

USH 45: CTH E TO STH 190 (MILWAUKEE COUNTY) NIGHTTIME 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	898	0.0	3000	898	0	0.35	0	69.6	57.3	49.7
1-2 AM	490	0.0	3000	490	0	0.36	0	70.1	57.4	49.7
2-3 AM	478	0.0	3000	478	0	0.36	0	70.1	57.4	49.7
3-4 AM	349	0.0	3000	349	0	0.36	0	70.2	57.4	49.7
4-5 AM	474	0.0	3000	474	0	0.36	0	70.2	57.4	49.7
5-6 AM	904	0.0	3000	904	0	0.35	0	69.6	57.3	49.7
6-7 AM	1841	0.0	3000	1841	0	0.34	0	68.4	56.9	49.7
7-8 AM	2479	0.0	2999	2479	0	0.41	0	67.6	54.3	46.5
8-9 AM	3288	0.0	OFF	3288	0	0.00	0	66.6	66.6	66.6
9-10 AM	3453	0.0	OFF	3453	0	0.00	0	66.4	66.4	66.4
10-11 AM	4021	0.0	OFF	4021	0	0.00	0	63.4	63.4	63.4
11AM-NOON	4624	0.0	OFF	4624	0	0.00	0	59.2	59.2	59.2
NOON-1PM	4715	0.0	OFF	4715	0	0.00	0	58.6	58.6	58.6
1-2 PM	4375	0.0	OFF	4375	0	0.00	0	61.0	61.0	61.0
2-3 PM	4620	0.0	OFF	4620	0	0.00	0	59.3	59.3	59.3
3-4 PM	4450	0.0	OFF	4450	0	0.00	0	60.4	60.4	60.4
4-5 PM	4703	0.0	OFF	4703	0	0.00	0	58.7	58.7	58.7
5-6 PM	4103	0.0	OFF	4103	0	0.00	0	62.8	62.8	62.8
6-7 PM	3878	0.0	2999	3878	0	8.30+	474	64.3	13.8	37.3
7-8 PM	2974	0.0	2999	2886	88	16.31+	859	67.1	10.1	37.3
8-9 PM	2190	0.0	2999	2190	0	5.48	386	68.0	18.6	43.5
9-10 PM	2123	0.0	3000	2123	0	0.33	0	68.1	56.8	49.7
10-11 PM	1890	0.0	3000	1890	0	0.34	0	68.4	56.9	49.7
11PM-MID	1311	0.0	3000	1311	0	0.35	0	69.1	57.1	49.7

"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	0.0
(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	0
(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	0.0196
MAIN ROUTE WITH WORKS	0.0181
'DIVERSION'	0.0001
<small>PIA: Personal Injury Accidents</small>	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$28,086
CONGESTED HOURS PER DAY*	2

*Delays Exceeding User-Specified Maximum

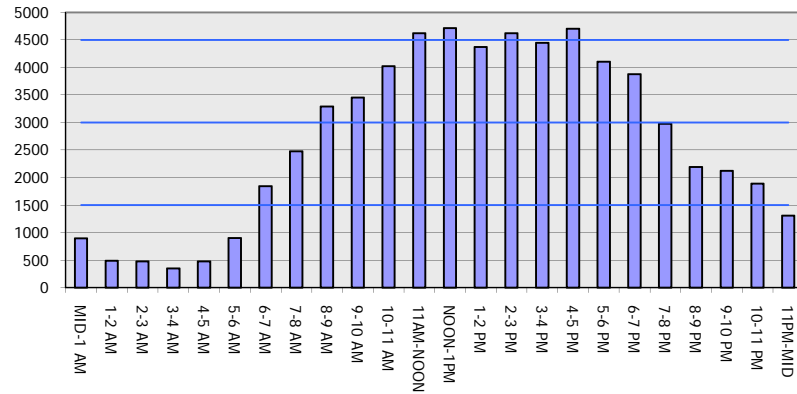
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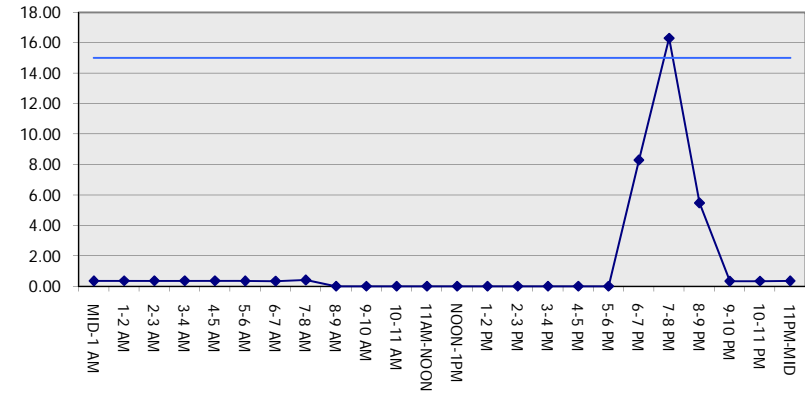
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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT
SATURDAY SOUTHBOUND DIRECTION

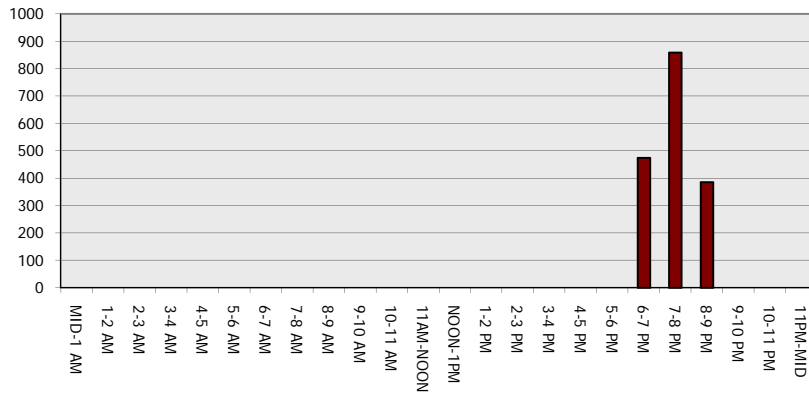
Main Route - Traffic Demand (Vehicles Per Hour)



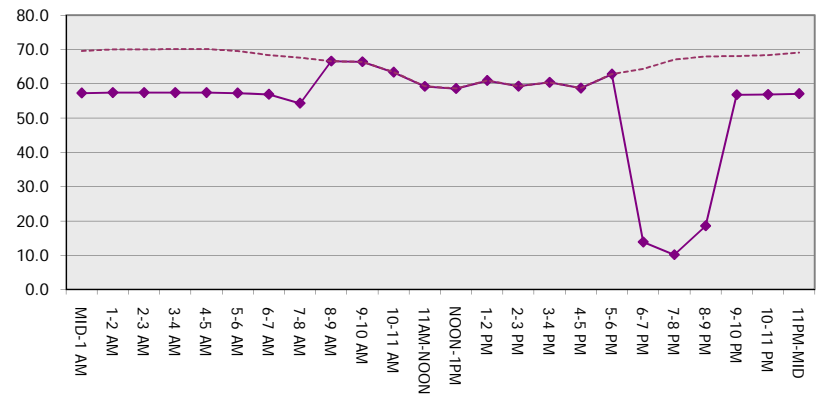
Main Route Average Delay Per Vehicle (Minutes)



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	1253	0.0	3000	1253	0	0.35	0	69.2	57.1	49.7
1-2 AM	893	0.0	3000	893	0	0.35	0	69.6	57.3	49.7
2-3 AM	834	0.0	3000	834	0	0.35	0	69.7	57.3	49.7
3-4 AM	679	0.0	3000	679	0	0.36	0	69.9	57.4	49.7
4-5 AM	838	0.0	3000	838	0	0.35	0	69.7	57.3	49.7
5-6 AM	1355	0.0	3000	1355	0	0.35	0	69.1	57.1	49.7
6-7 AM	1925	0.0	3000	1925	0	0.34	0	68.3	56.9	49.7
7-8 AM	2517	0.0	2999	2517	0	0.41	0	67.6	54.3	46.4
8-9 AM	3112	0.0	OFF	3112	0	0.00	0	66.9	66.9	66.9
9-10 AM	3818	0.0	OFF	3818	0	0.00	0	64.8	64.8	64.8
10-11 AM	4250	0.0	OFF	4250	0	0.00	0	61.8	61.8	61.8
11AM-NOON	4326	0.0	OFF	4326	0	0.00	0	61.3	61.3	61.3
NOON-1PM	4485	0.0	OFF	4485	0	0.00	0	60.2	60.2	60.2
1-2 PM	4327	0.0	OFF	4327	0	0.00	0	61.3	61.3	61.3
2-3 PM	4726	0.0	OFF	4726	0	0.00	0	58.6	58.6	58.6
3-4 PM	4455	0.0	OFF	4455	0	0.00	0	60.4	60.4	60.4
4-5 PM	4456	0.0	OFF	4456	0	0.00	0	60.4	60.4	60.4
5-6 PM	4057	0.0	OFF	4057	0	0.00	0	63.2	63.2	63.2
6-7 PM	3421	0.0	2999	3421	0	4.63	241	66.5	18.9	37.3
7-8 PM	3054	0.0	2999	3054	0	9.39	477	66.9	12.7	37.3
8-9 PM	2466	0.0	2999	2466	0	3.42	230	67.7	23.5	41.7
9-10 PM	2441	0.0	3000	2441	0	0.36	0	67.7	55.7	48.3
10-11 PM	2487	0.0	3000	2487	0	0.39	0	67.6	54.8	47.1
11PM-MID	1883	0.0	3000	1883	0	0.34	0	68.4	56.9	49.7

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

----- 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	0.0206
MAIN ROUTE WITH WORKS	0.0189
'DIVERSION'	0.0000

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$17,063
CONGESTED HOURS PER DAY*	0

*Delays Exceeding User-Specified Maximum

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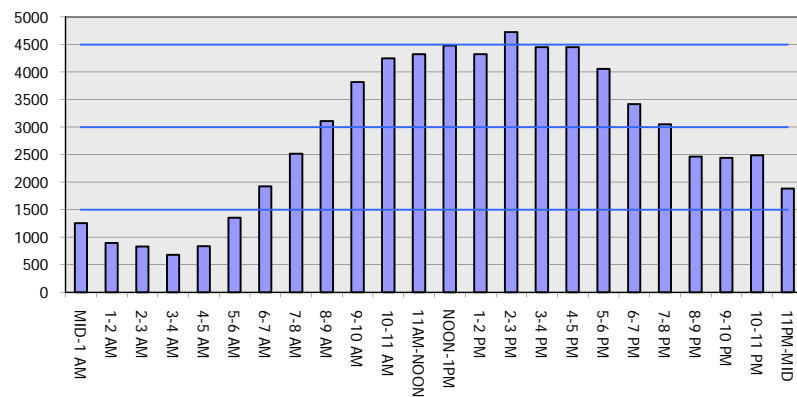
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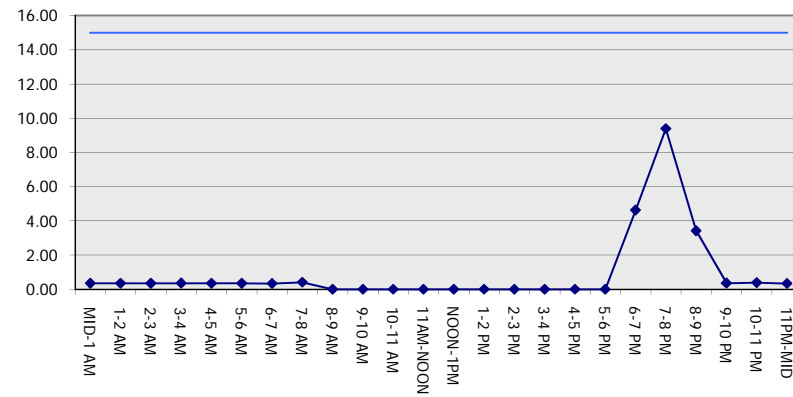
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

SATURDAY NORTHBOUND DIRECTION

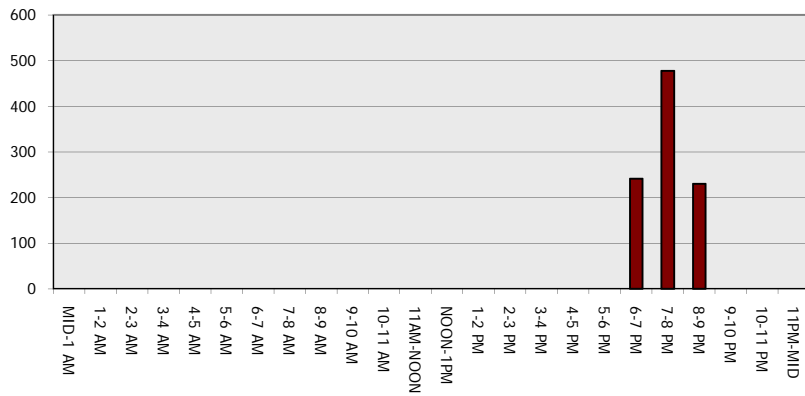
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

