

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

**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		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	243	0.0	102	0.0	OFF	243	0	102	0.00	0	70.2	70.2	70.2	30.8	30.8
1-2 AM	151	0.0	64	0.0	OFF	151	0	64	0.00	0	70.2	70.2	70.2	31.9	31.9
2-3 AM	130	0.0	57	0.0	OFF	130	0	57	0.00	0	70.2	70.2	70.2	32.0	32.0
3-4 AM	89	0.0	32	0.0	OFF	89	0	32	0.00	0	70.2	70.2	70.2	32.7	32.7
4-5 AM	95	0.0	37	0.0	OFF	95	0	37	0.00	0	70.2	70.2	70.2	32.5	32.5
5-6 AM	221	0.0	46	0.0	OFF	221	0	46	0.00	0	70.2	70.2	70.2	32.3	32.3
6-7 AM	290	0.0	94	0.0	OFF	290	0	94	0.00	0	70.2	70.2	70.2	31.1	31.1
7-8 AM	486	0.0	190	0.0	OFF	486	0	190	0.00	0	70.1	70.1	70.1	28.5	28.5
8-9 AM	845	0.0	341	0.0	OFF	845	0	341	0.00	0	69.7	69.7	69.7	24.5	24.5
9-10 AM	1523	0.0	464	0.0	1499	1523	0	464	1.75	24	68.9	48.2	32.5	21.4	21.4
10-11 AM	2233	0.0	587	0.0	1500	2155	78	665	14.28	409	67.9	15.3	30.8	19.0	17.5
11A-NOON	2863	0.0	789	0.0	1500	1500	1363	2151+	32.27	818	67.2	7.7	30.8	15.2	11.2
NOON-1PM	3327	0.0	860	0.0	1500	1500	1827	2687+	32.24	818	66.6	7.7	30.8	13.7	11.2
1-2 PM	3465	0.0	792	0.0	1500	1500	1965	2757+	32.23	818	66.4	7.7	30.8	15.1	11.2
2-3 PM	3521	0.0	826	0.0	1500	1500	2020	2846+	32.22	818	66.4	7.7	30.8	14.4	11.2
3-4 PM	3334	0.0	801	0.0	1500	1500	1834	2635+	32.24	818	66.6	7.7	30.8	14.9	11.2
4-5 PM	2809	0.0	728	0.0	1500	1500	1309	2037+	32.28	818	67.3	7.7	30.8	16.3	11.2
5-6 PM	2263	0.0	664	0.0	1500	1500	763	1427+	32.32	818	67.9	7.7	30.8	17.5	11.2
6-7 PM	1789	0.0	573	0.0	1500	1392	398	971+	28.85	728	68.5	8.6	30.8	19.3	12.4
7-8 PM	1209	0.0	475	0.0	OFF	1209	0	475	0.48	43	69.2	61.9	61.9	21.2	21.2
8-9 PM	830	0.0	303	0.0	OFF	830	0	303	0.00	0	69.7	69.7	69.7	25.5	25.5
9-10 PM	518	0.0	208	0.0	OFF	518	0	208	0.00	0	70.1	70.1	70.1	28.0	28.0
10-11 PM	334	0.0	163	0.0	OFF	334	0	163	0.00	0	70.2	70.2	70.2	29.2	29.2
11PM-MID	198	0.0	75	0.0	OFF	198	0	75	0.00	0	70.2	70.2	70.2	31.5	31.5

"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	0.0245
MAIN ROUTE WITH WORKS	0.0148
DIVERSION	0.1978

PIA: Personal Injury Accidents

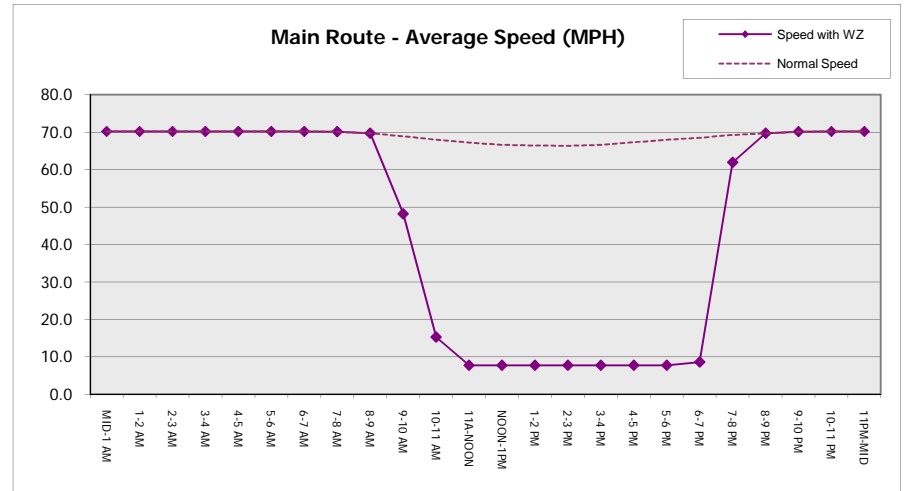
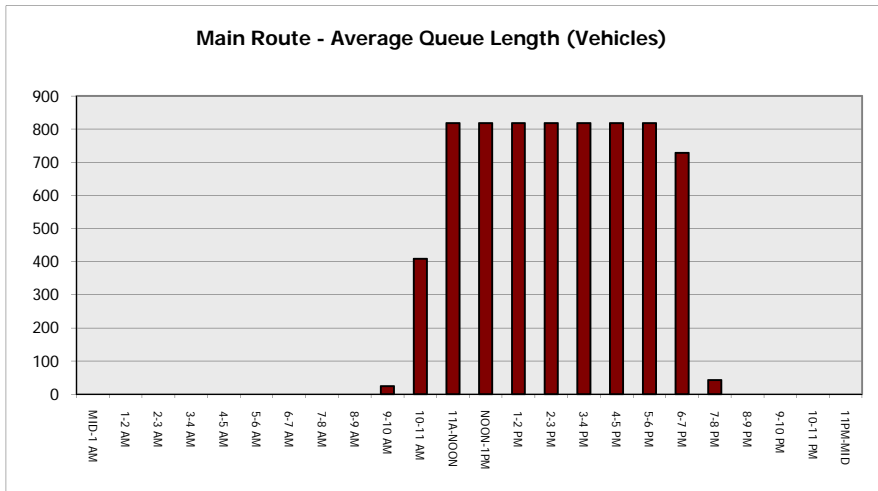
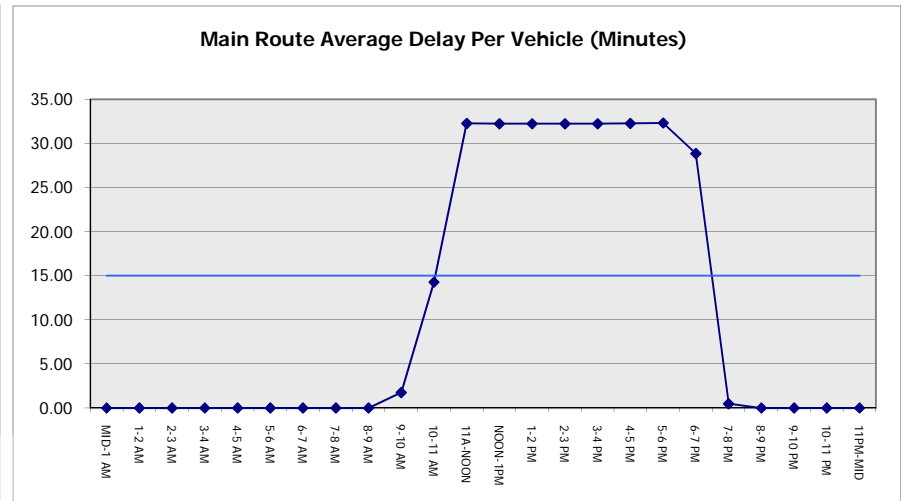
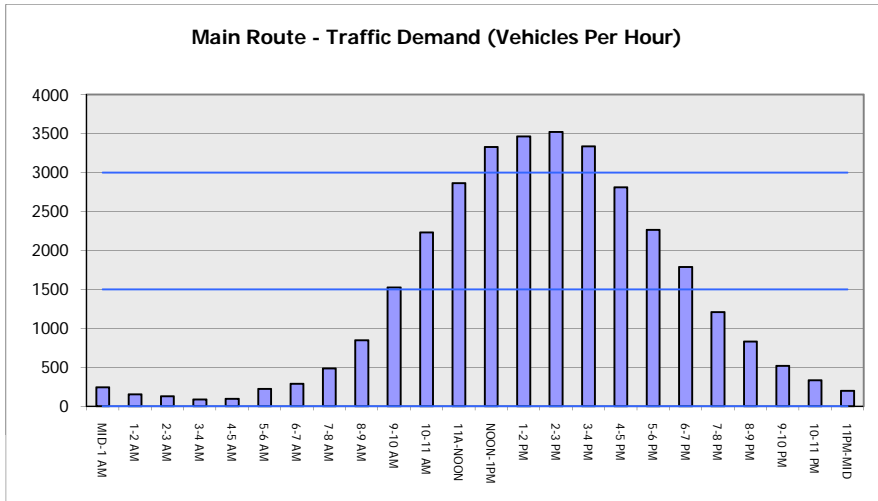
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$241,856
CONGESTED HOURS PER DAY*	8

\*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**

**OCTOBER**  
 Analyzed for 2009  
 Construction Season

**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**  
**SUNDAY 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>OCTOBER</b>
	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		DIVERSION		SITE CAPA CITY	FLOW MAIN ROUTE	FLOW DIVER -TING	TOTAL DIVN FLOW	AV.DEL PER VEH (MINS)	AVERAGE QUEUE (VEH)	MAIN ROUTE		SITE	ALTERNATE ROUTE	
	DEMAND FLOW	PCT HEAVY	NORMAL FLOW	PCT HEAVY							WITHOUT WORK ZN	WITH WORK ZN		WITHOUT WORK ZN	WITH WORK ZN
MID-1 AM	258	0.0	118	0.0	OFF	258	0	118	0.00	0	70.2	70.2	70.2	30.4	30.4
1-2 AM	182	0.0	73	0.0	OFF	182	0	73	0.00	0	70.2	70.2	70.2	31.6	31.6
2-3 AM	140	0.0	64	0.0	OFF	140	0	64	0.00	0	70.2	70.2	70.2	31.9	31.9
3-4 AM	102	0.0	38	0.0	OFF	102	0	38	0.00	0	70.2	70.2	70.2	32.5	32.5
4-5 AM	84	0.0	38	0.0	OFF	84	0	38	0.00	0	70.2	70.2	70.2	32.5	32.5
5-6 AM	175	0.0	85	0.0	OFF	175	0	85	0.00	0	70.2	70.2	70.2	31.3	31.3
6-7 AM	299	0.0	119	0.0	OFF	299	0	119	0.00	0	70.2	70.2	70.2	30.4	30.4
7-8 AM	424	0.0	194	0.0	OFF	424	0	194	0.00	0	70.2	70.2	70.2	28.4	28.4
8-9 AM	679	0.0	286	0.0	OFF	679	0	286	0.00	0	69.9	69.9	69.9	26.0	26.0
9-10 AM	1012	0.0	463	0.0	1500	1012	0	463	0.59	0	69.5	60.7	41.6	21.4	21.4
10-11 AM	1335	0.0	601	0.0	1499	1335	0	601	0.88	0	69.1	56.8	34.7	18.8	18.8
11A-NOON	1606	0.0	701	0.0	1499	1606	0	701	2.37	37	68.7	43.5	30.8	16.8	16.8
NOON-1PM	1824	0.0	728	0.0	1500	1824	0	728	10.26	259	68.5	19.6	30.8	16.3	16.3
1-2 PM	1868	0.0	674	0.0	1499	1754	114	789	22.89	577	68.4	10.4	30.8	17.3	15.1
2-3 PM	1840	0.0	703	0.0	1499	1569	270	973+	28.79	725	68.4	8.6	30.8	16.8	12.4
3-4 PM	1829	0.0	705	0.0	1500	1513	316	1021+	30.35	766	68.4	8.2	30.8	16.8	11.8
4-5 PM	1656	0.0	703	0.0	1500	1405	252	955+	28.42	716	68.7	8.6	30.8	16.8	12.5
5-6 PM	1587	0.0	686	0.0	1500	1416	171	857+	25.57	641	68.7	9.5	30.8	17.1	13.7
6-7 PM	1294	0.0	503	0.0	1499	1194	100	604	17.09	431	69.1	13.3	30.8	20.6	18.7
7-8 PM	957	0.0	448	0.0	OFF	957	0	448	0.10	7	69.6	67.9	67.9	21.7	21.7
8-9 PM	696	0.0	391	0.0	OFF	696	0	391	0.00	0	69.9	69.9	69.9	23.2	23.2
9-10 PM	527	0.0	238	0.0	OFF	527	0	238	0.00	0	70.0	70.0	70.0	27.2	27.2
10-11 PM	368	0.0	133	0.0	OFF	368	0	133	0.00	0	70.2	70.2	70.2	30.0	30.0
11PM-MID	212	0.0	67	0.0	OFF	212	0	67	0.00	0	70.2	70.2	70.2	31.7	31.7

"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	0.0157
MAIN ROUTE WITH WORKS	0.0138
DIVERSION	0.0948

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$88,171
CONGESTED HOURS PER DAY*	6

\*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**

**OCTOBER**  
 Analyzed for 2009  
 Construction Season

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

