

<b>USH 45: CTH E TO STH 190 (MILWAUKEE COUNTY)</b> <b>OFF-PEAK DAY 2 LANE CLOSURE</b> <b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b>	<b>OCTOBER</b>
	Analyzed for 2009 Construction Season

**SUMMARY OF TRAFFIC MODEL OUTPUT**

SUNDAY 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	842	0.0	OFF	842	0	0.00	0	69.7	69.7	69.7	
1-2 AM	473	0.0	OFF	473	0	0.00	0	70.2	70.2	70.2	
2-3 AM	428	0.0	OFF	428	0	0.00	0	70.2	70.2	70.2	
3-4 AM	306	0.0	OFF	306	0	0.00	0	70.2	70.2	70.2	
4-5 AM	279	0.0	OFF	279	0	0.00	0	70.2	70.2	70.2	
5-6 AM	486	0.0	OFF	486	0	0.00	0	70.1	70.1	70.1	
6-7 AM	905	0.0	OFF	905	0	0.00	0	69.6	69.6	69.6	
7-8 AM	1156	0.0	OFF	1156	0	0.00	0	69.3	69.3	69.3	
8-9 AM	1702	0.0	OFF	1702	0	0.00	0	68.6	68.6	68.6	
9-10 AM	2584	0.0	1499	1937	647	12.68+	321	67.5	8.8	30.8	
10-11 AM	3214	0.0	1499	1494	1720	17.19+	422	66.8	7.3	30.8	
11AM-NOON	3815	0.0	1500	1500	2315	17.15+	423	64.8	7.3	30.8	
NOON-1PM	4429	0.0	1500	1500	2929	17.00+	423	60.6	7.3	30.8	
1-2 PM	4484	0.0	1500	1500	2984	16.98+	423	60.2	7.3	30.8	
2-3 PM	4689	0.0	1500	1500	3189	16.93+	423	58.8	7.3	30.8	
3-4 PM	4437	0.0	1500	1500	2937	17.00+	423	60.5	7.3	30.8	
4-5 PM	4151	0.0	1500	1500	2651	17.07+	423	62.5	7.3	30.8	
5-6 PM	4025	0.0	1500	1500	2525	17.10+	423	63.3	7.3	30.8	
6-7 PM	3794	0.0	1500	1500	2294	17.15+	423	65.0	7.3	30.8	
7-8 PM	3004	0.0	OFF	3004	0	0.32	31	67.0	56.3	56.3	
8-9 PM	2277	0.0	OFF	2277	0	0.00	0	67.9	67.9	67.9	
9-10 PM	1638	0.0	OFF	1638	0	0.00	0	68.7	68.7	68.7	
10-11 PM	1076	0.0	OFF	1076	0	0.00	0	69.4	69.4	69.4	
11PM-MID	662	0.0	OFF	662	0	0.00	0	69.9	69.9	69.9	

"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	0.0166
MAIN ROUTE WITH WORKS	0.0083
'DIVERSION'	0.0170
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$184,485
CONGESTED HOURS PER DAY*	10

\*Delays Exceeding User-Specified Maximum

**USH 45: CTH E TO STH 190 (MILWAUKEE COUNTY)**  
**OFF-PEAK DAY 2 LANE CLOSURE**  
**NO DIVERSION ROUTE (MAX QUEUE METHOD)**

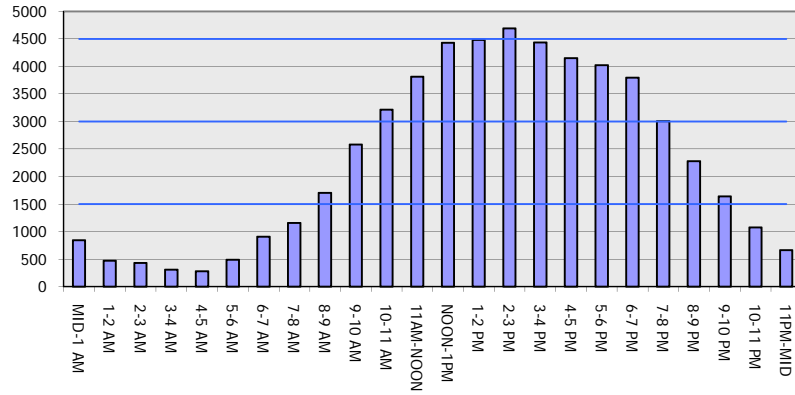
**OCTOBER**

Analyzed for 2009  
 Construction Season

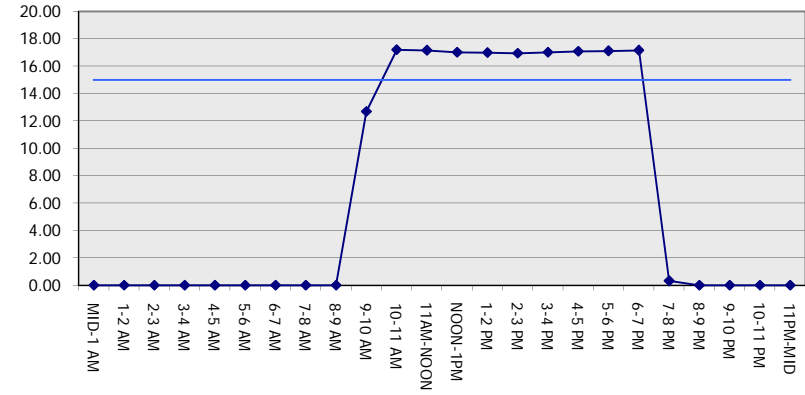
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SUNDAY SOUTHBOUND DIRECTION**

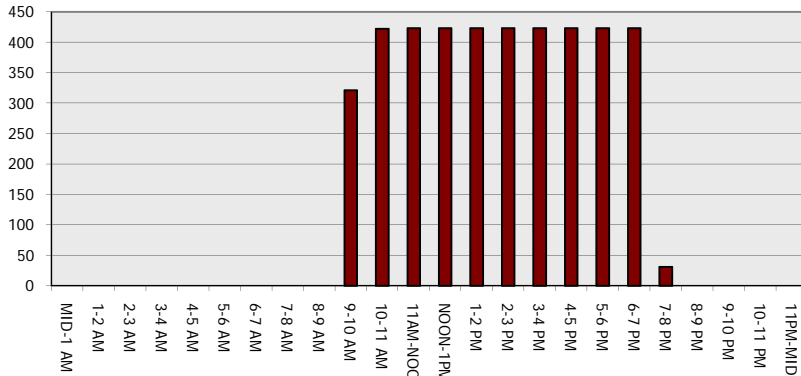
**Main Route - Traffic Demand (Vehicles Per Hour)**



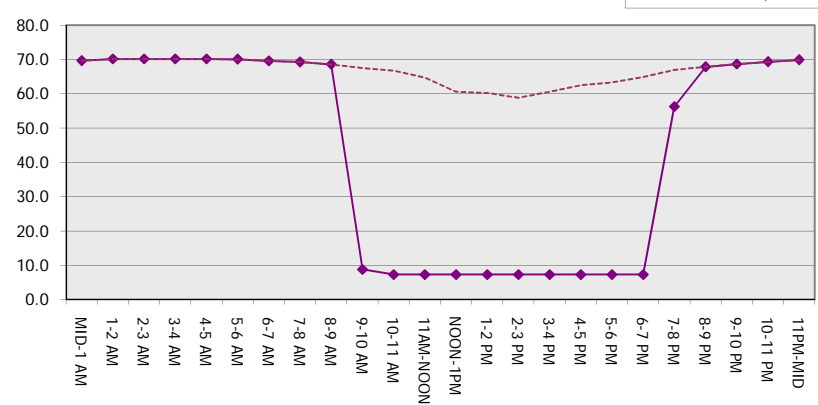
**Main Route Average Delay Per Vehicle (Minutes)**



**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 2 LANE CLOSURE</b> <b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b>	<b>OCTOBER</b>
	Analyzed for 2009 Construction Season

**SUMMARY OF TRAFFIC MODEL OUTPUT**

SUNDAY 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	1278	0.0	OFF	1278	0	0.00	0	69.1	69.1	69.1
1-2 AM	825	0.0	OFF	825	0	0.00	0	69.7	69.7	69.7
2-3 AM	825	0.0	OFF	825	0	0.00	0	69.7	69.7	69.7
3-4 AM	559	0.0	OFF	559	0	0.00	0	70.0	70.0	70.0
4-5 AM	548	0.0	OFF	548	0	0.00	0	70.0	70.0	70.0
5-6 AM	736	0.0	OFF	736	0	0.00	0	69.8	69.8	69.8
6-7 AM	1015	0.0	OFF	1015	0	0.00	0	69.5	69.5	69.5
7-8 AM	1296	0.0	OFF	1296	0	0.00	0	69.1	69.1	69.1
8-9 AM	1795	0.0	OFF	1795	0	0.00	0	68.5	68.5	68.5
9-10 AM	2510	0.0	1499	1922	588	12.35+	314	67.6	8.9	30.8
10-11 AM	3067	0.0	1499	1499	1567	17.16+	422	66.9	7.3	30.8
11AM-NOON	3388	0.0	1500	1500	1888	17.20+	423	66.5	7.3	30.8
NOON-1PM	3881	0.0	1500	1500	2381	17.13+	423	64.3	7.3	30.8
1-2 PM	3868	0.0	1500	1500	2368	17.14+	423	64.5	7.3	30.8
2-3 PM	3907	0.0	1500	1500	2407	17.13+	423	64.1	7.3	30.8
3-4 PM	4233	0.0	1500	1500	2733	17.05+	423	61.9	7.3	30.8
4-5 PM	3911	0.0	1500	1500	2411	17.13+	423	64.1	7.3	30.8
5-6 PM	3899	0.0	1500	1500	2399	17.13+	423	64.2	7.3	30.8
6-7 PM	3174	0.0	1500	1500	1673	17.18+	422	66.8	7.3	30.8
7-8 PM	2946	0.0	OFF	2946	0	0.30	29	67.1	56.9	56.9
8-9 PM	2231	0.0	OFF	2231	0	0.00	0	67.9	67.9	67.9
9-10 PM	1963	0.0	OFF	1963	0	0.00	0	68.3	68.3	68.3
10-11 PM	1564	0.0	OFF	1564	0	0.00	0	68.8	68.8	68.8
11PM-MID	1071	0.0	OFF	1071	0	0.00	0	69.4	69.4	69.4

"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	0.0165
MAIN ROUTE WITH WORKS	0.0093
'DIVERSION'	0.0143

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$167,179
CONGESTED HOURS PER DAY*	10

\*Delays Exceeding User-Specified Maximum

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OFF-PEAK DAY 2 LANE CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

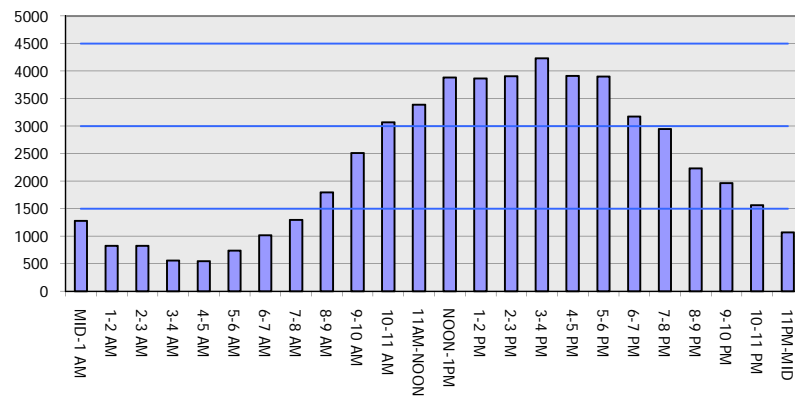
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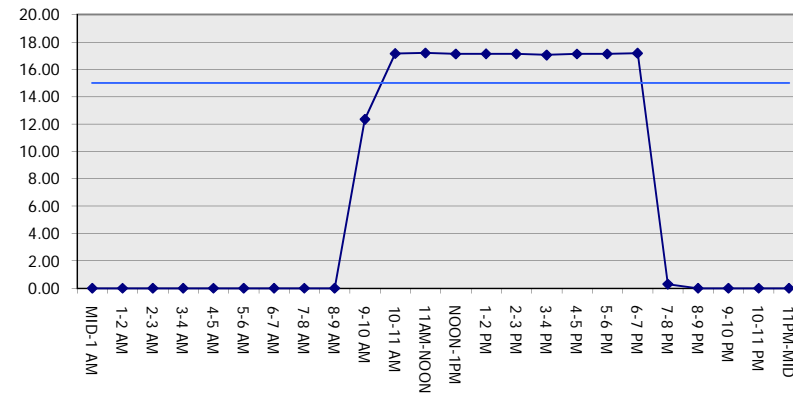
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**SUNDAY NORTHBOUND DIRECTION**

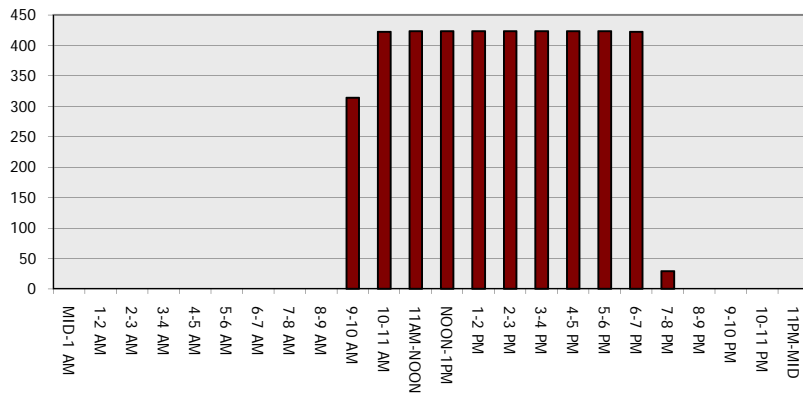
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

