20 | 15 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 4 | 53 | 0 | 1 | 57 | 15 | 0 | 2 | 0 | 17 | 1 | 109 | 110 |
| 16:45 | 0 | 30 | 14 | 1 | 44 | 0 | 0 | 0 | 0 | 0 | 5 | 74 | 0 | 3 | 79 | 32 | 0 | 10 | 0 | 42 | 4 | 165 | 169 |
| Total | 0 | 73 | 48 | 3 | 121 | 0 | 0 | 0 | 0 | 0 | 25 | 238 | 0 | 11 | 263 | 78 | 0 | 19 | 4 | 97 | 18 | 481 | 499 |
| 17:00 | 0 | 21 | 12 | 1 | 33 | 0 | 0 | 0 | 0 | 0 | 9 | 63 | 0 | 3 | 72 | 11 | 0 | 2 | 0 | 13 | 4 | 118 | 122 |
| 17:15 | 0 | 34 | 10 | 1 | 44 | 0 | 0 | 0 | 0 | 0 | 4 | 51 | 0 | 0 | 55 | 24 | 0 | 9 | 0 | 33 | 1 | 132 | 133 |
| 17:30 | 0 | 28 | 14 | 1 | 42 | 0 | 0 | 0 | 0 | 0 | 6 | 48 | 0 | 1 | 54 | 14 | 0 | 3 | 1 | 17 | 3 | 113 | 116 |
| 17:45 | 0 | 11 | 11 | 1 | 22 | 0 | 0 | 0 | 0 | 0 | 1 | 29 | 0 | 0 | 30 | 16 | 0 | 1 | 2 | 17 | 3 | 69 | 72 |
| Total | 0 | 94 | 47 | 4 | 141 | 0 | 0 | 0 | 0 | 0 | 20 | 191 | 0 | 4 | 211 | 65 | 0 | 15 | 3 | 80 | 11 | 432 | 443 |
| 18:00 | 0 | 16 | 13 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 7 | 41 | 0 | 1 | 48 | 20 | 0 | 2 | 0 | 22 | 1 | 99 | 100 |
| 18:15 | 0 | 19 | 16 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 5 | 39 | 0 | 0 | 44 | 14 | 0 | 4 | 0 | 18 | 0 | 97 | 97 |
| 18:30 | 0 | 17 | 7 | 1 | 24 | 0 | 0 | 0 | 0 | 0 | 1 | 26 | 0 | 1 | 27 | 16 | 0 | 2 | 1 | 18 | 3 | 69 | 72 |
| 18:45 | 0 | 12 | 18 | 1 | 30 | 0 | 0 | 0 | 0 | 0 | 5 | 29 | 0 | 2 | 34 | 10 | 0 | 3 | 0 | 13 | 3 | 77 | 80 |
| Total | 0 | 64 | 54 | 2 | 118 | 0 | 0 | 0 | 0 | 0 | 18 | 135 | 0 | 4 | 153 | 60 | 0 | 11 | 1 | 71 | 7 | 342 | 349 |

Anoka County Highway Department

Traffic Engineering Section Traffic Volume and Turning Movement Study

File Name : tmc0810
Site Code : 08100101
Start Date : 06/03/200
Page No : 2

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

Groups Printed- Unshifted - Bank 1

| Start Time | CSAH 5 Nowthen Blvd Southbound | | | | | CSAH 56 Ramsey Blvd Westbound | | | | | CSAH 5 Nowthen Blvd Northbound | | | | | CSAH 56 Ramsey 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 | 17 | 10 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 5 | 33 | 0 | 0 | 38 | 11 | 0 | 7 | 0 | 18 | 0 | 0 | 83 | 83 |
| 19:15 | 0 | 8 | 1 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 5 | 24 | 0 | 0 | 29 | 8 | 0 | 0 | 0 | 8 | 0 | 0 | 46 | 46 |
| 19:30 | 0 | 11 | 6 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 1 | 20 | 0 | 0 | 21 | 8 | 0 | 3 | 0 | 11 | 0 | 0 | 49 | 49 |
| 19:45 | 0 | 9 | 6 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 0 | 0 | 15 | 4 | 0 | 3 | 0 | 7 | 0 | 0 | 37 | 37 |
| Total | 0 | 45 | 23 | 0 | 68 | 0 | 0 | 0 | 0 | 0 | 12 | 91 | 0 | 0 | 103 | 31 | 0 | 13 | 0 | 44 | 0 | 215 | 215 | |
| 20:00 | 0 | 10 | 10 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 6 | 29 | 0 | 0 | 35 | 14 | 0 | 9 | 0 | 23 | 0 | 0 | 78 | 78 |
| 20:15 | 0 | 11 | 5 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 4 | 13 | 0 | 0 | 17 | 6 | 0 | 8 | 1 | 14 | 2 | 0 | 47 | 49 |
| 20:30 | 0 | 5 | 7 | 1 | 12 | 0 | 0 | 0 | 0 | 0 | 3 | 23 | 0 | 0 | 26 | 12 | 0 | 5 | 0 | 17 | 1 | 0 | 55 | 56 |
| 20:45 | 0 | 11 | 7 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 7 | 31 | 0 | 0 | 38 | 5 | 0 | 9 | 0 | 14 | 0 | 0 | 70 | 70 |
| Total | 0 | 37 | 29 | 2 | 66 | 0 | 0 | 0 | 0 | 0 | 20 | 96 | 0 | 0 | 116 | 37 | 0 | 31 | 1 | 68 | 3 | 250 | 253 | |
| 21:00 | 0 | 13 | 12 | 1 | 25 | 0 | 0 | 0 | 0 | 0 | 3 | 21 | 0 | 0 | 24 | 8 | 0 | 3 | 1 | 11 | 2 | 0 | 60 | 62 |
| 21:15 | 0 | 12 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 2 | 21 | 0 | 0 | 23 | 6 | 0 | 2 | 0 | 8 | 0 | 0 | 43 | 43 |
| 21:30 | 0 | 8 | 4 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 6 | 22 | 0 | 1 | 28 | 4 | 0 | 1 | 0 | 5 | 1 | 0 | 45 | 46 |
| 21:45 | 0 | 4 | 1 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 9 | 0 | 0 | 10 | 4 | 0 | 2 | 0 | 6 | 0 | 0 | 21 | 21 |
| Total | 0 | 37 | 17 | 1 | 54 | 0 | 0 | 0 | 0 | 0 | 12 | 73 | 0 | 1 | 85 | 22 | 0 | 8 | 1 | 30 | 3 | 169 | 172 | |
| Grand Total | 0 | 1640 | 626 | 141 | 2266 | 0 | 0 | 0 | 0 | 0 | 255 | 1612 | 0 | 112 | 1867 | 533 | 0 | 188 | 52 | 721 | 305 | 4854 | 5159 | |
| Approch % | 0 | 72.4 | 27.6 | | | 0 | 0 | 0 | | | 13.7 | 86.3 | 0 | | | 73.9 | 0 | 26.1 | | | 5.9 | 94.1 | | |
| Total % | 0 | 33.8 | 12.9 | | 46.7 | 0 | 0 | 0 | | | 5.3 | 33.2 | 0 | | 38.5 | 11 | 0 | 3.9 | | 14.9 | 0 | 0 | 0 | 100 |
| Unshifted | 0 | 1640 | 626 | | 2407 | 0 | 0 | 0 | | | 255 | 1612 | 0 | | 1979 | 533 | 0 | 188 | | 773 | 0 | 0 | 0 | 5159 |
| % Unshifted | 0 | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 0 | 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 5 Nowthen Blvd Southbound | | | | CSAH 56 Ramsey Blvd Westbound | | | | CSAH 5 Nowthen Blvd Northbound | | | | CSAH 56 Ramsey 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 08:00 to 11:45 - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 06:30 | | | | | | | | | | | | | | | | | |
| 06:30 | 0 | 99 | 33 | 132 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 7 | 0 | 3 | 10 | 150 |
| 06:45 | 0 | 83 | 31 | 114 | 0 | 0 | 0 | 0 | 2 | 14 | 0 | 16 | 5 | 0 | 3 | 8 | 138 |
| 07:00 | 0 | 106 | 20 | 126 | 0 | 0 | 0 | 0 | 1 | 13 | 0 | 14 | 9 | 0 | 3 | 12 | 152 |
| 07:15 | 0 | 98 | 20 | 118 | 0 | 0 | 0 | 0 | 1 | 20 | 0 | 21 | 19 | 0 | 7 | 26 | 165 |
| Total Volume | 0 | 386 | 104 | 490 | 0 | 0 | 0 | 0 | 4 | 55 | 0 | 59 | 40 | 0 | 16 | 56 | 605 |
| % App. Total | 0 | 78.8 | 21.2 | | 0 | 0 | 0 | | 6.8 | 93.2 | 0 | | 71.4 | 0 | 28.6 | | |
| PHF | .000 | .910 | .788 | .928 | .000 | .000 | .000 | .000 | .500 | .686 | .000 | .702 | .526 | .000 | .571 | .538 | .917 |

| Start Time | CSAH 5 Nowthen Blvd Southbound | | | | CSAH 56 Ramsey Blvd Westbound | | | | CSAH 5 Nowthen Blvd Northbound | | | | CSAH 56 Ramsey 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 12:00 to 21:45 - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 16:45 | | | | | | | | | | | | | | | | | |
| 16:45 | 0 | 30 | 14 | 44 | 0 | 0 | 0 | 0 | 5 | 74 | 0 | 79 | 32 | 0 | 10 | 42 | 165 |
| 17:00 | 0 | 21 | 12 | 33 | 0 | 0 | 0 | 0 | 9 | 63 | 0 | 72 | 11 | 0 | 2 | 13 | 118 |
| 17:15 | 0 | 34 | 10 | 44 | 0 | 0 | 0 | 0 | 4 | 51 | 0 | 55 | 24 | 0 | 9 | 33 | 132 |
| 17:30 | 0 | 28 | 14 | 42 | 0 | 0 | 0 | 0 | 6 | 48 | 0 | 54 | 14 | 0 | 3 | 17 | 113 |
| Total Volume | 0 | 113 | 50 | 163 | 0 | 0 | 0 | 0 | 24 | 236 | 0 | 260 | 81 | 0 | 24 | 105 | 526 |
| % App. Total | 0 | 69.3 | 30.7 | | 0 | 0 | 0 | | 9.2 | 90.8 | 0 | | 77.1 | 0 | 22.9 | | |
| PHF | .000 | .831 | .893 | .926 | .000 | .000 | .000 | .000 | .667 | .797 | .000 | .823 | .633 | .000 | .600 | .625 | .800 |

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

Study Name :
Study Date : 06/06/08
Page No. : 1

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 5 Nowthen Blvd
Number of Lanes: 1
Approach Speed: 55
Total Approach Volume: 1,867

Southbound: CSAH 5 Nowthen Blvd
Number of Lanes: 2
Approach Speed: 55
Total Approach Volume: 2,266

Minor Street Approaches

Eastbound: CSAH 56 Ramsey Blvd
Number of Lanes: 2

Total Approach Volume: 721

Westbound: CSAH 56 Ramsey Blvd
Number of Lanes: 2

Total Approach Volume: 1

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

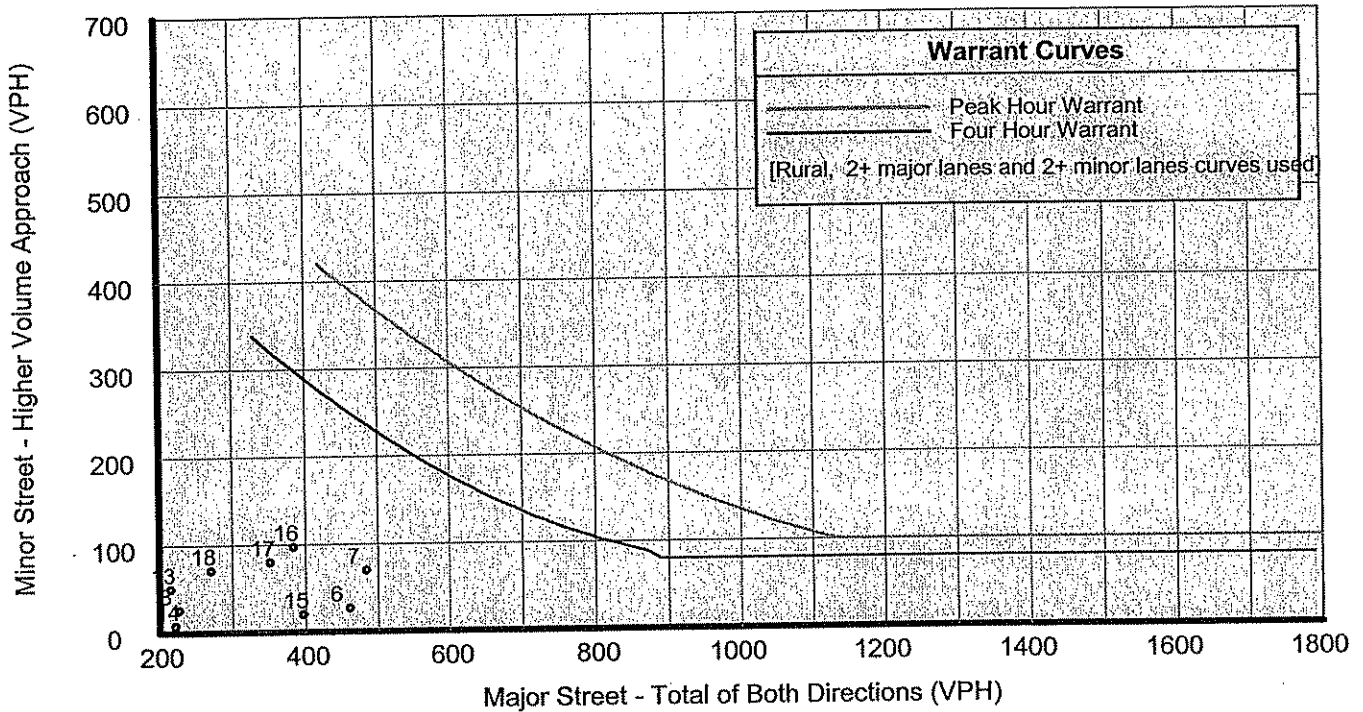
- Warrant 7 - Crash Experience Not Evaluated

- Warrant 8 - Roadway Network Not Evaluated

ANOKA COUNTY HIGHWAY PC-WARRANTS TRAFFIC SIGNAL WARRANT ANALYSIS

Study Name :
Study Date : 06/06/08
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 | 461 | 27 | EB | 420-Yes | 140-No | Major | 630-No | 70-Yes | Minor | 504-No | 112-No | --- |
| 07:00 | 485 | 70 | EB | 420-Yes | 140-No | Major | 630-No | 70-Yes | Minor | 504-No | 112-No | --- |
| 08:00 | 227 | 26 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 09:00 | 174 | 33 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 10:00 | 141 | 24 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 11:00 | 163 | 38 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 12:00 | 148 | 35 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 13:00 | 216 | 50 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 14:00 | 222 | 8 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 15:00 | 397 | 20 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 16:00 | 384 | 97 | EB | 420-No | 140-No | --- | 630-No | 70-Yes | Minor | 504-No | 112-No | --- |
| 17:00 | 352 | 80 | EB | 420-No | 140-No | --- | 630-No | 70-Yes | Minor | 504-No | 112-No | --- |
| 18:00 | 271 | 71 | EB | 420-No | 140-No | --- | 630-No | 70-Yes | Minor | 504-No | 112-No | --- |
| 19:00 | 171 | 44 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 20:00 | 182 | 68 | EB | 420-No | 140-No | --- | 630-No | 70-No | --- | 504-No | 112-No | --- |
| 21:00 | 139 | 30 | 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 : 06/06/08
Page No. : 1

Multi-Way Stop Warrant Report

Major Street Approaches

Northbound: CSAH 5 Nowthen Blvd
Total Approach Volume: 1,867
Approach Speed: 55

Southbound: CSAH 5 Nowthen Blvd
Total Approach Volume: 2,266
Approach Speed: 55

Minor Street Approaches

Eastbound: CSAH 56 Ramsey Blvd
Total Approach Volume: 721

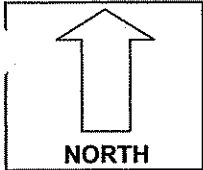
Westbound:
Total Approach Volume: 1

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 | Meets? | Major | Minor | 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 | 461 | 27 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 07:00 - 08:00 | 485 | 70 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 08:00 - 09:00 | 227 | 26 | 210-Yes | 140-No | Major | 240-No | 160-No | No |
| 09:00 - 10:00 | 174 | 34 | 210-No | 140-No | No | 240-No | 160-No | No |
| 10:00 - 11:00 | 141 | 24 | 210-No | 140-No | No | 240-No | 160-No | No |
| 11:00 - 12:00 | 163 | 38 | 210-No | 140-No | No | 240-No | 160-No | No |
| 12:00 - 13:00 | 148 | 35 | 210-No | 140-No | No | 240-No | 160-No | No |
| 13:00 - 14:00 | 216 | 50 | 210-Yes | 140-No | Major | 240-No | 160-No | No |
| 14:00 - 15:00 | 222 | 8 | 210-Yes | 140-No | Major | 240-No | 160-No | No |
| 15:00 - 16:00 | 397 | 20 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 16:00 - 17:00 | 384 | 97 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 17:00 - 18:00 | 352 | 80 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 18:00 - 19:00 | 271 | 71 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 19:00 - 20:00 | 171 | 44 | 210-No | 140-No | No | 240-No | 160-No | No |
| 20:00 - 21:00 | 182 | 68 | 210-No | 140-No | No | 240-No | 160-No | No |
| 21:00 - 22:00 | 139 | 30 | 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:

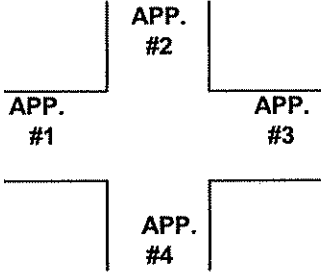
CSAH 5 Nowthen Blvd

DATE:

06/02/2008

CSAH 56 Ramsey Blvd

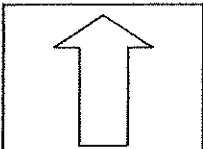
| |
|-------------------|
| APP. #1 = CSAH 56 |
| APP. #2 = CSAH 5 |
| APP. #3 = None |
| APP. #4 = CSAH 5 |



- 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 | | | | | | | | |
| 6:15-6:30 | | | | | | 4 | | 2 |
| 6:30-6:45 | | | | | | 3 | | 1 |
| 6:45-7:00 | | | | | | 5 | | 3 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 18 |
| 7:00-7:15 | | | | | | 6 | | 3 |
| 7:15-7:30 | | | | | | 4 | | 4 |
| 7:30-7:45 | | | | | | 9 | | 2 |
| 7:45-8:00 | | | | | | 9 | 1 | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 38 |
| 8:00-8:15 | | | | | | 6 | | |
| 8:15-8:30 | | | | | | 8 | | 2 |
| 8:30-8:45 | | | | | | 3 | | 3 |
| 8:45-9:00 | | | | | | 6 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 28 |
| 9:00-9:15 | | | | | | 6 | | 2 |
| 9:15-9:30 | | | | | | 7 | 1 | |
| 9:30-9:45 | | | | 1 | 1 | 2 | | |
| 9:45-10:00 | | | | | | 5 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 23 |
| 10:00-10:15 | | | | | | 6 | | |
| 10:15-10:30 | | | | | | 7 | | |
| 10:30-10:45 | | | | | | 8 | | |
| 10:45-11:00 | | | | | | | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 21 |
| 11:00-11:15 | | | | | | 4 | | 2 |
| 11:15-11:30 | | | | | | 6 | | |
| 11:30-11:45 | | | | | | 4 | | |
| 11:45-12:00 | | | | | | 8 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 24 |
| 12:00-12:15 | | | | | | 7 | | |
| 12:15-12:30 | | | | | | 4 | | 1 |
| 12:30-12:45 | | | | | | 7 | | |
| 12:45-1:00 | | | | 3 | 3 | 5 | | |
| HOURLY TOTAL | | | | | 3 | HOURLY TOTAL | | 24 |
| 1:00-1:15 | | | | | | 4 | | |
| 1:15-1:30 | | | | 1 | 1 | 3 | | |
| 1:30-1:45 | | | | | | 7 | 1 | |
| 1:45-2:00 | | | | | | 6 | 1 | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 22 |
| | | | | | TOTAL | | TOTAL | 198 |
| | | | | | 5 | | | |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32



NORTH

COUNT LOCATION:

CSAH 5 Nowthen Blvd

DATE:

06/03/2008

CSAH 56 Ramsey Blvd

| |
|-------------------|
| APP. #1 = CSAH 56 |
| APP. #2 = CSAH 5 |
| APP. #3 = None |
| APP. #4 = CSAH 5 |

| | |
|---------|---------|
| 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 |
| 2:00-2:15PM | | | | | | 5 | | |
| 2:15-2:30 | | | | | | 6 | | |
| 2:30-2:45 | | | | | | 4 | | 1 |
| 2:45-3:00 | | | | | | 3 | | 4 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 23 |
| 3:00-3:15 | | | | | | 10 | | 1 |
| 3:15-3:30 | | | | | | 7 | | 1 |
| 3:30-3:45 | | | | | | 6 | | 1 |
| 3:45-4:00 | | | | | | 5 | | 6 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 37 |
| 4:00-4:15 | | | | | | 3 | | 2 |
| 4:15-4:30 | | | | | | 4 | | 1 |
| 4:30-4:45 | | | | | | 1 | | |
| 4:45-5:00 | | | | | | 4 | | 1 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 16 |
| 5:00-5:15 | | | | | | 3 | | |
| 5:15-5:30 | | | | | | 1 | | |
| 5:30-5:45 | | | | | | 2 | | 1 |
| 5:45-6:00 | | | | | | 3 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 10 |
| 6:00-6:15 | | | | 3 | 3 | 1 | | |
| 6:15-6:30 | | | | | | | | |
| 6:30-6:45 | | | | | | 2 | | |
| 6:45-7:00 | | | | | | 3 | | |
| HOURLY TOTAL | | | | | 3 | HOURLY TOTAL | | 6 |
| 7:00-7:15 | 1 | | | | 1 | | | |
| 7:15-7:30 | | | | | | | | |
| 7:30-7:45 | | | | | | | | |
| 7:45-8:00 | | | | | | | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | |
| 8:00-8:15 | | | | | | | | |
| 8:15-8:30 | | | | | | 2 | | |
| 8:30-8:45 | | | | | | 1 | | |
| 8:45-9:00 | | | | | | | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 3 |
| 9:00-9:15 | | | | | | 1 | | |
| 9:15-9:30 | | | | | | | | |
| 9:30-9:45 | | | | | | 1 | | |
| 9:45-10:00 | | | | | | | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 2 |
| | | | | | TOTAL | | TOTAL | 97 |
| | | | | | 4 | | Grand Total | 295 |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32