

**IH 94: USH 41 AND IH 43 (MILWAUKEE COUNTY)
CONTINUOUS (24 HOUR) 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	2170	0.0	3000	2170	0	0.33	0	68.1	57.7	49.7	
1-2 AM	1458	0.0	3000	1458	0	0.34	0	68.9	58.0	49.7	
2-3 AM	1497	0.0	3000	1497	0	0.34	0	68.9	58.0	49.7	
3-4 AM	755	0.0	3000	755	0	0.35	0	69.8	58.3	49.7	
4-5 AM	481	0.0	3000	481	0	0.36	0	70.1	58.4	49.7	
5-6 AM	558	0.0	3000	558	0	0.36	0	70.0	58.4	49.7	
6-7 AM	954	0.0	3000	954	0	0.35	0	69.6	58.2	49.7	
7-8 AM	1216	0.0	3000	1216	0	0.35	0	69.2	58.1	49.7	
8-9 AM	1284	0.0	3000	1284	0	0.35	0	69.1	58.1	49.7	
9-10 AM	2396	0.0	2999	2396	0	0.42	0	67.8	55.3	46.4	
10-11 AM	3476	0.0	2999	3476	0	3.22	181	66.4	25.0	37.3	
11AM-NOON	4191	0.0	3000	3439	752	15.56+	840	62.2	10.6	37.3	
NOON-1PM	4467	0.0	2999	3018	1448	17.31+	932	60.4	10.1	37.3	
1-2 PM	4104	0.0	3000	2965	1139	16.87+	900	62.8	10.2	37.3	
2-3 PM	4149	0.0	2999	3002	1147	16.84+	899	62.5	10.2	37.3	
3-4 PM	4086	0.0	3000	2996	1090	16.79+	895	63.0	10.2	37.3	
4-5 PM	3971	0.0	3000	2999	972	16.79+	894	63.7	10.2	37.3	
5-6 PM	3559	0.0	3000	2998	561	16.85+	890	66.3	10.2	37.3	
6-7 PM	3396	0.0	3000	2998	398	16.83+	888	66.5	10.2	37.3	
7-8 PM	3140	0.0	3000	2998	142	16.80+	886	66.8	10.2	37.3	
8-9 PM	2745	0.0	2999	2745	0	14.85+	780	67.3	10.7	37.3	
9-10 PM	2513	0.0	2999	2513	0	7.51	402	67.6	15.0	38.7	
10-11 PM	2354	0.0	3000	2354	0	0.63	21	67.8	50.7	47.5	
11PM-MID	1424	0.0	3000	1424	0	0.34	0	69.0	58.1	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	0.0202
MAIN ROUTE WITH WORKS	0.0141
'DIVERSION'	0.0059
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$186,284
CONGESTED HOURS PER DAY*	10

*Delays Exceeding User-Specified Maximum

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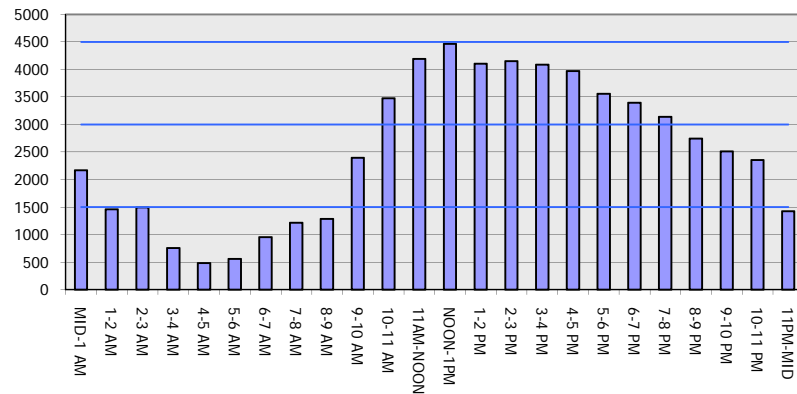
AUGUST

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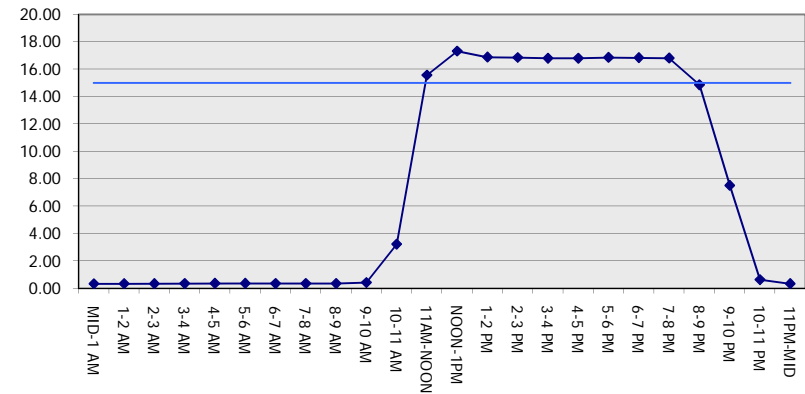
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

SUNDAY WESTBOUND DIRECTION

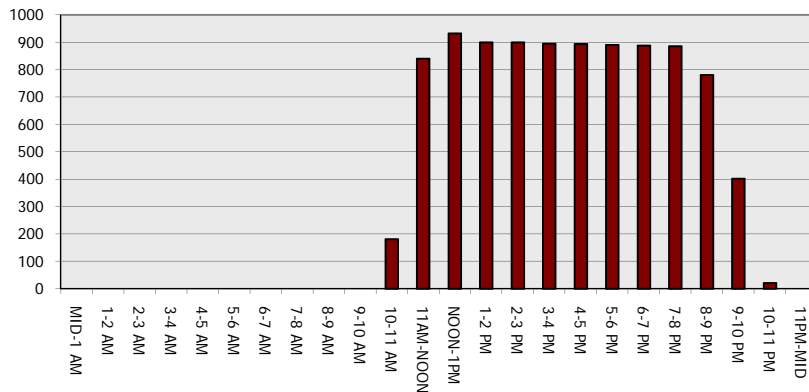
Main Route - Traffic Demand (Vehicles Per Hour)



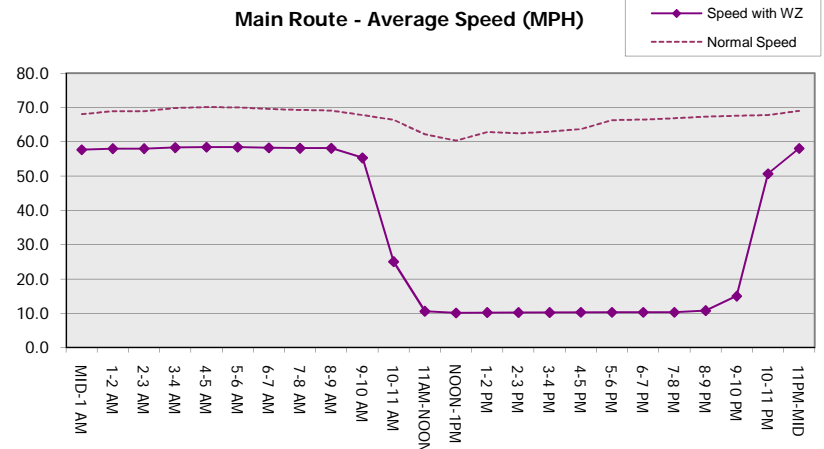
Main Route Average Delay Per Vehicle (Minutes)



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	1416	0.0	3000	1416	0	0.34	0	69.0	58.1	49.7
1-2 AM	758	0.0	3000	758	0	0.35	0	69.8	58.3	49.7
2-3 AM	575	0.0	3000	575	0	0.36	0	70.0	58.4	49.7
3-4 AM	507	0.0	3000	507	0	0.36	0	70.1	58.4	49.7
4-5 AM	331	0.0	3000	331	0	0.36	0	70.2	58.5	49.7
5-6 AM	448	0.0	3000	448	0	0.36	0	70.2	58.5	49.7
6-7 AM	739	0.0	3000	739	0	0.35	0	69.8	58.3	49.7
7-8 AM	1048	0.0	3000	1048	0	0.35	0	69.4	58.2	49.7
8-9 AM	1286	0.0	3000	1286	0	0.35	0	69.1	58.1	49.7
9-10 AM	2222	0.0	3000	2222	0	0.33	0	68.0	57.7	49.7
10-11 AM	2509	0.0	3000	2509	0	0.41	0	67.6	55.5	46.6
11AM-NOON	2686	0.0	3000	2686	0	0.52	0	67.4	52.7	42.7
NOON-1PM	2767	0.0	2999	2767	0	0.57	0	67.3	51.5	41.2
1-2 PM	3503	0.0	2999	3503	0	4.16	230	66.4	21.5	37.3
2-3 PM	3427	0.0	2999	3427	0	13.51+	714	66.4	11.2	37.3
3-4 PM	3584	0.0	2999	2981	602	16.86+	890	66.3	10.2	37.3
4-5 PM	3710	0.0	2999	2991	720	16.84+	891	65.5	10.2	37.3
5-6 PM	3494	0.0	2999	2994	500	16.84+	889	66.4	10.2	37.3
6-7 PM	3426	0.0	2999	2997	429	16.83+	888	66.4	10.2	37.3
7-8 PM	2959	0.0	2999	2932	27	16.52+	870	67.1	10.3	37.3
8-9 PM	2748	0.0	2999	2748	0	13.63+	713	67.3	11.1	37.3
9-10 PM	2483	0.0	2999	2483	0	6.20	347	67.6	17.0	40.2
10-11 PM	1680	0.0	3000	1680	0	0.36	1	68.6	57.4	49.7
11PM-MID	994	0.0	3000	994	0	0.35	0	69.5	58.2	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	0.0165
MAIN ROUTE WITH WORKS	0.0126
'DIVERSION'	0.0018

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$115,049
CONGESTED HOURS PER DAY*	7

*Delays Exceeding User-Specified Maximum

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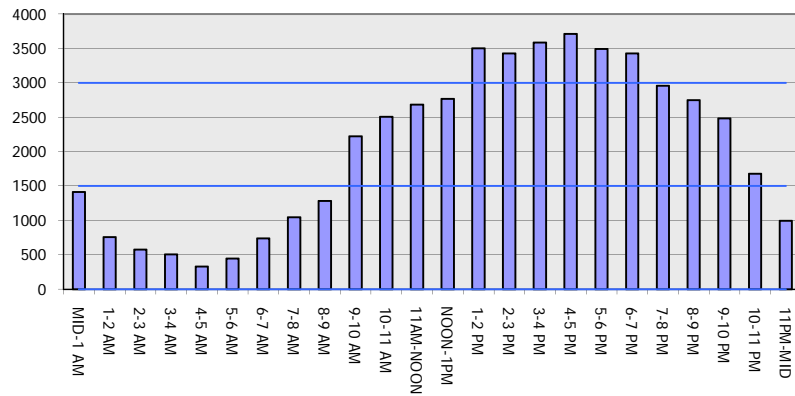
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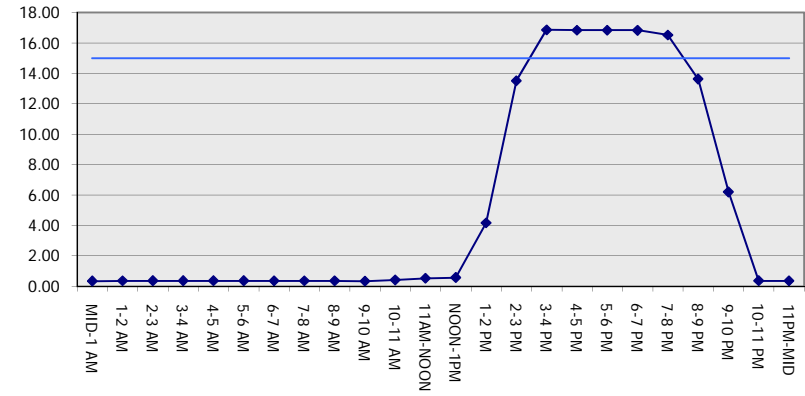
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

SUNDAY EASTBOUND DIRECTION

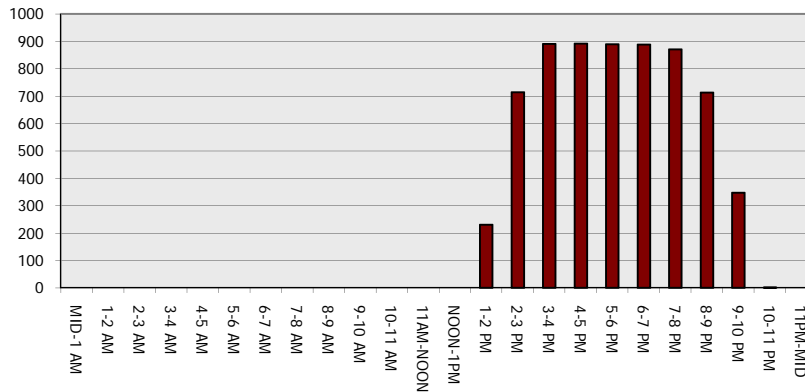
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

