

USH 45: STH 190 TO NORTH AVE (MILWAUKEE COUNTY) OFF-PEAK DAY CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	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	567	0.0	OFF	567	0	0.00	0	70.0	70.0	70.0
1-2 AM	405	0.0	OFF	405	0	0.00	0	70.2	70.2	70.2
2-3 AM	374	0.0	OFF	374	0	0.00	0	70.2	70.2	70.2
3-4 AM	463	0.0	OFF	463	0	0.00	0	70.2	70.2	70.2
4-5 AM	837	0.0	OFF	837	0	0.00	0	69.7	69.7	69.7
5-6 AM	2369	0.0	OFF	2369	0	0.00	0	67.8	67.8	67.8
6-7 AM	5197	0.0	OFF	5197	0	0.00	0	55.3	55.3	55.3
7-8 AM	5757	0.0	OFF	5757	0	0.00	0	51.5	51.5	51.5
8-9 AM	5304	0.0	OFF	5304	0	0.00	0	54.6	54.6	54.6
9-10 AM	4244	0.0	OFF	4244	0	0.00	0	61.9	61.9	61.9
10-11 AM	4000	0.0	2999	4000	0	8.45+	499	63.5	14.3	37.3
11AM-NOON	4258	0.0	2999	2917	1341	17.18+	920	61.8	10.1	37.3
NOON-1PM	4411	0.0	3000	3011	1399	17.23+	926	60.7	10.1	37.3
1-2 PM	4273	0.0	3000	2994	1279	17.04+	913	61.7	10.1	37.3
2-3 PM	5114	0.0	2999	3000	2114	17.41+	953	55.9	10.0	37.3
3-4 PM	4992	0.0	OFF	4992	0	4.50	422	56.8	18.8	18.8
4-5 PM	4218	0.0	OFF	4218	0	0.00	0	62.0	62.0	62.0
5-6 PM	3928	0.0	OFF	3928	0	0.00	0	64.0	64.0	64.0
6-7 PM	4189	0.0	OFF	4189	0	0.00	0	62.2	62.2	62.2
7-8 PM	2848	0.0	OFF	2848	0	0.00	0	67.2	67.2	67.2
8-9 PM	2218	0.0	OFF	2218	0	0.00	0	68.0	68.0	68.0
9-10 PM	1972	0.0	OFF	1972	0	0.00	0	68.3	68.3	68.3
10-11 PM	1543	0.0	OFF	1543	0	0.00	0	68.8	68.8	68.8
11PM-MID	1238	0.0	OFF	1238	0	0.00	0	69.2	69.2	69.2

"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	0.0250
MAIN ROUTE WITH WORKS	0.0219
'DIVERSION'	0.0047
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$58,706
CONGESTED HOURS PER DAY*	5

*Delays Exceeding User-Specified Maximum

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NO DIVERSION ROUTE (MAX QUEUE METHOD)**

OCTOBER

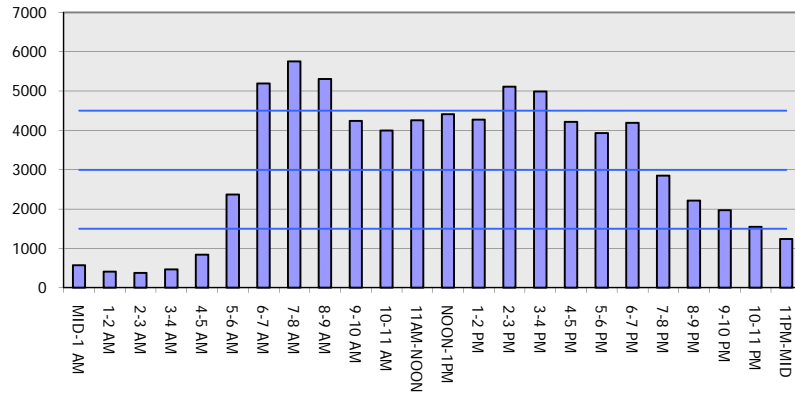
Analyzed for 2009
Construction Season

GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

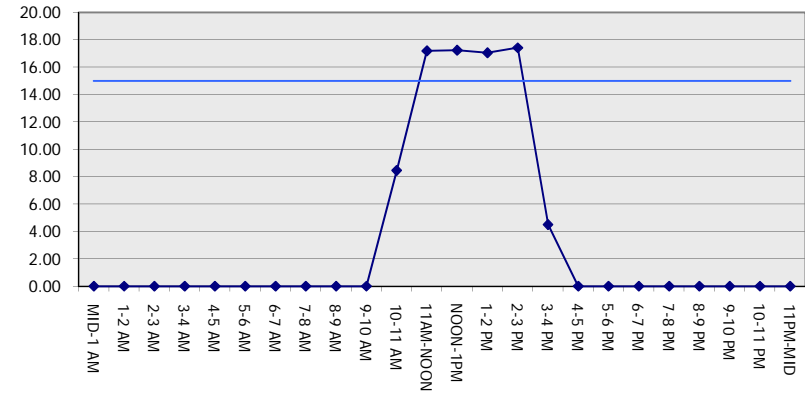
MON-THUR

SOUTHBOUND DIRECTION

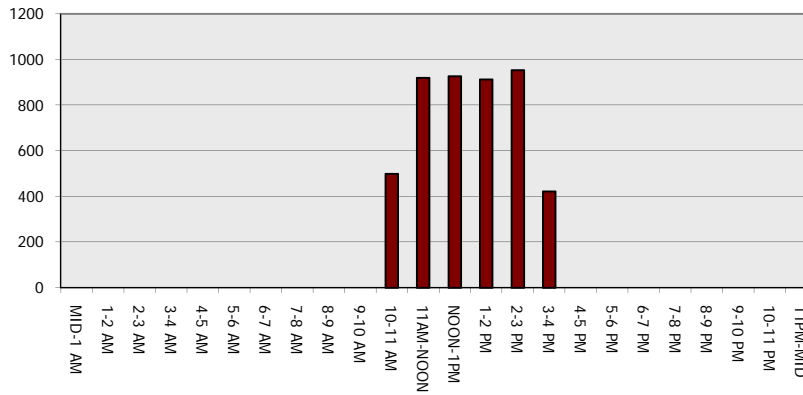
Main Route - Traffic Demand (Vehicles Per Hour)



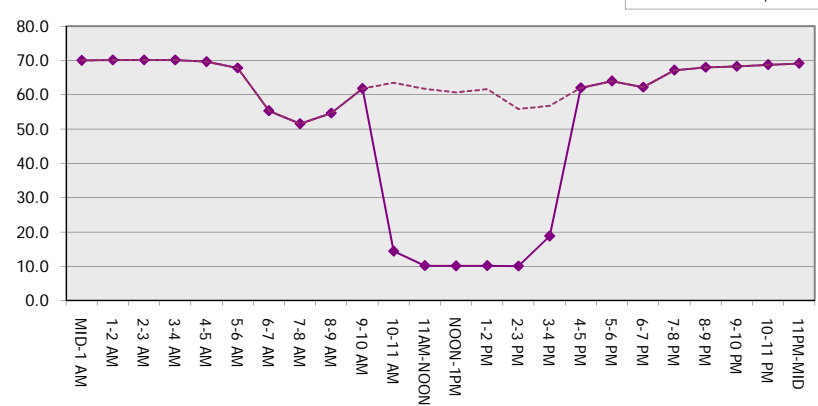
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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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	776	0.0	OFF	776	0	0.00	0	69.7	69.7	69.7
1-2 AM	613	0.0	OFF	613	0	0.00	0	70.0	70.0	70.0
2-3 AM	583	0.0	OFF	583	0	0.00	0	70.0	70.0	70.0
3-4 AM	662	0.0	OFF	662	0	0.00	0	69.9	69.9	69.9
4-5 AM	1231	0.0	OFF	1231	0	0.00	0	69.2	69.2	69.2
5-6 AM	3178	0.0	OFF	3178	0	0.00	0	66.8	66.8	66.8
6-7 AM	5326	0.0	OFF	5326	0	0.00	0	54.5	54.5	54.5
7-8 AM	6196	0.0	OFF	6196	0	0.00	0	48.5	48.5	48.5
8-9 AM	5445	0.0	OFF	5445	0	0.00	0	53.7	53.7	53.7
9-10 AM	4235	0.0	OFF	4235	0	0.00	0	61.9	61.9	61.9
10-11 AM	3977	0.0	2999	3977	0	8.31+	490	63.7	14.5	37.3
11AM-NOON	4182	0.0	2999	2931	1251	17.06+	912	62.3	10.1	37.3
NOON-1PM	4369	0.0	3000	3018	1351	17.15+	921	61.0	10.1	37.3
1-2 PM	4404	0.0	3000	3013	1391	17.21+	926	60.8	10.1	37.3
2-3 PM	5230	0.0	2999	3000	2230	17.35+	953	55.1	10.0	37.3
3-4 PM	5952	0.0	OFF	5952	0	9.18	916	50.2	10.8	10.8
4-5 PM	6393	0.0	OFF	6393	0	10.74	1088	47.2	9.4	9.4
5-6 PM	6190	0.0	OFF	6190	0	13.74	1380	48.6	7.7	7.7
6-7 PM	4592	0.0	OFF	4592	0	8.12	771	59.5	12.3	12.3
7-8 PM	3163	0.0	OFF	3163	0	0.01	0	66.8	66.4	66.4
8-9 PM	2699	0.0	OFF	2699	0	0.00	0	67.4	67.4	67.4
9-10 PM	2546	0.0	OFF	2546	0	0.00	0	67.6	67.6	67.6
10-11 PM	1955	0.0	OFF	1955	0	0.00	0	68.3	68.3	68.3
11PM-MID	1335	0.0	OFF	1335	0	0.00	0	69.1	69.1	69.1

"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	0.0285
MAIN ROUTE WITH WORKS	0.0254
'DIVERSION'	0.0048

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$94,553
CONGESTED HOURS PER DAY*	5

*Delays Exceeding User-Specified Maximum

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OCTOBER

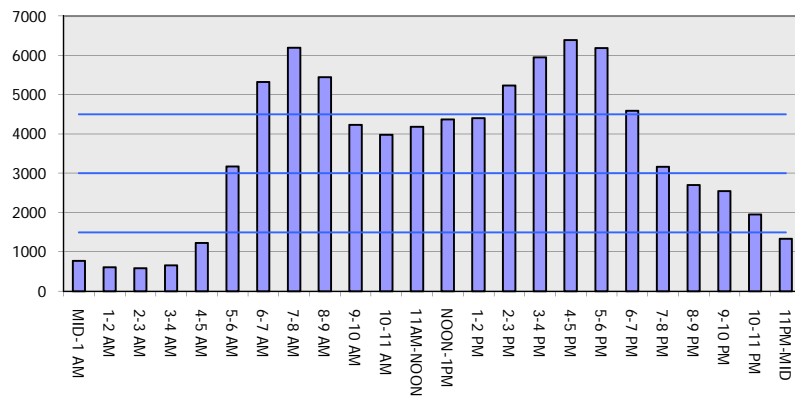
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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

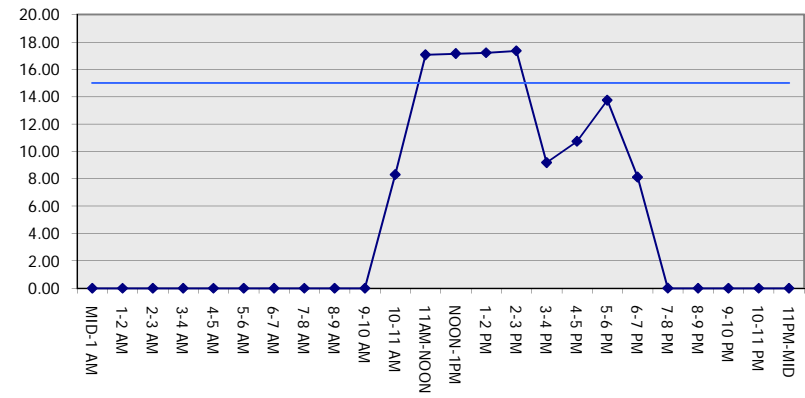
MON-THUR

NORTHBOUND DIRECTION

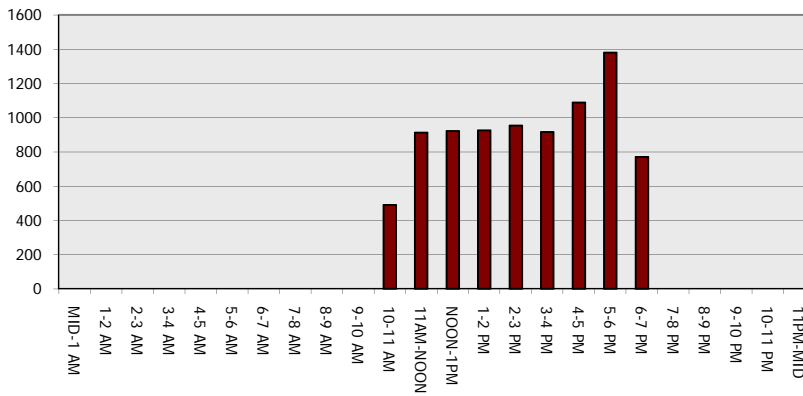
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

