

STH 29: 40TH ST TO CTH T (CHIPPEWA COUNTY) CONTINUOUS (24 HOUR) CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	AUGUST
	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	40	0.0	1500	40	0	0.50	0	63.8	50.9	41.9
1-2 AM	36	0.0	1500	36	0	0.50	0	63.8	50.9	41.9
2-3 AM	53	0.0	1500	53	0	0.50	0	63.8	50.9	41.8
3-4 AM	82	0.0	1500	82	0	0.51	0	63.8	50.7	41.7
4-5 AM	160	0.0	1500	160	0	0.51	0	63.6	50.5	41.4
5-6 AM	234	0.0	1500	234	0	0.52	0	63.5	50.2	41.2
6-7 AM	281	0.0	1500	281	0	0.53	0	63.4	50.1	41.0
7-8 AM	299	0.0	1500	299	0	0.53	0	63.3	50.1	41.0
8-9 AM	285	0.0	1500	285	0	0.53	0	63.3	50.1	41.0
9-10 AM	296	0.0	1500	296	0	0.53	0	63.3	50.1	41.0
10-11 AM	307	0.0	1500	307	0	0.53	0	63.3	50.1	40.9
11AM-NOON	309	0.0	1500	309	0	0.53	0	63.3	50.1	40.9
NOON-1PM	356	0.0	1500	356	0	0.53	0	63.2	49.9	40.8
1-2 PM	366	0.0	1500	366	0	0.53	0	63.2	49.9	40.7
2-3 PM	394	0.0	1500	394	0	0.54	0	63.2	49.8	40.7
3-4 PM	439	0.0	1500	439	0	0.54	0	63.1	49.6	40.5
4-5 PM	440	0.0	1500	440	0	0.54	0	63.1	49.6	40.5
5-6 PM	374	0.0	1500	374	0	0.53	0	63.2	49.9	40.7
6-7 PM	258	0.0	1500	258	0	0.52	0	63.4	50.2	41.1
7-8 PM	211	0.0	1500	211	0	0.52	0	63.5	50.4	41.2
8-9 PM	181	0.0	1500	181	0	0.52	0	63.6	50.4	41.4
9-10 PM	129	0.0	1500	129	0	0.51	0	63.7	50.6	41.5
10-11 PM	87	0.0	1500	87	0	0.51	0	63.7	50.7	41.7
11PM-MID	66	0.0	1500	66	0	0.50	0	63.8	50.8	41.8

----- 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	0.0020
MAIN ROUTE WITH WORKS	0.0026
'DIVERSION'	0.0000

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS

ROAD USER COSTS PER DAY	\$604
CONGESTED HOURS PER DAY*	0

*Delays Exceeding User-Specified Maximum

**STH 29: 40TH ST TO CTH T (CHIPPEWA COUNTY)
CONTINUOUS (24 HOUR) CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

AUGUST

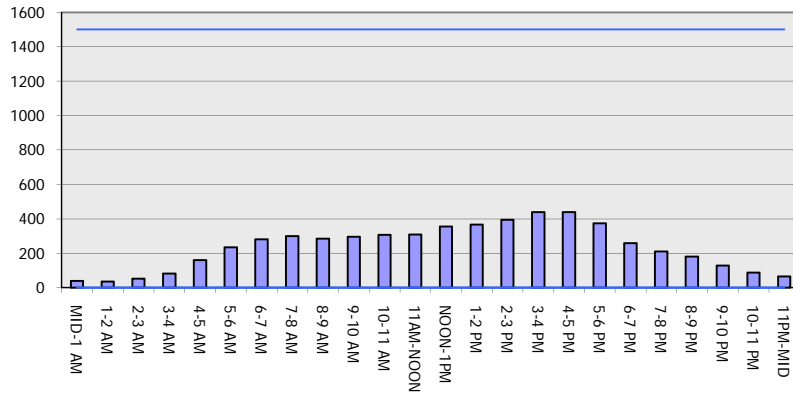
Analyzed for 2009
Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

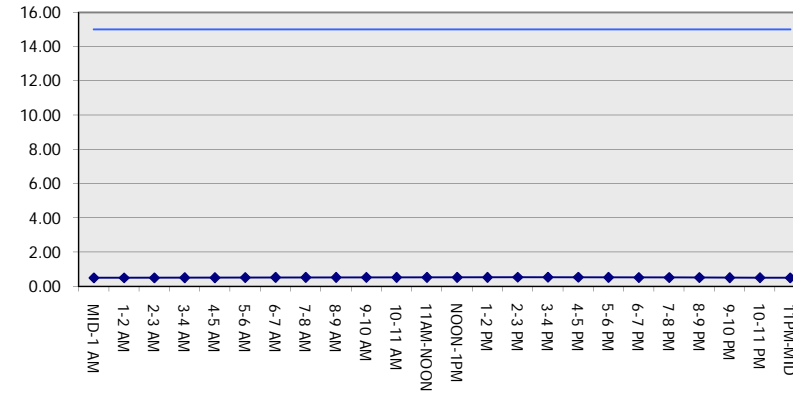
MON-THUR

SOUTHBOUND DIRECTION

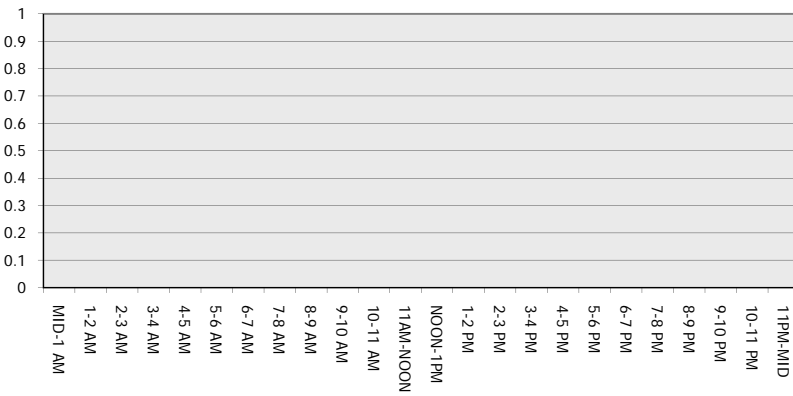
Main Route - Traffic Demand (Vehicles Per Hour)



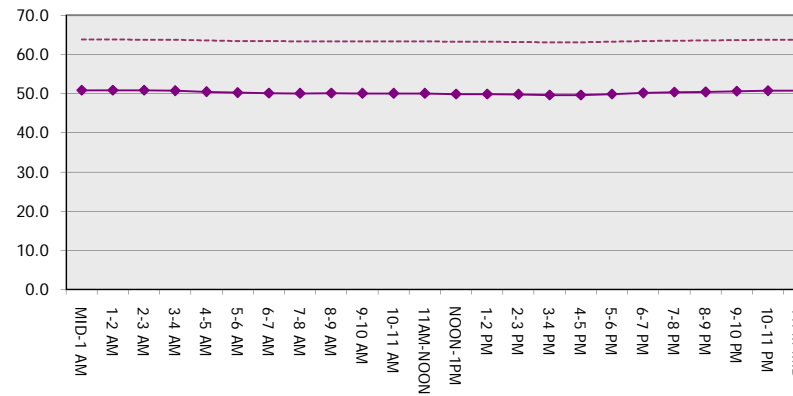
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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

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	48	0.0	1500	48	0	0.50	0	63.8	50.9	41.9
1-2 AM	45	0.0	1500	45	0	0.50	0	63.8	50.9	41.9
2-3 AM	41	0.0	1500	41	0	0.50	0	63.8	50.9	41.9
3-4 AM	50	0.0	1500	50	0	0.50	0	63.8	50.9	41.8
4-5 AM	108	0.0	1500	108	0	0.51	0	63.7	50.7	41.6
5-6 AM	204	0.0	1500	204	0	0.52	0	63.5	50.4	41.3
6-7 AM	314	0.0	1500	314	0	0.53	0	63.3	50.1	40.9
7-8 AM	352	0.0	1500	352	0	0.53	0	63.2	49.9	40.8
8-9 AM	302	0.0	1500	302	0	0.53	0	63.3	50.1	40.9
9-10 AM	329	0.0	1500	329	0	0.53	0	63.3	50.0	40.9
10-11 AM	344	0.0	1500	344	0	0.53	0	63.3	49.9	40.8
11AM-NOON	345	0.0	1500	345	0	0.53	0	63.3	49.9	40.8
NOON-1PM	348	0.0	1500	348	0	0.53	0	63.3	49.9	40.8
1-2 PM	386	0.0	1500	386	0	0.54	0	63.2	49.8	40.7
2-3 PM	430	0.0	1500	430	0	0.54	0	63.1	49.7	40.6
3-4 PM	502	0.0	1500	502	0	0.55	0	63.0	49.4	40.3
4-5 PM	463	0.0	1500	463	0	0.54	0	63.0	49.6	40.4
5-6 PM	387	0.0	1500	387	0	0.54	0	63.2	49.8	40.7
6-7 PM	278	0.0	1500	278	0	0.53	0	63.4	50.1	41.0
7-8 PM	236	0.0	1500	236	0	0.52	0	63.5	50.2	41.2
8-9 PM	186	0.0	1500	186	0	0.52	0	63.5	50.4	41.4
9-10 PM	138	0.0	1500	138	0	0.51	0	63.7	50.5	41.5
10-11 PM	112	0.0	1500	112	0	0.51	0	63.7	50.7	41.6
11PM-MID	81	0.0	1500	81	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	0.0021
MAIN ROUTE WITH WORKS	0.0027
'DIVERSION'	0.0000

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS

ROAD USER COSTS PER DAY	\$644
CONGESTED HOURS PER DAY*	0

*Delays Exceeding User-Specified Maximum

**STH 29: 40TH ST TO CTH T (CHIPPEWA COUNTY)
CONTINUOUS (24 HOUR) CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)**

AUGUST

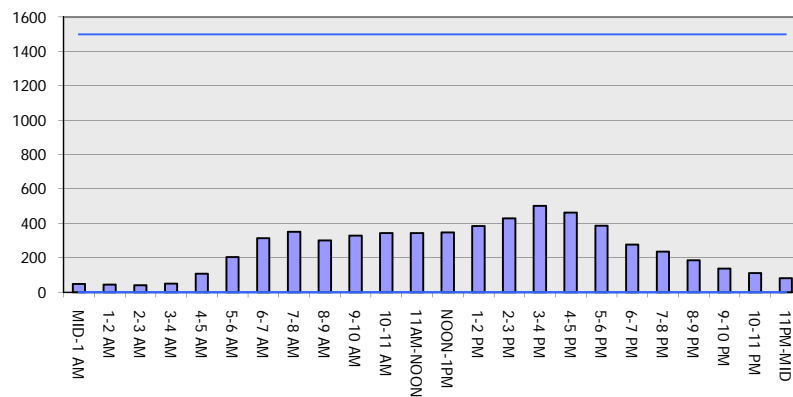
Analyzed for 2009
Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

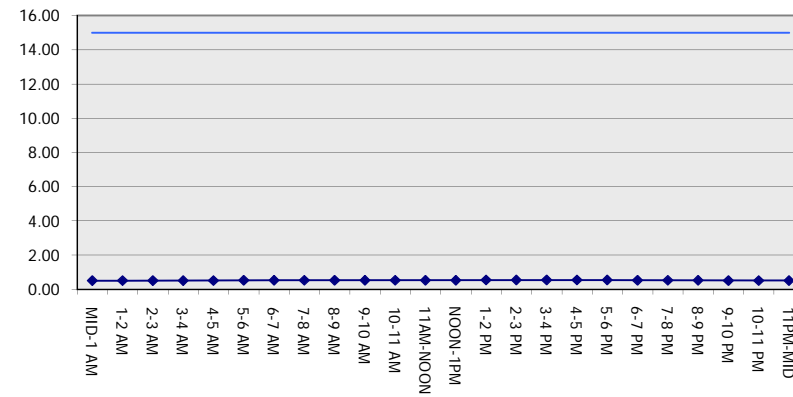
MON-THUR

NORTHBOUND DIRECTION

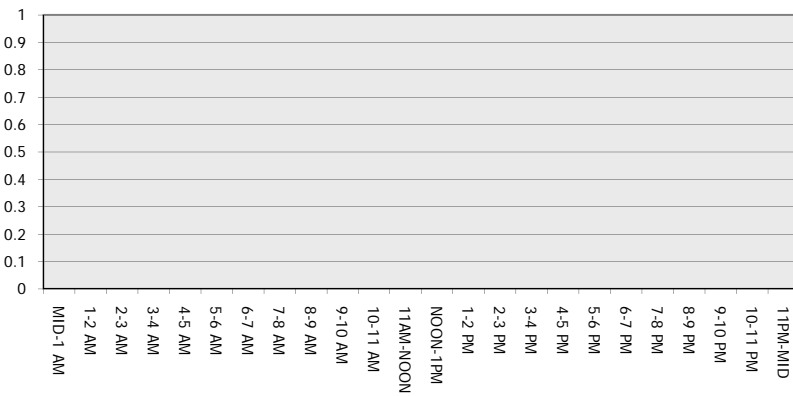
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

