

**STH 29: 40TH ST TO CTH T (CHIPPEWA COUNTY)  
CONTINUOUS (24 HOUR) 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	58	0.0	1500	58	0	0.50	0	63.8	50.8	41.8
1-2 AM	31	0.0	1500	31	0	0.50	0	63.8	50.9	41.9
2-3 AM	34	0.0	1500	34	0	0.50	0	63.8	50.9	41.9
3-4 AM	33	0.0	1500	33	0	0.50	0	63.8	50.9	41.9
4-5 AM	56	0.0	1500	56	0	0.50	0	63.8	50.8	41.8
5-6 AM	85	0.0	1500	85	0	0.51	0	63.7	50.7	41.7
6-7 AM	97	0.0	1500	97	0	0.51	0	63.7	50.7	41.7
7-8 AM	165	0.0	1500	165	0	0.51	0	63.6	50.5	41.4
8-9 AM	266	0.0	1500	266	0	0.52	0	63.4	50.2	41.0
9-10 AM	346	0.0	1500	346	0	0.53	0	63.3	49.9	40.8
10-11 AM	381	0.0	1500	381	0	0.53	0	63.2	49.8	40.7
11AM-NOON	407	0.0	1500	407	0	0.54	0	63.2	49.7	40.6
NOON-1PM	347	0.0	1500	347	0	0.53	0	63.3	49.9	40.8
1-2 PM	334	0.0	1500	334	0	0.53	0	63.3	50.0	40.9
2-3 PM	339	0.0	1500	339	0	0.53	0	63.3	49.9	40.8
3-4 PM	316	0.0	1500	316	0	0.53	0	63.3	50.0	40.9
4-5 PM	297	0.0	1500	297	0	0.53	0	63.3	50.1	41.0
5-6 PM	275	0.0	1500	275	0	0.52	0	63.4	50.1	41.0
6-7 PM	227	0.0	1500	227	0	0.52	0	63.5	50.3	41.2
7-8 PM	229	0.0	1500	229	0	0.52	0	63.5	50.3	41.2
8-9 PM	180	0.0	1500	180	0	0.52	0	63.6	50.4	41.4
9-10 PM	145	0.0	1500	145	0	0.51	0	63.7	50.5	41.5
10-11 PM	102	0.0	1500	102	0	0.51	0	63.7	50.7	41.7
11PM-MID	77	0.0	1500	77	0	0.51	0	63.8	50.7	41.7

**\*----- 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	0.0017
MAIN ROUTE WITH WORKS	0.0022
'DIVERSION'	0.0000

PIA: Personal Injury Accidents

**IMPACTS ON ROAD USERS**

ROAD USER COSTS PER DAY	\$646
CONGESTED HOURS PER DAY*	0

\*Delays Exceeding User-Specified Maximum

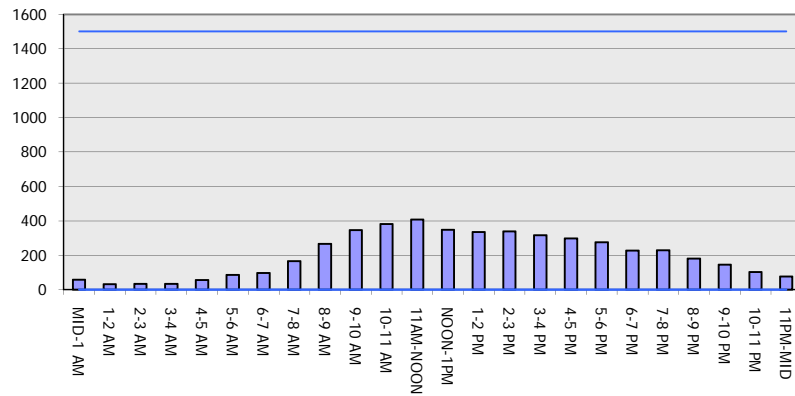
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**OCTOBER**

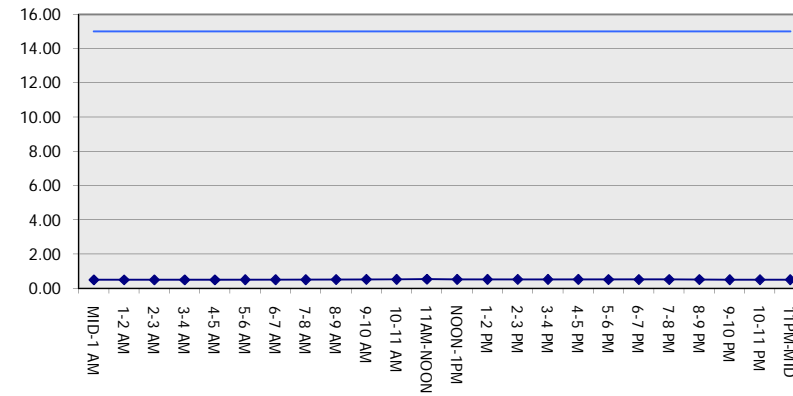
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Construction Season

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

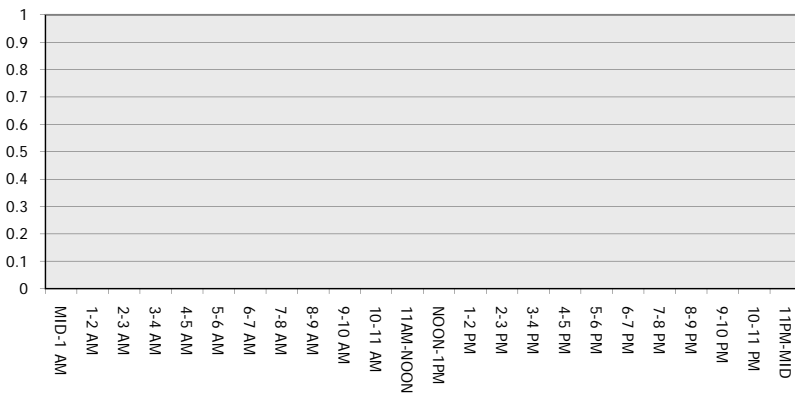
**Main Route - Traffic Demand (Vehicles Per Hour)**



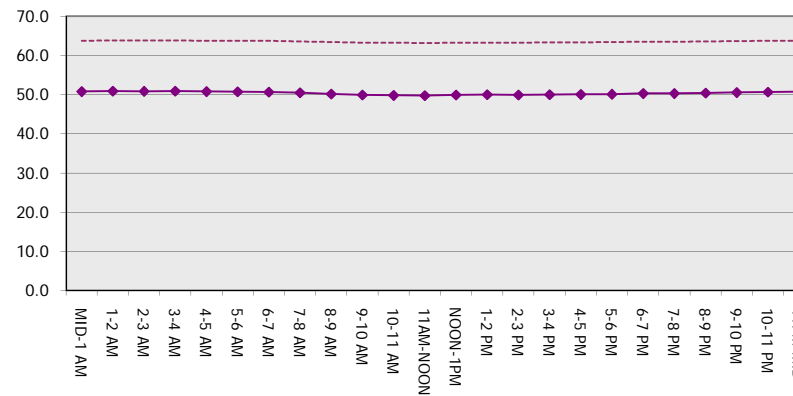
**Main Route Average Delay Per Vehicle (Minutes)**



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



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



<b>STH 29: 40TH ST TO CTH T (CHIPPEWA COUNTY)</b> <b>CONTINUOUS (24 HOUR) CLOSURE</b> <b>NO DIVERSION ROUTE (MAX QUEUE METHOD)</b>	<b>OCTOBER</b>
	Analyzed for 2009 Construction Season

**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	73	0.0	1500	73	0	0.51	0	63.8	50.8	41.7
1-2 AM	44	0.0	1500	44	0	0.50	0	63.8	50.9	41.9
2-3 AM	33	0.0	1500	33	0	0.50	0	63.8	50.9	41.9
3-4 AM	25	0.0	1500	25	0	0.50	0	63.8	50.9	41.9
4-5 AM	35	0.0	1500	35	0	0.50	0	63.8	50.9	41.9
5-6 AM	74	0.0	1500	74	0	0.51	0	63.8	50.7	41.7
6-7 AM	105	0.0	1500	105	0	0.51	0	63.7	50.7	41.6
7-8 AM	172	0.0	1500	172	0	0.52	0	63.6	50.5	41.4
8-9 AM	282	0.0	1500	282	0	0.53	0	63.4	50.1	41.0
9-10 AM	330	0.0	1500	330	0	0.53	0	63.3	50.0	40.9
10-11 AM	424	0.0	1500	424	0	0.54	0	63.1	49.7	40.6
11AM-NOON	423	0.0	1500	423	0	0.54	0	63.1	49.7	40.6
NOON-1PM	383	0.0	1500	383	0	0.54	0	63.2	49.8	40.7
1-2 PM	354	0.0	1500	354	0	0.53	0	63.2	49.9	40.8
2-3 PM	373	0.0	1500	373	0	0.53	0	63.2	49.9	40.7
3-4 PM	363	0.0	1500	363	0	0.53	0	63.2	49.9	40.7
4-5 PM	346	0.0	1500	346	0	0.53	0	63.3	49.9	40.8
5-6 PM	318	0.0	1500	318	0	0.53	0	63.3	50.0	40.9
6-7 PM	299	0.0	1500	299	0	0.53	0	63.3	50.1	41.0
7-8 PM	253	0.0	1500	253	0	0.52	0	63.4	50.2	41.1
8-9 PM	196	0.0	1500	196	0	0.52	0	63.5	50.4	41.3
9-10 PM	124	0.0	1500	124	0	0.51	0	63.7	50.6	41.5
10-11 PM	114	0.0	1500	114	0	0.51	0	63.7	50.6	41.6
11PM-MID	76	0.0	1500	76	0	0.51	0	63.8	50.7	41.7

*----- 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	0.0018
MAIN ROUTE WITH WORKS	0.0024
'DIVERSION'	0.0000

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$703
CONGESTED HOURS PER DAY*	0

\*Delays Exceeding User-Specified Maximum

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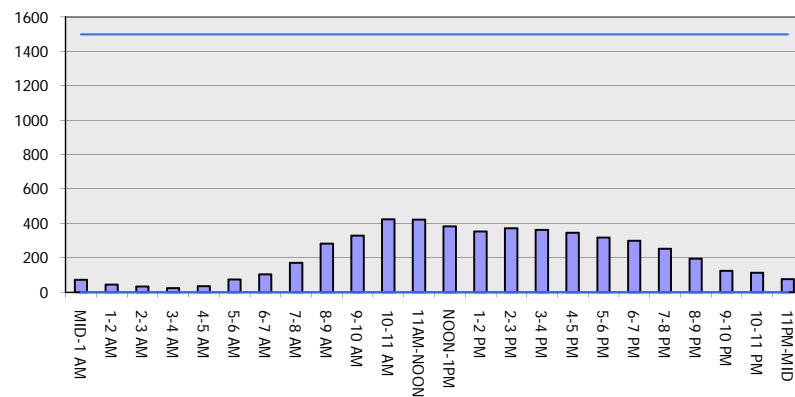
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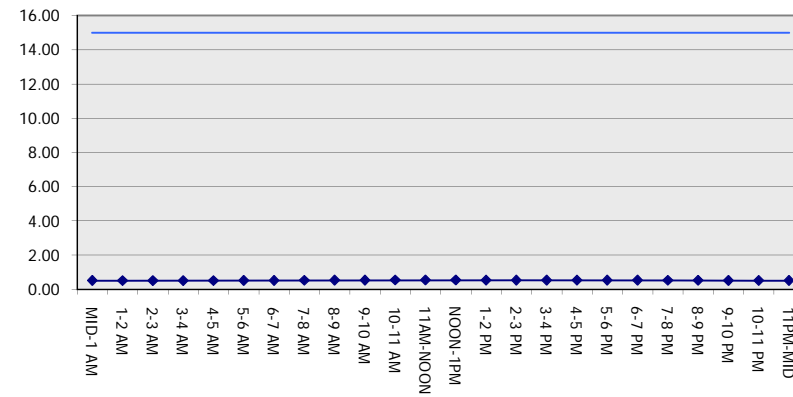
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**SATURDAY NORTHBOUND DIRECTION**

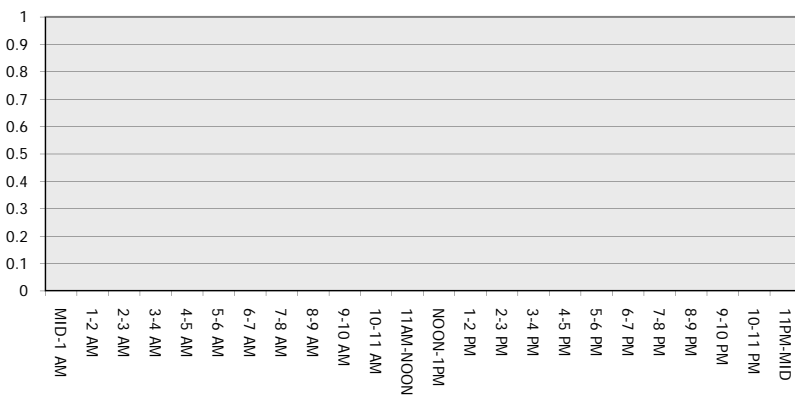
**Main Route - Traffic Demand (Vehicles Per Hour)**



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



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



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

