

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

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	800	0.0	3000	800	0	0.18	0	69.7	57.8	49.7
1-2 AM	665	0.0	3000	665	0	0.18	0	69.9	57.8	49.7
2-3 AM	692	0.0	3000	692	0	0.18	0	69.9	57.8	49.7
3-4 AM	805	0.0	3000	805	0	0.18	0	69.7	57.7	49.7
4-5 AM	1339	0.0	3000	1339	0	0.17	0	69.1	57.5	49.7
5-6 AM	2132	0.0	3000	2132	0	0.17	0	68.1	57.2	49.7
6-7 AM	2488	0.0	3000	2488	0	0.20	0	67.6	55.2	47.1
7-8 AM	2658	0.0	3000	2658	0	0.26	0	67.4	52.4	43.3
8-9 AM	2590	0.0	3000	2590	0	0.23	0	67.5	53.5	44.7
9-10 AM	2810	0.0	2999	2810	0	0.31	0	67.3	50.1	40.4
10-11 AM	3272	0.0	2999	3272	0	1.95	111	66.7	22.0	37.3
11AM-NOON	3603	0.0	3000	3603	0	10.17	558	66.3	9.7	37.3
NOON-1PM	3744	0.0	3000	3744	0	22.37	1224	65.3	7.8	37.3
1-2 PM	4336	0.0	3000	4325	12	40.75+	2257	61.2	7.1	37.3
2-3 PM	4613	0.0	3000	2897	1716	51.03+	2834	59.4	6.9	37.3
3-4 PM	4621	0.0	3000	3009	1612	51.35+	2852	59.3	6.9	37.3
4-5 PM	4427	0.0	3000	2913	1513	50.67+	2806	60.6	6.9	37.3
5-6 PM	4246	0.0	3000	2915	1331	49.32+	2724	61.9	6.9	37.3
6-7 PM	3913	0.0	3000	2936	977	47.89+	2632	64.1	7.0	37.3
7-8 PM	3274	0.0	3000	2976	298	47.49+	2598	66.7	7.0	37.3
8-9 PM	2744	0.0	3000	2744	0	45.47+	2484	67.3	7.0	37.3
9-10 PM	2573	0.0	3000	2573	0	39.33+	2145	67.6	7.1	37.3
10-11 PM	1931	0.0	3000	1931	0	25.88	1412	68.3	7.6	37.3
11PM-MID	1277	0.0	2999	1277	0	1.20	221	69.1	34.0	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	0.0104
MAIN ROUTE WITH WORKS	0.0029
'DIVERSION'	0.0028
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$425,196
CONGESTED HOURS PER DAY*	9

*Delays Exceeding User-Specified Maximum

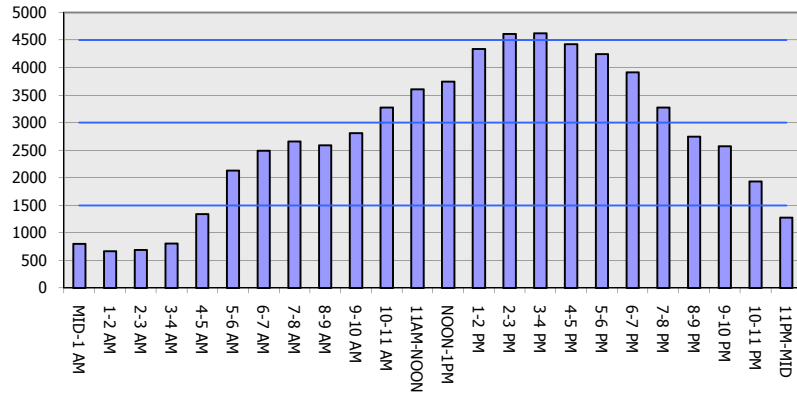
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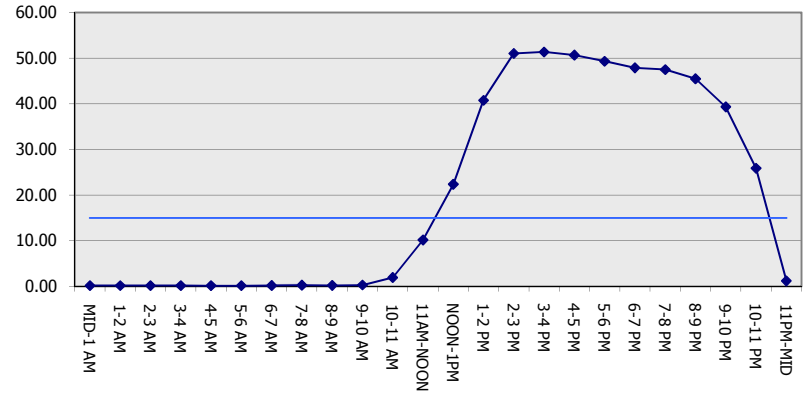
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY WESTBOUND DIRECTION

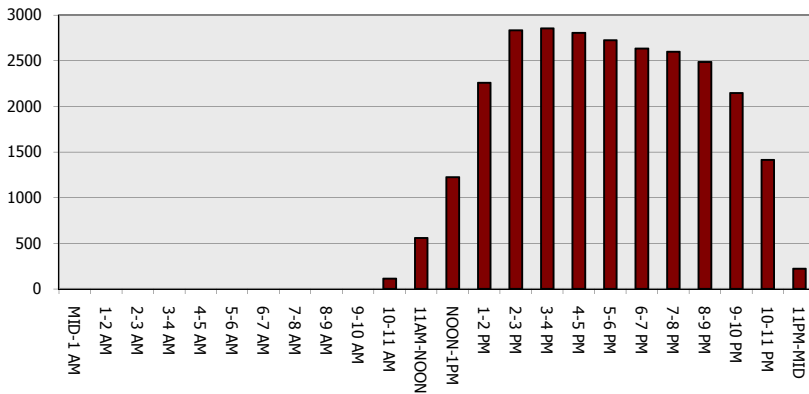
Main Route - Traffic Demand (Vehicles Per Hour)



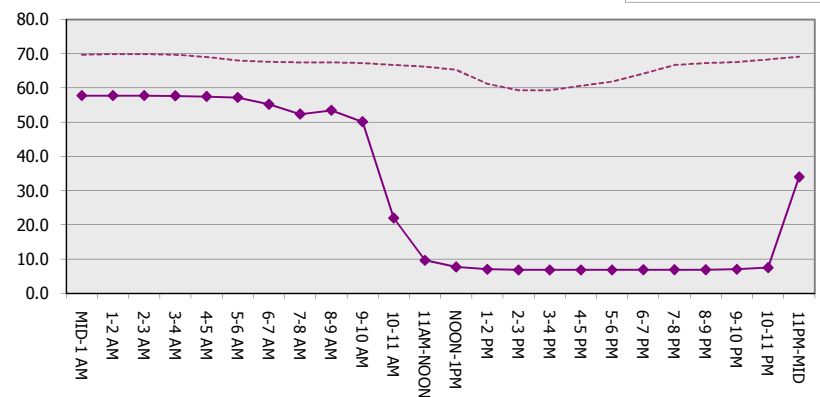
Main Route Average Delay Per Vehicle (Minutes)



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	899	0.0	3000	899	0	0.18	0	69.6	57.7	49.7
1-2 AM	584	0.0	3000	584	0	0.18	0	70.0	57.8	49.7
2-3 AM	512	0.0	3000	512	0	0.18	0	70.1	57.8	49.7
3-4 AM	511	0.0	3000	511	0	0.18	0	70.1	57.8	49.7
4-5 AM	644	0.0	3000	644	0	0.18	0	69.9	57.8	49.7
5-6 AM	1086	0.0	3000	1086	0	0.18	0	69.4	57.6	49.7
6-7 AM	1812	0.0	3000	1812	0	0.17	0	68.5	57.3	49.7
7-8 AM	2659	0.0	2999	2659	0	0.25	0	67.4	52.5	43.5
8-9 AM	3171	0.0	2999	3171	0	0.85	43	66.8	34.3	37.3
9-10 AM	4051	0.0	3000	4051	0	11.04	641	63.2	9.6	37.3
10-11 AM	4982	0.0	3000	4823	159	38.15+	2143	56.8	7.1	37.3
11AM-NOON	5053	0.0	2999	2898	2155	50.68+	2834	56.3	6.9	37.3
NOON-1PM	5048	0.0	2999	3000	2048	51.14+	2859	56.4	6.9	37.3
1-2 PM	5837	0.0	2999	3000	2837	50.38+	2859	51.0	6.9	37.3
2-3 PM	6056	0.0	2999	3000	3056	50.15+	2859	49.5	6.9	37.3
3-4 PM	5869	0.0	2999	3000	2869	50.35+	2859	50.7	6.9	37.3
4-5 PM	5948	0.0	2999	3000	2948	50.26+	2859	50.2	6.9	37.3
5-6 PM	5707	0.0	2999	3000	2707	50.52+	2859	51.9	6.9	37.3
6-7 PM	5447	0.0	2999	3000	2448	50.77+	2859	53.7	6.9	37.3
7-8 PM	3914	0.0	2999	2555	1360	49.85+	2741	64.1	6.9	37.3
8-9 PM	2759	0.0	2999	2759	0	44.59+	2435	67.3	7.0	37.3
9-10 PM	2041	0.0	2999	2041	0	33.18	1809	68.2	7.3	37.3
10-11 PM	1741	0.0	2999	1741	0	11.23	691	68.6	10.0	43.9
11PM-MID	1313	0.0	3000	1313	0	0.18	0	69.1	57.1	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	0.0124
MAIN ROUTE WITH WORKS	0.0028
'DIVERSION'	0.0083

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$676,087
CONGESTED HOURS PER DAY*	11

*Delays Exceeding User-Specified Maximum

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FRIDAY EASTBOUND DIRECTION

