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| USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY) OFF-PEAK DAY CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD) | OCTOBER Analyzed for 2009 Construction Season |
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| | |
|--|----------------------|
| 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 | 729 | 0.0 | OFF | 729 | 0 | 0.00 | 0 | 69.8 | 69.8 | 69.8 | |
| 1-2 AM | 482 | 0.0 | OFF | 482 | 0 | 0.00 | 0 | 70.1 | 70.1 | 70.1 | |
| 2-3 AM | 425 | 0.0 | OFF | 425 | 0 | 0.00 | 0 | 70.2 | 70.2 | 70.2 | |
| 3-4 AM | 496 | 0.0 | OFF | 496 | 0 | 0.00 | 0 | 70.1 | 70.1 | 70.1 | |
| 4-5 AM | 816 | 0.0 | OFF | 816 | 0 | 0.00 | 0 | 69.7 | 69.7 | 69.7 | |
| 5-6 AM | 2264 | 0.0 | OFF | 2264 | 0 | 0.00 | 0 | 67.9 | 67.9 | 67.9 | |
| 6-7 AM | 4972 | 0.0 | OFF | 4972 | 0 | 0.00 | 0 | 56.9 | 56.9 | 56.9 | |
| 7-8 AM | 5772 | 0.0 | OFF | 5772 | 0 | 0.00 | 0 | 51.4 | 51.4 | 51.4 | |
| 8-9 AM | 5057 | 0.0 | OFF | 5057 | 0 | 0.00 | 0 | 56.3 | 56.3 | 56.3 | |
| 9-10 AM | 4459 | 0.0 | OFF | 4459 | 0 | 0.00 | 0 | 60.4 | 60.4 | 60.4 | |
| 10-11 AM | 3426 | 0.0 | 2999 | 3426 | 0 | 3.88 | 206 | 66.4 | 22.2 | 37.3 | |
| 11AM-NOON | 4675 | 0.0 | 3000 | 3571 | 1104 | 15.73+ | 861 | 58.9 | 10.5 | 37.3 | |
| NOON-1PM | 4902 | 0.0 | 2999 | 2971 | 1931 | 17.46+ | 951 | 57.4 | 10.0 | 37.3 | |
| 1-2 PM | 5013 | 0.0 | 3000 | 3000 | 2013 | 17.45+ | 953 | 56.6 | 10.0 | 37.3 | |
| 2-3 PM | 5676 | 0.0 | 3000 | 3000 | 2676 | 17.13+ | 953 | 52.1 | 10.0 | 37.3 | |
| 3-4 PM | 4722 | 0.0 | OFF | 4722 | 0 | 3.95 | 367 | 58.6 | 20.7 | 20.7 | |
| 4-5 PM | 4558 | 0.0 | OFF | 4558 | 0 | 0.00 | 0 | 59.7 | 59.7 | 59.7 | |
| 5-6 PM | 4318 | 0.0 | OFF | 4318 | 0 | 0.00 | 0 | 61.4 | 61.4 | 61.4 | |
| 6-7 PM | 4201 | 0.0 | OFF | 4201 | 0 | 0.00 | 0 | 62.2 | 62.2 | 62.2 | |
| 7-8 PM | 3405 | 0.0 | OFF | 3405 | 0 | 0.00 | 0 | 66.5 | 66.5 | 66.5 | |
| 8-9 PM | 2554 | 0.0 | OFF | 2554 | 0 | 0.00 | 0 | 67.6 | 67.6 | 67.6 | |
| 9-10 PM | 2452 | 0.0 | OFF | 2452 | 0 | 0.00 | 0 | 67.7 | 67.7 | 67.7 | |
| 10-11 PM | 1865 | 0.0 | OFF | 1865 | 0 | 0.00 | 0 | 68.4 | 68.4 | 68.4 | |
| 11PM-MID | 1562 | 0.0 | OFF | 1562 | 0 | 0.00 | 0 | 68.8 | 68.8 | 68.8 | |

"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 | 0.0263 |
| MAIN ROUTE WITH WORKS | 0.0227 |
| 'DIVERSION' | 0.0060 |
| <small>PIA: Personal Injury Accidents</small> | |
| IMPACTS ON ROAD USERS | |
| ROAD USER COSTS PER DAY | \$59,342 |
| CONGESTED HOURS PER DAY* | 4 |

*Delays Exceeding User-Specified Maximum

**USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY)
OFF-PEAK DAY CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

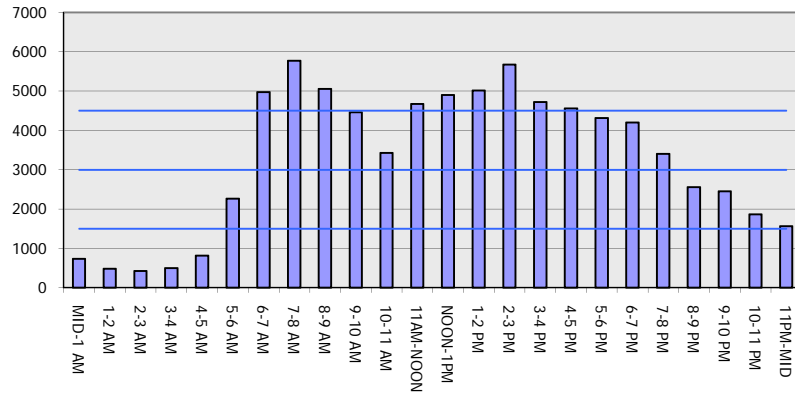
OCTOBER

Analyzed for 2009
Construction Season

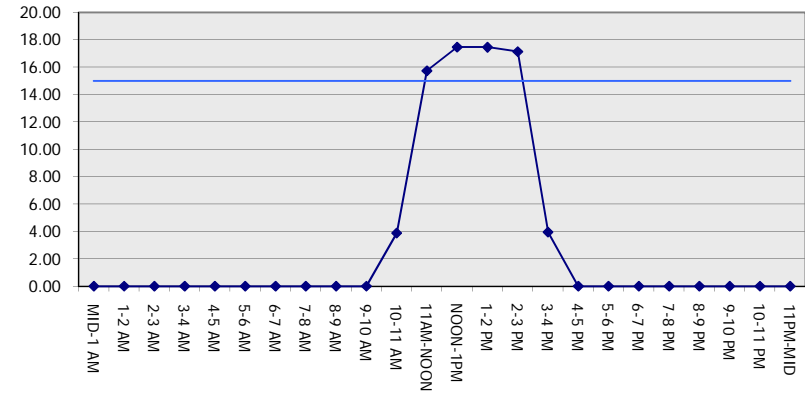
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY SOUTHBOUND DIRECTION

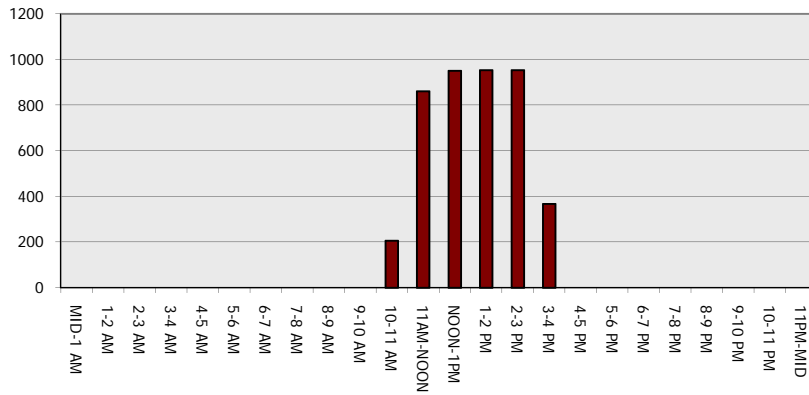
Main Route - Traffic Demand (Vehicles Per Hour)



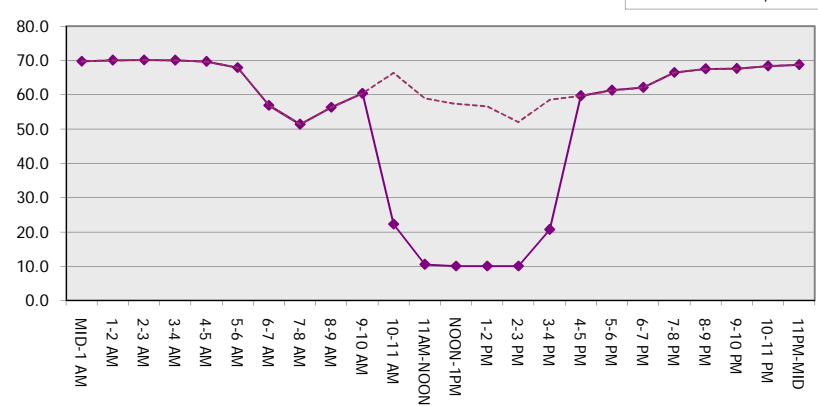
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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|---|--|
| USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY) OFF-PEAK DAY CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD) | OCTOBER |
| | 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 | 992 | 0.0 | OFF | 992 | 0 | 0.00 | 0 | 69.5 | 69.5 | 69.5 | |
| 1-2 AM | 763 | 0.0 | OFF | 763 | 0 | 0.00 | 0 | 69.8 | 69.8 | 69.8 | |
| 2-3 AM | 705 | 0.0 | OFF | 705 | 0 | 0.00 | 0 | 69.9 | 69.9 | 69.9 | |
| 3-4 AM | 748 | 0.0 | OFF | 748 | 0 | 0.00 | 0 | 69.8 | 69.8 | 69.8 | |
| 4-5 AM | 1311 | 0.0 | OFF | 1311 | 0 | 0.00 | 0 | 69.1 | 69.1 | 69.1 | |
| 5-6 AM | 3150 | 0.0 | OFF | 3150 | 0 | 0.00 | 0 | 66.8 | 66.8 | 66.8 | |
| 6-7 AM | 5295 | 0.0 | OFF | 5295 | 0 | 0.00 | 0 | 54.7 | 54.7 | 54.7 | |
| 7-8 AM | 6310 | 0.0 | OFF | 6310 | 0 | 0.00 | 0 | 47.8 | 47.8 | 47.8 | |
| 8-9 AM | 5149 | 0.0 | OFF | 5149 | 0 | 0.00 | 0 | 55.7 | 55.7 | 55.7 | |
| 9-10 AM | 4472 | 0.0 | OFF | 4472 | 0 | 0.00 | 0 | 60.3 | 60.3 | 60.3 | |
| 10-11 AM | 3629 | 0.0 | 2999 | 3629 | 0 | 5.28 | 301 | 66.1 | 18.8 | 37.3 | |
| 11AM-NOON | 4875 | 0.0 | 2999 | 3297 | 1578 | 16.93+ | 922 | 57.6 | 10.1 | 37.3 | |
| NOON-1PM | 5210 | 0.0 | 3000 | 3000 | 2210 | 17.36+ | 953 | 55.3 | 10.0 | 37.3 | |
| 1-2 PM | 5476 | 0.0 | 3000 | 3000 | 2476 | 17.23+ | 953 | 53.5 | 10.0 | 37.3 | |
| 2-3 PM | 6101 | 0.0 | 3000 | 3000 | 3101 | 16.89+ | 953 | 49.2 | 10.0 | 37.3 | |
| 3-4 PM | 6011 | 0.0 | OFF | 6011 | 0 | 9.32 | 932 | 49.8 | 10.6 | 10.6 | |
| 4-5 PM | 6507 | 0.0 | OFF | 6507 | 0 | 11.73 | 1191 | 46.4 | 8.7 | 8.7 | |
| 5-6 PM | 6481 | 0.0 | OFF | 6481 | 0 | 16.68 | 1686 | 46.6 | 6.5 | 6.5 | |
| 6-7 PM | 4339 | 0.0 | OFF | 4339 | 0 | 11.43 | 1096 | 61.2 | 9.3 | 9.3 | |
| 7-8 PM | 3677 | 0.0 | OFF | 3677 | 0 | 0.21 | 15 | 65.8 | 59.3 | 59.3 | |
| 8-9 PM | 2926 | 0.0 | OFF | 2926 | 0 | 0.00 | 0 | 67.1 | 67.1 | 67.1 | |
| 9-10 PM | 3002 | 0.0 | OFF | 3002 | 0 | 0.00 | 0 | 67.0 | 67.0 | 67.0 | |
| 10-11 PM | 2354 | 0.0 | OFF | 2354 | 0 | 0.00 | 0 | 67.8 | 67.8 | 67.8 | |
| 11PM-MID | 1885 | 0.0 | OFF | 1885 | 0 | 0.00 | 0 | 68.4 | 68.4 | 68.4 | |

"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 | 0.0305 |
| MAIN ROUTE WITH WORKS | 0.0264 |
| 'DIVERSION' | 0.0072 |

PIA: Personal Injury Accidents

| ECONOMIC IMPACT ON ROAD USERS | |
|-------------------------------|-----------|
| ROAD USER COSTS PER DAY | \$107,440 |
| CONGESTED HOURS PER DAY* | 4 |

*Delays Exceeding User-Specified Maximum

**USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY)
OFF-PEAK DAY CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

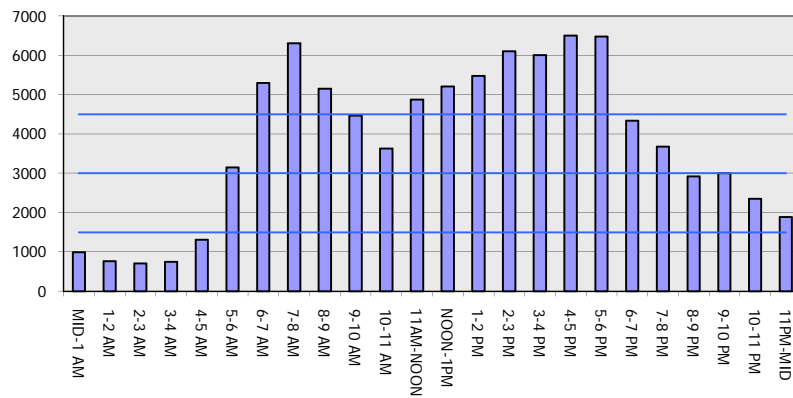
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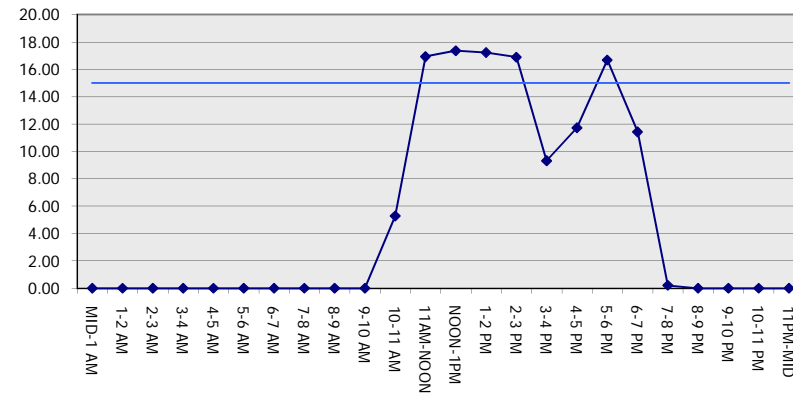
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY NORTHBOUND DIRECTION

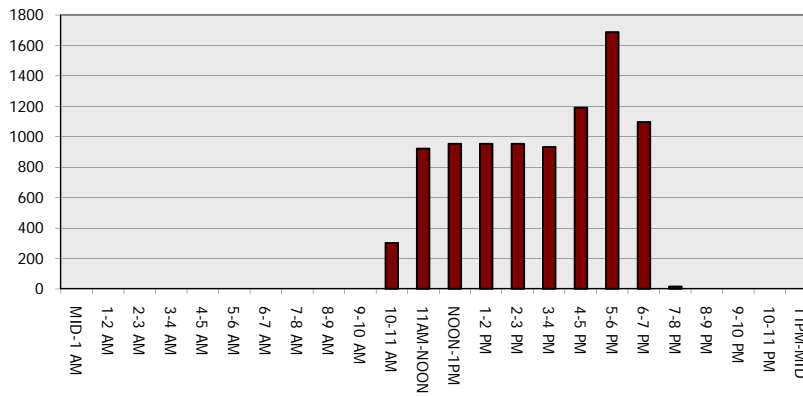
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

