

<b>USH 45: CTH E TO STH 190 (MILWAUKEE COUNTY)</b> <b>CONTINUOUS (24 HOUR) 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	1500	842	0	0.57	0	69.7	51.7	42.2	
1-2 AM	473	0.0	1500	473	0	0.53	0	70.2	52.9	43.6	
2-3 AM	428	0.0	1500	428	0	0.52	0	70.2	53.0	43.8	
3-4 AM	306	0.0	1500	306	0	0.51	0	70.2	53.4	44.3	
4-5 AM	279	0.0	1500	279	0	0.51	0	70.2	53.5	44.3	
5-6 AM	486	0.0	1500	486	0	0.53	0	70.1	52.8	43.5	
6-7 AM	905	0.0	1500	905	0	0.58	0	69.6	51.5	42.0	
7-8 AM	1156	0.0	1499	1156	0	0.68	0	69.3	49.0	39.1	
8-9 AM	1702	0.0	1499	1702	0	2.47	56	68.6	27.6	30.8	
9-10 AM	2584	0.0	1500	1786	797	16.02+	396	67.5	7.6	30.8	
10-11 AM	3214	0.0	1499	1475	1739	17.13+	421	66.8	7.3	30.8	
11AM-NOON	3815	0.0	1499	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	1499	1477	1526	17.10+	420	67.0	7.3	30.8	
8-9 PM	2277	0.0	1499	1498	779	16.92+	414	67.9	7.3	30.8	
9-10 PM	1638	0.0	1499	1450	188	16.71+	408	68.7	7.4	30.8	
10-11 PM	1076	0.0	1499	1076	0	5.94	207	69.4	15.6	35.6	
11PM-MID	662	0.0	1500	662	0	0.55	0	69.9	52.3	42.9	

+ 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	0.0066
'DIVERSION'	0.0188
<small>PIA: Personal Injury Accidents</small>	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$223,929
CONGESTED HOURS PER DAY*	13

\*Delays Exceeding User-Specified Maximum

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CONTINUOUS (24 HOUR) 2 LANE CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

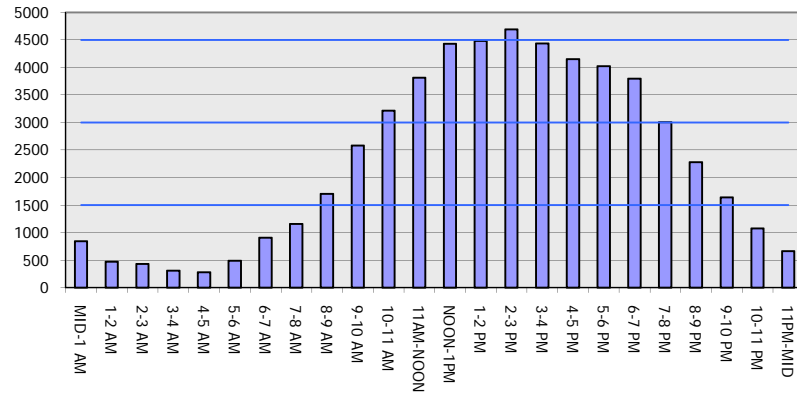
**OCTOBER**

Analyzed for 2009  
Construction Season

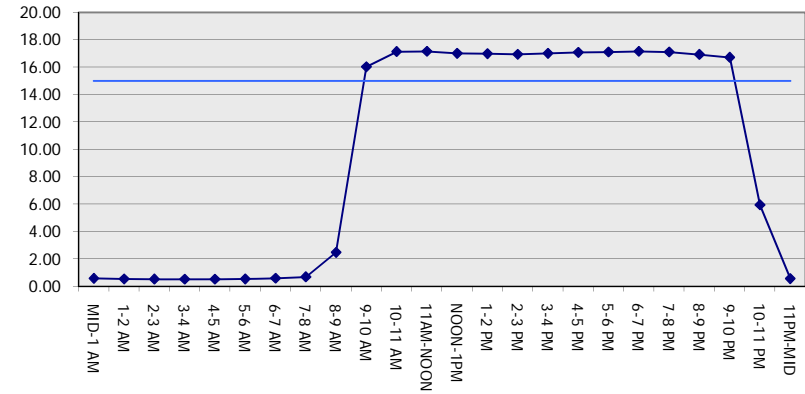
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SUNDAY SOUTHBOUND DIRECTION**

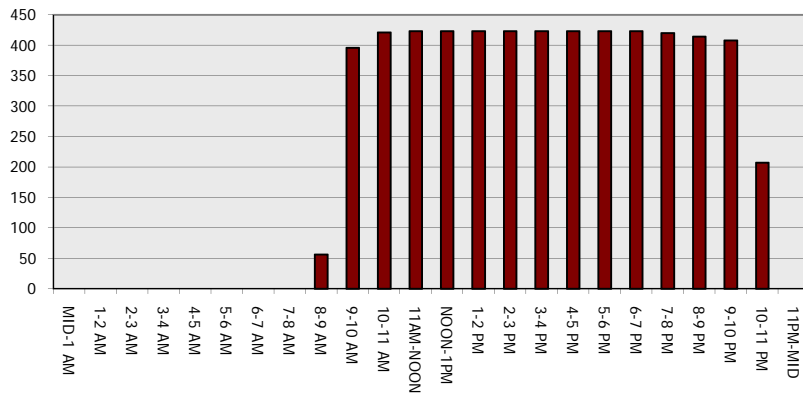
**Main Route - Traffic Demand (Vehicles Per Hour)**



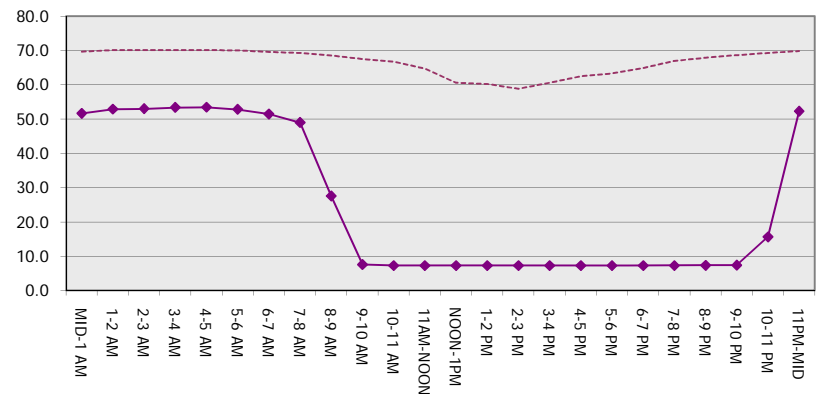
**Main Route Average Delay Per Vehicle (Minutes)**



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



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



<b>USH 45: CTH E TO STH 190 (MILWAUKEE COUNTY)</b> <b>CONTINUOUS (24 HOUR) 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	1500	1278	0	0.81	0	69.1	46.4	36.1
1-2 AM	825	0.0	1500	825	0	0.57	0	69.7	51.7	42.3
2-3 AM	825	0.0	1500	825	0	0.57	0	69.7	51.7	42.3
3-4 AM	559	0.0	1500	559	0	0.54	0	70.0	52.6	43.3
4-5 AM	548	0.0	1500	548	0	0.54	0	70.0	52.7	43.3
5-6 AM	736	0.0	1500	736	0	0.56	0	69.8	52.0	42.6
6-7 AM	1015	0.0	1500	1015	0	0.59	0	69.5	51.1	41.6
7-8 AM	1296	0.0	1499	1296	0	0.83	0	69.1	46.1	35.8
8-9 AM	1795	0.0	1499	1795	0	4.09	109	68.5	19.8	30.8
9-10 AM	2510	0.0	1499	1586	924	16.70+	409	67.6	7.4	30.8
10-11 AM	3067	0.0	1500	1520	1547	17.12+	421	66.9	7.3	30.8
11AM-NOON	3388	0.0	1500	1501	1887	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	1508	1666	17.17+	422	66.8	7.3	30.8
7-8 PM	2946	0.0	1500	1506	1440	17.09+	420	67.1	7.3	30.8
8-9 PM	2231	0.0	1500	1500	731	16.92+	414	67.9	7.3	30.8
9-10 PM	1963	0.0	1500	1500	463	16.91+	414	68.3	7.3	30.8
10-11 PM	1564	0.0	1500	1476	88	16.72+	408	68.8	7.4	30.8
11PM-MID	1071	0.0	1499	1071	0	5.27	187	69.4	17.1	35.6

+ 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	0.0073
'DIVERSION'	0.0164

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$216,694
CONGESTED HOURS PER DAY*	14

\*Delays Exceeding User-Specified Maximum

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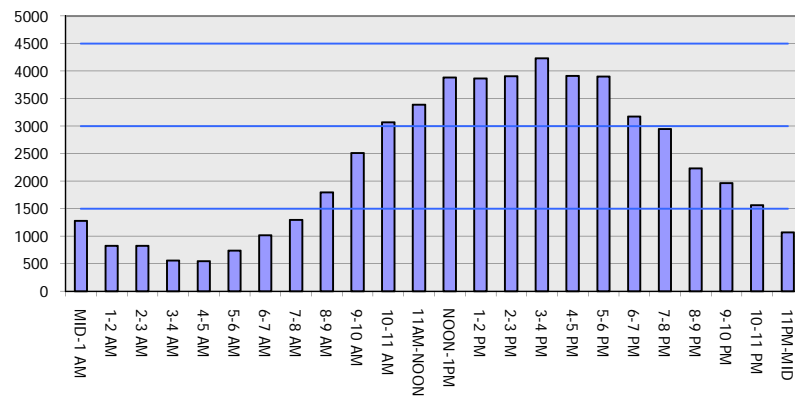
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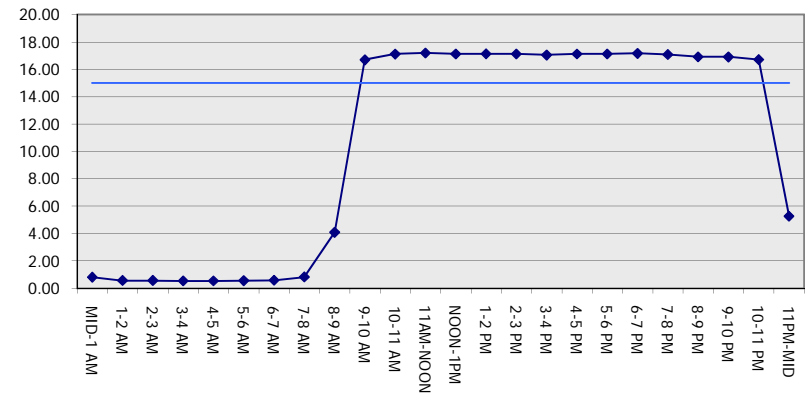
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**SUNDAY NORTHBOUND DIRECTION**

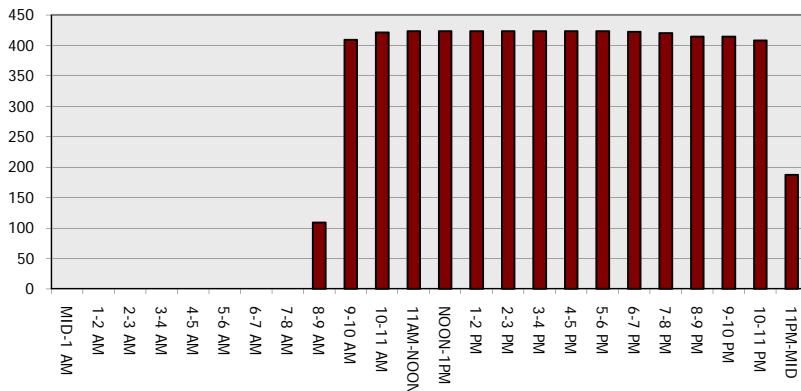
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

