



**RESOLUTION 2017-11  
ADOPTING SAFETY PERFORMANCE TARGETS**

**WHEREAS**, as required by 23 CFR 490 the Florida Department of Transportation has adopted aspirational targets of 0.1 for Number of Fatalities, Number of Serious Injuries, Fatality Rate, Serious Injury Rate and Total Number of Non-Motorized Fatalities and Serious Injuries; and

**WHEREAS**, the North Florida Transportation Planning Organization is also required to adopt performance targets for these measures;

**NOW, THEREFORE, BE IT RESOLVED THAT:**

The North Florida TPO adopts the Florida Department of Transportation performance targets as follows:

<b>Measure</b>	<b>Target</b>
• Number of Fatalities	0.1
• Number of Serious Injuries	0.1
• Fatality Rate	0.1
• Serious Injury Rate	0.1
• Total Number of Non-Motorized Fatalities and Serious Injuries	0.1

Adopted by the North Florida Transportation Planning Organization in regular meeting assembled in the City of Jacksonville the 14th day of December 2017.

**ATTEST:**

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**The Honorable Doyle Carter, Chairman**

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**Jeff Sheffield, Executive Director**



## MEMORANDUM

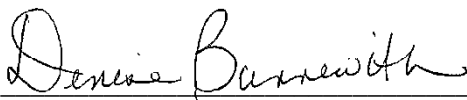
To: Members, North Florida Transportation Planning Organization and Committees  
From: Denise Bunnewith, Planning Director  
Date: November 15, 2017  
**Subject: Adoption of Safety Performance Targets**

As required by 23 CFR 490 **National Performance Measures for Highway Safety Improvement Program**, the Florida Department of Transportation (FDOT) has adopted the following performance targets:

Measure	Target
• Number of Fatalities	0.1
• Number of Serious Injuries	0.1
• Fatality Rate	0.1
• Serious Injury Rate	0.1
• Total Number of Non-Motorized Fatalities and Serious Injuries	0.1

These measures are incorporated in the 2017 Florida Highway Safety Improvement Program. The rationale for the establishment of these **aspirational targets** is attached.

The North Florida TPO is also required to establish performance targets for these measures. Staff recommends adoption of the FDOT measures. If the TPO elects to adopt different targets, justification, methodology and data must be provided to support the recommended targets.



Denise Bunnewith



**34. Safety Performance Targets**

**Calendar Year 2018 Targets \***



**Number of Fatalities**

**0.1**

**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**

**0.1**

**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**

**0.100**

**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 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**

**0.100**

**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**

**0.1**

**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.



## FHWA SAFETY Performance Measures for the North Florida TPO

County Number	County Name		Managing District	100 MVMT annually*						
				2011	2012	2013	2014	2015	2016	2017
71	Clay		02	15.2692866	15.2012357	15.6254809	16.0370376	16.6364575	17.4066281	n/a
72	Duval		02	101.3696131	100.0803386	102.3022571	104.0273046	108.6958912	112.8346975	n/a
74	Nassau		02	10.2509412	10.4329706	10.3358173	10.8182496	11.0587065	11.6720172	n/a
78	St Johns		02	22.9054398	23.1519767	23.3056919	25.4714904	26.5484284	27.9053671	n/a
<b>North Florida TPO</b>				<b>149.7952807</b>	<b>148.8665215</b>	<b>151.5692472</b>	<b>156.3540823</b>	<b>162.9394837</b>	<b>169.8187099</b>	<b>-</b>
District 2				247.3052451	245.3717941	248.3016864	256.0335498	264.9272441	277.9156344	-
Turnpike Enterprise				63.5483250	78.0670680	76.4372050	84.1898050	89.9969550	100.0922160	-
Statewide				2,004.2123956	1,933.3935667	1,945.4328817	2,037.3034648	2,096.0036464	2,183.0013953	-



## FHWA SAFETY Performance Measures for the North Florida TPO

County Number	County Name		Managing District	Average Annual Fatalities		Avg Fatalities Percentage change	Average Annual Serious Injuries		Avg Serious Injuries Percentage change	Average Annual Fatality Rates		Avg Fatality Rate Percentage change	Average Annual Serious Injury Rates		Avg Serious Injury Rate Percentage change	Average Annual Ped/Bike Fatalities & Serious Injuries		Avg Bicycle & Pedestrian Fatalities & Serious Injuries Percentage change
				2011-15	2012-16	2012-16	2011-15	2012-16	2012-16	2011-15	2012-16	2012-16	2011-15	2012-16	2012-16	2011-15	2012-16	2012-16
71	Clay		02	18.4	20.6	12.0%	103.0	98.2	-4.7%	1.155	1.257	8.8%	6.543	6.118	-6.5%	16.6	16.2	-2.4%
72	Duval		02	119.0	132.2	11.1%	978.8	1,013.0	3.5%	1.151	1.250	8.6%	9.474	9.634	1.7%	140.2	145.8	4.0%
74	Nassau		02	13.0	15.0	15.4%	56.4	64.0	13.5%	1.224	1.367	11.7%	5.305	5.825	9.8%	6.6	6.6	0.0%
78	St Johns		02	33.0	33.6	1.8%	203.2	195.8	-3.6%	1.355	1.334	-1.5%	8.449	7.896	-6.5%	28.4	27.6	-2.8%
<b>North Florida TPO</b>				<b>183.4</b>	<b>201.4</b>	<b>9.8</b>	<b>1,341.4</b>	<b>1,371.0</b>	<b>2.2</b>	<b>4.9</b>	<b>5.2</b>	<b>6.6</b>	<b>29.8</b>	<b>29.5</b>	<b>3.3</b>	<b>191.8</b>	<b>196.2</b>	<b>2.3</b>
District 2				334.2	357.6	7.0%	2,231.6	2,255.6	1.1%	1.323	1.380	4.3%	8.854	8.755	-1.1%	274.4	275.4	0.4%
Turnpike Enterprise				46.2	47.0	1.7%	316.4	283.4	-10.4%	0.592	0.548	-7.4%	4.142	3.368	-18.7%	9.2	10.0	8.7%
Statewide				2,531.6	2,685.6	6.1%	20,503.4	20,830.0	1.6%	1.262	1.313	4.0%	10.236	10.222	-0.1%	3,170.8	3,253.0	2.6%

Source: Traffic counts are from FDOT Transportation Statistics Office document "Summary Since 1990", "DVMT" tab, titled "Daily Vehicle Miles Traveled on Public Roads in Florida", available from <http://www.dot.state.fl.us/planning/statistics/mileage-rpts/public.shtm>. Turnpike figures are estimated from additional information provided by TSO. Fatal and serious injury counts are from FDOT Safety Office's Crash Analysis Reporting (CAR) database as of 10-2-2017.

## FHWA SAFETY Performance Measures for the North Florida TPO

County Number	County Name		Managing District	Fatality Counts by Year**							Severe Injury Counts by Year***						
				2011	2012	2013	2014	2015	2016	2017	2011	2012	2013	2014	2015	2016	2017
71	Clay		02	15	15	10	18	34	26	9	93	101	118	101	102	69	48
72	Duval		02	90	119	133	120	133	156	92	713	992	1,119	1,065	1,005	884	563
74	Nassau		02	12	11	10	17	15	22	12	55	49	43	47	88	93	67
78	St Johns		02	27	31	31	39	37	30	30	184	263	222	162	185	147	79
<b>North Florida TPO</b>				<b>144</b>	<b>176</b>	<b>184</b>	<b>194</b>	<b>219</b>	<b>234</b>	<b>143</b>	<b>1,045</b>	<b>1,405</b>	<b>1,502</b>	<b>1,375</b>	<b>1,380</b>	<b>1,193</b>	<b>757</b>
District 2				301	329	340	317	384	418	275	2,088	2,383	2,367	2,118	2,202	2,208	1,417
Turnpike Enterprise				45	43	41	42	60	49	35	387	338	287	264	306	222	64
Statewide				2,405	2,413	2,402	2,498	2,940	3,175	1,933	20,014	19,956	20,149	20,852	21,546	21,647	13,085

## FHWA SAFETY Performance Measures for North Florida TPO

County Number	County Name	Managing District	Fatality Rates per Annual 100 MVMT							Severe Injury Rates per Annual 100 MVMT						
			2011	2012	2013	2014	2015	2016	2017	2011	2012	2013	2014	2015	2016	2017
71	Clay	02	0.9824	0.9868	0.6400	1.1224	2.0437	1.4937	n/a	6.0907	6.6442	7.5518	6.2979	6.1311	3.9640	n/a
72	Duval	02	0.8878	1.1890	1.3001	1.1535	1.2236	1.3826	n/a	7.0337	9.9120	10.9382	10.2377	9.2460	7.8345	n/a
74	Nassau	02	1.1706	1.0543	0.9675	1.5714	1.3564	1.8848	n/a	5.3654	4.6966	4.1603	4.3445	7.9575	7.9678	n/a
78	St Johns	02	1.1788	1.3390	1.3301	1.5311	1.3937	1.0751	n/a	8.0330	11.3597	9.5256	6.3601	6.9684	5.2678	n/a
<b>North Florida TPO</b>			<b>0.9613</b>	<b>1.1823</b>	<b>1.2140</b>	<b>1.2408</b>	<b>1.3441</b>	<b>1.3779</b>	<b>n/a</b>	<b>6.9762</b>	<b>9.4380</b>	<b>9.9097</b>	<b>8.7941</b>	<b>8.4694</b>	<b>7.0251</b>	<b>n/a</b>
District 2			1.2171	1.3408	1.3693	1.2381	1.4495	1.5041	n/a	8.4430	9.7118	9.5328	8.2724	8.3117	7.9449	n/a
Turnpike Enterprise			0.7081	0.5508	0.5364	0.4989	0.6667	0.4895	n/a	6.0899	4.3296	3.7547	3.1358	3.4001	2.2180	n/a
Statewide			1.2000	1.2481	1.2347	1.2261	1.4027	1.4544	n/a	9.9860	10.3217	10.3571	10.2351	10.2796	9.9162	n/a

## FHWA SAFETY Performance Measures for the North Florida TPO

County Number	County Name		Managing District	Ped/Bike Combined Fatal and Severe Injuries by Year						
				2011	2012	2013	2014	2015	2016	2017
71	Clay		02	14	21	17	16	15	12	9
72	Duval		02	100	152	176	133	140	128	65
74	Nassau		02	6	5	5	10	7	6	5
78	St Johns		02	32	21	29	30	30	28	12
<b>North Florida TPO</b>				<b>152</b>	<b>199</b>	<b>227</b>	<b>189</b>	<b>192</b>	<b>174</b>	<b>91</b>
District 2				242	296	299	261	274	247	152
Turnpike Enterprise				6	13	10	10	7	10	9
Statewide				2,820	3,206	3,142	3,304	3,382	3,231	1,968