

**USH 45: STH 145 TO CTH E (MILWAUKEE COUNTY)
CONTINUOUS (24 HOUR) 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	345	0.0	3000	345	0	0.36	0	70.2	59.3	49.7
1-2 AM	260	0.0	3000	260	0	0.36	0	70.2	59.3	49.7
2-3 AM	266	0.0	3000	266	0	0.36	0	70.2	59.3	49.7
3-4 AM	371	0.0	3000	371	0	0.36	0	70.2	59.3	49.7
4-5 AM	745	0.0	3000	745	0	0.35	0	69.8	59.2	49.7
5-6 AM	2210	0.0	2999	2210	0	0.43	0	68.0	56.0	46.0
6-7 AM	4736	0.0	2999	3778	958	10.36+	620	58.5	13.2	37.4
7-8 AM	5611	0.0	3000	3034	2577	16.80+	935	52.5	10.3	37.6
8-9 AM	4433	0.0	3000	3079	1354	16.79+	903	60.5	10.4	37.3
9-10 AM	3325	0.0	3000	2995	330	16.68+	880	66.6	10.6	37.3
10-11 AM	3072	0.0	2999	2996	75	16.66+	877	66.9	10.6	37.3
11AM-NOON	3177	0.0	2999	2998	178	16.67+	878	66.8	10.6	37.3
NOON-1PM	3217	0.0	3000	2999	218	16.67+	879	66.8	10.6	37.3
1-2 PM	3261	0.0	3000	3000	261	16.67+	879	66.7	10.6	37.3
2-3 PM	3881	0.0	2999	3002	878	16.66+	884	64.3	10.5	37.3
3-4 PM	4312	0.0	3000	3029	1283	16.84+	904	61.4	10.4	37.3
4-5 PM	4285	0.0	3000	2990	1295	16.88+	905	61.6	10.4	37.3
5-6 PM	4129	0.0	3000	2997	1132	16.74+	894	62.7	10.5	37.3
6-7 PM	3075	0.0	3000	2898	177	16.38+	863	66.9	10.6	37.3
7-8 PM	1966	0.0	2999	1966	0	3.80	351	68.3	25.5	44.7
8-9 PM	1504	0.0	3000	1504	0	0.34	0	68.9	58.8	49.7
9-10 PM	1312	0.0	3000	1312	0	0.35	0	69.1	58.9	49.7
10-11 PM	950	0.0	3000	950	0	0.35	0	69.6	59.1	49.7
11PM-MID	854	0.0	3000	854	0	0.35	0	69.7	59.1	49.7

+ 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	0.0224
MAIN ROUTE WITH WORKS	0.0152
'DIVERSION'	0.0091
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$180,602
CONGESTED HOURS PER DAY*	13

*Delays Exceeding User-Specified Maximum

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OCTOBER

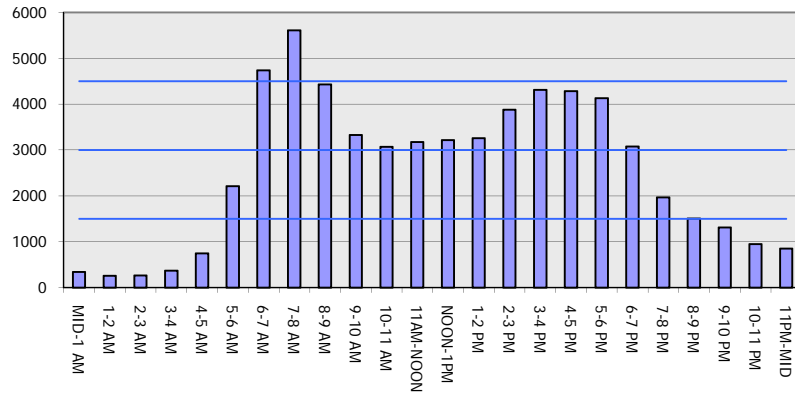
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GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

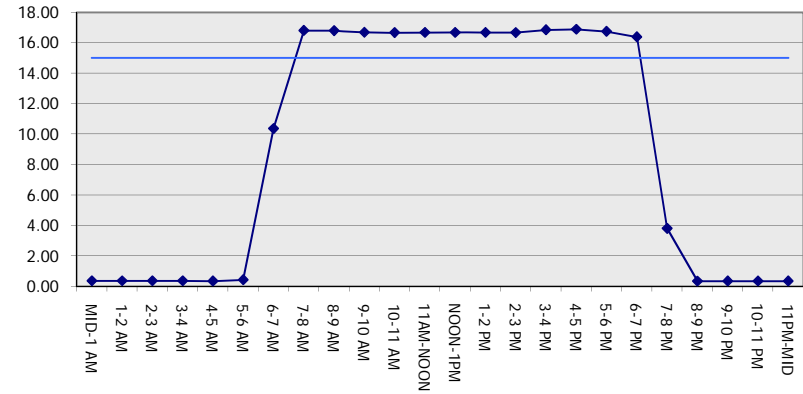
MON-THUR

SOUTHBOUND DIRECTION

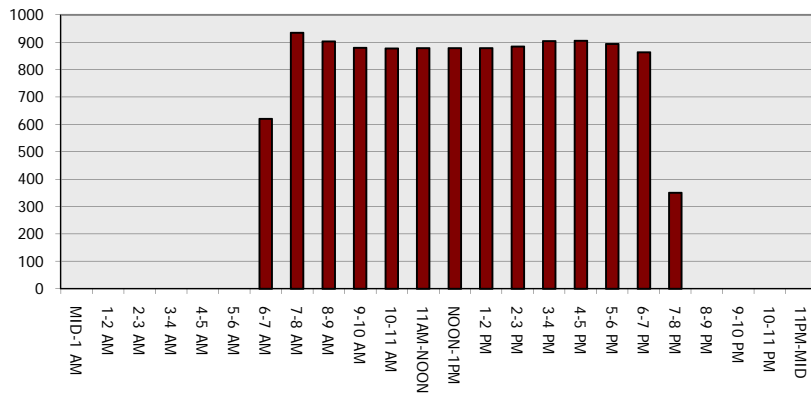
Main Route - Traffic Demand (Vehicles Per Hour)



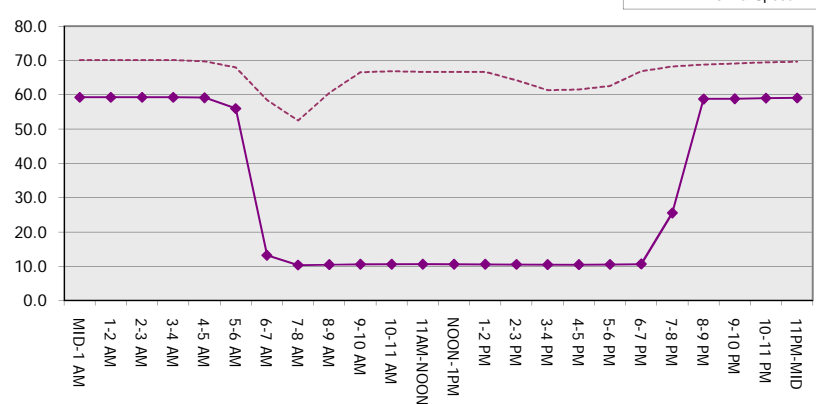
Main Route Average Delay Per Vehicle (Minutes)



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	421	0.0	3000	421	0	0.36	0	70.2	59.3	49.7
1-2 AM	290	0.0	3000	290	0	0.36	0	70.2	59.3	49.7
2-3 AM	270	0.0	3000	270	0	0.36	0	70.2	59.3	49.7
3-4 AM	332	0.0	3000	332	0	0.36	0	70.2	59.3	49.7
4-5 AM	678	0.0	3000	678	0	0.36	0	69.9	59.2	49.7
5-6 AM	2001	0.0	2999	2001	0	0.34	0	68.2	58.5	49.6
6-7 AM	3822	0.0	2999	3822	0	4.95	320	64.8	20.8	37.3
7-8 AM	4904	0.0	2999	3073	1831	17.06+	929	57.4	10.3	37.3
8-9 AM	4096	0.0	3000	3009	1087	16.78+	895	62.8	10.4	37.3
9-10 AM	2901	0.0	2999	2834	67	15.91+	837	67.1	10.7	37.3
10-11 AM	2815	0.0	3000	2815	0	12.39	643	67.3	11.9	37.3
11AM-NOON	2939	0.0	3000	2939	0	9.99	510	67.1	13.1	37.3
NOON-1PM	3187	0.0	3000	3187	0	11.02	569	66.8	12.5	37.3
1-2 PM	3422	0.0	3000	3158	264	15.47+	816	66.5	10.9	37.3
2-3 PM	4265	0.0	3000	3088	1177	16.85+	903	61.7	10.4	37.3
3-4 PM	5159	0.0	2999	3000	2159	17.12+	939	55.6	10.3	37.3
4-5 PM	5848	0.0	3000	3000	2848	16.76+	939	50.9	10.3	37.3
5-6 PM	5627	0.0	3000	3000	2627	16.89+	939	52.4	10.3	37.3
6-7 PM	3613	0.0	3000	2971	642	16.76+	885	66.2	10.5	37.3
7-8 PM	2361	0.0	2999	2361	0	11.51+	627	67.8	12.5	39.6
8-9 PM	1972	0.0	3000	1972	0	0.68	34	68.3	51.1	49.7
9-10 PM	1790	0.0	3000	1790	0	0.34	0	68.5	58.7	49.7
10-11 PM	1385	0.0	3000	1385	0	0.34	0	69.0	58.9	49.7
11PM-MID	829	0.0	3000	829	0	0.35	0	69.7	59.1	49.7

+ 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	0.0238
MAIN ROUTE WITH WORKS	0.0157
'DIVERSION'	0.0108

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$178,342
CONGESTED HOURS PER DAY*	10

*Delays Exceeding User-Specified Maximum

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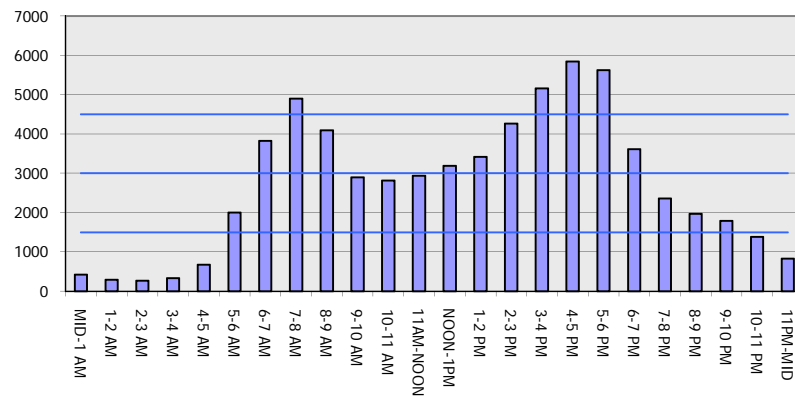
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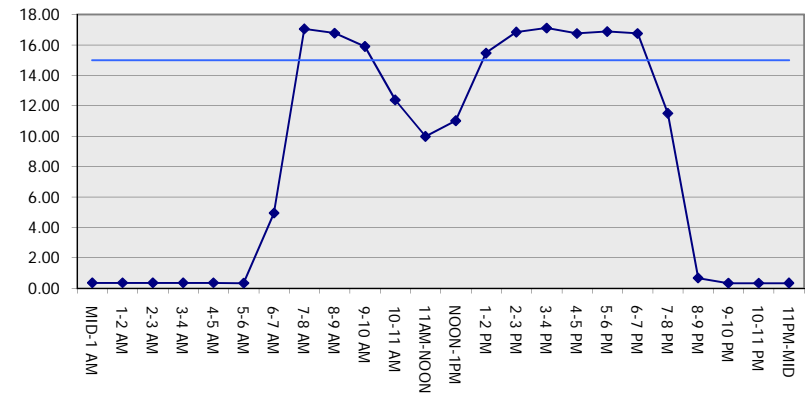
MON-THUR

NORTHBOUND DIRECTION

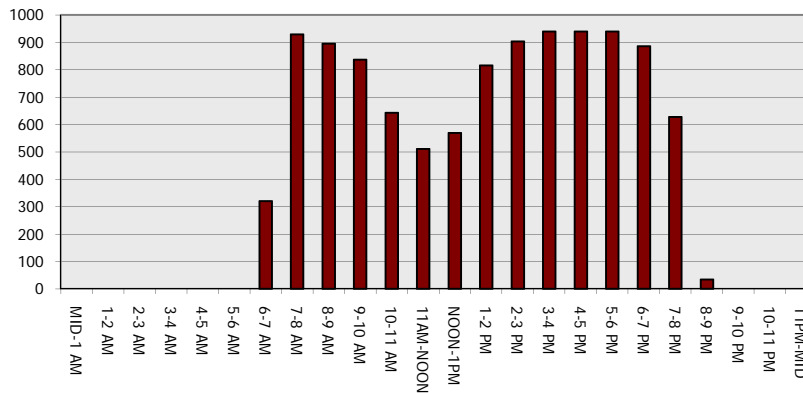
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

