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| IH 94: MN 96 TO STH 35 N CONTINUOUS (24 HOUR) CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD) | AUGUST |
| | Analyzed for 2009 Construction Season |

SUMMARY OF TRAFFIC MODEL OUTPUT

SUNDAY 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 | 639 | 0.0 | 3000 | 639 | 0 | 0.18 | 0 | 69.9 | 57.8 | 49.7 | |
| 1-2 AM | 450 | 0.0 | 3000 | 450 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 | |
| 2-3 AM | 346 | 0.0 | 3000 | 346 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 | |
| 3-4 AM | 343 | 0.0 | 3000 | 343 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 | |
| 4-5 AM | 353 | 0.0 | 3000 | 353 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 | |
| 5-6 AM | 411 | 0.0 | 3000 | 411 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 | |
| 6-7 AM | 548 | 0.0 | 3000 | 548 | 0 | 0.18 | 0 | 70.0 | 57.8 | 49.7 | |
| 7-8 AM | 879 | 0.0 | 3000 | 879 | 0 | 0.18 | 0 | 69.6 | 57.7 | 49.7 | |
| 8-9 AM | 1385 | 0.0 | 3000 | 1385 | 0 | 0.17 | 0 | 69.0 | 57.5 | 49.7 | |
| 9-10 AM | 2060 | 0.0 | 2999 | 2060 | 0 | 0.17 | 0 | 68.2 | 57.2 | 49.7 | |
| 10-11 AM | 3099 | 0.0 | 2999 | 3099 | 0 | 0.80 | 42 | 66.9 | 35.4 | 38.4 | |
| 11AM-NOON | 3993 | 0.0 | 3000 | 3993 | 0 | 10.75 | 620 | 63.6 | 9.7 | 37.3 | |
| NOON-1PM | 4549 | 0.0 | 3000 | 4549 | 0 | 33.95+ | 1892 | 59.8 | 7.3 | 37.3 | |
| 1-2 PM | 5416 | 0.0 | 2999 | 3008 | 2408 | 50.77+ | 2857 | 53.8 | 6.9 | 37.3 | |
| 2-3 PM | 6280 | 0.0 | 2999 | 3000 | 3280 | 49.89+ | 2859 | 47.9 | 6.9 | 37.3 | |
| 3-4 PM | 6693 | 0.0 | 2999 | 3000 | 3693 | 49.36+ | 2859 | 45.1 | 6.9 | 37.3 | |
| 4-5 PM | 7027 | 0.0 | 2999 | 3000 | 4027 | 48.89+ | 2859 | 42.8 | 6.9 | 37.3 | |
| 5-6 PM | 6587 | 0.0 | 2999 | 3000 | 3587 | 49.51+ | 2859 | 45.8 | 6.9 | 37.3 | |
| 6-7 PM | 5787 | 0.0 | 2999 | 3000 | 2787 | 50.43+ | 2859 | 51.3 | 6.9 | 37.3 | |
| 7-8 PM | 4927 | 0.0 | 2999 | 3015 | 1912 | 51.17+ | 2855 | 57.2 | 6.9 | 37.3 | |
| 8-9 PM | 4054 | 0.0 | 2999 | 2823 | 1231 | 48.69+ | 2682 | 63.2 | 7.0 | 37.3 | |
| 9-10 PM | 2941 | 0.0 | 2999 | 2904 | 37 | 46.94+ | 2566 | 67.1 | 7.0 | 37.3 | |
| 10-11 PM | 1965 | 0.0 | 2999 | 1965 | 0 | 36.54+ | 1993 | 68.3 | 7.2 | 37.3 | |
| 11PM-MID | 1377 | 0.0 | 2999 | 1377 | 0 | 6.60 | 668 | 69.0 | 15.3 | 44.0 | |

+ INDICATES QUEUEING EXCEEDS USER-SPECIFIED MAXIMUM LIMIT

WARNING: THE DEMAND FLOW IN ONE OR MORE HOURS EXCEEDS THE THEORETICAL CAPACITY OF THE MAIN ROUTE *WITHOUT* CONSTRUCTION

| *----- 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 | 0.0115 |
| MAIN ROUTE WITH WORKS | 0.0025 |
| 'DIVERSION' | 0.0085 |
| PIA: Personal Injury Accidents | |
| IMPACTS ON ROAD USERS | |
| ROAD USER COSTS PER DAY | \$771,510 |
| CONGESTED HOURS PER DAY* | 11 |

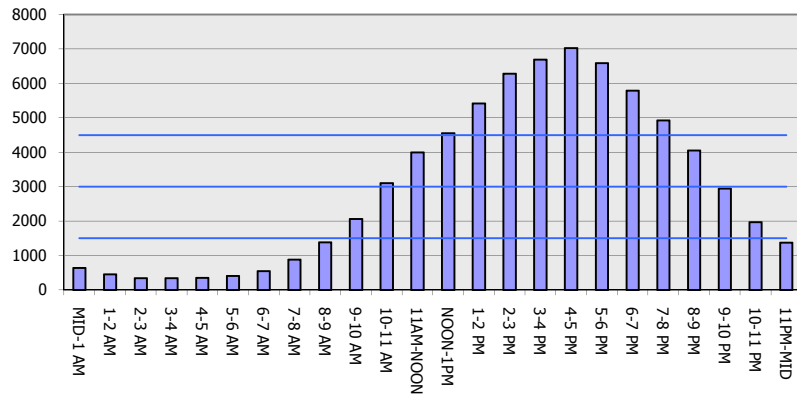
*Delays Exceeding User-Specified Maximum

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

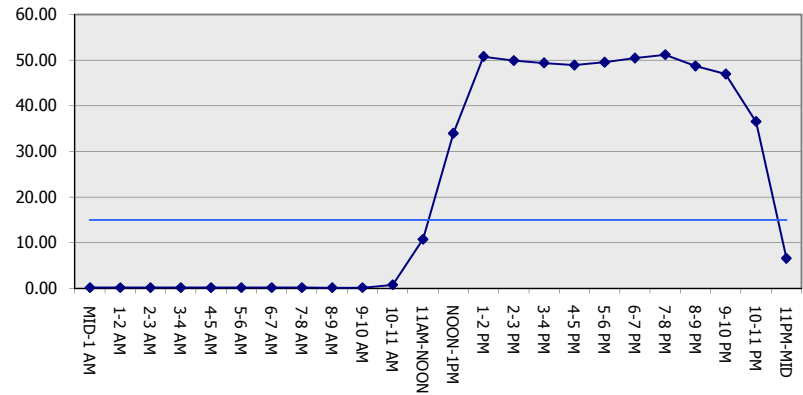
AUGUST
Analyzed for 2009
Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
SUNDAY WESTBOUND DIRECTION

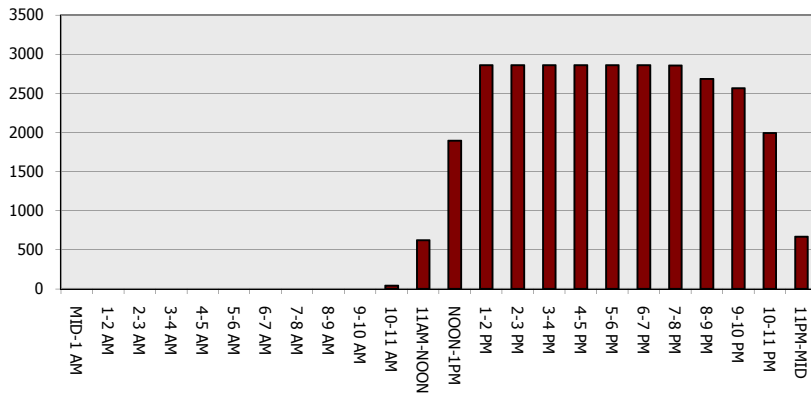
Main Route - Traffic Demand (Vehicles Per Hour)



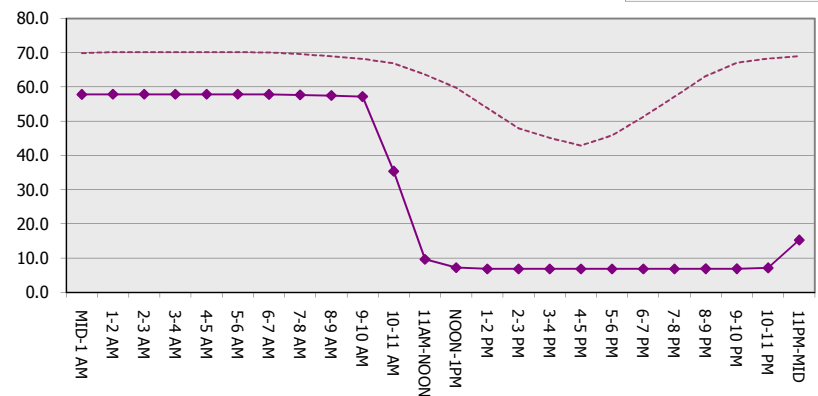
Main Route Average Delay Per Vehicle (Minutes)



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

SUNDAY 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 | 622 | 0.0 | 3000 | 622 | 0 | 0.18 | 0 | 70.0 | 57.8 | 49.7 |
| 1-2 AM | 409 | 0.0 | 3000 | 409 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 |
| 2-3 AM | 309 | 0.0 | 3000 | 309 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 |
| 3-4 AM | 263 | 0.0 | 3000 | 263 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 |
| 4-5 AM | 279 | 0.0 | 3000 | 279 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 |
| 5-6 AM | 437 | 0.0 | 3000 | 437 | 0 | 0.18 | 0 | 70.2 | 57.9 | 49.7 |
| 6-7 AM | 920 | 0.0 | 3000 | 920 | 0 | 0.18 | 0 | 69.6 | 57.7 | 49.7 |
| 7-8 AM | 1557 | 0.0 | 3000 | 1557 | 0 | 0.17 | 0 | 68.8 | 57.4 | 49.7 |
| 8-9 AM | 2300 | 0.0 | 2999 | 2300 | 0 | 0.19 | 0 | 67.9 | 55.8 | 47.9 |
| 9-10 AM | 3391 | 0.0 | 2999 | 3391 | 0 | 1.94 | 131 | 66.5 | 22.7 | 37.3 |
| 10-11 AM | 4358 | 0.0 | 3000 | 4358 | 0 | 18.19 | 1033 | 61.1 | 8.3 | 37.3 |
| 11AM-NOON | 4561 | 0.0 | 3000 | 4019 | 541 | 42.74+ | 2372 | 59.7 | 7.0 | 37.3 |
| NOON-1PM | 5029 | 0.0 | 3000 | 3004 | 2025 | 51.13+ | 2858 | 56.5 | 6.9 | 37.3 |
| 1-2 PM | 4928 | 0.0 | 3000 | 3001 | 1927 | 51.23+ | 2859 | 57.2 | 6.9 | 37.3 |
| 2-3 PM | 4498 | 0.0 | 3000 | 3006 | 1492 | 50.43+ | 2795 | 60.1 | 6.9 | 37.3 |
| 3-4 PM | 4326 | 0.0 | 3000 | 2938 | 1389 | 49.72+ | 2749 | 61.3 | 6.9 | 37.3 |
| 4-5 PM | 4170 | 0.0 | 3000 | 2923 | 1247 | 48.73+ | 2688 | 62.3 | 6.9 | 37.3 |
| 5-6 PM | 3651 | 0.0 | 3000 | 2974 | 676 | 47.68+ | 2612 | 65.9 | 7.0 | 37.3 |
| 6-7 PM | 3273 | 0.0 | 3000 | 2980 | 293 | 47.49+ | 2598 | 66.7 | 7.0 | 37.3 |
| 7-8 PM | 2759 | 0.0 | 3000 | 2759 | 0 | 45.83+ | 2503 | 67.3 | 7.0 | 37.3 |
| 8-9 PM | 2306 | 0.0 | 3000 | 2306 | 0 | 37.43+ | 2041 | 67.9 | 7.1 | 37.3 |
| 9-10 PM | 1628 | 0.0 | 3000 | 1628 | 0 | 17.78 | 1010 | 68.7 | 8.4 | 42.2 |
| 10-11 PM | 1126 | 0.0 | 3000 | 1126 | 0 | 0.30 | 23 | 69.3 | 51.5 | 49.7 |
| 11PM-MID | 775 | 0.0 | 3000 | 775 | 0 | 0.18 | 0 | 69.7 | 57.8 | 49.7 |

+ 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 | 0.0092 |
| MAIN ROUTE WITH WORKS | 0.0024 |
| 'DIVERSION' | 0.0035 |

PIA: Personal Injury Accidents

| ECONOMIC IMPACT ON ROAD USERS | |
|-------------------------------|-----------|
| ROAD USER COSTS PER DAY | \$563,533 |
| CONGESTED HOURS PER DAY* | 10 |

*Delays Exceeding User-Specified Maximum

**IH 94: MN 96 TO STH 35 N
CONTINUOUS (24 HOUR) CLOSURE
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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
SUNDAY EASTBOUND DIRECTION

