



January 16, 2018

## AGENDA ITEM 7A

### **CRTPA SAFETY TARGETS AND PERFORMANCE MEASURES**

TYPE OF ITEM: Discussion

#### **STATEMENT OF ISSUE**

The purpose of this item is to discuss Performance Targets for the Capital Region Transportation Planning Area (CRTPA) for the following five (5) safety performance measures adopted by the Federal Highway Administration (FHWA) in 2017 for all public roads:

1. Number of fatalities;
2. Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT);
3. Number of serious injuries;
4. Rate of serious injuries per 100 Million VMT; and
5. Number of non-motorized fatalities and non-motorized serious injuries.

The Florida Department of Transportation (FDOT) has adopted the target of, “Zero” for the FHWA safety performance measures, and the CRTPA, along with all the other Metropolitan Planning Organizations in the State of Florida, is now required to adopt its own targets and performance measures for the safety measures. MPO’s may agree to support the state target or establish a specific number or rate for each.

#### **RECOMMENDATIONS BY CRTPA COMMITTEES**

The CRTPA’s two (2) committees (Citizens Multimodal Advisory Committee and Technical Advisory Committee) held a joint meeting on January 9, 2018 and were briefed on the development of the Safety Targets and Performance Measures for the CRTPA as required by FHWA. The committees did not take formal action but did engage in a discussion on the overall utility of performance measures. A formal recommendation will be made next month.

#### **HISTORY AND ANALYSIS**

Nationally, state-specific, and locally, transportation plans exist to enhance safety for all users of the transportation system. A coordinated effort to connect all of the safety plans has long been in effect in the transportation realm, but over the last two years, a system of Performance Management has led to a greater push for comprehensive and coordinated transportation and safety planning. Performance Measures for Safety have been developed by the FHWA, for which targets are being established cooperatively between the FDOT and MPO’s within the State of Florida (as well as

nationally). Through this coordinated effort, the goals of the Highway Safety Improvement Program (HSIP), Highway Safety Plan (HSP), Strategic Highway Safety Plan (SHSP), and region-specific safety and transportation plans can be shown to guide and support one another.

In August of 2017, the FDOT adopted a target of “Zero” for the five (5) safety performance measures adopted by the Federal Highway Administration (FHWA) for all public roads. The Performance Measures, along with a brief description of each is provided in the table on the following page.

<b>Performance Measure</b>	<b>Description</b>
Number of fatalities	The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.
Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)	The ratio of total number of fatalities to the number of vehicle miles traveled (VMT, in 100 Million VMT) in a calendar year.
Number of serious injuries	The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year.
Rate of serious injuries per 100 Million VMT	The ratio of total number of serious injuries to the number of VMT (in 100 Million VMT) in a calendar year.
Number of non-motorized fatalities and non-motorized serious injuries	The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year.

<b>FDOT Adopted Measures</b>	<b>Target</b>	<b>Interim Performance Measure</b>
Number of fatalities	0	3,052
Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)	0	1.65
Number of serious injuries	0	20,861
Rate of serious injuries per 100 Million VMT	0	11.06
Number of non-motorized fatalities and non-motorized serious injuries	0	3,447

Upon adoption by the Florida Department of Transportation (FDOT) of a target of “Zero” and the Interim Performance Measures, the CRTPA, along with all the other Metropolitan Planning Organizations in the State of Florida, were given 180 days to adopt their targets for the safety measures. The CRTPA must adopt its Performance Measures and Targets by February 27, 2018.

MPO’s were granted the option of either adopting/supporting the State target, or establishing a specific number or rate for each performance measure. MPOs that choose to establish a rate for a target are required to report not only the estimate used for VMT to establish the target rate, but also the methodology used to arrive at the overall VMT estimate.

**RECOMMENDATION**

Utilizing data provided to the CRTPA from FDOT and the FHWA (provided in **Attachments 1** and **2**), staff has established an average result for each performance measure from the years 2011 through 2016. The averages were utilized as the 2018 target and performance measure for each Safety Measure. These draft measures are as follows:

<b>Draft Safety Performance Measures</b>	<b>Target and Performance Measure</b>
Number of fatalities	56
Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)	1.279
Number of serious injuries	266
Rate of serious injuries per 100 Million VMT	7.313
Number of non-motorized fatalities and non-motorized serious injuries	44

**NEXT STEPS**

The final proposed safety targets and performance measures for the CRTPA will be provided to the CRTPA Board and committees at their February 2018 Meetings for final adoption.

**ATTACHMENTS**

Attachment 1: Data Sheet for Florida MPOs, including 2009-2016

Attachment 2: Extracted Data Sheet for the CRTPA, including 2011-2016

Attachment 3: Florida Highway Safety Improvement Program Sec 34: Safety Performance Targets

MPO/TPO		Average Annual Fatalities <sup>1</sup>								Average Annual Serious Injuries <sup>2</sup>								Average Annual Fatality Rates <sup>3</sup>								Average Annual Serious Injury Rates <sup>4</sup>								Average Annual Pedestrian and Bicyclist Fatalities and Serious Injuries <sup>5</sup>							
		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16	
		Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ			
Space Coast TPO	Single County	63.8	66.2	3.8%	69.6	5.1%	74.8	7.5%	587.0	607.4	3.5%	601.4	-1.0%	630.8	4.9%	1.053	1.101	3.8%	1.159	5.1%	1.218	7.5%	9.666	10.097	4.5%	10.033	-0.6%	10.363	3.3%	79.8	82.2	3.0%	86.6	5.4%	90.2	4.2%					
Charlotte County-Punta Gorda MPO	Single County	22.8	21.0	-7.9%	21.4	1.9%	22.6	5.6%	164.2	149.2	-9.1%	134.6	-9.8%	127.0	-5.6%	1.048	0.965	-7.9%	0.969	1.9%	0.998	5.6%	7.555	6.864	-9.1%	6.127	-10.7%	5.676	-7.4%	24.2	23.0	-5.0%	21.4	-7.0%	20.4	-4.7%					
Broward MPO	Single County	178.4	175.0	-1.9%	183.0	4.6%	199.6	9.1%	2,080.6	2,004.0	-3.7%	1,888.8	-5.7%	1,776.0	-6.0%	1.099	1.074	-1.9%	1.109	4.6%	1.205	9.1%	12.801	12.278	-4.1%	11.447	-6.8%	10.797	-5.7%	351.4	350.6	-0.2%	341.4	-2.6%	352.2	3.2%					
Okaloosa-Walton TPO	Multiple Counties, not countywide	See individual counties below								See individual counties below								See individual counties below								See individual counties below															
Gainesville MTPO	Single County, not countywide	See individual county below								See individual county below								See individual county below								See individual county below															
Hernando/Citrus MPO	Multiple Counties	50.6	47.0	-7.1%	49.2	4.7%	49.8	1.2%	448.4	428.8	-4.4%	445.0	3.8%	461.2	3.6%	1.527	1.416	-7.1%	1.471	4.7%	1.464	1.2%	13.548	12.926	-4.6%	13.329	3.1%	13.560	1.7%	34.4	36.2	5.2%	41.0	13.3%	43.2	5.4%					
Hillsborough County MPO	Single County	157.6	161.0	2.2%	168.4	4.6%	183.8	9.1%	2,066.2	1,921.6	-7.0%	1,752.0	-8.8%	1,618.0	-7.6%	1.245	1.266	2.2%	1.308	4.6%	1.400	9.1%	16.296	15.106	-7.3%	13.650	-9.6%	12.430	-8.9%	254.8	249.6	-2.0%	246.0	-1.4%	242.6	-1.4%					
Indian River County MPO	Single County, not countywide	See individual county below								See individual county below								See individual county below								See individual county below															
North Florida MPO	Multiple Counties	168.4	172.8	2.6%	183.4	6.1%	201.4	9.8%	1,261.0	1,299.2	3.0%	1,341.4	3.2%	1,371.0	2.2%	1.112	1.136	2.6%	1.188	6.1%	1.272	9.8%	8.329	8.547	2.6%	8.717	2.0%	8.727	0.1%	174.2	181.8	4.4%	191.8	5.5%	196.2	2.3%					
Polk TPO	Single County	90.4	94.2	4.2%	99.8	5.9%	108.6	8.8%	566.4	539.0	-4.8%	499.6	-7.3%	480.8	-3.8%	1.520	1.541	4.2%	1.579	5.9%	1.648	8.8%	9.503	8.840	-7.0%	7.959	-10.0%	7.392	-7.1%	63.0	65.2	3.5%	63.6	-2.5%	67.4	6.0%					
Lee County MPO	Single County	75.2	75.6	0.5%	81.0	7.1%	87.0	7.4%	456.6	458.0	0.3%	460.4	0.5%	499.0	8.4%	1.164	1.140	0.5%	1.187	7.1%	1.229	7.4%	7.067	6.921	-2.1%	6.786	-2.0%	7.101	4.6%	76.8	80.0	4.2%	84.0	5.0%	91.0	8.3%					
Martin MPO	Single County	26.2	23.6	-9.9%	24.2	2.5%	25.4	5.0%	124.6	116.4	-6.6%	107.0	-8.1%	103.0	-3.7%	1.273	1.162	-9.9%	1.186	2.5%	1.246	5.0%	6.054	5.739	-5.2%	5.269	-8.2%	5.117	-2.9%	17.6	17.4	-1.1%	16.2	-6.9%	14.0	-13.6%					
Miami-Dade Urbanized Area MPO	Single County	242.8	246.6	1.6%	265.0	7.5%	273.8	3.3%	1,959.0	1,992.0	1.7%	1,992.2	0.0%	1,894.4	-4.9%	1.263	1.284	1.6%	1.378	7.5%	1.417	3.3%	10.206	10.383	1.7%	10.386	0.0%	9.854	-5.1%	411.8	425.8	3.4%	446.0	4.7%	436.0	-2.2%					
Collier County MPO	Single County	37.2	37.2	0.0%	38.8	4.3%	38.0	-2.1%	184.0	174.0	-5.4%	175.2	0.7%	177.2	1.1%	1.169	1.160	0.0%	1.183	4.3%	1.125	-2.1%	5.790	5.445	-6.0%	5.388	-1.0%	5.252	-2.5%	37.2	38.6	3.8%	37.6	-2.6%	40.0	6.4%					
Ocala/Marion County TPO	Single County	61.8	60.6	-1.9%	60.0	-1.0%	61.6	2.7%	423.0	359.4	-15.0%	326.8	-9.1%	327.8	0.3%	1.537	1.507	-1.9%	1.475	-1.0%	1.478	2.7%	10.501	8.952	-14.8%	8.069	-9.9%	7.894	-2.2%	41.8	39.0	-6.7%	38.0	-2.6%	41.2	8.4%					
METROPLAN Orlando	Multiple Counties	208.8	210.6	0.9%	218.4	3.7%	226.0	3.5%	1,539.6	1,893.0	23.0%	2,318.6	22.5%	2,640.0	13.9%	1.049	1.049	0.9%	1.073	3.7%	1.089	3.5%	7.748	9.401	21.3%	11.309	20.3%	12.627	11.7%	261.2	300.0	14.9%	341.8	13.9%	375.8	9.9%					
Bay County TPO	Single County	24.0	24.4	1.7%	27.2	11.5%	30.0	10.3%	257.4	250.4	-2.7%	255.2	1.9%	234.6	-8.1%	1.322	1.340	1.7%	1.476	11.5%	1.596	10.3%	14.172	13.761	-2.9%	13.897	1.0%	12.559	-9.6%	29.8	29.4	-1.3%	34.4	17.0%	37.6	9.3%					
Pasco County MPO	Single County	69.4	67.8	-2.3%	66.8	-1.5%	71.4	6.9%	855.4	871.0	1.8%	933.0	7.1%	1,032.6	10.7%	1.735	1.660	-2.3%	1.592	-1.5%	1.661	6.9%	21.416	21.279	-0.6%	22.077	3.8%	23.905	8.3%	105.6	109.6	3.8%	109.0	-0.5%	115.6	6.1%					
Florida-Alabama TPO	Multiple Counties, not countywide	See individual counties below								See individual counties below								See individual counties below								See individual counties below															
Pinellas County MPO	Single County	99.0	101.4	2.4%	102.8	1.4%	105.8	2.9%	1,270.0	1,217.8	-4.1%	1,194.6	-1.9%	1,175.2	-1.6%	1.229	1.272	2.4%	1.296	1.4%	1.310	2.9%	15.746	15.258	-3.1%	15.068	-1.2%	14.594	-3.1%	212.4	213.8	0.7%	217.2	1.6%	221.0	1.7%					
Sarasota/Manatee MPO	Multiple Counties	81.0	81.6	0.7%	87.4	7.1%	99.8	14.2%	770.8	777.8	0.9%	907.0	16.6%	1,131.2	24.7%	1.103	1.104	0.7%	1.160	7.1%	1.289	14.2%	10.492	10.497	0.0%	11.986	14.2%	14.504	21.0%	127.8	134.2	5.0%	142.8	6.4%	160.0	12.0%					
St Lucie TPO	Single County	30.0	29.8	-0.7%	31.0	4.0%	33.6	8.4%	187.4	174.0	-7.2%	166.6	-4.3%	165.0	-1.0%	0.967	0.956	-0.7%	0.985	4.0%	1.064	8.4%	6.027	5.562	-7.7%	5.276	-5.1%	5.236	-0.8%	26.6	28.4	6.8%	26.8	-5.6%	24.0	-10.4%					
Capital Region TPA	Multiple Counties	55.4	53.0	-4.3%	51.4	-3.0%	55.6	8.2%	351.8	313.6	-10.9%	278.6	-11.2%	266.0	-4.5%	1.299	1.249	-4.3%	1.208	-3.0%	1.279	8.2%	8.203	7.360	-10.3%	6.539	-11.2%	6.143	-6.1%	41.8	41.4	-1.0%	42.4	2.4%	44.0	3.8%					
River to Sea TPO	Multiple Counties, not countywide	See individual counties below								See individual counties below								See individual counties below								See individual counties below															
Palm Beach MPO	Single County	131.4	127.0	-3.3%	139.8	10.1%	153.4	9.7%	1,047.0	1,039.8	-0.7%	1,026.2	-1.3%	1,054.2	2.7%	1.066	1.022	-3.3%	1.100	10.1%	1.185	9.7%	8.493	8.366	-1.5%	8.105	-3.1%	8.195	1.1%	190.0	193.4	1.8%	200.6	3.7%	203.2	1.3%					
Lake-Sumter MPO	Multiple Counties	62.0	61.2	-1.3%	64.4	5.2%	66.4	3.1%	369.4	348.8	-5.6%	340.4	-2.4%	364.6	7.1%	1.436	1.385	-1.3%	1.410	5.2%	1.423	3.1%	8.571	7.879	-8.1%	7.425	-5.8%	7.742	4.3%	37.2	39.6	6.5%	38.8	-2.0%	40.8	5.2%					
Heartland Regional TPO	Multiple Counties	57.6	55.8	-3.1%	57.4	2.9%	60.8	5.9%	331.2	310.4	-6.3%	299.8	-3.4%	342.0	14.1%	2.053	1.996	-3.1%	2.025	2.9%	2.105	5.9%	11.785	11.089	-5.9%	10.577	-4.6%	11.750	11.1%	32.4	35.0	8.0%	33.2	-5.1%	32.6	-1.8%					

FDOT County Number	County Name	MPO/TPO	Average Annual Fatalities <sup>1</sup>								Average Annual Serious Injuries <sup>2</sup>								Average Annual Fatality Rates <sup>3</sup>								Average Annual Serious Injury Rates <sup>4</sup>								Average Annual Pedestrian and Bicyclist Fatalities and Serious Injuries <sup>5</sup>							
			2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16		2009-13		2010-14		2011-15		2012-16	
			Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ	Average	Average	%Δ	Average	%Δ	Average	%Δ			
26	Alachua	Gainesville MTPO	30.6	30.6	0.0%	32.8	7.2%	36.6	11.6%	302.8	275.8	-8.9%	265.6	-3.7%	264.0	-0.6%	1.080	1.073	-0.6%	1.137	6.0%	1.242	9.2%	10.669	9.677	-9.3%	9.217	-4.8%	8.959	-2.8%	37.6	38.2	1.6%	37.0	-3.1%	37.8	2.2%					
48	Escambia	Florida-Alabama TPO	40.8	41.6	2.0%	44.2	6.3%	44.4	0.5%	472.2	377.8	-20.0%	321.4	-14.9%	281.6	-12.4%	1.206	1.228	1.8%	1.298	5.7%	1.289	-0.7%	13.954	11.152	-20.1%	9.450	-15.3%	8.182	-13.4%	66.0	60.2	-8.8%	55.4	-8.0%	54.4	-1.8%					
58	Santa Rosa	Florida-Alabama TPO	23.8	22.2	-6.7%	21.8	-1.8%	20.0	-8.3%	262.2	233.0	-11.1%	218.0	-6.4%	189.6	-13.0%	1.189	1.105	-7.1%	1.081	-2.2%	0.978	-9.5%	13.105	11.602	-11.5%	10.821	-6.7%	9.245	-14.6%	16.4	15.2	-7.3%	15.0	-1.3%	15.8	5.3%					
57	Okaloosa	Okaloosa-Walton TPO	22.0	24.0	9.1%	27.0	12.5%	26.6	-1.5%	231.4	212.4	-8.2%	202.4	-4.7%	184.0	-9.1%	1.066	1.153	8.2%	1.284	11.4%	1.247	-2.9%	11.232	10.227	-8.9%	9.681	-5.3%	8.675	-10.4%	28.6	29.0	1.4%	30.8	6.2%	28.6	-7.1%					
60	Walton	Okaloosa-Walton TPO	19.4	18.2	-6.2%	14.2	-22.0%	14.2	0.0%	143.4	138.2	-3.6%	137.8	-0.3%	121.0	-12.2%	1.684	1.561	-7.3%	1.198	-23.3%	1.160	-3.2%	12.434	11.849	-4.7%	11.609	-2.0%	9.954	-14.3%	8.6	9.0	4.7%	9.4	4.4%	8.6	-8.5%					
73	Flagler	River to Sea TPO	18.4	20.0	8.7%	17.8	-11.0%	18.4	3.4%	176.2	160.0	-9.2%	137.8	-13.9%	119.4	-13.4%	1.720	1.798	4.5%	1.542	-14.2%	1.504	-2.5%	16.497	14.757	-10.5%	12.239	-17.1%	10.274	-16.1%	13.6	14.2	4.4%	15.8	11.3%	15.6	-1.3%					
79	Volusia	River to Sea TPO	94.4	93.0	-1.5%	89.2	-4.1%	96.4	8.1%	691.8	658.2	-4.9%	630.2	-4.3%	638.4	1.3%	1.716	1.697	-1.1%	1.624	-4.3%	1.715	5.6%	12.573	12.019	-4.4%	11.485	-4.4%	11.387	-0.9%	92.2	92.8	0.7%	89.0	-4.1%	88.8	-0.2%					
88	Indian River	Indian River County MPO	20.0	19.8	-1.0%	19.4	-2.0%	20.6	6.2%	117.2	119.0	1.5%	115.8	-2.7%	127.2	9.8%	1.333	1.312	-1.6%	1.262	-3.8%	1.322	4.8%	7.817	7.885																	

	2011	2012	2013	2014	2015	2016	
Gadsden	9	16	12	5	12	18	
Jefferson	8	6	6	1	5	7	
Leon	37	42	17	33	29	40	5-year
Wakulla	4	8	3	2	2	14	Average
Total	58	72	38	41	48	79	56

Fatality Rates

	2011	2012	2013	2014	2015	2016	
Gadsden	1.172	2.099	1.484	0.627	1.471	2.068	
Jefferson	1.988	1.514	1.443	0.244	1.167	1.615	
Leon	1.398	1.615	0.647	1.225	1.047	1.419	5-year
Wakulla	1.037	2.031	0.767	0.485	0.473	3.252	Average
Aggregate:	1.380	1.734	0.895	0.951	1.082	1.735	1.279

Serious Injury Crashes

	2011	2012	2013	2014	2015	2016	
Gadsden	72	77	49	45	41	39	
Jefferson	24	32	21	17	23	25	
Leon	216	169	164	180	165	161	5-year
Wakulla	14	18	21	24	21	38	Average
Total	326	296	255	266	250	263	266

Serious Injury Rates

	2011	2012	2013	2014	2015	2016	
Gadsden	9.379	10.102	6.060	5.642	5.027	4.480	
Jefferson	5.964	8.076	5.050	4.151	5.368	5.769	
Leon	8.162	6.500	6.238	6.683	5.957	5.710	5-year
Wakulla	3.630	4.569	5.369	5.824	4.962	8.827	Average
Average:	6.784	7.312	5.679	5.575	5.329	6.196	
Aggregate:	6.194	5.679	7.474	7.736	8.326	7.350	7.313

Non-Motorized Fatalities/Serious Injury

	2011	2012	2013	2014	2015	2016	
Gadsden	5	2	2	1	5	5	
Jefferson	2	4	2	3	-	2	
Leon	24	32	38	37	45	33	5-year
Wakulla	2	2	3	1	2	1	Average
Total	33	40	45	42	52	41	44

100M VMT

	2011	2012	2013	2014	2015	2016
Gadsden	7.677	7.623	8.086	7.976	8.155	8.706
Jefferson	4.024	3.962	4.158	4.096	4.285	4.334
Leon	26.464	26.001	26.290	26.934	27.697	28.196
Wakulla	3.857	3.940	3.912	4.121	4.232	4.305
Total	42.0	41.5	42.4	43.1	44.4	45.5

**34. Safety Performance Targets****Calendar Year 2018 Targets \*****Number of Fatalities** 0**Describe the basis for established target, including how it supports SHSP goals.**

Based on statistical forecasting, the five year rolling average for total fatalities on Florida's roads is forecast to be between 2,716 and 3,052 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for fatalities is zero in 2018. While the data forecast indicates Florida's five year rolling average for fatalities could continue to trend upward in 2017 and 2018, the FDOT State Safety Office expects the projects chosen for funding will mitigate the data forecast and ultimately reduce the number of traffic fatalities. An interim performance measure is required by our federal funding agencies in order to receive federal funding. We firmly believe that every life counts and although our target for fatalities is zero in 2018, Florida has forecast an interim performance measure of 3,052 in order to satisfy the federal requirement.

**Number of Serious Injuries** 0**Describe the basis for established target, including how it supports SHSP goals.**

Based on statistical forecasting, the five year rolling average for total serious injuries on Florida's roads is forecast to be between 18,831 and 20,861 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for serious injuries is zero in 2018. The data forecast indicates Florida's five year rolling average for serious injuries could continue to trend downward in 2017 and 2018. The FDOT State Safety Office expects the projects chosen for funding will enhance this downward trend in the number of serious injuries on Florida's roads. An interim performance measure is required by our federal funding agencies in order to receive federal funding. We firmly believe that every life counts and although our target for serious injuries is zero in 2018, Florida has forecast an interim performance measure of 20,861 in order to satisfy the federal requirement.

**Fatality Rate** 0**Describe the basis for established target, including how it supports SHSP goals.**

Based on statistical forecasting, the five year rolling average for fatality rate per 100 million VMT on Florida's roads is forecast to be between 1.06 and 1.65 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for fatality rate per

## 2017 Florida Highway Safety Improvement Program

100 million VMT is zero in 2018. While the data forecast indicates Florida's five year rolling average for fatality rate per 100 million VMT could continue to trend upward in 2017 and 2018, the FDOT State Safety Office expects the projects chosen for funding will mitigate the data forecast and ultimately reduce the number of traffic fatalities. An interim performance measure is required by our federal funding agencies in order to receive federal funding. We firmly believe that every life counts and although our target for fatality rate per 100 million VMT is zero in 2018, Florida has forecast an interim performance measure of 1.65 in order to satisfy the federal requirement.

**Serious Injury Rate** 0

### **Describe the basis for established target, including how it supports SHSP goals.**

Based on statistical forecasting, the five year rolling average for serious injury rate per 100 million VMT on Florida's roads is forecast to be between 7.57 and 11.06 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for serious injury rate per 100 million VMT is zero in 2018. The data forecast indicates Florida's five year rolling average for serious injury rate per 100 million VMT could continue to trend downward in 2017 and 2018. The FDOT State Safety Office expects the projects chosen for funding will enhance this downward trend in the serious injury rate per 100 million VMT. An interim performance measure is required by our federal funding agencies in order to receive federal funding. We firmly believe that every life counts and although our target for serious injury rate per 100 million VMT is zero in 2018, Florida has forecast an interim performance measure of 11.06 in order to satisfy the federal requirement.

**Total Number of Non-Motorized Fatalities and Serious Injuries** 0

### **Describe the basis for established target, including how it supports SHSP goals.**

Based on statistical forecasting, the five year rolling average for non-motorized fatalities and serious injuries on Florida's roads is forecast to be between 3,066 and 3,447 in 2018. This forecast was made by combining FARS data with current state data from 2009 to 2016 to predict probable outcomes for 2017 and 2018. Florida's target for non-motorized fatalities and serious injuries is zero in 2018. The data forecast indicates Florida's five year rolling average for non-motorized fatalities and serious injuries could continue to trend downward in 2017 and 2018. The FDOT State Safety Office expects the projects chosen for funding will enhance this downward trend in non-motorized fatalities and serious injuries. An interim performance measure is required by our federal funding agencies in order to receive federal funding. We firmly believe that every life counts and although our target for non-motorized fatalities and serious injuries is zero in 2018, Florida has forecast an interim performance measure of 3,447 in order to satisfy the federal requirement.

**Enter additional comments here to clarify your response for this question or add supporting information.**

Florida shares the national traffic safety vision, “Toward Zero Deaths,” and formally adopted our own version of the national vision, “Driving Down Fatalities,” in 2012. FDOT and its traffic safety partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable and based on that, zero deaths is our safety performance target. This target is consistent throughout our Strategic Highway Safety Plan, Highway Safety Improvement Program and Highway Safety Plan.

Florida’s data forecasts have been established using an ARIMA Hybrid Regression Model (0, 1,1)(2,0,0)(12) with VMT. Nine independent variables were tested to assess correlations; only Vehicle Miles of Travel (VMT) and gas consumption have relatively high correlations with fatalities and serious injuries and of these two variables only VMT was useful in predicting future fatalities and serious injuries. The first three performance measures (number of fatalities, number of serious injuries, and fatality rate per 100M VMT) have been forecasted based on a five year rolling average and the remaining performance measures will be forecasted annually. The forecasts for 2017 and 2018 are based on monthly data from 2005 through 2016 using statistical forecasting methodologies.

[Source: FDOT Highway Safety Plan]