

Highway Safety Improvement Program Data Driven Decisions

Florida Highway Safety Improvement Program 2016 Annual Report

Prepared by: FL

Disclaimer

Protection of Data from Discovery & Admission into Evidence

23 U.S.C. 148(h)(4) states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section [HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data."

23 U.S.C. 409 states "Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data."

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2. Executive Summary

The Florida Department of Transportation continues the critical work of providing a safe transportation system for the residents and visitors of Florida. The primary instrument which guides this work is the state's Strategic Highway Safety Plan. The plan identifies the main types of crashes which stakeholders through input and data analysis have selected as areas which require a suite of countermeasures to address. The plan directs the engineering, education, enforcement and emergency services, or the "4 E's" in their collective efforts to reduce fatal and serious injury crashes. When countermeasures from the 4 E's are applied to a crash type, the reductions gained are typically greater than if just one type of countermeasure were applied. This holistic approach to transportation safety represents the best value for taxpayers. The plan is divided into individual Emphasis Areas, whose goal is to reduce a specific type of crash. The overall goal of the plan is to reduce fatal and serious injuries. The plan is divided into nine emphasis areas; Lane Departure, Intersections, Aggressive Driving, Teen Drivers, Drivers age 65 and Older, Impaired Driving, Pedestrians and Bicyclists, Motorcycles and Distracted Drivers. The goal of the plan is to achieve a 5% reduction in the 5 – year rolling average of fatal and serious injury crashes, both overall and within each emphasis area.

The department received an allocation of \$110 million in Highway Safety Improvement Program funds during the 2015 state fiscal year, which began on July 1, 2015, and ended on June 30, 2016 (*Q.17, Pg. 9*). This funding was used to complete 225 projects which were in various stages of planning, design, construction or close-out. 94 of these projects were construction projects or safety projects which significantly advanced the state's plan. \$19 million of the funds were used for projects on local roadways (*Q.18, Pg. 9*). Additionally, \$3 million in funding was used for systemic projects, which not only address locations experiencing a high frequency of crashes, but areas which represent a high risk of experiencing crashes in the future (*Q.12, Pg.8*).

All projects funded through the Highway Safety Improvement Program are required to be focused on addressing crashes in one of the plan's emphasis areas. The Intersections emphasis area had 46 projects, totaling \$40 million in funding, the Lane Departure emphasis area had 14 projects, totaling \$30.9 million in funding and the Pedestrian and Bicyclist emphasis area had 9 projects, totaling \$5.6 million in funding (Q.23, Pgs. 11 – 19). A caveat for these figures is that one project frequently deploys multiple countermeasures, which may benefit multiple emphasis areas. These figures should be considered minimums and not explicit counts of the projects and countermeasures for each emphasis area.

The department conducted a project evaluation to determine the effectiveness of HSIP funded projects from calendar year 2011. The evaluation used crash data from 3 years before and after a project was constructed, excluding 1 year around the construction dates. Using a benefit / cost analysis procedure, the evaluation showed that the projects resulted in \$7 of benefits for every \$1 of HSIP funds spent. When comparing the before period to the after period, the projects resulted in a reduction of 712 target crashes, 5 fatal crashes and 217 injury crashes. The projects included 14 locations which received rumble striping to warn drivers that they are nearing the edge of the roadway or crossing the centerline, which resulted in a societal benefit of \$14.66 for every dollar invested, 215 fewer target crashes, 11 fewer fatalities and 57 fewer injury crashes. Target crashes are determined by the type of countermeasure deployed; an example of which is measuring the change in run off the road crashes for rumble striping projects (*Q.36, Pgs 47 – 64*).

Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP MAP-21 Reporting Guidance dated February 13, 2013 and consists of four sections: program structure, progress in implementing HSIP projects, progress in achieving safety performance targets, and assessment of the effectiveness of the improvements.

Program Structure

Program Administration

3. How are Highway Safety Improvement Program funds administered in the State?

Central

4. Describe how local roads are addressed as part of Highway Safety Improvement Program.

Due to changes in the Florida Traffic Crash Report, Long Form, the State Safety Office (SSO) was unable to develop a high crash location list for local roads during the reporting period. However, the SSO supported the districts with identifying high crash locations on local roads through Geographic Information Systems (GIS) analysis. The SSO developed several analyses of pedestrian and bicyclist involved crashes and intersection crashes. The department is working towards developing a replacement system that will once again provide high crash listings on local roads.

Additionally, other local projects are identified through a coordinated effort with the District Safety Engineer and the Community Traffic Safety Teams.

5. Identify which internal partners are involved with Highway Safety Improvement Program planning.

Design Planning Operations Governors Highway Safety Office

6. Briefly describe coordination with internal partners.

District staff coordinate with planning, design, and operations for planning HSIP projects. Central Office staff then coordinates with District staff on programming and funding projects. District staff look at

opportunities to program HSIP project components concurrently with other projects in the Department's work program.

Other HSIP planning activites include efforts with the Strategic Highway Safety Plan (SHSP). Special emphasis areas teams have been formed based on the SHSP structure. Each team is made up of key personnel within the department and from other agencies or groups which have an interest or responsibility in the emphasis area. The teams meet to develop goals, objectives and action items using the SHSP as the guiding principle. Quarterly meetings are held to discuss progress on action items, plan new work and share best practices.

Additionally, the following groups are included in the internal coordination of the HSIP program: Bike and Pedestrian Safety Manager, State Safety Office, Safe Routes to School Program, Local Agency Program and Work Program Office.

7. Identify which external partners are involved with Highway Safety Improvement Program planning.

Metropolitan Planning Organizations Local Government Association Other-Community Traffic Safety Team (CTST)

8. Identify any program administration practices used to implement the HSIP that have changed since the last reporting period.

Other-None

9. Describe any other aspects of Highway Safety Improvement Program Administration on which you would like to elaborate.

The HSIP program is centrally managed for both funding and administration of the program. Each district is responsible for submitting projects for funding consideration annually. The State Safety Office reviews district submitted projects annually and determines funding based on need, project priorities and the Net Present Value (NPV) of an individual project.

Program Methodology

10. Select the programs that are administered under HSIP.

Intersection	Bicycle Safety	Skid Hazard
Pedestrian Safety	Other-Lane Departure	

11. Program:IntersectionDate of Program Methodology:9/1/2007

What data types were used in the program methodology?

Crashes Exposure Fatal and serious injury crashes Traffic only *Roadway* Other-Mile Point

What project identification methodology was used for this program?

Crash frequency Crash rate

Are local roads (non-state owned and operated) included or addressed in this program? Yes

If yes, are local road projects identified using the same methodology as state roads? No

If no, describe the methodology used to identify local road projects as part of this program. The same overall process is used, excluding traffic volume data and crash rates.

How are highway safety improvement projects advanced for implementation?

Other-Districts coordinate with staff for projects and submit to Central Office for approval.

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4). Rank of Priority Consideration

A score is provided for each project that includes the following: Benefit Cost Ratio greater than 1, Net Present Value greater than 0 and is on the High Crash Intersection List.

11. Program: Bicycle Safety

Date of Program Methodology: 9/12/2012

What data types were used in the program methodology?

CrashesExposureRoadwayFatal and serious injury crashesPopulationonly

What project identification methodology was used for this program?

Crash frequency Crash rate Other-Projects are identified using GIS analysis of crash locations and frequency.

Are local roads (non-state owned and operated) included or addressed in this program? Yes

If yes, are local road projects identified using the same methodology as state roads? Yes

1

How are highway safety improvement projects advanced for implementation?

Competitive application process

Other-Locations are identified through GIS analysis by Central Office or vetted through the districts. District submitted projects are evaluated using a Benefit Cost Ratio greater than 1.

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4). Rank of Priority Consideration

Cost Effectiveness

11. Program:Skid HazardDate of Program Methodology:9/1/2007

What data types were used in the program methodology?

Crashes Exposure Fatal and serious injury crashes Traffic only *Roadway* Other-Friction Number

What project identification methodology was used for this program?

Crash frequency Crash rate Other-Locations with a high proportion of wet weather crashes are included in the screening process for skid hazard project locations.

Are local roads (non-state owned and operated) included or addressed in this program? No

How are highway safety improvement projects advanced for implementation?

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

A score is provided for each project that includes the following: Benefit Cost Ratio greater than 1, Net Present Value greater than 0 and is on the High Crash Segment List.

11. Program: Pedestrian Safety

Date of Program Methodology: 9/1/2012

What data types were used in the program methodology?

CrashesExposureRoadwayFatal and serious injury crashesPopulationonly

What project identification methodology was used for this program?

Crash frequency Crash rate Other-Projects are identified using GIS analysis of crash locations and frequency.

Are local roads (non-state owned and operated) included or addressed in this program? Yes If yes, are local road projects identified using the same methodology as state roads? Yes

How are highway safety improvement projects advanced for implementation? Competitive application process

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4). Rank of Priority Consideration

1

Cost Effectiveness

11. Program:Other-Lane DepartureDate of Program Methodology:9/1/2007

What data types were used in the program methodology?

Crashes Exposure Fatal and serious injury crashes Traffic only

Roadway Other-Mile Point

What project identification methodology was used for this program?

Crash frequency Crash rate

Are local roads (non-state owned and operated) included or addressed in this program? Yes

If yes, are local road projects identified using the same methodology as state roads? No

If no, describe the methodology used to identify local road projects as part of this program. The same overall process is used, excluding traffic volume data and crash rates.

How are highway safety improvement projects advanced for implementation?

Other-Districts coordinate with staff for projects and submit to Central Office for approval.

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4). Rank of Priority Consideration

A score is provided for each project that includes the following: Benefit Cost Ratio and Net Present Value greater than 1, Net Present Value greater than 0 and is on the High Crash Segments List.

12. What proportion of highway safety improvement program funds address systemic improvements?

3%

Highway safety improvement program funds are used to address which of the following systemic

improvements?

Add/Upgrade/Modify/Remove Traffic Signal

13. What process is used to identify potential countermeasures?

Engineering Study Road Safety Assessment

14. Identify any program methodology practices used to implement the HSIP that have changed since the last reporting period.

Other-None

15. Describe any other aspects of the Highway Safety Improvement Program methodology on which you would like to elaborate.

None at this time.

Progress in Implementing Projects

Funds Programmed

16. Reporting period for Highway Safety Improvement Program funding.

State Fiscal Year

17. Enter the programmed and obligated funding for each applicable funding category.

Funding Category	Programmed*		Obligated					
	Amount	Percentage	Amount	Percentage				
HSIP (Section 148)	\$110,005,414.00	100 %	\$110,005,414.00	100 %				
HRRRP (SAFETEA-LU)	\$3,872.00	0 %	\$3,872.00	0 %				
Totals	\$110,009,286.00	100%	\$110,009,286.00	100%				

18. How much funding is programmed to local (non-state owned and operated) safety projects?
\$19,575,328.00
How much funding is obligated to local safety projects?
\$19,525,328.00

19. How much funding is programmed to non-infrastructure safety projects?
\$6,533,830.00
How much funding is obligated to non-infrastructure safety projects?
\$6,533,830.00

20. How much funding was transferred in to the HSIP from other core program areas during the reporting period?
\$0.00
How much funding was transferred out of the HSIP to other core program areas during the reporting period?
\$6,279,955.00

21. Discuss impediments to obligating Highway Safety Improvement Program funds and plans to overcome this in the future.

None to report at this time.

22. Describe any other aspects of the general Highway Safety Improvement Program implementation progress on which you would like to elaborate.

Question 20

Funds transferred out of the Highway Safety Improvement Program (HSIP) were used during the State Fiscal Year 2015/2016 to implement the department's Pedestrian and Bicycle Safety Initiative and the Safe Routes to School Program.

The Pedestrian and Bicycle Safety Initiative was previously funded through the HSIP. Funds were transferred from the HSIP to this program as a result of funding restrictions enacted through the Fixing America's Surface Transportation (FAST) Act (PL 114-94).

General Listing of Projects

23. List the projects obligated using HSIP funds for the reporting period.

Projec t	Improvement Category	Output	HSIP Cost	Total Cost	Fundin g Catego	Functional Classificati on	AADT	Spee d	Roadwa y Ownersh	Relationshi SHSP	o to
					ry				ip	Emphasis Area	Strate gy
22083 8-2	Intersection geometry Intersection geometrics - miscellaneous/other/unspe cified	1 Numbe rs	402965	402965	HSIP (Sectio n 148)	Non- Location Specific	0	0	Non- Location Specific	Intersectio ns	
25464 7-1	Pedestrians and bicyclists Install sidewalk	1 Numbe rs	882294	1068522	HSIP (Sectio n 148)	Non- Location Specific	0	0	State Highway Agency	Pedestrian s	
25467 7-2	Intersection geometry Intersection geometrics - miscellaneous/other/unspe cified	1 Numbe rs	546062 4	5460624	HSIP (Sectio n 148)	Non- Location Specific	0	0	State Highway Agency	Intersectio ns	
41886 0-5	Access management Change in access - close or restrict existing access	7.27 Miles	129473	163308	HSIP (Sectio n 148)	Urban Principal Arterial - Other	52287	45	State Highway Agency	Intersectio ns	
42307 1-1	Intersection geometry Auxiliary lanes - extend acceleration/deceleration lane	1 Numbe rs	242165 0	2680997	HSIP (Sectio n 148)	Urban Principal Arterial - Other	31902	45	State Highway Agency	Intersectio ns	
42564 6-2	Roadway signs and traffic control Roadway signs (including post) - new or	1 Numbe rs	249525	249525	HSIP (Sectio n 148)	Non- Location Specific	0	0	Non- Location Specific	Multiple	

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	updated										
42700 4-2	Intersection traffic control Modify traffic signal - add additional signal heads	1 Numbe rs	321054	484596	HSIP (Sectio n 148)	Urban Principal Arterial - Other	48000	45	State Highway Agency	Intersectio ns	
42902 8-1	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	10000	2609340	HSIP (Sectio n 148)	Urban Principal Arterial - Other	15000	45	State Highway Agency	Intersectio ns	
42906 1-1	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	250000	1418023	HSIP (Sectio n 148)	Urban Minor Arterial	11300	45	State Highway Agency	Intersectio ns	
42907 7-2	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	170062 4	5555093	HSIP (Sectio n 148)	Urban Principal Arterial - Other	49000	40	State Highway Agency	Intersectio ns	
42913 4-1	Intersection traffic control Modify traffic signal - add additional signal heads	1 Numbe rs	672858	1480040	HSIP (Sectio n 148)	Urban Principal Arterial - Other	65500	35	State Highway Agency	Intersectio ns	
42934 3-2	Intersection traffic control Modify traffic signal timing - left-turn phasing (permissive to protected- only)	1 Numbe rs	167582	167618	HSIP (Sectio n 148)	Urban Minor Arterial	24500	30	State Highway Agency	Intersectio ns	
42934 5-2	Intersection traffic control Modify traffic signal - add additional signal heads	1 Numbe rs	134416	134416	HSIP (Sectio n 148)	Urban Minor Arterial	18400	35	State Highway Agency	Intersectio ns	
42936 5-1	Lighting Continuous roadway lighting	2.45 Miles	164485 4	1928000	HSIP (Sectio n 148)	Urban Principal Arterial - Interstate	25905 3	65	State Highway Agency	Lane Departure	

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42936	Intersection traffic control	0.15	249468	2494688	HSIP	Urban	8700	45	State	Pedestrian	
6-1	Modify traffic signal - modernization/replacemen t	Miles	8	2494000	(Sectio n 148)	Major Collector	5700		Highway Agency	S	
42950 4-1	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	498246	513246	HSIP (Sectio n 148)	Urban Principal Arterial - Other	46500	45	State Highway Agency	Intersectio ns	
42950 6-1	Lighting Continuous roadway lighting	1.247 Miles	919968	960996	HSIP (Sectio n 148)	Urban Principal Arterial - Other	46500	45	State Highway Agency	Lane Departure	
42960 6-2	Lighting Intersection lighting	1 Numbe rs	45930	46456	HSIP (Sectio n 148)	Urban Local Road or Street	0	0	Other Local Agency	Intersectio ns	
42967 0-2	Shoulder treatments Widen shoulder - paved or other	6.819 Miles	300100 0	3190282	HSIP (Sectio n 148)	Rural Minor Collector	700	25	Other Local Agency	Lane Departure	
42967 0-4	Shoulder treatments Widen shoulder - paved or other	2.436 Miles	149900 0	1499000	HSIP (Sectio n 148)	Rural Minor Collector	600	0	Other Local Agency	Lane Departure	
42967 5-2	Roadway delineation Improve retroreflectivity	3.02 Miles	189000	189000	HSIP (Sectio n 148)	Rural Minor Arterial	14925	45	Other Local Agency	Lane Departure	
42973 7-1	Lighting Continuous roadway lighting	3.98 Miles	256613 9	2840635	HSIP (Sectio n 148)	Rural Principal Arterial - Interstate	73500	70	State Highway Agency	Lane Departure	
42973 8-1	Intersection traffic control Modify traffic signal timing - left-turn phasing (permissive to protected- only)	1 Numbe rs	521491	548350	HSIP (Sectio n 148)	Urban Minor Arterial	16900	35	State Highway Agency	Intersectio ns	

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42974 0-1	Intersection traffic control Modify traffic signal timing - left-turn phasing (permissive to protected- only)	1 Numbe rs	433799	456012	HSIP (Sectio n 148)	Urban Minor Arterial	37500	45	State Highway Agency	Intersectio ns	
42974 1-1	Intersection traffic control Modify traffic signal - add additional signal heads	1 Numbe rs	397189	420984	HSIP (Sectio n 148)	Urban Principal Arterial - Other	51000	45	State Highway Agency	Intersectio ns	
42974 2-1	Lighting Intersection lighting	0.63 Miles	12970	12970	HSIP (Sectio n 148)	Urban Principal Arterial - Other	50500	45	State Highway Agency	Intersectio ns	
42974 5-1	Lighting Intersection lighting	0.83 Miles	281178	286600	HSIP (Sectio n 148)	Urban Principal Arterial - Other	12700	55	State Highway Agency	Intersectio ns	
42975 0-2	Roadway Superelevation / cross slope	0.192 Miles	163889 9	1817529	HSIP (Sectio n 148)	Urban Minor Collector	2000	0	Other Local Agency	Lane Departure	
42975 2-7	Pedestrians and bicyclists Install sidewalk	1.91 Miles	8020	25720	HSIP (Sectio n 148)	Urban Principal Arterial - Other	44484	45	State Highway Agency	Pedestrian s	
43019 6-1	Intersection geometry Auxiliary lanes - extend existing left-turn lane	1 Numbe rs	329780	339314	HSIP (Sectio n 148)	Urban Principal Arterial - Other	46500	45	State Highway Agency	Intersectio ns	
43019 8-1	Lighting Intersection lighting	1 Numbe rs	63274	63274	HSIP (Sectio n 148)	Urban Principal Arterial - Other	41000	40	State Highway Agency	Intersectio ns	
43068	Shoulder treatments Widen	12.748	512328	5123281	HSIP	Rural	3100	0	Other	Lane	

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7-3	shoulder - paved or other	Miles	1		(Sectio n 148)	Major Collector			Local Agency	Departure	
43076 5-1	Intersection geometry Auxiliary lanes - extend existing left-turn lane	1 Numbe rs	690203	769634	HSIP (Sectio n 148)	Urban Principal Arterial - Other	26986	40	State Highway Agency	Intersectio ns	
43076 8-1	Intersection geometry Auxiliary lanes - add left- turn lane	5 Numbe rs	214824 1	2179091	HSIP (Sectio n 148)	Urban Principal Arterial - Other	57000	45	State Highway Agency	Intersectio ns	
43086 1-1	Intersection geometry Auxiliary lanes - add right- turn lane	1 Numbe rs	321594	331697	HSIP (Sectio n 148)	Urban Principal Arterial - Other	26986	40	State Highway Agency	Intersectio ns	
43090 0-1	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	300000	3568802	HSIP (Sectio n 148)	Urban Principal Arterial - Other	26986	40	State Highway Agency	Intersectio ns	
43091 1-1	Intersection geometry Intersection geometrics - modify skew angle	1 Numbe rs	674817 2	6994186	HSIP (Sectio n 148)	Urban Principal Arterial - Other	44870	45	State Highway Agency	Intersectio ns	
43093 1-1	Intersection geometry Auxiliary lanes - add right- turn lane	0.5 Miles	368091	382904	HSIP (Sectio n 148)	Urban Principal Arterial - Other	44870	45	State Highway Agency	Intersectio ns	
43113 2-1	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	395000	1787239	HSIP (Sectio n 148)	Urban Principal Arterial - Other	44870	45	State Highway Agency	Intersectio ns	
43114 2-1	Shoulder treatments Widen shoulder - paved or other	2.239 Miles	692240	692240	HSIP (Sectio n 148)	Rural Major Collector	2000	55	Other Local Agency	Lane Departure	

43114 3-1 43182 0-2	Intersection geometry Auxiliary lanes - modify left-turn lane offset Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	1 Numbe rs 1 Numbe rs	400000 115607	3720010 115607	HSIP (Sectio n 148) HSIP (Sectio n 148)	Urban Principal Arterial - Other Non- Location Specific	17500	55 0	State Highway Agency State Highway Agency	Intersectio ns Pedestrian s	
43219 3-1	Roadway Roadway widening - travel lanes	0.33 Miles	110000 00	2901571 63	HSIP (Sectio n 148)	Urban Principal Arterial - Other	17500	55	State Highway Agency	Lane Departure	
43241 4-1	Roadway Rumble strips - edge or shoulder	32.18 Miles	259791	286791	HSIP (Sectio n 148)	Rural Principal Arterial - Other	4450	50	State Highway Agency	Lane Departure	
43242 5-1	Roadway Rumble strips - edge or shoulder	8.53 Miles	59729	59729	HSIP (Sectio n 148)	Urban Principal Arterial - Other	10050	60	State Highway Agency	Lane Departure	
43242 5-2	Roadway Rumble strips - edge or shoulder	6.65 Miles	45170	45170	HSIP (Sectio n 148)	Rural Principal Arterial - Other	4400	55	State Highway Agency	Lane Departure	
43311 1-1	Intersection geometry Auxiliary lanes - add left- turn lane	0.33 Miles	160114 7	1656000	HSIP (Sectio n 148)	Urban Principal Arterial - Other	17500	55	State Highway Agency	Intersectio ns	
43336 9-1	Intersection geometry Auxiliary lanes - add left- turn lane	1 Numbe rs	236524	237456	HSIP (Sectio n 148)	Urban Principal Arterial - Other	35000	45	State Highway Agency	Intersectio ns	
43337 0-1	Intersection geometry Intersection geometrics -	1 Numbe	519654	537921	HSIP (Sectio	Urban Principal	17500	55	State Highway	Intersectio ns	

	modify intersection corner	rs			n 148)	Arterial -			Agency		
	radius				,	Other			<i>U</i> ,		
43337	Intersection geometry	1	388223	395750	HSIP	Urban	30500	40	State	Intersectio	
2-1	Intersection geometrics -	Numbe			(Sectio	Principal			Highway	ns	
	modify intersection corner	rs			n 148)	Arterial -			Agency		
	radius					Other					
43337	Intersection geometry	1	224308	246000	HSIP	Rural	4946	55	State	Intersectio	
3-1	Auxiliary lanes - add left-	Numbe			(Sectio	Minor			Highway	ns	
	turn lane	rs			n 148)	Arterial			Agency		
43337	Lighting Intersection	1	216538	243530	HSIP	Rural	4946	55	State	Intersectio	
4-1	lighting	Numbe			(Sectio	Minor			Highway	ns	
		rs			n 148)	Arterial			Agency	-	
43337	Lighting Continuous	1.52	103480	1087453	HSIP	Urban	13546	40	State	Lane	
5-1	roadway lighting	Miles	9		(Sectio	Principal			Highway	Departure	
					n 148)	Arterial - Other			Agency		
43337	Lighting Continuous	1.14	490347	520364	HSIP	Urban	6571	40	State	Lane	
43337 6-1	roadway lighting	1.14 Miles	490347	520304	(Sectio	Principal	1/20	40	Highway	Departure	
0-1		WINES			n 148)	Arterial -			Agency	Departure	
					11 140)	Other			Agency		
43337	Pedestrians and bicyclists	1	4625	4625	HSIP	Non-	0	0	State	Pedestrian	
7-1	Miscellaneous pedestrians	Numbe			(Sectio	Location			Highway	s	
	and bicyclists	rs			n 148)	Specific			Agency		
43337	Intersection traffic control	1	124294	1242948	HSIP	Rural	4200	55	State	Intersectio	
9-1	Modify control - two-way	Numbe	8		(Sectio	Major			Highway	ns	
	stop to roundabout	rs			n 148)	Collector			Agency		
43339	Intersection traffic control	1	363890	3736378	HSIP	Rural	6137	60	State	Intersectio	
6-1	Modify control - two-way	Numbe	4		(Sectio	Minor			Highway	ns	
	stop to roundabout	rs			n 148)	Arterial			Agency		
43340	Access management	1	590579	593331	HSIP	Rural	19800	60	State	Intersectio	
2-1	Median crossover -	Numbe			(Sectio	Principal			Highway	ns	
	directional crossover	rs			n 148)	Arterial -			Agency		
						Other					

2016 Florida

43340	Access management	1	694585	727864	HSIP	Urban	38441	45	State	Intersectio	
7-1	Median crossover -	Numbe			(Sectio	Minor			Highway	ns	
	directional crossover	rs			n 148)	Arterial			Agency		
43340	Intersection geometry	1	870180	912355	HSIP	Urban	17400	40	State	Intersectio	
8-1	Auxiliary lanes - modify	Numbe			(Sectio	Minor			Highway	ns	
	free-flow turn lane	rs			n 148)	Arterial			Agency		
43340	Intersection geometry	1	428988	440696	HSIP	Urban	19800	60	State	Intersectio	
9-1	Intersection geometrics -	Numbe			(Sectio	Principal			Highway	ns	
	modify skew angle	rs			n 148)	Arterial -			Agency		
						Other					
43341	Pedestrians and bicyclists	1.14	250379	250379	HSIP	Urban	42500	40	State	Pedestrian	
1-1	Modify existing crosswalk	Miles			(Sectio	Principal			Highway	S	
					n 148)	Arterial -			Agency		
						Other					
43341	Intersection geometry	1	642925	657925	HSIP	Non-	0	0	State	Intersectio	
2-1	Intersection geometrics -	Numbe			(Sectio	Location			Highway	ns	
	miscellaneous/other/unspe	rs			n 148)	Specific			Agency		
	cified		2002250	200250				0	0.1		
43341	Intersection geometry	1	386250	386250	HSIP	Urban	0	0	Other	Intersectio	
6-1	Intersection geometrics - miscellaneous/other/unspe	Numbe			(Sectio	Local Road or Street			Local	ns	
	cified	rs			n 148)	orstreet			Agency		
43343	Intersection geometry	1	350000	350000	HSIP	Urban	3800	35	Other	Intersectio	
45545 6-1	Auxiliary lanes - add right-	ı Numbe	550000	550000	(Sectio	Minor	5600	55	Local	ns	
0-1	turn lane	rs			n 148)	Arterial			Agency	115	
43351	Roadway signs and traffic	365	231753	2322538	HSIP	Non-	0	0	State	Lane	
43351 9-2	control Roadway signs	Numbe	8	2322330	(Sectio	Location	0	0	Highway	Departure	
J-2	(including post) - new or	rs	0		n 148)	Specific			Agency	Departare	
	updated					opeenie			1.80109		
43430	Access management	2	376213	376213	HSIP	Urban	21000	45	State	Intersectio	
8-1	Change in access - close or	- Numbe	0,0210	0,0210	(Sectio	Principal		.0	Highway	ns	
	restrict existing access	rs			n 148)	Arterial -			Agency	-	
		-			- /	Other			0,		

2016 Florida

43480	Lighting Continuous	1.1	357971	367874	HSIP	Urban	30331	45	State	Lane	
9-1	roadway lighting	Miles			(Sectio	Principal			Highway	Departure	
					n 148)	Arterial -			Agency		
						Other					
43601	Access management	1	153715	1537153	HSIP	Urban	28000	45	Other	Intersectio	
2-1	Change in access - close or	Numbe	3		(Sectio	Minor			Local	ns	
	restrict existing access	rs			n 148)	Arterial			Agency		
43696	Intersection geometry	1	450000	450000	HSIP	Urban	0	0	Other	Intersectio	
5-1	Auxiliary lanes - add right-	Numbe			(Sectio	Local Road			Local	ns	
	turn lane	rs			n 148)	or Street			Agency		

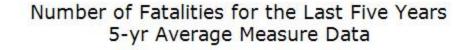
Progress in Achieving Safety Performance Targets

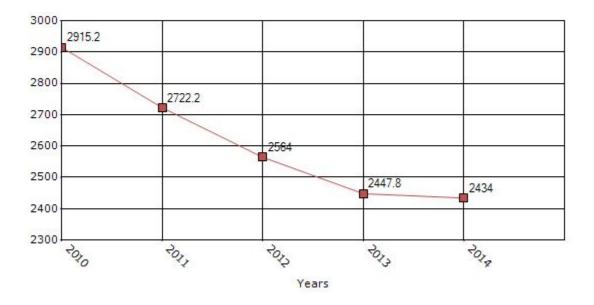
Overview of General Safety Trends

24. Present data showing the general highway safety trends in the state for the past five years.

Performance Measures*	2010 (5-yr avg)	2011 (5-yr avg)	2012 (5-yr avg)	2013 (5-yr avg)	2014 (5-yr avg)
Number of fatalities	2915.2	2722.2	2564	2447.8	2434
Number of serious injuries	24296.2	22585.2	21145	20437.8	20058.6
Fatality rate (per HMVMT)	1.46	1.38	1.32	1.26	1.25
Serious injury rate (per HMVMT)	12.14	11.42	10.86	10.55	10.31

*Performance measure data is presented using a five-year rolling average.

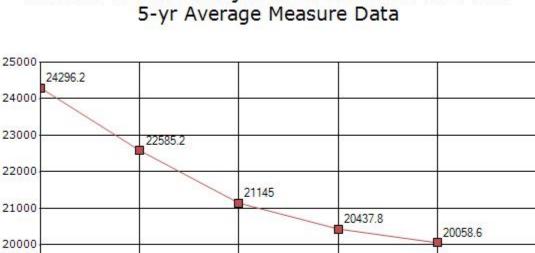




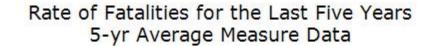
19000

2010

2011





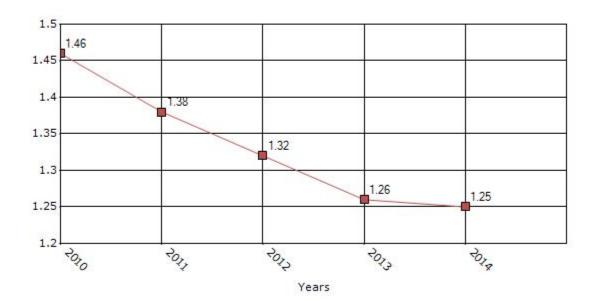


Years

2012

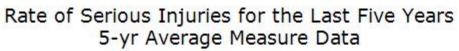
2013

POTA



22





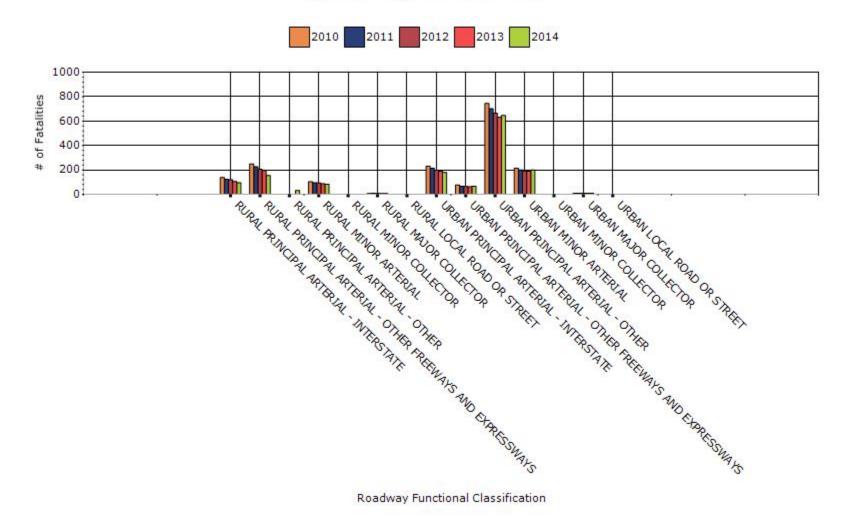
25. To the maximum extent possible, present performance measure data by functional classification and ownership.

Function Classification Number of fatalities Number of serious injuries Fatality rate (per HMVMT) Serious injury rate (per HMVMT) (5-yr avg) (5-yr avg) (5-yr avg) (5-yr avg) 5.03 RURAL PRINCIPAL 96.2 473.4 1.02 **ARTERIAL - INTERSTATE** 779.6 9.89 1.75 **RURAL PRINCIPAL** 155.2 **ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS** RURAL PRINCIPAL 32.4 111 0.45 1.53 **ARTERIAL - OTHER RURAL MINOR** 82.8 402.2 2.69 12.93 ARTERIAL 0.42 4.89 **RURAL MINOR** 0.4 COLLECTOR **RURAL MAJOR** 7 45.8 0.93 1.14 COLLECTOR 5.09 URBAN PRINCIPAL 0.7 179.8 1310 **ARTERIAL - INTERSTATE** URBAN PRINCIPAL 67.2 435.8 0.57 3.72 **ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS** URBAN PRINCIPAL 646.4 5605.2 1.82 15.78 **ARTERIAL - OTHER URBAN MINOR** 198.8 1721.2 1.57 13.54 ARTERIAL 0.4 0.09 0.19 **URBAN MINOR** COLLECTOR

Year - 2014

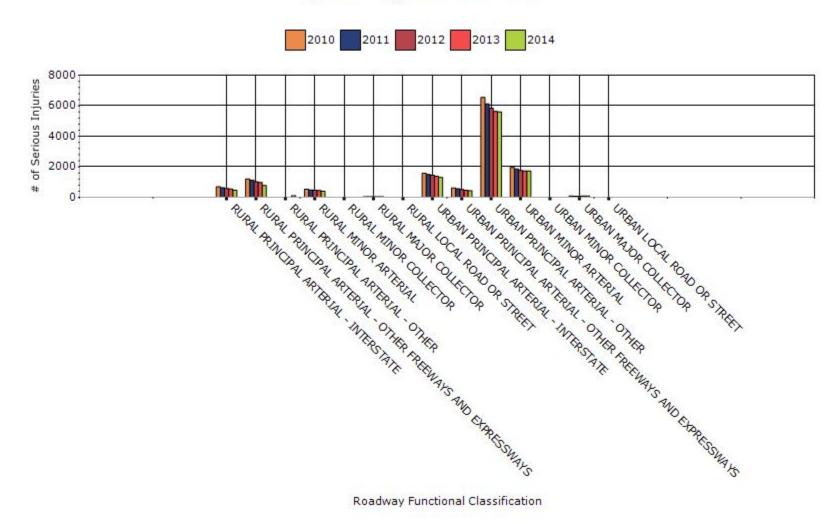
URBAN MAJOR	9	83.8	0.39	3.66
COLLECTOR				

Fatalities by Roadway Functional Classification 5-yr Average Measure Data

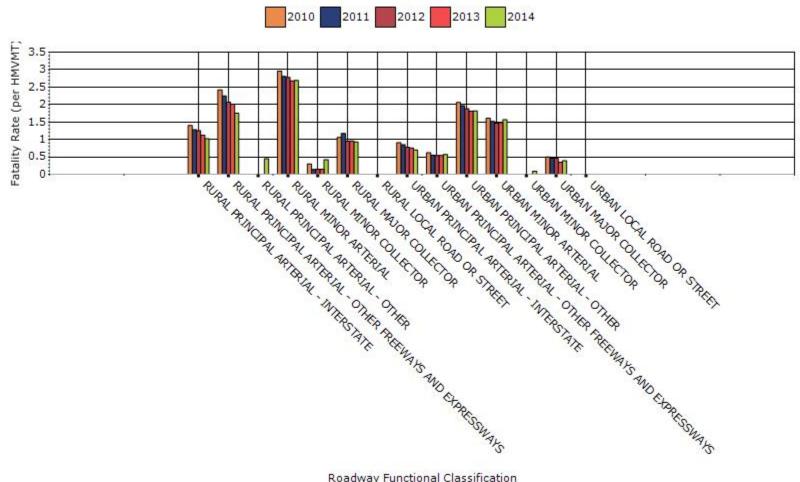


26

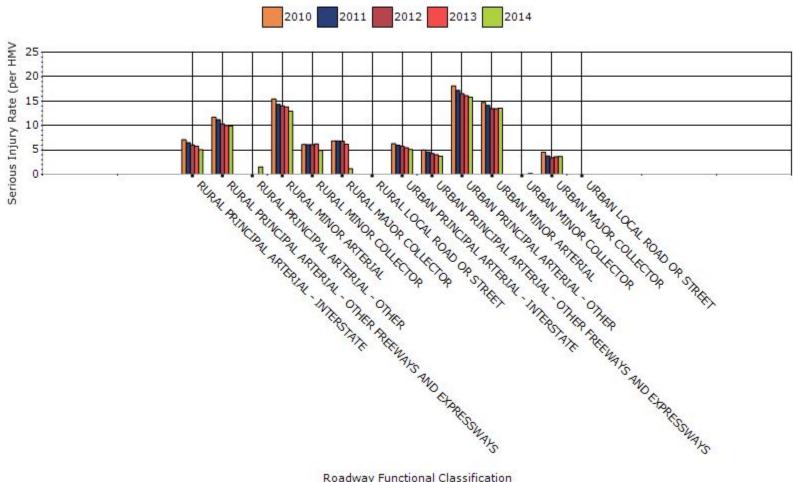
Serious Injuries by Roadway Functional Classification 5-yr Average Measure Data



Fatality Rate by Roadway Functional Classification 5-yr Average Measure Data



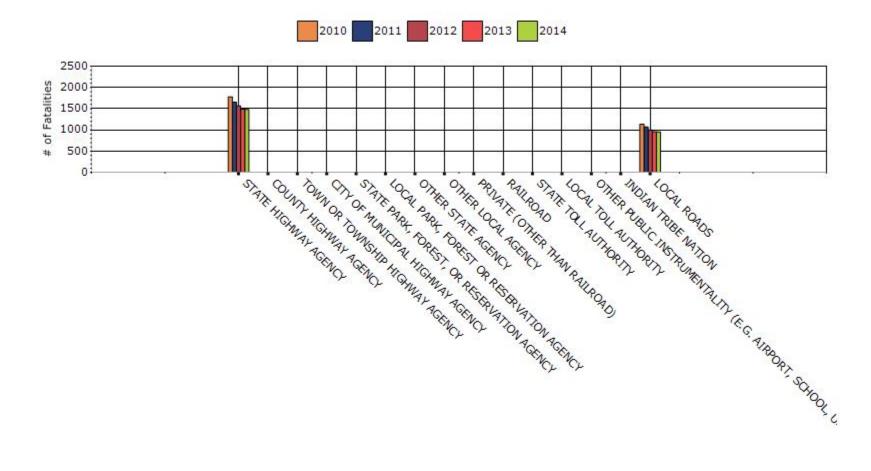
Serious Injury Rate by Roadway Functional Classification 5-yr Average Measure Data



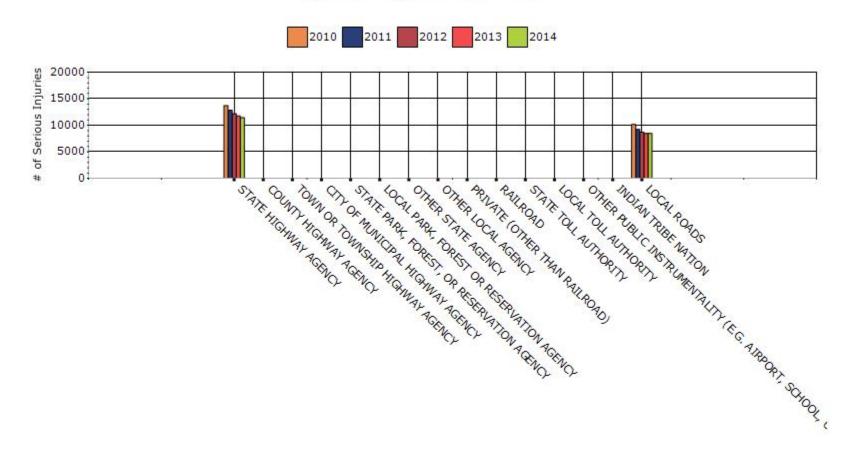
Year - 2014

Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	1481.8	11415.2	1.33	10.26
LOCAL ROADS	950.4	8479	1.13	10.06

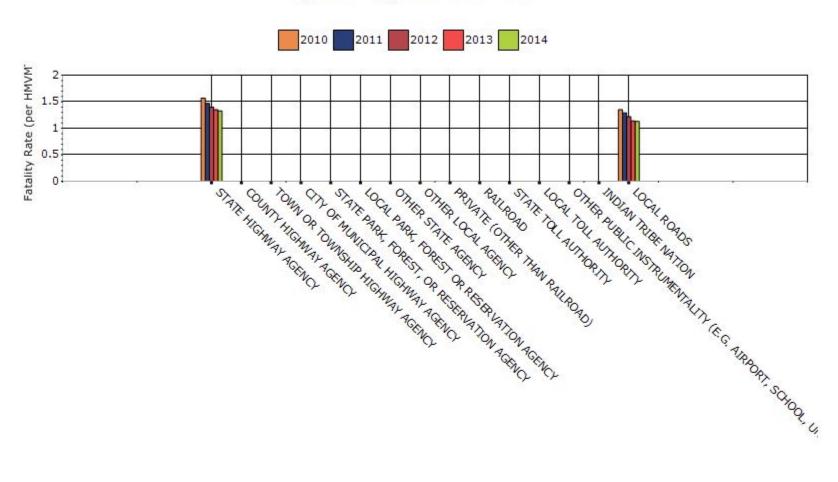
Number of Fatalities by Roadway Ownership 5-yr Average Measure Data



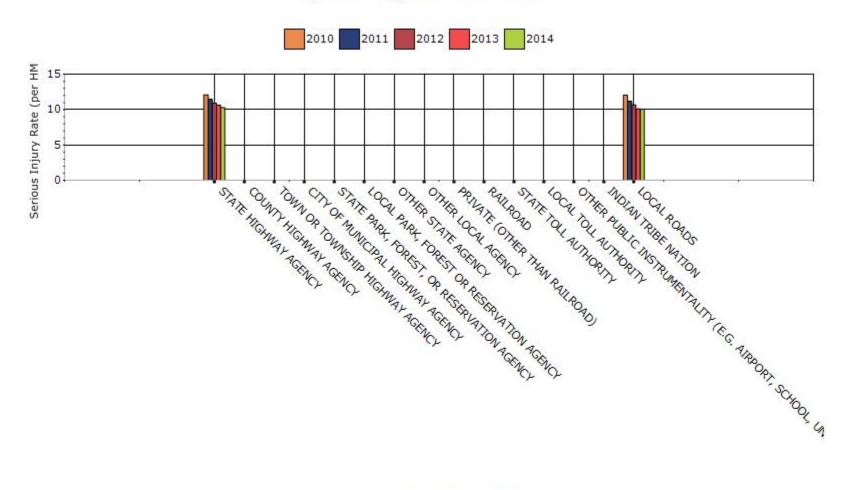
Number of Serious Injuries by Roadway Ownership 5-yr Average Measure Data



Fatality Rate by Roadway Ownership 5-yr Average Measure Data



Serious Injury Rate by Roadway Ownership 5-yr Average Measure Data



Roadway Functional Classification

26. Describe any other aspects of the general highway safety trends on which you would like to elaborate.

Question 25

Serious injury and fatality counts and rates were excluded from the data in question 25 for two federal functional classifications. Data for Urban and Rural Local Roads and Streets was excluded due to the low frequency of crashes and low volume which resulted in artificially high rates. The proportion of the functionally classified roads in this category in FDOT's data is too small to draw any definitive conclusions from the counts or rates.

Application of Special Rules

27. Present the rate of traffic fatalities and serious injuries per capita for drivers and pedestrians 65 years of age and older.

Older Driver Performance Measures	2010 (5-yr avg)	2011 (5-yr avg)	2012 (5-yr avg)	2013 (5-yr avg)	2014 (5-yr avg)
Fatality rate (per capita)			0.11	0.1	0.1
Serious injury rate (per capita)			0.54	0.52	0.51
Fatality and serious injury rate (per capita)			0.64	0.63	0.61

*Performance measure data is presented using a five-year rolling average.

Year	Count of Seriously Injured Drivers and Pedestrians (SI)	Count of Fatally Injured Drivers and Pedestrians (F)	Combined F and SI	Population Figure
2008	2,111	336	2,111	3,183
2009	2,167	340	2,167	3,199
2010	2,096	371	2,096	3,273
2011	2,086	340	2,086	3,359
2012	2,145	343	2,145	3,509
2013	2,115	351	2,115	3,644
2014	2,264	365	2,264	3,791

Calculation / Methods of deriving the values entered for Fatality and Serious Injury Rate (per capita)

Yearly Crash Rate = Combined F and SI for given year / Population Figure

5 Year Average Crash Rate = 5 Yearly Crash Rates / 5

Example, 2013 5-Year Average Crash Rate:

2010: 2096 / 3273 = 0.64 2011: 2086 / 3359 = 0.62 2012: 2145 / 3509 = 0.61 2013: 2115 / 3644 = 0.58 2014: 2264 / 3791 = 0.60

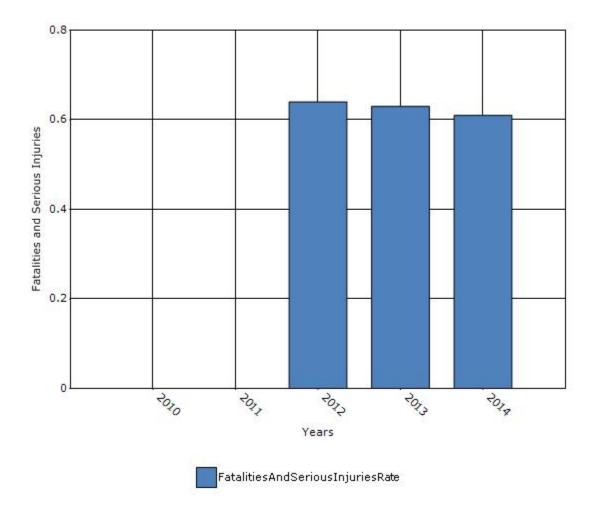
(0.64 + 0.62 + 0.61 + 0.58 + 0.60) = 3.05 / 5 = 0.61

Data Sources:

Fatals - FARS (Persons age 65 - 120, person type 1 (Driver) + 5 (Pedestrian), Injury = 4 (Fatal), State = 12 (Florida))

Serious Injuries - Florida Department of Highway Safety and Motor Vehicles - Five Year Crash Trends

Rate of Fatalities and Serious injuries for the Last Five Years 5-yr Average Measure Data



28. Does the older driver special rule apply to your state?

No

Assessment of the Effectiveness of the Improvements (Program Evaluation)

29. What indicators of success can you use to demonstrate effectiveness and success in the Highway Safety Improvement Program?

Other-Reduction in Fatalities and Serious Injuries

30. What significant programmatic changes have occurred since the last reporting period?

None

31. Briefly describe significant program changes that have occurred since the last reporting period.

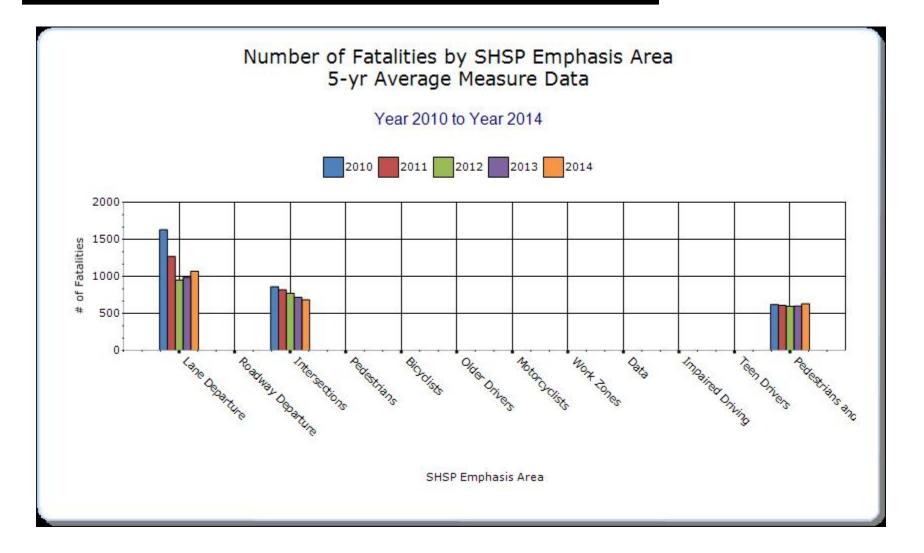
None.

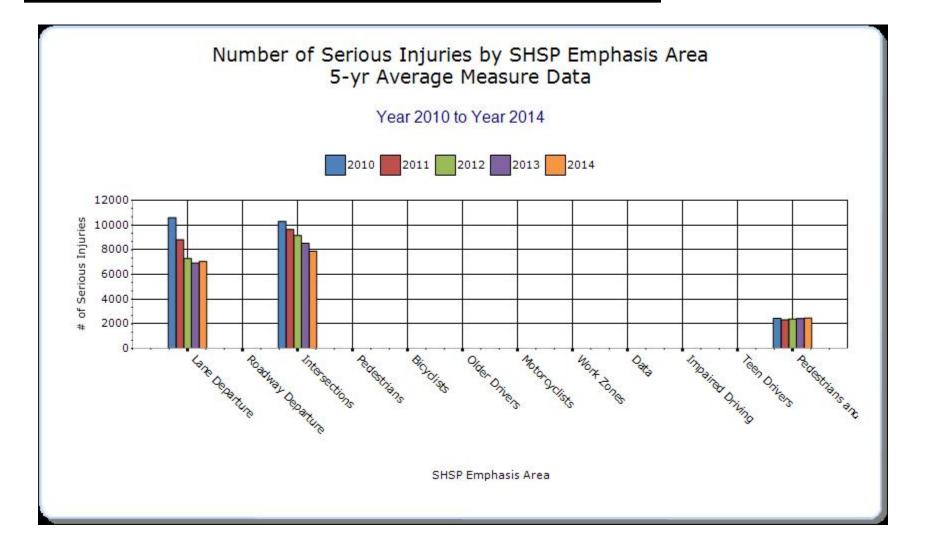
SHSP Emphasis Areas

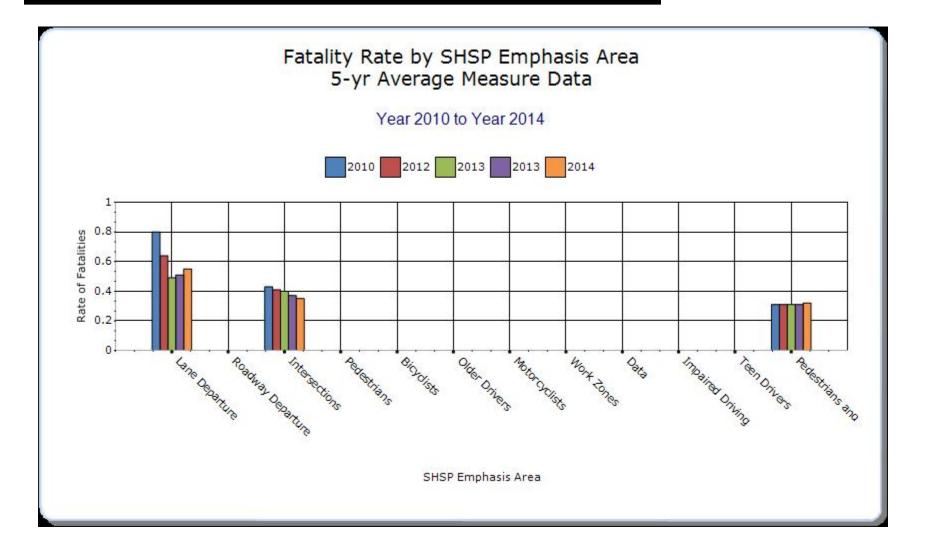
32. Present and describe trends in SHSP emphasis area performance measures.

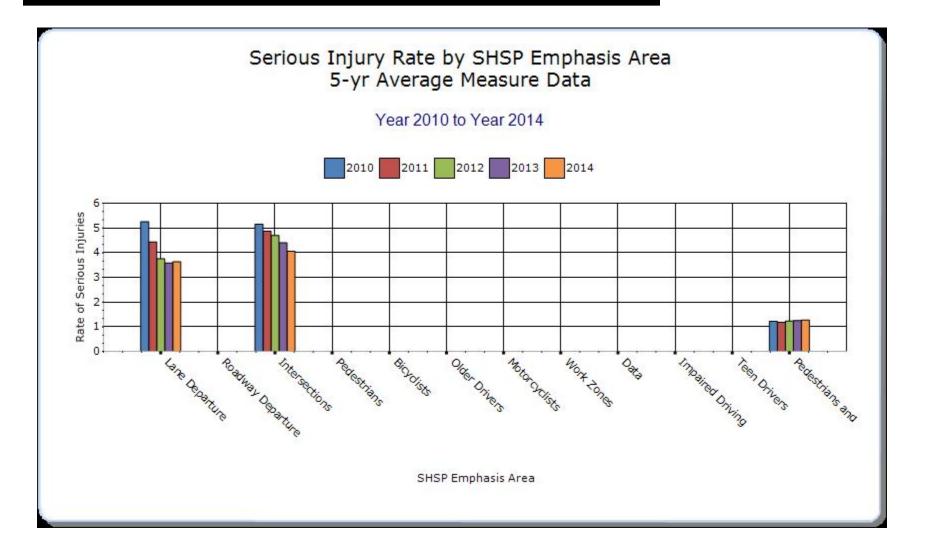
HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities (5-yr avg)	Number of serious injuries (5-yr avg)	Fatality rate (per HMVMT) (5-yr avg)	Serious injury rate (per HMVMT) (5-yr avg)	Other- 1 (5-yr avg)	Other- 2 (5-yr avg)	Other- 3 (5-yr avg)
Lane Departure	Run-off-road	1068	7042	0.55	3.63			
Intersections	Intersections	683.6	7881.4	0.35	4.06			
Pedestrians and	All	631	2459.8	0.32	1.27			
Bicyclists								

Year - 2014









Groups of similar project types

33. Present the overall effectiveness of HSIP subprograms.

Year - 2014

HSIP Sub- program Types	Target Crash Type	Number of fatalities (5-yr avg)	Number of serious injuries (5-yr avg)	Fatality rate (per HMVMT) (5-yr avg)	Serious injury rate (per HMVMT) (5-yr avg)	Other-1 (5-yr avg)	Other-2 (5-yr avg)	Other-3 (5-yr avg)
Pedestrian Safety		514.6	1610.2	0.26	0.83			
Intersection		683.6	7881.4	0.35	4.06			
Bicycle Safety		116.4	846	0.06	0.43			

Systemic Treatments

34. Present the overall effectiveness of systemic treatments.

Year - 2014

Systemic improvement	Target Crash Type	Number of fatalities (5-yr avg)	Number of serious injuries (5-yr avg)	Fatality rate (per HMVMT) (5-yr avg)	Serious injury rate (per HMVMT) (5-yr avg)	Other- 1 (5-yr avg)	Other- 2 (5-yr avg)	Other- 3 (5-yr avg)
Add/Upgrade/Modify/Remove Traffic Signal		683.6	7881.4	0.35	4.06			

35. Describe any other aspects of the overall Highway Safety Improvement Program effectiveness on which you would like to elaborate.

Question 32

Crash data reported for Lane Departure crashes should be viewed in light of the fact that the Florida Traffic Crash Report - Long Form changed significantly in 2011. Due to the changes in the crash report form, the definition of a Lane Departure crash was significantly changes. As a result, the frequency of crashes is very different when comparing 2010 and earlier crash data to 2011 and later crash data.

Question 36

Crash counts for both totals and crash severity were excluded from the data submitted as part of the option project evaluation. The evaluation results were calculated using the FDOT's Crash Analysis and System Hub (CRASH), which performs a naïve before / after analysis on state roadways. The output from the CRASH system provided before / after crash data with both target crash types (head-on, left turn, rear end, etc) and total crashes by injury severity (fatal, serious injury, etc). Unfortunately, it does not provide target crash types by crash severity level, which is the evaluation method FDOT used for the project evaluation.

FDOT performed a project evaluation using a naïve before / after method using the following parameters:

-3 calendar years of pre and post construction crash data, excluding 1 year before and after the construction period

-The project benefits were calculated using FDOT's average cost per crash on state roadways of \$155,695

-The project costs were provided by FDOT district staff through the CRASH system

-The change in crashes was measured as the change in total crashes in all improvement categories except:

Rumble Strips, Pedestrian Improvements, Access Management, Lighting, High Friction Surface Treatment and Auxiliary Lanes

Project Evaluation

36. Provide project evaluation data for completed projects (optional).

Location		Improvement Category	Improvement Type	Bef- Fatal	Bef- Serious Injury	Bef-All Injuries		Fatal	Aft-All Injuries		Evaluation Results (Benefit/ Cost Ratio)
53130000 from 8.400 to 0.3			Splitter island - install on one or more approaches								-1
18030000 from 10.600 to 0.267	Minor		Modify traffic signal - modernization/replacement								0.8

05020000 from 20.642 to 8.818	Minor	Roadway	Rumble strips - edge or shoulder						6.7
10075333 from 0.000 to 0.145	Rural Principal Arterial Interstate	Roadway	Pavement surface - high friction surface						16.8
		Intersection geometry	Auxiliary lanes - add acceleration lane						-1.8
08080000 from 4.441 to 6.238	Rural Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						8.6

08070000 from 0.000 to 7.022	Rural Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						37.9
02030000 from 15.570 to 7.795	Principal		Modify traffic signal - modify signal mounting (spanwire to mast arm)						-10.3
02030000 from 19.211 to 0.319	Principal	Intersection geometry	Auxiliary lanes - add left- turn lane						-3.7
06010000 from 0.000 to 3	Rural Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						16.5

13050000 from 22.134 to 8.651	Principal	Roadway	Pavement surface - miscellaneous						-0.4
03010000 from 24.687 to 3.727	Principal	Roadway	Rumble strips - edge or shoulder						10.7
05010000 from 10.724 to 5.276	Principal	Roadway	Rumble strips - edge or shoulder						-5.1
09060000 from 0.000 to 22.925	Rural Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						9.7

6.272 to	Rural Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						4.9
17030000 from 3.870 to 2.083	Urban Collector	Roadway	Pavement surface - miscellaneous						-0.1
17030000 from 5.953 to 3	Urban Collector	Roadway	Pavement surface - miscellaneous						-0.1
29010000 from 3.767 to 0.02	Urban Minor Arterial	Intersection geometry	Auxiliary lanes - add left- turn lane						3.1

87008000 from 7.005 to 0.345	Urban Minor Arterial	Interchange design	Interchange design - other						8.6
87026000 from 7.751 to 0.1		Access management	Change in access - close or restrict existing access						-7.8
75250000 from 0.939 to 0.189	Urban Minor Arterial	Intersection geometry	Auxiliary lanes - add left- turn lane						-1.4
93012000 from 2.761 to 0.306		Intersection geometry	Intersection geometrics - modify intersection corner radius						18.2

16100000 from 0.000 to 0.414	Urban Principal Arterial - Other	Roadway	Pavement surface - high friction surface						-1
from	Urban Principal Arterial - Other	Intersection traffic control	Modify traffic signal - add additional signal heads						-20.1
94120000 from 5.922 to 0.1	Urban Principal Arterial - Other		Modify traffic signal timing - left-turn phasing (permissive to protected/permissive)						-1.8
03080000 from 37.309 to 0.502	Principal	Pedestrians and bicyclists	Pedestrian signal - install new at non-intersection location						27

11200000 from 4.000 to 29.71	Urban Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						3.4
03010000 from 3.539 to 0.5		Pedestrians and bicyclists	Install sidewalk						-1
87001000 from 7.787 to 0.076	Urban Principal Arterial - Other	Intersection geometry	Splitter island - install on one or more approaches						3.1
15010000 from 8.853 to 0.289	Urban Principal Arterial - Other	Pedestrians and bicyclists	Install sidewalk						-21.7

Highway Safety Improvement Program

02030000 from 14.003 to 0.4	Principal	Pedestrians and bicyclists	Install new crosswalk						-1
	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left- turn lane						45.4
10290000 from 7.029 to 0.1	Urban Principal Arterial - Other	Access management	Change in access - close or restrict existing access						3.8
08040000 from 0.000 to 4.07	Urban Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						24.1

55

02030000 from 3.382 to 3.429	Urban Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						1.3
14050000 from 0.037 to 3.709	Urban Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						17.3
10060000 from 0.000 to 7.58	Urban Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						33
10120000 from 0.683 to 5.603	Urban Principal Arterial - Other	Roadway	Rumble strips - edge or shoulder						36.2

	Urban Principal Arterial - Other	Pedestrians and bicyclists	Install sidewalk						7.7
10150000 from 11.620 to 0.705	Principal	Roadway	Pavement surface - high friction surface						-4
10130000 from 7.590 to 0.152	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left- turn lane						11
15220000 from 0.197 to 1.028	Urban Principal Arterial - Other	Lighting	Continuous roadway lighting						-6.2

87120000 from 5.793 to 0.515		Intersection geometry	Auxiliary lanes - add left- turn lane						-8.7
02030000 from 14.396 to 0.462	Principal	Roadway	Pavement surface - miscellaneous						-6.3
15090000 from 7.340 to 2.652	Urban Principal Arterial - Other	Roadway	Pavement surface - miscellaneous						-3.6
10160000 from 0.280 to 1.529	Urban Principal Arterial - Other	Access management	Raised island - install new						49.9

9.596 to	Urban Principal Arterial - Other	Access management	Raised island - install new						53
26090000 from 12.700 to 0.949	Principal	Access management	Change in access - close or restrict existing access						14.2
87001000 from 7.825 to 0.17	Urban Principal Arterial - Other	Intersection geometry	Splitter island - install on one or more approaches						0.5
86110000 from 3.014 to 0.142	Urban Principal Arterial - Other		Intersection flashers - add advance intersection warning sign-mounted						-1

86100000 from 19.711 to 0.705	Principal		Modify traffic signal - add additional signal heads						6.8
87020000 from 12.333 to 0.1	Principal	Intersection geometry	Auxiliary lanes - extend existing left-turn lane						-98.7
	Urban Principal Arterial - Other	Access management	Change in access - close or restrict existing access						1.5
12011000 from 8.310 to 0.102	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - extend existing left-turn lane						45.5

20.854 to	Principal	Intersection geometry	Auxiliary lanes - add left- turn lane						0.3
		Access management	Median crossover - directional crossover						2.9
71110000 from 25.928 to 0.4	Principal	Intersection geometry	Auxiliary lanes - add left- turn lane						1.9
87030000 from 23.329 to 0.342	Principal	Intersection geometry	Auxiliary lanes - add left- turn lane						233.2

90060000 from 25.780 to 0.395	Principal	Access management	Median crossover - directional crossover						-6.7
87019000 from 1.660 to 0.056		Intersection geometry	Auxiliary lanes - add right- turn lane						-9.4
87047000 from 9.222 to 0.1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left- turn lane						2.8
70002000 from 0.088 to 0.129			Modify traffic signal - modernization/replacement						0.7

16010000 from 0.000 to 0.189	Urban Principal Arterial - Other	Lighting	Continuous roadway lighting						-30.2
36110000 from 25.491 to 0.24	Principal	Access management	Median crossover - directional crossover						-42.4
93150000 from 0.920 to 0.1	Urban Principal Arterial - Other	Lighting	Intersection lighting						-16.1
46160000 from 9.598 to 0.175	Urban Principal Arterial - Other		Modify traffic signal - modernization/replacement						-14.8

79010000 from 30.564 to 2.132	Principal	Access management	Raised island - install new						-5.4
10190051 from 0.000 to 0.183	Urban Principal Arterial Interstate	Roadway	Pavement surface - high friction surface						53.2
87270000 from 14.525 to 0.1	Principal	Shoulder treatments	Pave existing shoulders						-6.5

Optional Attachments

Sections

Files Attached

Glossary

5 year rolling average means the average of five individual, consecutive annual points of data (e.g. annual fatality rate).

Emphasis area means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.

Highway safety improvement project means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.

HMVMT means hundred million vehicle miles traveled.

Non-infrastructure projects are projects that do not result in construction. Examples of noninfrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.

Older driver special rule applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.

Performance measure means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives. **Programmed funds** mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.

Roadway Functional Classification means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

Strategic Highway Safety Plan (SHSP) means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.

Systematic refers to an approach where an agency deploys countermeasures at all locations across a system.

Systemic safety improvement means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.

Transfer means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.