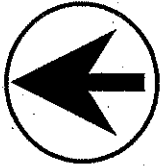


Date : 5/30/01

Count Number : TMC0118

Location : CSAH 78

@ CR 18

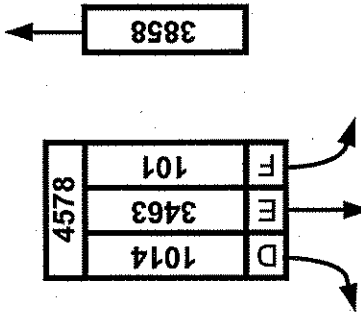


North

CSAH 78

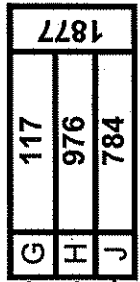
8436

#2



3858

CR 18

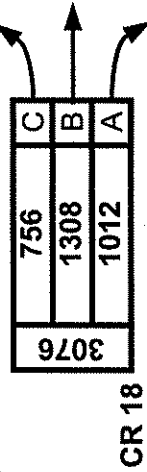


#3

2578

#1

5654

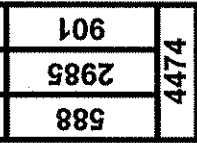


CR 18

2310

4187

CSAH 78



#4

5259

9733

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

Anoka County Highway Department

Traffic Volume and Turning

Movement Study

Anoka County Highway Department Traffic Engineering

Weather: Sunny, Party Cloudy Traffic Volume and Turning Movement Study
 Counter: TDC-8
 Counted by: Jessica/Melissa

File Name : TMC0118
 Site Code : 01180202
 Start Date : 05/30/2001
 Page No : 1

Groups Printed- Unshifted

| Start Time | CSAH 78 Southbound | | | | | CR 18 Westbound | | | | | CSAH 78 Northbound | | | | | CR 18 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 | 69 | 8 | 3 | 77 | 26 | 9 | 1 | 4 | 36 | 4 | 9 | 6 | 2 | 19 | 1 | 4 | 6 | 0 | 11 | 9 | 143 | 152 |
| 06:15 | 0 | 100 | 6 | 1 | 106 | 26 | 23 | 0 | 0 | 49 | 7 | 19 | 9 | 3 | 35 | 2 | 9 | 4 | 0 | 15 | 4 | 205 | 209 |
| 06:30 | 0 | 101 | 7 | 2 | 108 | 21 | 33 | 0 | 3 | 54 | 5 | 29 | 12 | 6 | 46 | 4 | 12 | 3 | 1 | 19 | 12 | 227 | 239 |
| 06:45 | 0 | 86 | 13 | 4 | 99 | 24 | 34 | 0 | 2 | 58 | 4 | 33 | 14 | 5 | 51 | 10 | 13 | 7 | 4 | 30 | 15 | 238 | 253 |
| Total | 0 | 356 | 34 | 10 | 390 | 97 | 99 | 1 | 9 | 197 | 20 | 90 | 41 | 16 | 151 | 17 | 38 | 20 | 5 | 75 | 40 | 813 | 853 |
| 07:00 | 0 | 87 | 5 | 2 | 92 | 33 | 30 | 3 | 3 | 66 | 10 | 27 | 7 | 7 | 44 | 9 | 12 | 7 | 3 | 28 | 15 | 230 | 245 |
| 07:15 | 1 | 99 | 15 | 6 | 115 | 16 | 24 | 4 | 1 | 44 | 10 | 42 | 8 | 8 | 60 | 19 | 10 | 13 | 1 | 42 | 16 | 261 | 277 |
| 07:30 | 1 | 98 | 22 | 7 | 121 | 21 | 21 | 3 | 1 | 45 | 4 | 43 | 13 | 0 | 60 | 32 | 19 | 15 | 9 | 66 | 17 | 292 | 309 |
| 07:45 | 1 | 96 | 48 | 15 | 145 | 23 | 23 | 3 | 4 | 49 | 13 | 71 | 14 | 16 | 98 | 44 | 20 | 5 | 14 | 69 | 49 | 361 | 410 |
| Total | 3 | 380 | 90 | 30 | 473 | 93 | 98 | 13 | 9 | 204 | 37 | 183 | 42 | 31 | 262 | 104 | 61 | 40 | 27 | 205 | 97 | 1144 | 1241 |
| 08:00 | 2 | 83 | 37 | 22 | 122 | 15 | 23 | 5 | 3 | 43 | 6 | 43 | 6 | 8 | 55 | 25 | 14 | 10 | 5 | 49 | 38 | 269 | 307 |
| 08:15 | 3 | 67 | 16 | 10 | 86 | 19 | 16 | 3 | 1 | 38 | 10 | 34 | 10 | 12 | 54 | 13 | 8 | 9 | 4 | 30 | 27 | 208 | 235 |
| 08:30 | 2 | 71 | 6 | 11 | 79 | 13 | 15 | 0 | 7 | 28 | 7 | 22 | 11 | 8 | 40 | 10 | 14 | 8 | 5 | 32 | 31 | 179 | 210 |
| 08:45 | 1 | 65 | 13 | 12 | 79 | 34 | 29 | 3 | 8 | 66 | 8 | 32 | 8 | 5 | 48 | 11 | 10 | 8 | 5 | 29 | 30 | 222 | 252 |
| Total | 8 | 286 | 72 | 55 | 366 | 81 | 83 | 11 | 19 | 175 | 31 | 131 | 35 | 33 | 197 | 59 | 46 | 35 | 19 | 140 | 126 | 878 | 1004 |
| 09:00 | 1 | 72 | 24 | 7 | 97 | 17 | 24 | 3 | 4 | 44 | 3 | 27 | 7 | 4 | 37 | 18 | 18 | 12 | 9 | 48 | 24 | 226 | 250 |
| 09:15 | 2 | 67 | 5 | 10 | 74 | 20 | 12 | 4 | 5 | 36 | 10 | 42 | 11 | 7 | 63 | 16 | 8 | 5 | 3 | 29 | 25 | 202 | 227 |
| 09:30 | 1 | 53 | 10 | 7 | 64 | 11 | 8 | 1 | 0 | 20 | 7 | 33 | 10 | 4 | 50 | 10 | 8 | 7 | 4 | 25 | 15 | 159 | 174 |
| 09:45 | 2 | 43 | 13 | 5 | 58 | 13 | 16 | 7 | 0 | 36 | 9 | 34 | 8 | 4 | 51 | 12 | 8 | 6 | 3 | 26 | 12 | 171 | 183 |
| Total | 6 | 235 | 52 | 29 | 293 | 61 | 60 | 15 | 9 | 136 | 29 | 136 | 36 | 19 | 201 | 56 | 42 | 30 | 19 | 128 | 76 | 758 | 834 |
| 10:00 | 0 | 59 | 20 | 9 | 79 | 4 | 12 | 0 | 0 | 16 | 10 | 43 | 7 | 5 | 60 | 9 | 11 | 9 | 6 | 29 | 20 | 184 | 204 |
| 10:15 | 1 | 35 | 23 | 7 | 59 | 6 | 12 | 1 | 1 | 19 | 8 | 43 | 11 | 10 | 62 | 6 | 8 | 7 | 3 | 21 | 21 | 161 | 182 |
| 10:30 | 1 | 49 | 16 | 6 | 66 | 13 | 13 | 2 | 3 | 28 | 2 | 32 | 6 | 4 | 40 | 9 | 9 | 7 | 4 | 25 | 17 | 159 | 176 |
| 10:45 | 2 | 49 | 8 | 5 | 59 | 10 | 8 | 1 | 0 | 19 | 3 | 16 | 7 | 2 | 26 | 12 | 9 | 5 | 3 | 26 | 10 | 130 | 140 |
| Total | 4 | 192 | 67 | 27 | 263 | 33 | 45 | 4 | 4 | 82 | 23 | 134 | 31 | 21 | 188 | 36 | 37 | 28 | 16 | 101 | 68 | 634 | 702 |
| 11:00 | 1 | 49 | 18 | 10 | 68 | 12 | 12 | 3 | 1 | 27 | 1 | 30 | 6 | 6 | 37 | 6 | 17 | 4 | 3 | 27 | 20 | 159 | 179 |
| 11:15 | 2 | 45 | 8 | 7 | 55 | 2 | 6 | 4 | 0 | 12 | 5 | 41 | 6 | 5 | 52 | 12 | 11 | 2 | 5 | 25 | 17 | 144 | 161 |
| 11:30 | 4 | 37 | 13 | 9 | 54 | 14 | 15 | 0 | 3 | 29 | 1 | 36 | 10 | 8 | 47 | 16 | 22 | 3 | 5 | 41 | 25 | 171 | 196 |
| 11:45 | 2 | 26 | 9 | 3 | 37 | 4 | 15 | 3 | 1 | 22 | 6 | 43 | 12 | 4 | 61 | 7 | 8 | 4 | 7 | 19 | 15 | 139 | 154 |
| Total | 9 | 157 | 48 | 29 | 214 | 32 | 48 | 10 | 5 | 90 | 13 | 150 | 34 | 23 | 197 | 41 | 58 | 13 | 20 | 112 | 77 | 613 | 690 |
| 12:00 | 4 | 33 | 4 | 4 | 41 | 5 | 10 | 3 | 4 | 18 | 5 | 42 | 16 | 5 | 63 | 9 | 12 | 10 | 5 | 31 | 18 | 153 | 171 |
| 12:15 | 2 | 42 | 14 | 13 | 58 | 9 | 9 | 1 | 1 | 19 | 7 | 27 | 9 | 5 | 43 | 11 | 10 | 4 | 3 | 25 | 22 | 145 | 167 |
| 12:30 | 2 | 47 | 9 | 8 | 58 | 7 | 6 | 1 | 1 | 14 | 6 | 35 | 12 | 5 | 53 | 13 | 13 | 9 | 5 | 35 | 19 | 160 | 179 |
| 12:45 | 1 | 38 | 22 | 10 | 61 | 5 | 8 | 3 | 1 | 16 | 11 | 39 | 16 | 5 | 66 | 12 | 8 | 3 | 1 | 23 | 17 | 166 | 183 |
| Total | 9 | 160 | 49 | 35 | 218 | 26 | 33 | 8 | 7 | 67 | 29 | 143 | 53 | 20 | 225 | 45 | 43 | 26 | 14 | 114 | 76 | 624 | 700 |
| 13:00 | 1 | 39 | 9 | 10 | 49 | 8 | 8 | 1 | 0 | 17 | 3 | 45 | 13 | 7 | 61 | 23 | 8 | 7 | 6 | 38 | 23 | 165 | 188 |
| 13:15 | 1 | 49 | 8 | 6 | 58 | 3 | 6 | 0 | 2 | 9 | 4 | 29 | 8 | 7 | 41 | 12 | 17 | 5 | 2 | 34 | 17 | 142 | 159 |
| 13:30 | 0 | 39 | 8 | 5 | 47 | 5 | 11 | 0 | 1 | 16 | 6 | 40 | 6 | 5 | 52 | 12 | 11 | 4 | 3 | 27 | 14 | 142 | 156 |
| 13:45 | 1 | 46 | 12 | 11 | 59 | 10 | 4 | 2 | 1 | 16 | 3 | 41 | 9 | 5 | 53 | 12 | 15 | 11 | 5 | 38 | 22 | 166 | 188 |
| Total | 3 | 173 | 37 | 32 | 213 | 26 | 29 | 3 | 4 | 58 | 16 | 155 | 36 | 24 | 207 | 59 | 51 | 27 | 16 | 137 | 76 | 615 | 691 |
| 14:00 | 1 | 35 | 10 | 4 | 46 | 4 | 10 | 0 | 1 | 14 | 3 | 29 | 3 | 7 | 35 | 10 | 17 | 4 | 1 | 31 | 13 | 126 | 139 |
| 14:15 | 2 | 48 | 11 | 4 | 61 | 7 | 9 | 2 | 4 | 18 | 4 | 34 | 12 | 3 | 50 | 13 | 13 | 7 | 5 | 33 | 16 | 162 | 178 |
| 14:30 | 1 | 48 | 10 | 5 | 59 | 11 | 10 | 1 | 2 | 22 | 7 | 47 | 13 | 9 | 67 | 17 | 18 | 13 | 6 | 48 | 22 | 196 | 218 |
| 14:45 | 1 | 59 | 13 | 6 | 73 | 11 | 19 | 2 | 2 | 32 | 4 | 54 | 19 | 13 | 77 | 18 | 27 | 10 | 8 | 55 | 29 | 237 | 266 |
| Total | 5 | 190 | 44 | 19 | 239 | 33 | 48 | 5 | 9 | 86 | 18 | 164 | 47 | 32 | 229 | 58 | 75 | 34 | 20 | 167 | 80 | 721 | 801 |
| 15:00 | 5 | 63 | 41 | 23 | 109 | 12 | 9 | 3 | 2 | 24 | 8 | 67 | 31 | 7 | 106 | 15 | 19 | 4 | 5 | 38 | 37 | 277 | 314 |
| 15:15 | 3 | 54 | 23 | 7 | 80 | 10 | 11 | 1 | 3 | 22 | 7 | 53 | 26 | 5 | 86 | 18 | 29 | 12 | 5 | 59 | 20 | 247 | 267 |
| 15:30 | 5 | 54 | 21 | 7 | 80 | 9 | 14 | 1 | 1 | 24 | 7 | 77 | 18 | 12 | 102 | 8 | 30 | 10 | 5 | 48 | 25 | 254 | 279 |
| 15:45 | 1 | 51 | 19 | 7 | 71 | 16 | 13 | 2 | 5 | 31 | 7 | 79 | 28 | 11 | 114 | 21 | 38 | 7 | 5 | 66 | 28 | 282 | 310 |
| Total | 14 | 222 | 104 | 44 | 340 | 47 | 47 | 7 | 11 | 101 | 29 | 276 | 103 | 35 | 408 | 62 | 116 | 33 | 20 | 211 | 110 | 1060 | 1170 |
| 16:00 | 2 | 63 | 13 | 11 | 78 | 21 | 17 | 2 | 2 | 40 | 12 | 77 | 35 | 9 | 124 | 12 | 30 | 14 | 5 | 56 | 27 | 298 | 325 |
| 16:15 | 1 | 43 | 17 | 5 | 61 | 12 | 18 | 1 | 1 | 31 | 5 | 68 | 30 | 10 | 103 | 19 | 30 | 9 | 1 | 58 | 17 | 253 | 270 |
| 16:30 | 1 | 31 | 9 | 4 | 41 | 17 | 9 | 6 | 5 | 32 | 7 | 58 | 23 | 10 | 88 | 15 | 38 | 15 | 1 | 68 | 20 | 229 | 249 |
| 16:45 | 0 | 54 | 25 | 7 | 79 | 13 | 21 | 0 | 2 | 34 | 8 | 100 | 31 | 7 | 139 | 27 | 42 | 11 | 3 | 80 | 19 | 332 | 351 |
| Total | 4 | 191 | 64 | 27 | 259 | 63 | 65 | 9 | 10 | 137 | 32 | 303 | 119 | 36 | 454 | 73 | 140 | 49 | 10 | 262 | 83 | 1112 | 1195 |
| 17:00 | 2 | 55 | 30 | 5 | 87 | 20 | 11 | 0 | 3 | 31 | 5 | 81 | 42 | 4 | 128 | 28 | 37 | 12 | 3 | 77 | 15 | 323 | 338 |
| 17:15 | 1 | 62 | 22 | 8 | 85 | 16 | 21 | 0 | 0 | 37 | 11 | 88 | 23 | 8 | 122 | 27 | 31 | 12 | 4 | 70 | 20 | 314 | 334 |
| 17:30 | 3 | 57 | 23 | 3 | 83 | 13 | 23 | 1 | 3 | 37 | 17 | 76 | 20 | 9 | 113 | 27 | 39 | 15 | 3 | 81 | 18 | 314 | 332 |
| 17:45 | 4 | 48 | 34 | 3 | 86 | 6 | 40 | 2 | 1 | 48 | 21 | 70 | 10 | 4 | 101 | 33 | 47 | 13 | 5 | 93 | 13 | 328 | 341 |
| Total | 10 | 222 | 109 | 19 | 341 | 55 | 95 | 3 | 7 | 153 | 54 | 315 | 95 | 25 | 464 | 115 | 154 | 52 | 15 | 321 | 66 | 1279 | 1345 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-----|------|------|-----|------|------|------|-----|-----|------|------|------|------|-----|------|------|------|------|-----|------|------|-------|-------|
| 18:00 | 5 | 57 | 24 | 4 | 86 | 13 | 39 | 6 | 2 | 58 | 26 | 88 | 17 | 8 | 131 | 35 | 39 | 11 | 1 | 85 | 15 | 360 | 375 |
| 18:15 | 1 | 42 | 19 | 2 | 62 | 11 | 34 | 5 | 0 | 50 | 30 | 88 | 31 | 3 | 149 | 25 | 33 | 17 | 1 | 75 | 6 | 336 | 342 |
| 18:30 | 1 | 47 | 21 | 3 | 69 | 11 | 21 | 2 | 1 | 34 | 20 | 50 | 15 | 1 | 85 | 17 | 19 | 16 | 3 | 52 | 8 | 240 | 248 |
| 18:45 | 1 | 53 | 14 | 0 | 68 | 11 | 21 | 2 | 0 | 34 | 38 | 55 | 20 | 1 | 113 | 20 | 29 | 24 | 4 | 73 | 5 | 288 | 293 |
| Total | 8 | 199 | 78 | 9 | 285 | 46 | 115 | 15 | 3 | 176 | 114 | 281 | 83 | 13 | 478 | 97 | 120 | 68 | 9 | 285 | 34 | 1224 | 1258 |
| 19:00 | 2 | 54 | 26 | 1 | 82 | 12 | 18 | 2 | 0 | 32 | 26 | 64 | 27 | 5 | 117 | 31 | 39 | 40 | 0 | 110 | 6 | 341 | 347 |
| 19:15 | 4 | 70 | 20 | 1 | 94 | 14 | 10 | 1 | 2 | 25 | 15 | 44 | 28 | 3 | 87 | 17 | 28 | 23 | 0 | 68 | 6 | 274 | 280 |
| 19:30 | 1 | 52 | 14 | 1 | 67 | 8 | 15 | 2 | 3 | 25 | 19 | 42 | 6 | 3 | 67 | 19 | 27 | 38 | 5 | 84 | 12 | 243 | 255 |
| 19:45 | 0 | 33 | 11 | 2 | 44 | 15 | 17 | 3 | 0 | 35 | 14 | 53 | 5 | 2 | 72 | 21 | 19 | 19 | 1 | 59 | 5 | 210 | 215 |
| Total | 7 | 209 | 71 | 5 | 287 | 49 | 60 | 8 | 5 | 117 | 74 | 203 | 66 | 13 | 343 | 88 | 113 | 120 | 6 | 321 | 29 | 1068 | 1097 |
| 20:00 | 3 | 24 | 23 | 1 | 50 | 6 | 8 | 1 | 0 | 15 | 10 | 45 | 3 | 3 | 58 | 16 | 32 | 40 | 0 | 88 | 4 | 211 | 215 |
| 20:15 | 0 | 52 | 12 | 3 | 64 | 7 | 13 | 0 | 0 | 20 | 20 | 33 | 0 | 0 | 53 | 16 | 24 | 31 | 1 | 71 | 4 | 208 | 212 |
| 20:30 | 0 | 37 | 18 | 3 | 55 | 1 | 8 | 0 | 1 | 9 | 10 | 49 | 0 | 2 | 59 | 14 | 34 | 46 | 1 | 94 | 7 | 217 | 224 |
| 20:45 | 4 | 49 | 18 | 1 | 71 | 9 | 3 | 2 | 0 | 14 | 8 | 43 | 9 | 2 | 60 | 22 | 29 | 24 | 0 | 75 | 3 | 220 | 223 |
| Total | 7 | 162 | 71 | 8 | 240 | 23 | 32 | 3 | 1 | 58 | 48 | 170 | 12 | 7 | 230 | 68 | 119 | 141 | 2 | 328 | 18 | 856 | 874 |
| 21:00 | 2 | 46 | 15 | 1 | 63 | 5 | 4 | 1 | 0 | 10 | 4 | 30 | 16 | 0 | 50 | 9 | 35 | 15 | 0 | 59 | 1 | 182 | 183 |
| 21:15 | 1 | 39 | 5 | 2 | 45 | 6 | 4 | 1 | 0 | 11 | 5 | 33 | 23 | 3 | 61 | 13 | 22 | 10 | 0 | 45 | 5 | 162 | 167 |
| 21:30 | 1 | 26 | 3 | 0 | 30 | 4 | 2 | 0 | 0 | 6 | 3 | 37 | 10 | 1 | 50 | 9 | 17 | 11 | 0 | 37 | 1 | 123 | 124 |
| 21:45 | 0 | 18 | 1 | 0 | 19 | 4 | 9 | 0 | 0 | 13 | 9 | 51 | 19 | 1 | 79 | 3 | 21 | 4 | 0 | 28 | 1 | 139 | 140 |
| Total | 4 | 129 | 24 | 3 | 157 | 19 | 19 | 2 | 0 | 40 | 21 | 151 | 68 | 5 | 240 | 34 | 95 | 40 | 0 | 169 | 8 | 606 | 614 |
| Grand Total | 101 | 346 | 101 | 381 | 4578 | 784 | 976 | 117 | 112 | 1877 | 588 | 298 | 901 | 353 | 4474 | 101 | 130 | 756 | 218 | 3076 | 1064 | 14005 | 15069 |
| Apprch % | 2.2 | 75.6 | 22.1 | | | 41.8 | 52.0 | 6.2 | | | 13.1 | 66.7 | 20.1 | | | 32.9 | 42.5 | 24.6 | | | | | |
| Total % | 0.7 | 24.7 | 7.2 | | 32.7 | 5.6 | 7.0 | 0.8 | | 13.4 | 4.2 | 21.3 | 6.4 | | 31.9 | 7.2 | 9.3 | 5.4 | | 22.0 | 7.1 | 92.9 | |

or Street Approaches:

Northbound:

CSAH 78

Data File: C:\Program Files\PCWarrants\TMC0118.war
 Count Type: IMC. Channel: 0. Count Date: 5/30/ 1
 Number of Lanes: 1
 Approach Speed: 55
 Total Approach Traffic: 4474

Southbound:

CSAH 78

Data File: C:\Program Files\PCWarrants\TMC0118.war
 Count Type: IMC. Channel: 0. Count Date: 5/30/ 1
 Number of Lanes: 1
 Approach Speed: 55
 Total Approach Traffic: 4578

Minor Street Approaches:

Eastbound:

CR 18

Data File: C:\Program Files\PCWarrants\TMC0118.war
 Count Type: IMC. Channel: 0. Count Date: 5/30/ 1
 Number of Lanes: 1
 Approach Speed: 50
 Total Approach Traffic: 3076

Westbound:

CR 18

Data File: C:\Program Files\PCWarrants\TMC0118.war
 Count Type: IMC. Channel: 0. Count Date: 5/30/ 1
 Number of Lanes: 1
 Approach Speed: 50
 Total Approach Traffic: 1877

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

| Hour | Main (Total) | Side | | | Warrant 1 | | Warrant 2 | | Warrant 8 | |
|------|--------------|------|------|------|-----------|----------|-----------|----------|-----------|----------|
| | | Vol. | Dir. | Rank | Meets? | Criteria | Meets? | Criteria | Meets? | Criteria |
| 0 | 0 | 0 | W | 17 | | 105 | | 52 | | 84 |
| 1 | 0 | 0 | W | 18 | | 105 | | 52 | | 84 |
| 2 | 0 | 0 | W | 19 | | 105 | | 52 | | 84 |
| 3 | 0 | 0 | W | 20 | | 105 | | 52 | | 84 |
| 4 | 0 | 0 | W | 21 | | 105 | | 52 | | 84 |
| 5 | 0 | 0 | W | 22 | | 105 | | 52 | | 84 |
| 6 | 541 | 197 | W | 8 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 7 | 735 | 205 | E | 7 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 8 | 563 | 175 | W | 9 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 9 | 494 | 136 | W | 13 | --BOTH-- | 105 | SIDE | 52 | --BOTH-- | 84 |
| 10 | 451 | 101 | E | 16 | MAIN | 105 | SIDE | 52 | --BOTH-- | 84 |
| 11 | 411 | 112 | E | 15 | --BOTH-- | 105 | SIDE | 52 | SIDE | 84 |
| 12 | 443 | 114 | E | 14 | --BOTH-- | 105 | SIDE | 52 | --BOTH-- | 84 |
| 13 | 420 | 137 | E | 12 | --BOTH-- | 105 | SIDE | 52 | --BOTH-- | 84 |
| 14 | 468 | 167 | E | 11 | --BOTH-- | 105 | SIDE | 52 | --BOTH-- | 84 |
| 15 | 748 | 211 | E | 6 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 16 | 713 | 262 | E | 5 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 17 | 805 | 321 | E | 2 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 18 | 763 | 285 | E | 4 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 19 | 630 | 321 | E | 3 | --BOTH-- | 105 | --BOTH-- | 52 | --BOTH-- | 84 |
| 20 | 470 | 328 | E | 1 | --BOTH-- | 105 | SIDE | 52 | --BOTH-- | 84 |
| 21 | 397 | 169 | E | 10 | --BOTH-- | 105 | SIDE | 52 | SIDE | 84 |
| 22 | 0 | 0 | W | 23 | | 105 | | 52 | | 84 |
| 23 | 0 | 0 | W | 24 | | 105 | | 52 | | 84 |

Warrant Summary:

General values apply.

Warrant 1 - Minimum Vehicular Volumes

SATISFIED for 15 hours. Criteria--Main St.: 350; Side St.: See Volume Summary.

Warrant 2 - Interruption of Continuous Traffic

SATISFIED for 8 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: 1279. Approaches on both streets satisfy one of the following criteria:

N-EW- 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

SATISFIED for 14 hours. Criteria--Main: 420; Side: See Volume Summary.

Warrant 9 - Four Hour Volumes

SATISFIED for 12 hours.

Warrant 10 - Peak Hour Delay

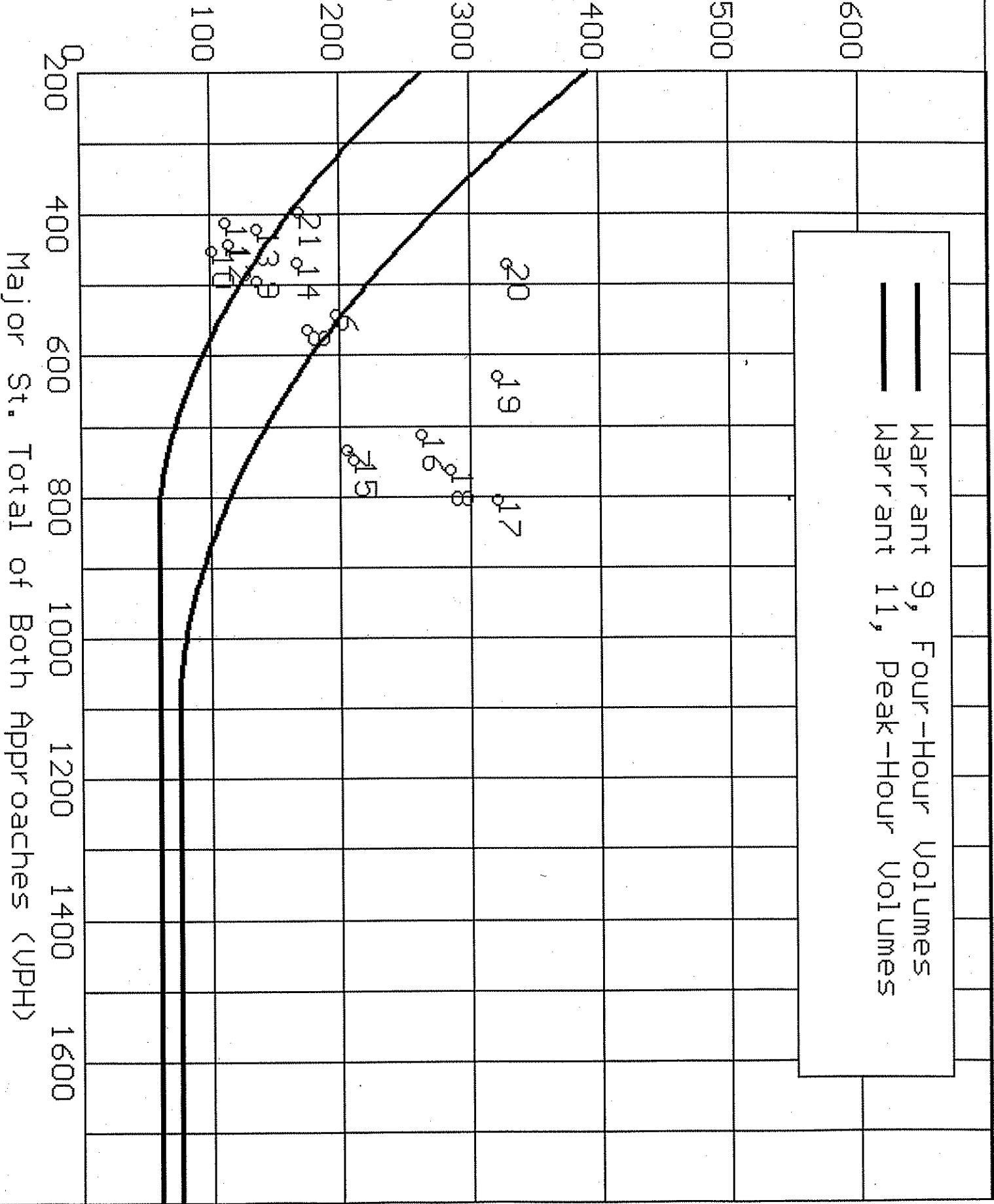
NOT APPLICABLE. Volume requirements satisfied, but side street peak hour delay not defined.

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

Warrant 11 - Peak Hour Volume

SATISFIED for 8 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 0118 CSAH 78 @ CR 18
Speed Limit of Major Roadway..... 55

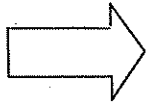
Minimum Traffic Volumes Multiway Stop Warrant Criteria:

- 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 | 813 | 197 | 75 | 272 | 1 |
| 7 AM - 8 AM | 1144 | 204 | 205 | 409 | 1 |
| 8 AM - 9 AM | 878 | 175 | 140 | 315 | 1 |
| 9 AM - 10 AM | 758 | 136 | 128 | 264 | 1 |
| 10 AM - 11 AM | 634 | 82 | 101 | 183 | 0 |
| 11 AM - 12 PM | 613 | 90 | 112 | 202 | 1 |
| 12 PM - 13 PM | 624 | 67 | 114 | 181 | 0 |
| 1 PM - 2 PM | 615 | 58 | 137 | 195 | 0 |
| 2 PM - 3 PM | 721 | 86 | 167 | 253 | 1 |
| 3 PM - 4 PM | 1060 | 101 | 211 | 312 | 1 |
| 4 PM - 5 PM | 1112 | 137 | 262 | 399 | 1 |
| 5 PM - 6 PM | 1279 | 153 | 321 | 474 | 1 |
| 6 PM - 7 PM | 1224 | 176 | 285 | 461 | 1 |
| 7 PM - 8 PM | 1068 | 117 | 321 | 438 | 1 |
| 8 PM - 9 PM | 856 | 58 | 328 | 386 | 1 |
| 9 PM - 10 PM | 606 | 40 | 169 | 209 | 1 |

TOTAL HOURS MET: 11

MULTIWAY STOP WARRANT IS MET



COUNT LOCATION:

CSAH 78 @

DATE:

5/30/01

CR 18

NORTH

APP. #1 = CR 18

APP. #2 = CSAH 78

APP. #3 = CR 18

APP. #4 = CSAH 78

APP. #2

APP. #1

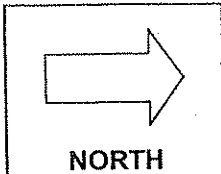
APP. #3

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 | | | 2 | | 2 | 9 | | |
| 6:15-6:30 | | | | | | 2 | | 2 |
| 6:30-6:45 | | | | | | 8 | | 4 |
| 6:45-7:00 | | | 1 | | 1 | 8 | | 7 |
| HOURLY TOTAL | | | | | 3 | HOURLY TOTAL | | 40 |
| 7:00-7:15 | | | | | | 9 | | 6 |
| 7:15-7:30 | | | | | | 12 | | 3 |
| 7:30-7:45 | | | | | | 13 | | 4 |
| 7:45-8:00 | | | | | | 26 | | 22 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 95 |
| 8:00-8:15 | | | | | | 18 | | 21 |
| 8:15-8:30 | | | | | | 23 | | 3 |
| 8:30-8:45 | | | | | | 25 | | 6 |
| 8:45-9:00 | | | | 3 | 3 | 21 | | 8 |
| HOURLY TOTAL | | | | | 3 | HOURLY TOTAL | | 125 |
| 9:00-9:15 | | | | | | 14 | | 9 |
| 9:15-9:30 | | | | | | 23 | 1 | 2 |
| 9:30-9:45 | | | 2 | | 2 | 17 | | |
| 9:45-10:00 | | | | | | 10 | | |
| HOURLY TOTAL | | | | | 2 | HOURLY TOTAL | | 76 |
| 10:00-10:15 | | | | | | 20 | | 1 |
| 10:15-10:30 | | | 2 | 1 | 3 | 18 | | |
| 10:30-10:45 | | | | | | 20 | | |
| 10:45-11:00 | | | | | | 8 | | |
| HOURLY TOTAL | | | | | 3 | HOURLY TOTAL | | 67 |
| 11:00-11:15 | | | | | | 18 | 1 | |
| 11:15-11:30 | | | | | | 19 | | |
| 11:30-11:45 | | | | | | 21 | | 2 |
| 11:45-12:00 | | | | | | 11 | | 2 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 74 |
| 12:00-12:15 | | | | | | 17 | | |
| 12:15-12:30 | | | | | | 19 | | |
| 12:30-12:45 | | | 1 | | 1 | 21 | | 1 |
| 12:45-1:00 | | | | | | 14 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 72 |
| 1:00-1:15 | | | | | | 25 | | 1 |
| 1:15-1:30 | | | | | | 12 | | |
| 1:30-1:45 | | | | | | 16 | | |
| 1:45-2:00 | | | | | | 22 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 76 |



COUNT LOCATION:

CSAH 78 @

DATE:

5/30/01

CR 18

APP. #1 = CR 18

APP. #2 = CSAH 78

APP. #3 = CR 18

APP. #4 = CSAH 78

APP. #1

APP. #2

APP. #3

APP. #4

- HEAVY VEHICLE- ANY VEHICLE HAVING MORE THAN FOUR TIRES TOUCHING THE PAVEMENT
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| TIME | PEDESTRIANS | | | | | HEAVY VEHICLES | | |
|---------------------|-------------|---------|---------|---------|------------|---------------------|----|------------|
| | APP. #1 | APP. #2 | APP. #3 | APP. #4 | 15 MIN TOT | TRUCKS | RV | BUS |
| 2:00-2:15PM | | | | | | 13 | | |
| 2:15-2:30 | | | 1 | | 1 | 14 | | |
| 2:30-2:45 | | | | | | 14 | | 8 |
| 2:45-3:00 | | | | | | 14 | | 15 |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 78 |
| 3:00-3:15 | 4 | | 20 | 5 | 29 | 13 | | 22 |
| 3:15-3:30 | | | 4 | 3 | 7 | 9 | | 8 |
| 3:30-3:45 | | | 1 | | 1 | 23 | | 3 |
| 3:45-4:00 | | | 2 | 1 | 3 | 18 | | 8 |
| HOURLY TOTAL | | | | | 40 | HOURLY TOTAL | | 104 |
| 4:00-4:15 | | | 1 | | 1 | 21 | | 6 |
| 4:15-4:30 | | | | | | 8 | | 5 |
| 4:30-4:45 | 1 | | | | 1 | 13 | | 7 |
| 4:45-5:00 | | | 2 | | 2 | 16 | | 4 |
| HOURLY TOTAL | | | | | 4 | HOURLY TOTAL | | 80 |
| 5:00-5:15 | | | 1 | | 1 | 11 | | 3 |
| 5:15-5:30 | | | 1 | | 1 | 20 | | |
| 5:30-5:45 | | | | | | 13 | | 1 |
| 5:45-6:00 | | | 1 | | 1 | 12 | | |
| HOURLY TOTAL | | | | | 3 | HOURLY TOTAL | | 60 |
| 6:00-6:15 | | | | | | 13 | | 2 |
| 6:15-6:30 | | | 1 | 1 | 2 | 4 | | |
| 6:30-6:45 | | | | | | 7 | | |
| 6:45-7:00 | | | 2 | | 2 | 5 | | |
| HOURLY TOTAL | | | | | 4 | HOURLY TOTAL | | 31 |
| 7:00-7:15 | | | | | | 6 | | |
| 7:15-7:30 | 1 | | | | 1 | 5 | | |
| 7:30-7:45 | | | 1 | 2 | 3 | 12 | | |
| 7:45-8:00 | | | 1 | 1 | 2 | 5 | 2 | |
| HOURLY TOTAL | | | | | 6 | HOURLY TOTAL | | 30 |
| 8:00-8:15 | | | 6 | 1 | 7 | 5 | | |
| 8:15-8:30 | | | 5 | | 5 | 3 | | |
| 8:30-8:45 | | | | | | 9 | | |
| 8:45-9:00 | | | 1 | | 1 | 2 | 1 | |
| HOURLY TOTAL | | | | | 13 | HOURLY TOTAL | | 20 |
| 9:00-9:15 | | | | | | 1 | | |
| 9:15-9:30 | 1 | | | | 1 | 5 | | |
| 9:30-9:45 | | | | | | | | |
| 9:45-10:00 | | | | | | | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 6 |