

USH 41: USH 10 TO STH 114 (WINNEBAGO COUNTY) NIGHTTIME 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	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	485	0.0	1500	485	0	0.53	0	70.1	58.4	43.6	
1-2 AM	310	0.0	1500	310	0	0.51	0	70.2	58.9	44.2	
2-3 AM	271	0.0	1500	271	0	0.51	0	70.2	58.9	44.4	
3-4 AM	229	0.0	1500	229	0	0.50	0	70.2	59.1	44.6	
4-5 AM	350	0.0	1500	350	0	0.52	0	70.2	58.7	44.1	
5-6 AM	532	0.0	1500	532	0	0.54	0	70.0	58.3	43.4	
6-7 AM	1087	0.0	1499	1087	0	0.68	0	69.4	55.4	39.4	
7-8 AM	1890	0.0	1499	1890	0	5.95	165	68.4	21.4	30.8	
8-9 AM	2043	0.0	OFF	2043	0	0.21	19	68.2	63.3	63.3	
9-10 AM	2216	0.0	OFF	2216	0	0.00	0	68.0	68.0	68.0	
10-11 AM	2432	0.0	OFF	2432	0	0.00	0	67.7	67.7	67.7	
11AM-NOON	2495	0.0	OFF	2495	0	0.00	0	67.6	67.6	67.6	
NOON-1PM	2600	0.0	OFF	2600	0	0.00	0	67.5	67.5	67.5	
1-2 PM	2656	0.0	OFF	2656	0	0.00	0	67.4	67.4	67.4	
2-3 PM	2599	0.0	OFF	2599	0	0.00	0	67.5	67.5	67.5	
3-4 PM	2603	0.0	OFF	2603	0	0.00	0	67.5	67.5	67.5	
4-5 PM	2685	0.0	OFF	2685	0	0.00	0	67.4	67.4	67.4	
5-6 PM	2490	0.0	OFF	2490	0	0.00	0	67.6	67.6	67.6	
6-7 PM	2223	0.0	1499	1901	321	11.59+	300	68.0	13.0	30.8	
7-8 PM	1849	0.0	1500	1500	349	16.36+	400	68.4	9.7	30.8	
8-9 PM	1664	0.0	1500	1500	164	16.37+	400	68.7	9.7	30.8	
9-10 PM	1651	0.0	1500	1500	151	16.37+	400	68.7	9.7	30.8	
10-11 PM	1200	0.0	1499	1200	0	10.73	276	69.2	13.8	32.5	
11PM-MID	845	0.0	1500	845	0	0.79	9	69.7	53.8	42.2	

"OFF" INDICATES NO ROAD WORK (ALL LANES OPEN TO TRAFFIC)

+ INDICATES QUEUEING EXCEEDS USER-SPECIFIED MAXIMUM LIMIT

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

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

MAIN ROUTE WITHOUT WORKS	0.0194
MAIN ROUTE WITH WORKS	0.0181
'DIVERSION'	0.0011
<small>PIA: Personal Injury Accidents</small>	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$35,864
CONGESTED HOURS PER DAY*	4

*Delays Exceeding User-Specified Maximum

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 NIGHTTIME 2 LANE CLOSURE
 NO DIVERSION ROUTE (MAX QUEUE METHOD)**

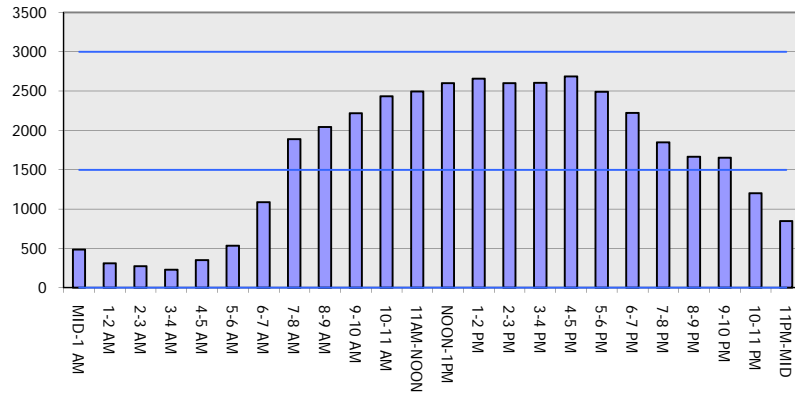
OCTOBER

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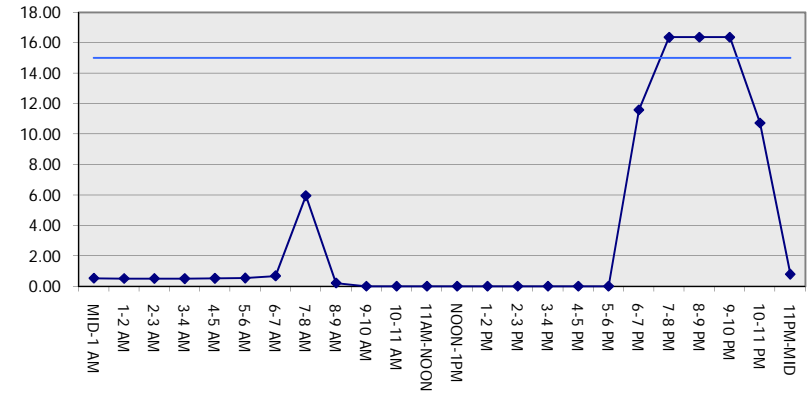
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

SATURDAY SOUTHBOUND DIRECTION

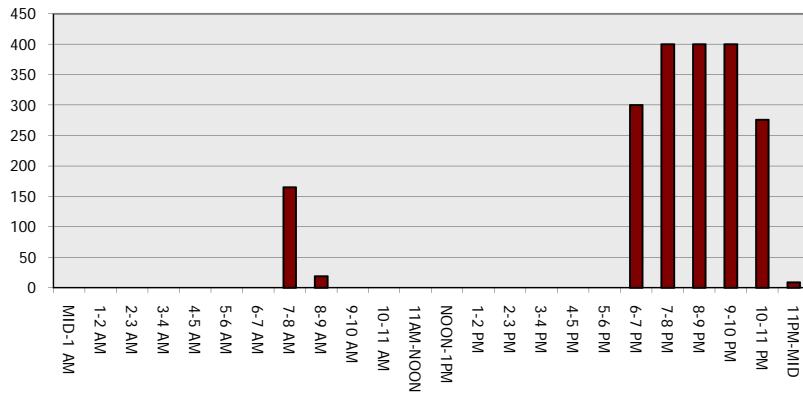
Main Route - Traffic Demand (Vehicles Per Hour)



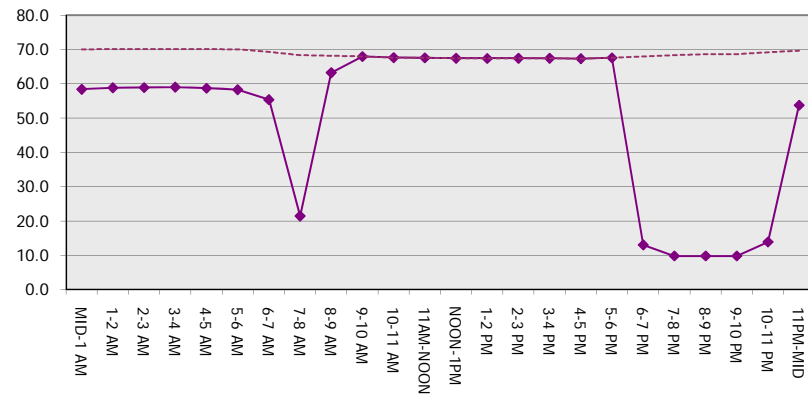
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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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	488	0.0	1500	488	0	0.53	0	70.1	58.4	43.5
1-2 AM	299	0.0	1500	299	0	0.51	0	70.2	58.9	44.3
2-3 AM	279	0.0	1500	279	0	0.51	0	70.2	58.9	44.3
3-4 AM	221	0.0	1500	221	0	0.50	0	70.2	59.1	44.6
4-5 AM	254	0.0	1500	254	0	0.50	0	70.2	59.0	44.5
5-6 AM	509	0.0	1500	509	0	0.53	0	70.1	58.4	43.5
6-7 AM	722	0.0	1500	722	0	0.56	0	69.9	57.8	42.7
7-8 AM	1326	0.0	1499	1326	0	0.86	0	69.1	52.4	35.1
8-9 AM	1777	0.0	OFF	1777	0	0.00	0	68.5	68.5	68.5
9-10 AM	2204	0.0	OFF	2204	0	0.00	0	68.0	68.0	68.0
10-11 AM	2768	0.0	OFF	2768	0	0.00	0	67.3	67.3	67.3
11AM-NOON	3115	0.0	OFF	3115	0	0.00	0	66.9	66.9	66.9
NOON-1PM	3272	0.0	OFF	3272	0	0.00	0	66.7	66.7	66.7
1-2 PM	3078	0.0	OFF	3078	0	0.00	0	66.9	66.9	66.9
2-3 PM	3032	0.0	OFF	3032	0	0.00	0	66.9	66.9	66.9
3-4 PM	3063	0.0	OFF	3063	0	0.00	0	66.9	66.9	66.9
4-5 PM	3281	0.0	OFF	3281	0	0.00	0	66.6	66.6	66.6
5-6 PM	3053	0.0	OFF	3053	0	0.00	0	66.9	66.9	66.9
6-7 PM	2580	0.0	1499	1780	800	13.47+	336	67.5	11.5	35.1
7-8 PM	1953	0.0	1499	1634	319	15.82+	387	68.3	10.0	30.8
8-9 PM	1650	0.0	1500	1489	161	16.32+	398	68.7	9.7	30.8
9-10 PM	1352	0.0	1499	1352	0	14.24+	348	69.1	11.0	30.8
10-11 PM	1027	0.0	1499	1027	0	2.32	80	69.4	37.3	38.4
11PM-MID	727	0.0	1500	727	0	0.56	0	69.8	57.8	42.7

"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	0.0207
MAIN ROUTE WITH WORKS	0.0193
'DIVERSION'	0.0015

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$30,604
CONGESTED HOURS PER DAY*	4

*Delays Exceeding User-Specified Maximum

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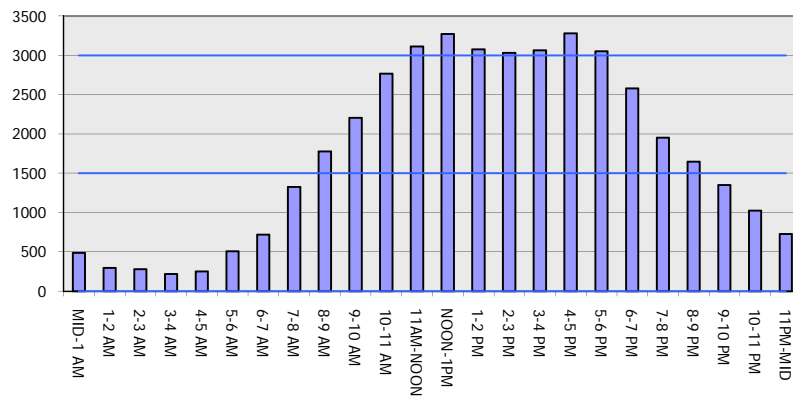
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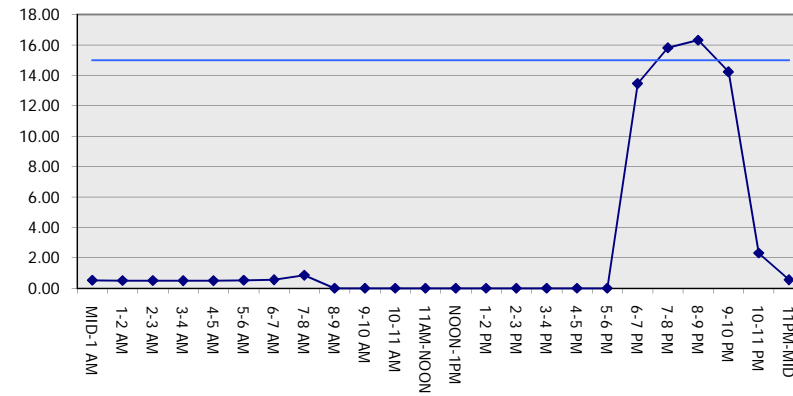
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SATURDAY NORTHBOUND DIRECTION

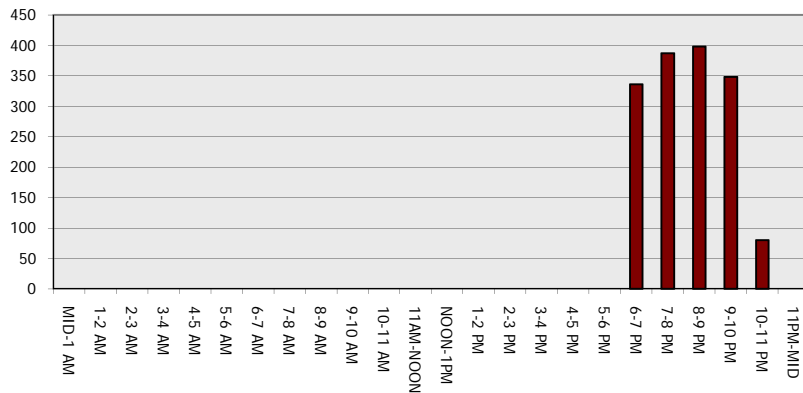
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

