

**USH 41: STH 15 TO STH 441 (OUTAGAMIE COUNTY)
CONTINUOUS (24 HOUR) CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

AUGUST

Analyzed for 2009
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 | 245 | 0.0 | 1500 | 245 | 0 | 0.45 | 0 | 66.0 | 60.9 | 44.5 |
| 1-2 AM | 157 | 0.0 | 1500 | 157 | 0 | 0.44 | 0 | 66.1 | 61.1 | 44.8 |
| 2-3 AM | 170 | 0.0 | 1500 | 170 | 0 | 0.44 | 0 | 66.1 | 61.0 | 44.8 |
| 3-4 AM | 148 | 0.0 | 1500 | 148 | 0 | 0.44 | 0 | 66.1 | 61.1 | 44.9 |
| 4-5 AM | 466 | 0.0 | 1500 | 466 | 0 | 0.47 | 0 | 65.5 | 60.3 | 43.7 |
| 5-6 AM | 880 | 0.0 | 1500 | 880 | 0 | 0.51 | 0 | 64.8 | 59.2 | 42.1 |
| 6-7 AM | 1840 | 0.0 | 1499 | 1840 | 0 | 4.19 | 112 | 63.0 | 36.1 | 30.8 |
| 7-8 AM | 2716 | 0.0 | 1499 | 1500 | 1216 | 15.39+ | 399 | 58.7 | 16.5 | 30.8 |
| 8-9 AM | 2095 | 0.0 | 1500 | 1508 | 587 | 15.72+ | 399 | 62.5 | 16.6 | 30.8 |
| 9-10 AM | 1863 | 0.0 | 1500 | 1515 | 348 | 15.73+ | 398 | 62.9 | 16.6 | 30.8 |
| 10-11 AM | 1982 | 0.0 | 1500 | 1500 | 482 | 15.77+ | 400 | 62.7 | 16.5 | 30.8 |
| 11AM-NOON | 2053 | 0.0 | 1500 | 1500 | 553 | 15.76+ | 400 | 62.5 | 16.5 | 30.8 |
| NOON-1PM | 2215 | 0.0 | 1500 | 1500 | 715 | 15.73+ | 400 | 62.3 | 16.5 | 30.8 |
| 1-2 PM | 2348 | 0.0 | 1500 | 1500 | 848 | 15.71+ | 400 | 62.0 | 16.5 | 30.8 |
| 2-3 PM | 2347 | 0.0 | 1500 | 1500 | 847 | 15.71+ | 400 | 62.0 | 16.5 | 30.8 |
| 3-4 PM | 2517 | 0.0 | 1500 | 1500 | 1017 | 15.59+ | 400 | 60.7 | 16.5 | 30.8 |
| 4-5 PM | 2762 | 0.0 | 1500 | 1500 | 1262 | 15.34+ | 400 | 58.2 | 16.5 | 30.8 |
| 5-6 PM | 2598 | 0.0 | 1500 | 1500 | 1098 | 15.51+ | 400 | 59.9 | 16.5 | 30.8 |
| 6-7 PM | 1861 | 0.0 | 1500 | 1526 | 335 | 15.68+ | 396 | 62.9 | 16.6 | 30.8 |
| 7-8 PM | 1239 | 0.0 | 1499 | 1239 | 0 | 11.14 | 287 | 64.1 | 21.2 | 31.9 |
| 8-9 PM | 956 | 0.0 | 1500 | 956 | 0 | 0.98 | 16 | 64.6 | 54.8 | 41.7 |
| 9-10 PM | 818 | 0.0 | 1500 | 818 | 0 | 0.50 | 0 | 64.8 | 59.4 | 42.4 |
| 10-11 PM | 742 | 0.0 | 1500 | 742 | 0 | 0.49 | 0 | 65.0 | 59.6 | 42.6 |
| 11PM-MID | 531 | 0.0 | 1500 | 531 | 0 | 0.47 | 0 | 65.4 | 60.1 | 43.4 |

+ 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 |

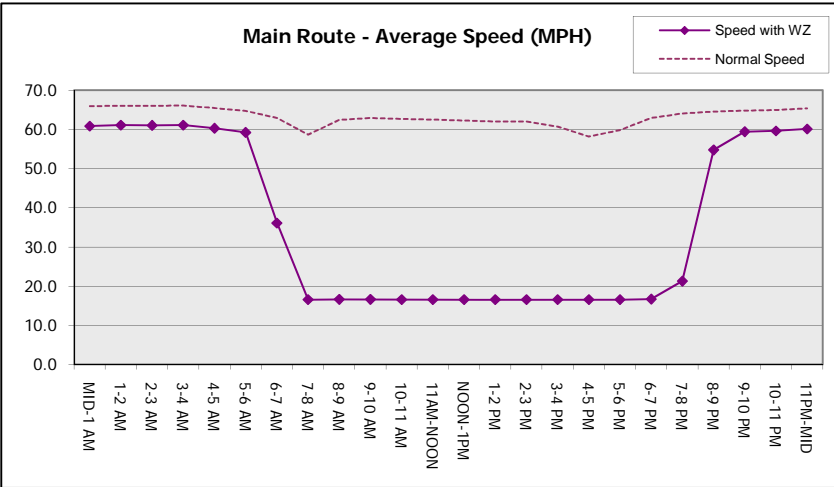
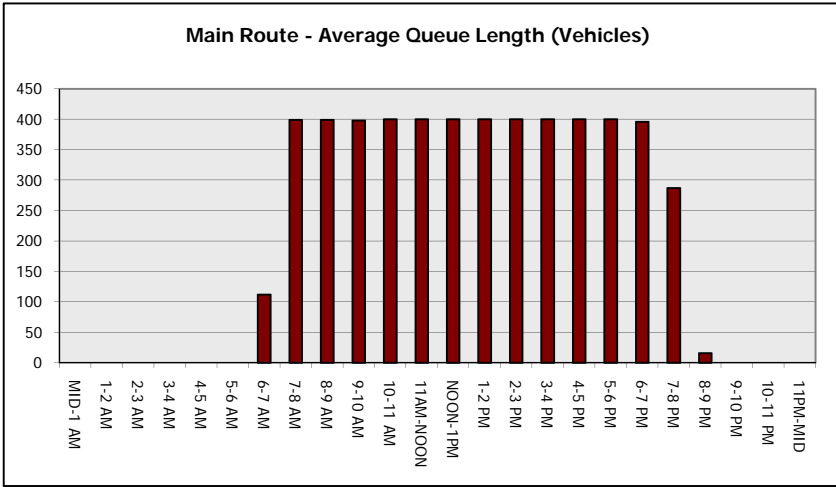
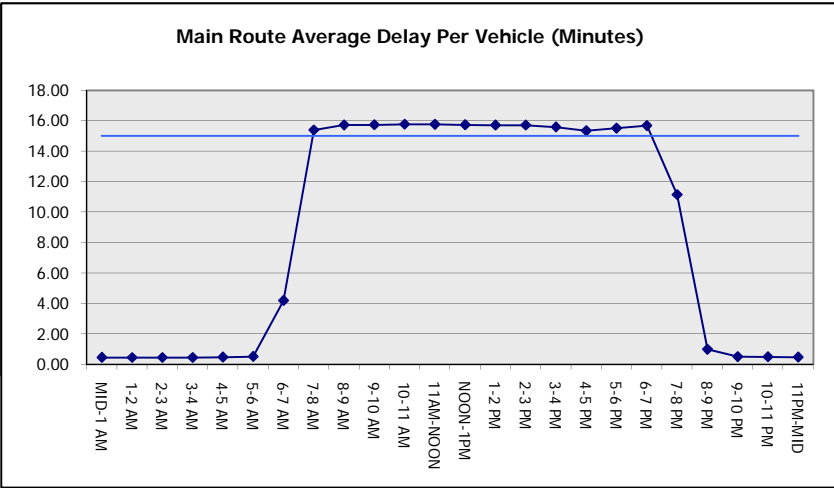
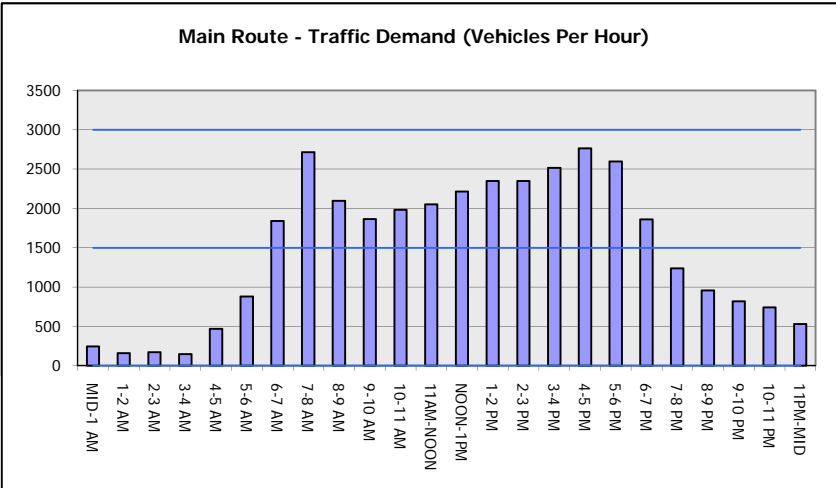
| AVERAGE ACCIDENT NUMBERS (PIA/DAY) | |
|------------------------------------|-----------|
| MAIN ROUTE WITHOUT WORKS | 0.0334 |
| MAIN ROUTE WITH WORKS | 0.0229 |
| 'DIVERSION' | 0.0203 |
| PIA: Personal Injury Accidents | |
| IMPACTS ON ROAD USERS | |
| ROAD USER COSTS PER DAY | \$102,328 |
| CONGESTED HOURS PER DAY* | 12 |

*Delays Exceeding User-Specified Maximum

**USH 41: STH 15 TO STH 441 (OUTAGAMIE COUNTY)
CONTINUOUS (24 HOUR) CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

AUGUST
Analyzed for 2009
Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
FRIDAY SOUTHBOUND DIRECTION



| | |
|--|--|
| USH 41: STH 15 TO STH 441 (OUTAGAMIE COUNTY) CONTINUOUS (24 HOUR) CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD) | AUGUST |
| | Analyzed for 2009 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 | 274 | 0.0 | 1500 | 274 | 0 | 0.45 | 0 | 65.9 | 60.8 | 44.4 |
| 1-2 AM | 184 | 0.0 | 1500 | 184 | 0 | 0.44 | 0 | 66.0 | 61.0 | 44.8 |
| 2-3 AM | 179 | 0.0 | 1500 | 179 | 0 | 0.44 | 0 | 66.1 | 61.0 | 44.8 |
| 3-4 AM | 148 | 0.0 | 1500 | 148 | 0 | 0.44 | 0 | 66.1 | 61.1 | 44.9 |
| 4-5 AM | 271 | 0.0 | 1500 | 271 | 0 | 0.45 | 0 | 65.9 | 60.8 | 44.4 |
| 5-6 AM | 725 | 0.0 | 1500 | 725 | 0 | 0.49 | 0 | 65.0 | 59.6 | 42.7 |
| 6-7 AM | 1280 | 0.0 | 1499 | 1280 | 0 | 0.73 | 0 | 64.0 | 56.5 | 36.5 |
| 7-8 AM | 1812 | 0.0 | 1499 | 1812 | 0 | 5.74 | 147 | 63.0 | 31.2 | 30.8 |
| 8-9 AM | 1542 | 0.0 | 1499 | 1542 | 0 | 13.59 | 339 | 63.5 | 18.4 | 30.8 |
| 9-10 AM | 1594 | 0.0 | 1500 | 1531 | 64 | 15.21+ | 383 | 63.4 | 17.0 | 30.8 |
| 10-11 AM | 1839 | 0.0 | 1500 | 1500 | 339 | 15.80+ | 400 | 63.0 | 16.5 | 30.8 |
| 11AM-NOON | 2074 | 0.0 | 1500 | 1500 | 574 | 15.76+ | 400 | 62.5 | 16.5 | 30.8 |
| NOON-1PM | 2219 | 0.0 | 1500 | 1500 | 719 | 15.73+ | 400 | 62.2 | 16.5 | 30.8 |
| 1-2 PM | 2433 | 0.0 | 1500 | 1500 | 933 | 15.67+ | 400 | 61.6 | 16.5 | 30.8 |
| 2-3 PM | 2575 | 0.0 | 1500 | 1500 | 1075 | 15.53+ | 400 | 60.1 | 16.5 | 30.8 |
| 3-4 PM | 2877 | 0.0 | 1500 | 1500 | 1377 | 15.21+ | 400 | 57.0 | 16.5 | 30.8 |
| 4-5 PM | 3314 | 0.0 | 1500 | 1500 | 1814 | 14.68+ | 400 | 52.5 | 16.5 | 30.8 |
| 5-6 PM | 2815 | 0.0 | 1500 | 1500 | 1315 | 15.28+ | 400 | 57.6 | 16.5 | 30.8 |
| 6-7 PM | 2018 | 0.0 | 1500 | 1500 | 518 | 15.77+ | 400 | 62.6 | 16.5 | 30.8 |
| 7-8 PM | 1454 | 0.0 | 1500 | 1454 | 0 | 15.17+ | 381 | 63.7 | 17.1 | 30.8 |
| 8-9 PM | 1363 | 0.0 | 1500 | 1363 | 0 | 11.27 | 279 | 63.8 | 21.1 | 30.8 |
| 9-10 PM | 1159 | 0.0 | 1499 | 1159 | 0 | 2.62 | 71 | 64.2 | 43.5 | 37.0 |
| 10-11 PM | 820 | 0.0 | 1500 | 820 | 0 | 0.50 | 0 | 64.8 | 59.4 | 42.3 |
| 11PM-MID | 530 | 0.0 | 1500 | 530 | 0 | 0.47 | 0 | 65.4 | 60.1 | 43.4 |

+ 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 | 0.0334 |
| MAIN ROUTE WITH WORKS | 0.0234 |
| 'DIVERSION' | 0.0190 |

PIA: Personal Injury Accidents

| ECONOMIC IMPACT ON ROAD USERS | |
|-------------------------------|----------|
| ROAD USER COSTS PER DAY | \$99,767 |
| CONGESTED HOURS PER DAY* | 11 |

*Delays Exceeding User-Specified Maximum

**USH 41: STH 15 TO STH 441 (OUTAGAMIE COUNTY)
CONTINUOUS (24 HOUR) CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

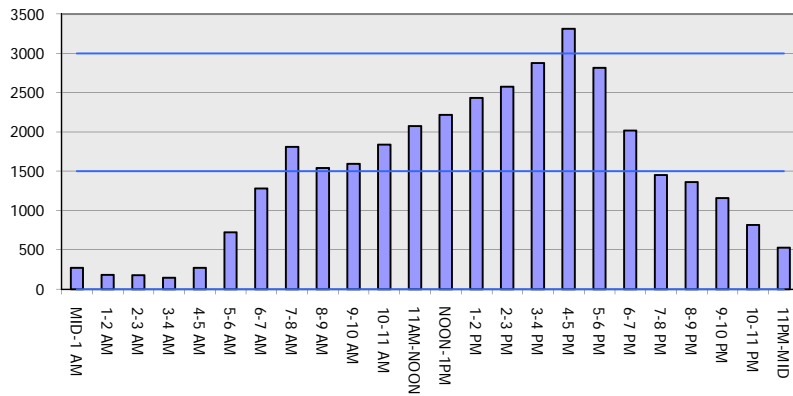
AUGUST

Analyzed for 2009
Construction Season

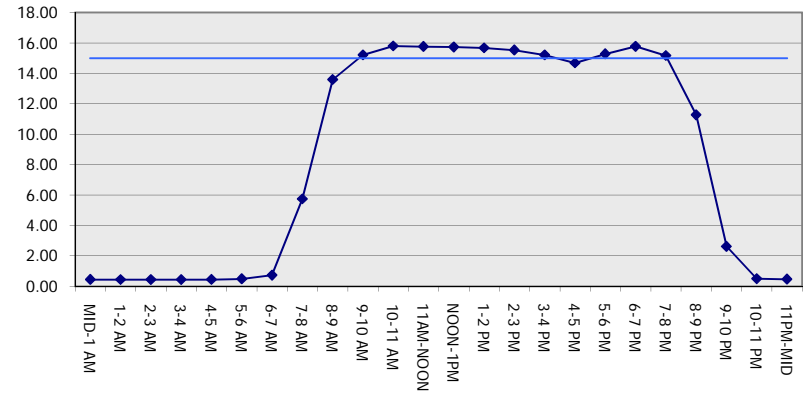
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY NORTHBOUND DIRECTION

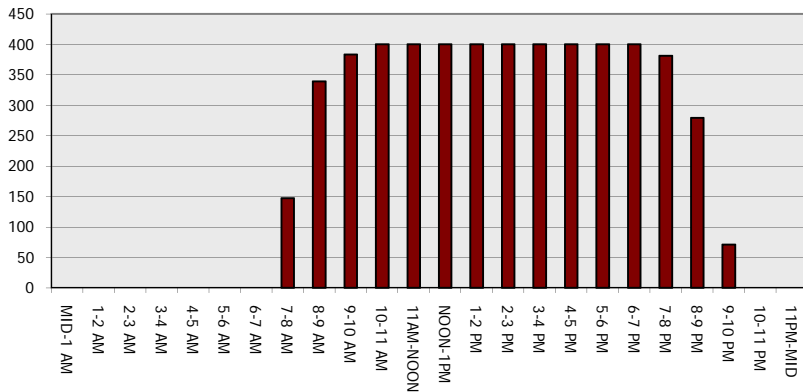
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

