

STH 441: USH 10 TO CTH CE (OUTAGAMIE COUNTY) CONTINUOUS (24 HOUR) CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	Analyzed for 2009 Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT

FRIDAY 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	101	0.0	1500	101	0	0.43	0	66.2	58.6	45.1	
1-2 AM	80	0.0	1500	80	0	0.43	0	66.3	58.7	45.1	
2-3 AM	78	0.0	1500	78	0	0.43	0	66.3	58.7	45.2	
3-4 AM	80	0.0	1500	80	0	0.43	0	66.3	58.7	45.1	
4-5 AM	286	0.0	1500	286	0	0.45	0	65.8	58.1	44.3	
5-6 AM	725	0.0	1500	725	0	0.49	0	65.0	56.8	42.7	
6-7 AM	1419	0.0	1499	1419	0	1.23	12	63.7	47.1	34.0	
7-8 AM	2184	0.0	1500	1841	343	11.53+	310	62.3	14.7	30.8	
8-9 AM	1432	0.0	1500	1395	37	14.63+	369	63.7	12.2	30.8	
9-10 AM	1043	0.0	1499	1043	0	2.73	98	64.5	36.0	38.3	
10-11 AM	1068	0.0	1500	1068	0	0.53	0	64.4	55.9	41.4	
11AM-NOON	1194	0.0	1500	1194	0	0.63	0	64.1	54.3	38.6	
NOON-1PM	1309	0.0	1500	1309	0	0.78	0	64.0	52.2	35.3	
1-2 PM	1385	0.0	1500	1385	0	0.88	0	63.8	51.0	33.3	
2-3 PM	1439	0.0	1499	1439	0	0.95	0	63.7	50.1	32.1	
3-4 PM	1688	0.0	1499	1688	0	3.72	84	63.2	30.7	30.8	
4-5 PM	1756	0.0	1500	1738	18	12.32+	315	63.1	14.0	30.8	
5-6 PM	1619	0.0	1500	1467	152	15.71+	396	63.3	11.6	30.8	
6-7 PM	1147	0.0	1499	1147	0	8.73	244	64.3	18.2	33.8	
7-8 PM	736	0.0	1500	736	0	0.53	1	65.0	56.3	42.6	
8-9 PM	549	0.0	1500	549	0	0.48	0	65.4	57.3	43.3	
9-10 PM	596	0.0	1500	596	0	0.48	0	65.3	57.2	43.2	
10-11 PM	459	0.0	1500	459	0	0.47	0	65.5	57.6	43.7	
11PM-MID	325	0.0	1500	325	0	0.45	0	65.8	57.9	44.2	

+ 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	0.0134
MAIN ROUTE WITH WORKS	0.0116
'DIVERSION'	0.0008
<small>PIA: Personal Injury Accidents</small>	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$27,263
CONGESTED HOURS PER DAY*	4

*Delays Exceeding User-Specified Maximum

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NO DIVERSION ROUTE (MAX QUEUE METHOD)**

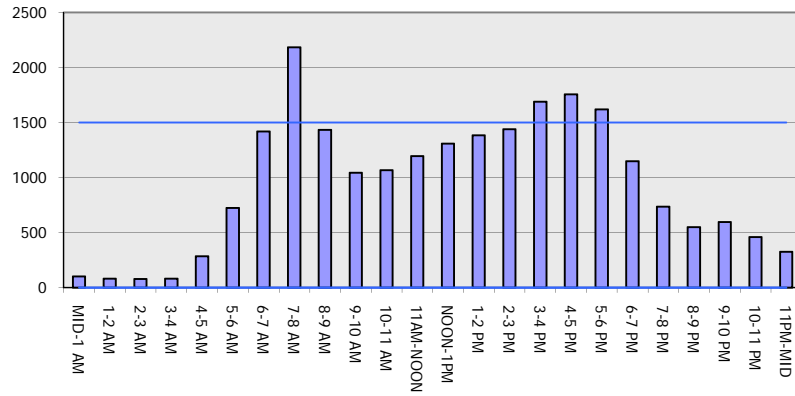
OCTOBER

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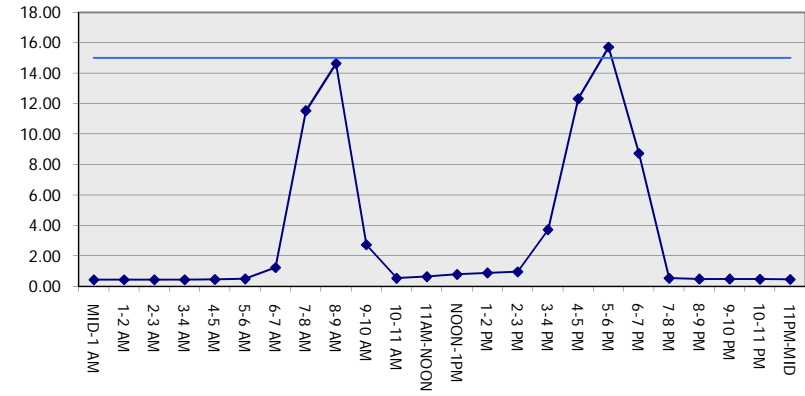
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY SOUTHBOUND DIRECTION

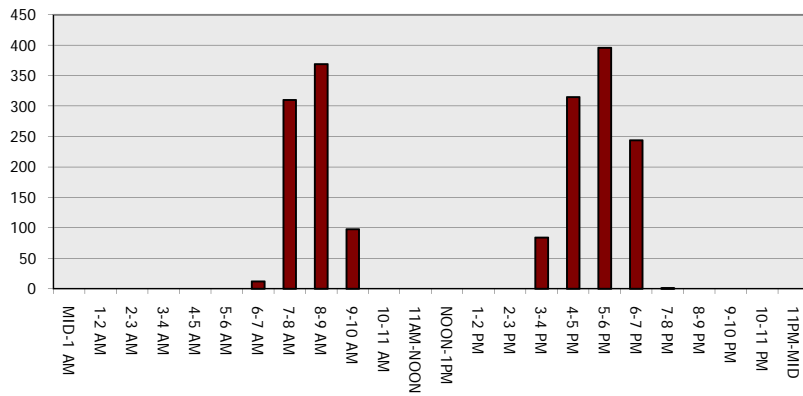
Main Route - Traffic Demand (Vehicles Per Hour)



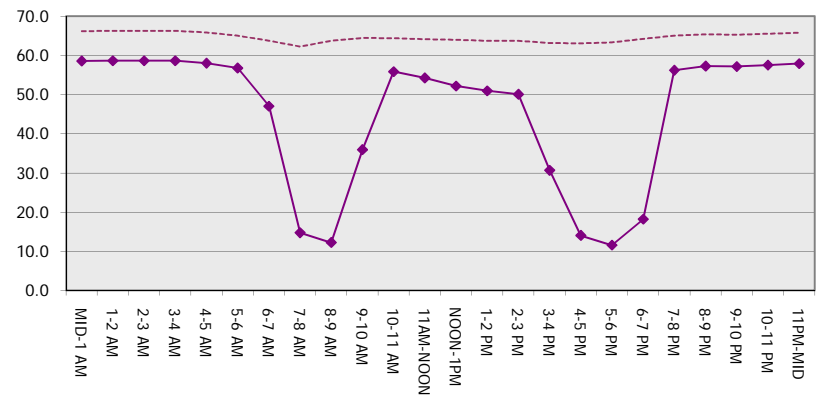
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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SUMMARY OF TRAFFIC MODEL OUTPUT

FRIDAY 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	224	0.0	1500	224	0	0.44	0	66.0	58.2	44.6
1-2 AM	147	0.0	1500	147	0	0.44	0	66.1	58.5	44.9
2-3 AM	117	0.0	1500	117	0	0.43	0	66.1	58.6	45.0
3-4 AM	67	0.0	1500	67	0	0.43	0	66.3	58.7	45.2
4-5 AM	132	0.0	1500	132	0	0.44	0	66.1	58.6	45.0
5-6 AM	450	0.0	1500	450	0	0.47	0	65.6	57.6	43.7
6-7 AM	1156	0.0	1499	1156	0	0.65	0	64.2	54.0	38.3
7-8 AM	1826	0.0	1499	1826	0	5.82	155	63.0	23.7	30.8
8-9 AM	1414	0.0	1499	1414	0	12.26	304	63.8	14.1	30.8
9-10 AM	1149	0.0	1499	1149	0	2.73	86	64.3	35.9	36.8
10-11 AM	1247	0.0	1500	1247	0	0.70	0	64.1	53.3	37.0
11AM-NOON	1448	0.0	1499	1448	0	0.96	0	63.7	49.9	31.9
NOON-1PM	1526	0.0	1499	1526	0	1.28	7	63.5	46.5	30.8
1-2 PM	1628	0.0	1500	1628	0	3.49	72	63.3	31.7	30.8
2-3 PM	2071	0.0	1500	1736	335	12.91+	335	62.5	13.5	30.8
3-4 PM	2413	0.0	1500	1500	913	15.75+	400	61.8	11.5	30.8
4-5 PM	2757	0.0	1500	1500	1257	15.53+	400	58.2	11.5	30.8
5-6 PM	2382	0.0	1500	1500	882	15.76+	400	62.0	11.5	30.8
6-7 PM	1678	0.0	1500	1507	171	15.71+	396	63.3	11.6	30.8
7-8 PM	1069	0.0	1499	1069	0	6.22	206	64.4	23.0	35.7
8-9 PM	894	0.0	1500	894	0	0.51	0	64.7	56.3	42.0
9-10 PM	798	0.0	1500	798	0	0.50	0	64.9	56.6	42.4
10-11 PM	722	0.0	1500	722	0	0.49	0	65.0	56.8	42.7
11PM-MID	479	0.0	1500	479	0	0.47	0	65.5	57.5	43.6

+ 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	0.0164
MAIN ROUTE WITH WORKS	0.0127
'DIVERSION'	0.0048

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$49,999
CONGESTED HOURS PER DAY*	5

*Delays Exceeding User-Specified Maximum

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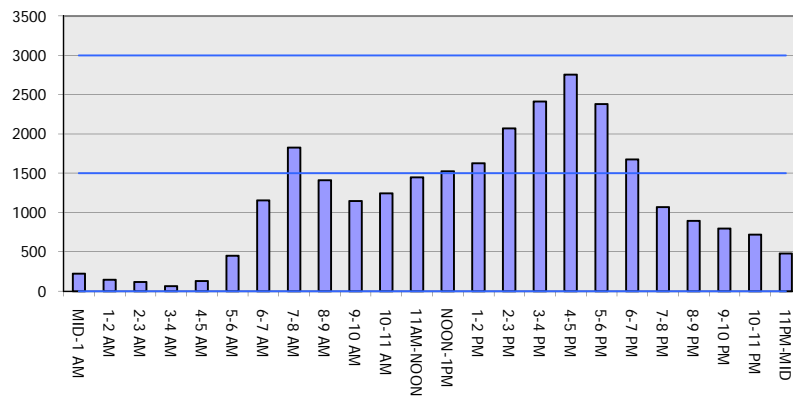
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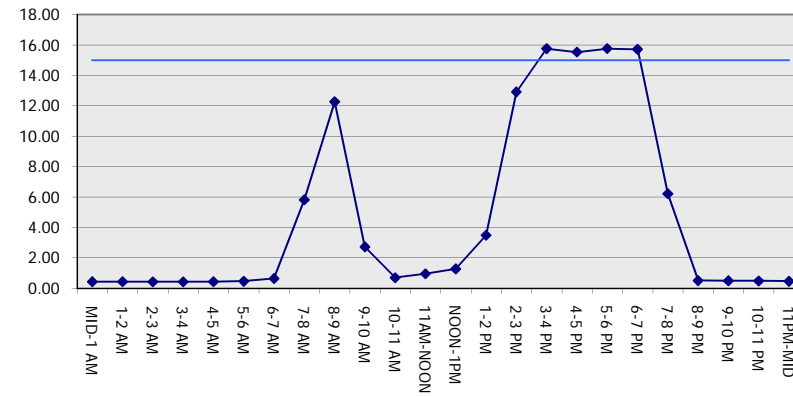
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FRIDAY NORTHBOUND DIRECTION

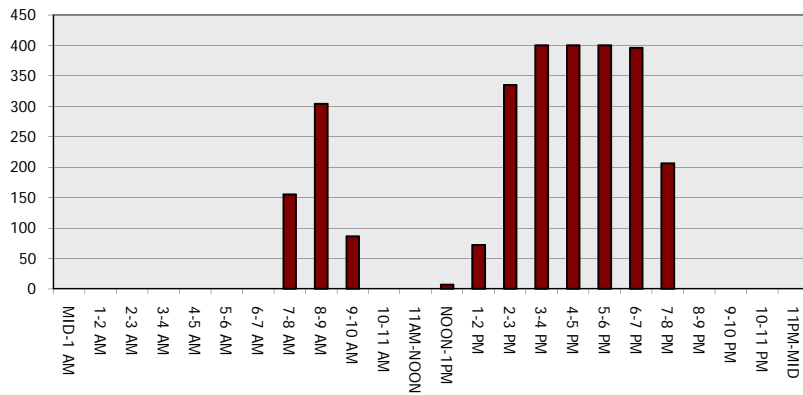
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

