

USH 41/45: CTH Q TO STH 145 (WAUKESHA AND MILWAUKEE COUNTIES) OFF-PEAK DAY 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	616	0.0	OFF	616	0	0.00	0	70.0	70.0	70.0
1-2 AM	338	0.0	OFF	338	0	0.00	0	70.2	70.2	70.2
2-3 AM	265	0.0	OFF	265	0	0.00	0	70.2	70.2	70.2
3-4 AM	286	0.0	OFF	286	0	0.00	0	70.2	70.2	70.2
4-5 AM	404	0.0	OFF	404	0	0.00	0	70.2	70.2	70.2
5-6 AM	831	0.0	OFF	831	0	0.00	0	69.7	69.7	69.7
6-7 AM	1289	0.0	OFF	1289	0	0.00	0	69.1	69.1	69.1
7-8 AM	1784	0.0	OFF	1784	0	0.00	0	68.5	68.5	68.5
8-9 AM	2305	0.0	1499	1838	467	10.71+	284	67.9	18.7	30.8
9-10 AM	2812	0.0	1500	1500	1312	16.28+	400	67.3	13.5	30.8
10-11 AM	3164	0.0	1500	1500	1664	16.25+	400	66.8	13.5	30.8
11AM-NOON	3439	0.0	1500	1500	1939	16.23+	400	66.4	13.5	30.8
NOON-1PM	3500	0.0	1500	1500	2000	16.23+	400	66.4	13.5	30.8
1-2 PM	3354	0.0	1500	1500	1854	16.24+	400	66.6	13.5	30.8
2-3 PM	3411	0.0	1500	1500	1911	16.23+	400	66.5	13.5	30.8
3-4 PM	3371	0.0	1500	1500	1871	16.24+	400	66.6	13.5	30.8
4-5 PM	3448	0.0	1500	1500	1948	16.23+	400	66.4	13.5	30.8
5-6 PM	3275	0.0	1500	1500	1775	16.24+	400	66.6	13.5	30.8
6-7 PM	2934	0.0	OFF	2934	0	0.21	18	67.1	63.8	63.8
7-8 PM	2291	0.0	OFF	2291	0	0.00	0	67.9	67.9	67.9
8-9 PM	1838	0.0	OFF	1838	0	0.00	0	68.4	68.4	68.4
9-10 PM	1734	0.0	OFF	1734	0	0.00	0	68.6	68.6	68.6
10-11 PM	1311	0.0	OFF	1311	0	0.00	0	69.1	69.1	69.1
11PM-MID	1018	0.0	OFF	1018	0	0.00	0	69.5	69.5	69.5

"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	0.0359
MAIN ROUTE WITH WORKS	0.0226
'DIVERSION'	0.0284
<small>PIA: Personal Injury Accidents</small>	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$140,344
CONGESTED HOURS PER DAY*	10

*Delays Exceeding User-Specified Maximum

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OFF-PEAK DAY 2 LANE CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)

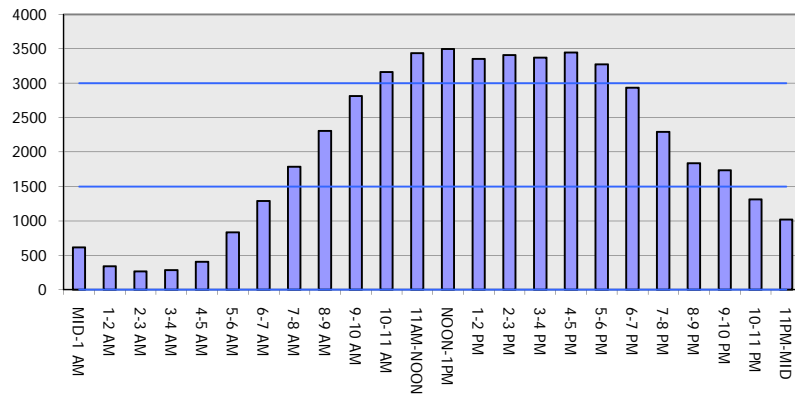
OCTOBER

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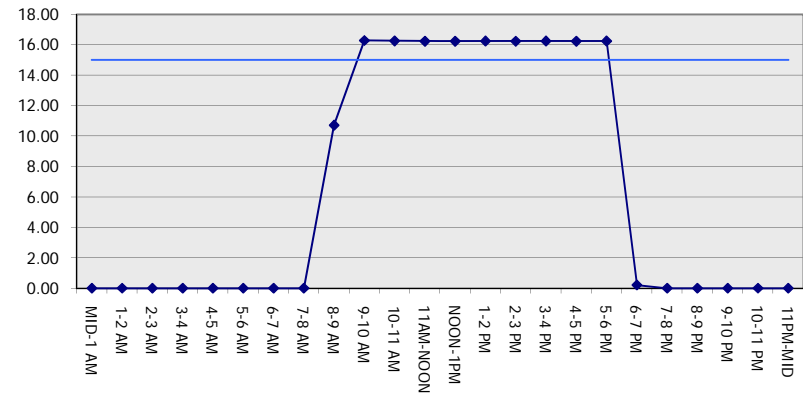
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

SATURDAY SOUTHBOUND DIRECTION

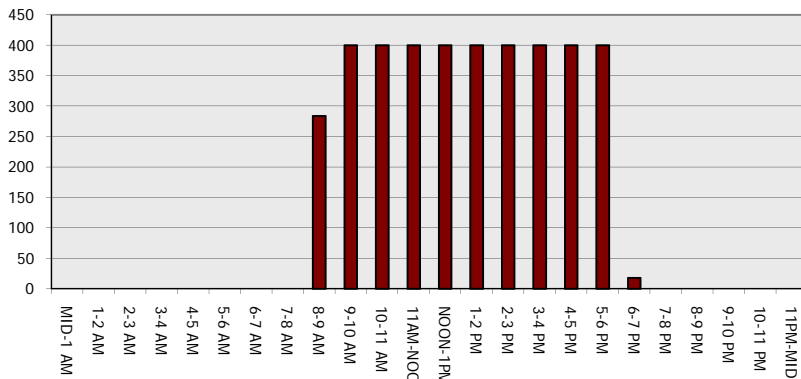
Main Route - Traffic Demand (Vehicles Per Hour)



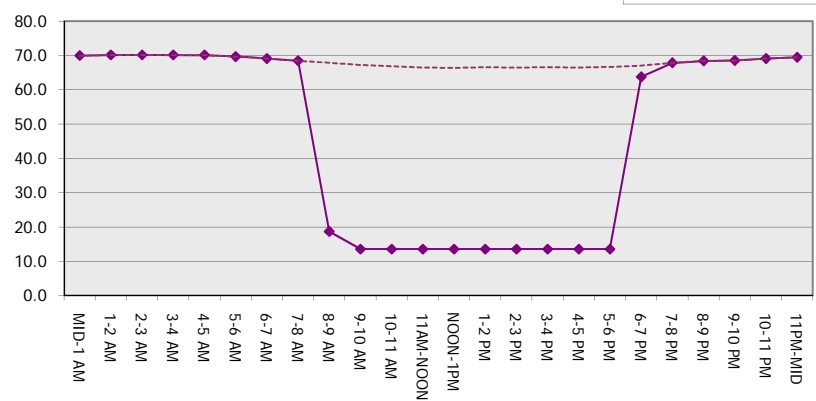
Main Route Average Delay Per Vehicle (Minutes)



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	702	0.0	OFF	702	0	0.00	0	69.9	69.9	69.9
1-2 AM	445	0.0	OFF	445	0	0.00	0	70.2	70.2	70.2
2-3 AM	359	0.0	OFF	359	0	0.00	0	70.2	70.2	70.2
3-4 AM	298	0.0	OFF	298	0	0.00	0	70.2	70.2	70.2
4-5 AM	469	0.0	OFF	469	0	0.00	0	70.2	70.2	70.2
5-6 AM	828	0.0	OFF	828	0	0.00	0	69.7	69.7	69.7
6-7 AM	1263	0.0	OFF	1263	0	0.00	0	69.2	69.2	69.2
7-8 AM	1729	0.0	OFF	1729	0	0.00	0	68.6	68.6	68.6
8-9 AM	2348	0.0	1499	1856	492	10.97+	288	67.8	18.3	30.8
9-10 AM	2822	0.0	1500	1500	1322	16.28+	400	67.3	13.5	30.8
10-11 AM	3270	0.0	1500	1500	1770	16.24+	400	66.7	13.5	30.8
11AM-NOON	3548	0.0	1500	1500	2048	16.22+	400	66.3	13.5	30.8
NOON-1PM	3646	0.0	1500	1500	2146	16.20+	400	66.0	13.5	30.8
1-2 PM	3627	0.0	1500	1500	2127	16.21+	400	66.1	13.5	30.8
2-3 PM	3565	0.0	1500	1500	2065	16.22+	400	66.3	13.5	30.8
3-4 PM	3670	0.0	1500	1500	2170	16.19+	400	65.8	13.5	30.8
4-5 PM	3433	0.0	1500	1500	1933	16.23+	400	66.4	13.5	30.8
5-6 PM	3076	0.0	1500	1500	1576	16.26+	400	66.9	13.5	30.8
6-7 PM	2675	0.0	OFF	2675	0	0.22	19	67.4	64.0	64.0
7-8 PM	2155	0.0	OFF	2155	0	0.00	0	68.1	68.1	68.1
8-9 PM	1856	0.0	OFF	1856	0	0.00	0	68.4	68.4	68.4
9-10 PM	1716	0.0	OFF	1716	0	0.00	0	68.6	68.6	68.6
10-11 PM	1437	0.0	OFF	1437	0	0.00	0	68.9	68.9	68.9
11PM-MID	1052	0.0	OFF	1052	0	0.00	0	69.4	69.4	69.4

"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	0.0366
MAIN ROUTE WITH WORKS	0.0226
'DIVERSION'	0.0299

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$144,464
CONGESTED HOURS PER DAY*	10

*Delays Exceeding User-Specified Maximum

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OFF-PEAK DAY 2 LANE CLOSURE
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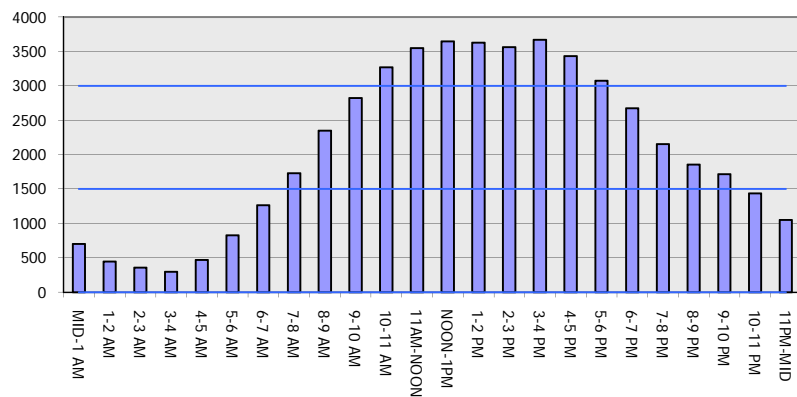
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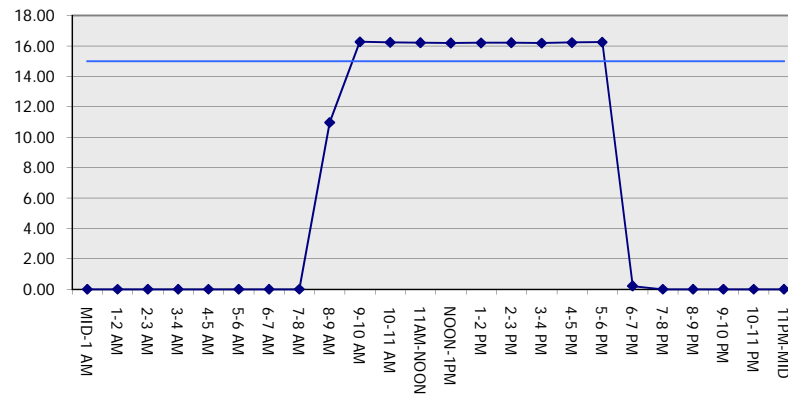
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SATURDAY NORTHBOUND DIRECTION

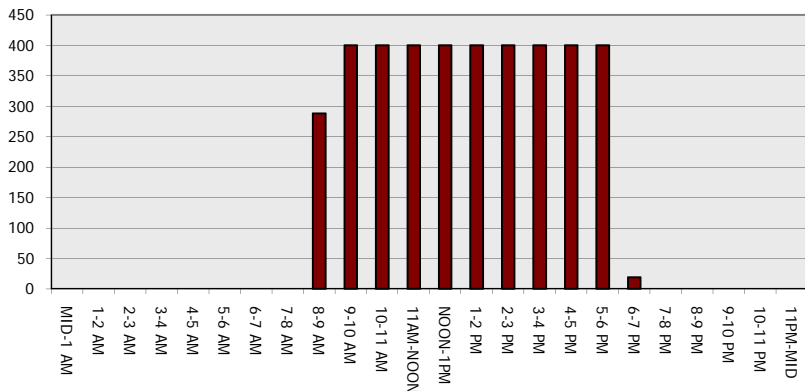
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

