

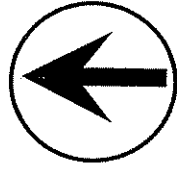
Date : 06/22/09

Count Number : TMC0917

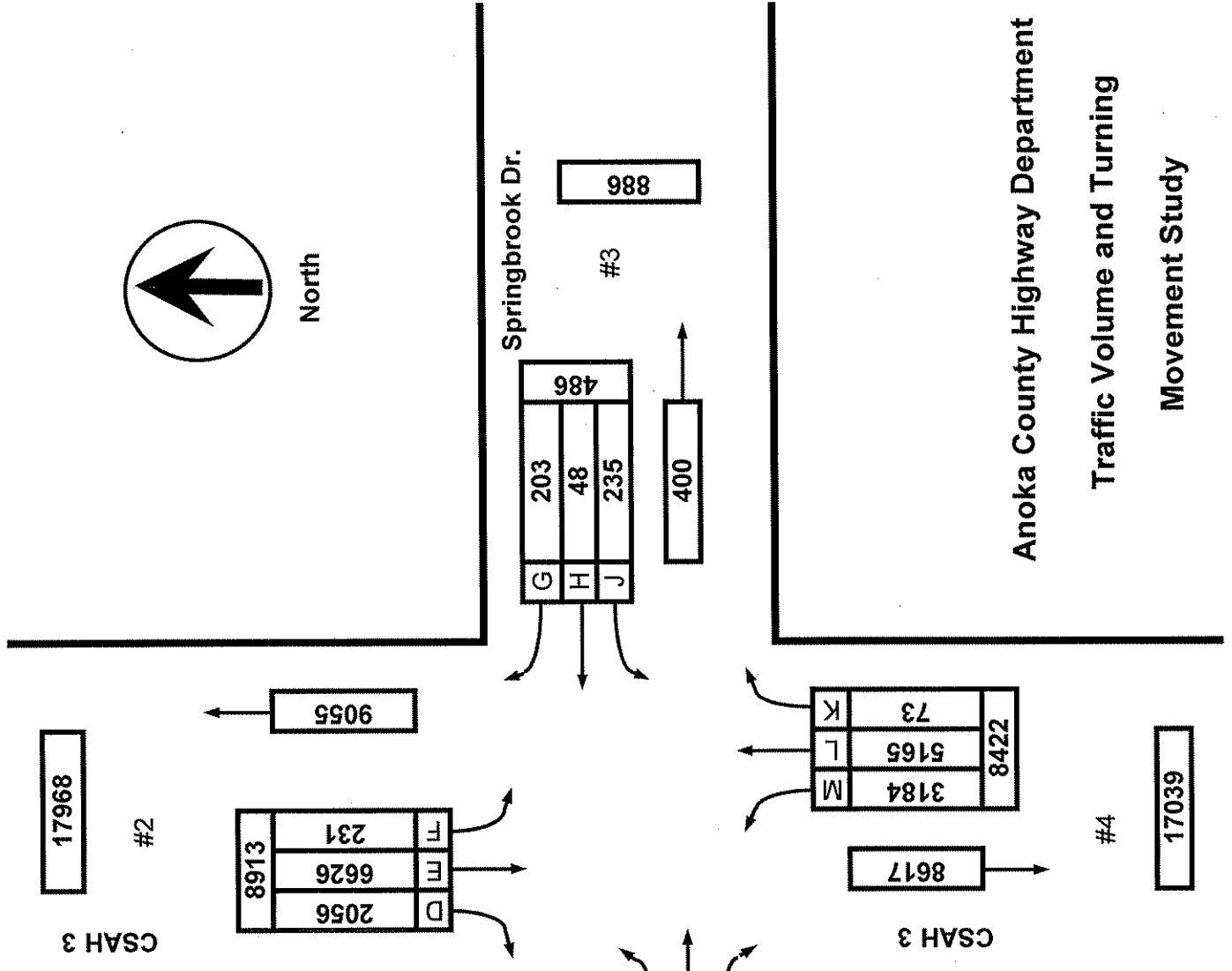
Location : CSAH 3 (Coon Rapids Blvd.)

@ Springbrook Dr.

Collection Period : 6:00AM - 10:00PM



North



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

Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

Date : 06/22/09

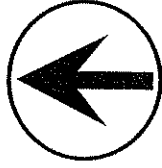
Count Number : TMC0917

Location : CSAH 3 (Coon Rapids Blvd.)

@ Springbrook Dr.

Collection Period : AM PEAK

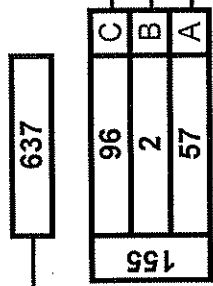
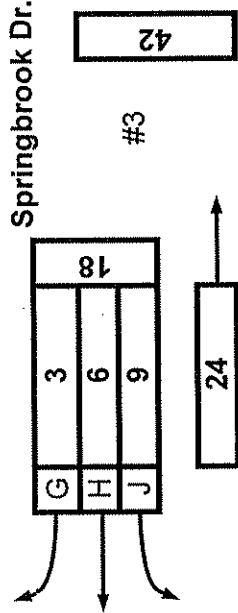
Hour : 7:15 - 8:15AM



North

CSAH 3 #2 1025

| | | |
|-----|---|-----|
| 785 | T | 20 |
| 554 | M | 240 |
| 211 | D | |



| | | |
|-----|---|-----|
| 563 | M | 420 |
| | L | 141 |
| | K | 2 |

CSAH 3 #4 620

1183

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

Anoka County Highway Department
Traffic Volume and Turning
Movement Study

Date: 06/22/09

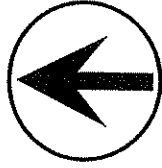
Count Number: TMC0917

Location: CSAH 3 (Coon Rapids Blvd.)

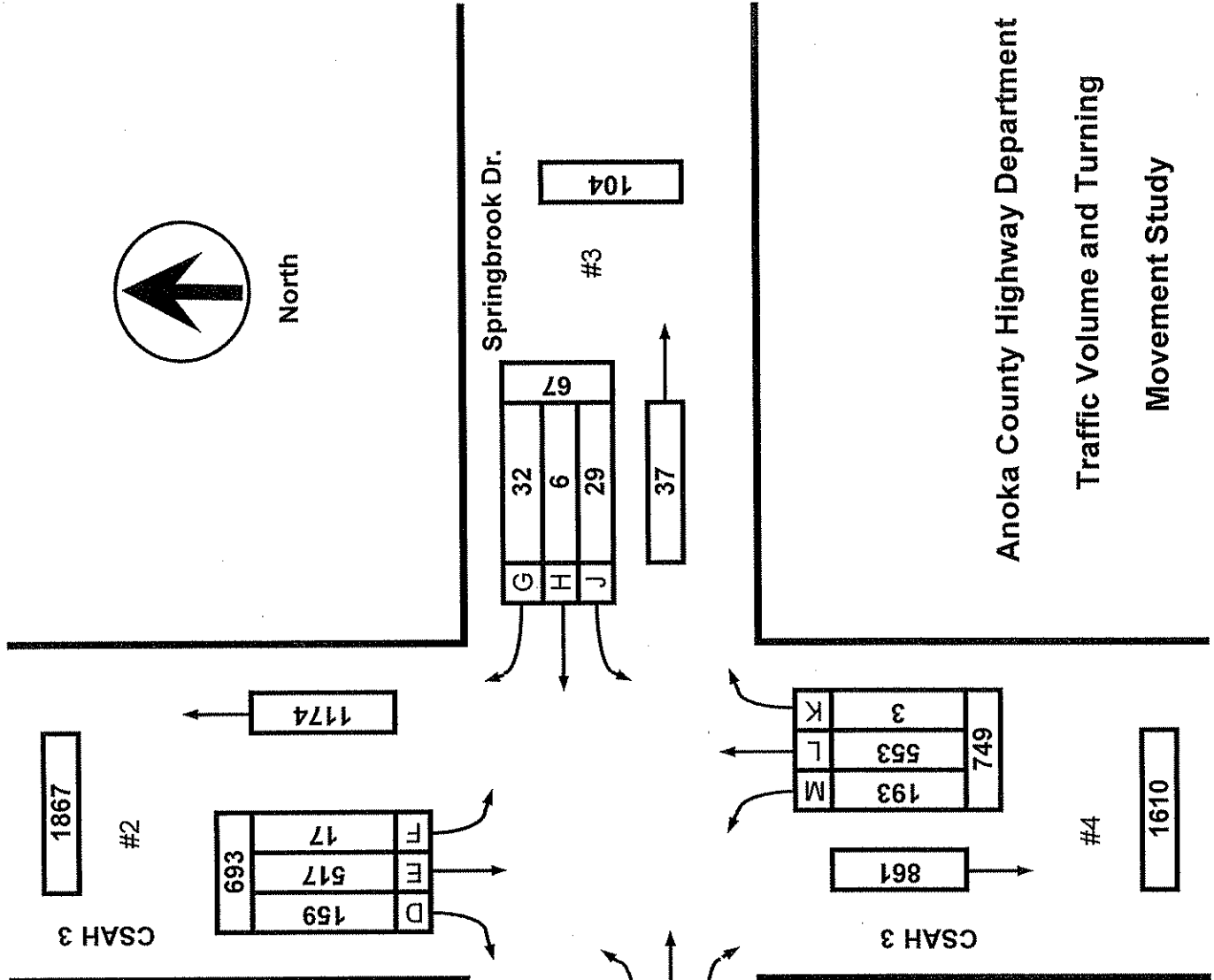
@ Springbrook Dr.

Collection Period: PM PEAK

Hour: 4:00 - 5:00



North



Anoka County Highway Department
 Traffic Volume and Turning
 Movement Study

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

Anoka County Highway Department

Traffic Engineering Section Traffic Volume and Turning Movement Study

Weather: Hot and Humid
Counter: DB-400
Counted by: Laura/Jake

File Name : TMC0917
Site Code : 09170102
Start Date : 6/22/2009
Page No : 1

Groups Printed- Unshifted

| Start Time | CSA3 Southbound | | | | | Springbrook Dr. Westbound | | | | | CSA3 Northbound | | | | | Springbrook Dr. 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 | 1 | 63 | 21 | 3 | 85 | 0 | 0 | 0 | 0 | 0 | 21 | 16 | 0 | 1 | 37 | 5 | 1 | 8 | 1 | 14 | 5 | 136 | 141 |
| 06:15 | 1 | 78 | 28 | 4 | 107 | 0 | 0 | 2 | 1 | 2 | 41 | 18 | 1 | 2 | 60 | 4 | 0 | 5 | 1 | 9 | 8 | 178 | 186 |
| 06:30 | 0 | 107 | 55 | 2 | 162 | 0 | 1 | 0 | 0 | 1 | 43 | 26 | 0 | 0 | 69 | 8 | 0 | 7 | 0 | 15 | 2 | 247 | 249 |
| 06:45 | 0 | 139 | 79 | 3 | 218 | 1 | 1 | 4 | 0 | 6 | 71 | 25 | 0 | 0 | 96 | 7 | 0 | 1 | 1 | 8 | 4 | 328 | 332 |
| Total | 2 | 387 | 183 | 12 | 572 | 1 | 2 | 6 | 1 | 9 | 176 | 85 | 1 | 3 | 262 | 24 | 1 | 21 | 3 | 46 | 19 | 889 | 908 |
| 07:00 | 0 | 145 | 65 | 4 | 210 | 2 | 0 | 3 | 0 | 5 | 39 | 22 | 0 | 1 | 61 | 12 | 2 | 7 | 1 | 21 | 6 | 297 | 303 |
| 07:15 | 3 | 115 | 29 | 2 | 147 | 2 | 0 | 0 | 0 | 2 | 101 | 25 | 1 | 4 | 127 | 9 | 0 | 21 | 1 | 30 | 7 | 306 | 313 |
| 07:30 | 11 | 116 | 42 | 2 | 169 | 4 | 1 | 0 | 0 | 5 | 75 | 40 | 0 | 4 | 115 | 35 | 0 | 16 | 4 | 51 | 10 | 340 | 350 |
| 07:45 | 3 | 199 | 94 | 4 | 296 | 3 | 2 | 2 | 0 | 7 | 142 | 43 | 1 | 1 | 186 | 36 | 1 | 17 | 0 | 54 | 5 | 543 | 548 |
| Total | 17 | 575 | 230 | 12 | 822 | 11 | 3 | 5 | 0 | 19 | 357 | 130 | 2 | 10 | 489 | 92 | 3 | 61 | 6 | 156 | 28 | 1486 | 1514 |
| 08:00 | 3 | 124 | 46 | 3 | 173 | 0 | 3 | 1 | 0 | 4 | 102 | 33 | 0 | 2 | 135 | 16 | 1 | 3 | 2 | 20 | 7 | 332 | 339 |
| 08:15 | 4 | 71 | 27 | 1 | 102 | 1 | 0 | 1 | 0 | 2 | 83 | 37 | 2 | 9 | 122 | 29 | 0 | 16 | 1 | 45 | 11 | 271 | 282 |
| 08:30 | 2 | 102 | 24 | 2 | 128 | 0 | 0 | 0 | 0 | 0 | 49 | 21 | 0 | 5 | 70 | 32 | 0 | 16 | 2 | 48 | 9 | 246 | 255 |
| 08:45 | 4 | 61 | 40 | 2 | 105 | 1 | 0 | 3 | 1 | 4 | 78 | 51 | 1 | 4 | 130 | 51 | 0 | 29 | 8 | 80 | 15 | 319 | 334 |
| Total | 13 | 358 | 137 | 8 | 508 | 2 | 3 | 5 | 1 | 10 | 312 | 142 | 3 | 20 | 457 | 128 | 1 | 64 | 13 | 193 | 42 | 1168 | 1210 |
| 09:00 | 3 | 95 | 48 | 8 | 146 | 0 | 1 | 2 | 0 | 3 | 81 | 58 | 1 | 5 | 140 | 38 | 0 | 30 | 2 | 68 | 15 | 357 | 372 |
| 09:15 | 4 | 98 | 41 | 5 | 143 | 0 | 0 | 1 | 0 | 1 | 106 | 119 | 2 | 5 | 227 | 46 | 1 | 35 | 1 | 82 | 11 | 453 | 464 |
| 09:30 | 7 | 96 | 53 | 6 | 156 | 2 | 1 | 1 | 0 | 4 | 69 | 28 | 0 | 1 | 97 | 32 | 0 | 12 | 1 | 44 | 8 | 301 | 309 |
| 09:45 | 8 | 105 | 33 | 6 | 146 | 3 | 3 | 0 | 0 | 6 | 49 | 65 | 0 | 0 | 114 | 26 | 0 | 13 | 0 | 39 | 6 | 305 | 311 |
| Total | 22 | 394 | 175 | 25 | 591 | 5 | 5 | 4 | 0 | 14 | 305 | 270 | 3 | 11 | 578 | 142 | 1 | 90 | 4 | 233 | 40 | 1416 | 1456 |
| 10:00 | 2 | 99 | 37 | 5 | 138 | 3 | 2 | 0 | 0 | 5 | 61 | 64 | 4 | 0 | 129 | 45 | 1 | 20 | 3 | 66 | 8 | 338 | 346 |
| 10:15 | 2 | 107 | 39 | 1 | 148 | 2 | 1 | 0 | 0 | 3 | 43 | 68 | 1 | 7 | 112 | 53 | 1 | 31 | 10 | 85 | 18 | 348 | 366 |
| 10:30 | 6 | 86 | 21 | 5 | 113 | 1 | 0 | 2 | 0 | 3 | 54 | 26 | 0 | 2 | 80 | 38 | 2 | 22 | 0 | 62 | 7 | 258 | 265 |
| 10:45 | 6 | 122 | 39 | 8 | 167 | 1 | 0 | 1 | 0 | 2 | 55 | 56 | 0 | 4 | 111 | 46 | 5 | 29 | 1 | 80 | 13 | 360 | 373 |
| Total | 16 | 414 | 136 | 19 | 566 | 7 | 3 | 3 | 0 | 13 | 213 | 214 | 5 | 13 | 432 | 182 | 9 | 102 | 14 | 293 | 46 | 1304 | 1350 |
| 11:00 | 6 | 106 | 17 | 6 | 129 | 3 | 0 | 3 | 0 | 6 | 73 | 88 | 2 | 2 | 163 | 60 | 2 | 9 | 1 | 71 | 9 | 369 | 378 |
| 11:15 | 2 | 138 | 32 | 6 | 172 | 2 | 0 | 3 | 0 | 5 | 73 | 80 | 1 | 4 | 154 | 53 | 1 | 24 | 6 | 78 | 16 | 409 | 425 |
| 11:30 | 4 | 118 | 30 | 3 | 152 | 1 | 0 | 0 | 0 | 1 | 56 | 56 | 1 | 1 | 113 | 53 | 0 | 47 | 4 | 100 | 8 | 366 | 374 |
| 11:45 | 1 | 135 | 25 | 4 | 161 | 5 | 2 | 4 | 1 | 11 | 43 | 73 | 1 | 5 | 117 | 35 | 2 | 31 | 1 | 68 | 11 | 357 | 368 |
| Total | 13 | 497 | 104 | 19 | 614 | 11 | 2 | 10 | 1 | 23 | 245 | 297 | 5 | 12 | 547 | 201 | 5 | 111 | 12 | 317 | 44 | 1501 | 1545 |
| 12:00 | 5 | 117 | 6 | 6 | 128 | 2 | 0 | 1 | 0 | 3 | 64 | 111 | 2 | 1 | 177 | 96 | 0 | 100 | 3 | 196 | 10 | 504 | 514 |
| 12:15 | 4 | 111 | 18 | 6 | 133 | 2 | 0 | 2 | 0 | 4 | 94 | 98 | 7 | 4 | 199 | 109 | 0 | 45 | 3 | 154 | 13 | 490 | 503 |
| 12:30 | 6 | 129 | 32 | 6 | 167 | 2 | 1 | 0 | 0 | 3 | 118 | 124 | 4 | 4 | 246 | 46 | 1 | 24 | 4 | 71 | 14 | 487 | 501 |
| 12:45 | 4 | 116 | 36 | 2 | 156 | 1 | 4 | 3 | 0 | 8 | 144 | 88 | 0 | 3 | 232 | 59 | 1 | 12 | 0 | 72 | 5 | 468 | 473 |
| Total | 19 | 473 | 92 | 20 | 584 | 7 | 5 | 6 | 0 | 18 | 420 | 421 | 13 | 12 | 854 | 310 | 2 | 181 | 10 | 493 | 42 | 1949 | 1991 |
| 13:00 | 1 | 106 | 16 | 3 | 123 | 4 | 1 | 2 | 0 | 7 | 71 | 75 | 2 | 3 | 148 | 45 | 4 | 22 | 3 | 71 | 9 | 349 | 358 |
| 13:15 | 5 | 61 | 20 | 1 | 86 | 1 | 0 | 3 | 0 | 4 | 70 | 90 | 0 | 2 | 160 | 32 | 6 | 25 | 2 | 63 | 5 | 313 | 318 |
| 13:30 | 8 | 129 | 41 | 9 | 178 | 11 | 0 | 2 | 1 | 13 | 43 | 85 | 0 | 9 | 128 | 47 | 1 | 28 | 2 | 76 | 21 | 395 | 416 |
| 13:45 | 6 | 108 | 33 | 5 | 147 | 10 | 1 | 6 | 1 | 17 | 64 | 131 | 2 | 5 | 197 | 57 | 1 | 53 | 0 | 111 | 11 | 472 | 483 |
| Total | 20 | 404 | 110 | 18 | 534 | 26 | 2 | 13 | 2 | 41 | 248 | 381 | 4 | 19 | 633 | 181 | 12 | 128 | 7 | 321 | 46 | 1529 | 1575 |
| 14:00 | 6 | 103 | 43 | 3 | 152 | 7 | 1 | 4 | 0 | 12 | 63 | 105 | 3 | 4 | 171 | 64 | 2 | 53 | 3 | 119 | 10 | 454 | 464 |
| 14:15 | 2 | 128 | 28 | 2 | 158 | 6 | 1 | 7 | 0 | 14 | 36 | 131 | 3 | 3 | 170 | 94 | 1 | 38 | 3 | 133 | 8 | 475 | 483 |
| 14:30 | 3 | 126 | 38 | 3 | 167 | 4 | 1 | 5 | 0 | 10 | 24 | 91 | 2 | 2 | 117 | 158 | 2 | 61 | 3 | 221 | 8 | 515 | 523 |
| 14:45 | 1 | 131 | 31 | 2 | 163 | 7 | 1 | 8 | 0 | 16 | 56 | 113 | 1 | 3 | 170 | 69 | 4 | 33 | 1 | 106 | 6 | 455 | 461 |
| Total | 12 | 488 | 140 | 10 | 640 | 24 | 4 | 24 | 0 | 52 | 179 | 440 | 9 | 12 | 628 | 385 | 9 | 185 | 10 | 579 | 32 | 1899 | 1931 |
| 15:00 | 3 | 120 | 35 | 4 | 158 | 8 | 0 | 6 | 0 | 14 | 50 | 97 | 0 | 1 | 147 | 101 | 0 | 44 | 2 | 145 | 7 | 464 | 471 |
| 15:15 | 3 | 132 | 41 | 6 | 176 | 6 | 1 | 3 | 1 | 10 | 34 | 76 | 0 | 5 | 110 | 94 | 0 | 32 | 3 | 126 | 15 | 422 | 437 |
| 15:30 | 7 | 125 | 43 | 3 | 175 | 4 | 2 | 3 | 1 | 9 | 55 | 117 | 0 | 4 | 172 | 138 | 4 | 59 | 1 | 201 | 9 | 557 | 566 |
| 15:45 | 2 | 127 | 37 | 5 | 166 | 2 | 2 | 5 | 0 | 9 | 39 | 146 | 1 | 3 | 186 | 176 | 0 | 65 | 6 | 241 | 14 | 602 | 616 |
| Total | 15 | 504 | 156 | 18 | 675 | 20 | 5 | 17 | 2 | 42 | 178 | 436 | 1 | 13 | 615 | 509 | 4 | 200 | 12 | 713 | 45 | 2045 | 2090 |
| 16:00 | 5 | 112 | 27 | 3 | 144 | 2 | 0 | 9 | 0 | 11 | 35 | 135 | 0 | 3 | 170 | 200 | 0 | 119 | 2 | 319 | 8 | 644 | 652 |
| 16:15 | 2 | 110 | 42 | 2 | 154 | 9 | 3 | 4 | 0 | 16 | 36 | 133 | 0 | 5 | 169 | 132 | 3 | 86 | 1 | 221 | 8 | 560 | 568 |
| 16:30 | 7 | 135 | 35 | 1 | 177 | 12 | 3 | 12 | 0 | 27 | 39 | 147 | 0 | 2 | 186 | 147 | 10 | 74 | 2 | 231 | 5 | 621 | 626 |
| 16:45 | 3 | 160 | 55 | 1 | 218 | 6 | 0 | 7 | 0 | 13 | 83 | 138 | 3 | 2 | 224 | 110 | 4 | 36 | 1 | 150 | 4 | 605 | 609 |
| Total | 17 | 517 | 159 | 7 | 693 | 29 | 6 | 32 | 0 | 67 | 193 | 553 | 3 | 12 | 749 | 589 | 17 | 315 | 6 | 921 | 25 | 2430 | 2455 |
| 17:00 | 6 | 110 | 26 | 0 | 142 | 7 | 4 | 5 | 1 | 16 | 24 | 133 | 0 | 0 | 157 | 157 | 12 | 51 | 1 | 220 | 2 | 535 | 537 |
| 17:15 | 6 | 170 | 35 | 0 | 211 | 4 | 0 | 5 | 0 | 9 | 37 | 88 | 2 | 0 | 127 | 146 | 2 | 21 | 6 | 169 | 6 | 516 | 522 |
| 17:30 | 3 | 123 | 32 | 1 | 158 | 6 | 0 | 6 | 1 | 12 | 34 | 261 | 5 | 4 | 300 | 102 | 0 | 33 | 4 | 135 | 10 | 605 | 615 |
| 17:45 | 8 | 108 | 34 | 0 | 150 | 4 | 0 | 9 | 0 | 13 | 25 | 144 | 1 | 0 | 170 | 85 | 3 | 21 | 1 | 109 | 1 | 442 | 443 |
| Total | 23 | 511 | 127 | 1 | 661 | 21 | 4 | 25 | 2 | 50 | 120 | 626 | 8 | 4 | 754 | 490 | 17 | 126 | 12 | 633 | 19 | 2098 | 2117 |

Anoka County Highway Department

Traffic Engineering Section
Traffic Volume and Turning Movement Study

File Name : TMC0917
Site Code : 09170102
Start Date : 6/22/2009
Page No : 2

Weather: Hot and Humid
Counter: DB-400
Counted by: Laura/Jake

Groups Printed- Unshifted

| Start Time | CSAH 3 Southbound | | | | | Springbrook Dr. Westbound | | | | | CSAH 3 Northbound | | | | | Springbrook Dr. 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 | | | |
| 18:00 | 5 | 114 | 35 | 1 | 154 | 4 | 1 | 2 | 0 | 7 | 29 | 116 | 0 | 1 | 145 | 57 | 0 | 6 | 0 | 63 | 2 | 369 | 371 |
| 18:15 | 3 | 111 | 29 | 0 | 143 | 2 | 0 | 4 | 0 | 6 | 21 | 50 | 1 | 1 | 72 | 30 | 1 | 25 | 2 | 56 | 3 | 277 | 280 |
| 18:30 | 4 | 96 | 35 | 1 | 135 | 4 | 0 | 6 | 0 | 10 | 28 | 85 | 0 | 1 | 113 | 40 | 1 | 10 | 0 | 51 | 2 | 309 | 311 |
| 18:45 | 2 | 109 | 29 | 1 | 140 | 6 | 2 | 2 | 1 | 10 | 17 | 79 | 1 | 0 | 97 | 30 | 0 | 6 | 0 | 36 | 2 | 283 | 285 |
| Total | 14 | 430 | 128 | 3 | 572 | 16 | 3 | 14 | 1 | 33 | 95 | 330 | 2 | 3 | 427 | 157 | 2 | 47 | 2 | 206 | 9 | 1238 | 1247 |
| 19:00 | 3 | 88 | 32 | 0 | 123 | 5 | 1 | 4 | 1 | 10 | 9 | 83 | 0 | 1 | 92 | 26 | 0 | 11 | 0 | 37 | 2 | 262 | 264 |
| 19:15 | 4 | 82 | 18 | 0 | 104 | 3 | 0 | 3 | 0 | 6 | 14 | 61 | 3 | 2 | 78 | 25 | 3 | 11 | 4 | 39 | 6 | 227 | 233 |
| 19:30 | 0 | 84 | 26 | 1 | 110 | 5 | 0 | 2 | 0 | 7 | 2 | 41 | 0 | 1 | 43 | 24 | 0 | 2 | 0 | 26 | 2 | 186 | 188 |
| 19:45 | 2 | 73 | 12 | 1 | 87 | 12 | 0 | 4 | 0 | 16 | 10 | 46 | 0 | 0 | 56 | 15 | 1 | 6 | 0 | 22 | 1 | 181 | 182 |
| Total | 9 | 327 | 88 | 2 | 424 | 25 | 1 | 13 | 1 | 39 | 35 | 231 | 3 | 4 | 269 | 90 | 4 | 30 | 4 | 124 | 11 | 856 | 867 |
| 20:00 | 1 | 57 | 17 | 0 | 75 | 5 | 0 | 10 | 0 | 15 | 8 | 54 | 3 | 0 | 65 | 29 | 2 | 8 | 0 | 39 | 0 | 194 | 194 |
| 20:15 | 3 | 41 | 22 | 0 | 66 | 9 | 0 | 3 | 0 | 12 | 23 | 63 | 0 | 0 | 86 | 25 | 2 | 13 | 1 | 40 | 1 | 204 | 205 |
| 20:30 | 2 | 56 | 11 | 1 | 69 | 1 | 0 | 0 | 0 | 1 | 9 | 119 | 4 | 0 | 132 | 33 | 1 | 16 | 0 | 50 | 1 | 252 | 253 |
| 20:45 | 0 | 40 | 9 | 0 | 49 | 6 | 0 | 7 | 0 | 13 | 16 | 99 | 1 | 0 | 116 | 23 | 3 | 8 | 0 | 34 | 0 | 212 | 212 |
| Total | 6 | 194 | 59 | 1 | 259 | 21 | 0 | 20 | 0 | 41 | 56 | 335 | 8 | 0 | 399 | 110 | 8 | 45 | 1 | 163 | 2 | 862 | 864 |
| 21:00 | 1 | 57 | 10 | 2 | 68 | 3 | 0 | 0 | 0 | 3 | 15 | 70 | 0 | 0 | 85 | 28 | 1 | 18 | 0 | 47 | 2 | 203 | 205 |
| 21:15 | 3 | 33 | 6 | 1 | 42 | 2 | 0 | 2 | 0 | 4 | 20 | 81 | 2 | 0 | 103 | 34 | 0 | 9 | 0 | 43 | 1 | 192 | 193 |
| 21:30 | 2 | 42 | 8 | 1 | 52 | 1 | 0 | 2 | 0 | 3 | 10 | 79 | 1 | 2 | 90 | 21 | 0 | 13 | 0 | 34 | 3 | 179 | 182 |
| 21:45 | 7 | 21 | 8 | 0 | 36 | 3 | 0 | 2 | 0 | 5 | 7 | 44 | 0 | 1 | 51 | 14 | 0 | 10 | 0 | 24 | 1 | 116 | 117 |
| Total | 13 | 153 | 32 | 4 | 198 | 9 | 0 | 6 | 0 | 15 | 52 | 274 | 3 | 3 | 329 | 97 | 1 | 50 | 0 | 148 | 7 | 690 | 697 |
| Grand Total | 231 | 6626 | 2056 | 179 | 8913 | 235 | 48 | 203 | 11 | 486 | 3184 | 5165 | 73 | 151 | 8422 | 3687 | 96 | 1756 | 116 | 5539 | 457 | 23360 | 23817 |
| Apprch % | 2.6 | 74.3 | 23.1 | | | 48.4 | 9.9 | 41.8 | | | 37.8 | 61.3 | 0.9 | | | 66.6 | 1.7 | 31.7 | | | 1.9 | 98.1 | |
| Total % | 1 | 28.4 | 8.8 | | 38.2 | 1 | 0.2 | 0.9 | | 2.1 | 13.6 | 22.1 | 0.3 | | 36.1 | 15.8 | 0.4 | 7.5 | | 23.7 | | | |

| Start Time | CSAH 3 Southbound | | | | Springbrook Dr. Westbound | | | | CSAH 3 Northbound | | | | Springbrook Dr. 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 06:00 to 11:45 - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 | | | | | | | | | | | | | | | | | |
| 07:15 | 3 | 115 | 29 | 147 | 2 | 0 | 0 | 2 | 101 | 25 | 1 | 127 | 9 | 0 | 21 | 30 | 306 |
| 07:30 | 11 | 116 | 42 | 169 | 4 | 1 | 0 | 5 | 75 | 40 | 0 | 115 | 35 | 0 | 16 | 51 | 340 |
| 07:45 | 3 | 199 | 94 | 296 | 3 | 2 | 2 | 7 | 142 | 43 | 1 | 186 | 36 | 1 | 17 | 54 | 543 |
| 08:00 | 3 | 124 | 46 | 173 | 0 | 3 | 1 | 4 | 102 | 33 | 0 | 135 | 16 | 1 | 3 | 20 | 332 |
| Total Volume | 20 | 554 | 211 | 785 | 9 | 6 | 3 | 18 | 420 | 141 | 2 | 563 | 96 | 2 | 57 | 155 | 1521 |
| % App. Total | 2.5 | 70.6 | 26.9 | | 50 | 33.3 | 16.7 | | 74.6 | 25 | 0.4 | | 61.9 | 1.3 | 36.8 | | |
| PHF | .455 | .696 | .561 | .663 | .563 | .500 | .375 | .643 | .739 | .820 | .500 | .757 | .667 | .500 | .679 | .718 | .700 |

| Start Time | CSAH 3 Southbound | | | | Springbrook Dr. Westbound | | | | CSAH 3 Northbound | | | | Springbrook Dr. 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 16:00 | | | | | | | | | | | | | | | | | |
| 16:00 | 5 | 112 | 27 | 144 | 2 | 0 | 9 | 11 | 35 | 135 | 0 | 170 | 200 | 0 | 119 | 319 | 644 |
| 16:15 | 2 | 110 | 42 | 154 | 9 | 3 | 4 | 16 | 36 | 133 | 0 | 169 | 132 | 3 | 86 | 221 | 560 |
| 16:30 | 7 | 135 | 35 | 177 | 12 | 3 | 12 | 27 | 39 | 147 | 0 | 186 | 147 | 10 | 74 | 231 | 621 |
| 16:45 | 3 | 160 | 55 | 218 | 6 | 0 | 7 | 13 | 83 | 138 | 3 | 224 | 110 | 4 | 36 | 150 | 605 |
| Total Volume | 17 | 517 | 159 | 693 | 29 | 6 | 32 | 67 | 193 | 553 | 3 | 749 | 589 | 17 | 315 | 921 | 2430 |
| % App. Total | 2.5 | 74.6 | 22.9 | | 43.3 | 9 | 47.8 | | 25.8 | 73.8 | 0.4 | | 64 | 1.8 | 34.2 | | |
| PHF | .607 | .808 | .723 | .795 | .604 | .500 | .667 | .620 | .581 | .940 | .250 | .836 | .736 | .425 | .662 | .722 | .943 |

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

Study Name : TMC0917
Study Date : 06/29/09
Page No. : 1

Signal Warrants - Summary

Major Street Approaches

Northbound: CSAH 3
Number of Lanes: 2
Approach Speed: 50
Total Approach Volume: 8,422

Southbound: CSAH 3
Number of Lanes: 2
Approach Speed: 50
Total Approach Volume: 8,913

Minor Street Approaches

Eastbound: Springbrook Dr.
Number of Lanes: 2

Total Approach Volume: 5,539

Westbound: Springbrook Dr.
Number of Lanes: 2

Total Approach Volume: 486

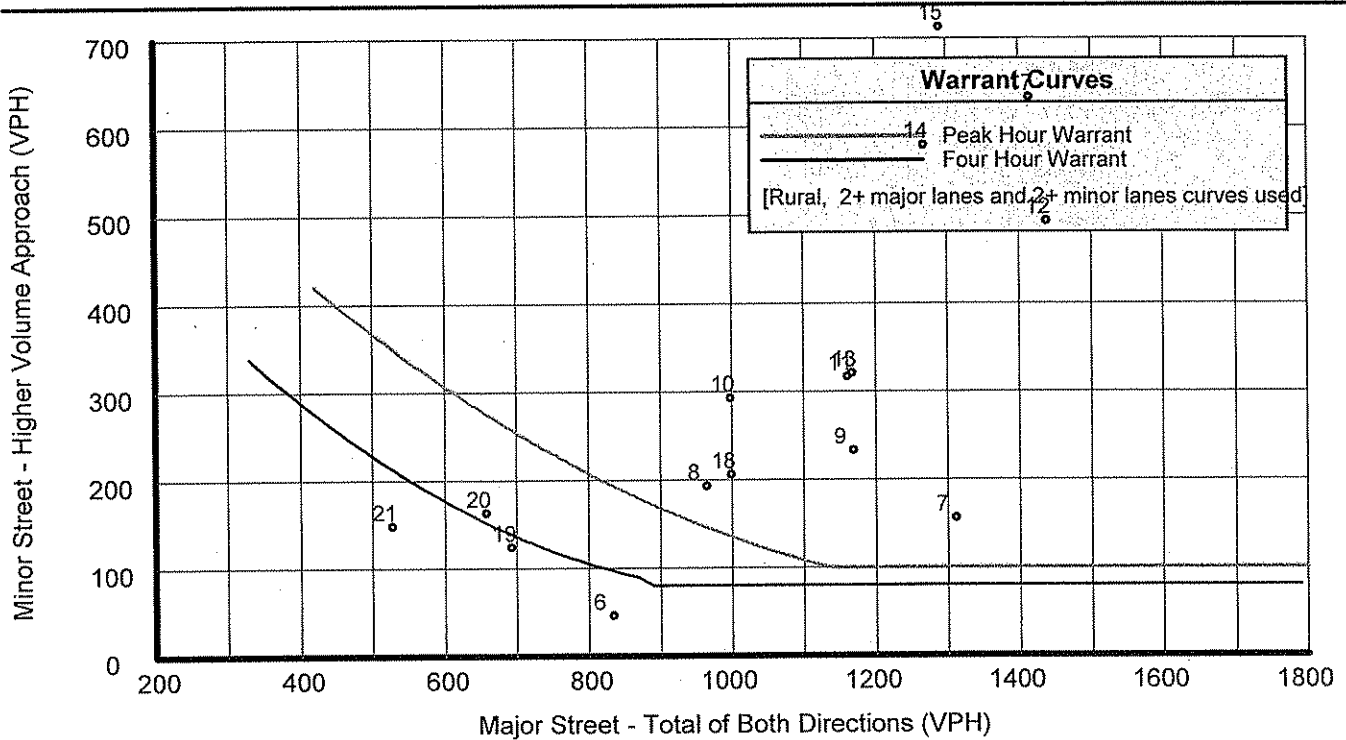
Warrant Summary (Rural values apply.)

| | |
|----------------------------------------------------------------------------------------|--------------------------|
| Warrant 1 - Eight Hour Vehicular Volumes | Satisfied |
| Warrant 1A - Minimum Vehicular Volume Satisfied | |
| Required volumes reached for 14 hours, 8 are needed | |
| Warrant 1B - Interruption of Continuous Traffic Satisfied | |
| Required volumes reached for 14 hours, 8 are needed | |
| Warrant 1 A&B - Combination of Warrants Satisfied | |
| Required volumes reached for 15 hours, 8 are needed | |
| Warrant 2 - Four Hour Volumes | Satisfied |
| Number of hours (13) volumes exceed minimum >= minimum required (4). | |
| Warrant 3 - Peak Hour | Satisfied |
| Warrant 3A - Peak Hour Delay Satisfied | |
| Number of hours (51) volumes exceed minimum >= required (1). Delay data not evaluated. | |
| Warrant 3B - Peak Hour Volumes Satisfied | |
| Volumes exceed minimums for at least one hour. | |
| Warrant 4 - Pedestrian Volumes | Not Evaluated |
| Warrant 5 - School Crossing | Not Evaluated |
| Warrant 6 - Coordinated Signal System | Not Evaluated |
| Warrant 7 - Crash Experience | Not Evaluated |
| Warrant 8 - Roadway Network | Not Evaluated |

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

Study Name : TMC0917
Study Date : 06/29/09
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 | 834 | 46 | EB | 420-Yes | 140-No | Major | 630-Yes | 70-No | Major | 504-Yes | 112-No | Major |
| 07:00 | 1,311 | 156 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 08:00 | 965 | 193 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 09:00 | 1,169 | 233 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 10:00 | 998 | 293 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 11:00 | 1,161 | 317 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 12:00 | 1,438 | 493 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 13:00 | 1,167 | 321 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 14:00 | 1,268 | 579 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 15:00 | 1,290 | 713 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 16:00 | 1,442 | 921 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 17:00 | 1,415 | 633 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 18:00 | 999 | 206 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 19:00 | 693 | 124 | EB | 420-Yes | 140-No | Major | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 20:00 | 658 | 163 | EB | 420-Yes | 140-Yes | Both | 630-Yes | 70-Yes | Both | 504-Yes | 112-Yes | Both |
| 21:00 | 527 | 148 | EB | 420-Yes | 140-Yes | Both | 630-No | 70-Yes | Minor | 504-Yes | 112-Yes | Both |
| 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 : TMC0917
Study Date : 06/29/09
Page No. : 1

Multi-Way Stop Warrant Report

Major Street Approaches

Northbound: CSAH 3
Total Approach Volume: 8,422
Approach Speed: 50

Southbound: CSAH 3
Total Approach Volume: 8,913
Approach Speed: 50

Minor Street Approaches

Eastbound: Springbrook Dr.
Total Approach Volume: 5,539

Westbound: Springbrook Dr.
Total Approach Volume: 486

Warrant Summary

Criteria A - Interim Measure Not Evaluated
If traffic signals are justified, stop signs can be installed as an interim measure.

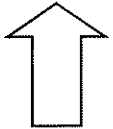
Criteria B - Crash Experience Not Evaluated

Criteria C - Minimum Volumes and Delays Satisfied
Delay data not evaluated
Required volumes reached for 15 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 Crit | Meets? | Major Crit | Minor Crit | Meets? |
| 07:00 - 08:00 | 1,311 | 175 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 08:00 - 09:00 | 965 | 203 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 09:00 - 10:00 | 1,169 | 247 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 10:00 - 11:00 | 998 | 306 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 11:00 - 12:00 | 1,161 | 340 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 12:00 - 13:00 | 1,438 | 511 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 13:00 - 14:00 | 1,167 | 362 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 14:00 - 15:00 | 1,268 | 631 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 15:00 - 16:00 | 1,290 | 755 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 16:00 - 17:00 | 1,442 | 988 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 17:00 - 18:00 | 1,415 | 683 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 18:00 - 19:00 | 999 | 239 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 19:00 - 20:00 | 693 | 163 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 20:00 - 21:00 | 658 | 204 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 21:00 - 22:00 | 527 | 163 | 210-Yes | 140-Yes | Both | 240-Yes | 160-Yes | Both |
| 05:30 - 06:30 | 289 | 25 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 05:45 - 06:45 | 520 | 41 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 06:00 - 07:00 | 834 | 55 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 06:15 - 07:15 | 983 | 67 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 06:30 - 07:30 | 1,090 | 88 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 06:45 - 07:45 | 1,143 | 128 | 210-Yes | 140-No | Major | 240-Yes | 160-No | Major |
| 00:00 - 01:00 | 0 | 0 | 210-No | 140-No | No | 240-No | 160-No | No |
| 00:15 - 01:15 | 0 | 0 | 210-No | 140-No | No | 240-No | 160-No | No |
| 00:30 - 01:30 | 0 | 0 | 210-No | 140-No | No | 240-No | 160-No | No |



NORTH

| |
|---------------------------|
| APP. #1 = Springbrook Dr. |
| APP. #2 = CSAH 3 |
| APP. #3 = Springbrook Dr. |
| APP. #4 = CSAH 3 |

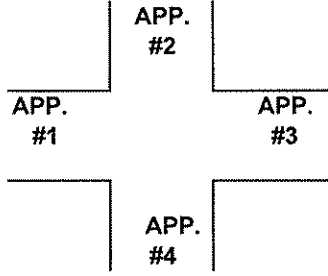
COUNT LOCATION:

CSAH 3 (Coon Rapids Blvd.)

DATE:

6/25/2009

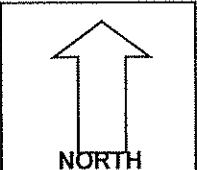
@ Springbrook Dr.



- 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 | | | | | | 4 | | 1 |
| 6:15-6:30 | | | | | | 7 | | 1 |
| 6:30-6:45 | | | | | | 1 | | 1 |
| 6:45-7:00 | | | | | | 4 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 19 |
| 7:00-7:15 | | | | | | 5 | | 1 |
| 7:15-7:30 | | | | | | 6 | | |
| 7:30-7:45 | | | | | | 10 | | 1 |
| 7:45-8:00 | | | | | | 4 | | 1 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 28 |
| 8:00-8:15 | | | | | | 6 | | 1 |
| 8:15-8:30 | | | | | | 9 | | 2 |
| 8:30-8:45 | | | | | | 8 | | 1 |
| 8:45-9:00 | | | | | | 11 | | 3 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 41 |
| 9:00-9:15 | | | | | | 14 | | 1 |
| 9:15-9:30 | | | | | | 9 | | |
| 9:30-9:45 | | | | | | 6 | | 2 |
| 9:45-10:00 | | | | | | 6 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 38 |
| 10:00-10:15 | | | | | | 5 | | 2 |
| 10:15-10:30 | | | | | | 13 | | 5 |
| 10:30-10:45 | | | | 1 | 1 | 4 | | 2 |
| 10:45-11:00 | | | | | | 10 | | 1 |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 42 |
| 11:00-11:15 | | | | | | 8 | | 1 |
| 11:15-11:30 | | | 1 | | 1 | 11 | | 5 |
| 11:30-11:45 | | | | | | 7 | | 1 |
| 11:45-12:00 | | | | | | 10 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 43 |
| 12:00-12:15 | | | | | | 9 | | 1 |
| 12:15-12:30 | | | | | | 8 | | 5 |
| 12:30-12:45 | | | | | | 10 | | 5 |
| 12:45-1:00 | | | | | | 4 | | 1 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 43 |
| 1:00-1:15 | | | | | | 8 | | 1 |
| 1:15-1:30 | | | 1 | | 1 | 6 | | |
| 1:30-1:45 | 2 | | | | 2 | 16 | | 4 |
| 1:45-2:00 | | | 1 | | 1 | 11 | | |
| HOURLY TOTAL | | | | | 4 | HOURLY TOTAL | | 46 |
| | | | | | TOTAL | | TOTAL | 300 |
| | | | | | 6 | | | |

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COUNT LOCATION:

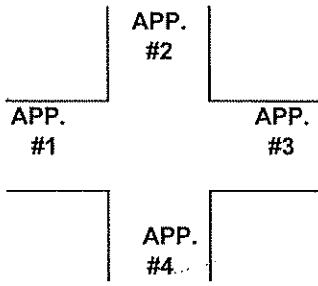
CSAH 3 (Coon Rapids Blvd.)

DATE:

6/22/2009

@ Springbrook Dr.

- APP. #1 = Springbrook Dr.
- APP. #2 = CSAH 3
- APP. #3 = Springbrook Dr.
- APP. #4 = CSAH 3



- 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 | | | | | | 9 | | 1 |
| 2:15-2:30 | | | 1 | | 1 | 6 | | 1 |
| 2:30-2:45 | 3 | | | 3 | 6 | 5 | | 2 |
| 2:45-3:00 | | | 1 | | 1 | 5 | | |
| HOURLY TOTAL | | | | | 8 | HOURLY TOTAL | | 29 |
| 3:00-3:15 | | 1 | 1 | 3 | 5 | 6 | | |
| 3:15-3:30 | | | 1 | | 1 | 13 | | 5 |
| 3:30-3:45 | | | | | | 9 | | |
| 3:45-4:00 | | | | | | 4 | | 4 |
| HOURLY TOTAL | | | | | 6 | HOURLY TOTAL | | 41 |
| 4:00-4:15 | | | | | | 6 | | 1 |
| 4:15-4:30 | | | | | | 5 | | 2 |
| 4:30-4:45 | | | | | | 2 | | 1 |
| 4:45-5:00 | | | | | | 2 | | 2 |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 21 |
| 5:00-5:15 | | | | | | 2 | | |
| 5:15-5:30 | | 2 | 1 | 1 | 4 | | | 1 |
| 5:30-5:45 | | | | | | 9 | | |
| 5:45-6:00 | | | | | | | | |
| HOURLY TOTAL | | | | | 4 | | | 12 |
| 6:00-6:15 | | | | | | 2 | | |
| 6:15-6:30 | | | 2 | | 2 | 3 | | |
| 6:30-6:45 | | | | | | 2 | | |
| 6:45-7:00 | | | | | | 1 | | 1 |
| HOURLY TOTAL | | | | | 2 | HOURLY TOTAL | | 9 |
| 7:00-7:15 | | | 1 | | 1 | 2 | | |
| 7:15-7:30 | | | | | | 1 | 1 | 1 |
| 7:30-7:45 | | | | | | 1 | | 1 |
| 7:45-8:00 | | | | | | 1 | | |
| HOURLY TOTAL | | | | | 1 | HOURLY TOTAL | | 8 |
| 8:00-8:15 | | | | | | | | |
| 8:15-8:30 | | | | | | | | 1 |
| 8:30-8:45 | | | | | | | | 1 |
| 8:45-9:00 | | | | | | | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 2 |
| 9:00-9:15 | | | | | | 2 | | |
| 9:15-9:30 | | | | | | 1 | | |
| 9:30-9:45 | | | | | | 2 | | 1 |
| 9:45-10:00 | | | | | | 1 | | |
| HOURLY TOTAL | | | | | | HOURLY TOTAL | | 7 |
| | | | | | TOTAL | | TOTAL | 429 |
| | | | | | 21 | | | |

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