

**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

MON-THUR 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	256	0.0	1500	256	0	0.45	0	65.9	56.9	44.5	
1-2 AM	180	0.0	1500	180	0	0.44	0	66.1	57.1	44.8	
2-3 AM	134	0.0	1500	134	0	0.44	0	66.1	57.3	45.0	
3-4 AM	180	0.0	1500	180	0	0.44	0	66.1	57.1	44.8	
4-5 AM	358	0.0	1500	358	0	0.46	0	65.7	56.6	44.0	
5-6 AM	889	0.0	1500	889	0	0.51	0	64.7	55.0	42.0	
6-7 AM	1763	0.0	1499	1763	0	3.14	81	63.1	30.6	30.8	
7-8 AM	2500	0.0	1499	1619	882	15.63+	398	60.9	10.5	30.8	
8-9 AM	1815	0.0	1500	1502	313	16.10+	407	63.0	10.4	30.8	
9-10 AM	1521	0.0	1500	1513	8	15.89+	401	63.5	10.4	30.8	
10-11 AM	1501	0.0	1500	1501	0	15.72+	396	63.6	10.5	30.8	
11AM-NOON	1553	0.0	1499	1508	45	16.08+	406	63.5	10.4	30.8	
NOON-1PM	1579	0.0	1500	1500	79	16.12+	407	63.5	10.4	30.8	
1-2 PM	1686	0.0	1500	1500	186	16.12+	407	63.2	10.4	30.8	
2-3 PM	1931	0.0	1499	1500	431	16.10+	407	62.8	10.4	30.8	
3-4 PM	2128	0.0	1500	1500	628	16.09+	407	62.4	10.4	30.8	
4-5 PM	2433	0.0	1500	1500	933	16.05+	408	61.5	10.4	30.8	
5-6 PM	2092	0.0	1500	1500	592	16.09+	407	62.5	10.4	30.8	
6-7 PM	1251	0.0	1499	1251	0	12.29+	318	64.0	12.5	31.8	
7-8 PM	906	0.0	1500	906	0	1.00	22	64.7	47.9	41.9	
8-9 PM	817	0.0	1500	817	0	0.50	0	64.8	55.2	42.4	
9-10 PM	663	0.0	1500	663	0	0.49	0	65.1	55.6	42.9	
10-11 PM	460	0.0	1500	460	0	0.47	0	65.5	56.3	43.7	
11PM-MID	286	0.0	1500	286	0	0.45	0	65.8	56.8	44.3	

+ 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	0.0143
MAIN ROUTE WITH WORKS	0.0106
'DIVERSION'	0.0047
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$78,208
CONGESTED HOURS PER DAY*	12

*Delays Exceeding User-Specified Maximum

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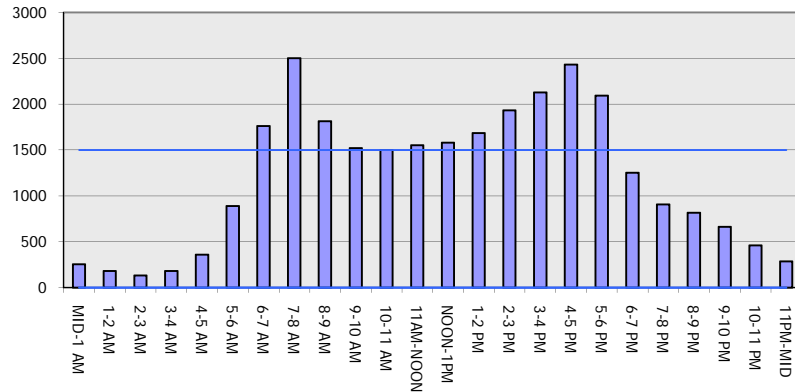
OCTOBER

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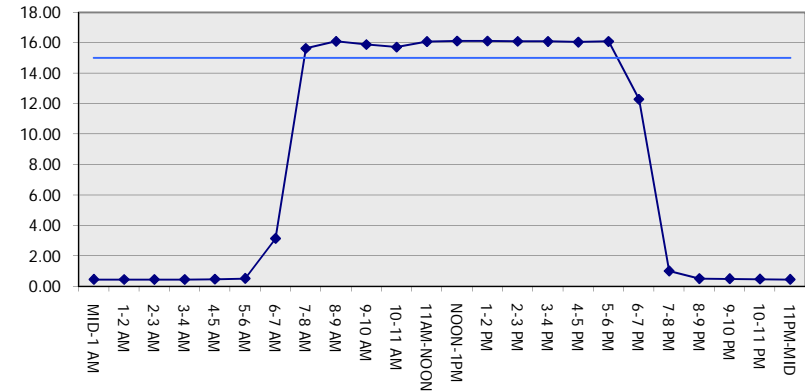
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

MON-THUR SOUTHBOUND DIRECTION

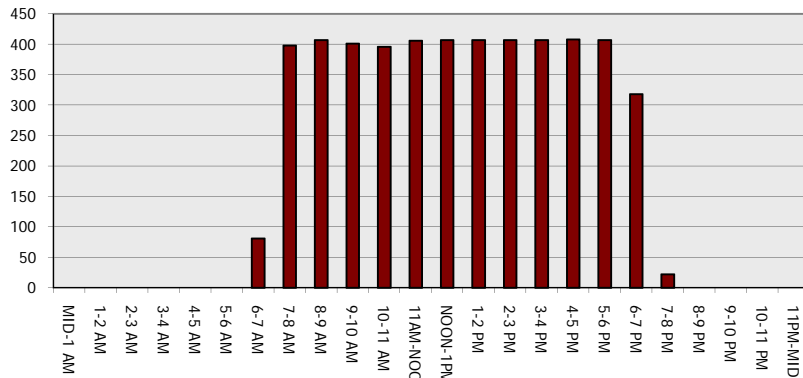
Main Route - Traffic Demand (Vehicles Per Hour)



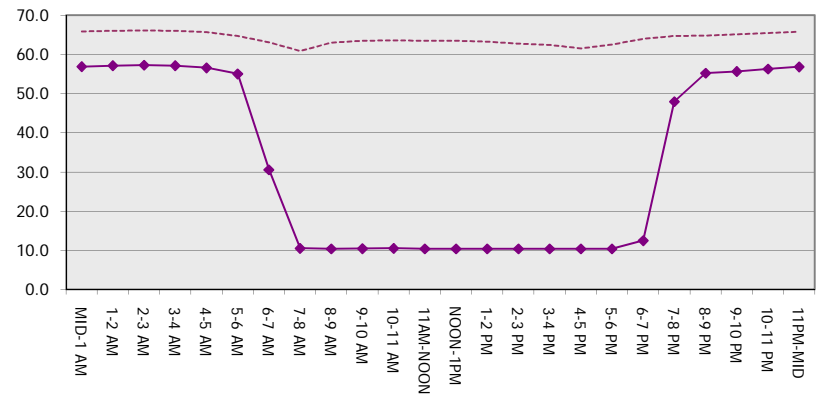
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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SUMMARY OF TRAFFIC MODEL OUTPUT

MON-THUR 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	184	0.0	1500	184	0	0.44	0	66.0	57.1	44.8
1-2 AM	138	0.0	1500	138	0	0.44	0	66.1	57.3	45.0
2-3 AM	124	0.0	1500	124	0	0.43	0	66.1	57.3	45.0
3-4 AM	153	0.0	1500	153	0	0.44	0	66.1	57.2	44.9
4-5 AM	286	0.0	1500	286	0	0.45	0	65.8	56.8	44.3
5-6 AM	867	0.0	1500	867	0	0.51	0	64.8	55.1	42.2
6-7 AM	1693	0.0	1499	1693	0	2.26	50	63.2	35.8	31.0
7-8 AM	2580	0.0	1499	1757	823	15.19+	391	60.1	10.7	30.8
8-9 AM	1754	0.0	1499	1458	296	15.96+	403	63.1	10.4	30.8
9-10 AM	1662	0.0	1499	1499	163	16.12+	407	63.3	10.4	30.8
10-11 AM	1674	0.0	1500	1500	174	16.12+	407	63.3	10.4	30.8
11AM-NOON	1757	0.0	1499	1500	258	16.11+	407	63.1	10.4	30.8
NOON-1PM	1776	0.0	1499	1500	276	16.11+	407	63.1	10.4	30.8
1-2 PM	1862	0.0	1500	1500	363	16.10+	407	62.9	10.4	30.8
2-3 PM	2129	0.0	1499	1500	629	16.09+	407	62.4	10.4	30.8
3-4 PM	2482	0.0	1499	1500	982	16.03+	408	61.1	10.4	30.8
4-5 PM	2869	0.0	1499	1498	1371	15.88+	410	57.1	10.3	30.8
5-6 PM	2586	0.0	1500	1499	1087	15.99+	408	60.0	10.3	30.8
6-7 PM	1599	0.0	1500	1453	146	15.76+	398	63.4	10.5	30.8
7-8 PM	1042	0.0	1499	1042	0	4.36	165	64.5	25.6	36.6
8-9 PM	890	0.0	1500	890	0	0.51	0	64.7	55.0	42.0
9-10 PM	672	0.0	1500	672	0	0.49	0	65.1	55.6	42.8
10-11 PM	464	0.0	1500	464	0	0.47	0	65.5	56.3	43.7
11PM-MID	316	0.0	1500	316	0	0.45	0	65.8	56.7	44.2

+ 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	0.0156
MAIN ROUTE WITH WORKS	0.0107
'DIVERSION'	0.0075

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$88,944
CONGESTED HOURS PER DAY*	12

*Delays Exceeding User-Specified Maximum

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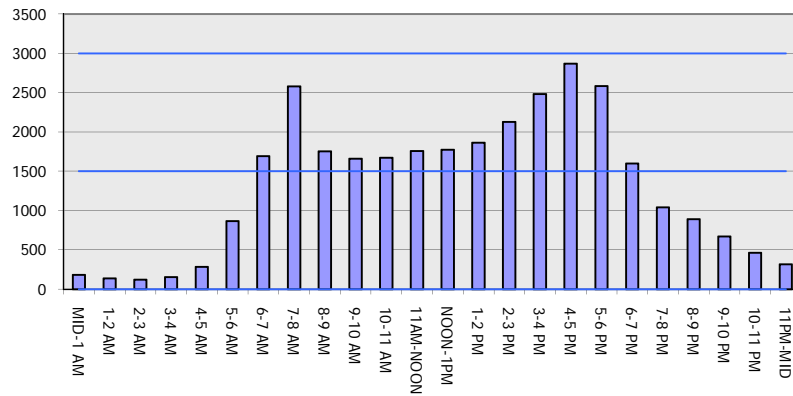
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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

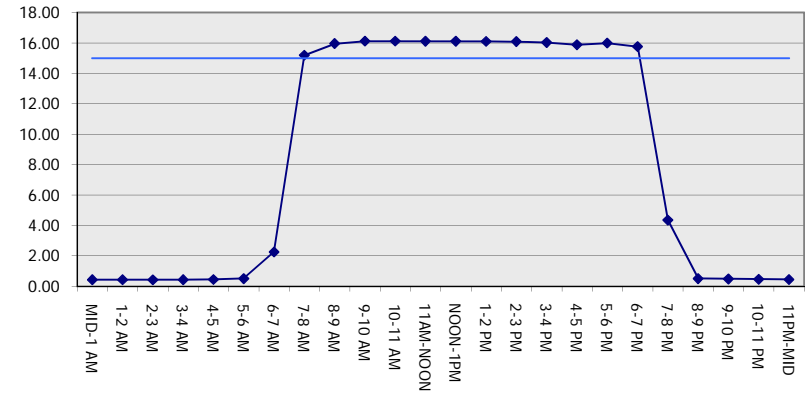
MON-THUR

NORTHBOUND DIRECTION

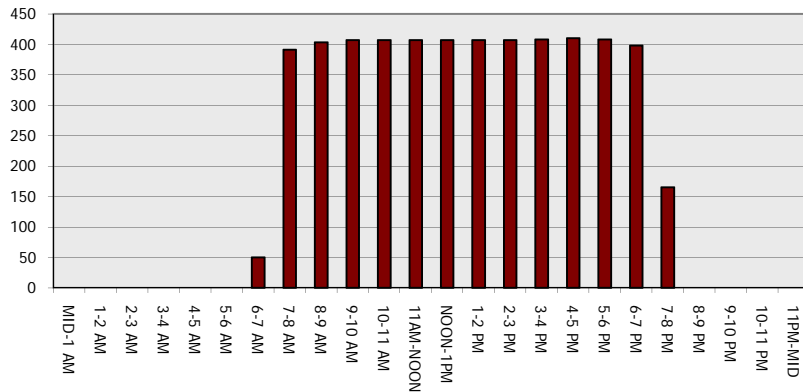
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

