

|   |  |
|---|--|
| <b>USH 41: 9TH AVE TO STH 44 (WINNEBAGO COUNTY)</b><br><b>NIGHTTIME CLOSURE</b><br><b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b> | <b>AUGUST</b>                            |
|   | Analyzed for 2009<br>Construction Season |

**SUMMARY OF TRAFFIC MODEL OUTPUT**

FRIDAY      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    | 275                          | 0.0       | 1500           | 275        | 0           | 0.45                  | 0                     | 65.9              | 48.7           | 44.4 |
| 1-2 AM      | 187                          | 0.0       | 1500           | 187        | 0           | 0.44                  | 0                     | 66.0              | 49.0           | 44.7 |
| 2-3 AM      | 169                          | 0.0       | 1500           | 169        | 0           | 0.44                  | 0                     | 66.1              | 49.1           | 44.8 |
| 3-4 AM      | 220                          | 0.0       | 1500           | 220        | 0           | 0.44                  | 0                     | 66.0              | 48.9           | 44.6 |
| 4-5 AM      | 385                          | 0.0       | 1500           | 385        | 0           | 0.46                  | 0                     | 65.6              | 48.3           | 44.0 |
| 5-6 AM      | 841                          | 0.0       | OFF            | 841        | 0           | 0.00                  | 0                     | 64.8              | 64.8           | 64.8 |
| 6-7 AM      | 1496                         | 0.0       | OFF            | 1496       | 0           | 0.00                  | 0                     | 63.6              | 63.6           | 63.6 |
| 7-8 AM      | 2096                         | 0.0       | OFF            | 2096       | 0           | 0.00                  | 0                     | 62.5              | 62.5           | 62.5 |
| 8-9 AM      | 1844                         | 0.0       | OFF            | 1844       | 0           | 0.00                  | 0                     | 63.0              | 63.0           | 63.0 |
| 9-10 AM     | 1839                         | 0.0       | OFF            | 1839       | 0           | 0.00                  | 0                     | 63.0              | 63.0           | 63.0 |
| 10-11 AM    | 1975                         | 0.0       | OFF            | 1975       | 0           | 0.00                  | 0                     | 62.7              | 62.7           | 62.7 |
| 11AM-NOON   | 2090                         | 0.0       | OFF            | 2090       | 0           | 0.00                  | 0                     | 62.5              | 62.5           | 62.5 |
| NOON-1PM    | 2201                         | 0.0       | OFF            | 2201       | 0           | 0.00                  | 0                     | 62.3              | 62.3           | 62.3 |
| 1-2 PM      | 2320                         | 0.0       | OFF            | 2320       | 0           | 0.00                  | 0                     | 62.0              | 62.0           | 62.0 |
| 2-3 PM      | 2570                         | 0.0       | OFF            | 2570       | 0           | 0.00                  | 0                     | 60.2              | 60.2           | 60.2 |
| 3-4 PM      | 2684                         | 0.0       | OFF            | 2684       | 0           | 0.00                  | 0                     | 59.0              | 59.0           | 59.0 |
| 4-5 PM      | 2696                         | 0.0       | OFF            | 2696       | 0           | 0.00                  | 0                     | 58.9              | 58.9           | 58.9 |
| 5-6 PM      | 2310                         | 0.0       | OFF            | 2310       | 0           | 0.00                  | 0                     | 62.1              | 62.1           | 62.1 |
| 6-7 PM      | 1730                         | 0.0       | OFF            | 1730       | 0           | 0.00                  | 0                     | 63.2              | 63.2           | 63.2 |
| 7-8 PM      | 1247                         | 0.0       | 1500           | 1247       | 0           | 0.70                  | 0                     | 64.1              | 41.8           | 37.0 |
| 8-9 PM      | 1009                         | 0.0       | 1500           | 1009       | 0           | 0.52                  | 0                     | 64.5              | 46.1           | 41.7 |
| 9-10 PM     | 870                          | 0.0       | 1500           | 870        | 0           | 0.51                  | 0                     | 64.8              | 46.6           | 42.2 |
| 10-11 PM    | 784                          | 0.0       | 1500           | 784        | 0           | 0.50                  | 0                     | 64.9              | 46.8           | 42.5 |
| 11PM-MID    | 492                          | 0.0       | 1500           | 492        | 0           | 0.47                  | 0                     | 65.5              | 47.9           | 43.5 |

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

| *----- 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 |

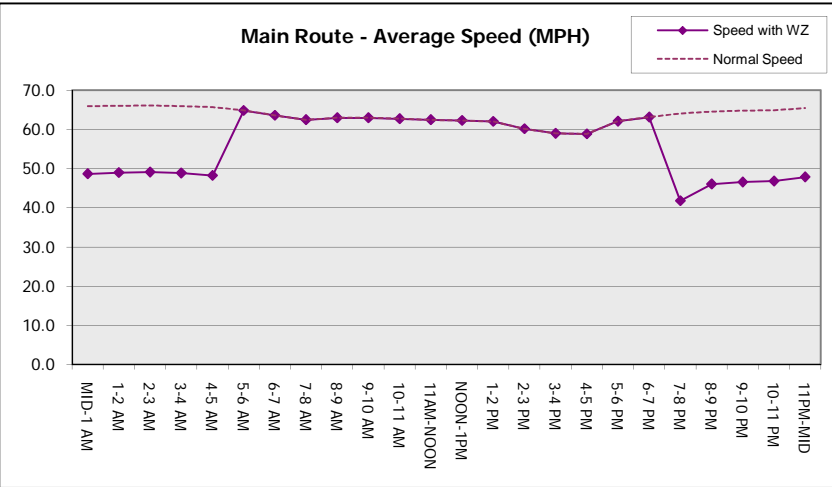
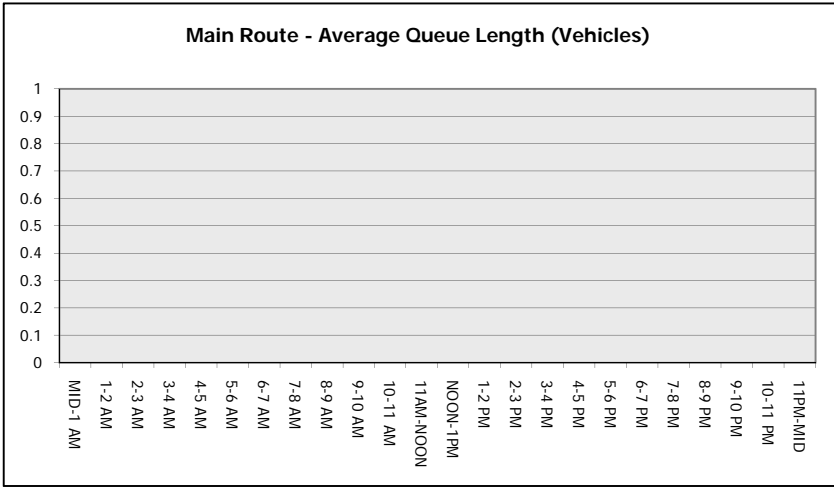
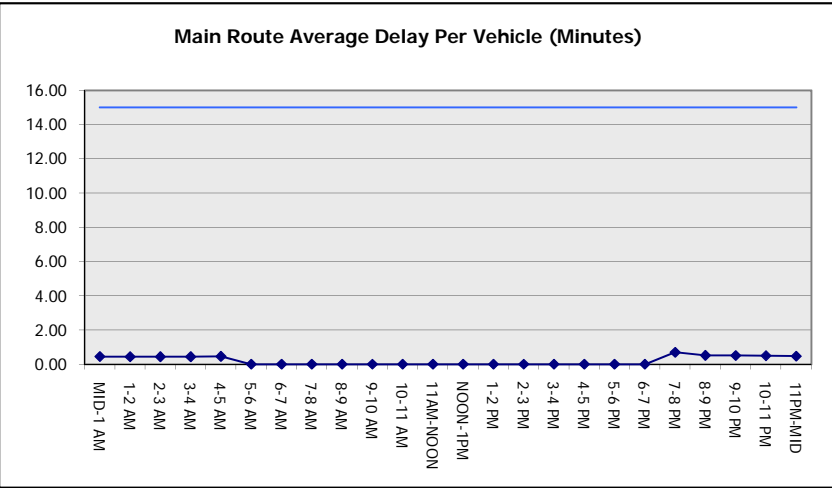
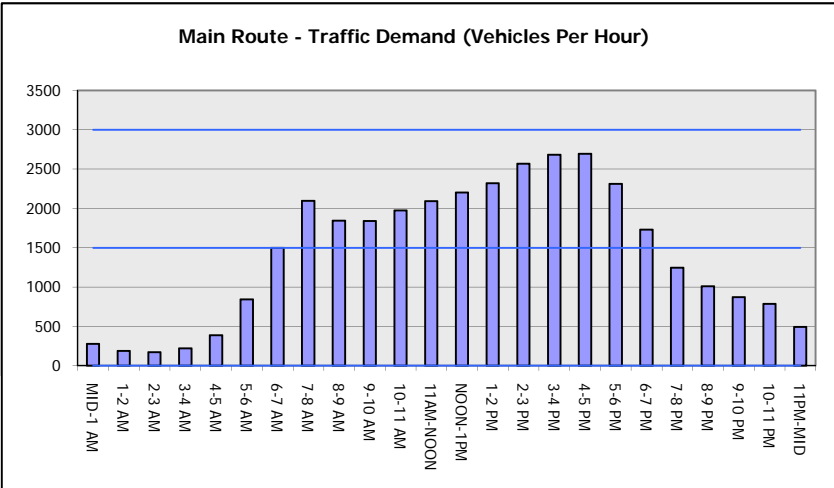
| AVERAGE ACCIDENT NUMBERS (PIA/DAY)            |        |
|---|--------|
| MAIN ROUTE WITHOUT WORKS                      | 0.0076 |
| MAIN ROUTE WITH WORKS                         | 0.0073 |
| 'DIVERSION'                                   | 0.0000 |
| <small>PIA: Personal Injury Accidents</small> |        |
| IMPACTS ON ROAD USERS                         |        |
| ROAD USER COSTS PER DAY                       | \$776  |
| CONGESTED HOURS PER DAY*                      | 0      |

\*Delays Exceeding User-Specified Maximum

**USH 41: 9TH AVE TO STH 44 (WINNEBAGO COUNTY)  
NIGHTTIME CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

**AUGUST**  
Analyzed for 2009  
Construction Season

**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**  
**FRIDAY SOUTHBOUND DIRECTION**



|   |  |
|---|--|
| <b>USH 41: 9TH AVE TO STH 44 (WINNEBAGO COUNTY)</b><br><b>NIGHTTIME CLOSURE</b><br><b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b> | <b>AUGUST</b>                            |
|   | Analyzed for 2009<br>Construction Season |

**SUMMARY OF TRAFFIC MODEL OUTPUT**

FRIDAY      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    | 244                          | 0.0       | 1500           | 244        | 0           | 0.45                  | 0                     | 66.0              | 48.8           | 44.5 |
| 1-2 AM      | 163                          | 0.0       | 1500           | 163        | 0           | 0.44                  | 0                     | 66.1              | 49.1           | 44.8 |
| 2-3 AM      | 163                          | 0.0       | 1500           | 163        | 0           | 0.44                  | 0                     | 66.1              | 49.1           | 44.8 |
| 3-4 AM      | 195                          | 0.0       | 1500           | 195        | 0           | 0.44                  | 0                     | 66.0              | 49.0           | 44.7 |
| 4-5 AM      | 288                          | 0.0       | 1500           | 288        | 0           | 0.45                  | 0                     | 65.8              | 48.6           | 44.3 |
| 5-6 AM      | 755                          | 0.0       | OFF            | 755        | 0           | 0.00                  | 0                     | 65.0              | 65.0           | 65.0 |
| 6-7 AM      | 1363                         | 0.0       | OFF            | 1363       | 0           | 0.00                  | 0                     | 63.8              | 63.8           | 63.8 |
| 7-8 AM      | 1860                         | 0.0       | OFF            | 1860       | 0           | 0.00                  | 0                     | 62.9              | 62.9           | 62.9 |
| 8-9 AM      | 1588                         | 0.0       | OFF            | 1588       | 0           | 0.00                  | 0                     | 63.4              | 63.4           | 63.4 |
| 9-10 AM     | 1707                         | 0.0       | OFF            | 1707       | 0           | 0.00                  | 0                     | 63.2              | 63.2           | 63.2 |
| 10-11 AM    | 1927                         | 0.0       | OFF            | 1927       | 0           | 0.00                  | 0                     | 62.8              | 62.8           | 62.8 |
| 11AM-NOON   | 2069                         | 0.0       | OFF            | 2069       | 0           | 0.00                  | 0                     | 62.5              | 62.5           | 62.5 |
| NOON-1PM    | 2194                         | 0.0       | OFF            | 2194       | 0           | 0.00                  | 0                     | 62.3              | 62.3           | 62.3 |
| 1-2 PM      | 2366                         | 0.0       | OFF            | 2366       | 0           | 0.00                  | 0                     | 62.0              | 62.0           | 62.0 |
| 2-3 PM      | 2494                         | 0.0       | OFF            | 2494       | 0           | 0.00                  | 0                     | 60.9              | 60.9           | 60.9 |
| 3-4 PM      | 2657                         | 0.0       | OFF            | 2657       | 0           | 0.00                  | 0                     | 59.3              | 59.3           | 59.3 |
| 4-5 PM      | 2733                         | 0.0       | OFF            | 2733       | 0           | 0.00                  | 0                     | 58.5              | 58.5           | 58.5 |
| 5-6 PM      | 2704                         | 0.0       | OFF            | 2704       | 0           | 0.00                  | 0                     | 58.8              | 58.8           | 58.8 |
| 6-7 PM      | 2349                         | 0.0       | OFF            | 2349       | 0           | 0.00                  | 0                     | 62.0              | 62.0           | 62.0 |
| 7-8 PM      | 1867                         | 0.0       | 1499           | 1867       | 0           | 8.11                  | 212                   | 62.9              | 11.3           | 30.8 |
| 8-9 PM      | 1439                         | 0.0       | 1499           | 1439       | 0           | 14.42+                | 361                   | 63.7              | 8.4            | 30.8 |
| 9-10 PM     | 1077                         | 0.0       | 1499           | 1077       | 0           | 3.08                  | 129                   | 64.4              | 21.5           | 36.9 |
| 10-11 PM    | 766                          | 0.0       | 1500           | 766        | 0           | 0.50                  | 0                     | 65.0              | 46.9           | 42.5 |
| 11PM-MID    | 595                          | 0.0       | 1500           | 595        | 0           | 0.48                  | 0                     | 65.3              | 47.5           | 43.2 |

"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           | 0.0079 |
| MAIN ROUTE WITH WORKS              | 0.0075 |
| 'DIVERSION'                        | 0.0000 |

PIA: Personal Injury Accidents

| ECONOMIC IMPACT ON ROAD USERS |          |
|-------------------------------|----------|
| ROAD USER COSTS PER DAY       | \$10,368 |
| CONGESTED HOURS PER DAY*      | 1        |

\*Delays Exceeding User-Specified Maximum

**USH 41: 9TH AVE TO STH 44 (WINNEBAGO COUNTY)  
NIGHTTIME CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

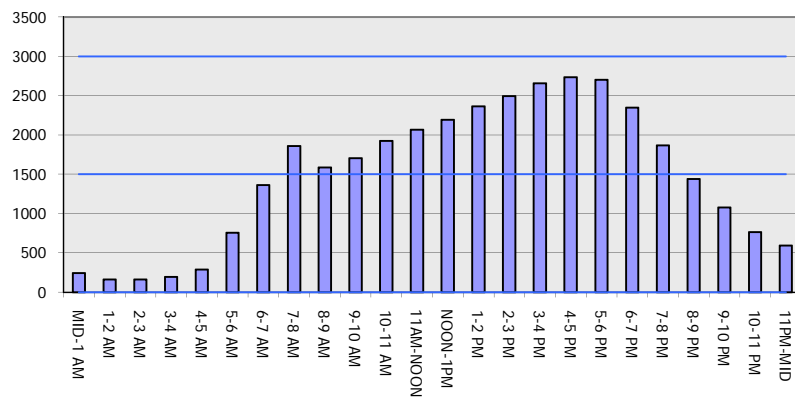
**AUGUST**

Analyzed for 2009  
Construction Season

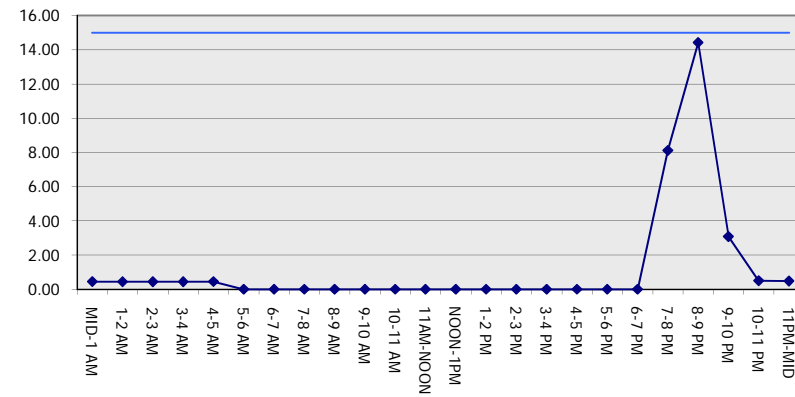
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**FRIDAY NORTHBOUND DIRECTION**

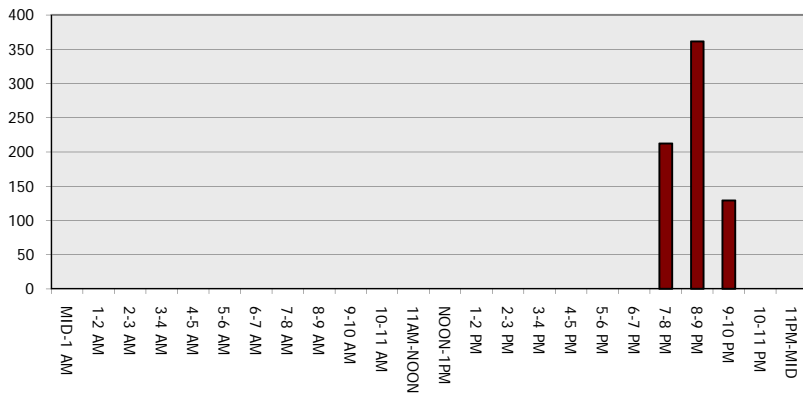
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

