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| IH 94: MN 96 TO STH 35 N OFF-PEAK DAY 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD) | OCTOBER |
| | Analyzed for 2009 Construction Season |

SUMMARY OF TRAFFIC MODEL OUTPUT

FRIDAY WESTBOUND 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 | 733 | 0.0 | OFF | 733 | 0 | 0.00 | 0 | 69.8 | 69.8 | 69.8 | |
| 1-2 AM | 633 | 0.0 | OFF | 633 | 0 | 0.00 | 0 | 69.9 | 69.9 | 69.9 | |
| 2-3 AM | 693 | 0.0 | OFF | 693 | 0 | 0.00 | 0 | 69.9 | 69.9 | 69.9 | |
| 3-4 AM | 803 | 0.0 | OFF | 803 | 0 | 0.00 | 0 | 69.7 | 69.7 | 69.7 | |
| 4-5 AM | 1215 | 0.0 | OFF | 1215 | 0 | 0.00 | 0 | 69.2 | 69.2 | 69.2 | |
| 5-6 AM | 2181 | 0.0 | OFF | 2181 | 0 | 0.00 | 0 | 68.0 | 68.0 | 68.0 | |
| 6-7 AM | 2540 | 0.0 | OFF | 2540 | 0 | 0.00 | 0 | 67.6 | 67.6 | 67.6 | |
| 7-8 AM | 2748 | 0.0 | OFF | 2748 | 0 | 0.00 | 0 | 67.3 | 67.3 | 67.3 | |
| 8-9 AM | 2557 | 0.0 | OFF | 2557 | 0 | 0.00 | 0 | 67.6 | 67.6 | 67.6 | |
| 9-10 AM | 2660 | 0.0 | 1499 | 2660 | 0 | 19.70+ | 566 | 67.4 | 5.4 | 30.8 | |
| 10-11 AM | 3003 | 0.0 | 1500 | 1575 | 1428 | 47.55+ | 1232 | 67.0 | 3.9 | 30.8 | |
| 11AM-NOON | 3371 | 0.0 | 1500 | 1500 | 1871 | 48.24+ | 1251 | 66.6 | 3.9 | 30.8 | |
| NOON-1PM | 3612 | 0.0 | 1500 | 1500 | 2112 | 48.23+ | 1251 | 66.2 | 3.9 | 30.8 | |
| 1-2 PM | 4171 | 0.0 | 1500 | 1500 | 2671 | 48.04+ | 1251 | 62.3 | 3.9 | 30.8 | |
| 2-3 PM | 4590 | 0.0 | 1500 | 1500 | 3090 | 47.89+ | 1251 | 59.5 | 3.9 | 30.8 | |
| 3-4 PM | 4578 | 0.0 | 1500 | 1500 | 3078 | 47.89+ | 1251 | 59.6 | 3.9 | 30.8 | |
| 4-5 PM | 4524 | 0.0 | OFF | 4524 | 0 | 5.33 | 516 | 59.9 | 9.5 | 9.5 | |
| 5-6 PM | 4222 | 0.0 | OFF | 4222 | 0 | 0.00 | 0 | 62.0 | 62.0 | 62.0 | |
| 6-7 PM | 3644 | 0.0 | OFF | 3644 | 0 | 0.00 | 0 | 66.0 | 66.0 | 66.0 | |
| 7-8 PM | 3034 | 0.0 | OFF | 3034 | 0 | 0.00 | 0 | 66.9 | 66.9 | 66.9 | |
| 8-9 PM | 2586 | 0.0 | OFF | 2586 | 0 | 0.00 | 0 | 67.5 | 67.5 | 67.5 | |
| 9-10 PM | 1988 | 0.0 | OFF | 1988 | 0 | 0.00 | 0 | 68.2 | 68.2 | 68.2 | |
| 10-11 PM | 1570 | 0.0 | OFF | 1570 | 0 | 0.00 | 0 | 68.8 | 68.8 | 68.8 | |
| 11PM-MID | 968 | 0.0 | OFF | 968 | 0 | 0.00 | 0 | 69.6 | 69.6 | 69.6 | |

"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 | 0.0100 |
| MAIN ROUTE WITH WORKS | 0.0064 |
| 'DIVERSION' | 0.0053 |
| PIA: Personal Injury Accidents | |
| IMPACTS ON ROAD USERS | |
| ROAD USER COSTS PER DAY | \$254,773 |
| CONGESTED HOURS PER DAY* | 7 |

*Delays Exceeding User-Specified Maximum

**IH 94: MN 96 TO STH 35 N
OFF-PEAK DAY 2 LANE CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

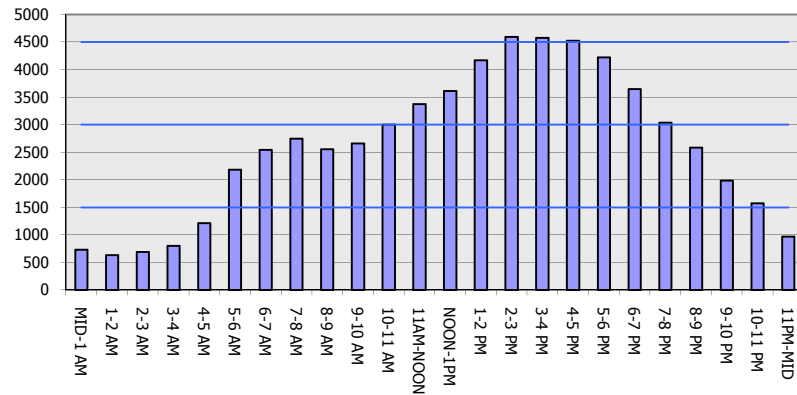
OCTOBER

Analyzed for 2009
Construction Season

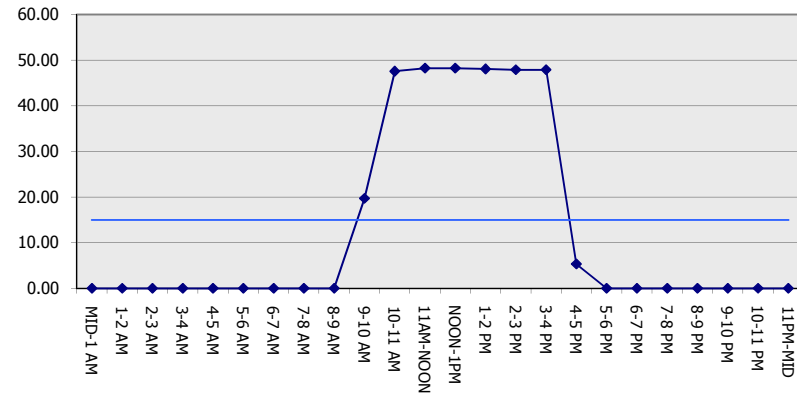
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY WESTBOUND DIRECTION

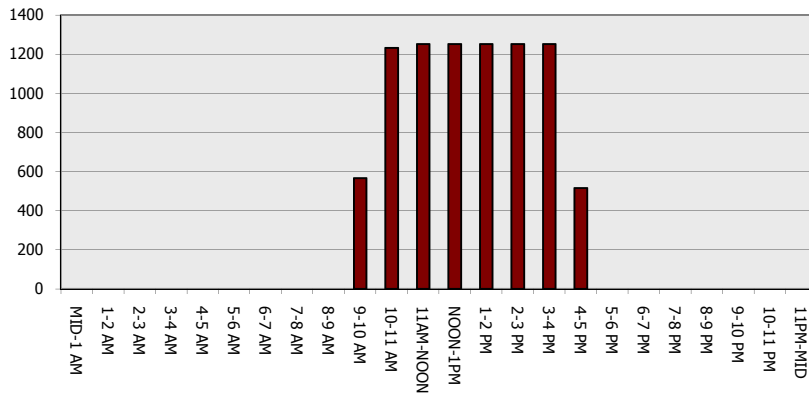
Main Route - Traffic Demand (Vehicles Per Hour)



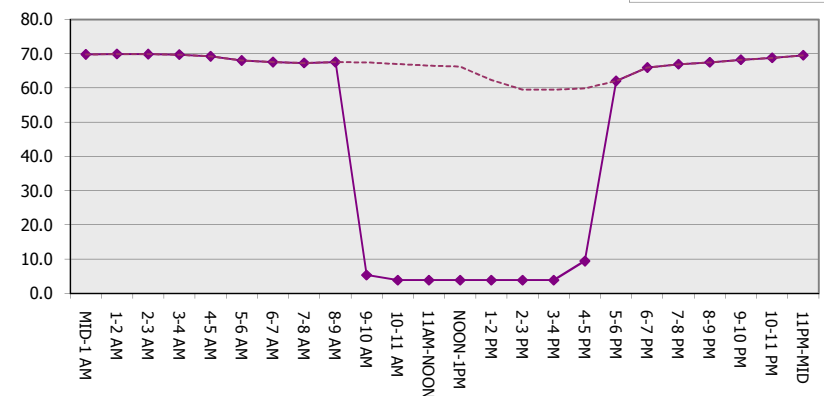
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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|---|--|
| IH 94: MN 96 TO STH 35 N OFF-PEAK DAY 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD) | OCTOBER Analyzed for 2009 Construction Season |
|---|--|

SUMMARY OF TRAFFIC MODEL OUTPUT
FRIDAY EASTBOUND 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 | 701 | 0.0 | OFF | 701 | 0 | 0.00 | 0 | 69.9 | 69.9 | 69.9 |
| 1-2 AM | 515 | 0.0 | OFF | 515 | 0 | 0.00 | 0 | 70.1 | 70.1 | 70.1 |
| 2-3 AM | 402 | 0.0 | OFF | 402 | 0 | 0.00 | 0 | 70.2 | 70.2 | 70.2 |
| 3-4 AM | 466 | 0.0 | OFF | 466 | 0 | 0.00 | 0 | 70.2 | 70.2 | 70.2 |
| 4-5 AM | 571 | 0.0 | OFF | 571 | 0 | 0.00 | 0 | 70.0 | 70.0 | 70.0 |
| 5-6 AM | 1016 | 0.0 | OFF | 1016 | 0 | 0.00 | 0 | 69.5 | 69.5 | 69.5 |
| 6-7 AM | 1567 | 0.0 | OFF | 1567 | 0 | 0.00 | 0 | 68.8 | 68.8 | 68.8 |
| 7-8 AM | 2451 | 0.0 | OFF | 2451 | 0 | 0.00 | 0 | 67.7 | 67.7 | 67.7 |
| 8-9 AM | 2761 | 0.0 | OFF | 2761 | 0 | 0.00 | 0 | 67.3 | 67.3 | 67.3 |
| 9-10 AM | 3486 | 0.0 | 1499 | 3004 | 482 | 30.04+ | 830 | 66.4 | 4.6 | 30.8 |
| 10-11 AM | 4117 | 0.0 | 1499 | 1500 | 2617 | 48.06+ | 1251 | 62.7 | 3.9 | 30.8 |
| 11AM-NOON | 4203 | 0.0 | 1499 | 1500 | 2704 | 48.03+ | 1251 | 62.2 | 3.9 | 30.8 |
| NOON-1PM | 4282 | 0.0 | 1499 | 1500 | 2782 | 48.00+ | 1251 | 61.6 | 3.9 | 30.8 |
| 1-2 PM | 5055 | 0.0 | 1499 | 1500 | 3555 | 47.70+ | 1251 | 56.3 | 3.9 | 30.8 |
| 2-3 PM | 5369 | 0.0 | 1499 | 1500 | 3869 | 47.55+ | 1251 | 54.2 | 3.9 | 30.8 |
| 3-4 PM | 5644 | 0.0 | 1499 | 1500 | 4144 | 47.42+ | 1251 | 52.3 | 3.9 | 30.8 |
| 4-5 PM | 5565 | 0.0 | OFF | 5565 | 0 | 12.93 | 1286 | 52.8 | 4.3 | 4.3 |
| 5-6 PM | 5071 | 0.0 | OFF | 5071 | 0 | 6.18 | 603 | 56.2 | 8.3 | 8.3 |
| 6-7 PM | 4662 | 0.0 | OFF | 4662 | 0 | 0.09 | 7 | 59.0 | 54.2 | 54.2 |
| 7-8 PM | 3577 | 0.0 | OFF | 3577 | 0 | 0.00 | 0 | 66.3 | 66.3 | 66.3 |
| 8-9 PM | 2338 | 0.0 | OFF | 2338 | 0 | 0.00 | 0 | 67.8 | 67.8 | 67.8 |
| 9-10 PM | 1848 | 0.0 | OFF | 1848 | 0 | 0.00 | 0 | 68.4 | 68.4 | 68.4 |
| 10-11 PM | 1498 | 0.0 | OFF | 1498 | 0 | 0.00 | 0 | 68.9 | 68.9 | 68.9 |
| 11PM-MID | 1121 | 0.0 | OFF | 1121 | 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 | 0.0109 |
| MAIN ROUTE WITH WORKS | 0.0064 |
| 'DIVERSION' | 0.0074 |

PIA: Personal Injury Accidents

| ECONOMIC IMPACT ON ROAD USERS | |
|-------------------------------|-----------|
| ROAD USER COSTS PER DAY | \$336,219 |
| CONGESTED HOURS PER DAY* | 7 |

*Delays Exceeding User-Specified Maximum

**IH 94: MN 96 TO STH 35 N
OFF-PEAK DAY 2 LANE CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

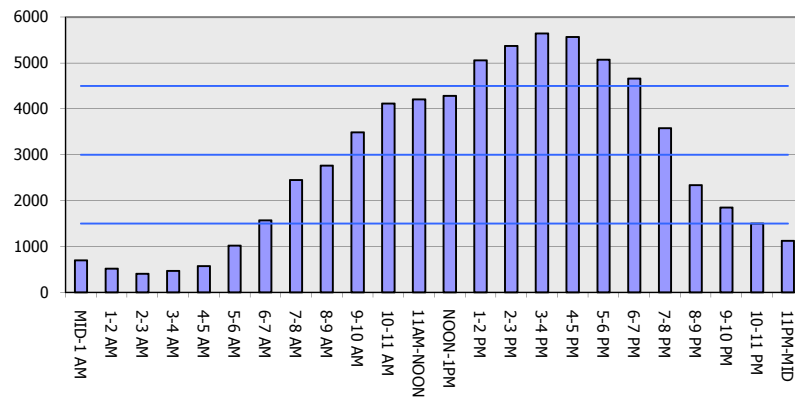
OCTOBER

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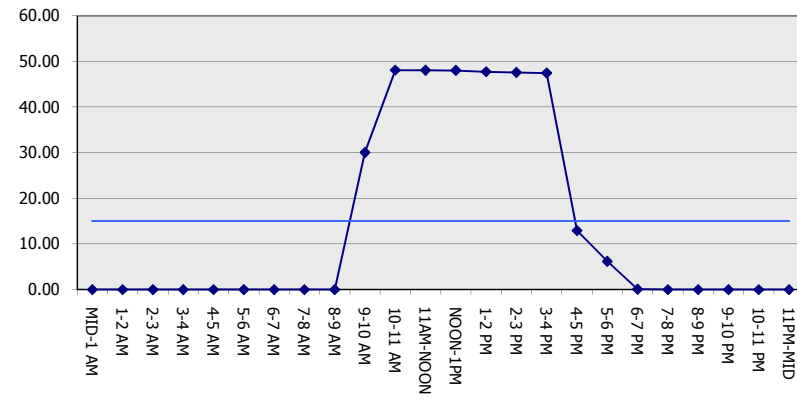
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY EASTBOUND DIRECTION

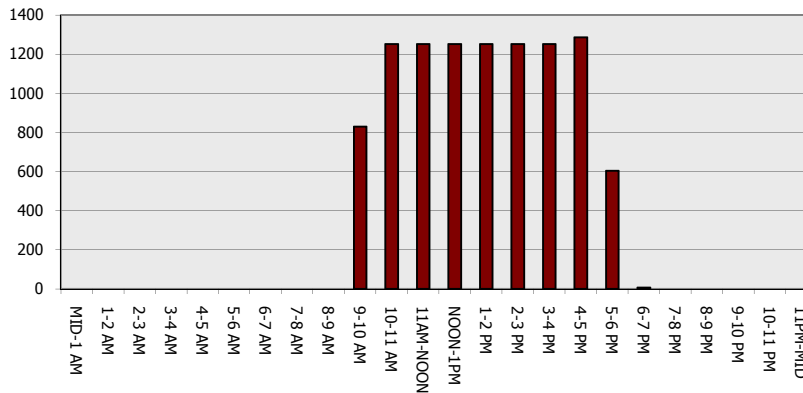
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

