

**USH 45: CTH E TO STH 190 (MILWAUKEE COUNTY)  
OFF-PEAK DAY CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

**OCTOBER**  
Analyzed for 2009  
Construction Season

**SUMMARY OF TRAFFIC MODEL OUTPUT**  
SATURDAY 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	898	0.0	OFF	898	0	0.00	0	69.6	69.6	69.6	
1-2 AM	490	0.0	OFF	490	0	0.00	0	70.1	70.1	70.1	
2-3 AM	478	0.0	OFF	478	0	0.00	0	70.1	70.1	70.1	
3-4 AM	349	0.0	OFF	349	0	0.00	0	70.2	70.2	70.2	
4-5 AM	474	0.0	OFF	474	0	0.00	0	70.2	70.2	70.2	
5-6 AM	904	0.0	OFF	904	0	0.00	0	69.6	69.6	69.6	
6-7 AM	1841	0.0	OFF	1841	0	0.00	0	68.4	68.4	68.4	
7-8 AM	2479	0.0	OFF	2479	0	0.00	0	67.6	67.6	67.6	
8-9 AM	3288	0.0	2999	3288	0	2.39	113	66.6	27.8	37.3	
9-10 AM	3453	0.0	2999	3453	0	9.36	491	66.4	12.8	37.3	
10-11 AM	4021	0.0	2999	3172	849	16.82+	896	63.4	10.0	37.3	
11AM-NOON	4624	0.0	3000	3045	1579	17.68+	956	59.2	9.7	37.3	
NOON-1PM	4715	0.0	3000	3002	1713	17.85+	967	58.6	9.7	37.3	
1-2 PM	4375	0.0	3000	2975	1400	17.47+	939	61.0	9.8	37.3	
2-3 PM	4620	0.0	2999	3033	1587	17.79+	962	59.3	9.7	37.3	
3-4 PM	4450	0.0	3000	2979	1471	17.60+	947	60.4	9.8	37.3	
4-5 PM	4703	0.0	2999	3015	1688	17.82+	965	58.7	9.7	37.3	
5-6 PM	4103	0.0	3000	2950	1153	17.13+	915	62.8	9.9	37.3	
6-7 PM	3878	0.0	OFF	3878	0	2.15	195	64.3	29.1	29.1	
7-8 PM	2974	0.0	OFF	2974	0	0.00	0	67.1	67.1	67.1	
8-9 PM	2190	0.0	OFF	2190	0	0.00	0	68.0	68.0	68.0	
9-10 PM	2123	0.0	OFF	2123	0	0.00	0	68.1	68.1	68.1	
10-11 PM	1890	0.0	OFF	1890	0	0.00	0	68.4	68.4	68.4	
11PM-MID	1311	0.0	OFF	1311	0	0.00	0	69.1	69.1	69.1	

"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	0.0196
MAIN ROUTE WITH WORKS	0.0141
'DIVERSION'	0.0080
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$183,952
CONGESTED HOURS PER DAY*	8

\*Delays Exceeding User-Specified Maximum

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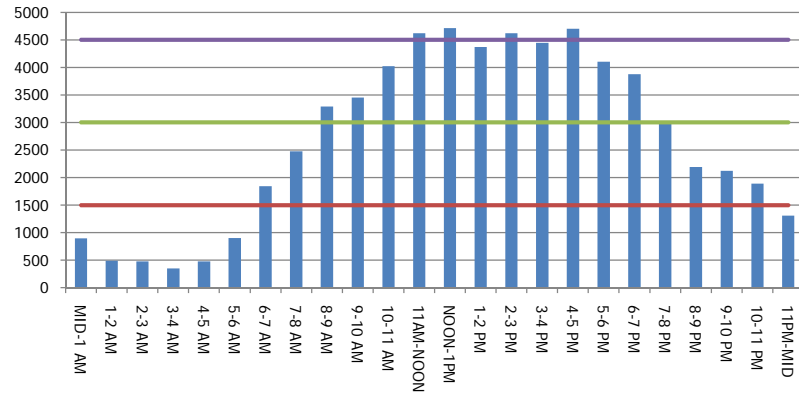
**OCTOBER**

Analyzed for 2009  
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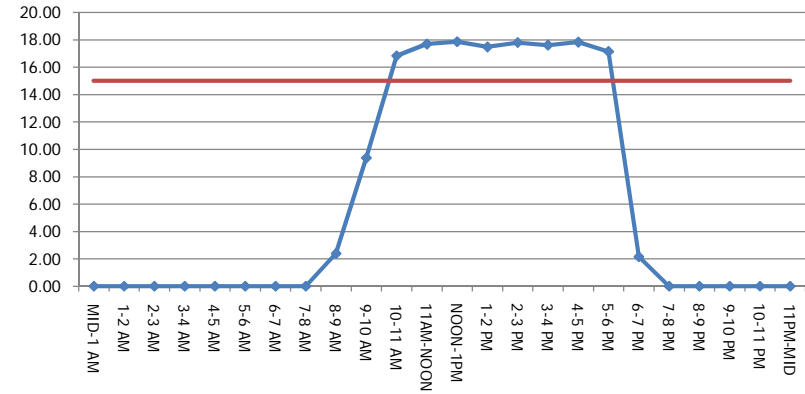
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SATURDAY SOUTHBOUND DIRECTION**

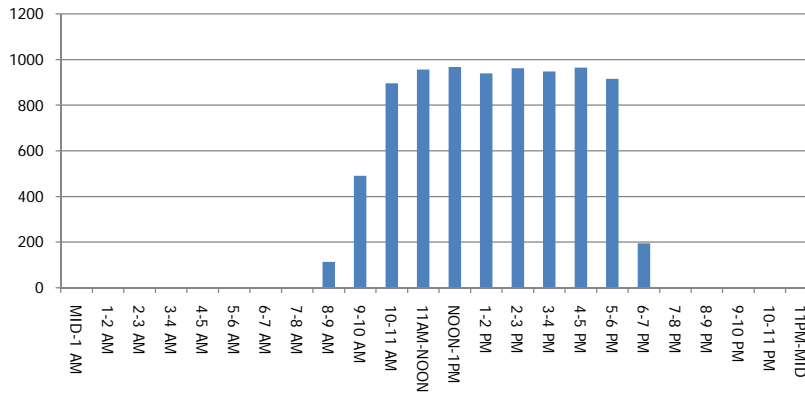
**Main Route - Traffic Demand (Vehicles Per Hour)**



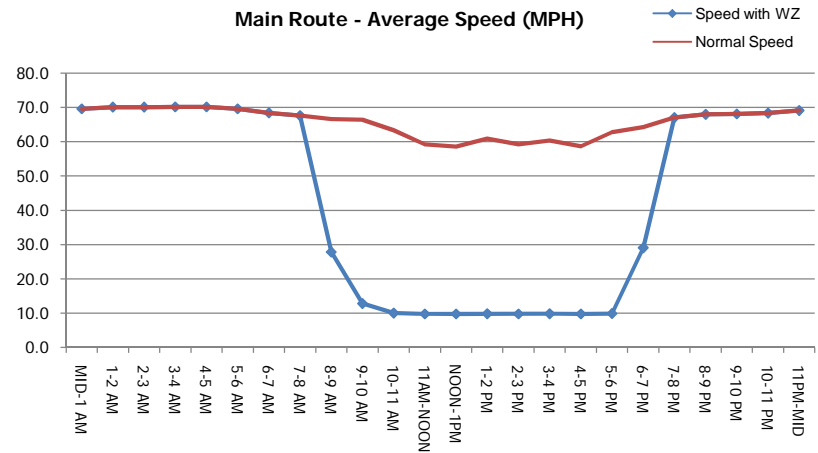
**Main Route Average Delay Per Vehicle (Minutes)**



**Main Route - Average Queue Length (Vehicles)**



**Main Route - Average Speed (MPH)**



<b>USH 45: CTH E TO STH 190 (MILWAUKEE COUNTY)</b> <b>OFF-PEAK DAY CLOSURE</b> <b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b>	<b>OCTOBER</b>
	Analyzed for 2009 Construction Season

**SUMMARY OF TRAFFIC MODEL OUTPUT**

SATURDAY 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	1253	0.0	OFF	1253	0	0.00	0	69.2	69.2	69.2
1-2 AM	893	0.0	OFF	893	0	0.00	0	69.6	69.6	69.6
2-3 AM	834	0.0	OFF	834	0	0.00	0	69.7	69.7	69.7
3-4 AM	679	0.0	OFF	679	0	0.00	0	69.9	69.9	69.9
4-5 AM	838	0.0	OFF	838	0	0.00	0	69.7	69.7	69.7
5-6 AM	1355	0.0	OFF	1355	0	0.00	0	69.1	69.1	69.1
6-7 AM	1925	0.0	OFF	1925	0	0.00	0	68.3	68.3	68.3
7-8 AM	2517	0.0	OFF	2517	0	0.00	0	67.6	67.6	67.6
8-9 AM	3112	0.0	2999	3112	0	1.20	34	66.9	39.3	37.6
9-10 AM	3818	0.0	3000	3818	0	9.05+	510	64.8	13.3	37.3
10-11 AM	4250	0.0	2999	2973	1277	17.25+	924	61.8	9.9	37.3
11AM-NOON	4326	0.0	3000	3005	1321	17.31+	929	61.3	9.9	37.3
NOON-1PM	4485	0.0	3000	3016	1469	17.58+	947	60.2	9.8	37.3
1-2 PM	4327	0.0	3000	2984	1342	17.36+	932	61.3	9.8	37.3
2-3 PM	4726	0.0	2999	3020	1706	17.79+	965	58.6	9.7	37.3
3-4 PM	4455	0.0	3000	2988	1468	17.59+	947	60.4	9.8	37.3
4-5 PM	4456	0.0	3000	2998	1458	17.57+	946	60.4	9.8	37.3
5-6 PM	4057	0.0	3000	2970	1087	17.08+	911	63.2	9.9	37.3
6-7 PM	3421	0.0	OFF	3421	0	1.75	160	66.5	32.9	32.9
7-8 PM	3054	0.0	OFF	3054	0	0.00	0	66.9	66.9	66.9
8-9 PM	2466	0.0	OFF	2466	0	0.00	0	67.7	67.7	67.7
9-10 PM	2441	0.0	OFF	2441	0	0.00	0	67.7	67.7	67.7
10-11 PM	2487	0.0	OFF	2487	0	0.00	0	67.6	67.6	67.6
11PM-MID	1883	0.0	OFF	1883	0	0.00	0	68.4	68.4	68.4

"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	0.0206
MAIN ROUTE WITH WORKS	0.0152
'DIVERSION'	0.0078

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$179,404
CONGESTED HOURS PER DAY*	9

\*Delays Exceeding User-Specified Maximum

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**OCTOBER**

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**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT  
SATURDAY NORTHBOUND DIRECTION**

