

IH 94: MN 96 TO STH 35 N NIGHTTIME 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	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	733	0.0	1499	733	0	4.04	266	69.8	15.8	38.3	
1-2 AM	633	0.0	1500	633	0	0.28	0	69.9	52.8	43.0	
2-3 AM	693	0.0	1500	693	0	0.28	0	69.9	52.7	42.8	
3-4 AM	803	0.0	1500	803	0	0.29	0	69.7	52.4	42.4	
4-5 AM	1215	0.0	1499	1215	0	0.38	0	69.2	48.0	37.4	
5-6 AM	2181	0.0	OFF	2181	0	0.00	0	68.0	68.0	68.0	
6-7 AM	2540	0.0	OFF	2540	0	0.00	0	67.6	67.6	67.6	
7-8 AM	2748	0.0	OFF	2748	0	0.00	0	67.3	67.3	67.3	
8-9 AM	2557	0.0	OFF	2557	0	0.00	0	67.6	67.6	67.6	
9-10 AM	2660	0.0	OFF	2660	0	0.00	0	67.4	67.4	67.4	
10-11 AM	3003	0.0	OFF	3003	0	0.00	0	67.0	67.0	67.0	
11AM-NOON	3371	0.0	OFF	3371	0	0.00	0	66.6	66.6	66.6	
NOON-1PM	3612	0.0	OFF	3612	0	0.00	0	66.2	66.2	66.2	
1-2 PM	4171	0.0	OFF	4171	0	0.00	0	62.3	62.3	62.3	
2-3 PM	4590	0.0	OFF	4590	0	0.00	0	59.5	59.5	59.5	
3-4 PM	4578	0.0	OFF	4578	0	0.00	0	59.6	59.6	59.6	
4-5 PM	4524	0.0	OFF	4524	0	0.00	0	59.9	59.9	59.9	
5-6 PM	4222	0.0	OFF	4222	0	0.00	0	62.0	62.0	62.0	
6-7 PM	3644	0.0	OFF	3644	0	0.00	0	66.0	66.0	66.0	
7-8 PM	3034	0.0	1499	3034	0	28.64+	799	66.9	4.7	30.8	
8-9 PM	2586	0.0	1499	1396	1190	47.29+	1225	67.5	3.9	30.8	
9-10 PM	1988	0.0	1499	1282	705	45.44+	1176	68.2	4.0	30.8	
10-11 PM	1570	0.0	1499	1448	121	45.92+	1187	68.8	4.0	30.8	
11PM-MID	968	0.0	1499	968	0	35.54	920	69.6	4.2	30.8	

"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	0.0100
MAIN ROUTE WITH WORKS	0.0083
'DIVERSION'	0.0007
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$98,060
CONGESTED HOURS PER DAY*	4

*Delays Exceeding User-Specified Maximum

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

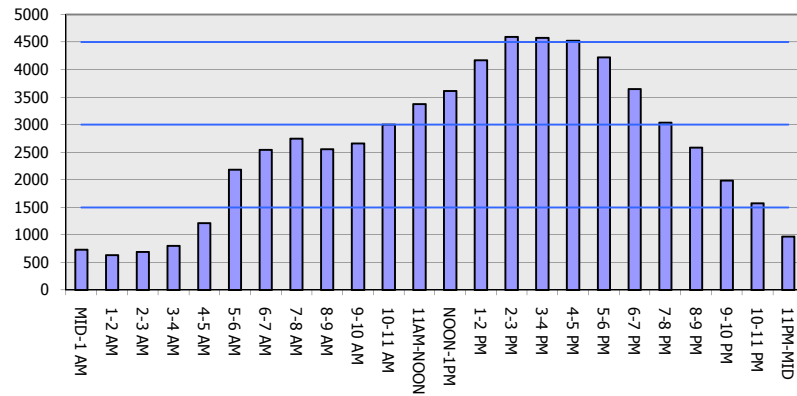
OCTOBER

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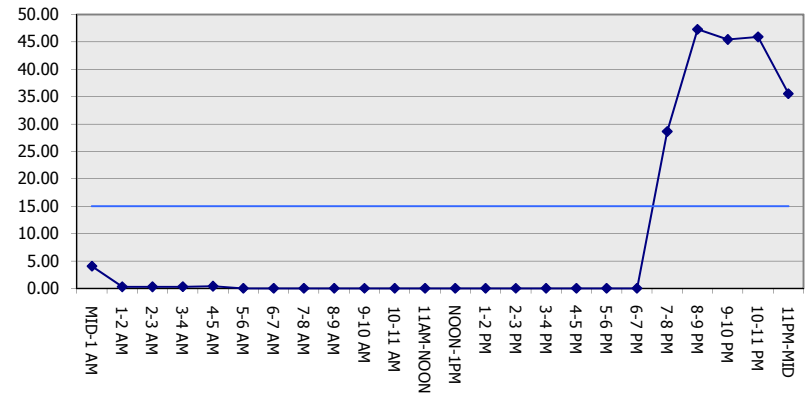
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY WESTBOUND DIRECTION

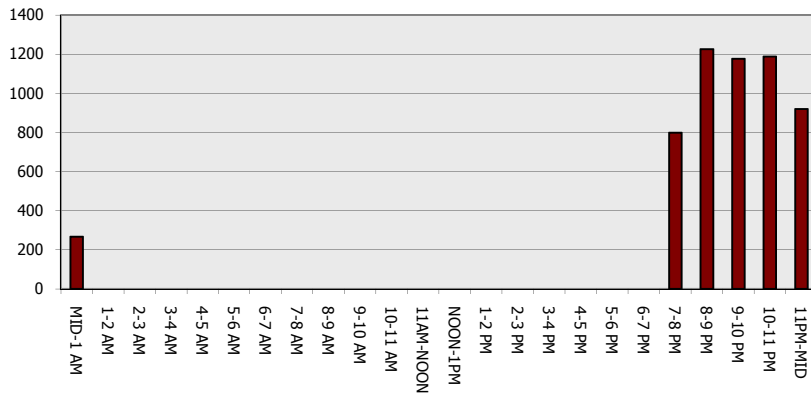
Main Route - Traffic Demand (Vehicles Per Hour)



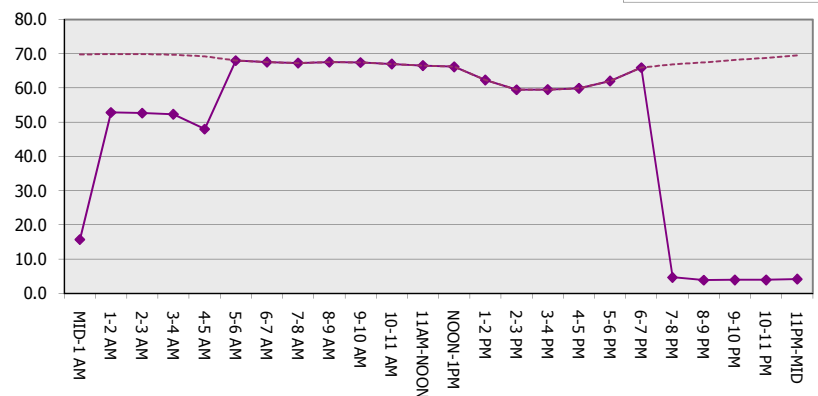
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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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	701	0.0	1499	701	0	7.18	353	69.9	10.8	36.6	
1-2 AM	515	0.0	1500	515	0	0.27	0	70.1	53.3	43.5	
2-3 AM	402	0.0	1500	402	0	0.26	0	70.2	53.6	43.9	
3-4 AM	466	0.0	1500	466	0	0.27	0	70.2	53.4	43.7	
4-5 AM	571	0.0	1500	571	0	0.27	0	70.0	53.1	43.2	
5-6 AM	1016	0.0	OFF	1016	0	0.00	0	69.5	69.5	69.5	
6-7 AM	1567	0.0	OFF	1567	0	0.00	0	68.8	68.8	68.8	
7-8 AM	2451	0.0	OFF	2451	0	0.00	0	67.7	67.7	67.7	
8-9 AM	2761	0.0	OFF	2761	0	0.00	0	67.3	67.3	67.3	
9-10 AM	3486	0.0	OFF	3486	0	0.00	0	66.4	66.4	66.4	
10-11 AM	4117	0.0	OFF	4117	0	0.00	0	62.7	62.7	62.7	
11AM-NOON	4203	0.0	OFF	4203	0	0.00	0	62.2	62.2	62.2	
NOON-1PM	4282	0.0	OFF	4282	0	0.00	0	61.6	61.6	61.6	
1-2 PM	5055	0.0	OFF	5055	0	0.00	0	56.3	56.3	56.3	
2-3 PM	5369	0.0	OFF	5369	0	0.00	0	54.2	54.2	54.2	
3-4 PM	5644	0.0	OFF	5644	0	0.00	0	52.3	52.3	52.3	
4-5 PM	5565	0.0	OFF	5565	0	0.00	0	52.8	52.8	52.8	
5-6 PM	5071	0.0	OFF	5071	0	0.00	0	56.2	56.2	56.2	
6-7 PM	4662	0.0	OFF	4662	0	0.00	0	59.0	59.0	59.0	
7-8 PM	3577	0.0	1499	2801	776	34.22+	917	66.3	4.3	30.8	
8-9 PM	2338	0.0	1499	1452	886	46.88+	1214	67.8	4.0	30.8	
9-10 PM	1848	0.0	1499	1491	356	46.43+	1201	68.4	4.0	30.8	
10-11 PM	1498	0.0	1499	1366	131	45.14+	1167	68.9	4.0	30.8	
11PM-MID	1121	0.0	1499	1121	0	36.62	946	69.4	4.2	30.8	

"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	0.0109
MAIN ROUTE WITH WORKS	0.0093
'DIVERSION'	0.0008

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$103,321
CONGESTED HOURS PER DAY*	4

*Delays Exceeding User-Specified Maximum

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NIGHTTIME 2 LANE CLOSURE
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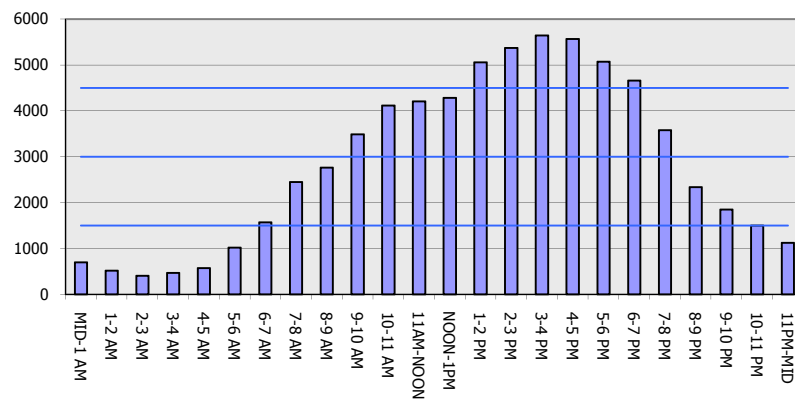
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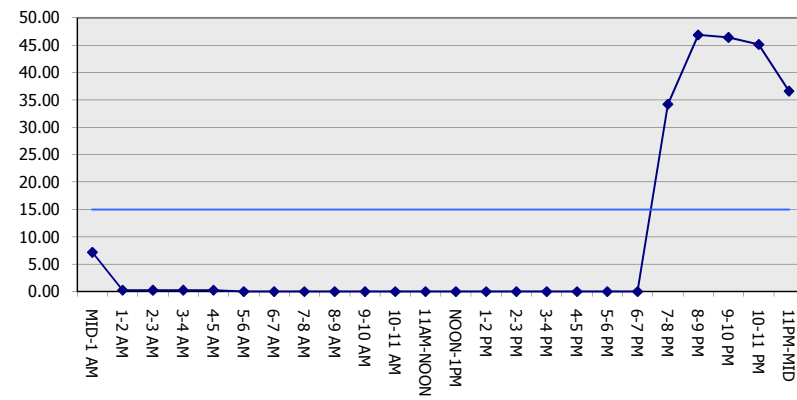
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY EASTBOUND DIRECTION

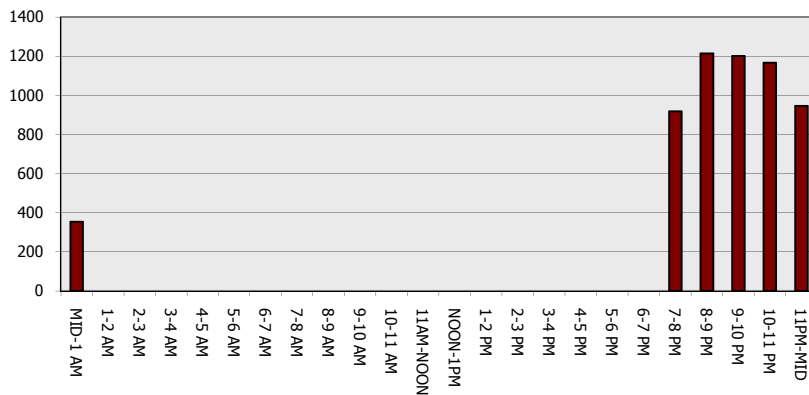
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

