

STH 441: RACINE ST TO USH 10 (CALUMET AND OUTAGAMIE COUNTIES) CONTINUOUS (24 HOUR) CLOSURE NO DIVERSION ROUTE (MAX QUEUE METHOD)	OCTOBER
	Analyzed for 2009 Construction Season

SUMMARY OF TRAFFIC MODEL OUTPUT

FRIDAY WESTBOUND 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	118	0.0	1500	118	0	0.43	0	66.1	56.5	45.0	
1-2 AM	94	0.0	1500	94	0	0.43	0	66.2	56.6	45.1	
2-3 AM	92	0.0	1500	92	0	0.43	0	66.2	56.6	45.1	
3-4 AM	94	0.0	1500	94	0	0.43	0	66.2	56.6	45.1	
4-5 AM	334	0.0	1500	334	0	0.45	0	65.8	55.8	44.2	
5-6 AM	844	0.0	1500	844	0	0.50	0	64.8	54.3	42.2	
6-7 AM	1653	0.0	1499	1653	0	2.10	45	63.3	35.3	31.4	
7-8 AM	2546	0.0	1500	1806	739	15.28+	395	60.4	10.2	31.1	
8-9 AM	1670	0.0	1499	1410	260	15.75+	397	63.3	10.1	30.8	
9-10 AM	1215	0.0	1499	1215	0	10.31	269	64.1	13.3	31.9	
10-11 AM	1243	0.0	1500	1243	0	1.33	23	64.1	42.5	36.0	
11AM-NOON	1392	0.0	1499	1392	0	0.88	0	63.8	47.8	33.2	
NOON-1PM	1527	0.0	1499	1527	0	1.26	6	63.5	43.1	30.8	
1-2 PM	1613	0.0	1500	1613	0	3.76	78	63.4	26.2	30.8	
2-3 PM	1677	0.0	1500	1677	0	8.80	217	63.3	14.7	30.8	
3-4 PM	1967	0.0	1499	1604	363	15.88+	402	62.7	10.0	30.8	
4-5 PM	2046	0.0	1499	1499	547	16.31+	413	62.6	9.9	30.8	
5-6 PM	1887	0.0	1500	1499	387	16.31+	413	62.8	9.9	30.8	
6-7 PM	1336	0.0	1499	1333	3	14.51+	366	63.9	10.6	30.8	
7-8 PM	859	0.0	1500	859	0	1.59	57	64.8	40.2	41.5	
8-9 PM	640	0.0	1500	640	0	0.48	0	65.2	54.9	43.0	
9-10 PM	695	0.0	1500	695	0	0.49	0	65.1	54.7	42.8	
10-11 PM	535	0.0	1500	535	0	0.47	0	65.4	55.2	43.3	
11PM-MID	379	0.0	1500	379	0	0.46	0	65.7	55.7	44.0	

+ 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	0.0118
MAIN ROUTE WITH WORKS	0.0092
'DIVERSION'	0.0024
PIA: Personal Injury Accidents	
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY	\$50,345
CONGESTED HOURS PER DAY*	6

*Delays Exceeding User-Specified Maximum

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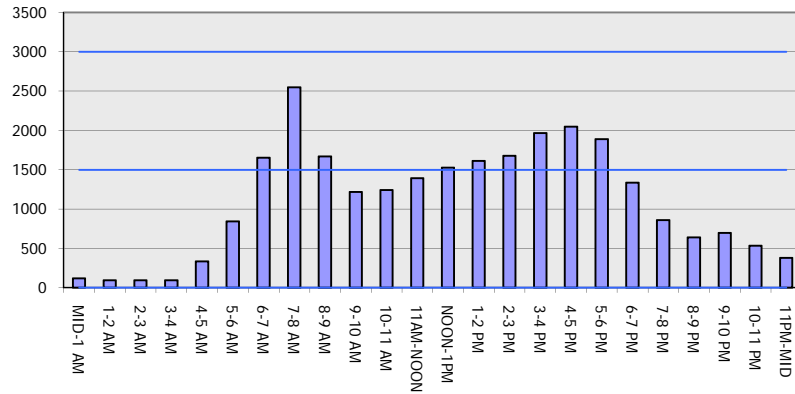
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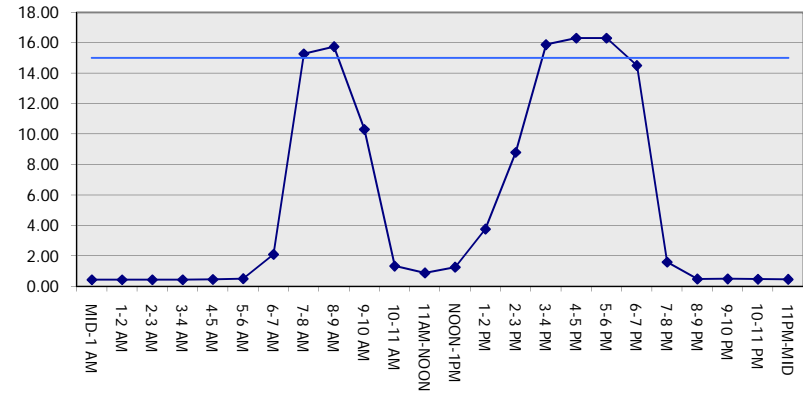
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY WESTBOUND DIRECTION

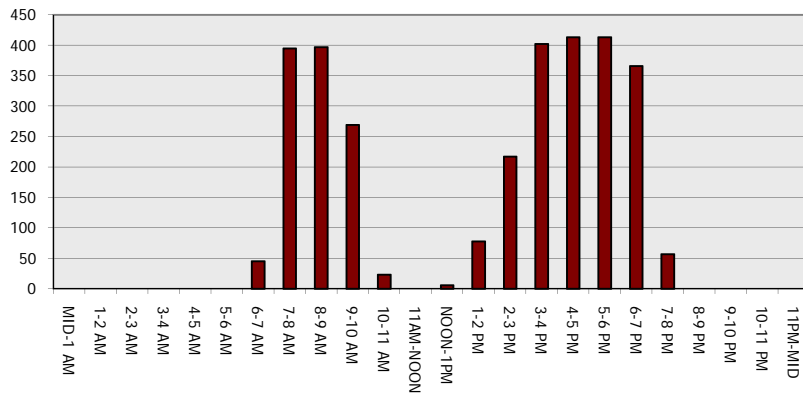
Main Route - Traffic Demand (Vehicles Per Hour)



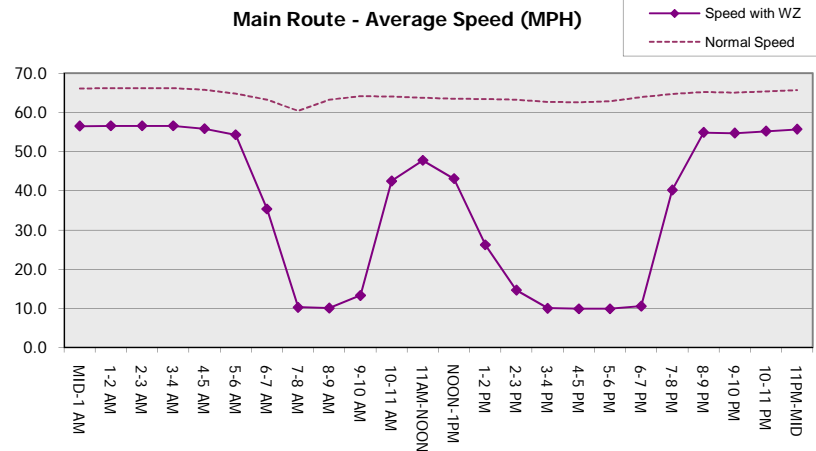
Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)



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SUMMARY OF TRAFFIC MODEL OUTPUT

FRIDAY EASTBOUND 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	261	0.0	1500	261	0	0.45	0	65.9	56.1	44.5	
1-2 AM	171	0.0	1500	171	0	0.44	0	66.1	56.3	44.8	
2-3 AM	137	0.0	1500	137	0	0.44	0	66.1	56.4	45.0	
3-4 AM	78	0.0	1500	78	0	0.43	0	66.3	56.6	45.2	
4-5 AM	153	0.0	1500	153	0	0.44	0	66.1	56.4	44.9	
5-6 AM	525	0.0	1500	525	0	0.47	0	65.4	55.2	43.4	
6-7 AM	1347	0.0	1499	1347	0	0.96	5	63.9	46.8	35.5	
7-8 AM	2128	0.0	1500	1844	284	10.34+	287	62.4	13.5	30.8	
8-9 AM	1648	0.0	1500	1546	102	16.11+	407	63.3	9.9	30.8	
9-10 AM	1338	0.0	1499	1338	0	13.50+	339	63.9	10.9	30.8	
10-11 AM	1453	0.0	1500	1453	0	9.10	218	63.7	14.3	30.8	
11AM-NOON	1688	0.0	1500	1688	0	11.54	289	63.2	12.1	30.8	
NOON-1PM	1779	0.0	1499	1502	277	16.32+	413	63.1	9.9	30.8	
1-2 PM	1897	0.0	1500	1501	396	16.31+	413	62.8	9.9	30.8	
2-3 PM	2414	0.0	1500	1502	911	16.29+	414	61.8	9.9	30.8	
3-4 PM	2812	0.0	1500	1511	1301	16.18+	417	57.7	9.9	30.8	
4-5 PM	3213	0.0	1499	1501	1711	16.12+	422	53.6	9.8	30.8	
5-6 PM	2776	0.0	1500	1503	1274	16.18+	416	58.1	9.9	30.8	
6-7 PM	1955	0.0	1500	1500	455	16.31+	413	62.7	9.9	30.8	
7-8 PM	1246	0.0	1499	1246	0	12.25+	315	64.1	11.8	31.5	
8-9 PM	1042	0.0	1500	1042	0	1.22	30	64.5	43.9	40.3	
9-10 PM	930	0.0	1500	930	0	0.51	0	64.6	54.0	41.9	
10-11 PM	842	0.0	1500	842	0	0.50	0	64.8	54.3	42.2	
11PM-MID	559	0.0	1500	559	0	0.48	0	65.3	55.1	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	0.0144
MAIN ROUTE WITH WORKS	0.0098
'DIVERSION'	0.0069

PIA: Personal Injury Accidents

ECONOMIC IMPACT ON ROAD USERS	
ROAD USER COSTS PER DAY	\$87,866
CONGESTED HOURS PER DAY*	11

*Delays Exceeding User-Specified Maximum

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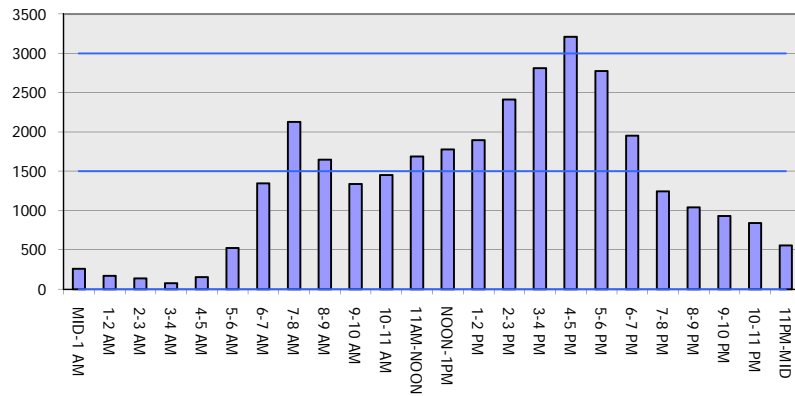
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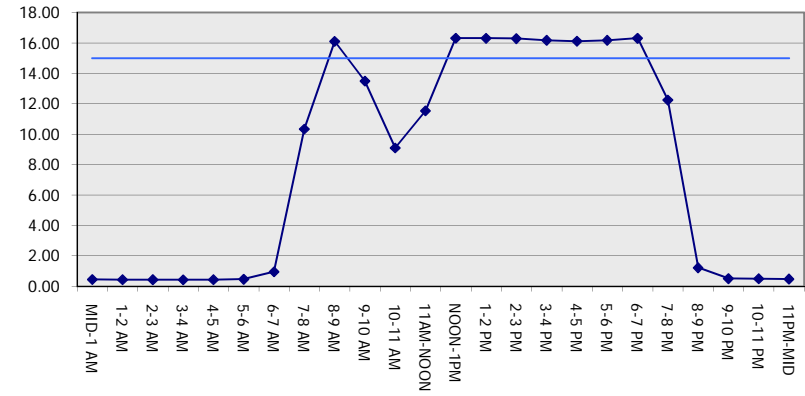
GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT

FRIDAY EASTBOUND DIRECTION

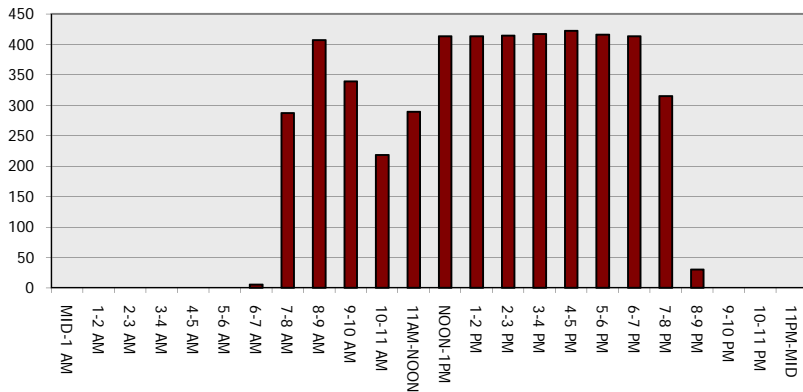
Main Route - Traffic Demand (Vehicles Per Hour)



Main Route Average Delay Per Vehicle (Minutes)



Main Route - Average Queue Length (Vehicles)



Main Route - Average Speed (MPH)

