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| <b>IH 43/894: HALE INTERCHANGE TO STH 27 (MILWAUKEE COUNTY)</b><br><b>OFF-PEAK DAY CLOSURE</b><br><b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b> | <b>OCTOBER</b>                           |
|  | Analyzed for 2009<br>Construction Season |

**SUMMARY OF TRAFFIC MODEL OUTPUT**

MON-THUR                  SOUTHBOUND DIRECTION

| TIME OF DAY | FLOWS AND CAPACITY IN VEH/HR |           |                |            |             |                       | AVERAGE SPEEDS IN MPH |                   |                |      |  |
|-------------|------------------------------|-----------|----------------|------------|-------------|-----------------------|-----------------------|-------------------|----------------|------|--|
|             | MAIN ROUTE                   |           | SITE CAPA CITY | FLOW       |             | AV.DEL PER VEH (MINS) | AVERAGE QUEUE (VEH)   | MAIN ROUTE        |                | SITE |  |
|             | DEMAND FLOW                  | PCT HEAVY |                | MAIN ROUTE | 'DIVER TED' |                       |                       | WITHOUT WORK ZONE | WITH WORK ZONE |      |  |
| MID-1 AM    | 662                          | 0.0       | OFF            | 662        | 0           | 0.00                  | 0                     | 69.9              | 69.9           | 69.9 |  |
| 1-2 AM      | 428                          | 0.0       | OFF            | 428        | 0           | 0.00                  | 0                     | 70.2              | 70.2           | 70.2 |  |
| 2-3 AM      | 396                          | 0.0       | OFF            | 396        | 0           | 0.00                  | 0                     | 70.2              | 70.2           | 70.2 |  |
| 3-4 AM      | 484                          | 0.0       | OFF            | 484        | 0           | 0.00                  | 0                     | 70.1              | 70.1           | 70.1 |  |
| 4-5 AM      | 955                          | 0.0       | OFF            | 955        | 0           | 0.00                  | 0                     | 69.6              | 69.6           | 69.6 |  |
| 5-6 AM      | 2525                         | 0.0       | OFF            | 2525       | 0           | 0.00                  | 0                     | 67.6              | 67.6           | 67.6 |  |
| 6-7 AM      | 4504                         | 0.0       | OFF            | 4504       | 0           | 0.00                  | 0                     | 60.1              | 60.1           | 60.1 |  |
| 7-8 AM      | 4698                         | 0.0       | OFF            | 4698       | 0           | 0.00                  | 0                     | 58.7              | 58.7           | 58.7 |  |
| 8-9 AM      | 3955                         | 0.0       | OFF            | 3955       | 0           | 0.00                  | 0                     | 63.8              | 63.8           | 63.8 |  |
| 9-10 AM     | 3541                         | 0.0       | OFF            | 3541       | 0           | 0.00                  | 0                     | 66.3              | 66.3           | 66.3 |  |
| 10-11 AM    | 3505                         | 0.0       | 2999           | 3505       | 0           | 4.66                  | 250                   | 66.4              | 30.2           | 37.3 |  |
| 11AM-NOON   | 3600                         | 0.0       | 3000           | 3283       | 316         | 13.66+                | 723                   | 66.3              | 14.7           | 37.3 |  |
| NOON-1PM    | 3769                         | 0.0       | 3000           | 3000       | 769         | 15.15+                | 801                   | 65.1              | 13.5           | 37.3 |  |
| 1-2 PM      | 3987                         | 0.0       | 3000           | 3000       | 987         | 15.06+                | 801                   | 63.6              | 13.5           | 37.3 |  |
| 2-3 PM      | 4596                         | 0.0       | 3000           | 3001       | 1596        | 14.79+                | 801                   | 59.4              | 13.5           | 37.3 |  |
| 3-4 PM      | 5418                         | 0.0       | OFF            | 5418       | 0           | 5.37                  | 498                   | 53.8              | 25.4           | 25.4 |  |
| 4-5 PM      | 5668                         | 0.0       | OFF            | 5668       | 0           | 0.79                  | 64                    | 52.2              | 45.0           | 45.0 |  |
| 5-6 PM      | 5222                         | 0.0       | OFF            | 5222       | 0           | 0.00                  | 0                     | 55.2              | 55.2           | 55.2 |  |
| 6-7 PM      | 4262                         | 0.0       | OFF            | 4262       | 0           | 0.00                  | 0                     | 61.7              | 61.7           | 61.7 |  |
| 7-8 PM      | 2858                         | 0.0       | OFF            | 2858       | 0           | 0.00                  | 0                     | 67.2              | 67.2           | 67.2 |  |
| 8-9 PM      | 2319                         | 0.0       | OFF            | 2319       | 0           | 0.00                  | 0                     | 67.9              | 67.9           | 67.9 |  |
| 9-10 PM     | 2156                         | 0.0       | OFF            | 2156       | 0           | 0.00                  | 0                     | 68.1              | 68.1           | 68.1 |  |
| 10-11 PM    | 1582                         | 0.0       | OFF            | 1582       | 0           | 0.00                  | 0                     | 68.7              | 68.7           | 68.7 |  |
| 11PM-MID    | 1041                         | 0.0       | OFF            | 1041       | 0           | 0.00                  | 0                     | 69.4              | 69.4           | 69.4 |  |

"OFF" INDICATES NO ROAD WORK (ALL LANES OPEN TO TRAFFIC)

+ INDICATES QUEUEING EXCEEDS USER-SPECIFIED MAXIMUM LIMIT

| *----- SITE BREAKDOWN DELAYS -----*    |      |
|--|------|
| BREAKDOWN DURATION (MINS)              | 0    |
| RANGE OF QUEUE DELAY - MIN (VEH-H) MAX | 0.0  |
| AV BREAKDOWNS PER DAY                  | 0.00 |
| AV QUEUE DELAY/DAY (VEH-H)             | 0.0  |
| AV TOTAL DELAY/DAY (VEH-H)             | 0.0  |

| *----- SITE ACCIDENT DELAYS -----*     |   |
|--|---|
| BREAKDOWN DURATION (MINS)              | 0 |
| RANGE OF QUEUE DELAY - MIN (VEH-H) MAX | 0 |
| AV BREAKDOWNS PER DAY                  | 0 |
| AV QUEUE DELAY/DAY (VEH-H)             | 0 |
| AV TOTAL DELAY/DAY (VEH-H)             | 0 |

| AVERAGE ACCIDENT NUMBERS (PIA/DAY) |          |
|------------------------------------|----------|
| MAIN ROUTE WITHOUT WORKS           | 0.0494   |
| MAIN ROUTE WITH WORKS              | 0.0458   |
| 'DIVERSION'                        | 0.0058   |
| PIA: Personal Injury Accidents     |          |
| IMPACTS ON ROAD USERS              |          |
| ROAD USER COSTS PER DAY            | \$56,217 |
| CONGESTED HOURS PER DAY*           | 4        |

\*Delays Exceeding User-Specified Maximum

**IH 43/894: HALE INTERCHANGE TO STH 27 (MILWAUKEE COUNTY)**  
**OFF-PEAK DAY CLOSURE**  
**NO DIVERSION ROUTE (MAX QUEUE METHOD)**

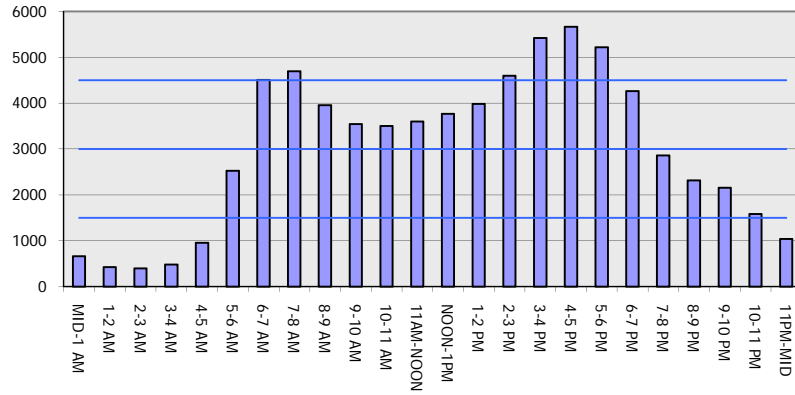
**OCTOBER**

Analyzed for 2009  
 Construction Season

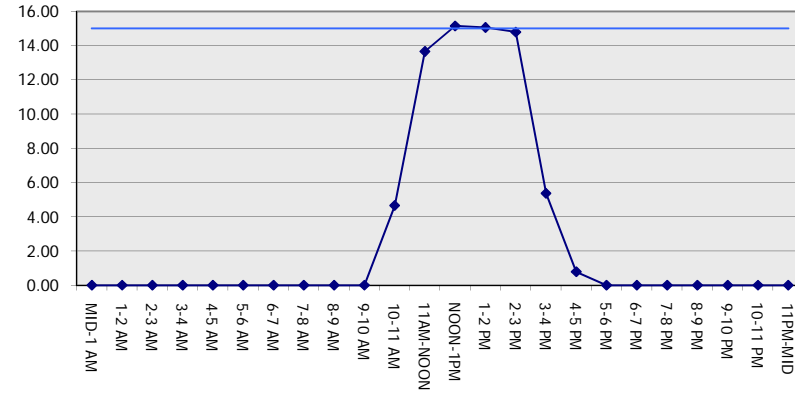
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**MON-THUR SOUTHBOUND DIRECTION**

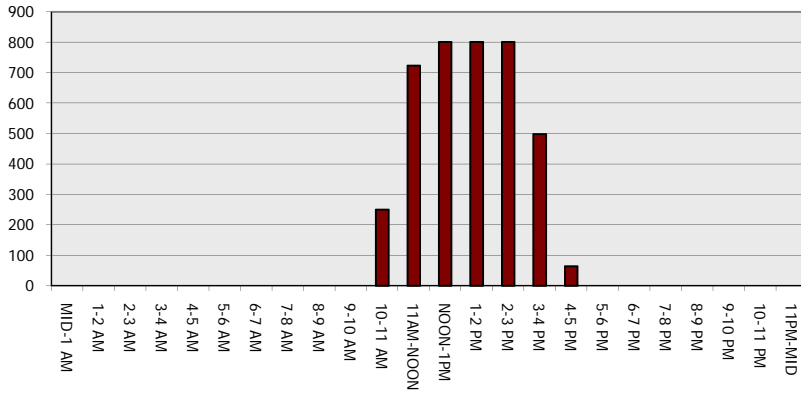
**Main Route - Traffic Demand (Vehicles Per Hour)**



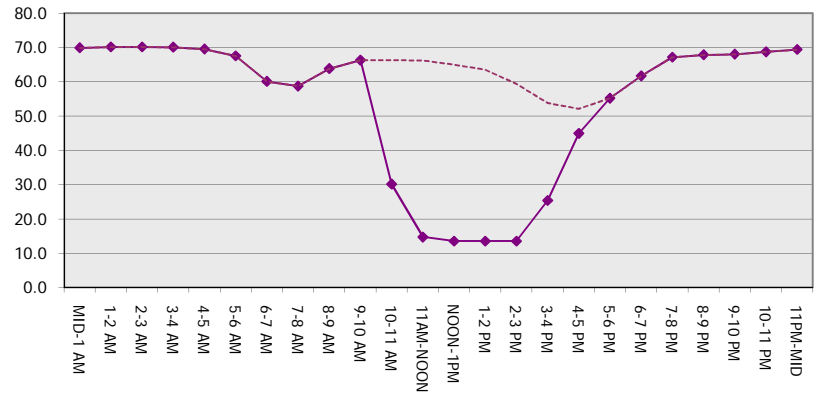
**Main Route Average Delay Per Vehicle (Minutes)**



**Main Route - Average Queue Length (Vehicles)**



**Main Route - Average Speed (MPH)**



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| <b>IH 43/894: HALE INTERCHANGE TO STH 27 (MILWAUKEE COUNTY)</b><br><b>OFF-PEAK DAY CLOSURE</b><br><b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b> | <b>OCTOBER</b>                           |
|  | Analyzed for 2009<br>Construction Season |

**SUMMARY OF TRAFFIC MODEL OUTPUT**

MON-THUR                      NORTHBOUND DIRECTION

| TIME OF DAY | FLOWS AND CAPACITY IN VEH/HR |           |                |            |             |                       |                     | AVERAGE SPEEDS IN MPH |                |      |
|-------------|------------------------------|-----------|----------------|------------|-------------|-----------------------|---------------------|-----------------------|----------------|------|
|             | MAIN ROUTE                   |           | SITE CAPA CITY | FLOW       |             | AV.DEL PER VEH (MINS) | AVERAGE QUEUE (VEH) | MAIN ROUTE            |                | SITE |
|             | DEMAND FLOW                  | PCT HEAVY |                | MAIN ROUTE | 'DIVER TED' |                       |                     | WITHOUT WORK ZONE     | WITH WORK ZONE |      |
| MID-1 AM    | 527                          | 0.0       | OFF            | 527        | 0           | 0.00                  | 0                   | 70.0                  | 70.0           | 70.0 |
| 1-2 AM      | 361                          | 0.0       | OFF            | 361        | 0           | 0.00                  | 0                   | 70.2                  | 70.2           | 70.2 |
| 2-3 AM      | 372                          | 0.0       | OFF            | 372        | 0           | 0.00                  | 0                   | 70.2                  | 70.2           | 70.2 |
| 3-4 AM      | 514                          | 0.0       | OFF            | 514        | 0           | 0.00                  | 0                   | 70.1                  | 70.1           | 70.1 |
| 4-5 AM      | 1052                         | 0.0       | OFF            | 1052       | 0           | 0.00                  | 0                   | 69.4                  | 69.4           | 69.4 |
| 5-6 AM      | 2650                         | 0.0       | OFF            | 2650       | 0           | 0.00                  | 0                   | 67.4                  | 67.4           | 67.4 |
| 6-7 AM      | 5221                         | 0.0       | OFF            | 5221       | 0           | 0.00                  | 0                   | 55.2                  | 55.2           | 55.2 |
| 7-8 AM      | 5609                         | 0.0       | OFF            | 5609       | 0           | 0.00                  | 0                   | 52.5                  | 52.5           | 52.5 |
| 8-9 AM      | 4669                         | 0.0       | OFF            | 4669       | 0           | 0.00                  | 0                   | 58.9                  | 58.9           | 58.9 |
| 9-10 AM     | 3563                         | 0.0       | OFF            | 3563       | 0           | 0.00                  | 0                   | 66.3                  | 66.3           | 66.3 |
| 10-11 AM    | 3344                         | 0.0       | 2999           | 3344       | 0           | 3.58                  | 175                 | 66.6                  | 34.6           | 37.3 |
| 11AM-NOON   | 3440                         | 0.0       | 3000           | 3440       | 0           | 10.41                 | 553                 | 66.4                  | 18.0           | 37.3 |
| NOON-1PM    | 3670                         | 0.0       | 2999           | 3000       | 670         | 15.19+                | 801                 | 65.8                  | 13.5           | 37.3 |
| 1-2 PM      | 3857                         | 0.0       | 3000           | 3000       | 857         | 15.12+                | 801                 | 64.5                  | 13.5           | 37.3 |
| 2-3 PM      | 4445                         | 0.0       | 3000           | 3001       | 1444        | 14.86+                | 801                 | 60.5                  | 13.5           | 37.3 |
| 3-4 PM      | 4986                         | 0.0       | OFF            | 4986       | 0           | 3.52                  | 304                 | 56.8                  | 32.0           | 32.0 |
| 4-5 PM      | 5365                         | 0.0       | OFF            | 5365       | 0           | 0.00                  | 0                   | 54.2                  | 54.2           | 54.2 |
| 5-6 PM      | 5451                         | 0.0       | OFF            | 5451       | 0           | 0.00                  | 0                   | 53.6                  | 53.6           | 53.6 |
| 6-7 PM      | 4177                         | 0.0       | OFF            | 4177       | 0           | 0.00                  | 0                   | 62.3                  | 62.3           | 62.3 |
| 7-8 PM      | 3064                         | 0.0       | OFF            | 3064       | 0           | 0.00                  | 0                   | 66.9                  | 66.9           | 66.9 |
| 8-9 PM      | 2585                         | 0.0       | OFF            | 2585       | 0           | 0.00                  | 0                   | 67.5                  | 67.5           | 67.5 |
| 9-10 PM     | 2207                         | 0.0       | OFF            | 2207       | 0           | 0.00                  | 0                   | 68.0                  | 68.0           | 68.0 |
| 10-11 PM    | 1513                         | 0.0       | OFF            | 1513       | 0           | 0.00                  | 0                   | 68.9                  | 68.9           | 68.9 |
| 11PM-MID    | 1072                         | 0.0       | OFF            | 1072       | 0           | 0.00                  | 0                   | 69.4                  | 69.4           | 69.4 |

"OFF" INDICATES NO ROAD WORK (ALL LANES OPEN TO TRAFFIC)

+ INDICATES QUEUEING EXCEEDS USER-SPECIFIED MAXIMUM LIMIT

| *----- SITE BREAKDOWN DELAYS -----* |      |
|-------------------------------------|------|
| BREAKDOWN DURATION (MINS)           | 0    |
| RANGE OF QUEUE DELAY - MIN          | 0.0  |
| (VEH-H) MAX                         | 0.0  |
| AV BREAKDOWNS PER DAY               | 0.00 |
| AV QUEUE DELAY/DAY (VEH-H)          | 0.0  |
| AV TOTAL DELAY/DAY (VEH-H)          | 0.0  |

| *----- SITE ACCIDENT DELAYS -----* |   |
|------------------------------------|---|
| BREAKDOWN DURATION (MINS)          | 0 |
| RANGE OF QUEUE DELAY - MIN         | 0 |
| (VEH-H) MAX                        | 0 |
| AV BREAKDOWNS PER DAY              | 0 |
| AV QUEUE DELAY/DAY (VEH-H)         | 0 |
| AV TOTAL DELAY/DAY (VEH-H)         | 0 |

| AVERAGE ACCIDENT NUMBERS (PIA/DAY) |        |
|------------------------------------|--------|
| MAIN ROUTE WITHOUT WORKS           | 0.0504 |
| MAIN ROUTE WITH WORKS              | 0.0474 |
| 'DIVERSION'                        | 0.0047 |

PIA: Personal Injury Accidents

| ECONOMIC IMPACT ON ROAD USERS |          |
|-------------------------------|----------|
| ROAD USER COSTS PER DAY       | \$48,552 |
| CONGESTED HOURS PER DAY*      | 3        |

\*Delays Exceeding User-Specified Maximum

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OFF-PEAK DAY CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

**OCTOBER**

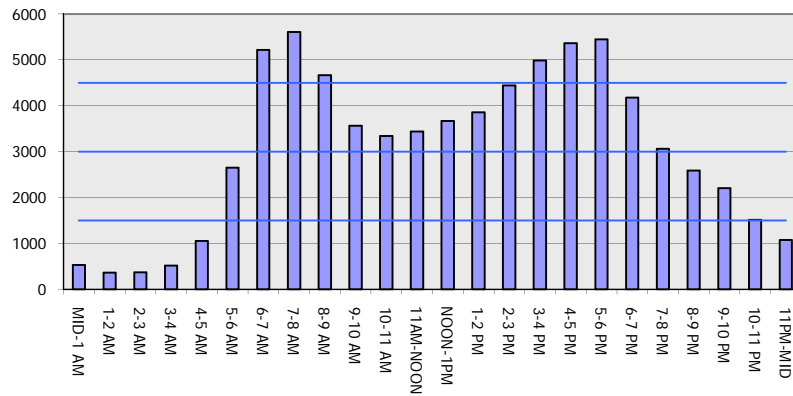
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**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

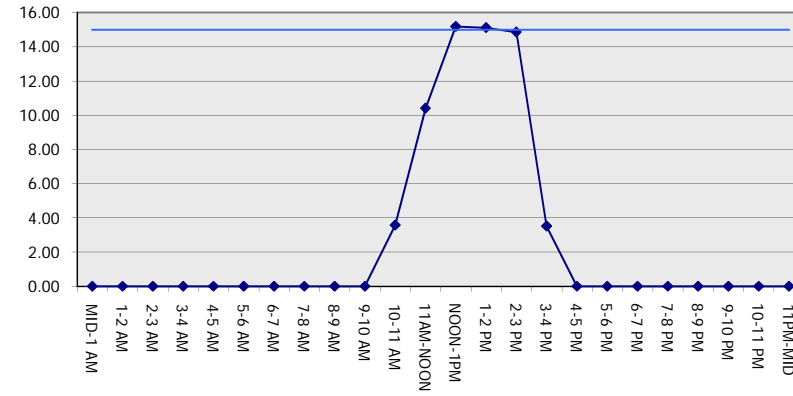
**MON-THUR**

**NORTHBOUND DIRECTION**

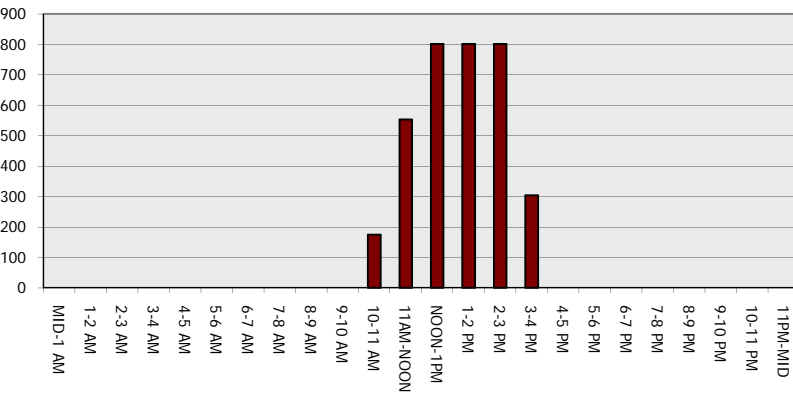
**Main Route - Traffic Demand (Vehicles Per Hour)**



**Main Route Average Delay Per Vehicle (Minutes)**



**Main Route - Average Queue Length (Vehicles)**



**Main Route - Average Speed (MPH)**

