

<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**

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	900	0.0	OFF	900	0	0.00	0	69.6	69.6	69.6	
1-2 AM	491	0.0	OFF	491	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	906	0.0	OFF	906	0	0.00	0	69.6	69.6	69.6	
6-7 AM	1845	0.0	OFF	1845	0	0.00	0	68.4	68.4	68.4	
7-8 AM	2484	0.0	OFF	2484	0	0.00	0	67.6	67.6	67.6	
8-9 AM	3295	0.0	2999	3295	0	2.45	117	66.6	29.0	37.3	
9-10 AM	3459	0.0	2999	3459	0	9.54	501	66.4	13.1	37.3	
10-11 AM	4030	0.0	2999	3148	881	16.83+	897	63.3	10.2	37.3	
11AM-NOON	4633	0.0	3000	3042	1592	17.44+	943	59.2	10.0	37.3	
NOON-1PM	4724	0.0	3000	3001	1724	17.58+	953	58.6	10.0	37.3	
1-2 PM	4384	0.0	3000	2979	1406	17.25+	927	60.9	10.1	37.3	
2-3 PM	4629	0.0	2999	3028	1602	17.54+	949	59.2	10.0	37.3	
3-4 PM	4460	0.0	3000	2984	1476	17.36+	935	60.4	10.1	37.3	
4-5 PM	4713	0.0	2999	3011	1702	17.55+	951	58.7	10.0	37.3	
5-6 PM	4111	0.0	3000	2958	1154	16.94+	904	62.8	10.2	37.3	
6-7 PM	3886	0.0	OFF	3886	0	2.14	192	64.3	30.7	30.7	
7-8 PM	2980	0.0	OFF	2980	0	0.00	0	67.0	67.0	67.0	
8-9 PM	2194	0.0	OFF	2194	0	0.00	0	68.0	68.0	68.0	
9-10 PM	2127	0.0	OFF	2127	0	0.00	0	68.1	68.1	68.1	
10-11 PM	1894	0.0	OFF	1894	0	0.00	0	68.4	68.4	68.4	
11PM-MID	1314	0.0	OFF	1314	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	0.0216
MAIN ROUTE WITH WORKS	0.0157
'DIVERSION'	0.0089
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$182,506
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)**

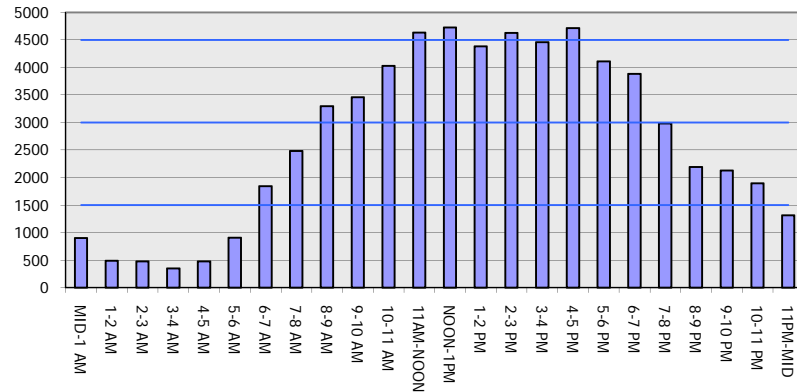
**OCTOBER**

Analyzed for 2009  
Construction Season

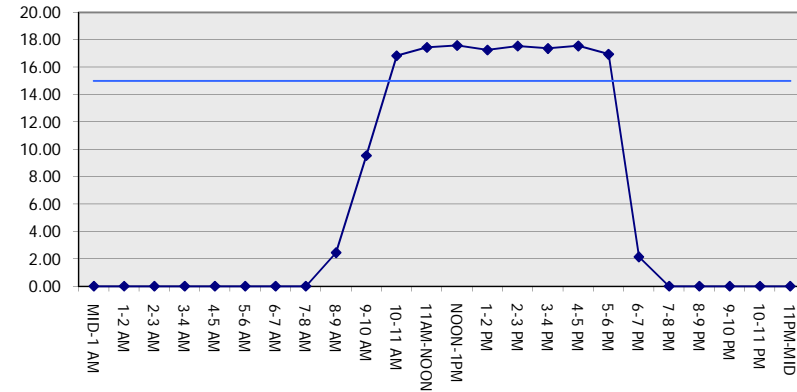
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SATURDAY SOUTHBOUND DIRECTION**

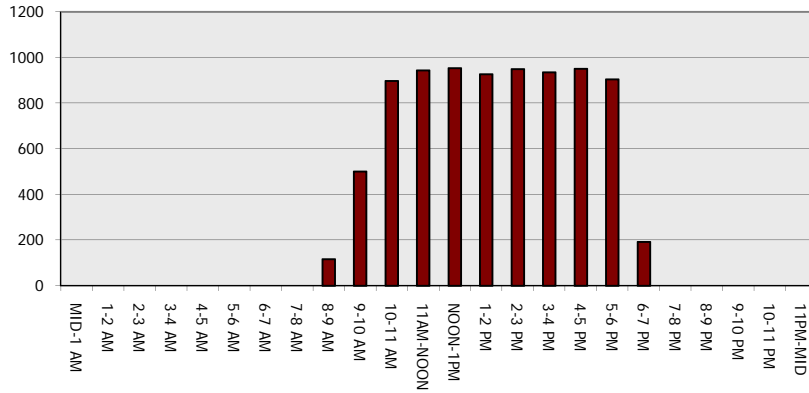
**Main Route - Traffic Demand (Vehicles Per Hour)**



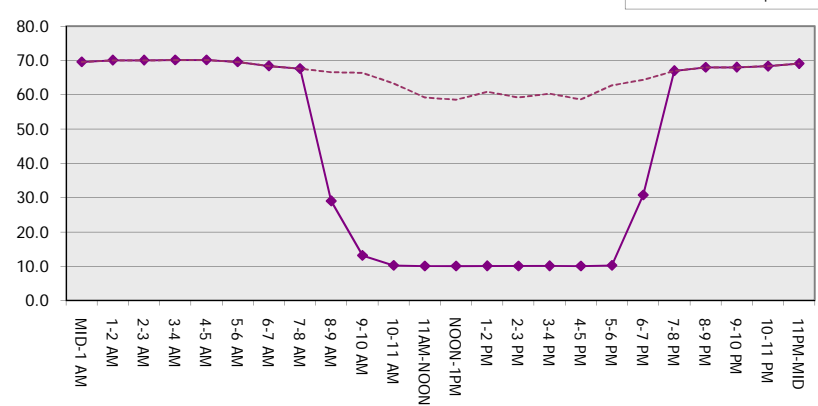
**Main Route Average Delay Per Vehicle (Minutes)**



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



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



<b>USH 45: 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**

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	1256	0.0	OFF	1256	0	0.00	0	69.2	69.2	69.2
1-2 AM	895	0.0	OFF	895	0	0.00	0	69.6	69.6	69.6
2-3 AM	836	0.0	OFF	836	0	0.00	0	69.7	69.7	69.7
3-4 AM	681	0.0	OFF	681	0	0.00	0	69.9	69.9	69.9
4-5 AM	839	0.0	OFF	839	0	0.00	0	69.7	69.7	69.7
5-6 AM	1357	0.0	OFF	1357	0	0.00	0	69.1	69.1	69.1
6-7 AM	1928	0.0	OFF	1928	0	0.00	0	68.3	68.3	68.3
7-8 AM	2522	0.0	OFF	2522	0	0.00	0	67.6	67.6	67.6
8-9 AM	3118	0.0	2999	3118	0	1.22	35	66.9	40.6	37.6
9-10 AM	3826	0.0	3000	3826	0	9.14+	517	64.7	13.7	37.3
10-11 AM	4259	0.0	2999	2952	1306	17.10+	916	61.8	10.1	37.3
11AM-NOON	4334	0.0	3000	3004	1330	17.12+	919	61.2	10.1	37.3
NOON-1PM	4494	0.0	2999	3015	1480	17.36+	936	60.2	10.1	37.3
1-2 PM	4335	0.0	3000	2985	1350	17.16+	921	61.2	10.1	37.3
2-3 PM	4736	0.0	2999	3015	1721	17.53+	951	58.5	10.0	37.3
3-4 PM	4465	0.0	3000	2993	1472	17.35+	935	60.4	10.1	37.3
4-5 PM	4466	0.0	2999	2998	1468	17.35+	934	60.4	10.1	37.3
5-6 PM	4065	0.0	3000	2973	1092	16.90+	901	63.1	10.2	37.3
6-7 PM	3428	0.0	OFF	3428	0	1.74	158	66.4	34.7	34.7
7-8 PM	3061	0.0	OFF	3061	0	0.00	0	66.9	66.9	66.9
8-9 PM	2472	0.0	OFF	2472	0	0.00	0	67.7	67.7	67.7
9-10 PM	2445	0.0	OFF	2445	0	0.00	0	67.7	67.7	67.7
10-11 PM	2492	0.0	OFF	2492	0	0.00	0	67.6	67.6	67.6
11PM-MID	1887	0.0	OFF	1887	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	0.0228
MAIN ROUTE WITH WORKS	0.0170
'DIVERSION'	0.0087

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$177,910
CONGESTED HOURS PER DAY*	9

\*Delays Exceeding User-Specified Maximum

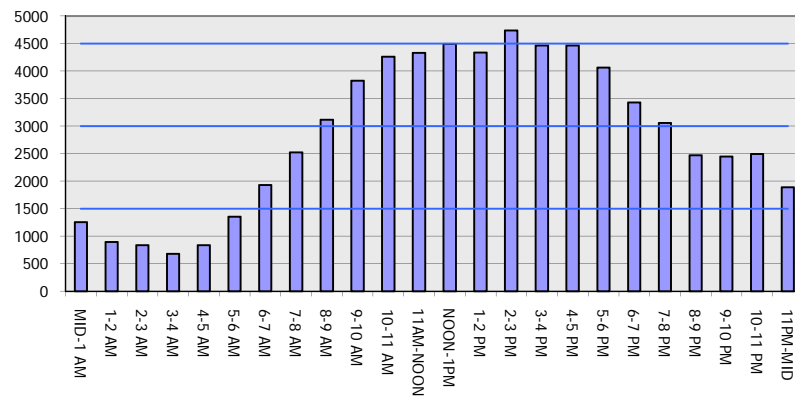
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 OFF-PEAK DAY CLOSURE  
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**OCTOBER**

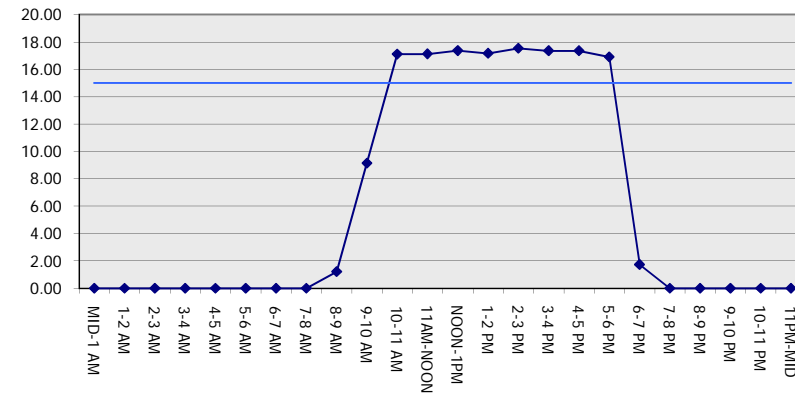
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**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**  
**SATURDAY NORTHBOUND DIRECTION**

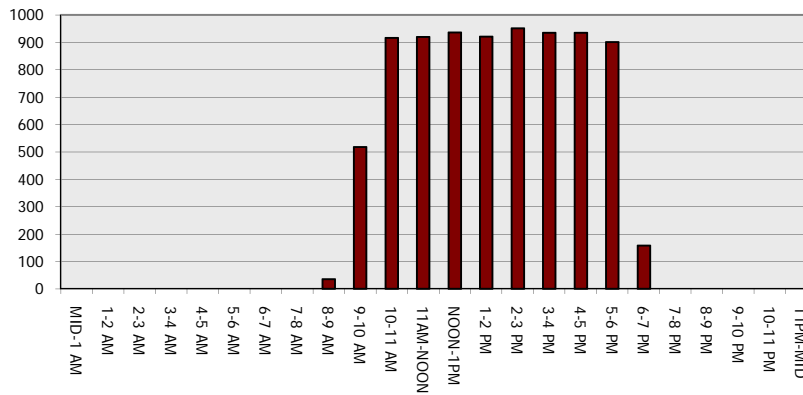
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

