

Date : 6/25/01

Count Number : TMC0115/0116

Location : CSAH 52 (Radisson Rd.)

@ Naples St. /95th Ave.



North

CSAH 52

10430

#2

6021

| | | |
|------|---|--|
| 4409 | | |
| 43 | T | |
| 3899 | F | |
| 467 | D | |

Naples St.

2336

#1

| | | |
|------|---|--|
| 1205 | | |
| 478 | C | |
| 0 | B | |
| 653 | A | |
| 1131 | | |

95th Ave.

| | | |
|-----|---|--|
| 33 | G | |
| 57 | H | |
| 418 | J | |
| 508 | | |

#3

1074

566

CSAH 52

4970

#4

| | | |
|------|---|--|
| 523 | K | |
| 5510 | L | |
| 681 | M | |
| 6714 | | |

11684

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

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Anoka County Highway Department

Traffic Engineering

Traffic Volume and Turning Movement Study

Weather: Hot, Sunny
 Counter: TDC-8
 Counted by: Jessica/Melissa

File Name : tmc011516
 Site Code : 01150201
 Start Date : 06/25/2001
 Page No : 1

Groups Printed- 1 - Unshifted

| Start Time | CSAH 52 Southbound | | | | | Naples St. Westbound | | | | | CSAH 52 Northbound | | | | | 95th Ave. 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 | | | |
| Factor | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | | | |
| 06:00 | 0 | 103 | 4 | 16 | 107 | 1 | 1 | 2 | 2 | 4 | 1 | 26 | 6 | 3 | 33 | 0 | 0 | 8 | 2 | 8 | 23 | 152 | 175 |
| 06:15 | 0 | 99 | 7 | 23 | 106 | 2 | 0 | 0 | 1 | 2 | 15 | 46 | 9 | 4 | 70 | 1 | 0 | 2 | 1 | 3 | 29 | 181 | 210 |
| 06:30 | 1 | 102 | 8 | 18 | 111 | 2 | 1 | 0 | 1 | 3 | 24 | 65 | 2 | 8 | 91 | 6 | 0 | 9 | 0 | 15 | 27 | 220 | 247 |
| 06:45 | 0 | 93 | 15 | 13 | 108 | 1 | 0 | 2 | 2 | 3 | 25 | 78 | 13 | 11 | 116 | 5 | 0 | 8 | 1 | 13 | 27 | 240 | 267 |
| Total | 1 | 397 | 34 | 70 | 432 | 6 | 2 | 4 | 6 | 12 | 65 | 215 | 30 | 26 | 310 | 12 | 0 | 27 | 4 | 39 | 106 | 793 | 899 |
| 07:00 | 0 | 108 | 17 | 12 | 125 | 3 | 0 | 0 | 2 | 3 | 27 | 65 | 6 | 14 | 98 | 5 | 0 | 10 | 1 | 15 | 29 | 241 | 270 |
| 07:15 | 2 | 95 | 14 | 16 | 111 | 2 | 0 | 0 | 1 | 2 | 8 | 56 | 7 | 8 | 71 | 5 | 0 | 7 | 2 | 12 | 27 | 196 | 223 |
| 07:30 | 3 | 88 | 21 | 15 | 112 | 0 | 0 | 0 | 0 | 0 | 7 | 67 | 9 | 12 | 83 | 10 | 0 | 9 | 5 | 19 | 32 | 214 | 246 |
| 07:45 | 1 | 103 | 21 | 15 | 125 | 2 | 0 | 1 | 1 | 3 | 15 | 75 | 17 | 12 | 107 | 11 | 0 | 9 | 2 | 20 | 30 | 255 | 285 |
| Total | 6 | 394 | 73 | 58 | 473 | 7 | 0 | 1 | 4 | 8 | 57 | 263 | 39 | 46 | 359 | 31 | 0 | 35 | 10 | 66 | 118 | 906 | 1024 |
| 08:00 | 1 | 77 | 8 | 11 | 86 | 4 | 0 | 2 | 1 | 6 | 13 | 49 | 8 | 12 | 70 | 8 | 0 | 9 | 6 | 17 | 30 | 179 | 209 |
| 08:15 | 0 | 78 | 12 | 6 | 90 | 2 | 1 | 0 | 1 | 3 | 11 | 58 | 7 | 12 | 76 | 7 | 0 | 9 | 1 | 16 | 20 | 185 | 205 |
| 08:30 | 0 | 70 | 7 | 18 | 77 | 4 | 2 | 0 | 2 | 6 | 7 | 58 | 5 | 12 | 70 | 13 | 0 | 6 | 2 | 19 | 34 | 172 | 206 |
| 08:45 | 0 | 73 | 7 | 15 | 80 | 2 | 0 | 1 | 3 | 3 | 10 | 64 | 7 | 16 | 81 | 10 | 0 | 11 | 3 | 21 | 37 | 185 | 222 |
| Total | 1 | 298 | 34 | 50 | 333 | 12 | 3 | 3 | 7 | 18 | 41 | 229 | 27 | 52 | 297 | 38 | 0 | 35 | 12 | 73 | 121 | 721 | 842 |
| 09:00 | 0 | 69 | 4 | 14 | 73 | 4 | 2 | 0 | 0 | 6 | 12 | 57 | 6 | 14 | 75 | 6 | 0 | 9 | 3 | 15 | 31 | 169 | 200 |
| 09:15 | 0 | 53 | 7 | 8 | 60 | 3 | 0 | 0 | 0 | 3 | 12 | 72 | 4 | 17 | 88 | 8 | 0 | 5 | 4 | 13 | 29 | 164 | 193 |
| 09:30 | 0 | 64 | 5 | 13 | 69 | 2 | 0 | 0 | 0 | 2 | 8 | 49 | 3 | 16 | 60 | 6 | 0 | 4 | 1 | 10 | 30 | 141 | 171 |
| 09:45 | 0 | 58 | 4 | 14 | 62 | 6 | 1 | 0 | 2 | 7 | 9 | 65 | 8 | 14 | 82 | 7 | 0 | 4 | 1 | 11 | 31 | 162 | 193 |
| Total | 0 | 244 | 20 | 49 | 264 | 15 | 3 | 0 | 2 | 18 | 41 | 243 | 21 | 61 | 305 | 27 | 0 | 22 | 9 | 49 | 121 | 636 | 757 |
| 10:00 | 1 | 54 | 0 | 17 | 55 | 7 | 0 | 0 | 2 | 7 | 9 | 67 | 3 | 26 | 79 | 4 | 0 | 10 | 1 | 14 | 46 | 155 | 201 |
| 10:15 | 1 | 47 | 3 | 12 | 51 | 3 | 0 | 1 | 1 | 4 | 14 | 47 | 8 | 10 | 69 | 2 | 0 | 9 | 0 | 11 | 23 | 135 | 158 |
| 10:30 | 0 | 38 | 8 | 17 | 46 | 5 | 2 | 0 | 2 | 7 | 8 | 40 | 6 | 10 | 54 | 1 | 0 | 10 | 1 | 11 | 30 | 118 | 148 |
| 10:45 | 0 | 28 | 11 | 11 | 39 | 9 | 3 | 0 | 2 | 12 | 7 | 71 | 7 | 18 | 85 | 4 | 0 | 14 | 3 | 18 | 34 | 154 | 188 |
| Total | 2 | 167 | 22 | 57 | 191 | 24 | 5 | 1 | 7 | 30 | 38 | 225 | 24 | 64 | 287 | 11 | 0 | 43 | 5 | 54 | 133 | 562 | 695 |
| 11:00 | 0 | 55 | 6 | 13 | 61 | 12 | 0 | 0 | 0 | 12 | 9 | 49 | 5 | 14 | 63 | 6 | 0 | 7 | 0 | 13 | 27 | 149 | 176 |
| 11:15 | 1 | 51 | 10 | 5 | 62 | 7 | 2 | 0 | 0 | 9 | 7 | 57 | 12 | 16 | 76 | 0 | 0 | 15 | 0 | 15 | 21 | 162 | 183 |
| 11:30 | 1 | 42 | 4 | 15 | 47 | 7 | 0 | 4 | 0 | 11 | 11 | 60 | 7 | 14 | 78 | 4 | 0 | 12 | 2 | 16 | 31 | 152 | 183 |
| 11:45 | 0 | 11 | 3 | 2 | 14 | 1 | 1 | 0 | 1 | 2 | 12 | 79 | 9 | 20 | 100 | 6 | 0 | 8 | 1 | 14 | 24 | 130 | 154 |
| Total | 2 | 159 | 23 | 35 | 184 | 27 | 3 | 4 | 1 | 34 | 39 | 245 | 33 | 64 | 317 | 16 | 0 | 42 | 3 | 58 | 103 | 593 | 696 |
| 12:00 | 1 | 66 | 5 | 16 | 72 | 4 | 2 | 2 | 1 | 8 | 8 | 64 | 13 | 17 | 85 | 10 | 0 | 8 | 3 | 18 | 37 | 183 | 220 |
| 12:15 | 0 | 60 | 8 | 12 | 68 | 12 | 4 | 2 | 0 | 18 | 10 | 78 | 13 | 19 | 101 | 7 | 0 | 6 | 2 | 13 | 33 | 200 | 233 |
| 12:30 | 0 | 55 | 10 | 14 | 65 | 7 | 1 | 0 | 3 | 8 | 9 | 70 | 14 | 18 | 93 | 7 | 0 | 16 | 3 | 23 | 38 | 189 | 227 |
| 12:45 | 0 | 41 | 7 | 13 | 48 | 11 | 1 | 0 | 2 | 12 | 12 | 63 | 12 | 20 | 87 | 7 | 0 | 10 | 1 | 17 | 36 | 164 | 200 |
| Total | 1 | 222 | 30 | 55 | 253 | 34 | 8 | 4 | 6 | 46 | 39 | 275 | 52 | 74 | 366 | 31 | 0 | 40 | 9 | 71 | 144 | 736 | 860 |
| 13:00 | 0 | 40 | 3 | 10 | 43 | 4 | 2 | 0 | 2 | 6 | 11 | 71 | 11 | 18 | 93 | 5 | 0 | 4 | 2 | 9 | 32 | 151 | 183 |
| 13:15 | 2 | 52 | 3 | 15 | 57 | 6 | 0 | 1 | 2 | 7 | 6 | 66 | 8 | 21 | 80 | 6 | 0 | 8 | 0 | 14 | 38 | 158 | 196 |
| 13:30 | 1 | 51 | 8 | 15 | 60 | 7 | 0 | 3 | 1 | 10 | 8 | 70 | 12 | 23 | 90 | 3 | 0 | 20 | 2 | 23 | 41 | 183 | 224 |
| 13:45 | 1 | 48 | 11 | 16 | 60 | 7 | 4 | 2 | 2 | 13 | 9 | 63 | 9 | 14 | 81 | 10 | 0 | 11 | 1 | 21 | 33 | 175 | 208 |
| Total | 4 | 191 | 25 | 56 | 220 | 24 | 6 | 6 | 7 | 36 | 34 | 270 | 40 | 76 | 344 | 24 | 0 | 43 | 5 | 67 | 144 | 667 | 811 |
| 14:00 | 1 | 45 | 5 | 6 | 51 | 4 | 1 | 0 | 1 | 5 | 7 | 72 | 4 | 14 | 83 | 2 | 0 | 11 | 2 | 13 | 23 | 152 | 175 |
| 14:15 | 0 | 41 | 4 | 9 | 45 | 7 | 0 | 0 | 2 | 7 | 11 | 83 | 13 | 19 | 107 | 5 | 0 | 14 | 1 | 19 | 31 | 178 | 209 |
| 14:30 | 2 | 44 | 4 | 10 | 50 | 5 | 1 | 0 | 1 | 6 | 13 | 102 | 16 | 21 | 131 | 6 | 0 | 8 | 0 | 14 | 32 | 201 | 233 |
| 14:45 | 0 | 62 | 9 | 14 | 71 | 10 | 1 | 0 | 4 | 11 | 16 | 98 | 13 | 17 | 127 | 5 | 0 | 13 | 1 | 18 | 36 | 227 | 263 |
| Total | 3 | 192 | 22 | 39 | 217 | 26 | 3 | 0 | 8 | 29 | 47 | 355 | 46 | 71 | 448 | 18 | 0 | 46 | 4 | 64 | 122 | 758 | 880 |
| 15:00 | 2 | 53 | 6 | 7 | 61 | 7 | 5 | 0 | 0 | 12 | 8 | 115 | 18 | 20 | 141 | 5 | 0 | 17 | 2 | 22 | 29 | 236 | 265 |
| 15:15 | 5 | 66 | 7 | 9 | 78 | 12 | 0 | 0 | 3 | 12 | 11 | 128 | 17 | 22 | 156 | 9 | 0 | 4 | 0 | 13 | 34 | 259 | 293 |
| 15:30 | 0 | 63 | 3 | 8 | 66 | 14 | 1 | 0 | 2 | 15 | 10 | 141 | 13 | 22 | 164 | 8 | 0 | 14 | 2 | 22 | 34 | 267 | 301 |
| 15:45 | 1 | 65 | 4 | 6 | 70 | 15 | 0 | 0 | 1 | 15 | 10 | 173 | 11 | 24 | 194 | 9 | 0 | 18 | 2 | 27 | 33 | 306 | 339 |
| Total | 8 | 247 | 20 | 30 | 275 | 48 | 6 | 0 | 6 | 54 | 39 | 657 | 59 | 88 | 655 | 31 | 0 | 53 | 6 | 84 | 130 | 1068 | 1198 |
| 16:00 | 0 | 53 | 9 | 10 | 62 | 14 | 1 | 0 | 2 | 15 | 14 | 139 | 13 | 23 | 166 | 10 | 0 | 16 | 1 | 26 | 36 | 269 | 305 |
| 16:15 | 2 | 71 | 7 | 6 | 80 | 7 | 0 | 0 | 1 | 7 | 9 | 169 | 7 | 17 | 185 | 15 | 0 | 14 | 1 | 29 | 25 | 301 | 326 |
| 16:30 | 2 | 98 | 5 | 10 | 105 | 11 | 1 | 0 | 0 | 12 | 7 | 152 | 16 | 18 | 175 | 15 | 0 | 14 | 0 | 29 | 28 | 321 | 349 |
| 16:45 | 2 | 72 | 10 | 6 | 84 | 10 | 2 | 0 | 1 | 12 | 17 | 183 | 10 | 17 | 210 | 19 | 0 | 15 | 1 | 34 | 25 | 340 | 365 |
| Total | 6 | 294 | 31 | 32 | 331 | 42 | 4 | 0 | 4 | 46 | 47 | 643 | 46 | 75 | 736 | 59 | 0 | 59 | 3 | 118 | 114 | 1231 | 1345 |

**Anoka County Highway Department
Traffic Engineering**

Weather: Hot, Sunny
Inter: TDC-8
Counted by: Jessica/Melissa

File Name : tmc011516
Site Code : 01150201
Start Date : 06/25/2001
Page No : 2

Groups Printed- 1 - Unshifted

| Start Time | CSAH 52 Southbound | | | | | Naples St. Westbound | | | | | CSAH 52 Northbound | | | | | 95th Ave. 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 | | | |
| Factor | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | | | |
| 17:00 | 0 | 81 | 32 | 3 | 113 | 9 | 1 | 0 | 1 | 10 | 8 | 169 | 12 | 13 | 189 | 20 | 0 | 14 | 1 | 34 | 18 | 346 | 364 |
| 17:15 | 1 | 92 | 5 | 1 | 98 | 12 | 1 | 0 | 0 | 13 | 10 | 199 | 7 | 13 | 216 | 19 | 0 | 17 | 2 | 36 | 16 | 363 | 379 |
| 17:30 | 2 | 63 | 6 | 1 | 71 | 12 | 0 | 0 | 1 | 12 | 10 | 182 | 9 | 11 | 201 | 22 | 0 | 16 | 1 | 38 | 14 | 322 | 336 |
| 17:45 | 1 | 44 | 3 | 3 | 48 | 11 | 1 | 0 | 0 | 12 | 11 | 206 | 13 | 11 | 230 | 24 | 0 | 19 | 0 | 43 | 14 | 333 | 347 |
| Total | 4 | 280 | 46 | 8 | 330 | 44 | 3 | 0 | 2 | 47 | 39 | 756 | 41 | 48 | 836 | 85 | 0 | 66 | 4 | 151 | 62 | 1364 | 1426 |
| 18:00 | 1 | 64 | 3 | 1 | 68 | 12 | 0 | 0 | 0 | 12 | 11 | 192 | 14 | 11 | 217 | 8 | 0 | 11 | 2 | 19 | 14 | 316 | 330 |
| 18:15 | 0 | 41 | 16 | 0 | 57 | 11 | 0 | 0 | 0 | 11 | 11 | 146 | 0 | 0 | 157 | 16 | 0 | 9 | 0 | 25 | 0 | 250 | 250 |
| 18:30 | 1 | 45 | 2 | 1 | 48 | 6 | 4 | 0 | 0 | 10 | 14 | 98 | 5 | 8 | 117 | 20 | 0 | 6 | 2 | 26 | 11 | 201 | 212 |
| 18:45 | 2 | 29 | 6 | 2 | 37 | 11 | 2 | 0 | 0 | 13 | 7 | 87 | 6 | 7 | 100 | 12 | 0 | 13 | 3 | 25 | 12 | 175 | 187 |
| Total | 4 | 179 | 27 | 4 | 210 | 40 | 6 | 0 | 0 | 46 | 43 | 523 | 25 | 26 | 591 | 56 | 0 | 39 | 7 | 95 | 37 | 942 | 979 |
| 19:00 | 0 | 41 | 7 | 1 | 48 | 3 | 0 | 0 | 0 | 3 | 13 | 88 | 11 | 0 | 112 | 7 | 0 | 7 | 1 | 14 | 2 | 177 | 179 |
| 19:15 | 0 | 35 | 5 | 0 | 40 | 4 | 2 | 0 | 0 | 6 | 9 | 73 | 6 | 4 | 88 | 5 | 0 | 18 | 0 | 23 | 4 | 157 | 161 |
| 19:30 | 1 | 39 | 5 | 2 | 45 | 7 | 0 | 0 | 0 | 7 | 6 | 76 | 6 | 1 | 88 | 2 | 0 | 13 | 1 | 15 | 4 | 155 | 159 |
| 19:45 | 0 | 50 | 3 | 1 | 53 | 7 | 2 | 0 | 0 | 9 | 11 | 88 | 1 | 6 | 100 | 5 | 0 | 8 | 0 | 13 | 7 | 175 | 182 |
| Total | 1 | 165 | 20 | 4 | 186 | 21 | 4 | 0 | 0 | 25 | 39 | 325 | 24 | 11 | 388 | 19 | 0 | 46 | 2 | 65 | 17 | 664 | 681 |
| 20:00 | 0 | 24 | 11 | 0 | 35 | 6 | 1 | 0 | 0 | 7 | 8 | 50 | 3 | 1 | 61 | 1 | 0 | 13 | 0 | 14 | 1 | 117 | 118 |
| 20:15 | 0 | 59 | 1 | 0 | 60 | 3 | 0 | 0 | 0 | 3 | 11 | 46 | 1 | 3 | 58 | 4 | 0 | 7 | 0 | 11 | 3 | 132 | 135 |
| 20:30 | 0 | 100 | 4 | 2 | 104 | 7 | 0 | 0 | 0 | 7 | 16 | 63 | 1 | 2 | 80 | 2 | 0 | 3 | 1 | 5 | 5 | 196 | 201 |
| 20:45 | 0 | 65 | 4 | 0 | 69 | 5 | 0 | 1 | 0 | 6 | 8 | 41 | 3 | 2 | 52 | 1 | 0 | 9 | 0 | 10 | 2 | 137 | 139 |
| Total | 0 | 248 | 20 | 2 | 268 | 21 | 1 | 1 | 0 | 23 | 43 | 200 | 8 | 8 | 251 | 8 | 0 | 32 | 1 | 40 | 11 | 582 | 593 |
| 21:00 | 0 | 87 | 0 | 0 | 87 | 4 | 0 | 0 | 0 | 4 | 11 | 40 | 3 | 3 | 54 | 3 | 0 | 3 | 0 | 6 | 3 | 151 | 154 |
| 21:15 | 0 | 48 | 3 | 1 | 51 | 10 | 0 | 1 | 0 | 11 | 9 | 60 | 1 | 1 | 70 | 5 | 0 | 4 | 0 | 9 | 2 | 141 | 143 |
| 21:30 | 0 | 55 | 9 | 0 | 64 | 3 | 0 | 8 | 0 | 11 | 3 | 50 | 2 | 0 | 55 | 2 | 0 | 10 | 0 | 12 | 0 | 142 | 142 |
| 21:45 | 0 | 32 | 8 | 0 | 40 | 10 | 0 | 0 | 0 | 10 | 7 | 36 | 2 | 0 | 45 | 2 | 0 | 8 | 0 | 10 | 0 | 105 | 105 |
| Total | 0 | 222 | 20 | 1 | 242 | 27 | 0 | 9 | 0 | 36 | 30 | 186 | 8 | 4 | 224 | 12 | 0 | 25 | 0 | 37 | 5 | 539 | 544 |
| Grand Total | 43 | 3899 | 467 | 550 | 4409 | 418 | 57 | 33 | 60 | 508 | 681 | 5510 | 523 | 794 | 6714 | 478 | 0 | 653 | 84 | 1131 | 1488 | 12762 | 14250 |
| Apprch % | 1.0 | 88.4 | 10.6 | | | 82.3 | 11.2 | 6.5 | | | 10.1 | 82.1 | 7.8 | | | 42.3 | 0.0 | 57.7 | | | | | |
| Total % | 0.3 | 30.6 | 3.7 | | 34.5 | 3.3 | 0.4 | 0.3 | | 4.0 | 5.3 | 43.2 | 4.1 | | 52.6 | 3.7 | 0.0 | 5.1 | | 8.9 | 10.4 | 89.6 | |

or Street Approaches:

Northbound:

CSAH 52

Data File: E:\2001 COUNT FILES\TMC011516.war
 Count Type: IMC. Channel: 0. Count Date: 6/25/ 1
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 6714

Southbound:

CSAH 52

Data File: E:\2001 COUNT FILES\TMC011516.war
 Count Type: IMC. Channel: 0. Count Date: 6/25/ 1
 Number of Lanes: 2
 Approach Speed: 50
 Total Approach Traffic: 4409

Minor Street Approaches:

Eastbound:

95th Ave.

Data File: E:\2001 COUNT FILES\TMC011516.war
 Count Type: IMC. Channel: 0. Count Date: 6/25/ 1
 Number of Lanes: 2
 Approach Speed: 30
 Total Approach Traffic: 1131

Westbound:

Naples St.

Data File: E:\2001 COUNT FILES\TMC011516.war
 Count Type: IMC. Channel: 0. Count Date: 6/25/ 1
 Number of Lanes: 2
 Approach Speed: 30
 Total Approach Traffic: 508

Analysis of 8-Hour Volume Warrants (Criteria refers to high volume side street for that hour):

| Hour | Main | Side | | Warrant 1 | | Warrant 2 | | Warrant 8 | | |
|-------|---------|------|------|-----------|----------|-----------|----------|-----------|----------|----------|
| Begin | (Total) | Vol. | Dir. | Rank | Meets? | Criteria | Meets? | Criteria | Meets? | Criteria |
| 0 | 0 | 0 | W | 17 | | 140 | | 70 | | 112 |
| 1 | 0 | 0 | W | 18 | | 140 | | 70 | | 112 |
| 2 | 0 | 0 | W | 19 | | 140 | | 70 | | 112 |
| 3 | 0 | 0 | W | 20 | | 140 | | 70 | | 112 |
| 4 | 0 | 0 | W | 21 | | 140 | | 70 | | 112 |
| 5 | 0 | 0 | W | 22 | | 140 | | 70 | | 112 |
| 6 | 742 | 39 | E | 15 | MAIN | 140 | MAIN | 70 | MAIN | 112 |
| 7 | 832 | 66 | E | 8 | MAIN | 140 | MAIN | 70 | MAIN | 112 |
| 8 | 630 | 73 | E | 5 | MAIN | 140 | --BOTH-- | 70 | MAIN | 112 |
| 9 | 569 | 49 | E | 13 | MAIN | 140 | | 70 | MAIN | 112 |
| 10 | 478 | 54 | E | 12 | MAIN | 140 | | 70 | | 112 |
| 11 | 501 | 58 | E | 11 | MAIN | 140 | | 70 | | 112 |
| 12 | 619 | 71 | E | 6 | MAIN | 140 | SIDE | 70 | MAIN | 112 |
| 13 | 564 | 67 | E | 7 | MAIN | 140 | | 70 | MAIN | 112 |
| 14 | 665 | 64 | E | 10 | MAIN | 140 | MAIN | 70 | MAIN | 112 |
| 15 | 930 | 84 | E | 4 | MAIN | 140 | --BOTH-- | 70 | MAIN | 112 |
| 16 | 1067 | 118 | E | 2 | MAIN | 140 | --BOTH-- | 70 | --BOTH-- | 112 |
| 17 | 1166 | 151 | E | 1 | --BOTH-- | 140 | --BOTH-- | 70 | --BOTH-- | 112 |
| 18 | 801 | 95 | E | 3 | MAIN | 140 | --BOTH-- | 70 | MAIN | 112 |
| 19 | 574 | 65 | E | 9 | MAIN | 140 | | 70 | MAIN | 112 |
| 20 | 519 | 40 | E | 14 | MAIN | 140 | | 70 | MAIN | 112 |
| 21 | 466 | 37 | E | 16 | MAIN | 140 | | 70 | | 112 |
| 22 | 0 | 0 | W | 23 | | 140 | | 70 | | 112 |
| 23 | 0 | 0 | W | 24 | | 140 | | 70 | | 112 |

Warrant Summary:

Rural values apply.

High-volume minor approach is wide enough for two lanes. Re-striping may be desirable.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 1 hours. Criteria--Main St.: 420; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

NOT SATISFIED. Required values reached for 5 hours. Criteria--Main St.: 630; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. 8th-High Hour--Pedestrians: 0. Criteria--Pedestrians: 105; Vehicles: 420.

Warrant 4 - School Crossing

NOT APPLICABLE. Gap data has not been defined.

Warrant 5 - Progressive Movement

NOT SATISFIED. Adjacent signals closer than 1000 feet and/or not part of coordinated system.

Warrant 6 - Accident Experience

NOT SATISFIED. 0 correctable accidents is fewer than required 5.

Correctable Accidents: 0; Right Angle Accidents: 0; Left Turn Accidents: 0; Other Accidents: 0.

Warrant 7 - Systems Warrant

SATISFIED. Peak hour total entering volume: 1364. Approaches on both streets satisfy one of the following criteria:

NSEW- Approaches which are part of the principal through traffic roadway network.

- Approaches which connect areas of principal traffic generation.

- Approaches which include rural or suburban highways outside, entering or traversing a city.

- Approaches which have surface street freeway or expressway ramp terminals.

- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 2 hours. Criteria--Main: 504; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

NOT SATISFIED. Required values reached for 3 hours.

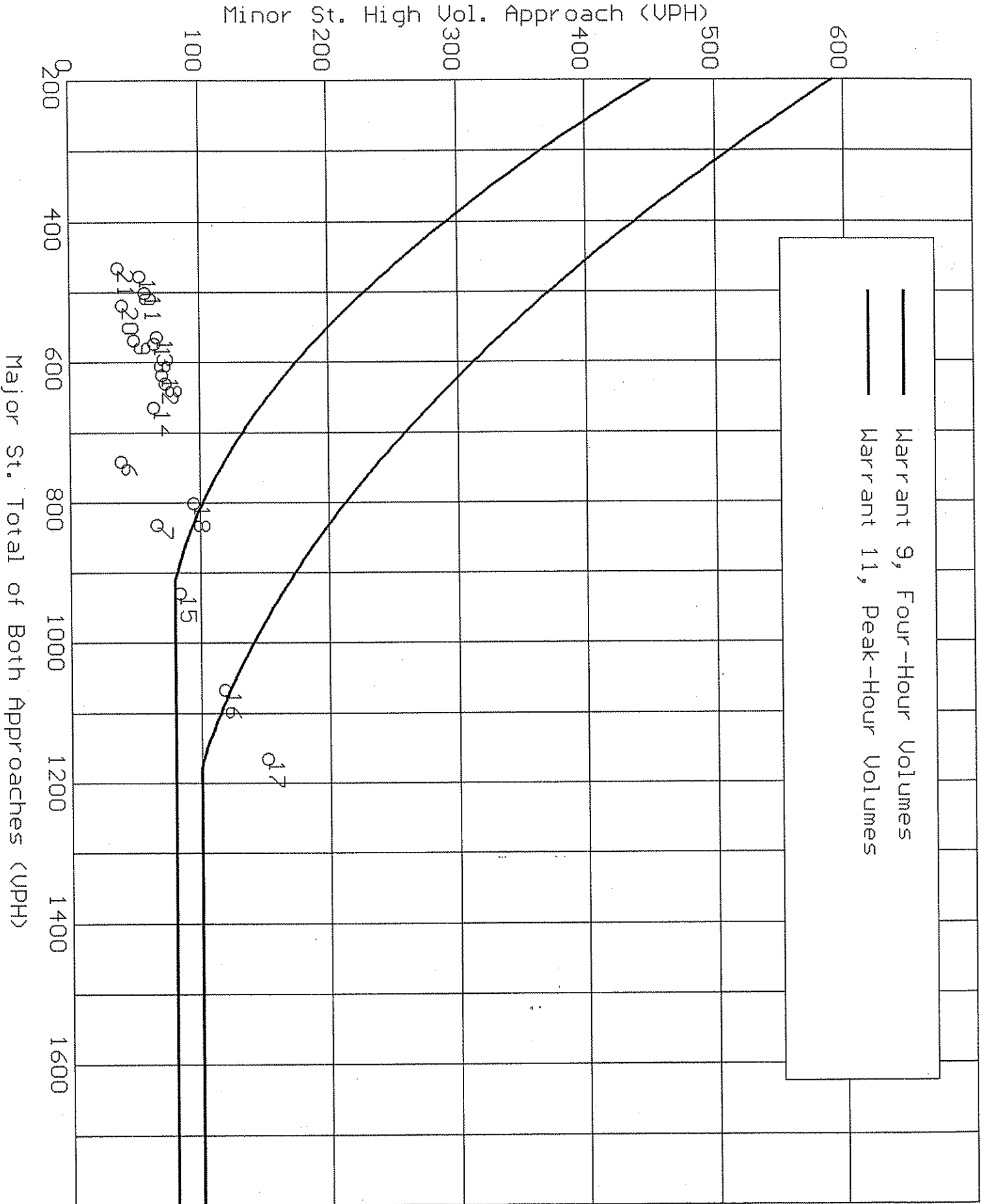
Warrant 10 - Peak Hour Delay

NOT APPLICABLE. Volume requirements satisfied, but side street peak hour delay not defined.

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 150.

Warrant 11 - Peak Hour Volume

SATISFIED for 2 hours.



Multiway Stop Warrant Analysis
TMC 0115/0116 CSAH 52 @ 95th Av./Naples St.
Speed Limit of Major Roadway..... 50

Minimum Traffic Volumes Multiway Stop Warrant Criteria:

- a) The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour (vph) for any 8 hours of an average day, AND:
- b) The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 vph for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour, BUT:
- c) When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum volume warrant is 70% of the above requirements.

| Hour | Total Vehicular Traffic Entering the Intersection | Vehicular Traffic Entering on First Minor Roadway | Vehicular Traffic Entering on Second Minor Roadway | Sum of Minor Approaches | Hours Stop Warrant Met |
|---------------|---|---|--|-------------------------|------------------------|
| 6 AM - 7 AM | 793 | 12 | 39 | 51 | 0 |
| 7 AM - 8 AM | 906 | 8 | 66 | 74 | 0 |
| 8 AM - 9 AM | 721 | 18 | 73 | 91 | 0 |
| 9 AM - 10 AM | 636 | 18 | 49 | 67 | 0 |
| 10 AM - 11 AM | 562 | 30 | 54 | 84 | 0 |
| 11 AM - 12 PM | 593 | 34 | 58 | 92 | 0 |
| 12 PM - 13 PM | 736 | 46 | 71 | 117 | 0 |
| 1 PM - 2 PM | 667 | 36 | 67 | 103 | 0 |
| 2 PM - 3 PM | 758 | 29 | 64 | 93 | 0 |
| 3 PM - 4 PM | 1068 | 54 | 84 | 138 | 0 |
| 4 PM - 5 PM | 1231 | 46 | 118 | 164 | 0 |
| 5 PM - 6 PM | 1364 | 47 | 151 | 198 | 0 |
| 6 PM - 7 PM | 942 | 46 | 95 | 141 | 0 |
| 7 PM - 8 PM | 664 | 25 | 65 | 90 | 0 |
| 8 PM - 9 PM | 582 | 23 | 40 | 63 | 0 |
| 9 PM - 10 PM | 539 | 36 | 37 | 73 | 0 |

TOTAL HOURS MET: 0

MULTIWAY STOP WARRANT IS NOT MET

Date : 6/27/01

Count Number : TMC0116

Location : CSAH 52 (Radisson Rd.)
@ 95th Ave.

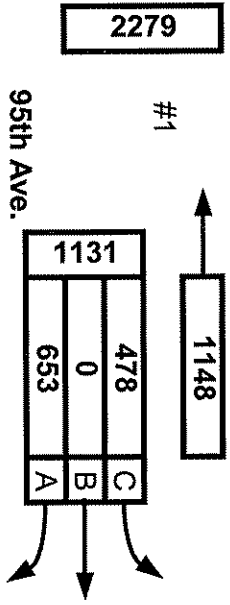
CSAH 52

10843

#2

| |
|--------|
| 4980 |
| D 467 |
| E 4513 |
| F 0 |

5863



#1

95th Ave.

CSAH 52

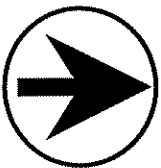
5166

#3

| |
|------|
| 6066 |
| 681 |
| 5385 |
| 0 |
| M |
| L |
| K |

11232

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



North

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

Weather: Hot, Sunny
 Inter: TDC-8
 Counted by: Jessica/Melissa

File Name : TMC0116
 Site Code : 01160202
 Start Date : 06/27/2001
 Page No : 1

Groups Printed- 1 - Unshifted

| Start Time | CSAH 52 Southbound | | | | | none Westbound | | | | | CSAH 52 Northbound | | | | | 95th Ave. 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 | | | |
| Factor | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | | | |
| 06:00 | 0 | 126 | 4 | 15 | 130 | 0 | 0 | 0 | 0 | 0 | 1 | 31 | 0 | 2 | 32 | 0 | 0 | 8 | 2 | 8 | 19 | 170 | 189 |
| 06:15 | 0 | 136 | 7 | 21 | 143 | 0 | 0 | 0 | 0 | 0 | 15 | 43 | 0 | 3 | 58 | 1 | 0 | 2 | 1 | 3 | 25 | 204 | 229 |
| 06:30 | 0 | 142 | 8 | 13 | 150 | 0 | 0 | 0 | 0 | 0 | 24 | 44 | 0 | 5 | 68 | 6 | 0 | 9 | 0 | 15 | 18 | 233 | 251 |
| 06:45 | 0 | 151 | 15 | 17 | 166 | 0 | 0 | 0 | 0 | 0 | 25 | 65 | 0 | 5 | 90 | 5 | 0 | 8 | 1 | 13 | 23 | 269 | 292 |
| Total | 0 | 555 | 34 | 66 | 589 | 0 | 0 | 0 | 0 | 0 | 65 | 183 | 0 | 15 | 248 | 12 | 0 | 27 | 4 | 39 | 85 | 876 | 961 |
| 07:00 | 0 | 116 | 17 | 6 | 133 | 0 | 0 | 0 | 0 | 0 | 27 | 44 | 0 | 3 | 71 | 5 | 0 | 10 | 1 | 15 | 10 | 219 | 229 |
| 07:15 | 0 | 136 | 14 | 8 | 150 | 0 | 0 | 0 | 0 | 0 | 8 | 44 | 0 | 5 | 52 | 5 | 0 | 7 | 2 | 12 | 15 | 214 | 229 |
| 07:30 | 0 | 127 | 21 | 18 | 148 | 0 | 0 | 0 | 0 | 0 | 7 | 46 | 0 | 6 | 53 | 10 | 0 | 9 | 5 | 19 | 29 | 220 | 249 |
| 07:45 | 0 | 111 | 21 | 20 | 132 | 0 | 0 | 0 | 0 | 0 | 15 | 72 | 0 | 9 | 87 | 11 | 0 | 9 | 2 | 20 | 31 | 239 | 270 |
| Total | 0 | 490 | 73 | 52 | 563 | 0 | 0 | 0 | 0 | 0 | 57 | 206 | 0 | 23 | 263 | 31 | 0 | 35 | 10 | 66 | 85 | 892 | 977 |
| 08:00 | 0 | 93 | 8 | 13 | 101 | 0 | 0 | 0 | 0 | 0 | 13 | 60 | 0 | 11 | 73 | 8 | 0 | 9 | 6 | 17 | 30 | 191 | 221 |
| 08:15 | 0 | 86 | 12 | 14 | 98 | 0 | 0 | 0 | 0 | 0 | 11 | 63 | 0 | 11 | 74 | 7 | 0 | 9 | 1 | 16 | 26 | 188 | 214 |
| 08:30 | 0 | 56 | 7 | 7 | 63 | 0 | 0 | 0 | 0 | 0 | 7 | 67 | 0 | 10 | 74 | 13 | 0 | 6 | 2 | 19 | 19 | 156 | 175 |
| 08:45 | 0 | 83 | 7 | 19 | 90 | 0 | 0 | 0 | 0 | 0 | 10 | 78 | 0 | 13 | 88 | 10 | 0 | 11 | 3 | 21 | 35 | 199 | 234 |
| Total | 0 | 318 | 34 | 53 | 352 | 0 | 0 | 0 | 0 | 0 | 41 | 268 | 0 | 45 | 309 | 38 | 0 | 35 | 12 | 73 | 110 | 734 | 844 |
| 09:00 | 0 | 63 | 4 | 14 | 67 | 0 | 0 | 0 | 0 | 0 | 12 | 70 | 0 | 12 | 82 | 6 | 0 | 9 | 3 | 15 | 29 | 164 | 193 |
| 09:15 | 0 | 58 | 7 | 18 | 65 | 0 | 0 | 0 | 0 | 0 | 12 | 69 | 0 | 11 | 81 | 8 | 0 | 5 | 4 | 13 | 33 | 159 | 192 |
| 09:30 | 0 | 46 | 5 | 13 | 51 | 0 | 0 | 0 | 0 | 0 | 8 | 73 | 0 | 11 | 81 | 6 | 0 | 4 | 1 | 10 | 25 | 142 | 167 |
| 09:45 | 0 | 46 | 4 | 8 | 50 | 0 | 0 | 0 | 0 | 0 | 9 | 70 | 0 | 10 | 79 | 7 | 0 | 4 | 1 | 11 | 19 | 140 | 159 |
| Total | 0 | 213 | 20 | 53 | 233 | 0 | 0 | 0 | 0 | 0 | 41 | 282 | 0 | 44 | 323 | 27 | 0 | 22 | 9 | 49 | 106 | 605 | 711 |
| 10:00 | 0 | 46 | 0 | 11 | 46 | 0 | 0 | 0 | 0 | 0 | 9 | 54 | 0 | 12 | 63 | 4 | 0 | 10 | 1 | 14 | 24 | 123 | 147 |
| 10:15 | 0 | 47 | 3 | 11 | 50 | 0 | 0 | 0 | 0 | 0 | 14 | 76 | 0 | 18 | 90 | 2 | 0 | 9 | 0 | 11 | 29 | 151 | 180 |
| 10:30 | 0 | 63 | 8 | 18 | 71 | 0 | 0 | 0 | 0 | 0 | 8 | 72 | 0 | 13 | 80 | 1 | 0 | 10 | 1 | 11 | 32 | 162 | 194 |
| 10:45 | 0 | 42 | 11 | 10 | 53 | 0 | 0 | 0 | 0 | 0 | 7 | 71 | 0 | 10 | 78 | 4 | 0 | 14 | 3 | 18 | 23 | 149 | 172 |
| Total | 0 | 198 | 22 | 50 | 220 | 0 | 0 | 0 | 0 | 0 | 38 | 273 | 0 | 53 | 311 | 11 | 0 | 43 | 5 | 54 | 108 | 585 | 693 |
| 11:00 | 0 | 40 | 6 | 13 | 46 | 0 | 0 | 0 | 0 | 0 | 9 | 49 | 0 | 10 | 58 | 6 | 0 | 7 | 0 | 13 | 23 | 117 | 140 |
| 11:15 | 0 | 51 | 10 | 13 | 61 | 0 | 0 | 0 | 0 | 0 | 7 | 57 | 0 | 6 | 64 | 0 | 0 | 15 | 0 | 15 | 19 | 140 | 159 |
| 11:30 | 0 | 53 | 4 | 9 | 57 | 0 | 0 | 0 | 0 | 0 | 11 | 60 | 0 | 15 | 71 | 4 | 0 | 12 | 2 | 16 | 26 | 144 | 170 |
| 11:45 | 0 | 65 | 3 | 14 | 68 | 0 | 0 | 0 | 0 | 0 | 12 | 79 | 0 | 13 | 91 | 6 | 0 | 8 | 1 | 14 | 28 | 173 | 201 |
| Total | 0 | 209 | 23 | 49 | 232 | 0 | 0 | 0 | 0 | 0 | 39 | 245 | 0 | 44 | 284 | 16 | 0 | 42 | 3 | 58 | 96 | 574 | 670 |
| 12:00 | 0 | 64 | 5 | 6 | 69 | 0 | 0 | 0 | 0 | 0 | 8 | 64 | 0 | 12 | 72 | 10 | 0 | 8 | 3 | 18 | 21 | 159 | 180 |
| 12:15 | 0 | 50 | 8 | 13 | 58 | 0 | 0 | 0 | 0 | 0 | 10 | 78 | 0 | 11 | 88 | 7 | 0 | 6 | 2 | 13 | 26 | 159 | 185 |
| 12:30 | 0 | 54 | 10 | 16 | 64 | 0 | 0 | 0 | 0 | 0 | 9 | 70 | 0 | 12 | 79 | 7 | 0 | 16 | 3 | 23 | 31 | 166 | 197 |
| 12:45 | 0 | 51 | 7 | 15 | 58 | 0 | 0 | 0 | 0 | 0 | 12 | 63 | 0 | 12 | 75 | 7 | 0 | 10 | 1 | 17 | 28 | 150 | 178 |
| Total | 0 | 219 | 30 | 50 | 249 | 0 | 0 | 0 | 0 | 0 | 39 | 275 | 0 | 47 | 314 | 31 | 0 | 40 | 9 | 71 | 106 | 634 | 740 |
| 13:00 | 0 | 43 | 3 | 6 | 46 | 0 | 0 | 0 | 0 | 0 | 11 | 71 | 0 | 10 | 82 | 5 | 0 | 4 | 2 | 9 | 18 | 137 | 155 |
| 13:15 | 0 | 60 | 3 | 17 | 63 | 0 | 0 | 0 | 0 | 0 | 6 | 66 | 0 | 20 | 72 | 6 | 0 | 8 | 0 | 14 | 37 | 149 | 186 |
| 13:30 | 0 | 56 | 8 | 15 | 64 | 0 | 0 | 0 | 0 | 0 | 8 | 70 | 0 | 12 | 78 | 3 | 0 | 20 | 2 | 23 | 29 | 165 | 194 |
| 13:45 | 0 | 69 | 11 | 21 | 80 | 0 | 0 | 0 | 0 | 0 | 9 | 63 | 0 | 8 | 72 | 10 | 0 | 11 | 1 | 21 | 30 | 173 | 203 |
| Total | 0 | 228 | 25 | 59 | 253 | 0 | 0 | 0 | 0 | 0 | 34 | 270 | 0 | 50 | 304 | 24 | 0 | 43 | 5 | 67 | 114 | 624 | 738 |
| 14:00 | 0 | 58 | 5 | 15 | 63 | 0 | 0 | 0 | 0 | 0 | 7 | 66 | 0 | 11 | 73 | 2 | 0 | 11 | 2 | 13 | 28 | 149 | 177 |
| 14:15 | 0 | 69 | 4 | 24 | 73 | 0 | 0 | 0 | 0 | 0 | 11 | 76 | 0 | 8 | 87 | 5 | 0 | 14 | 1 | 19 | 33 | 179 | 212 |
| 14:30 | 0 | 45 | 4 | 12 | 49 | 0 | 0 | 0 | 0 | 0 | 13 | 90 | 0 | 8 | 103 | 6 | 0 | 8 | 0 | 14 | 20 | 166 | 186 |
| 14:45 | 0 | 55 | 9 | 17 | 64 | 0 | 0 | 0 | 0 | 0 | 16 | 111 | 0 | 15 | 127 | 5 | 0 | 13 | 1 | 18 | 33 | 209 | 242 |
| Total | 0 | 227 | 22 | 68 | 249 | 0 | 0 | 0 | 0 | 0 | 47 | 343 | 0 | 42 | 390 | 18 | 0 | 46 | 4 | 64 | 114 | 703 | 817 |
| 15:00 | 0 | 69 | 6 | 15 | 75 | 0 | 0 | 0 | 0 | 0 | 8 | 100 | 0 | 12 | 108 | 5 | 0 | 17 | 2 | 22 | 29 | 205 | 234 |
| 15:15 | 0 | 82 | 7 | 14 | 89 | 0 | 0 | 0 | 1 | 0 | 11 | 119 | 0 | 14 | 130 | 9 | 0 | 4 | 0 | 13 | 29 | 232 | 261 |
| 15:30 | 0 | 75 | 3 | 12 | 78 | 0 | 0 | 0 | 0 | 0 | 10 | 124 | 0 | 14 | 134 | 8 | 0 | 14 | 2 | 22 | 28 | 234 | 262 |
| 15:45 | 0 | 69 | 4 | 9 | 73 | 0 | 0 | 0 | 0 | 0 | 10 | 140 | 0 | 7 | 150 | 9 | 0 | 18 | 2 | 27 | 18 | 250 | 268 |
| Total | 0 | 295 | 20 | 50 | 315 | 0 | 0 | 0 | 1 | 0 | 39 | 483 | 0 | 47 | 522 | 31 | 0 | 53 | 6 | 84 | 104 | 921 | 1025 |
| 16:00 | 0 | 69 | 9 | 7 | 78 | 0 | 6 | 0 | 1 | 6 | 14 | 128 | 0 | 9 | 142 | 10 | 0 | 16 | 1 | 26 | 18 | 252 | 270 |
| 16:15 | 0 | 66 | 7 | 7 | 73 | 0 | 0 | 0 | 0 | 0 | 9 | 168 | 0 | 12 | 177 | 15 | 0 | 14 | 1 | 29 | 20 | 279 | 299 |
| 16:30 | 0 | 66 | 5 | 6 | 71 | 0 | 0 | 0 | 0 | 0 | 7 | 157 | 0 | 8 | 164 | 15 | 0 | 14 | 0 | 29 | 14 | 264 | 278 |
| 16:45 | 0 | 90 | 10 | 6 | 100 | 0 | 0 | 0 | 0 | 0 | 17 | 155 | 0 | 8 | 172 | 19 | 0 | 15 | 1 | 34 | 15 | 306 | 321 |
| Total | 0 | 291 | 31 | 26 | 322 | 0 | 6 | 0 | 1 | 6 | 47 | 608 | 0 | 37 | 655 | 59 | 0 | 59 | 3 | 118 | 67 | 1101 | 1168 |

Anoka County Highway Department
Traffic Engineering

Weather: Hot, Sunny
Counter: TDC-8
Counted by: Jessica/Melissa

Traffic Volume and Turning Movement Stud

File Name : TMC0116
Site Code : 01160202
Start Date : 06/27/2001
Page No : 2

Groups Printed- 1 - Unshifted

| Start Time | CSAH 52 Southbound | | | | | none Westbound | | | | | CSAH 52 Northbound | | | | | 95th Ave. 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 | | | |
| Factor | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | 1.0 | 1.0 | 1.0 | 1.0 | | | | |
| 17:00 | 0 | 118 | 32 | 4 | 150 | 0 | 0 | 0 | 0 | 0 | 8 | 178 | 0 | 3 | 186 | 20 | 0 | 14 | 1 | 34 | 8 | 370 | 378 |
| 17:15 | 0 | 65 | 5 | 3 | 70 | 0 | 0 | 0 | 0 | 0 | 10 | 187 | 0 | 7 | 197 | 19 | 0 | 17 | 2 | 36 | 12 | 303 | 315 |
| 17:30 | 0 | 78 | 6 | 4 | 84 | 0 | 0 | 0 | 0 | 0 | 10 | 181 | 0 | 2 | 191 | 22 | 0 | 16 | 1 | 38 | 7 | 313 | 320 |
| 17:45 | 0 | 63 | 3 | 4 | 66 | 0 | 0 | 0 | 0 | 0 | 11 | 174 | 0 | 6 | 185 | 24 | 0 | 19 | 0 | 43 | 10 | 294 | 304 |
| Total | 0 | 324 | 46 | 15 | 370 | 0 | 0 | 0 | 0 | 0 | 39 | 720 | 0 | 18 | 759 | 85 | 0 | 66 | 4 | 151 | 37 | 1280 | 1317 |
| 18:00 | 0 | 59 | 3 | 2 | 62 | 0 | 0 | 0 | 0 | 0 | 11 | 198 | 0 | 7 | 209 | 8 | 0 | 11 | 2 | 19 | 11 | 290 | 301 |
| 18:15 | 0 | 55 | 16 | 4 | 71 | 0 | 0 | 0 | 0 | 0 | 11 | 137 | 0 | 3 | 148 | 16 | 0 | 9 | 0 | 25 | 7 | 244 | 251 |
| 18:30 | 0 | 71 | 2 | 6 | 73 | 0 | 0 | 0 | 0 | 0 | 14 | 121 | 0 | 2 | 135 | 20 | 0 | 6 | 2 | 26 | 10 | 234 | 244 |
| 18:45 | 0 | 32 | 6 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 7 | 108 | 0 | 4 | 115 | 12 | 0 | 13 | 3 | 25 | 7 | 178 | 185 |
| Total | 0 | 217 | 27 | 12 | 244 | 0 | 0 | 0 | 0 | 0 | 43 | 564 | 0 | 16 | 607 | 56 | 0 | 39 | 7 | 95 | 35 | 946 | 981 |
| 19:00 | 0 | 77 | 7 | 0 | 84 | 0 | 0 | 0 | 0 | 0 | 13 | 79 | 0 | 4 | 92 | 7 | 0 | 7 | 1 | 14 | 5 | 190 | 195 |
| 19:15 | 0 | 43 | 5 | 1 | 48 | 0 | 0 | 0 | 0 | 0 | 9 | 74 | 0 | 2 | 83 | 5 | 0 | 18 | 0 | 23 | 3 | 154 | 157 |
| 19:30 | 0 | 47 | 5 | 1 | 52 | 0 | 0 | 0 | 0 | 0 | 6 | 69 | 0 | 3 | 75 | 2 | 0 | 13 | 1 | 15 | 5 | 142 | 147 |
| 19:45 | 0 | 43 | 3 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 11 | 60 | 0 | 0 | 71 | 5 | 0 | 8 | 0 | 13 | 0 | 130 | 130 |
| Total | 0 | 210 | 20 | 2 | 230 | 0 | 0 | 0 | 0 | 0 | 39 | 282 | 0 | 9 | 321 | 19 | 0 | 46 | 2 | 65 | 13 | 616 | 629 |
| 20:00 | 0 | 75 | 11 | 2 | 86 | 0 | 0 | 0 | 0 | 0 | 8 | 32 | 0 | 0 | 40 | 1 | 0 | 13 | 0 | 14 | 2 | 140 | 142 |
| 20:15 | 0 | 43 | 1 | 1 | 44 | 0 | 0 | 0 | 0 | 0 | 11 | 62 | 0 | 1 | 73 | 4 | 0 | 7 | 0 | 11 | 2 | 128 | 130 |
| 20:30 | 0 | 63 | 4 | 2 | 67 | 0 | 0 | 0 | 0 | 0 | 16 | 66 | 0 | 0 | 82 | 2 | 0 | 3 | 1 | 5 | 3 | 154 | 157 |
| 20:45 | 0 | 63 | 4 | 2 | 67 | 0 | 0 | 0 | 0 | 0 | 8 | 45 | 0 | 1 | 53 | 1 | 0 | 9 | 0 | 10 | 3 | 130 | 133 |
| Total | 0 | 244 | 20 | 7 | 264 | 0 | 0 | 0 | 0 | 0 | 43 | 205 | 0 | 2 | 248 | 8 | 0 | 32 | 1 | 40 | 10 | 552 | 562 |
| 21:00 | 0 | 63 | 0 | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 11 | 54 | 0 | 0 | 65 | 3 | 0 | 3 | 0 | 6 | 0 | 134 | 134 |
| 21:15 | 0 | 98 | 3 | 1 | 101 | 0 | 0 | 0 | 0 | 0 | 9 | 41 | 0 | 1 | 50 | 5 | 0 | 4 | 0 | 9 | 2 | 160 | 162 |
| 21:30 | 0 | 66 | 9 | 2 | 75 | 0 | 0 | 0 | 0 | 0 | 3 | 38 | 0 | 0 | 41 | 2 | 0 | 10 | 0 | 12 | 2 | 128 | 130 |
| 21:45 | 0 | 48 | 8 | 0 | 56 | 0 | 0 | 0 | 0 | 0 | 7 | 45 | 0 | 0 | 52 | 2 | 0 | 8 | 0 | 10 | 0 | 118 | 118 |
| Total | 0 | 275 | 20 | 3 | 295 | 0 | 0 | 0 | 0 | 0 | 30 | 178 | 0 | 1 | 208 | 12 | 0 | 25 | 0 | 37 | 4 | 540 | 544 |
| Grand Total | 0 | 451 | 467 | 615 | 4980 | 0 | 6 | 0 | 2 | 6 | 681 | 538 | 0 | 493 | 6066 | 478 | 0 | 653 | 84 | 1131 | 1194 | 12183 | 13377 |
| Apprch % | 0.0 | 90.6 | 9.4 | | | 0.0 | 100.0 | 0.0 | | | 11.2 | 88.8 | 0.0 | | | 42.3 | 0.0 | 57.7 | | | | | |
| Total % | 0.0 | 37.0 | 3.8 | | 40.9 | 0.0 | 0.0 | 0.0 | | 0.0 | 5.6 | 44.2 | 0.0 | | 49.8 | 3.9 | 0.0 | 5.4 | | 9.3 | 8.9 | 91.1 | |

or Street Approaches:

Northbound:

CSAH 52

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0116.war
 Count Type: IMC. Channel: 0. Count Date: 6/27/ 1
 Number of Lanes: 1
 Approach Speed: 50
 Total Approach Traffic: 6066

Southbound:

CSAH 52

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0116.war
 Count Type: IMC. Channel: 0. Count Date: 6/27/ 1
 Number of Lanes: 1
 Approach Speed: 50
 Total Approach Traffic: 4980

Minor Street Approaches:

Eastbound:

95th Ave.

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0116.war
 Count Type: IMC. Channel: 0. Count Date: 6/27/ 1
 Number of Lanes: 1
 Approach Speed: 30
 Total Approach Traffic: 1131

Westbound:

none

Data File: C:\Program Files\JAMAR\PETRA\Data Files\TMC0116.war
 Count Type: IMC. Channel: 0. Count Date: 6/27/ 1
 Number of Lanes: 1
 Approach Speed: 0
 Total Approach Traffic: 6

Analysis of 8-Hour Volume Warrants (Criteria refers to high volume side street for that hour):

| Hour | Main | Side | Warrant 1 | | Warrant 2 | | Warrant 8 | |
|-------|---------|------|-----------|------|-----------|----------|-----------|----------|
| Begin | (Total) | Vol. | Dir. | Rank | Meets? | Criteria | Meets? | Criteria |
| 0 | 0 | 0 | W | 17 | | 105 | | 52 |
| 1 | 0 | 0 | W | 18 | | 105 | | 52 |
| 2 | 0 | 0 | W | 19 | | 105 | | 52 |
| 3 | 0 | 0 | W | 20 | | 105 | | 52 |
| 4 | 0 | 0 | W | 21 | | 105 | | 52 |
| 5 | 0 | 0 | W | 22 | | 105 | | 52 |
| 6 | 837 | 39 | E | 15 | MAIN | 105 | MAIN | 52 |
| 7 | 826 | 66 | E | 8 | MAIN | 105 | --BOTH-- | 52 |
| 8 | 661 | 73 | E | 5 | MAIN | 105 | --BOTH-- | 52 |
| 9 | 556 | 49 | E | 13 | MAIN | 105 | MAIN | 52 |
| 10 | 531 | 54 | E | 12 | MAIN | 105 | --BOTH-- | 52 |
| 11 | 516 | 58 | E | 11 | MAIN | 105 | SIDE | 52 |
| 12 | 563 | 71 | E | 6 | MAIN | 105 | --BOTH-- | 52 |
| 13 | 557 | 67 | E | 7 | MAIN | 105 | --BOTH-- | 52 |
| 14 | 639 | 64 | E | 10 | MAIN | 105 | --BOTH-- | 52 |
| 15 | 837 | 84 | E | 4 | MAIN | 105 | --BOTH-- | 52 |
| 16 | 977 | 118 | E | 2 | --BOTH-- | 105 | --BOTH-- | 52 |
| 17 | 1129 | 151 | E | 1 | --BOTH-- | 105 | --BOTH-- | 52 |
| 18 | 851 | 95 | E | 3 | MAIN | 105 | --BOTH-- | 52 |
| 19 | 551 | 65 | E | 9 | MAIN | 105 | --BOTH-- | 52 |
| 20 | 512 | 40 | E | 14 | MAIN | 105 | | 52 |
| 21 | 503 | 37 | E | 16 | MAIN | 105 | | 52 |
| 22 | 0 | 0 | W | 23 | | 105 | | 52 |
| 23 | 0 | 0 | W | 24 | | 105 | | 52 |

Warrant Summary:

Rural values apply.

Warrant 1 - Minimum Vehicular Volumes

NOT SATISFIED. Required values reached for 2 hours. Criteria--Main St.: 350; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

SATISFIED for 11 hours. Criteria--Main St.: 525; Side St.: See Volume Summary.

Warrant 3 - Minimum Pedestrian Volumes

NOT SATISFIED. Ped volumes too low. Criteria--190 Peds in peak hour, 100 peds in 4th high hour.

Warrant 4 - School Crossing

NOT APPLICABLE. Gap data has not been defined.

Warrant 5 - Progressive Movement

NOT SATISFIED. Adjacent signals closer than 1000 feet and/or not part of coordinated system.

Warrant 6 - Accident Experience

NOT SATISFIED. 0 correctable accidents is fewer than required 5.

Correctable Accidents: 0; Right Angle Accidents: 0; Left Turn Accidents: 0; Other Accidents: 0.

Warrant 7 - Systems Warrant

SATISFIED. Peak hour total entering volume: 1280. Approaches on both streets satisfy one of the following criteria:

NSE - Approaches which are part of the principal through traffic roadway network.

- Approaches which include rural or suburban highways outside, entering or traversing a city.

- Approaches which appear as a major route in an official transportation plan.

Warrant 8 - Combination of Warrants

NOT SATISFIED. Required values reached for 4 hours. Criteria--Main: 420; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

SATISFIED for 5 hours.

Warrant 10 - Peak Hour Delay

NOT APPLICABLE. Volume requirements satisfied, but side street peak hour delay not defined.

Criteria--Main St.: 800 (4 approaches), 650 (3 approaches); Side St.: 100.

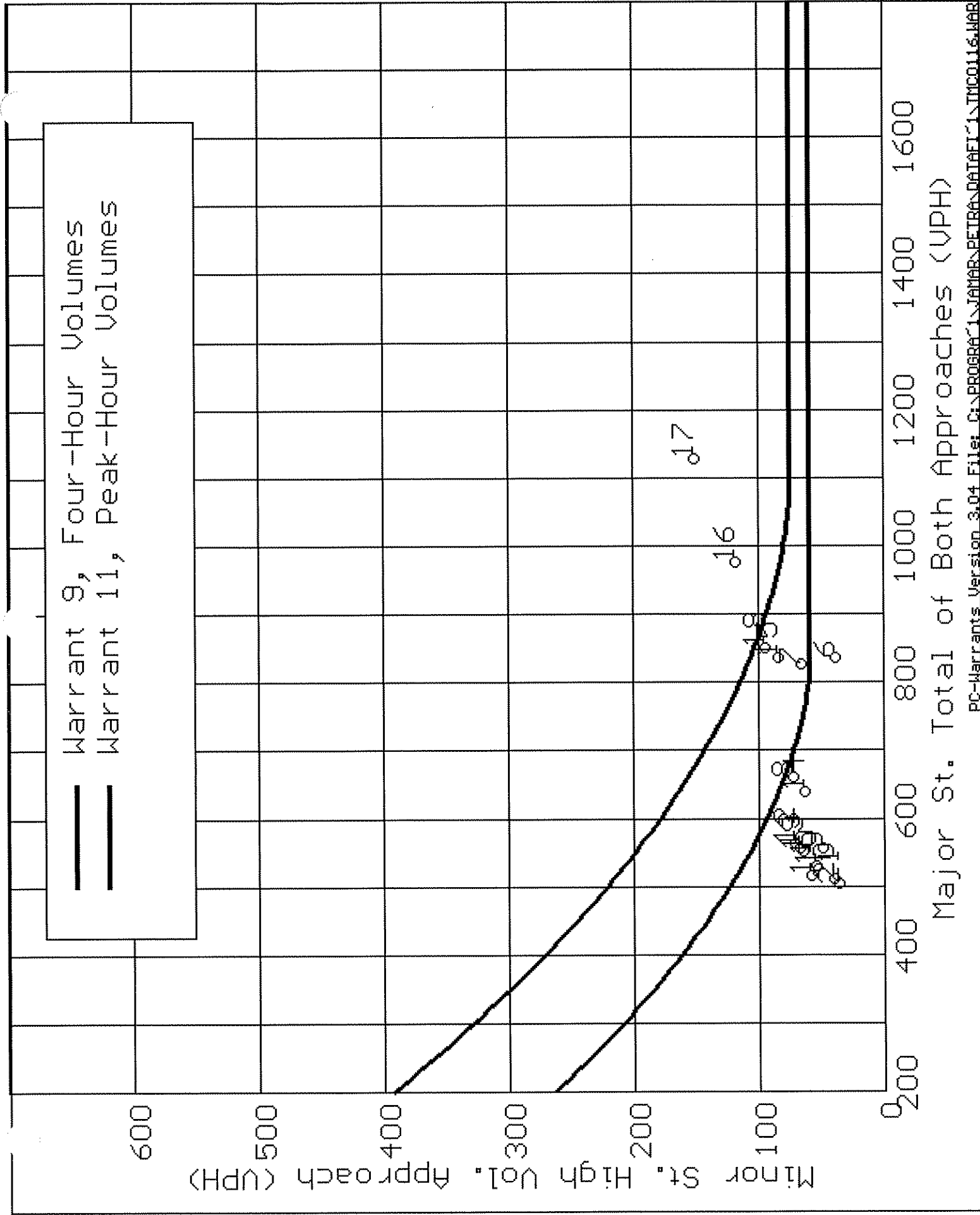
Warrant 11 - Peak Hour Volume

SATISFIED for 2 hours.

Minor St. High Vol. Approach (UPH)

Warrant 9, Four-Hour Volumes
Warrant 11, Peak-Hour Volumes

Major St. Total of Both Approaches (UPH)



Multiway Stop Warrant Analysis
TMC 0116 CSAH 52@ 95th Ave.
Speed Limit of Major Roadway..... 50

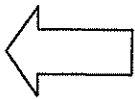
Minimum Traffic Volumes Multiway Stop Warrant Criteria:

- a) The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour (vph) for any 8 hours of an average day, AND:
- b) The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 vph for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour, BUT:
- c) When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum volume warrant is 70% of the above requirements.

| Hour | Total Vehicular Traffic Entering the Intersection | Vehicular Traffic Entering on First Minor Roadway | Vehicular Traffic Entering on Second Minor Roadway | Sum of Minor Approaches | Hours Stop Warrant Met |
|---------------|---|---|--|-------------------------|------------------------|
| 6 AM - 7 AM | 876 | 0 | 39 | 39 | 0 |
| 7 AM - 8 AM | 892 | 0 | 66 | 66 | 0 |
| 8 AM - 9 AM | 734 | 0 | 73 | 73 | 0 |
| 9 AM - 10 AM | 605 | 0 | 49 | 49 | 0 |
| 10 AM - 11 AM | 585 | 0 | 54 | 54 | 0 |
| 11 AM - 12 PM | 574 | 0 | 58 | 58 | 0 |
| 12 PM - 13 PM | 634 | 0 | 71 | 71 | 0 |
| 1 PM - 2 PM | 624 | 0 | 67 | 67 | 0 |
| 2 PM - 3 PM | 703 | 0 | 64 | 64 | 0 |
| 3 PM - 4 PM | 921 | 0 | 84 | 84 | 0 |
| 4 PM - 5 PM | 1101 | 0 | 118 | 118 | 0 |
| 5 PM - 6 PM | 1280 | 0 | 151 | 151 | 0 |
| 6 PM - 7 PM | 946 | 0 | 95 | 95 | 0 |
| 7 PM - 8 PM | 616 | 0 | 65 | 65 | 0 |
| 8 PM - 9 PM | 552 | 0 | 40 | 40 | 0 |
| 9 PM - 10 PM | 540 | 0 | 37 | 37 | 0 |

TOTAL HOURS MET: 0

MULTIWAY STOP WARRANT IS NOT MET



COUNT LOCATION:

CSAH 52 @

DATE:

6/27/01

95th Ave

NORTH

APP. #1 = CSAH 52

APP. #2 =

APP. #3 = CSAH 52

APP. #4 = 95th Ave.

APP. #2

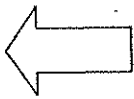
APP. #1

APP. #3

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 |
| 6:00-6:15AM | | | | | | 17 | | 1 |
| 6:15-6:30 | | | | | | 22 | | 2 |
| 6:30-6:45 | | | | | | 18 | | |
| 6:45-7:00 | | | | | | 22 | | 1 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 83 |
| 7:00-7:15 | | | | | | 9 | | 1 |
| 7:15-7:30 | | | | | | 14 | | 2 |
| 7:30-7:45 | | | | | | 28 | | |
| 7:45-8:00 | | | | | | 28 | | 2 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 84 |
| 8:00-8:15 | | | 1 | | 1 | 30 | | |
| 8:15-8:30 | | | | | | 25 | | 2 |
| 8:30-8:45 | | | | | | 21 | | |
| 8:45-9:00 | | | | | | 43 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 121 |
| 9:00-9:15 | | | | 1 | 1 | 35 | | |
| 9:15-9:30 | | | | | | 24 | | |
| 9:30-9:45 | | | | | | 25 | | |
| 9:45-10:00 | | | 1 | | 1 | 16 | | |
| HOURLY TOTAL | | | | | 2 | HOURLY TOTAL | | 100 |
| 10:00-10:15 | | | 1 | | | 18 | | |
| 10:15-10:30 | | | | | | 26 | | |
| 10:30-10:45 | | | | | | 28 | | 3 |
| 10:45-11:00 | | | | | | 22 | | 2 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 99 |
| 11:00-11:15 | | | 1 | | 1 | 21 | | |
| 11:15-11:30 | | | | | | 19 | | |
| 11:30-11:45 | | | | | | 25 | | 1 |
| 11:45-12:00 | | | | | | 24 | | 1 |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 91 |
| 12:00-12:15 | | | | | | 22 | | |
| 12:15-12:30 | | | | | | 21 | | 4 |
| 12:30-12:45 | | | | | | 27 | | |
| 12:45-1:00 | | | | | | 27 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 101 |
| 1:00-1:15 | | | | | | 18 | | |
| 1:15-1:30 | | | | | | 33 | | 2 |
| 1:30-1:45 | | | | | | 27 | | 4 |
| 1:45-2:00 | | | | | | 25 | | 4 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 113 |



NORTH

COUNT LOCATION:

CSAH 52 @

DATE:

6/27/01

95th Ave

APP. #1 = CSAH 52

APP. #2 =

APP. #3 = CSAH 52

APP. #4 = 95th Ave.

APP. #2

APP. #1

APP. #3

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 | 1 | | | | 1 | 25 | | 1 |
| 2:15-2:30 | | | | | | 33 | | |
| 2:30-2:45 | | | | | | 23 | | |
| 2:45-3:00 | | | | | | 29 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 111 |
| 3:00-3:15 | | | | | | 28 | | |
| 3:15-3:30 | | | | | | 26 | | |
| 3:30-3:45 | | | | | | 29 | | |
| 3:45-4:00 | | | | | | 18 | | 1 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 102 |
| 4:00-4:15 | | | | | | 18 | 1 | |
| 4:15-4:30 | 1 | | | | 1 | 17 | 1 | |
| 4:30-4:45 | | | | | | 13 | | |
| 4:45-5:00 | | | | | | 16 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 66 |
| 5:00-5:15 | | | | | | 7 | | |
| 5:15-5:30 | 1 | | | | 1 | 9 | | 1 |
| 5:30-5:45 | | | | | | 7 | | |
| 5:45-6:00 | 1 | | 1 | | 2 | 8 | | 2 |
| HOURLY TOTAL | | | | | 3 | HOURLY TOTAL | | 34 |
| 6:00-6:15 | | | 1 | | 1 | 8 | 1 | 2 |
| 6:15-6:30 | | | | | | 7 | | |
| 6:30-6:45 | | | | | | 10 | | |
| 6:45-7:00 | | | | 1 | 1 | 5 | | |
| HOURLY TOTAL | | | | | 2 | HOURLY TOTAL | | 33 |
| 7:00-7:15 | | | | | | 5 | | |
| 7:15-7:30 | | | | | | 3 | | |
| 7:30-7:45 | | | | | | 5 | | |
| 7:45-8:00 | | | | 2 | 2 | | | |
| HOURLY TOTAL | | | | | 2 | HOURLY TOTAL | | 13 |
| 8:00-8:15 | | | | 1 | 1 | 2 | | |
| 8:15-8:30 | | | | | | 2 | | |
| 8:30-8:45 | | | | | | 4 | | |
| 8:45-9:00 | | | | | | 4 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 12 |
| 9:00-9:15 | | | | | | | | |
| 9:15-9:30 | | | | | | 2 | | |
| 9:30-9:45 | | | | | | 1 | | 1 |
| 9:45-10:00 | | | | | | | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 4 |

