

<b>USH 45: STH 190 TO NORTH AVE (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**

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	843	0.0	OFF	843	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	429	0.0	OFF	429	0	0.00	0	70.2	70.2	70.2
3-4 AM	307	0.0	OFF	307	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	487	0.0	OFF	487	0	0.00	0	70.1	70.1	70.1
6-7 AM	907	0.0	OFF	907	0	0.00	0	69.6	69.6	69.6
7-8 AM	1158	0.0	OFF	1158	0	0.00	0	69.3	69.3	69.3
8-9 AM	1706	0.0	OFF	1706	0	0.00	0	68.6	68.6	68.6
9-10 AM	2589	0.0	2999	2589	0	0.45	0	67.5	54.3	45.1
10-11 AM	3221	0.0	2999	3221	0	1.76	71	66.8	34.5	37.3
11AM-NOON	3822	0.0	3000	3813	10	10.66+	592	64.8	12.6	37.3
NOON-1PM	4438	0.0	2999	2907	1530	17.36+	935	60.5	10.1	37.3
1-2 PM	4493	0.0	3000	3000	1493	17.39+	937	60.2	10.1	37.3
2-3 PM	4698	0.0	2999	3002	1697	17.58+	953	58.7	10.0	37.3
3-4 PM	4446	0.0	3000	2981	1465	17.35+	934	60.5	10.1	37.3
4-5 PM	4159	0.0	3000	2972	1187	16.91+	904	62.4	10.2	37.3
5-6 PM	4034	0.0	3000	2999	1035	16.79+	894	63.3	10.2	37.3
6-7 PM	3803	0.0	3000	2999	804	16.82+	892	64.9	10.2	37.3
7-8 PM	3010	0.0	OFF	3010	0	1.42	133	67.0	38.2	38.2
8-9 PM	2282	0.0	OFF	2282	0	0.00	0	67.9	67.9	67.9
9-10 PM	1641	0.0	OFF	1641	0	0.00	0	68.7	68.7	68.7
10-11 PM	1078	0.0	OFF	1078	0	0.00	0	69.4	69.4	69.4
11PM-MID	663	0.0	OFF	663	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	0.0184
MAIN ROUTE WITH WORKS	0.0133
'DIVERSION'	0.0071
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$155,801
CONGESTED HOURS PER DAY*	8

\*Delays Exceeding User-Specified Maximum

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

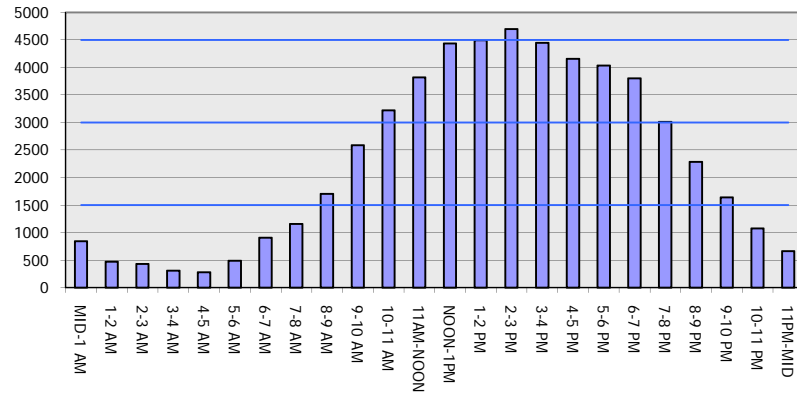
**OCTOBER**

Analyzed for 2009  
Construction Season

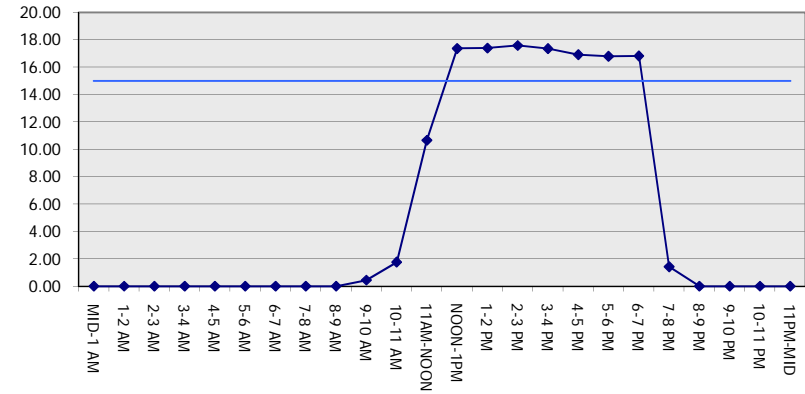
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SUNDAY SOUTHBOUND DIRECTION**

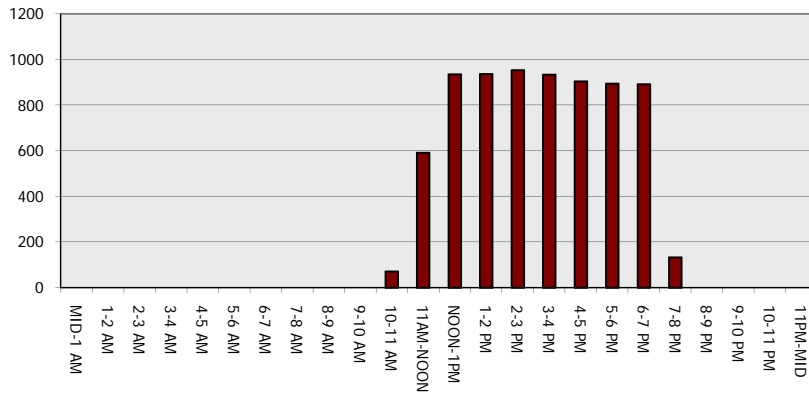
**Main Route - Traffic Demand (Vehicles Per Hour)**



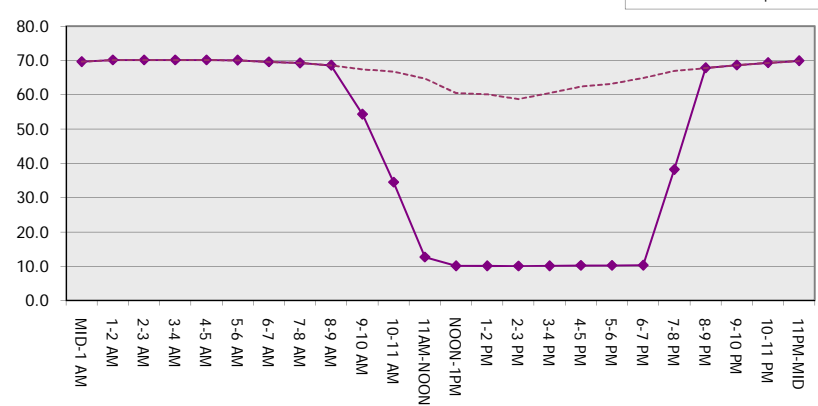
**Main Route Average Delay Per Vehicle (Minutes)**



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



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



<b>USH 45: STH 190 TO NORTH AVE (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**

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	1280	0.0	OFF	1280	0	0.00	0	69.1	69.1	69.1
1-2 AM	827	0.0	OFF	827	0	0.00	0	69.7	69.7	69.7
2-3 AM	827	0.0	OFF	827	0	0.00	0	69.7	69.7	69.7
3-4 AM	560	0.0	OFF	560	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	738	0.0	OFF	738	0	0.00	0	69.8	69.8	69.8
6-7 AM	1017	0.0	OFF	1017	0	0.00	0	69.5	69.5	69.5
7-8 AM	1299	0.0	OFF	1299	0	0.00	0	69.1	69.1	69.1
8-9 AM	1799	0.0	OFF	1799	0	0.00	0	68.5	68.5	68.5
9-10 AM	2514	0.0	2999	2514	0	0.42	0	67.6	55.2	46.3
10-11 AM	3073	0.0	2999	3073	0	1.07	22	66.9	42.7	37.5
11AM-NOON	3394	0.0	3000	3394	0	5.07	263	66.5	18.8	37.3
NOON-1PM	3889	0.0	3000	3413	477	14.85+	793	64.3	10.7	37.3
1-2 PM	3876	0.0	2999	2997	878	16.81+	893	64.4	10.2	37.3
2-3 PM	3915	0.0	3000	2999	916	16.80+	893	64.1	10.2	37.3
3-4 PM	4242	0.0	2999	3015	1227	16.95+	908	61.9	10.2	37.3
4-5 PM	3919	0.0	3000	2992	926	16.80+	893	64.1	10.2	37.3
5-6 PM	3907	0.0	2999	2996	911	16.81+	893	64.1	10.2	37.3
6-7 PM	3180	0.0	3000	2991	189	16.80+	886	66.8	10.2	37.3
7-8 PM	2952	0.0	OFF	2952	0	1.37	129	67.1	38.8	38.8
8-9 PM	2235	0.0	OFF	2235	0	0.00	0	67.9	67.9	67.9
9-10 PM	1967	0.0	OFF	1967	0	0.00	0	68.3	68.3	68.3
10-11 PM	1566	0.0	OFF	1566	0	0.00	0	68.8	68.8	68.8
11PM-MID	1073	0.0	OFF	1073	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	0.0182
MAIN ROUTE WITH WORKS	0.0144
'DIVERSION'	0.0043

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$129,048
CONGESTED HOURS PER DAY*	7

\*Delays Exceeding User-Specified Maximum

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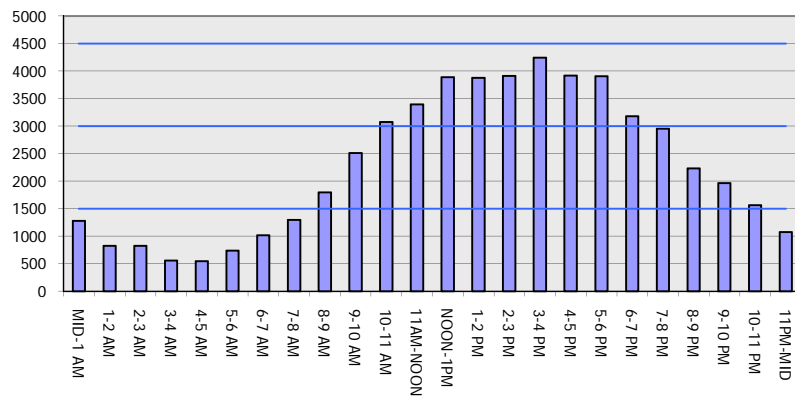
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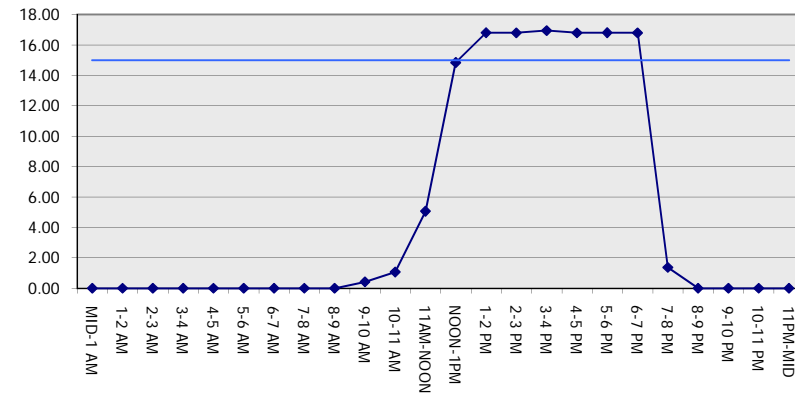
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SUNDAY NORTHBOUND DIRECTION**

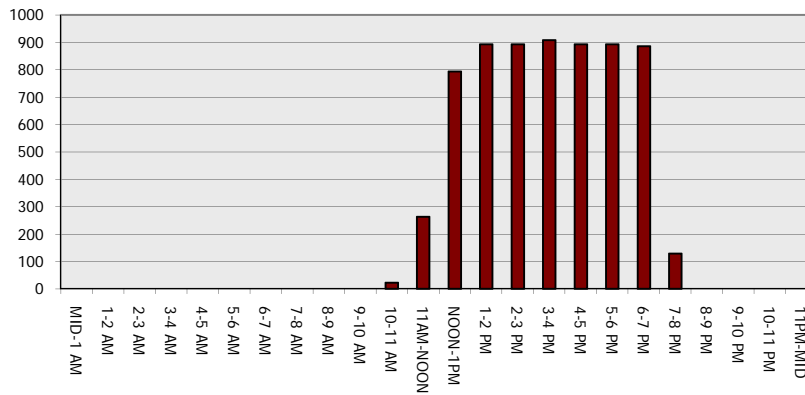
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

