

IH 94: MN 96 TO STH 35 N NIGHTTIME 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	OFF	2060	0	0.00	0	68.2	68.2	68.2	
10-11 AM	3099	0.0	OFF	3099	0	0.00	0	66.9	66.9	66.9	
11AM-NOON	3993	0.0	OFF	3993	0	0.00	0	63.6	63.6	63.6	
NOON-1PM	4549	0.0	OFF	4549	0	0.00	0	59.8	59.8	59.8	
1-2 PM	5416	0.0	OFF	5416	0	0.00	0	53.8	53.8	53.8	
2-3 PM	6280	0.0	OFF	6280	0	0.00	0	47.9	47.9	47.9	
3-4 PM	6693	0.0	OFF	6693	0	0.00	0	45.1	45.1	45.1	
4-5 PM	7027	0.0	OFF	7027	0	0.00	0	42.8	42.8	42.8	
5-6 PM	6587	0.0	OFF	6587	0	0.00	0	45.8	45.8	45.8	
6-7 PM	5787	0.0	OFF	5787	0	0.00	0	51.3	51.3	51.3	
7-8 PM	4927	0.0	2999	4927	0	17.21	1017	57.2	8.5	37.3	
8-9 PM	4054	0.0	3000	3719	335	44.16+	2432	63.2	7.0	37.3	
9-10 PM	2941	0.0	3000	2751	190	46.45+	2539	67.1	7.0	37.3	
10-11 PM	1965	0.0	3000	1965	0	35.35+	1928	68.3	7.2	37.3	
11PM-MID	1377	0.0	2999	1377	0	5.38	611	69.0	17.3	44.7	

"OFF" INDICATES NO ROAD WORK (ALL LANES OPEN TO TRAFFIC) **+ 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	0.0092
'DIVERSION'	0.0002
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$128,635
CONGESTED HOURS PER DAY*	3

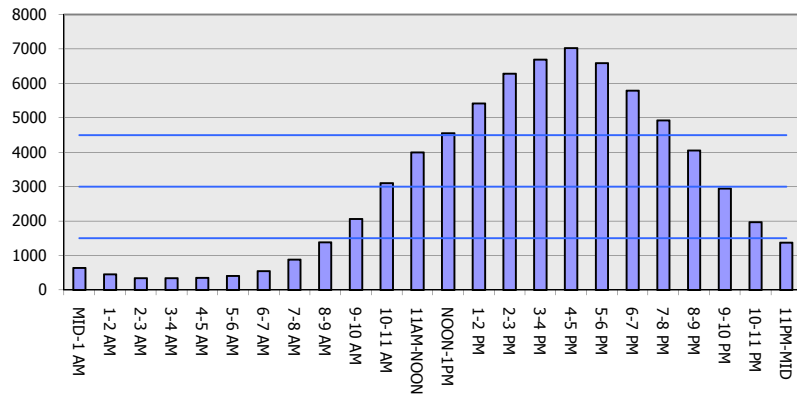
*Delays Exceeding User-Specified Maximum

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NIGHTTIME CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

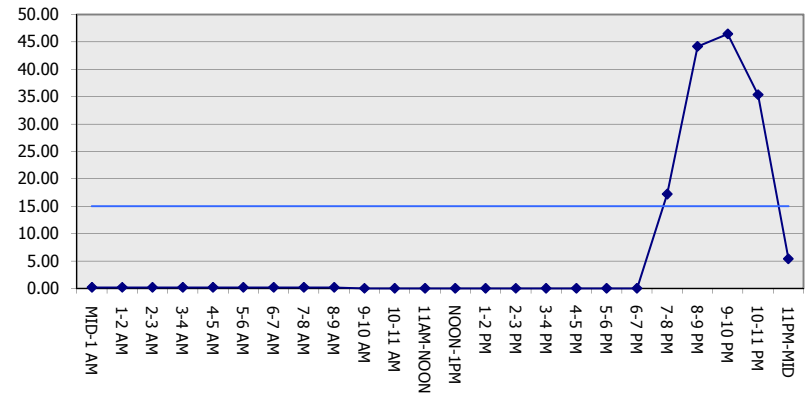
AUGUST
Analyzed for 2009
Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
SUNDAY WESTBOUND DIRECTION

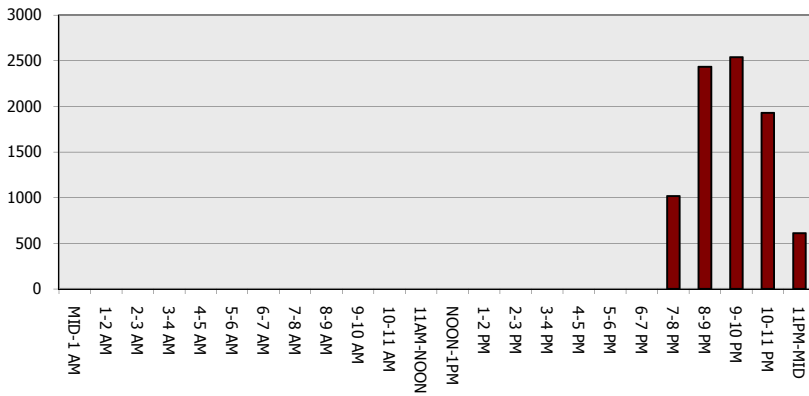
Main Route - Traffic Demand (Vehicles Per Hour)



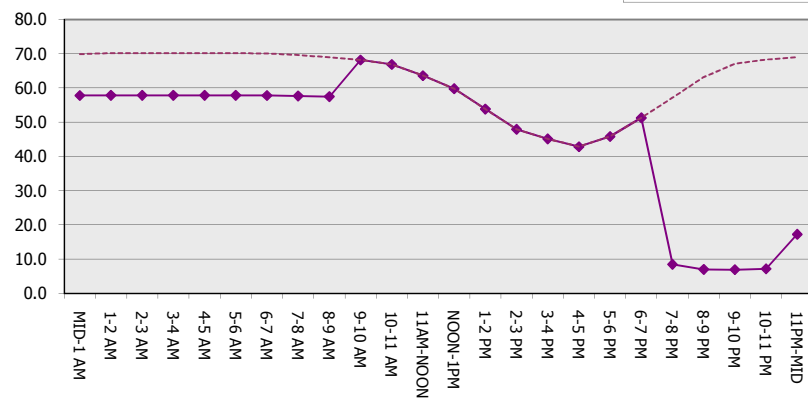
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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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	OFF	3391	0	0.00	0	66.5	66.5	66.5
10-11 AM	4358	0.0	OFF	4358	0	0.00	0	61.1	61.1	61.1
11AM-NOON	4561	0.0	OFF	4561	0	0.00	0	59.7	59.7	59.7
NOON-1PM	5029	0.0	OFF	5029	0	0.00	0	56.5	56.5	56.5
1-2 PM	4928	0.0	OFF	4928	0	0.00	0	57.2	57.2	57.2
2-3 PM	4498	0.0	OFF	4498	0	0.00	0	60.1	60.1	60.1
3-4 PM	4326	0.0	OFF	4326	0	0.00	0	61.3	61.3	61.3
4-5 PM	4170	0.0	OFF	4170	0	0.00	0	62.3	62.3	62.3
5-6 PM	3651	0.0	OFF	3651	0	0.00	0	65.9	65.9	65.9
6-7 PM	3273	0.0	OFF	3273	0	0.00	0	66.7	66.7	66.7
7-8 PM	2759	0.0	3000	2759	0	0.29	0	67.3	50.8	41.3
8-9 PM	2306	0.0	3000	2306	0	0.17	0	67.9	57.1	49.7
9-10 PM	1628	0.0	3000	1628	0	0.17	0	68.7	57.4	49.7
10-11 PM	1126	0.0	3000	1126	0	0.18	0	69.3	57.6	49.7
11PM-MID	775	0.0	3000	775	0	0.18	0	69.7	57.8	49.7

"OFF" INDICATES NO ROAD WORK (ALL LANES OPEN TO TRAFFIC)

----- 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	0.0075
'DIVERSION'	0.0000

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$833
CONGESTED HOURS PER DAY*	0

*Delays Exceeding User-Specified Maximum

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SUNDAY EASTBOUND DIRECTION

