

**IH 43/894: HALE INTERCHANGE TO STH 27 (MILWAUKEE COUNTY)
OFF-PEAK DAY CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

OCTOBER
Analyzed for 2009
Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT
FRIDAY SOUTHBOUND 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	862	0.0	OFF	862	0	0.00	0	69.7	69.7	69.7
1-2 AM	540	0.0	OFF	540	0	0.00	0	70.0	70.0	70.0
2-3 AM	525	0.0	OFF	525	0	0.00	0	70.1	70.1	70.1
3-4 AM	580	0.0	OFF	580	0	0.00	0	70.0	70.0	70.0
4-5 AM	987	0.0	OFF	987	0	0.00	0	69.5	69.5	69.5
5-6 AM	2516	0.0	OFF	2516	0	0.00	0	67.6	67.6	67.6
6-7 AM	4286	0.0	OFF	4286	0	0.00	0	61.5	61.5	61.5
7-8 AM	4643	0.0	OFF	4643	0	0.00	0	59.1	59.1	59.1
8-9 AM	4066	0.0	OFF	4066	0	0.00	0	63.1	63.1	63.1
9-10 AM	3739	0.0	OFF	3739	0	0.00	0	65.3	65.3	65.3
10-11 AM	4024	0.0	2999	3954	70	7.76+	481	63.3	21.8	37.3
11AM-NOON	4345	0.0	3000	2927	1418	14.79+	795	61.2	13.6	37.3
NOON-1PM	4553	0.0	3000	2997	1556	14.80+	801	59.7	13.5	37.3
1-2 PM	4874	0.0	2999	2998	1877	14.64+	801	57.6	13.5	37.3
2-3 PM	5417	0.0	3000	3000	2417	14.34+	801	53.8	13.5	37.3
3-4 PM	5638	0.0	OFF	5638	0	7.19	694	52.4	21.3	21.3
4-5 PM	5732	0.0	OFF	5732	0	3.98	379	51.7	28.8	28.8
5-6 PM	5456	0.0	OFF	5456	0	0.71	55	53.6	46.7	46.7
6-7 PM	4726	0.0	OFF	4726	0	0.00	0	58.6	58.6	58.6
7-8 PM	3494	0.0	OFF	3494	0	0.00	0	66.4	66.4	66.4
8-9 PM	2772	0.0	OFF	2772	0	0.00	0	67.3	67.3	67.3
9-10 PM	2688	0.0	OFF	2688	0	0.00	0	67.4	67.4	67.4
10-11 PM	2042	0.0	OFF	2042	0	0.00	0	68.2	68.2	68.2
11PM-MID	1494	0.0	OFF	1494	0	0.00	0	68.9	68.9	68.9

"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	0.0547
MAIN ROUTE WITH WORKS	0.0487
'DIVERSION'	0.0116
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$74,043
CONGESTED HOURS PER DAY*	5

*Delays Exceeding User-Specified Maximum

IH 43/894: HALE INTERCHANGE TO STH 27 (MILWAUKEE COUNTY)
OFF-PEAK DAY CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)

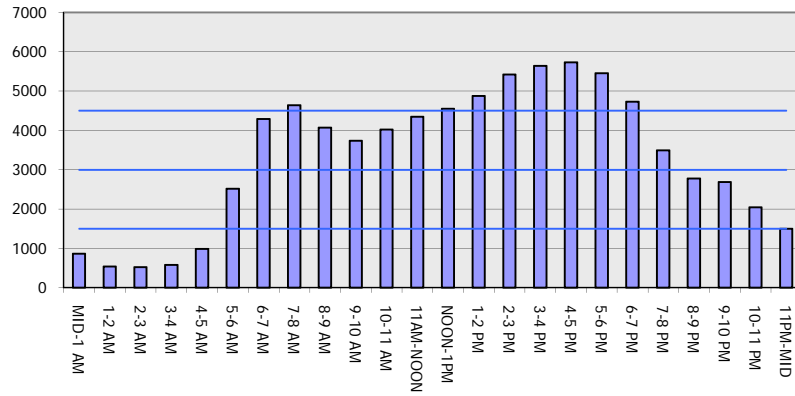
OCTOBER

Analyzed for 2009
 Construction Season

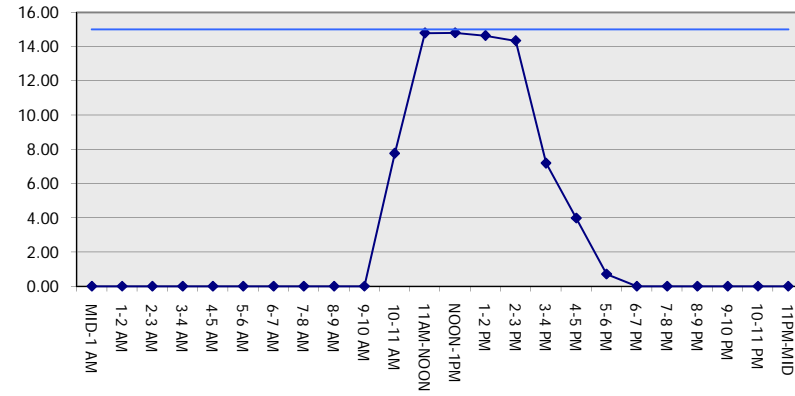
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY SOUTHBOUND DIRECTION

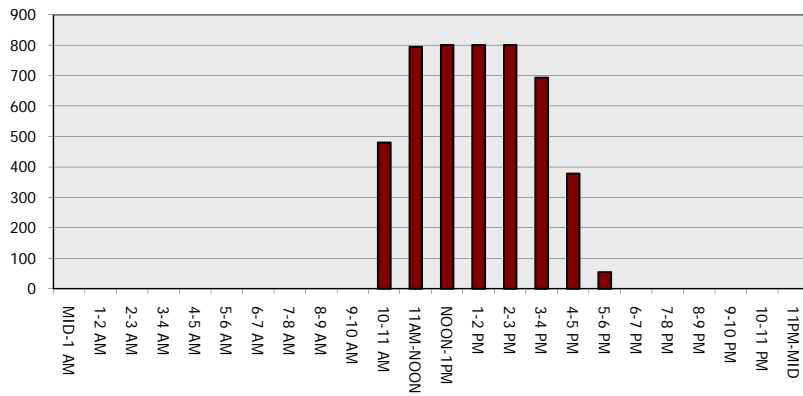
Main Route - Traffic Demand (Vehicles Per Hour)



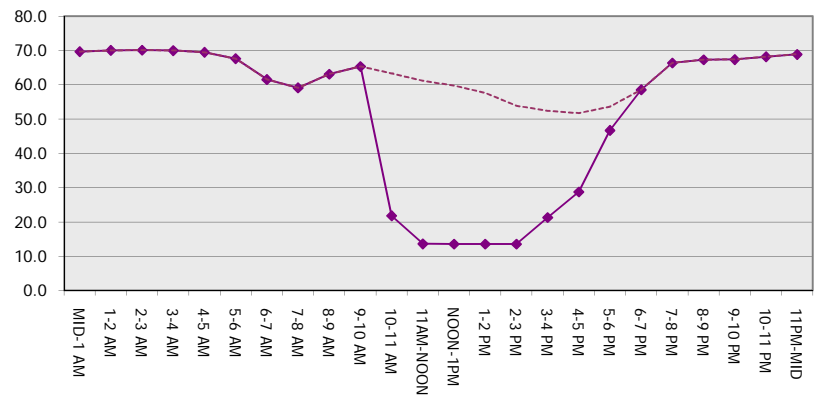
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



IH 43/894: HALE INTERCHANGE TO STH 27 (MILWAUKEE COUNTY) OFF-PEAK DAY CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	Analyzed for 2009 Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT

FRIDAY NORTHBOUND 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	646	0.0	OFF	646	0	0.00	0	69.9	69.9	69.9
1-2 AM	428	0.0	OFF	428	0	0.00	0	70.2	70.2	70.2
2-3 AM	442	0.0	OFF	442	0	0.00	0	70.2	70.2	70.2
3-4 AM	568	0.0	OFF	568	0	0.00	0	70.0	70.0	70.0
4-5 AM	1040	0.0	OFF	1040	0	0.00	0	69.4	69.4	69.4
5-6 AM	2441	0.0	OFF	2441	0	0.00	0	67.7	67.7	67.7
6-7 AM	4760	0.0	OFF	4760	0	0.00	0	58.3	58.3	58.3
7-8 AM	5386	0.0	OFF	5386	0	0.00	0	54.1	54.1	54.1
8-9 AM	4381	0.0	OFF	4381	0	0.00	0	60.9	60.9	60.9
9-10 AM	3735	0.0	OFF	3735	0	0.00	0	65.3	65.3	65.3
10-11 AM	3746	0.0	2999	3746	0	6.27	367	65.3	25.2	37.3
11AM-NOON	3897	0.0	2999	3001	896	15.10+	801	64.2	13.5	37.3
NOON-1PM	4286	0.0	3000	3003	1284	14.93+	801	61.5	13.5	37.3
1-2 PM	4453	0.0	3000	3003	1450	14.85+	801	60.4	13.5	37.3
2-3 PM	4926	0.0	3000	3001	1925	14.62+	801	57.2	13.5	37.3
3-4 PM	5403	0.0	OFF	5403	0	4.95	455	54.0	26.5	26.5
4-5 PM	5582	0.0	OFF	5582	0	0.40	29	52.7	48.7	48.7
5-6 PM	5569	0.0	OFF	5569	0	0.00	0	52.8	52.8	52.8
6-7 PM	4540	0.0	OFF	4540	0	0.00	0	59.9	59.9	59.9
7-8 PM	3464	0.0	OFF	3464	0	0.00	0	66.4	66.4	66.4
8-9 PM	2840	0.0	OFF	2840	0	0.00	0	67.2	67.2	67.2
9-10 PM	2613	0.0	OFF	2613	0	0.00	0	67.5	67.5	67.5
10-11 PM	2007	0.0	OFF	2007	0	0.00	0	68.2	68.2	68.2
11PM-MID	1457	0.0	OFF	1457	0	0.00	0	68.9	68.9	68.9

"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	0.0538
MAIN ROUTE WITH WORKS	0.0490
'DIVERSION'	0.0088

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$61,215
CONGESTED HOURS PER DAY*	4

*Delays Exceeding User-Specified Maximum

IH 43/894: HALE INTERCHANGE TO STH 27 (MILWAUKEE COUNTY)
OFF-PEAK DAY CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)

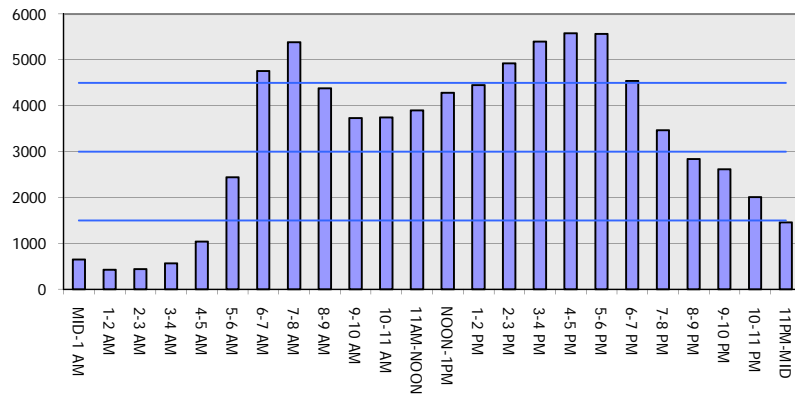
OCTOBER

Analyzed for 2009
 Construction Season

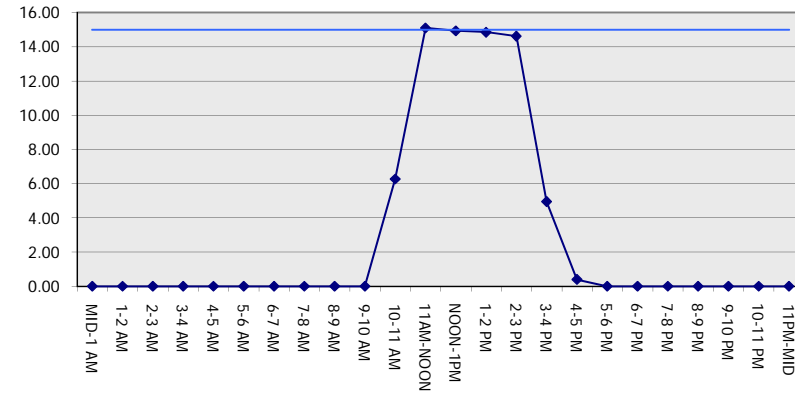
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY NORTHBOUND DIRECTION

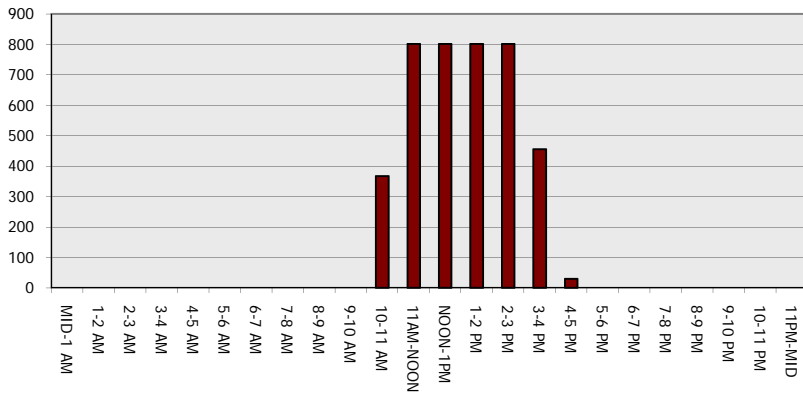
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

