

**USH 41: STH 76 TO USH 45 (WINNEBAGO COUNTY)  
CONTINUOUS (24 HOUR) CLOSURE  
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

**OCTOBER**

Analyzed for 2009  
Construction Season

**SUMMARY OF TRAFFIC MODEL OUTPUT**

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	185	0.0	1500	185	0	0.44	0	66.0	57.1	44.7	
1-2 AM	144	0.0	1500	144	0	0.44	0	66.1	57.3	44.9	
2-3 AM	163	0.0	1500	163	0	0.44	0	66.1	57.2	44.8	
3-4 AM	189	0.0	1500	189	0	0.44	0	66.0	57.1	44.7	
4-5 AM	329	0.0	1500	329	0	0.45	0	65.8	56.6	44.2	
5-6 AM	814	0.0	1500	814	0	0.50	0	64.9	55.2	42.4	
6-7 AM	1589	0.0	1499	1589	0	1.87	33	63.4	38.7	31.8	
7-8 AM	2271	0.0	1500	1807	463	13.85+	360	62.2	11.4	31.2	
8-9 AM	1812	0.0	1499	1477	335	16.03+	405	63.0	10.4	30.8	
9-10 AM	1592	0.0	1499	1494	98	16.10+	406	63.4	10.4	30.8	
10-11 AM	1712	0.0	1499	1500	212	16.11+	407	63.2	10.4	30.8	
11AM-NOON	1836	0.0	1500	1500	337	16.11+	407	63.0	10.4	30.8	
NOON-1PM	2018	0.0	1499	1500	518	16.09+	407	62.6	10.4	30.8	
1-2 PM	2122	0.0	1500	1500	622	16.09+	407	62.4	10.4	30.8	
2-3 PM	2325	0.0	1499	1500	826	16.07+	408	62.0	10.4	30.8	
3-4 PM	2560	0.0	1499	1499	1061	15.99+	408	60.3	10.4	30.8	
4-5 PM	2740	0.0	1499	1499	1241	15.92+	409	58.4	10.3	30.8	
5-6 PM	2417	0.0	1500	1500	917	16.06+	408	61.7	10.4	30.8	
6-7 PM	1675	0.0	1500	1496	179	16.10+	407	63.3	10.4	30.8	
7-8 PM	1109	0.0	1499	1109	0	7.92	233	64.3	17.3	34.3	
8-9 PM	956	0.0	1500	956	0	0.52	0	64.6	54.6	41.9	
9-10 PM	831	0.0	1500	831	0	0.50	0	64.8	55.1	42.3	
10-11 PM	661	0.0	1500	661	0	0.49	0	65.1	55.6	42.9	
11PM-MID	421	0.0	1500	421	0	0.46	0	65.6	56.4	43.8	

+ 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	0.0160
MAIN ROUTE WITH WORKS	0.0110
'DIVERSION'	0.0078
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$92,871
CONGESTED HOURS PER DAY*	12

\*Delays Exceeding User-Specified Maximum

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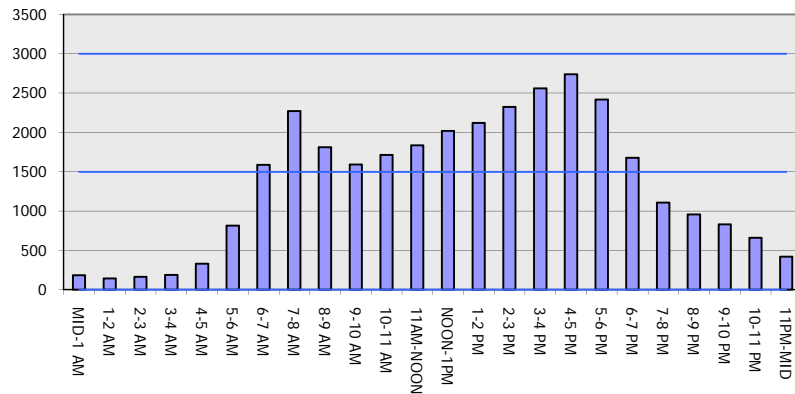
**OCTOBER**

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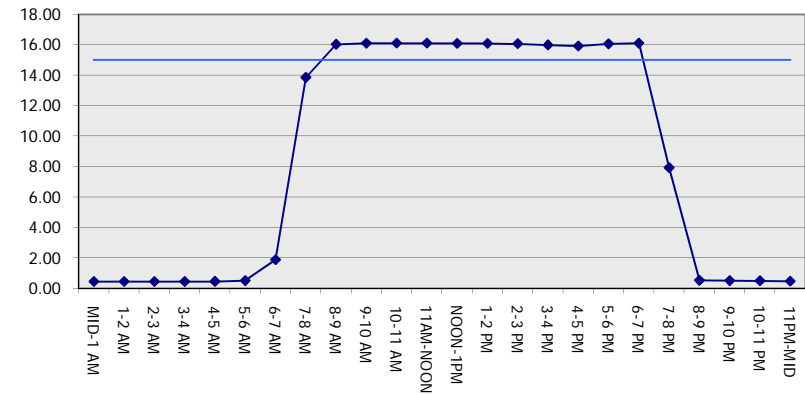
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**FRIDAY SOUTHBOUND DIRECTION**

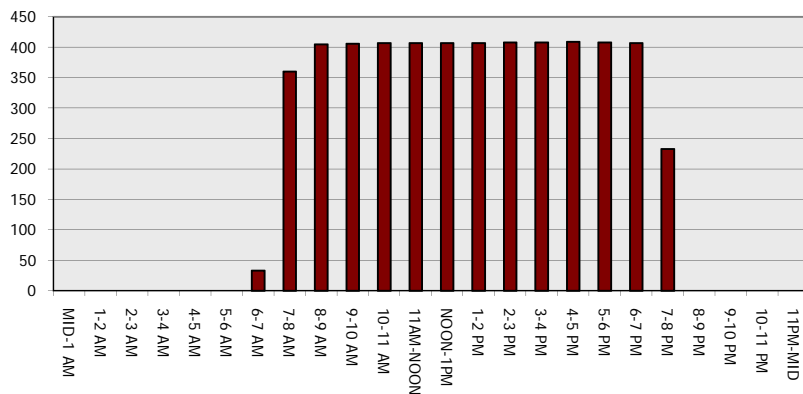
**Main Route - Traffic Demand (Vehicles Per Hour)**



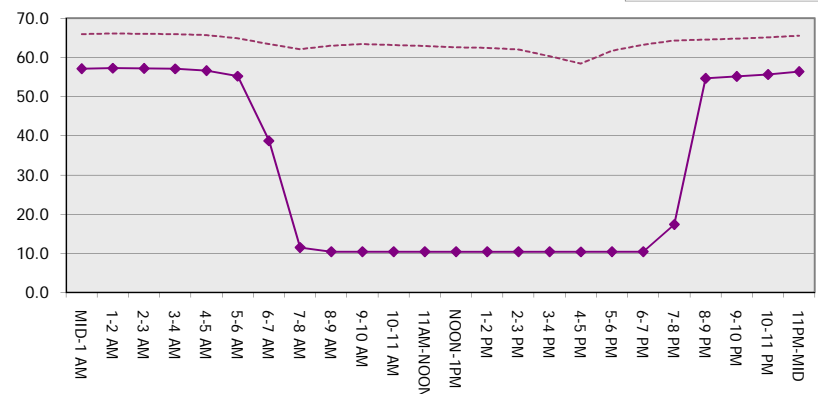
**Main Route Average Delay Per Vehicle (Minutes)**



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



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



<b>USH 41: STH 76 TO USH 45 (WINNEBAGO COUNTY)                  CONTINUOUS (24 HOUR) CLOSURE                  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	229	0.0	1500	229	0	0.44	0	66.0	56.9	44.6
1-2 AM	178	0.0	1500	178	0	0.44	0	66.1	57.1	44.8
2-3 AM	160	0.0	1500	160	0	0.44	0	66.1	57.2	44.8
3-4 AM	180	0.0	1500	180	0	0.44	0	66.1	57.1	44.8
4-5 AM	293	0.0	1500	293	0	0.45	0	65.8	56.8	44.3
5-6 AM	782	0.0	1500	782	0	0.50	0	65.0	55.3	42.5
6-7 AM	1569	0.0	1499	1569	0	1.83	34	63.5	39.1	32.4
7-8 AM	2430	0.0	1500	1697	733	14.18+	375	61.6	11.4	34.0
8-9 AM	1738	0.0	1499	1577	160	15.78+	398	63.2	10.4	30.8
9-10 AM	1846	0.0	1500	1500	346	16.10+	407	63.0	10.4	30.8
10-11 AM	2043	0.0	1499	1500	543	16.09+	407	62.6	10.4	30.8
11AM-NOON	2292	0.0	1499	1500	793	16.08+	408	62.1	10.4	30.8
NOON-1PM	2347	0.0	1500	1500	847	16.07+	408	62.0	10.4	30.8
1-2 PM	2620	0.0	1499	1499	1120	15.96+	408	59.7	10.3	30.8
2-3 PM	2860	0.0	1499	1500	1360	15.88+	410	57.2	10.3	30.8
3-4 PM	3166	0.0	1499	1501	1666	15.77+	412	54.1	10.3	30.8
4-5 PM	3354	0.0	1500	1500	1854	15.64+	413	52.2	10.3	30.8
5-6 PM	3280	0.0	1500	1500	1780	15.70+	412	52.9	10.3	30.8
6-7 PM	2461	0.0	1500	1499	962	16.04+	408	61.3	10.4	30.8
7-8 PM	1673	0.0	1500	1499	174	16.11+	407	63.3	10.4	30.8
8-9 PM	1254	0.0	1499	1254	0	11.94+	306	64.0	12.7	31.2
9-10 PM	1017	0.0	1500	1017	0	1.29	32	64.5	44.6	40.2
10-11 PM	653	0.0	1500	653	0	0.49	0	65.1	55.7	42.9
11PM-MID	483	0.0	1500	483	0	0.47	0	65.5	56.2	43.6

+ 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	0.0192
MAIN ROUTE WITH WORKS	0.0114
'DIVERSION'	0.0141

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$118,928
CONGESTED HOURS PER DAY*	14

\*Delays Exceeding User-Specified Maximum

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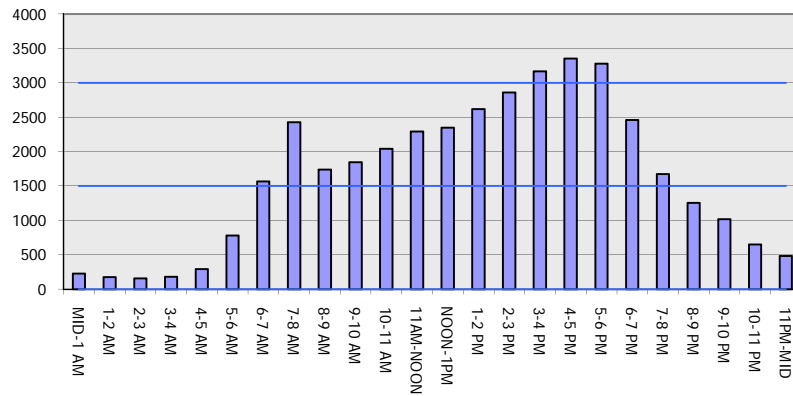
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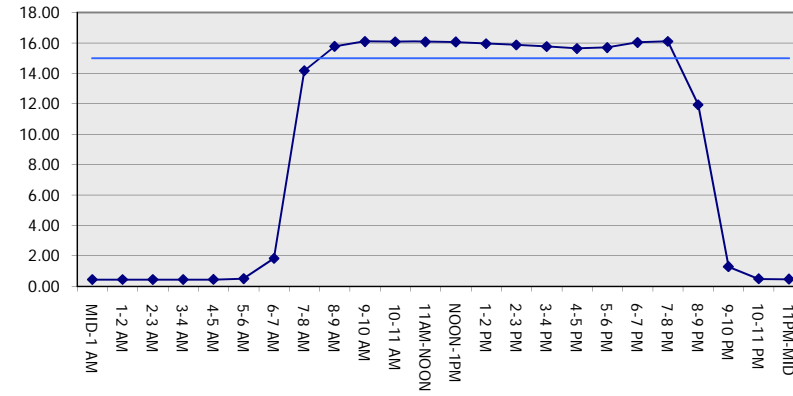
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**FRIDAY NORTHBOUND DIRECTION**

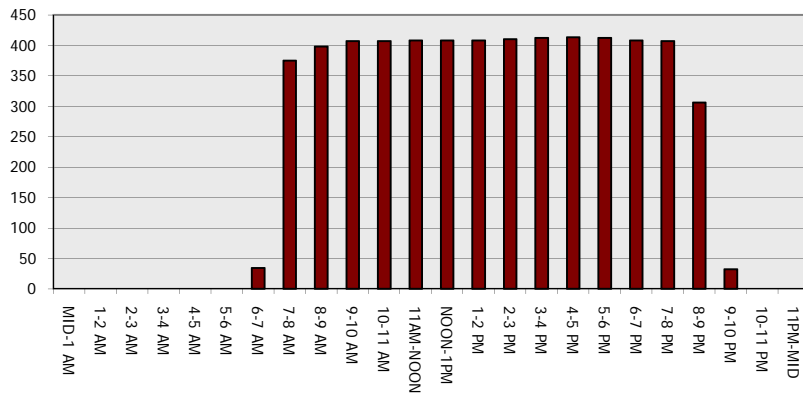
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

