

<b>USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY) NIGHTTIME 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)</b>	<b>OCTOBER</b>
	Analyzed for 2009 Construction Season

<b>SUMMARY OF TRAFFIC MODEL OUTPUT</b>	
FRIDAY	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	729	0.0	2000	729	0	0.56	0	69.8	53.3	42.7
1-2 AM	482	0.0	2000	482	0	0.53	0	70.1	54.2	43.6
2-3 AM	425	0.0	2000	425	0	0.52	0	70.2	54.3	43.8
3-4 AM	496	0.0	2000	496	0	0.53	0	70.1	54.1	43.5
4-5 AM	816	0.0	2000	816	0	0.57	0	69.7	53.0	42.4
5-6 AM	2264	0.0	OFF	2264	0	0.00	0	67.9	67.9	67.9
6-7 AM	4972	0.0	OFF	4972	0	0.00	0	56.9	56.9	56.9
7-8 AM	5772	0.0	OFF	5772	0	0.00	0	51.4	51.4	51.4
8-9 AM	5057	0.0	OFF	5057	0	0.00	0	56.3	56.3	56.3
9-10 AM	4459	0.0	OFF	4459	0	0.00	0	60.4	60.4	60.4
10-11 AM	3426	0.0	OFF	3426	0	0.00	0	66.4	66.4	66.4
11AM-NOON	4675	0.0	OFF	4675	0	0.00	0	58.9	58.9	58.9
NOON-1PM	4902	0.0	OFF	4902	0	0.00	0	57.4	57.4	57.4
1-2 PM	5013	0.0	OFF	5013	0	0.00	0	56.6	56.6	56.6
2-3 PM	5676	0.0	OFF	5676	0	0.00	0	52.1	52.1	52.1
3-4 PM	4722	0.0	OFF	4722	0	0.00	0	58.6	58.6	58.6
4-5 PM	4558	0.0	OFF	4558	0	0.00	0	59.7	59.7	59.7
5-6 PM	4318	0.0	OFF	4318	0	0.00	0	61.4	61.4	61.4
6-7 PM	4201	0.0	OFF	4201	0	0.00	0	62.2	62.2	62.2
7-8 PM	3405	0.0	1999	2472	933	14.42+	475	66.5	9.1	27.9
8-9 PM	2554	0.0	1999	2045	509	17.00+	558	67.6	8.4	27.9
9-10 PM	2452	0.0	2000	2007	444	17.10+	561	67.7	8.4	27.9
10-11 PM	1865	0.0	2000	1865	0	14.90+	484	68.4	8.9	27.9
11PM-MID	1562	0.0	1999	1562	0	5.40	207	68.8	17.8	28.6

"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	0.0263
MAIN ROUTE WITH WORKS	0.0249
'DIVERSION'	0.0015
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$40,757
CONGESTED HOURS PER DAY*	4

\*Delays Exceeding User-Specified Maximum

**USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY)  
NIGHTTIME 2 LANE CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

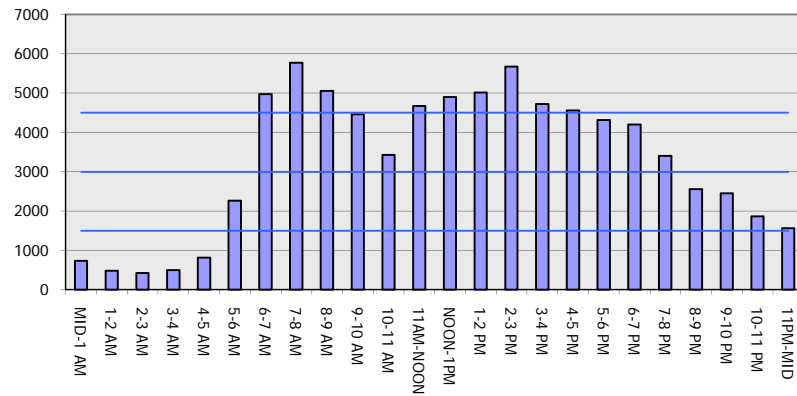
**OCTOBER**

Analyzed for 2009  
Construction Season

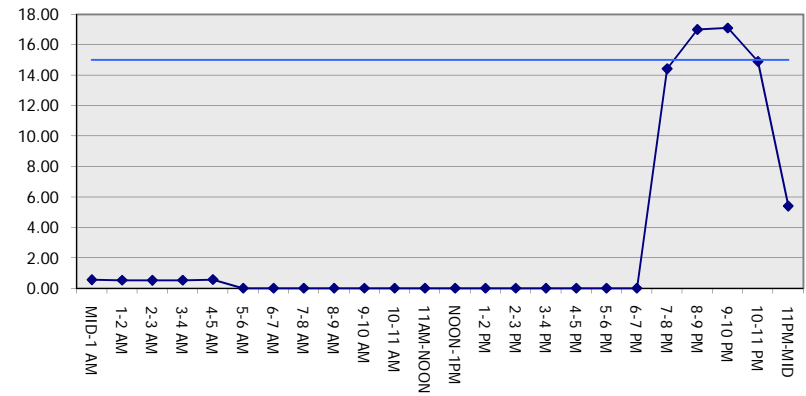
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**FRIDAY SOUTHBOUND DIRECTION**

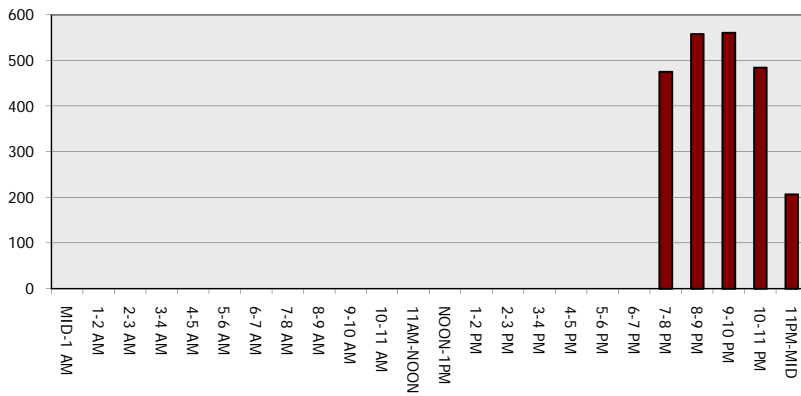
**Main Route - Traffic Demand (Vehicles Per Hour)**



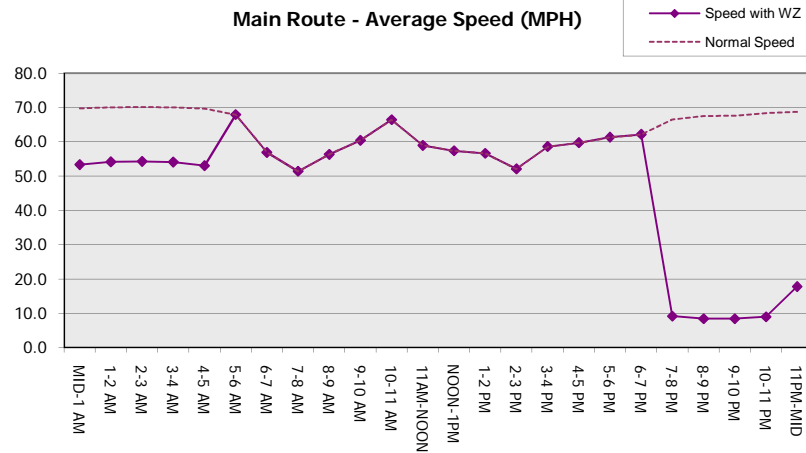
**Main Route Average Delay Per Vehicle (Minutes)**



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



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



<b>USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY)</b> <b>NIGHTTIME 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**

FRIDAY 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	992	0.0	2000	992	0	1.74	97	69.5	35.6	37.4	
1-2 AM	763	0.0	2000	763	0	0.56	0	69.8	53.2	42.5	
2-3 AM	705	0.0	2000	705	0	0.56	0	69.9	53.4	42.7	
3-4 AM	748	0.0	2000	748	0	0.56	0	69.8	53.3	42.6	
4-5 AM	1311	0.0	1999	1311	0	0.87	0	69.1	46.7	35.1	
5-6 AM	3150	0.0	OFF	3150	0	0.00	0	66.8	66.8	66.8	
6-7 AM	5295	0.0	OFF	5295	0	0.00	0	54.7	54.7	54.7	
7-8 AM	6310	0.0	OFF	6310	0	0.00	0	47.8	47.8	47.8	
8-9 AM	5149	0.0	OFF	5149	0	0.00	0	55.7	55.7	55.7	
9-10 AM	4472	0.0	OFF	4472	0	0.00	0	60.3	60.3	60.3	
10-11 AM	3629	0.0	OFF	3629	0	0.00	0	66.1	66.1	66.1	
11AM-NOON	4875	0.0	OFF	4875	0	0.00	0	57.6	57.6	57.6	
NOON-1PM	5210	0.0	OFF	5210	0	0.00	0	55.3	55.3	55.3	
1-2 PM	5476	0.0	OFF	5476	0	0.00	0	53.5	53.5	53.5	
2-3 PM	6101	0.0	OFF	6101	0	0.00	0	49.2	49.2	49.2	
3-4 PM	6011	0.0	OFF	6011	0	0.00	0	49.8	49.8	49.8	
4-5 PM	6507	0.0	OFF	6507	0	0.00	0	46.4	46.4	46.4	
5-6 PM	6481	0.0	OFF	6481	0	0.00	0	46.6	46.6	46.6	
6-7 PM	4339	0.0	OFF	4339	0	0.00	0	61.2	61.2	61.2	
7-8 PM	3677	0.0	1999	2289	1388	15.28+	510	65.8	8.9	29.9	
8-9 PM	2926	0.0	1999	2305	621	16.08+	532	67.1	8.6	27.9	
9-10 PM	3002	0.0	1999	1989	1013	17.15+	564	67.0	8.3	27.9	
10-11 PM	2354	0.0	1999	1996	358	17.10+	561	67.8	8.4	27.9	
11PM-MID	1885	0.0	1999	1832	52	15.88+	519	68.4	8.7	27.9	

"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	0.0305
MAIN ROUTE WITH WORKS	0.0284
'DIVERSION'	0.0027

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$54,178
CONGESTED HOURS PER DAY*	5

\*Delays Exceeding User-Specified Maximum

**USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY)  
NIGHTTIME 2 LANE CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

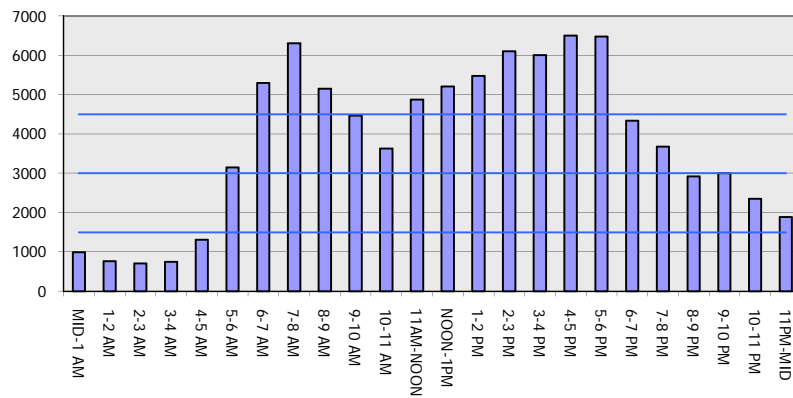
**OCTOBER**

Analyzed for 2009  
Construction Season

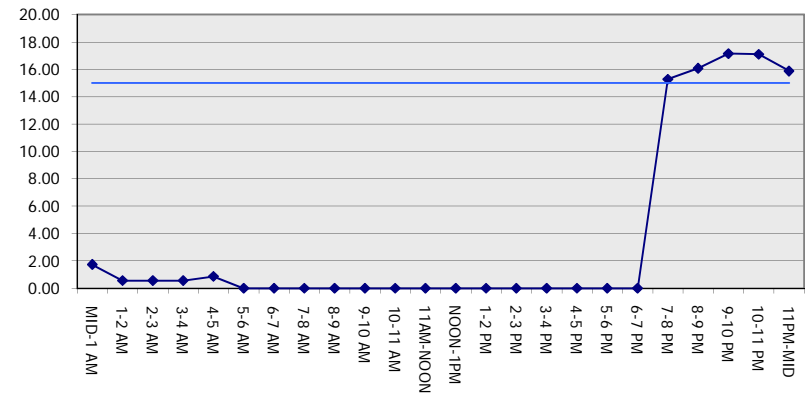
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**FRIDAY NORTHBOUND DIRECTION**

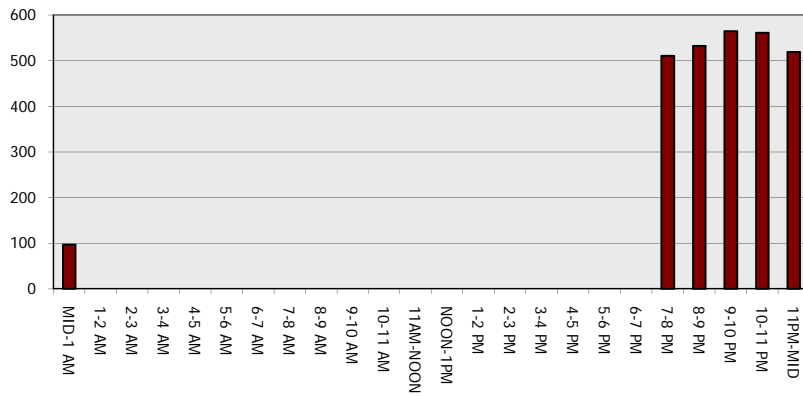
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

