

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

**MAY**  
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	207	0.0	93	0.0	OFF	207	0	93	0.00	0	70.2	70.2	70.2	31.1	31.1
1-2 AM	120	0.0	64	0.0	OFF	120	0	64	0.00	0	70.2	70.2	70.2	31.9	31.9
2-3 AM	90	0.0	45	0.0	OFF	90	0	45	0.00	0	70.2	70.2	70.2	32.4	32.4
3-4 AM	90	0.0	35	0.0	OFF	90	0	35	0.00	0	70.2	70.2	70.2	32.6	32.6
4-5 AM	104	0.0	50	0.0	OFF	104	0	50	0.00	0	70.2	70.2	70.2	32.2	32.2
5-6 AM	188	0.0	58	0.0	OFF	188	0	58	0.00	0	70.2	70.2	70.2	32.0	32.0
6-7 AM	341	0.0	113	0.0	OFF	341	0	113	0.00	0	70.2	70.2	70.2	30.6	30.6
7-8 AM	530	0.0	194	0.0	OFF	530	0	194	0.00	0	70.0	70.0	70.0	28.4	28.4
8-9 AM	888	0.0	265	0.0	OFF	888	0	265	0.00	0	69.6	69.6	69.6	26.5	26.5
9-10 AM	1301	0.0	469	0.0	1499	1301	0	469	0.83	0	69.1	57.4	35.7	21.2	21.4
10-11 AM	1796	0.0	625	0.0	1499	1796	0	625	4.80	120	68.5	31.6	30.8	18.3	18.3
11A-NOON	2204	0.0	788	0.0	1500	1983	221	1008+	22.51	599	68.0	10.6	30.8	15.2	14.0
NOON-1PM	2488	0.0	912	0.0	1500	1500	988	1900+	32.30	818	67.6	7.7	30.8	12.9	11.2
1-2 PM	2533	0.0	885	0.0	1500	1500	1033	1919+	32.30	818	67.6	7.7	30.8	13.2	11.2
2-3 PM	2317	0.0	940	0.0	1500	1500	817	1757+	32.32	818	67.9	7.7	30.8	12.7	11.2
3-4 PM	2315	0.0	938	0.0	1500	1500	815	1753+	32.32	818	67.9	7.7	30.8	12.7	11.2
4-5 PM	2128	0.0	849	0.0	1500	1501	627	1476+	32.32	818	68.1	7.7	30.8	13.9	11.2
5-6 PM	1784	0.0	748	0.0	1500	1483	301	1049+	31.52	797	68.5	7.9	30.8	15.9	11.4
6-7 PM	1481	0.0	668	0.0	1500	1267	215	883+	25.81	652	68.9	9.4	30.8	17.5	13.6
7-8 PM	1246	0.0	531	0.0	OFF	1246	0	531	0.33	29	69.2	63.9	63.9	20.1	20.1
8-9 PM	876	0.0	371	0.0	OFF	876	0	371	0.00	0	69.6	69.6	69.6	23.7	23.7
9-10 PM	701	0.0	250	0.0	OFF	701	0	250	0.00	0	69.9	69.9	69.9	26.9	26.9
10-11 PM	408	0.0	187	0.0	OFF	408	0	187	0.00	0	70.2	70.2	70.2	28.6	28.6
11PM-MID	244	0.0	92	0.0	OFF	244	0	92	0.00	0	70.2	70.2	70.2	31.1	31.1

"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	0.0197
MAIN ROUTE WITH WORKS	0.0150
DIVERSION	0.1443

PIA: Personal Injury Accidents

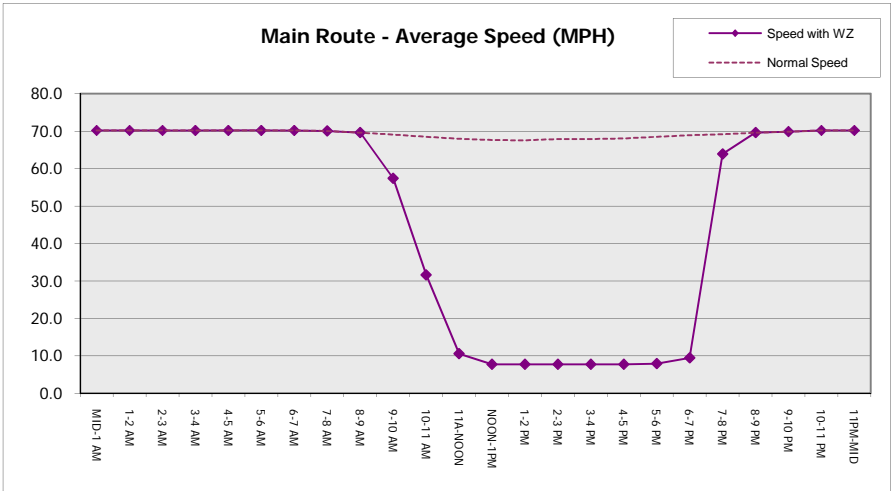
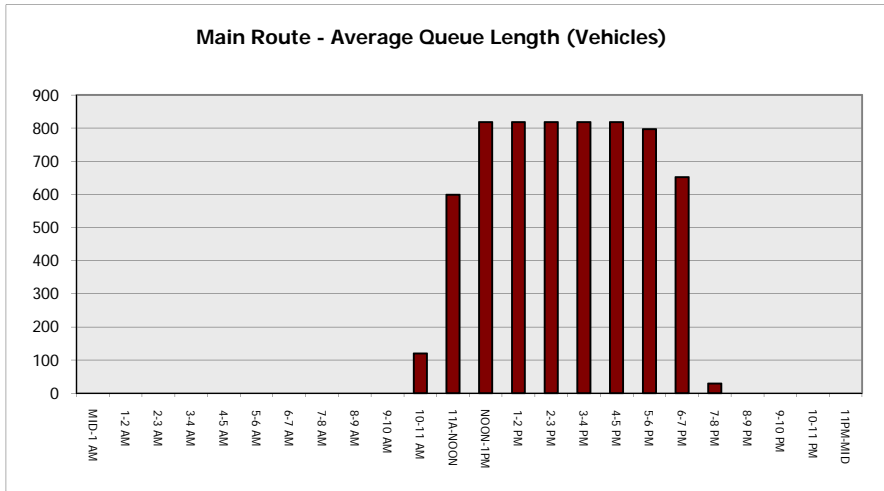
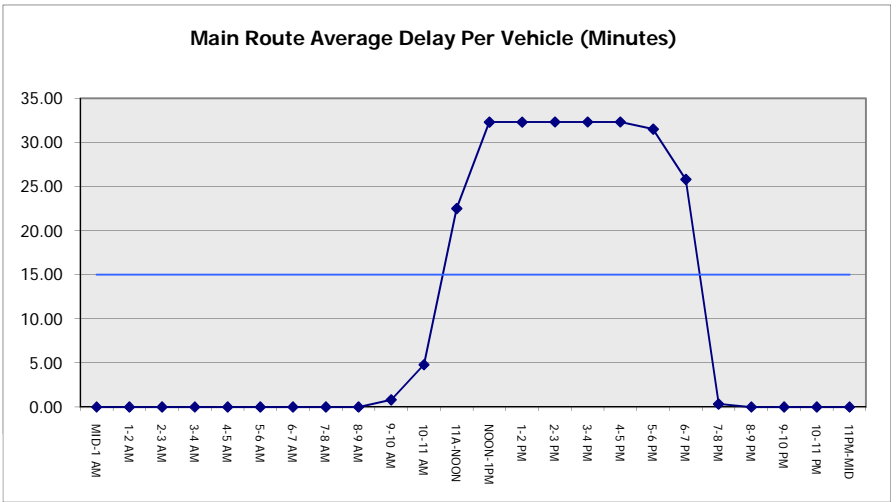
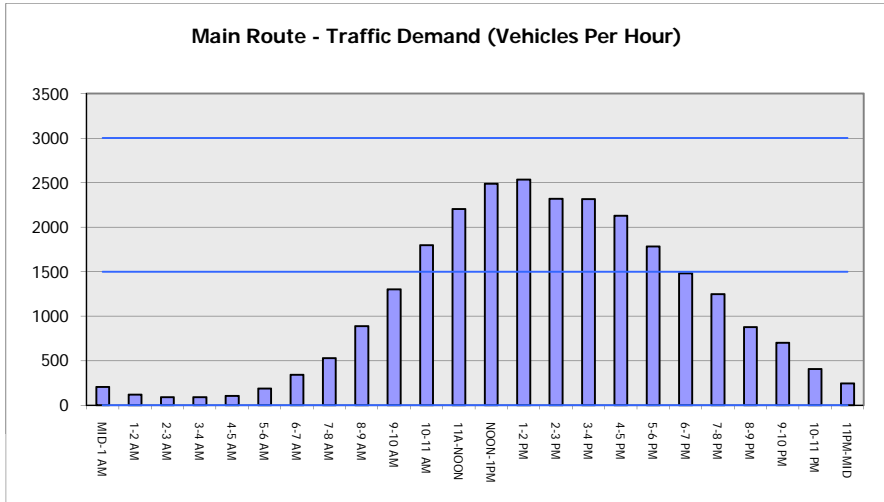
IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$160,091
CONGESTED HOURS PER DAY*	8

\*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**

**MAY**  
 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>MAY</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	260	0.0	102	0.0	OFF	260	0	102	0.00	0	70.2	70.2	70.2	30.8	30.8
1-2 AM	137	0.0	86	0.0	OFF	137	0	86	0.00	0	70.2	70.2	70.2	31.2	31.2
2-3 AM	108	0.0	79	0.0	OFF	108	0	79	0.00	0	70.2	70.2	70.2	31.4	31.4
3-4 AM	77	0.0	45	0.0	OFF	77	0	45	0.00	0	70.2	70.2	70.2	32.4	32.4
4-5 AM	74	0.0	50	0.0	OFF	74	0	50	0.00	0	70.2	70.2	70.2	32.2	32.2
5-6 AM	146	0.0	93	0.0	OFF	146	0	93	0.00	0	70.2	70.2	70.2	31.1	31.1
6-7 AM	299	0.0	151	0.0	OFF	299	0	151	0.00	0	70.2	70.2	70.2	29.5	29.5
7-8 AM	421	0.0	250	0.0	OFF	421	0	250	0.00	0	70.2	70.2	70.2	26.9	26.9
8-9 AM	638	0.0	441	0.0	OFF	638	0	441	0.00	0	69.9	69.9	69.9	21.9	21.9
9-10 AM	1032	0.0	625	0.0	1500	1032	0	625	0.59	0	69.4	60.6	41.5	18.3	18.3
10-11 AM	1249	0.0	756	0.0	1499	1249	0	756	0.77	0	69.2	58.2	37.0	15.8	15.8
11A-NOON	1500	0.0	881	0.0	1499	1500	0	881+	1.28	5	68.9	52.5	31.3	13.2	13.2
NOON-1PM	1628	0.0	855	0.0	1500	1628	0	855+	3.98	80	68.7	34.8	30.8	13.8	13.8
1-2 PM	1714	0.0	878	0.0	1500	1714	0	878+	10.54	256	68.6	19.3	30.8	13.3	13.3
2-3 PM	1685	0.0	879	0.0	1499	1685	0	879+	18.54	461	68.6	12.4	30.8	13.3	13.3
3-4 PM	1596	0.0	845	0.0	1499	1591	4	850+	24.02	601	68.7	10.0	30.8	14.0	13.9
4-5 PM	1566	0.0	785	0.0	1499	1490	76	862+	25.81	647	68.8	9.4	30.8	15.2	13.7
5-6 PM	1385	0.0	695	0.0	1499	1321	64	759	21.80	545	69.0	10.9	30.8	17.0	15.7
6-7 PM	1181	0.0	563	0.0	1499	1181	0	563	11.81	301	69.2	17.8	31.7	19.5	19.5
7-8 PM	1092	0.0	432	0.0	OFF	1092	0	432	0.03	1	69.4	68.9	68.9	22.0	22.0
8-9 PM	904	0.0	336	0.0	OFF	904	0	336	0.00	0	69.6	69.6	69.6	24.7	24.7
9-10 PM	648	0.0	237	0.0	OFF	648	0	237	0.00	0	69.9	69.9	69.9	27.3	27.3
10-11 PM	512	0.0	166	0.0	OFF	512	0	166	0.00	0	70.1	70.1	70.1	29.1	29.1
11PM-MID	318	0.0	67	0.0	OFF	318	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	0.0151
MAIN ROUTE WITH WORKS	0.0140
DIVERSION	0.0992

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$54,538
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**

**MAY**  
 Analyzed for 2009  
 Construction Season

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

