

**STH 441: USH 41 TO RACINE ST (WINNEBAGO COUNTY)  
CONTINUOUS (24 HOUR) CLOSURE  
DIVERSION ROUTE: PROSPECT AVENUE - STH 47**

**MAY**  
Analyzed for 2009  
Construction Season

**SUMMARY OF TRAFFIC MODEL OUTPUT**

SATURDAY WESTBOUND DIRECTION

TIME OF DAY	FLOWS AND CAPACITY IN VEH/HR							AVERAGE SPEEDS IN MPH							
	MAIN ROUTE		ALTERNATE ROUTE		SITE CAPA CITY	FLOW MAIN ROUTE	FLOW DIVER -TING	TOTAL DIVN FLOW	AV.DEL PER VEH (MINS)	AVERAGE QUEUE (VEH)	MAIN ROUTE		ALTERNATE ROUTE		
	DEMAND FLOW	PCT HEAVY	NORMAL FLOW	PCT HEAVY							WITHOUT WORK ZN	WITH WORK ZN	SITE	WITHOUT WORK ZN	WITH WORK ZN
MID-1 AM	343	0.0	105	0.0	1500	343	0	105	0.46	0	65.8	46.4	44.1	24.0	24.0
1-2 AM	199	0.0	61	0.0	1500	199	0	61	0.44	0	66.0	46.9	44.7	24.3	24.3
2-3 AM	217	0.0	67	0.0	1500	217	0	67	0.44	0	66.0	46.9	44.6	24.3	24.3
3-4 AM	171	0.0	53	0.0	1500	171	0	53	0.44	0	66.1	47.1	44.8	24.5	24.5
4-5 AM	292	0.0	90	0.0	1500	292	0	90	0.45	0	65.8	46.6	44.3	24.2	24.2
5-6 AM	499	0.0	153	0.0	1500	499	0	153	0.47	0	65.5	45.8	43.5	23.7	23.7
6-7 AM	757	0.0	232	0.0	1500	757	0	232	0.50	0	65.0	44.9	42.5	23.0	23.0
7-8 AM	1048	0.0	321	0.0	1499	1048	0	321	0.54	0	64.5	43.5	41.1	22.4	22.4
8-9 AM	1496	0.0	459	0.0	1499	1496	0	459	1.25	9	63.6	30.2	31.7	21.3	21.3
9-10 AM	1678	0.0	515	0.0	1500	1678	0	515	5.05	117	63.3	13.7	30.8	20.9	21.4
10-11 AM	1771	0.0	544	0.0	1500	1771	0	544	13.69	348	63.1	8.3	30.8	20.7	22.2
11A-NOON	1762	0.0	540	0.0	1499	1563	199	739	20.75	532	63.1	7.1	30.8	20.7	21.5
NOON-1PM	1855	0.0	569	0.0	1500	1529	326	896	22.23	572	62.9	7.0	30.8	20.5	20.4
1-2 PM	1733	0.0	531	0.0	1499	1452	281	812	21.42	550	63.2	7.0	30.8	20.7	20.9
2-3 PM	1623	0.0	497	0.0	1500	1471	152	649	19.98	511	63.3	7.2	30.8	21.1	22.1
3-4 PM	1640	0.0	502	0.0	1500	1503	136	639	19.88	509	63.3	7.2	30.8	21.0	22.2
4-5 PM	1491	0.0	457	0.0	1499	1455	36	493	18.71	477	63.6	7.3	30.8	21.4	23.2
5-6 PM	1482	0.0	454	0.0	1500	1482	0	454	18.00	457	63.7	7.5	30.8	21.4	23.4
6-7 PM	1277	0.0	391	0.0	1499	1277	0	391	13.62	344	64.0	8.3	30.8	21.9	23.3
7-8 PM	1029	0.0	315	0.0	1499	1029	0	315	1.46	55	64.5	29.5	39.4	22.4	22.6
8-9 PM	942	0.0	288	0.0	1500	942	0	288	0.51	0	64.6	44.2	41.9	22.6	22.6
9-10 PM	813	0.0	249	0.0	1500	813	0	249	0.50	0	64.9	44.6	42.4	22.9	22.9
10-11 PM	632	0.0	194	0.0	1500	632	0	194	0.48	0	65.2	45.3	43.0	23.3	23.3
11PM-MID	484	0.0	148	0.0	1500	484	0	148	0.47	0	65.5	45.9	43.6	23.7	23.7

**\*----- SITE BREAKDOWN DELAYS -----\***

BREAKDOWN DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN (VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN (VEH-H) MAX	0.0
AV BREAKDOWNS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

**\*----- SITE ACCIDENT DELAYS -----\***

ACCIDENT DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN (VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN (VEH-H) MAX	0.0
AV ACCIDENTS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

**AVERAGE ACCIDENT NUMBERS (PIA/DAY)**

MAIN ROUTE WITHOUT WORKS	0.0048
MAIN ROUTE WITH WORKS	0.0030
DIVERSION	0.0708

PIA: Personal Injury Accidents

**IMPACTS ON ROAD USERS**

ROAD USER COSTS PER DAY ( DOLLARS)	\$88,789
CONGESTED HOURS PER DAY*	7

\*Delays Exceeding 15 Minutes

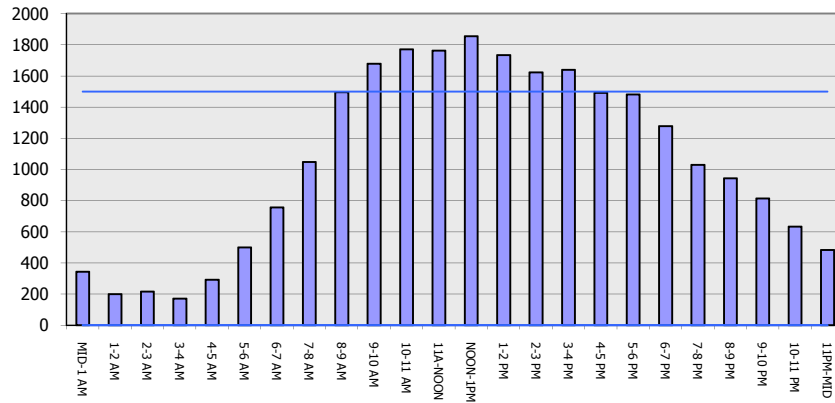
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 CONTINUOUS (24 HOUR) CLOSURE  
 DIVERSION ROUTE: PROSPECT AVENUE - STH 47**

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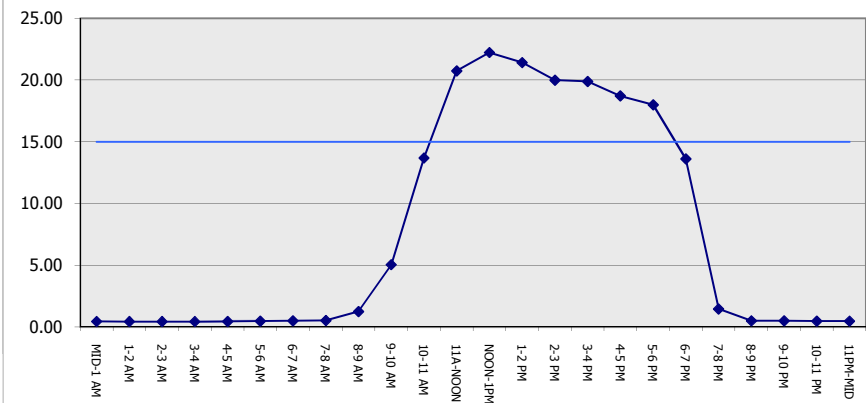
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SATURDAY WESTBOUND DIRECTION**

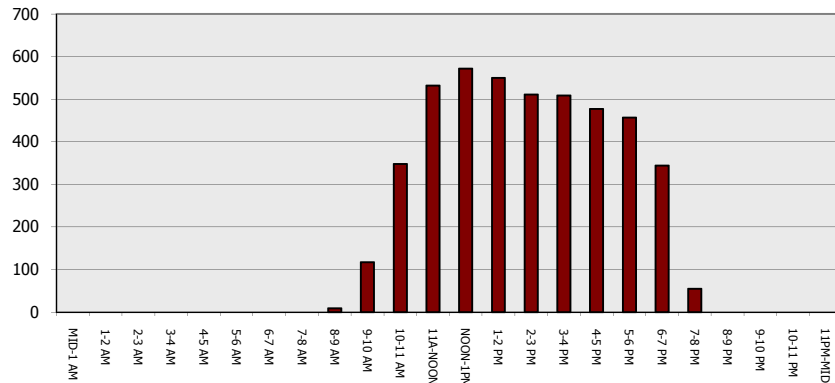
**Main Route - Traffic Demand (Vehicles Per Hour)**



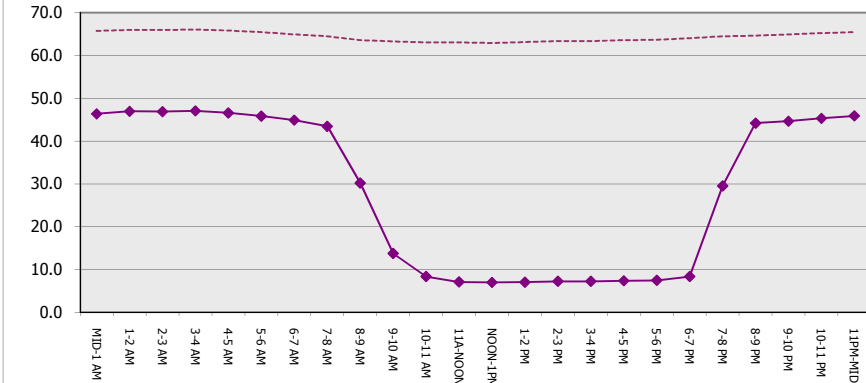
**Main Route Average Delay Per Vehicle (Minutes)**



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



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



<b>STH 441: USH 41 TO RACINE ST (WINNEBAGO COUNTY)</b> <b>CONTINUOUS (24 HOUR) CLOSURE</b> <b>DIVERSION ROUTE: PROSPECT AVENUE - STH 47</b>	<b>MAY</b>
	Analyzed for 2009 Construction Season

**SUMMARY OF TRAFFIC MODEL OUTPUT**

SATURDAY EASTBOUND DIRECTION

TIME OF DAY	FLOWS AND CAPACITY IN VEH/HR							TOTAL DIVN FLOW	AV.DEL PER VEH (MINS)	AVERAGE QUEUE (VEH)	AVERAGE SPEEDS IN MPH				
	MAIN		DIVERSION		SITE CAPA CITY	FLOW MAIN ROUTE	FLOW DIVER -TING				MAIN ROUTE		SITE	ALTERNATE ROUTE	
	DEMAND FLOW	PCT HEAVY	NORMAL FLOW	PCT HEAVY							WITHOUT WORK ZN	WITH WORK ZN		WITHOUT WORK ZN	WITH WORK ZN
MID-1 AM	478	0.0	146	0.0	1500	478	0	146	0.47	0	65.5	45.9	43.6	23.7	23.7
1-2 AM	246	0.0	75	0.0	1500	246	0	75	0.45	0	66.0	46.8	44.5	24.3	24.3
2-3 AM	248	0.0	76	0.0	1500	248	0	76	0.45	0	66.0	46.8	44.5	24.3	24.3
3-4 AM	148	0.0	45	0.0	1500	148	0	45	0.44	0	66.1	47.2	44.9	24.5	24.5
4-5 AM	184	0.0	57	0.0	1500	184	0	57	0.44	0	66.0	47.0	44.8	24.4	24.4
5-6 AM	371	0.0	114	0.0	1500	371	0	114	0.46	0	65.7	46.3	44.0	24.0	24.0
6-7 AM	728	0.0	223	0.0	1500	728	0	223	0.49	0	65.0	45.0	42.7	23.1	23.1
7-8 AM	927	0.0	284	0.0	1500	927	0	284	0.51	0	64.6	44.3	41.9	22.7	22.7
8-9 AM	1204	0.0	370	0.0	1499	1204	0	370	0.64	0	64.1	40.9	38.4	22.0	22.0
9-10 AM	1500	0.0	460	0.0	1499	1500	0	460	1.26	9	63.6	30.1	31.6	21.3	21.3
10-11 AM	1808	0.0	555	0.0	1500	1808	0	555	6.76	174	63.0	11.9	30.8	20.6	21.3
11A-NOON	2064	0.0	633	0.0	1500	1822	242	875	21.14	549	62.5	7.1	30.8	20.0	20.4
NOON-1PM	2198	0.0	674	0.0	1499	1569	629	1303	27.23	708	62.3	6.5	30.8	19.7	17.6
1-2 PM	2199	0.0	674	0.0	1499	1501	699	1373	28.30	737	62.3	6.5	30.8	19.7	17.1
2-3 PM	2214	0.0	678	0.0	1500	1505	710	1388	28.54	744	62.3	6.5	30.8	19.6	17.0
3-4 PM	2131	0.0	654	0.0	1499	1460	671	1325	27.57	717	62.4	6.5	30.8	19.8	17.4
4-5 PM	2193	0.0	672	0.0	1500	1532	661	1333	27.68	720	62.3	6.5	30.8	19.7	17.4
5-6 PM	2217	0.0	679	0.0	1500	1503	714	1393	28.63	746	62.2	6.5	30.8	19.6	17.0
6-7 PM	1969	0.0	603	0.0	1499	1369	600	1204	25.88	672	62.7	6.6	30.8	20.2	18.3
7-8 PM	1644	0.0	504	0.0	1500	1386	257	762	20.99	539	63.3	7.1	30.8	21.0	21.3
8-9 PM	1418	0.0	434	0.0	1499	1400	18	452	17.76	451	63.7	7.5	30.8	21.5	23.3
9-10 PM	1204	0.0	370	0.0	1499	1204	0	370	9.99	257	64.1	9.7	32.0	22.0	23.2
10-11 PM	1056	0.0	323	0.0	1500	1056	0	323	0.79	12	64.4	38.0	40.7	22.4	22.4
11PM-MID	672	0.0	206	0.0	1500	672	0	206	0.49	0	65.1	45.2	42.8	23.3	23.3

*----- SITE BREAKDOWN DELAYS -----*	
BREAKDOWN DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN	0.0
(VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN	0.0
(VEH-H) MAX	0.0
AV BREAKDOWNS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

*----- SITE ACCIDENT DELAYS -----*	
ACCIDENT DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN	0.0
(VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN	0.0
(VEH-H) MAX	0.0
AV ACCIDENTS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

AVERAGE ACCIDENT NUMBERS (PIA/DAY)	
MAIN ROUTE WITHOUT WORKS	0.0059
MAIN ROUTE WITH WORKS	0.0032
DIVERSION	0.1175

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$168,382
CONGESTED HOURS PER DAY*	10

\*Delays Exceeding 15 Minutes

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

