

USH 41/45: CTH Q TO STH 145 (WAUKESHA AND MILWAUKEE COUNTIES) CONTINUOUS (24 HOUR) 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	Analyzed for 2009 Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT

SUNDAY 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	661	0.0	1500	661	0	0.55	0	69.9	61.4	42.9	
1-2 AM	396	0.0	1500	396	0	0.52	0	70.2	62.0	43.9	
2-3 AM	299	0.0	1500	299	0	0.51	0	70.2	62.1	44.3	
3-4 AM	213	0.0	1500	213	0	0.50	0	70.2	62.3	44.6	
4-5 AM	217	0.0	1500	217	0	0.50	0	70.2	62.3	44.6	
5-6 AM	374	0.0	1500	374	0	0.52	0	70.2	62.0	44.0	
6-7 AM	640	0.0	1500	640	0	0.55	0	69.9	61.4	43.0	
7-8 AM	916	0.0	1500	916	0	0.58	0	69.6	60.7	42.0	
8-9 AM	1271	0.0	1499	1271	0	0.79	0	69.2	57.7	36.8	
9-10 AM	2080	0.0	1499	1995	85	8.04+	230	68.1	22.8	30.8	
10-11 AM	2676	0.0	1500	1483	1192	16.19+	398	67.4	13.6	31.5	
11AM-NOON	3255	0.0	1500	1500	1755	16.23+	400	66.7	13.5	31.0	
NOON-1PM	3540	0.0	1500	1500	2040	16.21+	400	66.3	13.5	31.0	
1-2 PM	3537	0.0	1500	1500	2037	16.21+	399	66.3	13.5	31.0	
2-3 PM	3680	0.0	1500	1500	2180	16.17+	400	65.7	13.5	31.0	
3-4 PM	3785	0.0	1500	1500	2285	16.12+	400	65.0	13.5	31.0	
4-5 PM	3892	0.0	1500	1500	2392	16.08+	400	64.3	13.5	31.0	
5-6 PM	3716	0.0	1500	1500	2216	16.16+	400	65.5	13.5	31.0	
6-7 PM	3354	0.0	1500	1500	1854	16.22+	400	66.6	13.5	31.0	
7-8 PM	2636	0.0	1500	1500	1136	16.28+	400	67.4	13.5	31.0	
8-9 PM	1828	0.0	1499	1432	396	16.10+	393	68.4	13.7	30.9	
9-10 PM	1289	0.0	1499	1289	0	13.58+	335	69.1	15.7	31.1	
10-11 PM	856	0.0	1500	856	0	1.42	36	69.7	51.2	41.9	
11PM-MID	509	0.0	1500	509	0	0.53	0	70.1	61.7	43.5	

+ 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	0.0334
MAIN ROUTE WITH WORKS	0.0173
'DIVERSION'	0.0332
<small>PIA: Personal Injury Accidents</small>	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$173,614
CONGESTED HOURS PER DAY*	13

*Delays Exceeding User-Specified Maximum

**USH 41/45: CTH Q TO STH 145 (WAUKESHA AND MILWAUKEE COUNTIES)
 CONTINUOUS (24 HOUR) 2 LANE CLOSURE
 NO DIVERSION ROUTE (MAX QUEUE METHOD)**

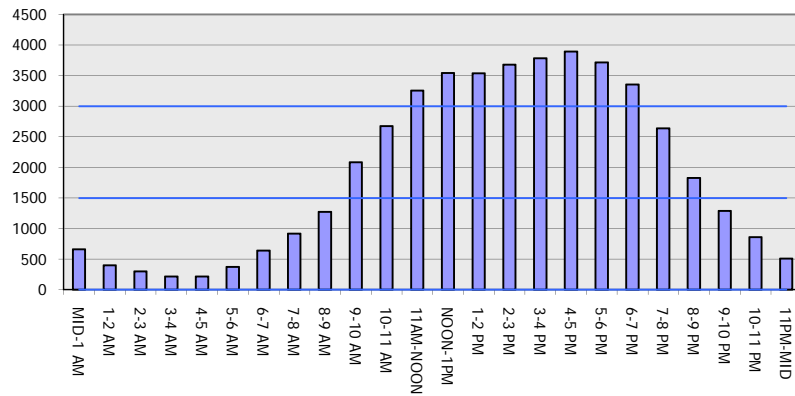
OCTOBER

Analyzed for 2009
 Construction Season

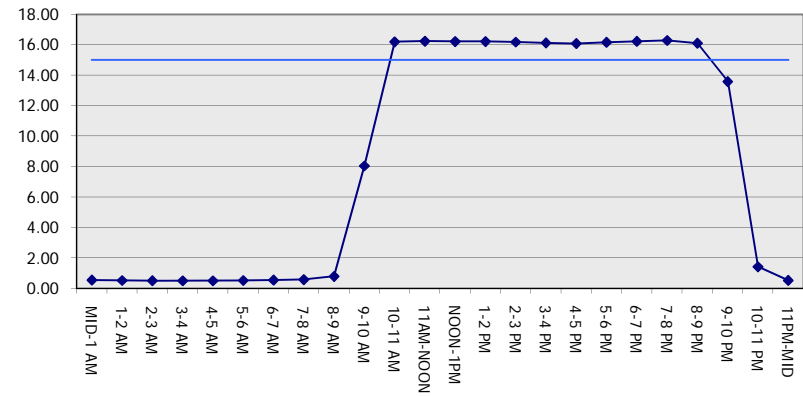
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

SUNDAY SOUTHBOUND DIRECTION

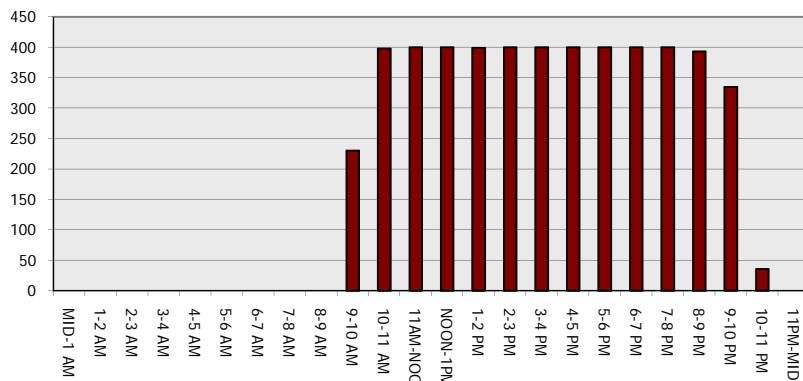
Main Route - Traffic Demand (Vehicles Per Hour)



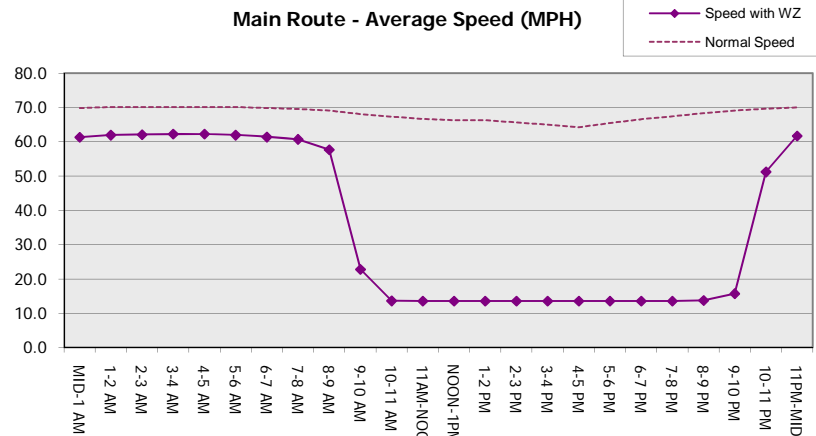
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



USH 41/45: CTH Q TO STH 145 (WAUKESHA AND MILWAUKEE COUNTIES) CONTINUOUS (24 HOUR) 2 LANE CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	Analyzed for 2009 Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT

SUNDAY 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	714	0.0	1500	714	0	0.56	0	69.9	61.2	42.7	
1-2 AM	415	0.0	1500	415	0	0.52	0	70.2	61.9	43.8	
2-3 AM	367	0.0	1500	367	0	0.52	0	70.2	62.0	44.0	
3-4 AM	245	0.0	1500	245	0	0.50	0	70.2	62.2	44.5	
4-5 AM	231	0.0	1500	231	0	0.50	0	70.2	62.2	44.6	
5-6 AM	442	0.0	1500	442	0	0.53	0	70.2	61.9	43.7	
6-7 AM	563	0.0	1500	563	0	0.54	0	70.0	61.6	43.3	
7-8 AM	932	0.0	1500	932	0	0.58	0	69.6	60.7	41.9	
8-9 AM	1345	0.0	1499	1345	0	0.89	0	69.1	56.4	34.6	
9-10 AM	1909	0.0	1499	1909	0	6.11	168	68.4	27.2	30.8	
10-11 AM	2502	0.0	1499	1500	1002	16.30+	399	67.6	13.5	30.8	
11AM-NOON	3035	0.0	1500	1500	1535	16.26+	400	66.9	13.5	30.8	
NOON-1PM	3286	0.0	1500	1500	1786	16.24+	400	66.6	13.5	30.8	
1-2 PM	3229	0.0	1500	1500	1729	16.25+	400	66.7	13.5	30.8	
2-3 PM	2986	0.0	1500	1500	1486	16.27+	400	67.0	13.5	30.8	
3-4 PM	3203	0.0	1500	1500	1703	16.25+	400	66.8	13.5	30.8	
4-5 PM	3058	0.0	1500	1500	1558	16.26+	400	66.9	13.5	30.8	
5-6 PM	2647	0.0	1500	1500	1147	16.29+	400	67.4	13.5	30.8	
6-7 PM	2313	0.0	1500	1500	813	16.32+	400	67.9	13.5	30.8	
7-8 PM	1789	0.0	1500	1500	289	16.36+	400	68.5	13.5	30.8	
8-9 PM	1285	0.0	1499	1285	0	13.12+	323	69.1	16.1	30.9	
9-10 PM	1073	0.0	1499	1073	0	1.92	49	69.4	46.8	38.9	
10-11 PM	904	0.0	1500	904	0	0.58	0	69.6	60.8	42.0	
11PM-MID	548	0.0	1500	548	0	0.54	0	70.0	61.6	43.3	

+ 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	0.0286
MAIN ROUTE WITH WORKS	0.0173
'DIVERSION'	0.0221

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$137,652
CONGESTED HOURS PER DAY*	11

*Delays Exceeding User-Specified Maximum

USH 41/45: CTH Q TO STH 145 (WAUKESHA AND MILWAUKEE COUNTIES)
CONTINUOUS (24 HOUR) 2 LANE CLOSURE
NO DIVERSION ROUTE (MAX QUEUE METHOD)

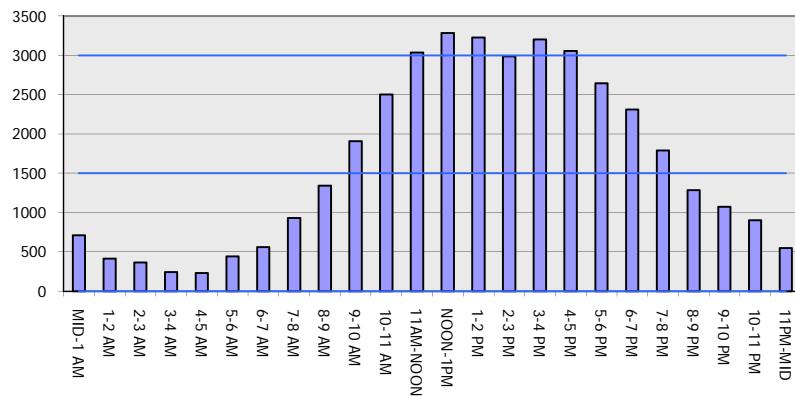
OCTOBER

Analyzed for 2009
 Construction Season

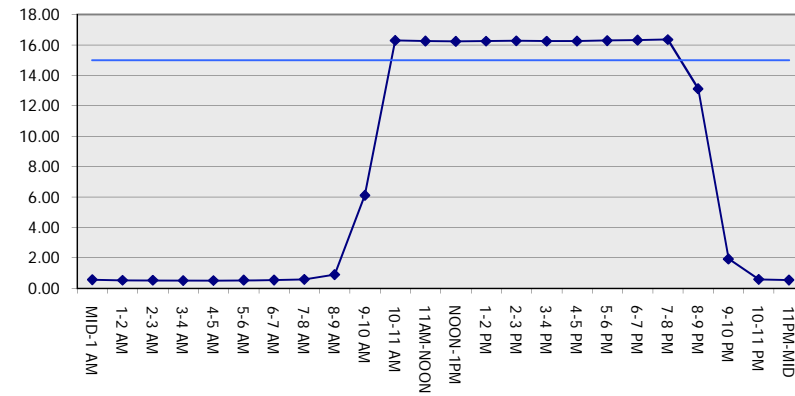
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

SUNDAY NORTHBOUND DIRECTION

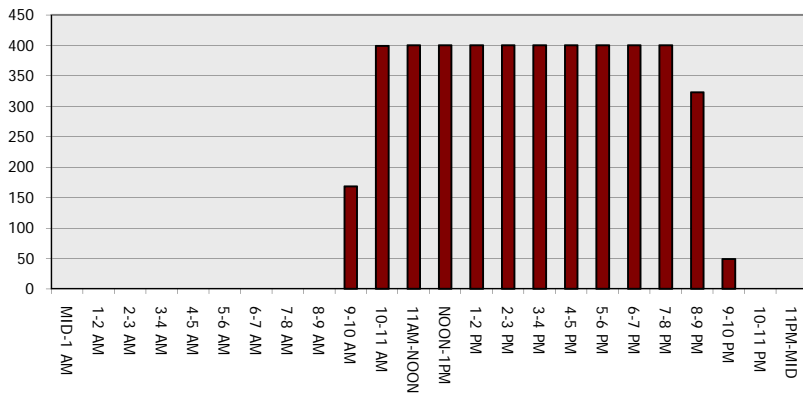
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

