

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

MON-THUR 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	592	0.0	OFF	592	0	0.00	0	70.0	70.0	70.0
1-2 AM	548	0.0	OFF	548	0	0.00	0	70.0	70.0	70.0
2-3 AM	588	0.0	OFF	588	0	0.00	0	70.0	70.0	70.0
3-4 AM	783	0.0	OFF	783	0	0.00	0	69.7	69.7	69.7
4-5 AM	1416	0.0	OFF	1416	0	0.00	0	69.0	69.0	69.0
5-6 AM	2467	0.0	OFF	2467	0	0.00	0	67.7	67.7	67.7
6-7 AM	2795	0.0	OFF	2795	0	0.00	0	67.3	67.3	67.3
7-8 AM	2673	0.0	OFF	2673	0	0.00	0	67.4	67.4	67.4
8-9 AM	2450	0.0	OFF	2450	0	0.00	0	67.7	67.7	67.7
9-10 AM	2311	0.0	1499	2311	0	14.20	407	67.9	6.1	30.8
10-11 AM	2382	0.0	1500	1860	523	43.10+	1116	67.8	4.0	30.8
11AM-NOON	2471	0.0	1500	1505	966	46.57+	1206	67.7	4.0	30.8
NOON-1PM	2520	0.0	1500	1510	1010	46.64+	1207	67.6	4.0	30.8
1-2 PM	2770	0.0	1500	1532	1238	46.97+	1216	67.3	4.0	30.8
2-3 PM	2815	0.0	1500	1509	1306	47.17+	1222	67.3	3.9	30.8
3-4 PM	2987	0.0	1500	1512	1474	47.69+	1236	67.0	3.9	30.8
4-5 PM	3005	0.0	OFF	3005	0	2.64	256	67.0	17.0	17.0
5-6 PM	2780	0.0	OFF	2780	0	0.00	0	67.3	67.3	67.3
6-7 PM	2315	0.0	OFF	2315	0	0.00	0	67.9	67.9	67.9
7-8 PM	1903	0.0	OFF	1903	0	0.00	0	68.4	68.4	68.4
8-9 PM	1585	0.0	OFF	1585	0	0.00	0	68.7	68.7	68.7
9-10 PM	1347	0.0	OFF	1347	0	0.00	0	69.1	69.1	69.1
10-11 PM	1004	0.0	OFF	1004	0	0.00	0	69.5	69.5	69.5
11PM-MID	705	0.0	OFF	705	0	0.00	0	69.9	69.9	69.9

"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	0.0075
MAIN ROUTE WITH WORKS	0.0052
'DIVERSION'	0.0024
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$168,693
CONGESTED HOURS PER DAY*	6

*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

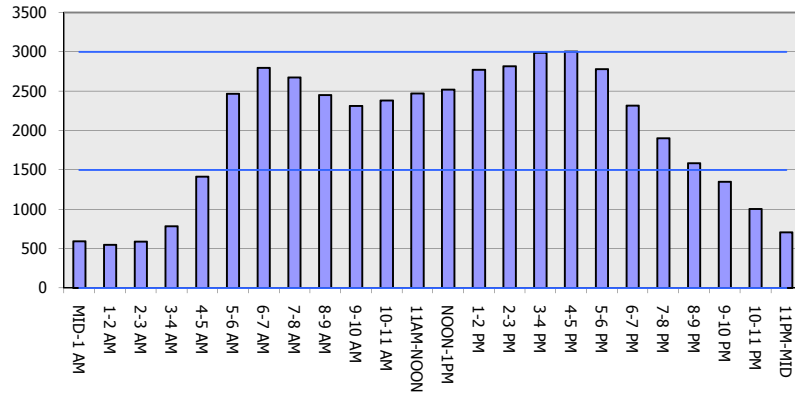
Analyzed for 2009
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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

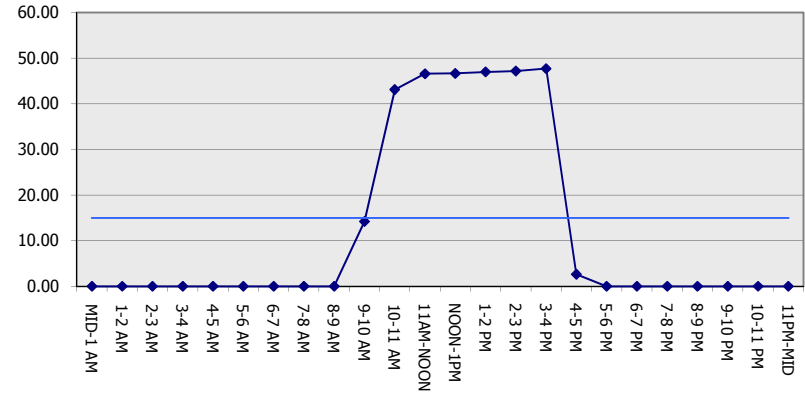
MON-THUR

WESTBOUND DIRECTION

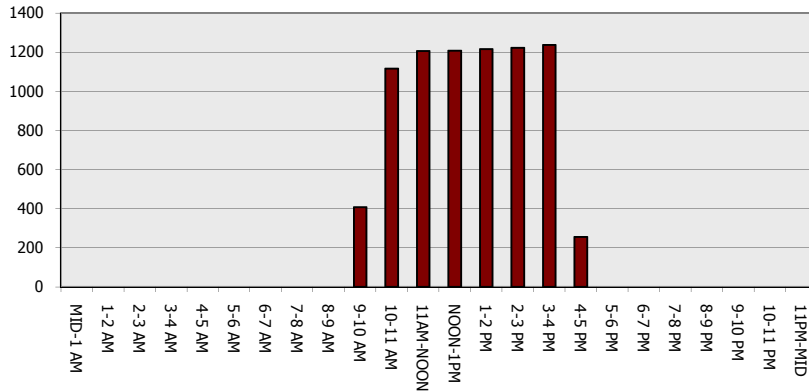
Main Route - Traffic Demand (Vehicles Per Hour)



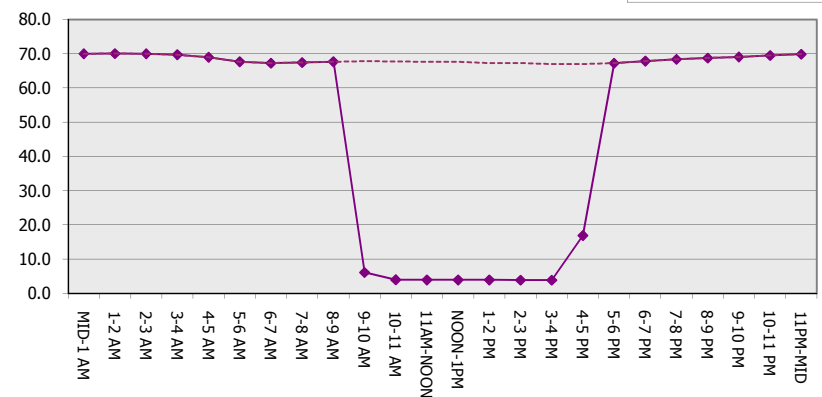
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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SUMMARY OF TRAFFIC MODEL OUTPUT
MON-THUR 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	604	0.0	OFF	604	0	0.00	0	70.0	70.0	70.0
1-2 AM	408	0.0	OFF	408	0	0.00	0	70.2	70.2	70.2
2-3 AM	365	0.0	OFF	365	0	0.00	0	70.2	70.2	70.2
3-4 AM	416	0.0	OFF	416	0	0.00	0	70.2	70.2	70.2
4-5 AM	588	0.0	OFF	588	0	0.00	0	70.0	70.0	70.0
5-6 AM	1010	0.0	OFF	1010	0	0.00	0	69.5	69.5	69.5
6-7 AM	1717	0.0	OFF	1717	0	0.00	0	68.6	68.6	68.6
7-8 AM	2251	0.0	OFF	2251	0	0.00	0	67.9	67.9	67.9
8-9 AM	2359	0.0	OFF	2359	0	0.00	0	67.8	67.8	67.8
9-10 AM	2706	0.0	1499	2706	0	20.42+	586	67.4	5.3	30.8
10-11 AM	2883	0.0	1500	1520	1364	47.35+	1227	67.1	3.9	30.8
11AM-NOON	2828	0.0	1500	1497	1331	47.25+	1224	67.2	3.9	30.8
NOON-1PM	2798	0.0	1500	1503	1295	47.14+	1221	67.3	3.9	30.8
1-2 PM	2991	0.0	1500	1520	1471	47.68+	1235	67.0	3.9	30.8
2-3 PM	3281	0.0	1500	1500	1781	48.25+	1251	66.6	3.9	30.8
3-4 PM	3638	0.0	1500	1500	2138	48.22+	1251	66.0	3.9	30.8
4-5 PM	3579	0.0	OFF	3579	0	3.34	320	66.3	14.2	14.2
5-6 PM	2934	0.0	OFF	2934	0	0.00	0	67.1	67.1	67.1
6-7 PM	2523	0.0	OFF	2523	0	0.00	0	67.6	67.6	67.6
7-8 PM	1931	0.0	OFF	1931	0	0.00	0	68.3	68.3	68.3
8-9 PM	1603	0.0	OFF	1603	0	0.00	0	68.7	68.7	68.7
9-10 PM	1416	0.0	OFF	1416	0	0.00	0	69.0	69.0	69.0
10-11 PM	1171	0.0	OFF	1171	0	0.00	0	69.3	69.3	69.3
11PM-MID	776	0.0	OFF	776	0	0.00	0	69.7	69.7	69.7

"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	0.0074
MAIN ROUTE WITH WORKS	0.0047
'DIVERSION'	0.0035

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$204,148
CONGESTED HOURS PER DAY*	7

*Delays Exceeding User-Specified Maximum

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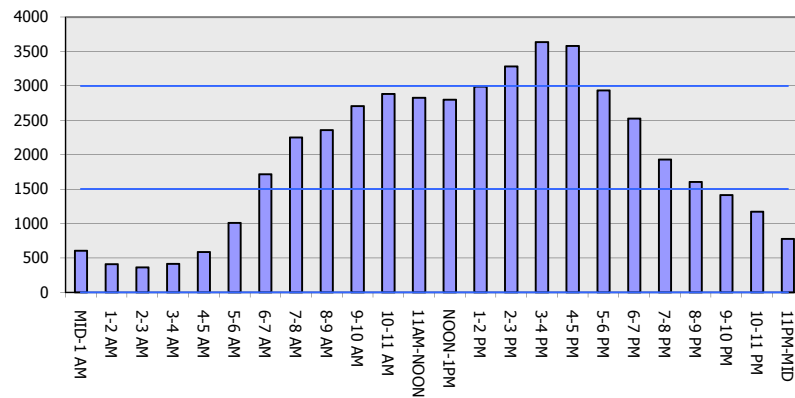
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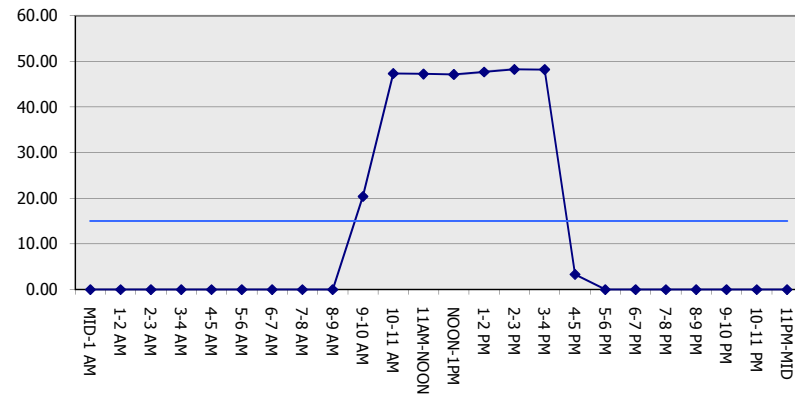
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

MON-THUR EASTBOUND DIRECTION

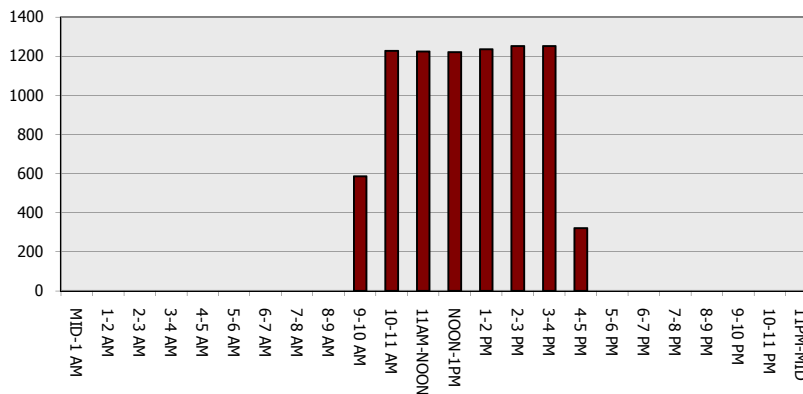
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

