

|  |  |
|--|--|
| <b>USH 41: USH 45 TO 9TH AVE (WINNEBAGO COUNTY)</b><br><b>CONTINUOUS (24 HOUR) CLOSURE</b><br><b>DIVERSION ROUTE: STH 21, USH 45</b> | <b>MAY</b>                               |
|  | Analyzed for 2009<br>Construction Season |

**SUMMARY OF TRAFFIC MODEL OUTPUT**

SUNDAY SOUTHBOUND DIRECTION

| TIME OF DAY | FLOWS AND CAPACITY IN VEH/HR |           |                 |           |                |                 |                  | AVERAGE SPEEDS IN MPH |                       |                     | AVERAGE SPEEDS IN MPH |              |                 |                 |              |
|-------------|------------------------------|-----------|-----------------|-----------|----------------|-----------------|------------------|-----------------------|-----------------------|---------------------|-----------------------|--------------|-----------------|-----------------|--------------|
|             | MAIN ROUTE                   |           | ALTERNATE ROUTE |           | SITE CAPA CITY | FLOW MAIN ROUTE | FLOW DIVER -TING | TOTAL DIVN FLOW       | AV.DEL PER VEH (MINS) | AVERAGE QUEUE (VEH) | MAIN ROUTE            |              | ALTERNATE ROUTE |                 |              |
|             | DEMAND FLOW                  | PCT HEAVY | NORMAL FLOW     | PCT HEAVY |                |                 |                  |                       |                       |                     | WITHOUT WORK ZN       | WITH WORK ZN | SITE            | WITHOUT WORK ZN | WITH WORK ZN |
| MID-1 AM    | 281                          | 0.0       | 72              | 0.0       | 1500           | 281             | 0                | 72                    | 0.45                  | 0                   | 65.9                  | 52.3         | 44.3            | 22.7            | 22.7         |
| 1-2 AM      | 200                          | 0.0       | 50              | 0.0       | 1500           | 200             | 0                | 50                    | 0.44                  | 0                   | 66.0                  | 52.5         | 44.7            | 22.9            | 22.9         |
| 2-3 AM      | 179                          | 0.0       | 45              | 0.0       | 1500           | 179             | 0                | 45                    | 0.44                  | 0                   | 66.1                  | 52.7         | 44.8            | 23.0            | 23.0         |
| 3-4 AM      | 136                          | 0.0       | 35              | 0.0       | 1500           | 136             | 0                | 35                    | 0.44                  | 0                   | 66.1                  | 52.8         | 45.0            | 23.2            | 23.2         |
| 4-5 AM      | 143                          | 0.0       | 36              | 0.0       | 1500           | 143             | 0                | 36                    | 0.44                  | 0                   | 66.1                  | 52.8         | 44.9            | 23.1            | 23.1         |
| 5-6 AM      | 264                          | 0.0       | 67              | 0.0       | 1500           | 264             | 0                | 67                    | 0.45                  | 0                   | 65.9                  | 52.4         | 44.4            | 22.7            | 22.7         |
| 6-7 AM      | 465                          | 0.0       | 118             | 0.0       | 1500           | 465             | 0                | 118                   | 0.47                  | 0                   | 65.5                  | 51.7         | 43.7            | 22.0            | 22.0         |
| 7-8 AM      | 659                          | 0.0       | 168             | 0.0       | 1500           | 659             | 0                | 168                   | 0.49                  | 0                   | 65.1                  | 51.0         | 42.9            | 21.4            | 21.4         |
| 8-9 AM      | 1173                         | 0.0       | 300             | 0.0       | 1499           | 1173            | 0                | 300                   | 0.65                  | 0                   | 64.2                  | 47.1         | 38.3            | 19.7            | 19.7         |
| 9-10 AM     | 1800                         | 0.0       | 459             | 0.0       | 1499           | 1800            | 0                | 459                   | 4.13                  | 113                 | 63.0                  | 19.8         | 30.8            | 17.6            | 17.9         |
| 10-11 AM    | 2347                         | 0.0       | 598             | 0.0       | 1499           | 1764            | 583              | 1181                  | 17.55                 | 452                 | 62.0                  | 8.4          | 30.8            | 15.8            | 12.4         |
| 11A-NOON    | 2542                         | 0.0       | 648             | 0.0       | 1499           | 1611            | 931              | 1578+                 | 24.01                 | 624                 | 60.5                  | 7.5          | 30.8            | 15.2            | 10.3         |
| NOON-1PM    | 2761                         | 0.0       | 704             | 0.0       | 1500           | 1617            | 1144             | 1848+                 | 28.11                 | 739                 | 58.2                  | 7.1          | 30.8            | 14.4            | 9.5          |
| 1-2 PM      | 2736                         | 0.0       | 698             | 0.0       | 1500           | 1502            | 1234             | 1932+                 | 29.89                 | 787                 | 58.5                  | 6.9          | 30.8            | 14.5            | 9.2          |
| 2-3 PM      | 2903                         | 0.0       | 740             | 0.0       | 1500           | 1513            | 1389             | 2130+                 | 30.43                 | 805                 | 56.8                  | 6.9          | 30.8            | 14.0            | 9.1          |
| 3-4 PM      | 2921                         | 0.0       | 745             | 0.0       | 1500           | 1500            | 1421             | 2167+                 | 30.51                 | 808                 | 56.6                  | 6.9          | 30.8            | 13.9            | 9.1          |
| 4-5 PM      | 2862                         | 0.0       | 730             | 0.0       | 1500           | 1492            | 1370             | 2100+                 | 30.41                 | 804                 | 57.2                  | 6.9          | 30.8            | 14.1            | 9.1          |
| 5-6 PM      | 2658                         | 0.0       | 677             | 0.0       | 1500           | 1416            | 1242             | 1919+                 | 29.47                 | 774                 | 59.2                  | 7.0          | 30.8            | 14.8            | 9.3          |
| 6-7 PM      | 2074                         | 0.0       | 529             | 0.0       | 1499           | 1192            | 883              | 1412                  | 21.07                 | 547                 | 62.5                  | 7.9          | 30.8            | 16.7            | 11.2         |
| 7-8 PM      | 1708                         | 0.0       | 435             | 0.0       | 1500           | 1341            | 367              | 803                   | 12.75                 | 319                 | 63.2                  | 9.7          | 30.8            | 17.9            | 15.0         |
| 8-9 PM      | 1229                         | 0.0       | 313             | 0.0       | 1499           | 1209            | 20               | 333                   | 3.83                  | 122                 | 64.1                  | 20.9         | 34.6            | 19.5            | 19.5         |
| 9-10 PM     | 845                          | 0.0       | 215             | 0.0       | 1500           | 845             | 0                | 215                   | 0.50                  | 0                   | 64.8                  | 50.4         | 42.2            | 20.8            | 20.8         |
| 10-11 PM    | 638                          | 0.0       | 163             | 0.0       | 1500           | 638             | 0                | 163                   | 0.48                  | 0                   | 65.2                  | 51.0         | 43.0            | 21.5            | 21.5         |
| 11PM-MID    | 334                          | 0.0       | 85              | 0.0       | 1500           | 334             | 0                | 85                    | 0.45                  | 0                   | 65.8                  | 52.1         | 44.2            | 22.5            | 22.5         |

+ INDICATES DIVERSION FLOW EXCEEDS USER-SPECIFIED WARNING LIMIT

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

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

| AVERAGE ACCIDENT NUMBERS (PIA/DAY) |        |
|------------------------------------|--------|
| MAIN ROUTE WITHOUT WORKS           | 0.0102 |
| MAIN ROUTE WITH WORKS              | 0.0055 |
| DIVERSION                          | 0.0716 |

PIA: Personal Injury Accidents

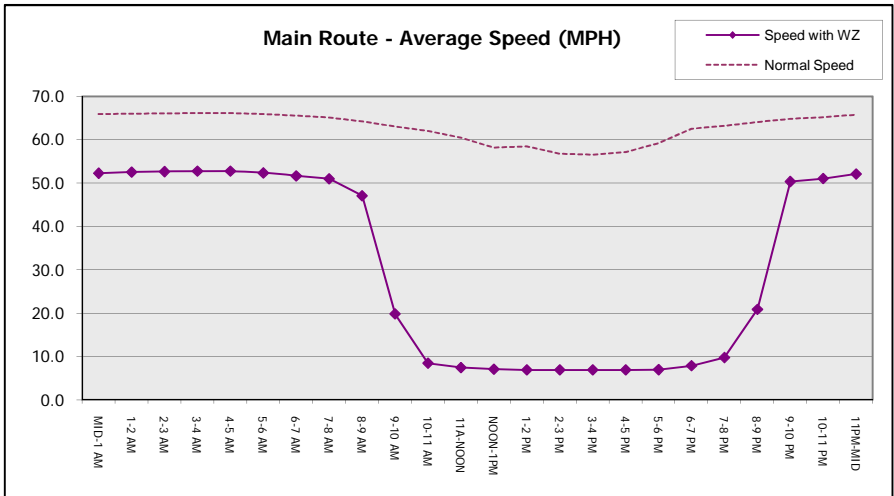
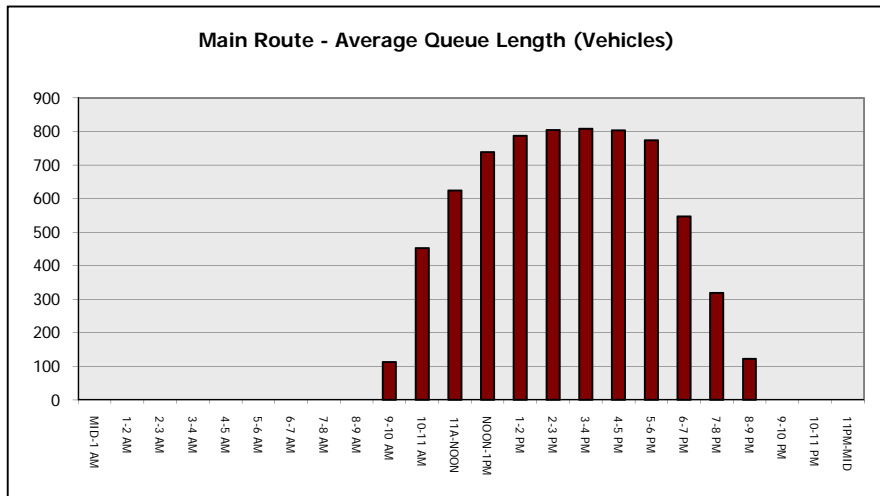
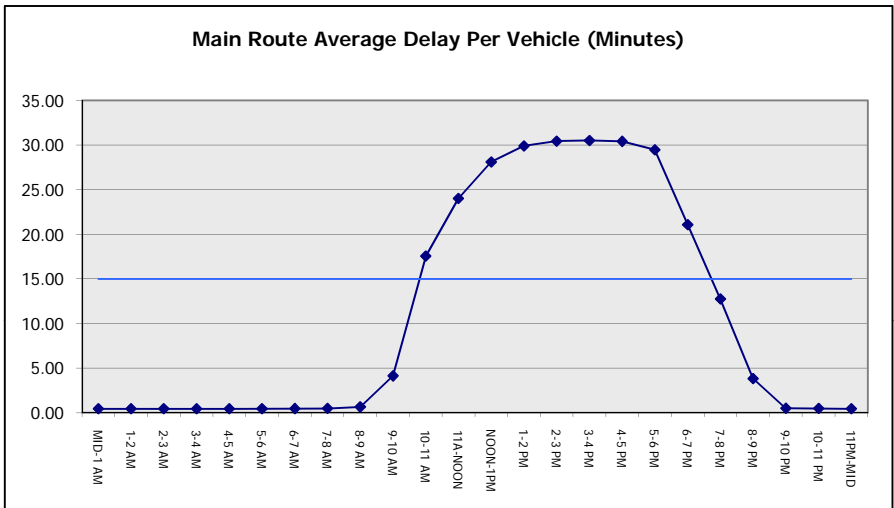
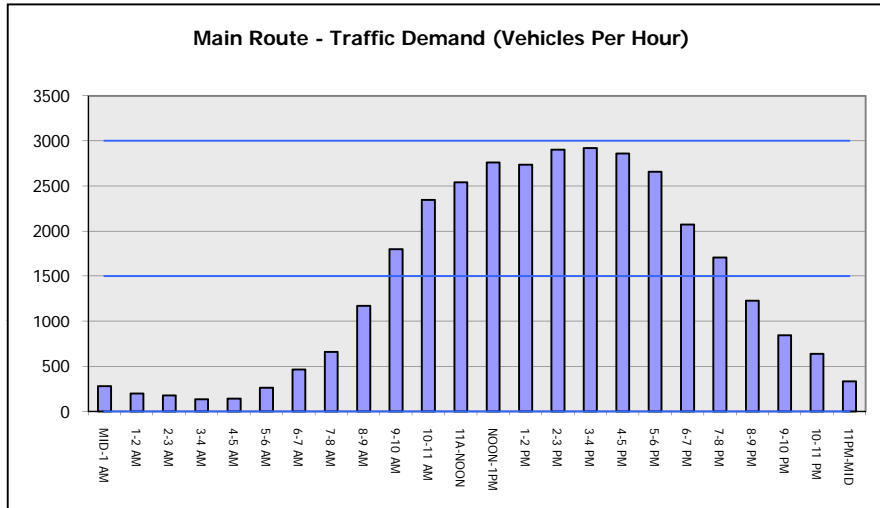
| IMPACTS ON ROAD USERS              |           |
|------------------------------------|-----------|
| ROAD USER COSTS PER DAY ( DOLLARS) | \$220,313 |
| CONGESTED HOURS PER DAY*           | 9         |

\*Delays Exceeding 15 Minutes

**USH 41: USH 45 TO 9TH AVE (WINNEBAGO COUNTY)**  
**CONTINUOUS (24 HOUR) CLOSURE**  
**DIVERSION ROUTE: STH 21, USH 45**

**MAY**  
 Analyzed for 2009  
 Construction Season

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



|  |  |
|--|--|
| <b>USH 41: USH 45 TO 9TH AVE (WINNEBAGO COUNTY)<br/>                 CONTINUOUS (24 HOUR) CLOSURE<br/>                 DIVERSION ROUTE: STH 21, USH 45</b> | <b>MAY</b>                               |
|  | Analyzed for 2009<br>Construction Season |

**SUMMARY OF TRAFFIC MODEL OUTPUT**

SUNDAY NORTHBOUND DIRECTION

| TIME OF DAY | FLOWS AND CAPACITY IN VEH/HR |           |             |           |                |                 |                  |                 | AVERAGE SPEEDS IN MPH |                     |                 |              |      |                 |              |
|-------------|------------------------------|-----------|-------------|-----------|----------------|-----------------|------------------|-----------------|-----------------------|---------------------|-----------------|--------------|------|-----------------|--------------|
|             | MAIN                         |           | DIVERSION   |           | SITE CAPA CITY | FLOW MAIN ROUTE | FLOW DIVER -TING | TOTAL DIVN FLOW | AV.DEL PER VEH (MINS) | AVERAGE QUEUE (VEH) | MAIN ROUTE      |              | SITE | ALTERNATE ROUTE |              |
|             | DEMAND FLOW                  | PCT HEAVY | NORMAL FLOW | PCT HEAVY |                |                 |                  |                 |                       |                     | WITHOUT WORK ZN | WITH WORK ZN |      | WITHOUT WORK ZN | WITH WORK ZN |
| MID-1 AM    | 271                          | 0.0       | 69          | 0.0       | 1500           | 271             | 0                | 69              | 0.45                  | 0                   | 65.9            | 52.3         | 44.4 | 21.8            | 21.8         |
| 1-2 AM      | 167                          | 0.0       | 42          | 0.0       | 1500           | 167             | 0                | 42              | 0.44                  | 0                   | 66.1            | 52.7         | 44.8 | 22.5            | 22.5         |
| 2-3 AM      | 143                          | 0.0       | 36          | 0.0       | 1500           | 143             | 0                | 36              | 0.44                  | 0                   | 66.1            | 52.8         | 44.9 | 22.7            | 22.7         |
| 3-4 AM      | 87                           | 0.0       | 23          | 0.0       | 1500           | 87              | 0                | 23              | 0.43                  | 0                   | 66.2            | 53.0         | 45.1 | 23.0            | 23.0         |
| 4-5 AM      | 113                          | 0.0       | 29          | 0.0       | 1500           | 113             | 0                | 29              | 0.43                  | 0                   | 66.2            | 52.8         | 45.0 | 22.9            | 22.9         |
| 5-6 AM      | 299                          | 0.0       | 76          | 0.0       | 1500           | 299             | 0                | 76              | 0.45                  | 0                   | 65.8            | 52.2         | 44.3 | 21.6            | 21.6         |
| 6-7 AM      | 371                          | 0.0       | 95          | 0.0       | 1500           | 371             | 0                | 95              | 0.46                  | 0                   | 65.7            | 52.0         | 44.0 | 21.1            | 21.1         |
| 7-8 AM      | 602                          | 0.0       | 153         | 0.0       | 1500           | 602             | 0                | 153             | 0.48                  | 0                   | 65.3            | 51.2         | 43.1 | 19.6            | 19.6         |
| 8-9 AM      | 870                          | 0.0       | 221         | 0.0       | 1500           | 870             | 0                | 221             | 0.51                  | 0                   | 64.8            | 50.3         | 42.2 | 17.8            | 17.8         |
| 9-10 AM     | 1297                         | 0.0       | 330         | 0.0       | 1499           | 1297            | 0                | 330             | 0.75                  | 0                   | 64.0            | 45.0         | 35.8 | 14.9            | 14.9         |
| 10-11 AM    | 1674                         | 0.0       | 426         | 0.0       | 1499           | 1674            | 0                | 426             | 2.97                  | 66                  | 63.3            | 23.9         | 30.8 | 12.6            | 12.6         |
| 11A-NOON    | 1957                         | 0.0       | 499         | 0.0       | 1500           | 1901            | 56               | 555             | 14.38                 | 377                 | 62.7            | 9.4          | 30.8 | 11.5            | 12.4         |
| NOON-1PM    | 2119                         | 0.0       | 540         | 0.0       | 1499           | 1742            | 378              | 918+            | 27.58                 | 720                 | 62.4            | 7.1          | 30.8 | 10.9            | 9.7          |
| 1-2 PM      | 2026                         | 0.0       | 517         | 0.0       | 1500           | 1465            | 561              | 1078+           | 29.64                 | 773                 | 62.6            | 7.0          | 30.8 | 11.2            | 9.3          |
| 2-3 PM      | 1931                         | 0.0       | 492         | 0.0       | 1500           | 1473            | 458              | 950+            | 29.54                 | 770                 | 62.8            | 7.0          | 30.8 | 11.6            | 9.3          |
| 3-4 PM      | 1913                         | 0.0       | 488         | 0.0       | 1500           | 1478            | 435              | 922+            | 28.48                 | 741                 | 62.8            | 7.0          | 30.8 | 11.7            | 9.5          |
| 4-5 PM      | 1927                         | 0.0       | 491         | 0.0       | 1500           | 1504            | 423              | 914+            | 28.15                 | 732                 | 62.8            | 7.1          | 30.8 | 11.6            | 9.5          |
| 5-6 PM      | 1953                         | 0.0       | 498         | 0.0       | 1500           | 1517            | 435              | 934+            | 28.89                 | 752                 | 62.7            | 7.0          | 30.8 | 11.5            | 9.4          |
| 6-7 PM      | 1756                         | 0.0       | 448         | 0.0       | 1499           | 1345            | 411              | 859+            | 26.38                 | 685                 | 63.1            | 7.2          | 30.8 | 12.3            | 9.9          |
| 7-8 PM      | 1408                         | 0.0       | 359         | 0.0       | 1499           | 1200            | 209              | 568             | 17.18                 | 442                 | 63.8            | 8.6          | 30.8 | 14.1            | 12.7         |
| 8-9 PM      | 1129                         | 0.0       | 288         | 0.0       | 1499           | 1127            | 2                | 290             | 3.62                  | 134                 | 64.3            | 22.0         | 35.9 | 16.0            | 16.3         |
| 9-10 PM     | 856                          | 0.0       | 218         | 0.0       | 1500           | 856             | 0                | 218             | 0.51                  | 0                   | 64.8            | 50.4         | 42.2 | 17.8            | 17.8         |
| 10-11 PM    | 592                          | 0.0       | 151         | 0.0       | 1500           | 592             | 0                | 151             | 0.48                  | 0                   | 65.3            | 51.2         | 43.2 | 19.6            | 19.6         |
| 11PM-MID    | 348                          | 0.0       | 89          | 0.0       | 1500           | 348             | 0                | 89              | 0.46                  | 0                   | 65.8            | 52.0         | 44.1 | 21.2            | 21.2         |

+ INDICATES DIVERSION FLOW EXCEEDS USER-SPECIFIED WARNING LIMIT

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

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

| AVERAGE ACCIDENT NUMBERS (PIA/DAY) |        |
|------------------------------------|--------|
| MAIN ROUTE WITHOUT WORKS           | 0.0078 |
| MAIN ROUTE WITH WORKS              | 0.0053 |
| DIVERSION                          | 0.0371 |

PIA: Personal Injury Accidents

| IMPACTS ON ROAD USERS              |           |
|------------------------------------|-----------|
| ROAD USER COSTS PER DAY ( DOLLARS) | \$145,304 |
| CONGESTED HOURS PER DAY*           | 8         |

\*Delays Exceeding 15 Minutes

**USH 41: USH 45 TO 9TH AVE (WINNEBAGO COUNTY)  
CONTINUOUS (24 HOUR) CLOSURE  
DIVERSION ROUTE: STH 21, USH 45**

**MAY**  
Analyzed for 2009  
Construction Season

**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**  
**SUNDAY NORTHBOUND DIRECTION**

