

**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

SATURDAY 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	888	0.0	3000	888	0	0.18	0	69.6	57.7	49.7	
1-2 AM	636	0.0	3000	636	0	0.18	0	69.9	57.8	49.7	
2-3 AM	526	0.0	3000	526	0	0.18	0	70.0	57.8	49.7	
3-4 AM	563	0.0	3000	563	0	0.18	0	70.0	57.8	49.7	
4-5 AM	699	0.0	3000	699	0	0.18	0	69.9	57.8	49.7	
5-6 AM	836	0.0	3000	836	0	0.18	0	69.7	57.7	49.7	
6-7 AM	954	0.0	3000	954	0	0.18	0	69.6	57.7	49.7	
7-8 AM	1485	0.0	3000	1485	0	0.17	0	68.9	57.4	49.7	
8-9 AM	2028	0.0	3000	2028	0	0.17	0	68.2	57.2	49.7	
9-10 AM	2773	0.0	2999	2773	0	0.29	0	67.3	50.8	41.4	
10-11 AM	3580	0.0	2999	3580	0	4.28	259	66.3	14.3	37.3	
11AM-NOON	3749	0.0	3000	3749	0	17.37	952	65.3	8.3	37.3	
NOON-1PM	3633	0.0	2999	3633	0	30.04	1641	66.0	7.4	37.3	
1-2 PM	3883	0.0	2999	3826	57	43.40+	2385	64.3	7.0	37.3	
2-3 PM	3765	0.0	2999	2863	903	48.17+	2643	65.1	7.0	37.3	
3-4 PM	3762	0.0	2999	2981	781	47.68+	2616	65.1	7.0	37.3	
4-5 PM	3560	0.0	2999	2981	579	47.65+	2608	66.3	7.0	37.3	
5-6 PM	3182	0.0	2999	2981	201	47.43+	2594	66.8	7.0	37.3	
6-7 PM	2799	0.0	2999	2799	0	46.10+	2519	67.3	7.0	37.3	
7-8 PM	2365	0.0	2999	2365	0	38.47+	2098	67.8	7.1	37.3	
8-9 PM	2071	0.0	2999	2071	0	24.01	1309	68.2	7.7	37.3	
9-10 PM	1859	0.0	2999	1859	0	2.42	319	68.4	24.0	46.8	
10-11 PM	1391	0.0	3000	1391	0	0.17	0	69.0	57.5	49.7	
11PM-MID	906	0.0	3000	906	0	0.18	0	69.6	57.7	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	0.0083
MAIN ROUTE WITH WORKS	0.0025
'DIVERSION'	0.0009
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$369,589
CONGESTED HOURS PER DAY*	7

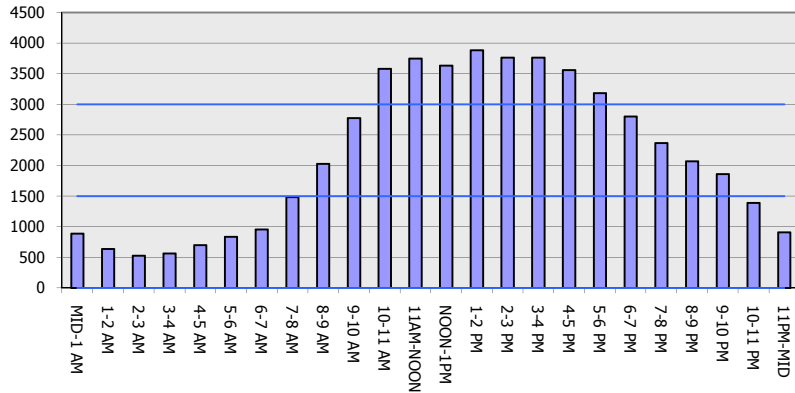
*Delays Exceeding User-Specified Maximum

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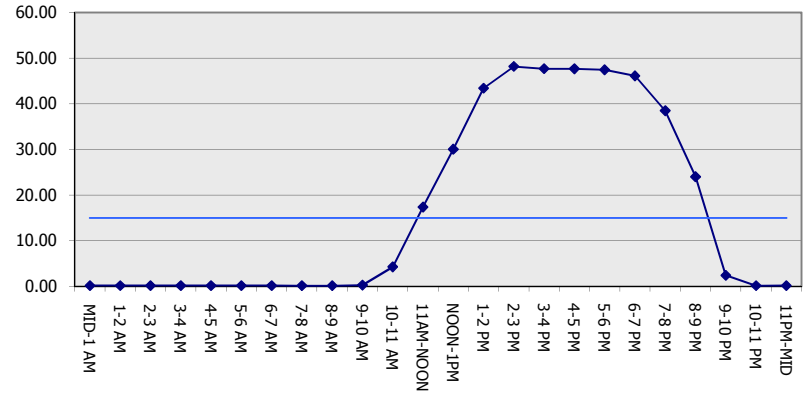
AUGUST
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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
SATURDAY WESTBOUND DIRECTION

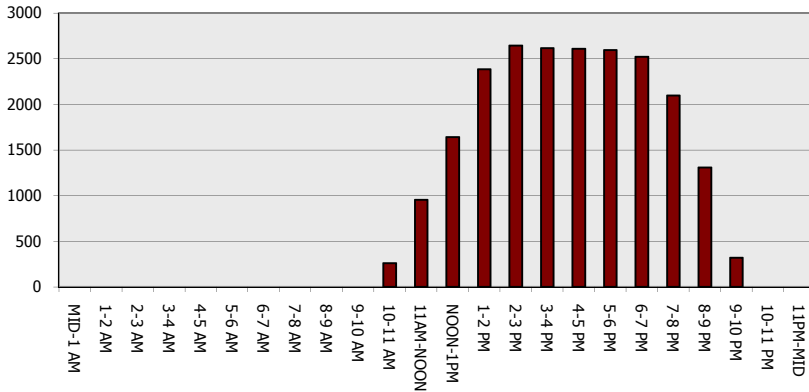
Main Route - Traffic Demand (Vehicles Per Hour)



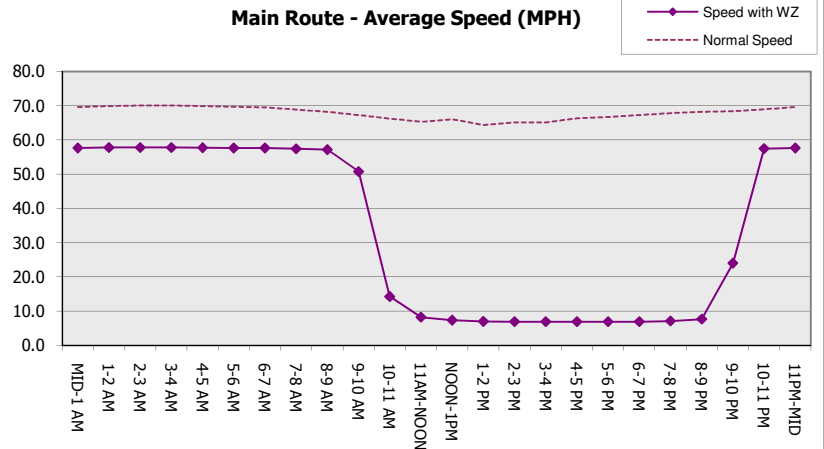
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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SUMMARY OF TRAFFIC MODEL OUTPUT

SATURDAY 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	914	0.0	3000	914	0	0.18	0	69.6	57.7	49.7
1-2 AM	542	0.0	3000	542	0	0.18	0	70.0	57.8	49.7
2-3 AM	447	0.0	3000	447	0	0.18	0	70.2	57.9	49.7
3-4 AM	406	0.0	3000	406	0	0.18	0	70.2	57.9	49.7
4-5 AM	506	0.0	3000	506	0	0.18	0	70.1	57.8	49.7
5-6 AM	757	0.0	3000	757	0	0.18	0	69.8	57.8	49.7
6-7 AM	1393	0.0	3000	1393	0	0.17	0	69.0	57.5	49.7
7-8 AM	2358	0.0	2999	2358	0	0.20	0	67.8	55.2	47.1
8-9 AM	3364	0.0	2999	3364	0	1.94	126	66.6	22.6	37.3
9-10 AM	4145	0.0	3000	4145	0	15.86	895	62.5	8.6	37.3
10-11 AM	4682	0.0	3000	4379	304	40.67+	2265	58.9	7.1	37.3
11AM-NOON	4449	0.0	3000	2881	1568	51.08+	2830	60.5	6.9	37.3
NOON-1PM	4091	0.0	3000	2841	1250	48.81+	2690	62.9	6.9	37.3
1-2 PM	3662	0.0	3000	2992	670	47.67+	2612	65.8	7.0	37.3
2-3 PM	3446	0.0	3000	2996	449	47.57+	2603	66.4	7.0	37.3
3-4 PM	3328	0.0	3000	2994	334	47.51+	2599	66.6	7.0	37.3
4-5 PM	2925	0.0	3000	2922	3	46.98+	2568	67.1	7.0	37.3
5-6 PM	2791	0.0	3000	2791	0	44.40+	2425	67.3	7.0	37.3
6-7 PM	2389	0.0	3000	2389	0	37.06+	2021	67.8	7.1	37.3
7-8 PM	2079	0.0	3000	2079	0	22.91	1250	68.1	7.8	37.4
8-9 PM	1832	0.0	2999	1832	0	1.84	268	68.4	27.4	47.9
9-10 PM	1545	0.0	3000	1545	0	0.17	0	68.8	57.4	49.7
10-11 PM	1225	0.0	3000	1225	0	0.18	0	69.2	57.6	49.7
11PM-MID	915	0.0	3000	915	0	0.18	0	69.6	57.7	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	0.0086
MAIN ROUTE WITH WORKS	0.0025
'DIVERSION'	0.0017

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$446,169
CONGESTED HOURS PER DAY*	9

*Delays Exceeding User-Specified Maximum

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SATURDAY EASTBOUND DIRECTION

