

**USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)  
CONTINUOUS (24 HOUR) 2 LANE CLOSURE  
DIVERSION ROUTE: BUS 51 - STH 52**

**MAY**  
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	189	0.0	80	0.0	1500	189	0	80	0.50	0	70.2	62.5	44.7	31.4	31.4
1-2 AM	110	0.0	59	0.0	1500	110	0	59	0.49	0	70.2	62.6	45.0	32.0	32.0
2-3 AM	107	0.0	46	0.0	1500	107	0	46	0.49	0	70.2	62.6	45.1	32.3	32.3
3-4 AM	173	0.0	58	0.0	1500	173	0	58	0.49	0	70.2	62.5	44.8	32.0	32.0
4-5 AM	343	0.0	148	0.0	1500	343	0	148	0.51	0	70.2	62.2	44.1	29.6	29.6
5-6 AM	757	0.0	325	0.0	1500	757	0	325	0.56	0	69.8	61.3	42.5	24.9	24.9
6-7 AM	1702	0.0	702	0.0	1499	1702	0	702	3.24	69	68.6	38.3	30.8	16.8	16.8
7-8 AM	1767	0.0	817	0.0	1499	1767	0	817+	13.73	342	68.6	15.8	30.8	14.5	14.5
8-9 AM	1457	0.0	645	0.0	1499	1456	1	647	18.46	454	68.9	12.5	30.8	17.9	17.9
9-10 AM	1492	0.0	669	0.0	1500	1492	0	669	16.83	411	68.9	13.5	30.8	17.5	17.5
10-11 AM	1708	0.0	765	0.0	1500	1704	4	769	20.34	509	68.6	11.6	30.8	15.6	15.5
11A-NOON	1814	0.0	908	0.0	1499	1741	73	981+	29.45	747	68.5	8.4	30.8	12.9	12.2
NOON-1PM	1918	0.0	983	0.0	1499	1500	418	1401+	32.35	818	68.4	7.7	30.8	12.4	11.2
1-2 PM	1996	0.0	1011	0.0	1499	1500	496	1507+	32.34	818	68.2	7.7	30.8	12.0	11.2
2-3 PM	2275	0.0	1222	0.0	1499	1500	775	1997+	32.32	818	67.9	7.7	30.8	11.2	11.2
3-4 PM	2616	0.0	1408	0.0	1499	1500	1116	2524+	32.29	818	67.5	7.7	30.8	11.2	11.2
4-5 PM	2763	0.0	1456	0.0	1499	1500	1263	2719+	32.28	818	67.3	7.7	30.8	11.2	11.2
5-6 PM	2558	0.0	1218	0.0	1499	1500	1058	2276+	32.30	818	67.6	7.7	30.8	11.2	11.2
6-7 PM	1842	0.0	868	0.0	1499	1409	433	1300+	31.46	796	68.4	7.9	30.8	13.5	11.4
7-8 PM	1468	0.0	705	0.0	1499	1274	194	899+	26.28	663	68.9	9.3	30.8	16.8	13.4
8-9 PM	1233	0.0	603	0.0	1500	1211	23	626	16.29	409	69.2	13.8	30.9	18.7	18.3
9-10 PM	855	0.0	449	0.0	1500	855	0	449	1.84	56	69.7	47.9	41.5	21.7	21.7
10-11 PM	630	0.0	353	0.0	1500	630	0	353	0.55	0	69.9	61.6	43.0	24.2	24.2
11PM-MID	377	0.0	212	0.0	1500	377	0	212	0.52	0	70.2	62.2	44.0	27.9	27.9

+ 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	0.0240
MAIN ROUTE WITH WORKS	0.0179
DIVERSION	0.2049

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$181,604
CONGESTED HOURS PER DAY*	13

\*Delays Exceeding 15 Minutes

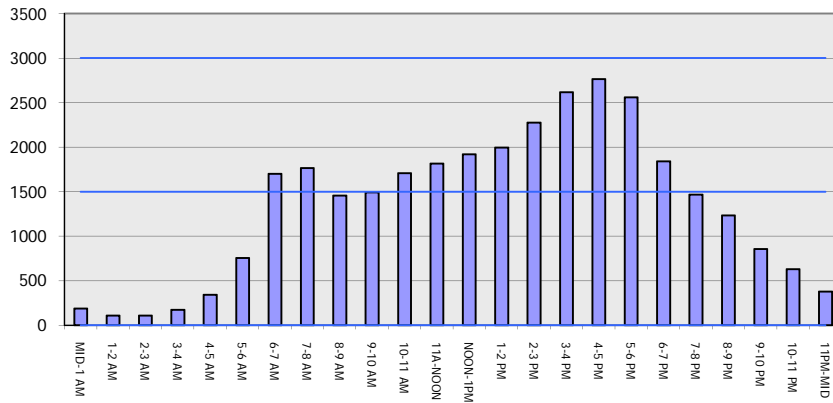
**USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)  
 CONTINUOUS (24 HOUR) 2 LANE CLOSURE  
 DIVERSION ROUTE: BUS 51 - STH 52**

**MAY**  
 Analyzed for 2009  
 Construction Season

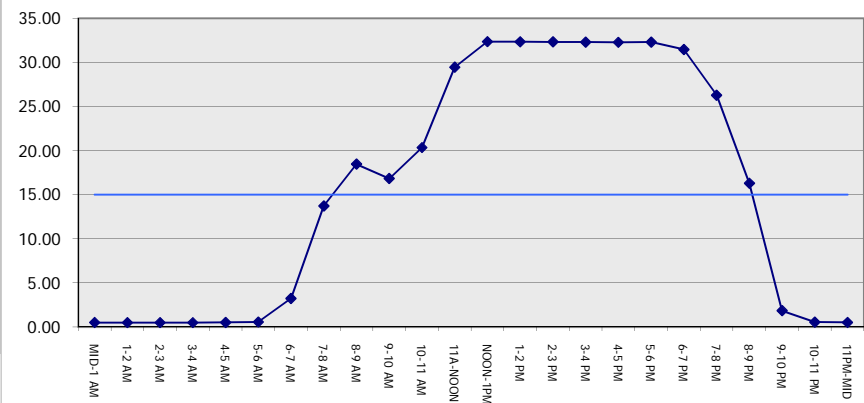
**GRAPHICAL REPRESENTATION OF TRAFFIC MODEL INPUT AND OUTPUT**

**FRIDAY SOUTHBOUND DIRECTION**

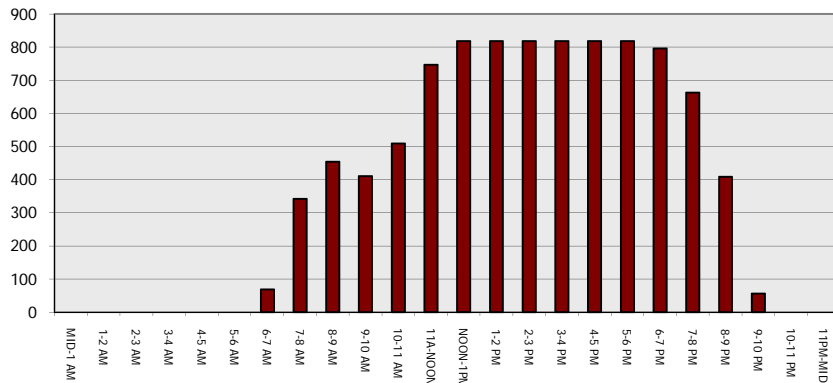
**Main Route - Traffic Demand (Vehicles Per Hour)**



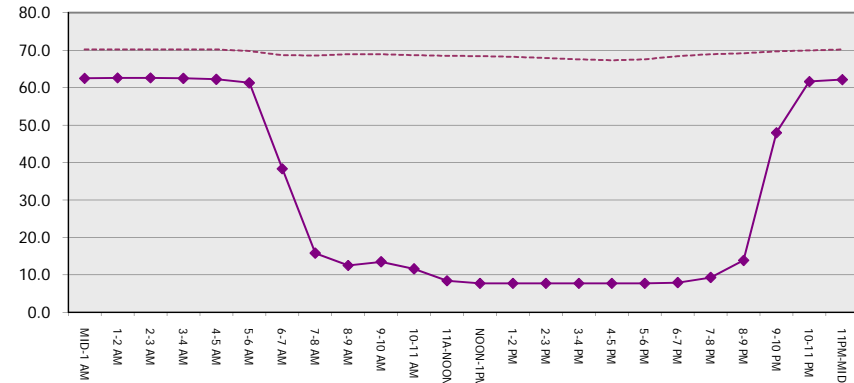
**Main Route Average Delay Per Vehicle (Minutes)**



**Main Route - Average Queue Length (Vehicles)**



**Main Route - Average Speed (MPH)**



<b>USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)</b> <b>CONTINUOUS (24 HOUR) 2 LANE CLOSURE</b> <b>DIVERSION ROUTE: BUS 51 - STH 52</b>	<b>MAY</b>  Analyzed for 2009 Construction Season
--	--

<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		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	343	0.0	72	0.0	1500	343	0	72	0.51	0	70.2	62.2	44.1	31.6	31.6
1-2 AM	197	0.0	68	0.0	1500	197	0	68	0.50	0	70.2	62.5	44.7	31.7	31.7
2-3 AM	162	0.0	61	0.0	1500	162	0	61	0.49	0	70.2	62.5	44.8	31.9	31.9
3-4 AM	206	0.0	82	0.0	1500	206	0	82	0.50	0	70.2	62.4	44.6	31.4	31.4
4-5 AM	272	0.0	168	0.0	1500	272	0	168	0.51	0	70.2	62.3	44.4	29.1	29.1
5-6 AM	782	0.0	460	0.0	1500	782	0	460	0.56	0	69.7	61.2	42.5	21.4	21.4
6-7 AM	1807	0.0	1004	0.0	1499	1807	0	1004+	4.12	105	68.5	34.2	30.8	12.0	12.0
7-8 AM	2321	0.0	1280	0.0	1500	2081	241	1520+	24.87	666	67.9	9.7	31.1	11.2	11.2
8-9 AM	1886	0.0	933	0.0	1500	1457	429	1361+	31.93	808	68.4	7.8	30.8	12.7	11.3
9-10 AM	2091	0.0	872	0.0	1500	1500	591	1463+	32.33	818	68.1	7.7	30.8	13.4	11.2
10-11 AM	2260	0.0	924	0.0	1500	1500	760	1684+	32.32	818	67.9	7.7	30.8	12.8	11.2
11A-NOON	2383	0.0	947	0.0	1500	1500	883	1830+	32.31	818	67.8	7.7	30.8	12.7	11.2
NOON-1PM	2501	0.0	1007	0.0	1500	1500	1001	2007+	32.30	818	67.6	7.7	30.8	12.0	11.2
1-2 PM	2822	0.0	1053	0.0	1500	1500	1322	2375+	32.28	818	67.3	7.7	30.8	11.4	11.2
2-3 PM	2996	0.0	1169	0.0	1500	1500	1496	2665+	32.26	818	67.0	7.7	30.8	11.2	11.2
3-4 PM	3561	0.0	1327	0.0	1500	1500	2061	3388+	32.22	818	66.3	7.7	30.8	11.2	11.2
4-5 PM	3496	0.0	1370	0.0	1500	1500	1996	3366+	32.22	818	66.4	7.7	30.8	11.2	11.2
5-6 PM	3491	0.0	1177	0.0	1500	1500	1991	3168+	32.22	818	66.4	7.7	30.8	11.2	11.2
6-7 PM	3068	0.0	780	0.0	1500	1500	1568	2348+	32.26	818	66.9	7.7	30.8	15.3	11.2
7-8 PM	2749	0.0	558	0.0	1500	1500	1249	1807+	32.28	818	67.3	7.7	30.8	19.6	11.2
8-9 PM	2446	0.0	386	0.0	1500	1500	946	1332+	32.30	818	67.7	7.7	30.8	23.3	11.2
9-10 PM	2067	0.0	296	0.0	1500	1320	747	1043+	30.53	773	68.2	8.1	30.8	25.6	11.7
10-11 PM	1474	0.0	250	0.0	1499	1105	369	619	17.89	461	68.9	12.8	30.8	26.9	18.6
11PM-MID	827	0.0	169	0.0	1499	827	0	169	2.12	68	69.7	45.7	41.0	29.1	29.1

+ 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	0.0345
MAIN ROUTE WITH WORKS	0.0195
DIVERSION	0.3236

PIA: Personal Injury Accidents

IMPACTS ON ROAD USERS	
ROAD USER COSTS PER DAY ( DOLLARS)	\$319,010
CONGESTED HOURS PER DAY*	16

\*Delays Exceeding 15 Minutes

**USH 51: STH 29 W TO STH 29 E (MARATHON COUNTY)  
 CONTINUOUS (24 HOUR) 2 LANE CLOSURE  
 DIVERSION ROUTE: BUS 51 - STH 52**

**MAY**  
 Analyzed for 2009  
 Construction Season

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

