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| IH 94: MN 96 TO STH 35 N CONTINUOUS (24 HOUR) 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD) | MAY |
| | 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 | 752 | 0.0 | 1499 | 752 | 0 | 19.16 | 530 | 69.8 | 5.4 | 34.7 | |
| 1-2 AM | 701 | 0.0 | 1500 | 701 | 0 | 0.43 | 12 | 69.9 | 46.5 | 42.7 | |
| 2-3 AM | 681 | 0.0 | 1500 | 681 | 0 | 0.28 | 0 | 69.9 | 52.7 | 42.8 | |
| 3-4 AM | 773 | 0.0 | 1500 | 773 | 0 | 0.28 | 0 | 69.8 | 52.4 | 42.5 | |
| 4-5 AM | 1264 | 0.0 | 1499 | 1264 | 0 | 0.40 | 0 | 69.2 | 47.4 | 36.7 | |
| 5-6 AM | 2171 | 0.0 | 1499 | 2171 | 0 | 9.18 | 284 | 68.1 | 7.8 | 30.8 | |
| 6-7 AM | 2902 | 0.0 | 1499 | 2064 | 838 | 42.99+ | 1116 | 67.1 | 4.0 | 30.8 | |
| 7-8 AM | 2883 | 0.0 | 1499 | 1489 | 1395 | 47.45+ | 1229 | 67.1 | 3.9 | 30.8 | |
| 8-9 AM | 2645 | 0.0 | 1499 | 1486 | 1159 | 46.74+ | 1210 | 67.4 | 4.0 | 30.8 | |
| 9-10 AM | 2735 | 0.0 | 1499 | 1509 | 1227 | 46.93+ | 1215 | 67.3 | 4.0 | 30.8 | |
| 10-11 AM | 2838 | 0.0 | 1499 | 1512 | 1326 | 47.23+ | 1223 | 67.2 | 3.9 | 30.8 | |
| 11AM-NOON | 3095 | 0.0 | 1499 | 1526 | 1569 | 47.99+ | 1243 | 66.9 | 3.9 | 30.8 | |
| NOON-1PM | 3463 | 0.0 | 1499 | 1500 | 1963 | 48.24+ | 1251 | 66.4 | 3.9 | 30.8 | |
| 1-2 PM | 3870 | 0.0 | 1499 | 1500 | 2370 | 48.14+ | 1251 | 64.4 | 3.9 | 30.8 | |
| 2-3 PM | 3990 | 0.0 | 1499 | 1500 | 2491 | 48.10+ | 1251 | 63.6 | 3.9 | 30.8 | |
| 3-4 PM | 4232 | 0.0 | 1499 | 1500 | 2732 | 48.02+ | 1251 | 61.9 | 3.9 | 30.8 | |
| 4-5 PM | 4278 | 0.0 | 1499 | 1500 | 2778 | 48.00+ | 1251 | 61.6 | 3.9 | 30.8 | |
| 5-6 PM | 4095 | 0.0 | 1499 | 1500 | 2595 | 48.07+ | 1251 | 62.9 | 3.9 | 30.8 | |
| 6-7 PM | 3567 | 0.0 | 1499 | 1500 | 2067 | 48.23+ | 1251 | 66.3 | 3.9 | 30.8 | |
| 7-8 PM | 2961 | 0.0 | 1499 | 1463 | 1498 | 47.77+ | 1238 | 67.1 | 3.9 | 30.8 | |
| 8-9 PM | 2696 | 0.0 | 1499 | 1479 | 1216 | 46.90+ | 1214 | 67.4 | 4.0 | 30.8 | |
| 9-10 PM | 2291 | 0.0 | 1499 | 1497 | 794 | 46.53+ | 1204 | 67.9 | 4.0 | 30.8 | |
| 10-11 PM | 1832 | 0.0 | 1499 | 1497 | 336 | 46.43+ | 1201 | 68.4 | 4.0 | 30.8 | |
| 11PM-MID | 1195 | 0.0 | 1499 | 1195 | 0 | 41.60+ | 1075 | 69.2 | 4.0 | 30.8 | |

+ 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 | 0.0099 |
| MAIN ROUTE WITH WORKS | 0.0017 |
| 'DIVERSION' | 0.0105 |
| PIA: Personal Injury Accidents | |
| IMPACTS ON ROAD USERS | |
| ROAD USER COSTS PER DAY | \$605,224 |
| CONGESTED HOURS PER DAY* | 18 |

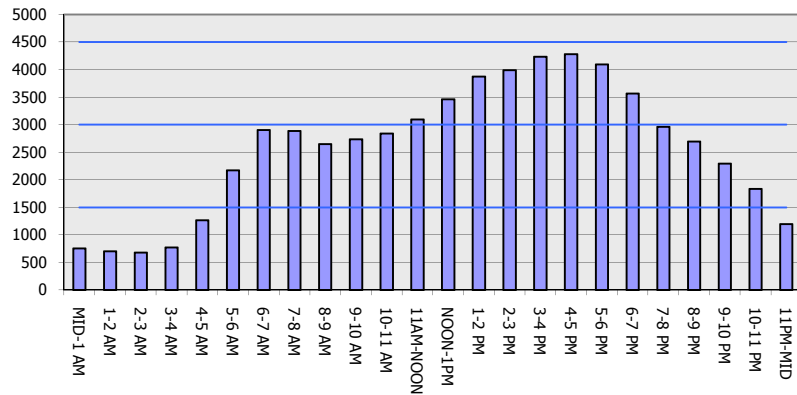
*Delays Exceeding User-Specified Maximum

**IH 94: MN 96 TO STH 35 N
CONTINUOUS (24 HOUR) 2 LANE CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

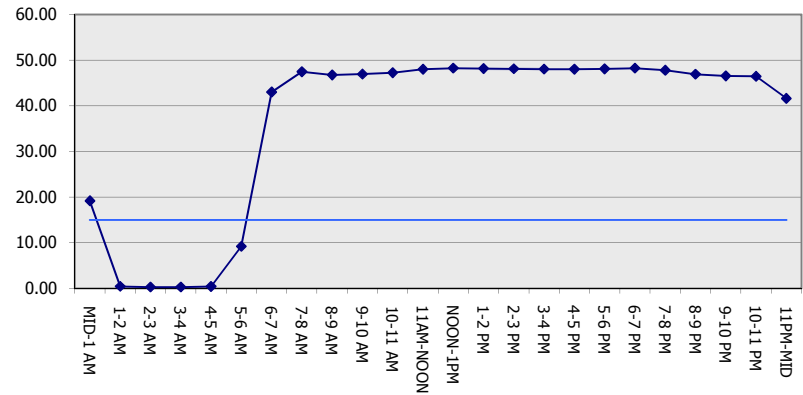
MAY
Analyzed for 2009
Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
FRIDAY WESTBOUND DIRECTION

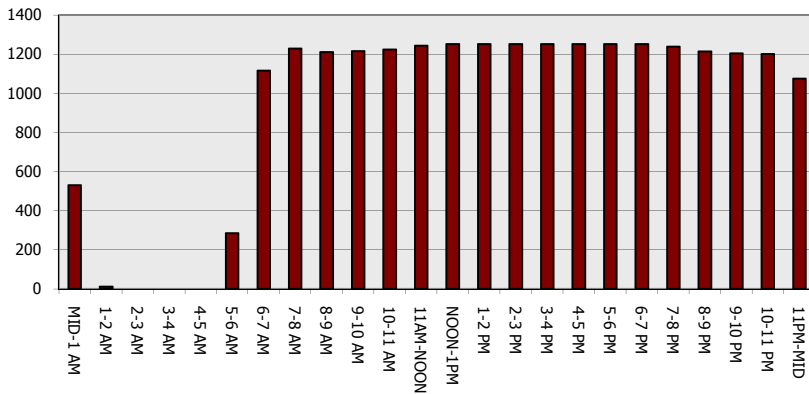
Main Route - Traffic Demand (Vehicles Per Hour)



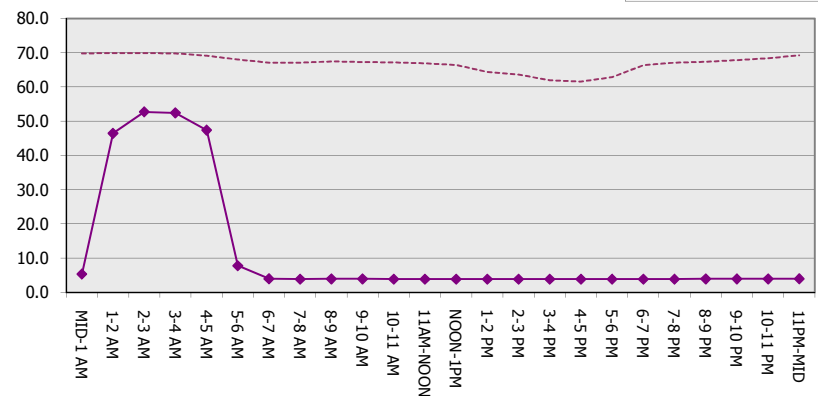
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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|---|--|
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| | 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 | 726 | 0.0 | 1500 | 726 | 0 | 14.09 | 433 | 69.8 | 6.4 | 36.3 |
| 1-2 AM | 472 | 0.0 | 1500 | 472 | 0 | 0.28 | 0 | 70.2 | 53.0 | 43.6 |
| 2-3 AM | 461 | 0.0 | 1500 | 461 | 0 | 0.27 | 0 | 70.2 | 53.4 | 43.7 |
| 3-4 AM | 448 | 0.0 | 1500 | 448 | 0 | 0.27 | 0 | 70.2 | 53.5 | 43.7 |
| 4-5 AM | 667 | 0.0 | 1500 | 667 | 0 | 0.28 | 0 | 69.9 | 52.8 | 42.8 |
| 5-6 AM | 1034 | 0.0 | 1499 | 1034 | 0 | 0.31 | 0 | 69.4 | 50.9 | 40.7 |
| 6-7 AM | 1745 | 0.0 | 1499 | 1745 | 0 | 2.05 | 73 | 68.6 | 20.9 | 30.8 |
| 7-8 AM | 2615 | 0.0 | 1500 | 2573 | 42 | 28.04+ | 764 | 67.5 | 4.7 | 30.9 |
| 8-9 AM | 2950 | 0.0 | 1500 | 1462 | 1488 | 47.74+ | 1237 | 67.1 | 3.9 | 30.8 |
| 9-10 AM | 3681 | 0.0 | 1500 | 1500 | 2181 | 48.21+ | 1251 | 65.7 | 3.9 | 30.8 |
| 10-11 AM | 4076 | 0.0 | 1500 | 1500 | 2576 | 48.08+ | 1251 | 63.0 | 3.9 | 30.8 |
| 11AM-NOON | 4248 | 0.0 | 1500 | 1500 | 2748 | 48.01+ | 1251 | 61.9 | 3.9 | 30.8 |
| NOON-1PM | 4511 | 0.0 | 1500 | 1500 | 3011 | 47.92+ | 1251 | 60.1 | 3.9 | 30.8 |
| 1-2 PM | 5189 | 0.0 | 1500 | 1500 | 3689 | 47.64+ | 1251 | 55.4 | 3.9 | 30.8 |
| 2-3 PM | 5228 | 0.0 | 1500 | 1500 | 3728 | 47.62+ | 1251 | 55.1 | 3.9 | 30.8 |
| 3-4 PM | 5748 | 0.0 | 1500 | 1500 | 4248 | 47.37+ | 1251 | 51.6 | 3.9 | 30.8 |
| 4-5 PM | 5857 | 0.0 | 1500 | 1500 | 4357 | 47.31+ | 1251 | 50.9 | 3.9 | 30.8 |
| 5-6 PM | 5624 | 0.0 | 1500 | 1500 | 4124 | 47.43+ | 1251 | 52.4 | 3.9 | 30.8 |
| 6-7 PM | 5397 | 0.0 | 1500 | 1500 | 3897 | 47.54+ | 1251 | 54.0 | 3.9 | 30.8 |
| 7-8 PM | 3753 | 0.0 | 1500 | 1500 | 2253 | 48.18+ | 1251 | 65.2 | 3.9 | 30.8 |
| 8-9 PM | 2515 | 0.0 | 1500 | 1442 | 1073 | 47.05+ | 1218 | 67.6 | 3.9 | 30.8 |
| 9-10 PM | 1858 | 0.0 | 1500 | 1494 | 363 | 46.43+ | 1201 | 68.4 | 4.0 | 30.8 |
| 10-11 PM | 1526 | 0.0 | 1500 | 1437 | 89 | 45.79+ | 1184 | 68.8 | 4.0 | 30.8 |
| 11PM-MID | 1146 | 0.0 | 1500 | 1146 | 0 | 38.73+ | 1001 | 69.3 | 4.1 | 30.8 |

+ 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 | 0.0114 |
| MAIN ROUTE WITH WORKS | 0.0016 |
| 'DIVERSION' | 0.0147 |
| <small>PIA: Personal Injury Accidents</small> | |
| ECONOMIC IMPACT ON ROAD USERS | |
| ROAD USER COSTS PER DAY | \$702,313 |
| CONGESTED HOURS PER DAY* | 17 |

*Delays Exceeding User-Specified Maximum

**IH 94: MN 96 TO STH 35 N
CONTINUOUS (24 HOUR) 2 LANE CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
FRIDAY EASTBOUND DIRECTION

