

**USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)**  
**OFF-PEAK DAY 2 LANE CLOSURE**  
**DIVERSION ROUTE: BUS 51 - STH 52**

**AUGUST**

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		ALTERNATE ROUTE		SITE CAPA CITY	FLOW MAIN ROUTE	FLOW DIVER -TING	TOTAL DIVN FLOW	AV.DEL PER VEH (MINS)	AVERAGE QUEUE (VEH)	MAIN ROUTE		ALTERNATE ROUTE		
	DEMAND FLOW	PCT HEAVY	NORMAL FLOW	PCT HEAVY							WITHOUT WORK ZN	WITH WORK ZN	SITE	WITHOUT WORK ZN	WITH WORK ZN
MID-1 AM	233	0.0	90	0.0	OFF	233	0	90	0.00	0	70.2	70.2	70.2	31.2	31.2
1-2 AM	130	0.0	60	0.0	OFF	130	0	60	0.00	0	70.2	70.2	70.2	32.0	32.0
2-3 AM	115	0.0	58	0.0	OFF	115	0	58	0.00	0	70.2	70.2	70.2	32.0	32.0
3-4 AM	171	0.0	54	0.0	OFF	171	0	54	0.00	0	70.2	70.2	70.2	32.1	32.1
4-5 AM	354	0.0	114	0.0	OFF	354	0	114	0.00	0	70.2	70.2	70.2	30.5	30.5
5-6 AM	917	0.0	232	0.0	OFF	917	0	232	0.00	0	69.6	69.6	69.6	27.4	27.4
6-7 AM	1377	0.0	552	0.0	OFF	1377	0	552	0.00	0	69.0	69.0	69.0	19.7	19.7
7-8 AM	1669	0.0	645	0.0	OFF	1669	0	645	0.00	0	68.7	68.7	68.7	17.9	17.9
8-9 AM	1555	0.0	546	0.0	OFF	1555	0	546	0.00	0	68.8	68.8	68.8	19.8	19.8
9-10 AM	1726	0.0	596	0.0	OFF	1726	0	596	0.00	0	68.6	68.6	68.6	18.8	18.8
10-11 AM	2012	0.0	708	0.0	1499	2012	0	708	8.54	241	68.2	22.2	30.8	16.7	16.7
11A-NOON	2199	0.0	807	0.0	1499	1845	354	1161+	28.81	737	68.0	8.6	30.8	14.8	12.4
NOON-1PM	2474	0.0	883	0.0	1499	1500	974	1857+	32.30	818	67.7	7.7	30.8	13.2	11.2
1-2 PM	2449	0.0	954	0.0	1499	1500	949	1903+	32.31	818	67.7	7.7	30.8	12.6	11.2
2-3 PM	2654	0.0	1081	0.0	1499	1500	1154	2235+	32.29	818	67.4	7.7	30.8	11.2	11.2
3-4 PM	2869	0.0	1202	0.0	OFF	2869	0	1202+	1.28	117	67.2	51.4	51.4	11.2	11.2
4-5 PM	2988	0.0	1227	0.0	OFF	2988	0	1227+	0.00	0	67.0	67.0	67.0	11.2	11.2
5-6 PM	2634	0.0	1051	0.0	OFF	2634	0	1051+	0.00	0	67.4	67.4	67.4	11.4	11.4
6-7 PM	1875	0.0	750	0.0	OFF	1875	0	750	0.00	0	68.4	68.4	68.4	15.9	15.9
7-8 PM	1412	0.0	610	0.0	OFF	1412	0	610	0.00	0	69.0	69.0	69.0	18.6	18.6
8-9 PM	1205	0.0	524	0.0	OFF	1205	0	524	0.00	0	69.2	69.2	69.2	20.2	20.2
9-10 PM	1042	0.0	430	0.0	OFF	1042	0	430	0.00	0	69.4	69.4	69.4	22.1	22.1
10-11 PM	753	0.0	331	0.0	OFF	753	0	331	0.00	0	69.8	69.8	69.8	24.7	24.7
11PM-MID	468	0.0	248	0.0	OFF	468	0	248	0.00	0	70.2	70.2	70.2	27.0	27.0

"OFF" INDICATES NO ROAD WORK (ALL LANES OPEN TO TRAFFIC)

+ INDICATES DIVERSION FLOW EXCEEDS USER-SPECIFIED WARNING LIMIT

*----- SITE BREAKDOWN DELAYS -----*	
BREAKDOWN DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN (VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN (VEH-H) MAX	0.0
AV BREAKDOWNS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

*----- SITE ACCIDENT DELAYS -----*	
ACCIDENT DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN (VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN (VEH-H) MAX	0.0
AV ACCIDENTS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

AVERAGE ACCIDENT NUMBERS (PIA/DAY)	
MAIN ROUTE WITHOUT WORKS	0.0264
MAIN ROUTE WITH WORKS	0.0233
DIVERSION	0.1632

PIA: Personal Injury Accidents

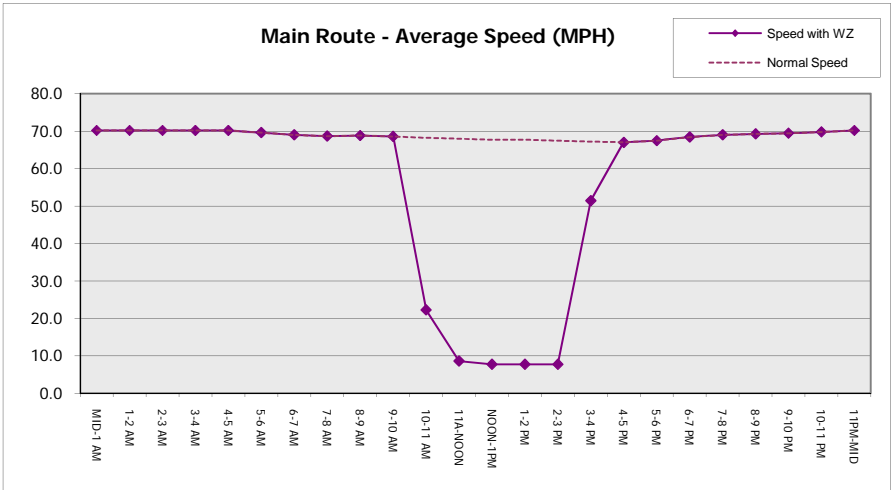
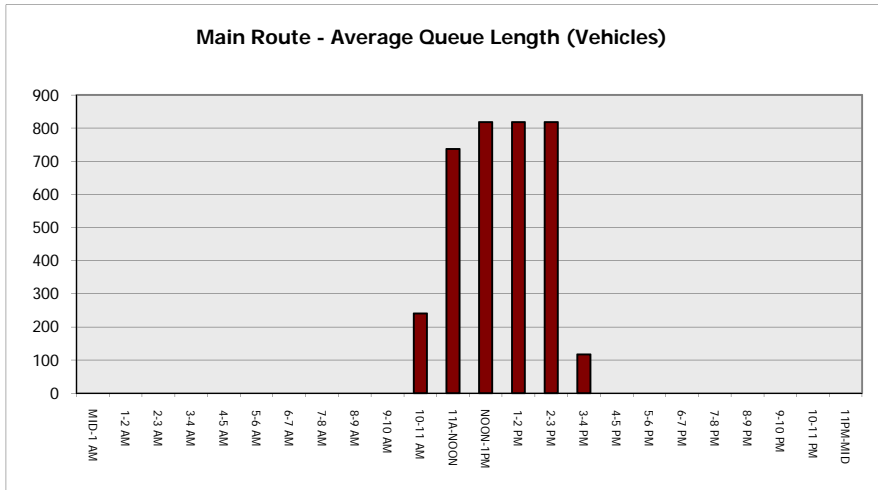
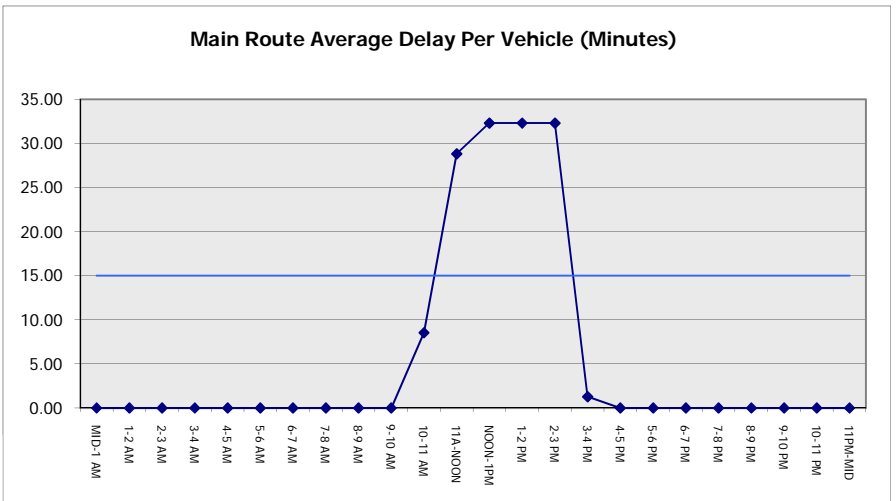
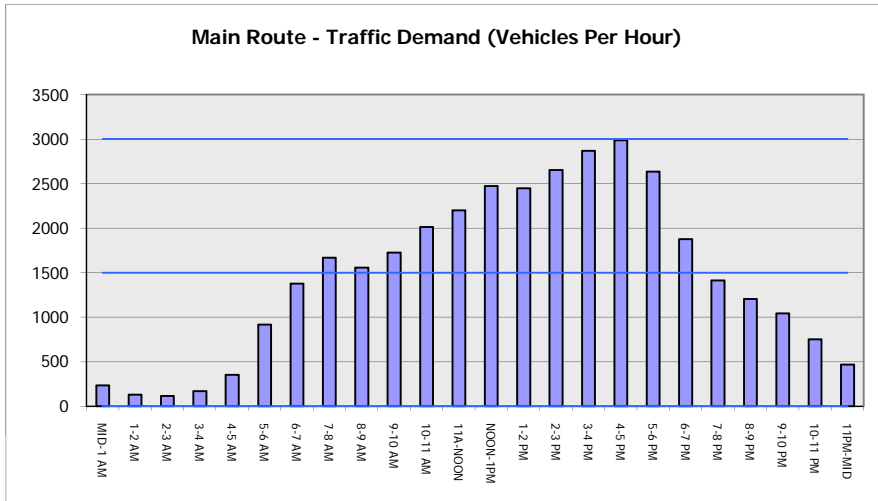
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$77,485
CONGESTED HOURS PER DAY*	4

\*Delays Exceeding 15 Minutes

**USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)  
 OFF-PEAK DAY 2 LANE CLOSURE  
 DIVERSION ROUTE: BUS 51 - STH 52**

**AUGUST**  
 Analyzed for 2009  
 Construction Season

**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**  
**FRIDAY SOUTHBOUND DIRECTION**



<b>USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)</b> <b>OFF-PEAK DAY 2 LANE CLOSURE</b> <b>DIVERSION ROUTE: BUS 51 - STH 52</b>	<b>AUGUST</b> Analyzed for 2009 Construction Season
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<b>SUMMARY OF TRAFFIC MODEL OUTPUT</b>	
FRIDAY	NORTHBOUND DIRECTION

TIME OF DAY	FLOWS AND CAPACITY IN VEH/HR							AVERAGE SPEEDS IN MPH							
	MAIN		DIVERSION		SITE CAPA CITY	FLOW MAIN ROUTE	FLOW DIVER -TING	TOTAL DIVN FLOW	AV.DEL PER VEH (MINS)	AVERAGE QUEUE (VEH)	MAIN ROUTE		ALTERNATE ROUTE		
	DEMAND FLOW	PCT HEAVY	NORMAL FLOW	PCT HEAVY							WITHOUT WORK ZN	WITH WORK ZN	SITE	WITHOUT WORK ZN	WITH WORK ZN
MID-1 AM	329	0.0	74	0.0	OFF	329	0	74	0.00	0	70.2	70.2	70.2	31.5	31.5
1-2 AM	203	0.0	61	0.0	OFF	203	0	61	0.00	0	70.2	70.2	70.2	31.9	31.9
2-3 AM	168	0.0	55	0.0	OFF	168	0	55	0.00	0	70.2	70.2	70.2	32.1	32.1
3-4 AM	195	0.0	65	0.0	OFF	195	0	65	0.00	0	70.2	70.2	70.2	31.8	31.8
4-5 AM	281	0.0	140	0.0	OFF	281	0	140	0.00	0	70.2	70.2	70.2	29.8	29.8
5-6 AM	756	0.0	361	0.0	OFF	756	0	361	0.00	0	69.8	69.8	69.8	24.0	24.0
6-7 AM	1648	0.0	759	0.0	OFF	1648	0	759	0.00	0	68.7	68.7	68.7	15.7	15.7
7-8 AM	2236	0.0	978	0.0	OFF	2236	0	978+	0.00	0	67.9	67.9	67.9	12.4	12.4
8-9 AM	1784	0.0	708	0.0	OFF	1784	0	708	0.00	0	68.5	68.5	68.5	16.7	16.7
9-10 AM	2031	0.0	741	0.0	OFF	2031	0	741	0.00	0	68.2	68.2	68.2	16.0	16.0
10-11 AM	2456	0.0	806	0.0	1499	2398	59	865+	14.66	451	67.7	15.0	30.8	14.8	14.1
11A-NOON	2684	0.0	832	0.0	1500	1490	1194	2025+	32.30	819	67.4	7.7	30.9	14.3	11.2
NOON-1PM	2723	0.0	850	0.0	1500	1500	1223	2073+	32.28	818	67.4	7.7	30.8	13.8	11.2
1-2 PM	2939	0.0	904	0.0	1500	1500	1439	2343+	32.27	818	67.1	7.7	30.8	12.9	11.2
2-3 PM	3357	0.0	980	0.0	1500	1500	1857	2837+	32.23	818	66.6	7.7	30.8	12.4	11.2
3-4 PM	3466	0.0	1066	0.0	OFF	3466	0	1066+	1.92	155	66.4	45.7	45.7	11.2	11.2
4-5 PM	3552	0.0	1059	0.0	OFF	3552	0	1059+	0.00	0	66.3	66.3	66.3	11.3	11.3
5-6 PM	3415	0.0	970	0.0	OFF	3415	0	970+	0.00	0	66.5	66.5	66.5	12.5	12.5
6-7 PM	2948	0.0	770	0.0	OFF	2948	0	770	0.00	0	67.1	67.1	67.1	15.5	15.5
7-8 PM	2636	0.0	547	0.0	OFF	2636	0	547	0.00	0	67.4	67.4	67.4	19.8	19.8
8-9 PM	2204	0.0	379	0.0	OFF	2204	0	379	0.00	0	68.0	68.0	68.0	23.5	23.5
9-10 PM	1726	0.0	290	0.0	OFF	1726	0	290	0.00	0	68.6	68.6	68.6	25.8	25.8
10-11 PM	1141	0.0	220	0.0	OFF	1141	0	220	0.00	0	69.3	69.3	69.3	27.7	27.7
11PM-MID	867	0.0	159	0.0	OFF	867	0	159	0.00	0	69.7	69.7	69.7	29.3	29.3

"OFF" INDICATES NO ROAD WORK (ALL LANES OPEN TO TRAFFIC)

+ INDICATES DIVERSION FLOW EXCEEDS USER-SPECIFIED WARNING LIMIT

*----- SITE BREAKDOWN DELAYS -----*	
BREAKDOWN DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN	0.0
(VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN	0.0
(VEH-H) MAX	0.0
AV BREAKDOWNS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

*----- SITE ACCIDENT DELAYS -----*	
ACCIDENT DURATION (MINS)	0
RANGE OF QUEUE DELAY - MIN	0.0
(VEH-H) MAX	0.0
RANGE OF DIVN DELAY - MIN	0.0
(VEH-H) MAX	0.0
AV ACCIDENTS PER DAY	0.00
AV QUEUE DELAY/DAY (VEH-H)	0.0
AV DIVN DELAY/DAY (VEH-H)	0.0
AV TOTAL DELAY/DAY (VEH-H)	0.0

AVERAGE ACCIDENT NUMBERS (PIA/DAY)	
MAIN ROUTE WITHOUT WORKS	0.0342
MAIN ROUTE WITH WORKS	0.0293
DIVERSION	0.1857

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$99,002
CONGESTED HOURS PER DAY*	4

\*Delays Exceeding 15 Minutes

**USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)  
 OFF-PEAK DAY 2 LANE CLOSURE  
 DIVERSION ROUTE: BUS 51 - STH 52**

**AUGUST**  
 Analyzed for 2009  
 Construction Season

**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**  
**FRIDAY NORTHBOUND DIRECTION**

