Highway Safety Improvement Program

Data Driven Decisions

Florida
Highway Safety Improvement Program
2015 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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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 crash trend from 2009 to 2013 within each emphasis areas shows that in most cases we are meeting the 5% reduction goal. The state is meeting its overall goal of a 5% reduction in fatal and serious injury crashes. The state is also exceeding the reduction goal in the following emphasis areas: Intersections, Lane Departure, Teen Drivers and Impaired Driving. With the implementation of more stringent laws regarding the licensing of teen drivers, this emphasis area saw a 20% reduction below the plan's goal in fatal and serious injury crashes in 2013. The state is not meeting the reduction goal in the following emphasis areas: Pedestrians and Bicyclists, Motorcyclists and Drivers Age 65and Older. In the case of Motorcyclists, crashes are being reduced, but not as much as the plan requires. In the remaining emphasis areas, the crashes are either holding steady or increasing. There are many efforts underway through diverse coalitions of stakeholders to address all emphasis areas.

Due to changes in Florida's crash report form in 2010, crash trends for the Aggressive Driving and Distracted Driving emphasis areas are not being reported at this time. As with the other emphasis areas, efforts are underway to address these crash types.

The department received an allocation of $120.1 million in Highway Safety Improvement Program and High Risk Rural Road funds during the 2014 state fiscal year, which began on July 1, 2014, and ended on June 30, 2015. The two funding allocations received were $118.9 million for the Highway Safety Improvement Program and $1.2 million for the High Risk Rural Roads program. This funding was used to complete 263 projects which were in various stages of planning, design, construction or close-out. 131 of these projects were construction projects or other safety projects which significantly advanced the

state's plan. $13.4 million of the funds were used for projects on local roadways. Additionally, $10 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 a high frequency of crashes in the future.

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 137 projects, totaling $59.7 million in funding, the Lane Departure emphasis area had 62 projects, totaling $32.9 million in funding and the Pedestrian and Bicyclist emphasis area had 54 projects, totaling $16.5 million in funding. 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.

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

How are Highway Safety Improvement Program funds allocated in a State?

☒ Central

☐ District

☐ Other

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 indentified a coordinated effort with the District Safety Engineer and the Community Traffic Safety Teams.

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

☒Design

☒Planning

☐Maintenance

☒Operations

☒Governors Highway Safety Office

☐Other:

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.

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

☒Metropolitan Planning Organizations

☐ Governors Highway Safety Office

☒ Local Government Association

☒ Other: Other-Community Traffic Safety Team (CTST)

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

☐ Multi-disciplinary HSIP steering committee

☒ Other: Other-None

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

Select the programs that are administered under the HSIP.

☐ Median Barrier	☒ Intersection	☐ Safe Corridor
☐ Horizontal Curve	☒ Bicycle Safety	☐ Rural State Highways
☒ Skid Hazard	☒ Crash Data	☐ Red Light Running Prevention
☐ Roadway Departure	☐ Low-Cost Spot Improvements	☐ Sign Replacement And

		Improvement
☐ Local Safety	☒ Pedestrian Safety	☐ Right Angle Crash
☐ Left Turn Crash	☐ Shoulder Improvement	☒ Segments
☐ Other:		

Program: **Intersection**

Date of Program Methodology: **9/1/2007**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☒ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☒ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☒ Other-Mile Point

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

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

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☒ 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).

☐ Relative Weight in Scoring

☒ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Other

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

Program: **Bicycle Safety**

Date of Program Methodology: **9/12/2012**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☐ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☒ Fatal and serious injury crashes only	☒ Population	☐ Functional classification

☐ Other

☐ Lane miles

☐ Roadside features

☐ Other

☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☒ 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

☐ No

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

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☒Competitive application process

☐selection committee

☒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).

☐Relative Weight in Scoring

☒Rank of Priority Consideration

- ☐Ranking based on B/C
- ☐Available funding
- ☐Incremental B/C
- ☐Ranking based on net benefit
- ☒Cost Effectiveness 1

Program: **Skid Hazard**

Date of Program Methodology: **9/1/2007**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☒ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☒ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☒ Other-Friction Number

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☐ Other

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).

☐ Relative Weight in Scoring

☐ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☐ Other

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

Program: **Crash Data**

Date of Program Methodology: **9/1/2006**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☒ Traffic	☒ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☐ Fatal and serious injury crashes only	☐ Population	☒ Functional classification
☒ Other-Fatal, Serious Injury, Injury and PDO Crashes reported on Florida Traffic Crash Report, Long Form.	☐ Lane miles	☒ Roadside features
	☐ Other	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☐ Yes

☒ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☐ Other

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).

☐ Relative Weight in Scoring

☐ Rank of Priority Consideration

- ☐ Ranking based on B/C
- ☐ Available funding
- ☐ Incremental B/C
- ☐ Ranking based on net benefit
- ☐ Other

Program: **Pedestrian Safety**

Date of Program Methodology: **9/1/2012**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☐ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☒ Fatal and serious injury crashes only	☒ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☐ Other

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☒ 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

☐ No

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

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☒ Competitive application process

☐ selection committee

☐ Other

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).

☐ Relative Weight in Scoring

☒ Rank of Priority Consideration

☐ Ranking based on B/C

☐ Available funding

☐ Incremental B/C

☐ Ranking based on net benefit

☒ Cost Effectiveness 1

Program: **Segments**

Date of Program Methodology: **9/1/2007**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
☐ All crashes	☒ Traffic	☐ Median width
☐ Fatal crashes only	☐ Volume	☐ Horizontal curvature
☒ Fatal and serious injury crashes only	☐ Population	☐ Functional classification
☐ Other	☐ Lane miles	☐ Roadside features
	☐ Other	☒ Other-Mile Point

What project identification methodology was used for this program?

☒ Crash frequency

☐ Expected crash frequency with EB adjustment

☐ Equivalent property damage only (EPDO Crash frequency)

☐ EPDO crash frequency with EB adjustment

☐ Relative severity index

☒ Crash rate

☐ Critical rate

☐ Level of service of safety (LOSS)

☐ Excess expected crash frequency using SPFs

☐ Excess expected crash frequency with the EB adjustment

☐ Excess expected crash frequency using method of moments

☐ Probability of specific crash types

☐ Excess proportions of specific crash types

☐ Other

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

☒ Yes

☐ No

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

☒ Yes

☐ No

How are highway safety improvement projects advanced for implementation?

☐ Competitive application process

☐ selection committee

☒ 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).

☐ Relative Weight in Scoring

☒Rank of Priority Consideration

☐Ranking based on B/C

☐Available funding

☐Incremental B/C

☐Ranking based on net benefit

☐Other

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

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

9

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

☐Cable Median Barriers

☐Traffic Control Device Rehabilitation

☐Install/Improve Signing

☐Upgrade Guard Rails

☐Safety Edge

☒Add/Upgrade/Modify/Remove Traffic Signal

☒Rumble Strips

☐Pavement/Shoulder Widening

☒Install/Improve Pavement Marking and/or Delineation

☐Clear Zone Improvements

☐Install/Improve Lighting

☐Other

What process is used to identify potential countermeasures?

☒ Engineering Study

☒ Road Safety Assessment

☐ Other:

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

☐ Highway Safety Manual

☐ Road Safety audits

☐ Systemic Approach

☒ Other: Other-None

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

The Florida Department of Transportation has begun to incorporate the AASHTO Highway Safety Manual into our safety evaluation process. The department has assembled a team to determine ways in which the manual can be incorporated beyond safety into planning, design and other parts of the departments project development and operations procedures.

Additionally, the State Safety Office has begun using the Net Present Value of district submitted projects to assist in determining allocation of HSIP funds.

Progress in Implementing Projects

Funds Programmed

Reporting period for Highway Safety Improvement Program funding.

☐ Calendar Year

☒ State Fiscal Year

☐ Federal Fiscal Year

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

Funding Category	Programmed*		Obligated	
HSIP (Section 148)	118944433	99 %	118944433	99 %
HRRRP (SAFETEA-LU)	1208619	1 %	1208619	1 %
HRRR Special Rule				
Penalty Transfer - Section 154				
Penalty Transfer – Section 164				
Incentive Grants - Section 163				
Incentive Grants (Section 406)				
Other Federal-aid Funds (i.e. STP, NHPP)				
State and Local Funds				

Totals	120153052	100%	120153052	100%

How much funding is programmed to local (non-state owned and maintained) safety projects?

$13,440,598.00

How much funding is obligated to local safety projects?

$13,440,598.00

How much funding is programmed to non-infrastructure safety projects?

$24,271,069.00

How much funding is obligated to non-infrastructure safety projects?

$27,271,069.00

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?

$0.00

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

There are no impediments to obligating Highway Safety Improvement Program Funds.

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

Projects which are included in the project listing (question 23), include those funded with Highway Safety Improvement Program or High Risk Rural Roads Program funds. These projects took place during the 2014 fiscal year (July 1, 2014 through June 30, 2015). Lastly, the project listing is not comprehensive, but represents those projects which were a construction project or significantly advanced the state's safety goals during the reporting period.

General Listing of Projects

List each highway safety improvement project obligated during the reporting period.

Project	Improvement Category	Output	HSIP Cost	Total Cost	Funding Category	Functional Classification	AADT	Speed	Roadway Ownership	Relationship to SHSP	
										Emphasis Area	Strategy
190258-1	Non-infrastructure Data/traffic records	1 Numbers	1485962	9317399	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians and Bicyclists	
211079-2	Non-infrastructure Road safety audits	1 Numbers	197256	197256	HSIP (Section 148)		0	0	State Highway Agency	Lane Departure	
211079-5	Non-infrastructure Road safety audits	1 Numbers	177764	177764	HSIP (Section 148)		0	0	Other Local Agency	Intersections	
254647-1-53-01	Roadway delineation Roadway delineation - other	1 Numbers	832691	832691	HSIP (Section 148)		0	0	State Highway Agency	Lane Departure	
254677-2	Non-infrastructure Transportation safety planning	1 Numbers	7367989	7506615	HSIP (Section 148)		0	0	State Highway Agency	Used for Multiple Engineering Emphasis	

										Areas	
410625-4	Intersection geometry Intersection geometry - other	3.661041 Miles	225512	715589	HSIP (Section 148)	Urban Principal Arterial - Other	28999.9471416719	45	State Highway Agency	Intersections	
412473-5	Intersection geometry Intersection geometry - other	0.248402 Miles	2501	139790	HSIP (Section 148)	Urban Principal Arterial - Other	32825.264402058	35	State Highway Agency	Intersections	
413202-2	Roadway Rumble strips - center	19.391314 Miles	190423	190423	HSIP (Section 148)	Rural Major Collector	1404.898220409 41	55	Other Local Agency	Lane Departure	
415495-1	Intersection traffic control Intersection traffic control - other	1 Numbers	4964	4964	HSIP (Section 148)		0	0	State Highway Agency	Lane Departure	
419615-3	Roadway Rumble strips - edge or shoulder	2.255768 Miles	71609	71609	HSIP (Section 148)	Rural Local Road or Street	0	0	Other Local Agency	Lane Departure	
422612-2	Intersection traffic control Modify traffic signal timing - left-turn phasing (permissive to	3.760853 Miles	125910	149340	HSIP (Section 148)	Urban Principal Arterial - Other	41499.6992412919	35	State Highway Agency	Intersections	

	protected-only)										
422814-1	Non-infrastructure Outreach	1 Numbers	603259	1161470	HSIP (Section 148)		0	0	State Highway Agency	Intersections	
423022-1	Shoulder treatments Pave existing shoulders	17.029469 Miles	32856	481807	HSIP (Section 148)	Rural Minor Arterial	2321.00018738425	45	Other Local Agency	Pedestrians and Bicyclists	
423088-1	Intersection traffic control Modify traffic signal - modernization/replacement	9.372627 Miles	323097	4805098	HSIP (Section 148)	Urban Minor Arterial	46703.6514720133	50	State Highway Agency	Intersections	
424898-1	Access management Raised island - modify existing	1.871626 Miles	874271	3433796	HSIP (Section 148)	Urban Minor Arterial	37975.4889331522	45	State Highway Agency	Intersections	
425271-2	Access management Raised island - modify existing	1.54 Miles	4444	37014	HSIP (Section 148)		12700	30	State Highway Agency	Intersections	
425273-4	Intersection geometry Auxiliary lanes - modify left-turn lane offset	0.020051 Miles	274790	284715	HSIP (Section 148)	Urban Principal Arterial - Other	28372.469203531	40	State Highway Agency	Intersections	
425646-2	Roadway delineation Roadway delineation	1 Number	57049	57049	HSIP (Sectio		0	0	Non-Location	Intersections	

	- other	s			n 148)				Specific Project		
425646-3	Non-infrastructure Educational efforts	1 Numbers	33354	33354	HSIP (Section 148)		0	0	Non-Location Specific Project	Lane Departure	
425697-1-HRRR	Roadway Roadway widening - travel lanes	4.57 Miles	512236	512236	HRRRP (SAFETEA-LU)	Rural Local Road or Street	0	0	Other Local Agency	Lane Departure	
427012-2	Intersection traffic control Intersection traffic control - other	0.159138 Miles	620457	637342	HSIP (Section 148)	Urban Principal Arterial - Other	32000.0411089746	50	State Highway Agency	Intersections	
427154-1	Intersection traffic control Modify traffic signal - modernization/replacement	0.992429 Miles	452000	1802400	HSIP (Section 148)	Urban Principal Arterial - Other	28120.4260963234	45	State Highway Agency	Intersections	
427204-1	Intersection geometry Auxiliary lanes - extend existing left-turn lane	0.369584 Miles	1090612	1141819	HSIP (Section 148)	Urban Principal Arterial - Other	22349.2618809256	45	State Highway Agency	Intersections	
427298-1	Intersection traffic control Modify traffic	0.06034	380608	429472	HSIP (Sectio	Urban Principal	46300.142575	45	State Highway	Intersecti	

	signal - modernization/replacement	7 Miles			n 148)	Arterial - Other	4387		Agency	ons	
427307-1	Intersection traffic control Modify traffic signal - modernization/replacement	0.058336 Miles	370581	385661	HSIP (Section 148)	Urban Principal Arterial - Other	45499.9331801975	45	State Highway Agency	Intersections	
427310-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.311806 Miles	963611	1016150	HSIP (Section 148)	Urban Minor Arterial	7300.00872657999	50	State Highway Agency	Intersections	
427452-1	Intersection traffic control Modify traffic signal - add additional signal heads	2.954501 Miles	2379950	8169599	HSIP (Section 148)	Urban Principal Arterial - Other	27172.9958981229	40	State Highway Agency	Intersections	
427640-1	Pedestrians and bicyclists Install sidewalk	1.203325 Miles	46053	107729	HSIP (Section 148)	Urban Local Road or Street	3545.03398001371	0	Other Local Agency	Pedestrians and Bicyclists	
428054-1	Intersection traffic control Systemic improvements - signal-controlled	0.858244 Miles	1490547	1568300	HSIP (Section 148)	Urban Minor Arterial	29317.5388712301	40	State Highway Agency	Intersections	
428166-1	Shoulder treatments Pave existing	15.917	23940	31745	HSIP (Sectio	Rural Minor	0	0	Other Local	Lane Departur	

	shoulders	Miles			n 148)	Collector			Agency	e	
428166-1-HRRR	Shoulder treatments Pave existing shoulders	15.92 Miles	91919	91919	HRRRP (SAFETEA-LU)	Rural Minor Collector	0	0	Other Local Agency	Lane Departure	
428273-1	Intersection traffic control Modify traffic signal - modernization/replacement	0.236415 Miles	813440	863417	HSIP (Section 148)	Urban Principal Arterial - Other	51538.7054797707	45	State Highway Agency	Intersections	
428274-1	Intersection traffic control Intersection traffic control - other	0.149782 Miles	28910	98820	HSIP (Section 148)	Urban Principal Arterial - Other	44999.9939712382	45	State Highway Agency	Intersections	
428770-1	Shoulder treatments Pave existing shoulders	1.04 Miles	21550	107091	HSIP (Section 148)	Rural Minor Collector	450.000183680339	0	Other Local Agency	Lane Departure	
428801-1	Railroad grade crossings Railroad grade crossings - other	0.082113 Miles	80000	80000	HSIP (Section 148)	Urban Principal Arterial - Other	23999.9907322836	35	State Highway Agency	Intersections	
428952-1	Intersection traffic control Systemic improvements - signal-controlled	2.270551 Miles	950661	1130140	HSIP (Section 148)	Urban Principal Arterial - Other	54660.2927078053	45	State Highway Agency	Intersections	

428962-1	Roadside Barrier-metal	3.066956 Miles	893848	3856024	HSIP (Section 148)	Urban Principal Arterial - Other	52999.999199206	60	State Highway Agency	Lane Departure	
429014-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.295199 Miles	759847	3542614	HSIP (Section 148)	Urban Principal Arterial - Other	43884.3886429155	45	State Highway Agency	Intersections	
429020-1	Alignment Horizontal curve realignment	0.270117 Miles	652098	851744	HSIP (Section 148)	Urban Minor Arterial	44451.7490457839	40	State Highway Agency	Lane Departure	
429021-1	Intersection geometry Auxiliary lanes - modify left-turn lane offset	0.206461 Miles	1009675	1079275	HSIP (Section 148)	Urban Principal Arterial - Other	86486.3785605998	45	State Highway Agency	Intersections	
429043-1	Pedestrians and bicyclists Crosswalk	0.273123 Miles	232878	420543	HSIP (Section 148)	Urban Principal Arterial - Other	21499.9769334695	30	State Highway Agency	Pedestrians and Bicyclists	
429073-1	Intersection traffic control Modify traffic signal - modernization/replacement	2.148902 Miles	1197539	4614973	HSIP (Section 148)	Urban Principal Arterial - Other	54803.5922359419	50	State Highway Agency	Intersections	

429135-2	Intersection traffic control Modify traffic signal timing - left-turn phasing (permissive to protected-only)	0.121708 Miles	432305	456132	HSIP (Section 148)	Urban Principal Arterial - Other Freeways and Expressways	146000.08679791	55	State Highway Agency	Intersections	
429146-2	Intersection traffic control Modify traffic signal - add additional signal heads	0.019027 Miles	64596	66811	HSIP (Section 148)	Urban Minor Arterial	15999.8422767646	40	State Highway Agency	Intersections	
429185-1	Intersection geometry Auxiliary lanes - extend existing left-turn lane	1.61796 Miles	898660	4200987	HSIP (Section 148)	Urban Principal Arterial - Other	38186.9737284039	45	State Highway Agency	Intersections	
429186-2	Intersection geometry Splitter island - remove from one or more approaches	1 Numbers	192981	206701	HSIP (Section 148)		53000	45	State Highway Agency	Intersections	
429190-2	Intersection geometry Auxiliary lanes - add left-turn lane	0.001298 Miles	411924	419516	HSIP (Section 148)	Urban Principal Arterial - Other	51986.1302003082	40	State Highway Agency	Intersections	
42924	Roadside Barrier-	17.834713	119173	184908	HSIP (Sectio	Rural Principal	8803.8996956	65	State Highway	Lane Departur	

6-1	metal	Miles			n 148)	Arterial - Other	6653		Agency	e	
429246-2	Shoulder treatments Pave existing shoulders	14.717925 Miles	13797501	16160311	HSIP (Section 148)	Rural Principal Arterial - Other	8800.00015430164	65	State Highway Agency	Lane Departure	
429490-1	Lighting Continuous roadway lighting	7.333902 Miles	2056462	208847 6	HSIP (Section 148)	Rural Principal Arterial - Other	9680.43732040597	65	State Highway Agency	Lane Departure	
429496-1	Intersection traffic control Modify traffic signal - modernization/replacement	0.057346 Miles	418991	441614	HSIP (Section 148)	Urban Principal Arterial - Other	43500.210180309	45	State Highway Agency	Intersections	
429498-1	Lighting Continuous roadway lighting	1.440978 Miles	1024458	1111997	HSIP (Section 148)	Urban Principal Arterial - Other	34995.1612328571	55	State Highway Agency	Intersections	
429503-1	Intersection traffic control Modify traffic signal - modernization/replacement	0.0171 Miles	562607	589562	HSIP (Section 148)	Urban Principal Arterial - Other	45498.7077777778	45	State Highway Agency	Intersections	

429586-1	Roadside Barrier-metal	13.871112 Miles	685315	685889	HSIP (Section 148)	Rural Minor Collector	900.000003965075	55	Other Local Agency	Lane Departure	
429606-1	Intersection traffic control Modify control - traffic signal to roundabout	0.001999 Miles	1345571	1345622	HSIP (Section 148)	Rural Major Collector	7599.45522761381	55	Other Local Agency	Intersections	
429608-1	Roadway Rumble strips - edge or shoulder	7.1 Miles	144055	144483	HSIP (Section 148)	Rural Local Road or Street	0	0	Other Local Agency	Lane Departure	
429611-1	Intersection geometry Intersection geometrics - modify skew angle	0.310072 Miles	879940	880068	HSIP (Section 148)	Rural Major Collector	1200.001125544503	0	Other Local Agency	Intersections	
429648-1	Shoulder treatments Pave existing shoulders	0.989928 Miles	591761	591761	HSIP (Section 148)	Urban Local Road or Street	0	40	Other Local Agency	Pedestrians and Bicyclists	
429650-2	Non-infrastructure Road safety audits	1 Numbers	300000	310299	HSIP (Section 148)		0	0	Non-Location Specific Project	Pedestrians and Bicyclists	
429652-1	Non-infrastructure	1 Number	300000	302503	HSIP (Sectio		0	0	Non-Location	Used for Multiple	

	Road safety audits	s			n 148)				Specific Project	Engineering Emphasis Areas	
429660-1	Pedestrians and bicyclists Install sidewalk	0.528617 Miles	140206	140206	HSIP (Section 148)	Rural Local Road or Street	0	0	Other Local Agency	Pedestrians and Bicyclists	
429661-1	Pedestrians and bicyclists Install sidewalk	0.915147 Miles	204795	205161	HSIP (Section 148)	Rural Minor Arterial	4799.9995126466	45	State Highway Agency	Pedestrians and Bicyclists	
429664-1	Pedestrians and bicyclists Install sidewalk	0.311233 Miles	325257	325257	HSIP (Section 148)	Rural Minor Collector	1999.99707935855	40	Other Local Agency	Pedestrians and Bicyclists	
429672-2-HRRR	Shoulder treatments Pave existing shoulders	6.51 Miles	405497	405497	HRRRP (SAFETEA-LU)	Rural Minor Collector	0	0	Other Local Agency	Lane Departure	
429674-2	Shoulder treatments Pave existing shoulders	9.065969 Miles	1902775	1902775	HSIP (Section 148)	Rural Minor Collector	304.611471426827	0	Other Local Agency	Lane Departure	
429684-1-HRRR	Roadway Roadway widening - travel lanes	3.99 Miles	93212	93212	HRRRP (SAFETEA-LU)	Rural Minor Collector	0	0	Other Local Agency	Lane Departure	
42969	Roadside Barrier-	2.28496	190647	221410	HSIP	Rural	19669.397927	70	State	Lane	

4-1	metal	1 Miles	8	5	(Section 148)	Principal Arterial - Interstate	1419		Highway Agency	Departure	
429696-1	Lighting Continuous roadway lighting	0.812734 Miles	227682	274151	HSIP (Section 148)	Rural Principal Arterial - Interstate	49068.087523101	70	State Highway Agency	Lane Departure	
429739-1	Intersection traffic control Modify control - remove right-turn yield	0.380481 Miles	2151132	2239383	HSIP (Section 148)	Urban Minor Arterial	16828.4091741769	35	State Highway Agency	Intersections	
429749-2	Pedestrians and bicyclists Install sidewalk	3.25 Miles	5752	46035	HSIP (Section 148)	Rural Local Road or Street	0	0	Other Local Agency	Pedestrians and Bicyclists	
429750-1	Roadway delineation Roadway delineation - other	99.020811 Miles	902605	922916	HSIP (Section 148)	Rural Major Collector	1743.31279039077	55	Other Local Agency	Pedestrians and Bicyclists	
429751-1	Intersection geometry Auxiliary lanes - extend existing left-turn lane	1.076908 Miles	2217518	2322928	HSIP (Section 148)	Urban Principal Arterial - Interstate	51897.9728909062	65	State Highway Agency	Intersections	
429751-2	Intersection geometry Auxiliary lanes - extend existing left-	0.681373 Miles	3704555	3856897	HSIP (Sectio	Urban Principal Arterial -	104539.533487532	65	State Highway	Intersections	

	turn lane				n 148)	Interstate			Agency		
429752-2	Pedestrians and bicyclists Install sidewalk	0.549594 Miles	113854	174141	HSIP (Section 148)	Urban Minor Arterial	5899.99533291848	45	State Highway Agency	Pedestrians and Bicyclists	
429752-3	Pedestrians and bicyclists Install sidewalk	2.116332 Miles	1150257	176261 7	HSIP (Section 148)	Urban Minor Arterial	11051.3570900029	55	State Highway Agency	Pedestrians and Bicyclists	
429752-4	Pedestrians and bicyclists Install sidewalk	0.349779 Miles	151535	187356	HSIP (Section 148)	Urban Minor Arterial	14600.0196209607	55	State Highway Agency	Pedestrians and Bicyclists	
429752-5	Pedestrians and bicyclists Install sidewalk	0.367756 Miles	192804	326436	HSIP (Section 148)	Urban Minor Arterial	7930.56508935272	45	State Highway Agency	Pedestrians and Bicyclists	
429752-6	Pedestrians and bicyclists Install sidewalk	0.920017 Miles	288938	305177	HSIP (Section 148)	Urban Principal Arterial - Other	28000.0042227481	55	State Highway Agency	Pedestrians and Bicyclists	
429752-7	Pedestrians and bicyclists Install sidewalk	1.915672 Miles	501714	544007	HSIP (Section 148)	Urban Principal Arterial - Other	43335.2780168004	45	State Highway Agency	Pedestrians and Bicyclists	
430602-2	Lighting Continuous roadway lighting	0.662564 Miles	463464	121798 4	HSIP (Section 148)	Urban Principal Arterial -	51000.0343287592	40	State Highway Agency	Pedestrians and Bicyclists	

						Other					
430665-1	Shoulder treatments Pave existing shoulders	3.021222 Miles	275334	303303	HSIP (Section 148)	Urban Principal Arterial - Other	38639.0249461973	55	State Highway Agency	Lane Departure	
430665-2	Shoulder treatments Pave existing shoulders	3.869391 Miles	410225	453352	HSIP (Section 148)	Rural Principal Arterial - Other	28657.8882798353	55	State Highway Agency	Lane Departure	
430672-1	Pedestrians and bicyclists Install sidewalk	5.516211 Miles	154348	206452	HSIP (Section 148)	Urban Principal Arterial - Other	27405.4245713226	55	State Highway Agency	Pedestrians and Bicyclists	
430761-1	Intersection geometry Auxiliary lanes - add right-turn lane	0.417347 Miles	230400	276103	HSIP (Section 148)	Urban Principal Arterial - Other	35999.9685537454	45	State Highway Agency	Intersections	
430795-1	Roadside Barrier-metal	3.328097 Miles	173053	208158 4	HSIP (Section 148)		5885.40457775119	0	State Highway Agency	Lane Departure	
430798-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.15192 Miles	516629	553126	HSIP (Section 148)	Urban Principal Arterial - Other	58689.86921406	45	State Highway Agency	Intersections	

430799-1	Lighting Continuous roadway lighting	0.245916 Miles	458302	465120	HSIP (Section 148)	Urban Principal Arterial - Other	31999.982339498	45	State Highway Agency	Intersections	
430801-1	Intersection traffic control Modify traffic signal - modernization/replacement	0.319634 Miles	723556	758992	HSIP (Section 148)	Urban Principal Arterial - Other	51719.0266023014	45	State Highway Agency	Intersections	
430852-1	Non-infrastructure Road safety audits	1 Numbers	125772	125772	HSIP (Section 148)		0	0	Non-Location Specific Project	Intersections	
430856-1	Intersection traffic control Modify traffic signal timing - left-turn phasing (permissive to protected-only)	0.031074 Miles	340565	387057	HSIP (Section 148)	Urban Principal Arterial - Other	55290.3766492888	45	State Highway Agency	Intersections	
430858-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.120219 Miles	468419	505711	HSIP (Section 148)	Urban Principal Arterial - Other	34166.729327311	40	State Highway Agency	Intersections	
430859-1	Pedestrians and bicyclists Medians and pedestrian refuge	1.278968 Miles	558661	587140	HSIP (Sectio	Urban Minor	32596.062304139	40	State Highway	Pedestrians and	

	areas				n 148)	Arterial			Agency	Bicyclists	
430860-1	Access management Raised island - modify existing	0.388102 Miles	758442	815065	HSIP (Section 148)	Urban Principal Arterial - Other	31852.5245399405	40	State Highway Agency	Intersections	
430863-1	Intersection traffic control Modify control - remove right-turn yield	0.198624 Miles	831971	871019	HSIP (Section 148)	Urban Minor Arterial	33128.8113420332	45	State Highway Agency	Intersections	
430864-1	Intersection traffic control Modify control - remove right-turn yield	0.065967 Miles	707596	726357	HSIP (Section 148)	Urban Principal Arterial - Other	47550.3891188018	45	State Highway Agency	Intersections	
430866-1	Pedestrians and bicyclists Medians and pedestrian refuge areas	2.398909 Miles	333464	354358	HSIP (Section 148)	Urban Principal Arterial - Other	45341.2846689891	45	State Highway Agency	Pedestrians and Bicyclists	
430896-1	Pedestrians and bicyclists Install sidewalk	3.473486 Miles	6636	52204	HSIP (Section 148)	Rural Principal Arterial - Other	29311.9275747765	55	State Highway Agency	Pedestrians and Bicyclists	
430929-1	Intersection geometry Auxiliary lanes - add right-turn lane	0.126021 Miles	261949	287540	HSIP (Section 148)	Rural Minor Arterial	4295.22677966371	60	State Highway Agency	Intersections	

430930-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.335101 Miles	695851	718815	HSIP (Section 148)	Rural Minor Arterial	3513.886562558875	60	State Highway Agency	Intersections	
430942-1	Roadway Rumble strips - edge or shoulder	24.009 Miles	477499	519768	HSIP (Section 148)		25000	45	State Highway Agency	Lane Departure	
430942-2	Roadway Rumble strips - edge or shoulder	8.95 Miles	163545	177173	HSIP (Section 148)		25000	55	State Highway Agency	Lane Departure	
430986-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.334617 Miles	331409	392474	HSIP (Section 148)	Urban Principal Arterial - Other	9800.009300184499	55	State Highway Agency	Intersections	
431122-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.629866 Miles	964058	997602	HSIP (Section 148)	Urban Minor Arterial	7800.001722588861	60	State Highway Agency	Intersections	
431196-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.13478 Miles	139485	139485	HSIP (Section 148)	Urban Major Collector	11799.9992728892	40	Other Local Agency	Intersections	
431243-1	Intersection traffic control Intersection traffic control - other	5.609159 Miles	168177 9	136520 46	HSIP (Section 148)	Urban Principal Arterial - Other	27230.9277278465	55	State Highway Agency	Intersections	
43143	Roadway Rumble	5.35121	95582	95582	HSIP	Rural	0	0	Other	Lane	

0-1	strips - edge or shoulder	9 Miles			(Section 148)	Local Road or Street			Local Agency	Departure	
431430-1-HRRR	Roadway Rumble strips - edge or shoulder	5.37 Miles	17237	17237	HRRRP (SAFETEA-LU)	Rural Local Road or Street	0	0	Other Local Agency	Lane Departure	
431635-1	Non-infrastructure Transportation safety planning	1 Numbers	1482648	1629042	HSIP (Section 148)		0	0	State Highway Agency	Lane Departure	
431751-1	Non-infrastructure Educational efforts	1 Numbers	83605	83605	HSIP (Section 148)		0	0	Non-Location Specific Project	Pedestrians and Bicyclists	
431820-2	Non-infrastructure Transportation safety planning	1 Numbers	526803	528601	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians and Bicyclists	
432549-1	Roadway Pavement surface - high friction surface	0.435028 Miles	1803956	1846680	HSIP (Section 148)	Urban Principal Arterial - Interstate	216000.183588183	65	State Highway Agency	Lane Departure	
432753-1	Access management Raised island - modify existing	0.246435 Miles	345640	372184	HSIP (Section 148)	Urban Principal Arterial -	43000.066987238	45	State Highway Agency	Intersections	

						Other					
433061-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.204834 Miles	553731	761995	HSIP (Section 148)	Urban Minor Arterial	13300.0138551217	35	Other Local Agency	Intersections	
433065-1	Lighting Continuous roadway lighting	7.953778 Miles	698000	698047	HSIP (Section 148)	Urban Principal Arterial - Other	46796.5990248911	55	State Highway Agency	Intersections	
433107-1	Intersection traffic control Systemic improvements - signal-controlled	1 Miles	207065	207065	HSIP (Section 148)	Rural Local Road or Street	0	0	Other Local Agency	Pedestrians and Bicyclists	
433144-1	Non-infrastructure Educational efforts	1 Numbers	4720000	4720000	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians and Bicyclists	
433360-1	Intersection geometry Auxiliary lanes - add left-turn lane	0.200206 Miles	300447	308409	HSIP (Section 148)	Rural Principal Arterial - Other	15399.9634326644	65	State Highway Agency	Intersections	
433377-1	Roadway delineation Roadway delineation - other	1 Numbers	97159	97159	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians and Bicyclists	
433436-1	Intersection geometry Auxiliary lanes - add	0.189737 Miles	800000	800000	HSIP (Sectio	Urban Minor	3800.00472759662	35	Other Local	Intersections	

	right-turn lane				n 148)	Arterial			Agency		
433437-1	Intersection traffic control Intersection traffic control - other	0.037956 Miles	241500	241564	HSIP (Section 148)	Urban Major Collector	6799.98440299294	45	Other Local Agency	Intersections	
433438-1	Shoulder treatments Pave existing shoulders	1.018447 Miles	290400	290449	HSIP (Section 148)		5000.00195493727	55	Other Local Agency	Lane Departure	
433519-3	Intersection traffic control Systemic improvements - signal-controlled	1 Numbers	3968986	3968986	HSIP (Section 148)		0	0	State Highway Agency	Intersections	
433522-1	Non-infrastructure Data/traffic records	1 Numbers	628000	628000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	
433786-1	Access management Change in access - close or restrict existing access	0.297837 Miles	620208	620325	HSIP (Section 148)	Urban Major Collector	28499.9534275459	30	Other Local Agency	Intersections	
433787-1	Intersection geometry Auxiliary lanes - add right-turn lane	0.226628 Miles	269700	269817	HSIP (Section 148)	Urban Minor Arterial	17500.00706000279	40	Other Local Agency	Intersections	
434307-1	Access management Change in access - close or restrict	0.149971 Miles	129000	129000	HSIP (Section 148)	Urban Local Road or	0	0	Other Local Agency	Intersections	

	existing access					Street					
434779-1	Non-infrastructure Road safety audits	1 Numbers	77415	77415	HSIP (Section 148)		0	0	State Highway Agency	Used for Multiple Engineering Emphasis Areas	
436104-1	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	1.6 Miles	148847	148847	HSIP (Section 148)	Urban Minor Arterial	30500	30	State Highway Agency	Intersections	
436105-1	Pedestrians and bicyclists Pedestrian warning signs - add/modify flashers	1 Numbers	66731	66731	HSIP (Section 148)	Urban Minor Arterial	9700	35	State Highway Agency	Pedestrians and Bicyclists	
436106-1	Pedestrians and bicyclists Pedestrian warning signs - add/modify flashers	1 Numbers	60174	60174	HSIP (Section 148)	Urban Minor Arterial	6500	50	State Highway Agency	Pedestrians and Bicyclists	
436107-1	Pedestrians and bicyclists Install sidewalk	1.381146 Miles	950193	950193	HSIP (Section 148)	Urban Principal Arterial - Other Freeways and	33885.6843671849	55	State Highway Agency	Pedestrians and Bicyclists	

						Expressways					

Progress in Achieving Safety Performance Targets

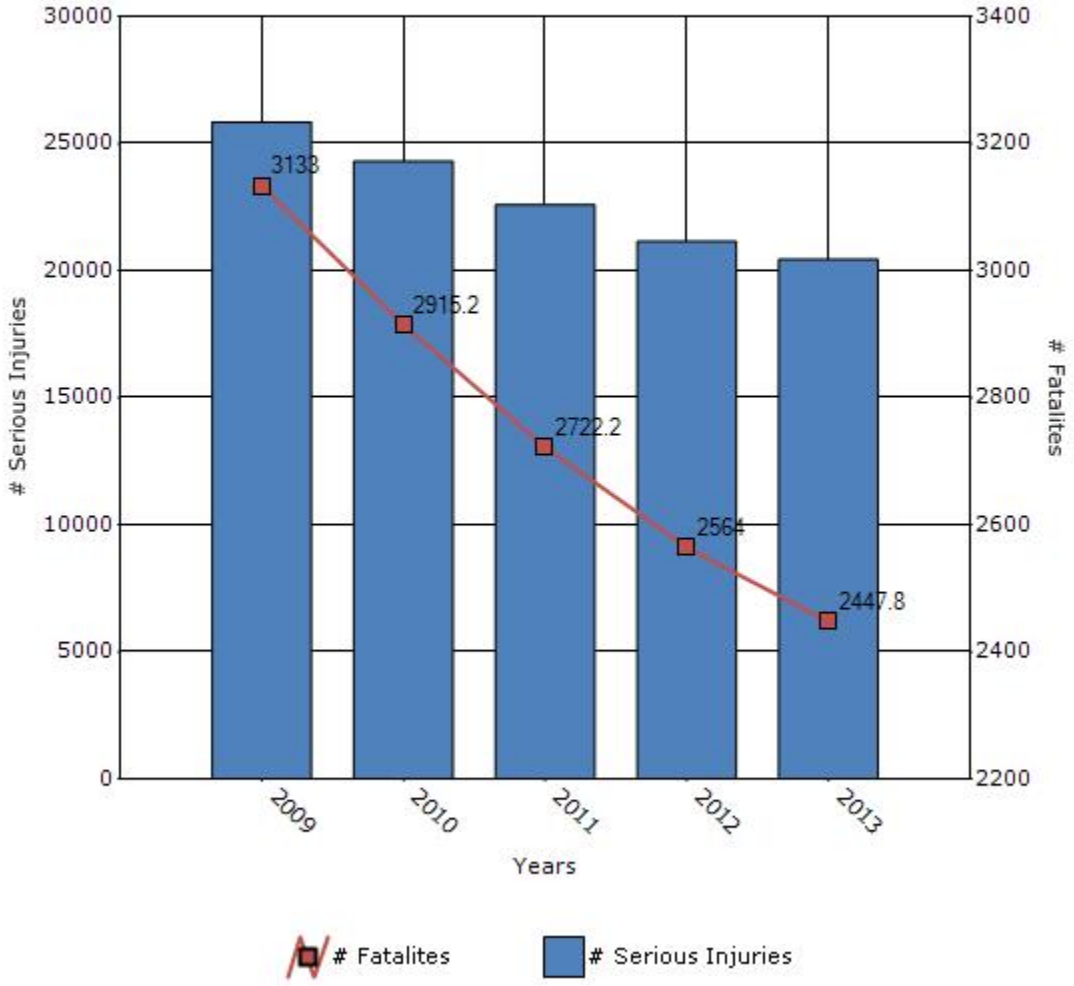
Overview of General Safety Trends

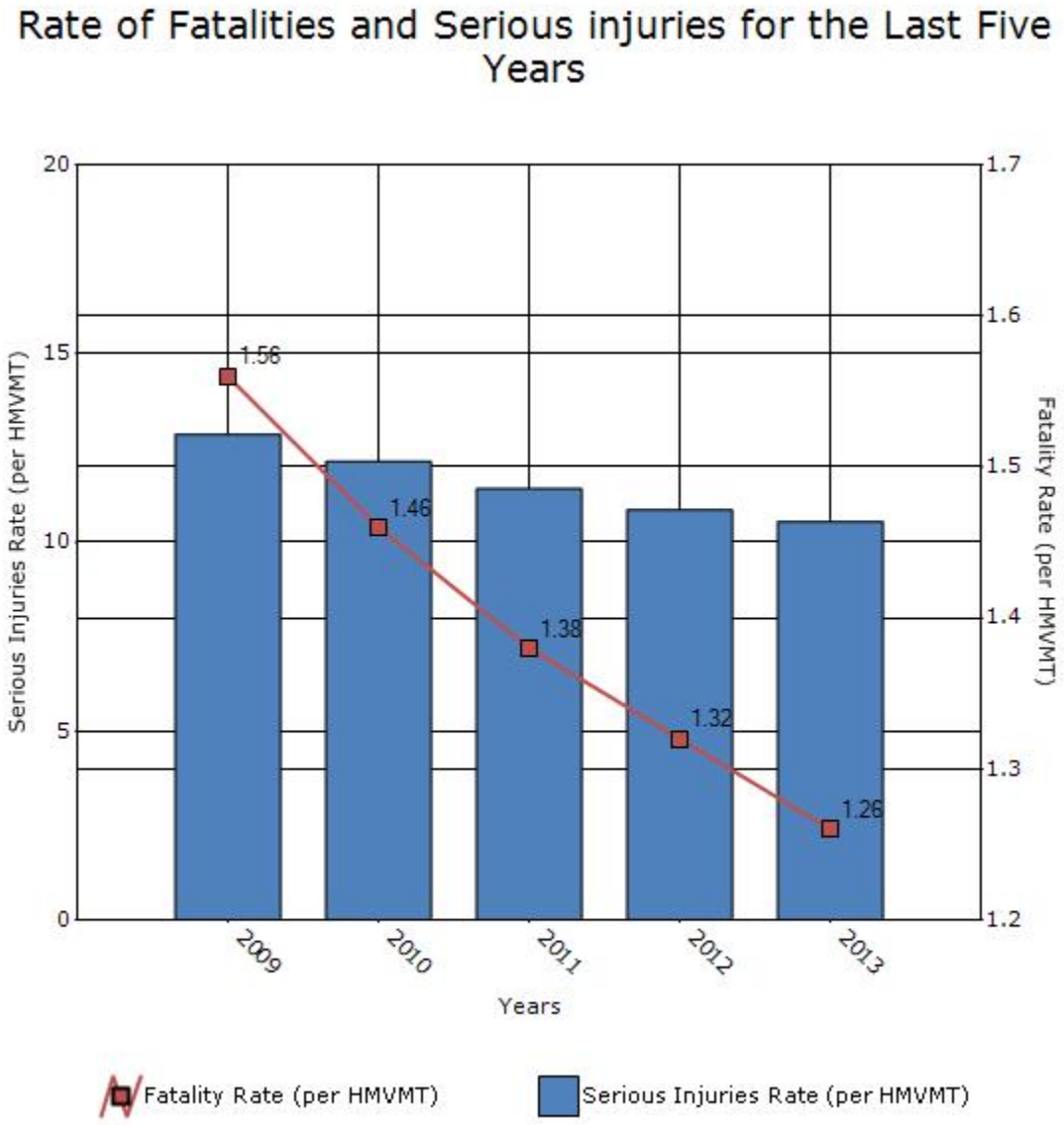
Present data showing the general highway safety trends in the state for the past five years.

Performance Measures*	2009	2010	2011	2012	2013
Number of fatalities	3133	2915.2	2722.2	2564	2447.8
Number of serious injuries	25846	24296.2	22585.2	21145	20437.8
Fatality rate (per HMVMT)	1.56	1.46	1.38	1.32	1.26
Serious injury rate (per HMVMT)	12.86	12.14	11.42	10.86	10.55

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

Number of Fatalities and Serious injuries for the Last Five Years



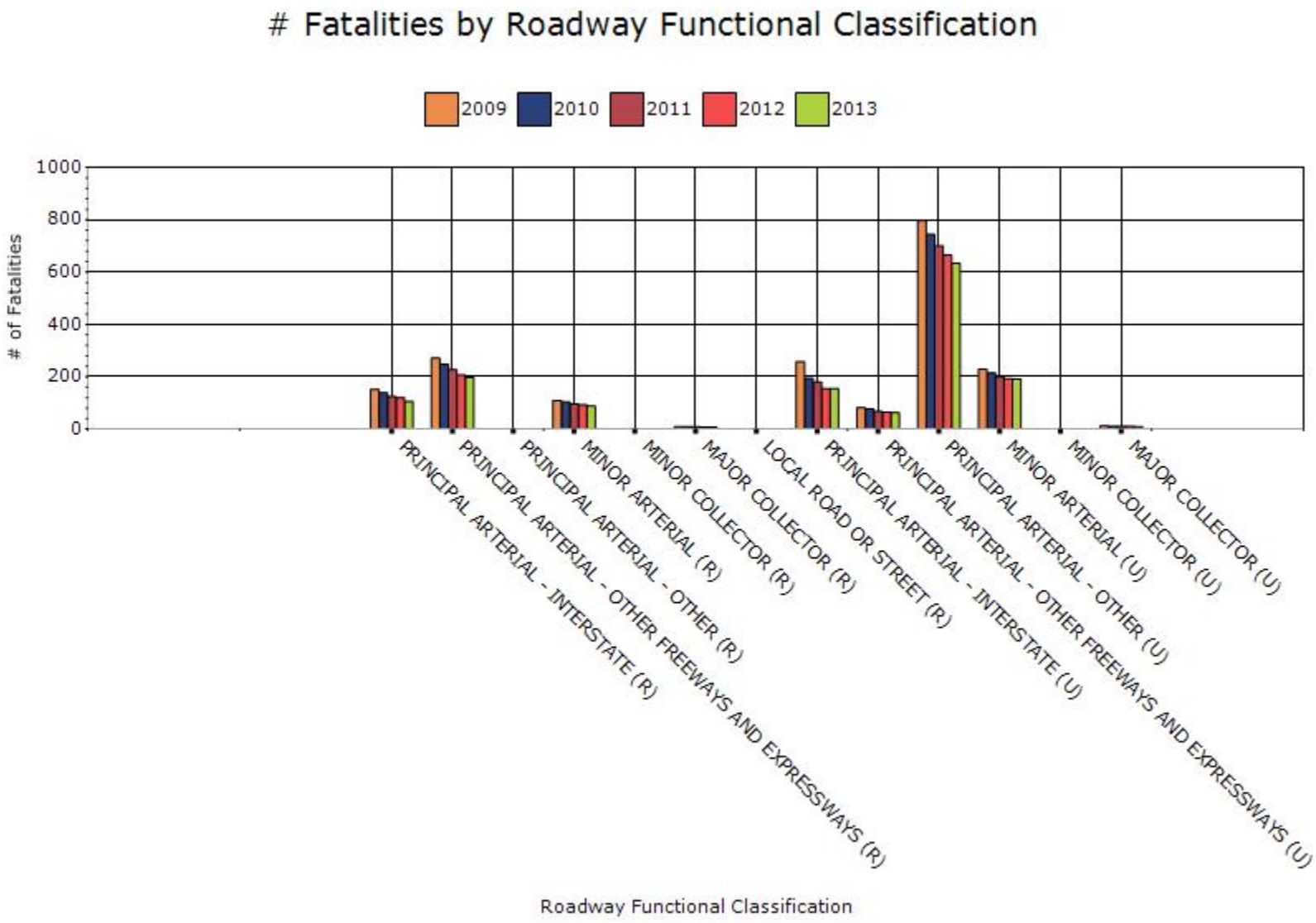

Rate of Fatalities and Serious injuries for the Last Five Years
Serious Injuries Rate (per HMVMT)
Fatality Rate (per HMVMT)
20
15
10
5
0
1.7
1.6
1.5
1.4
1.3
1.2
1.56
1.46
1.38
1.32
1.26
2009
2010
2011
2012
2013
Years
Fatality Rate (per HMVMT)
Serious Injuries Rate (per HMVMT)

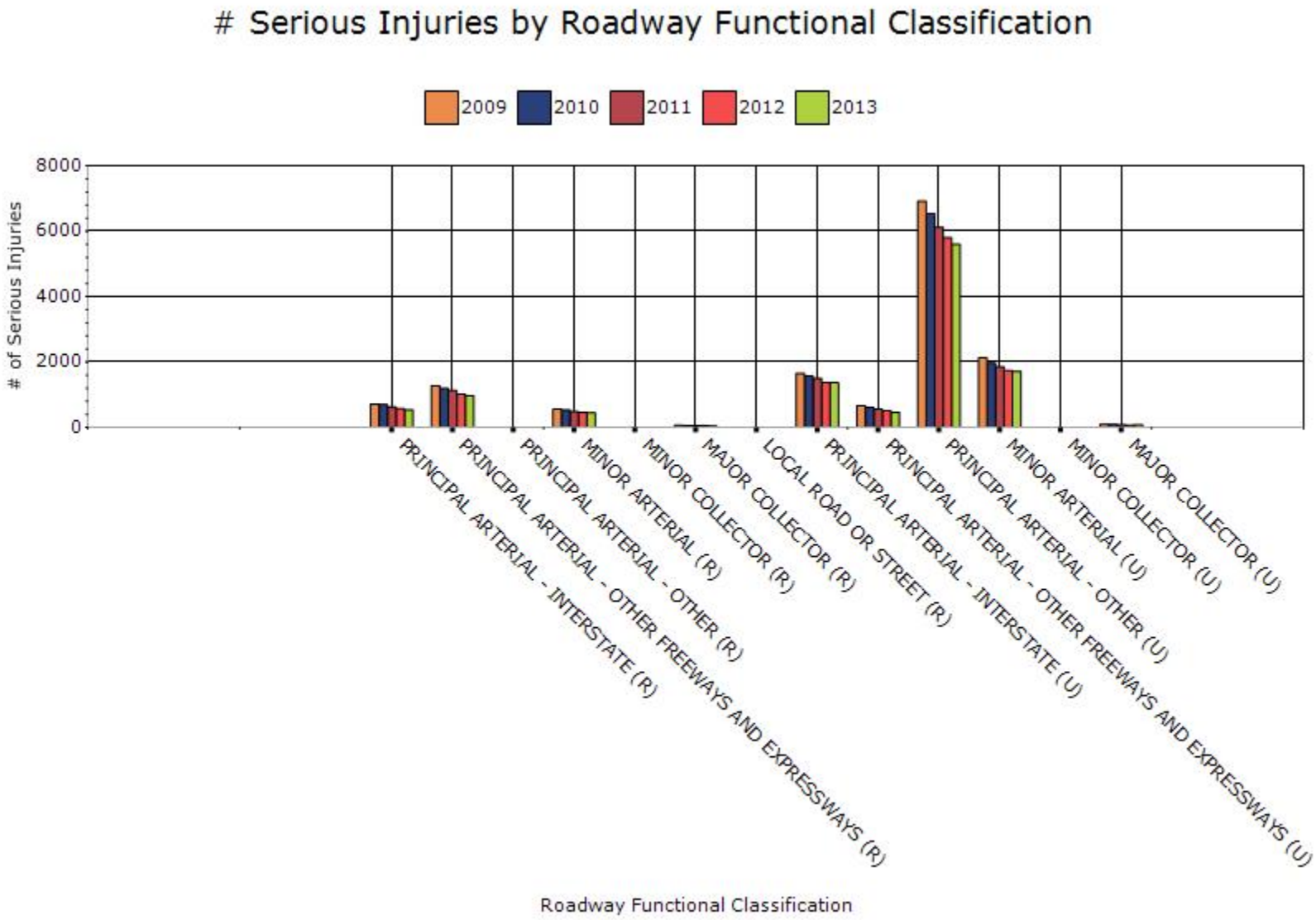
To the maximum extent possible, present performance measure* data by functional classification and ownership.

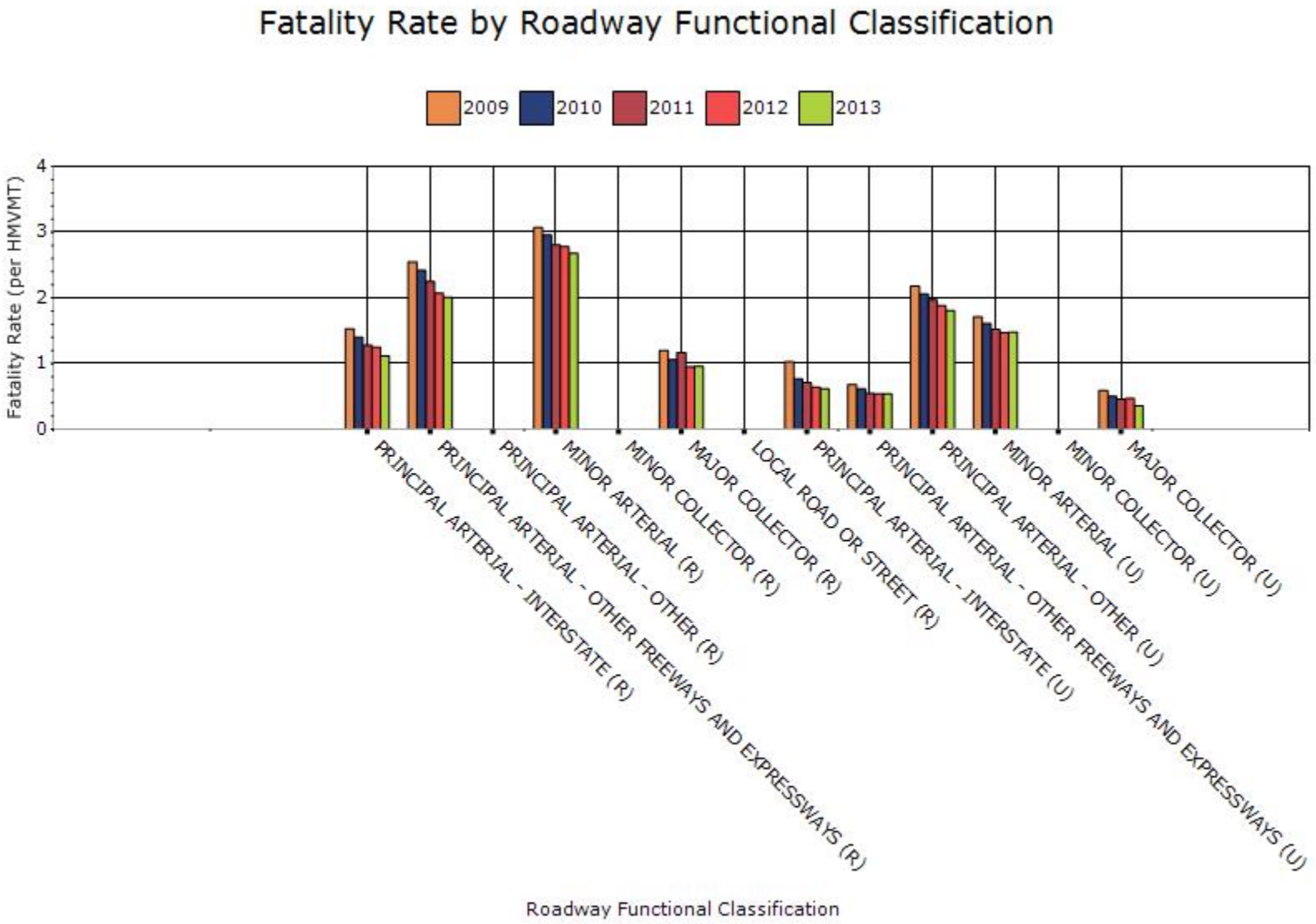
Year - 2013

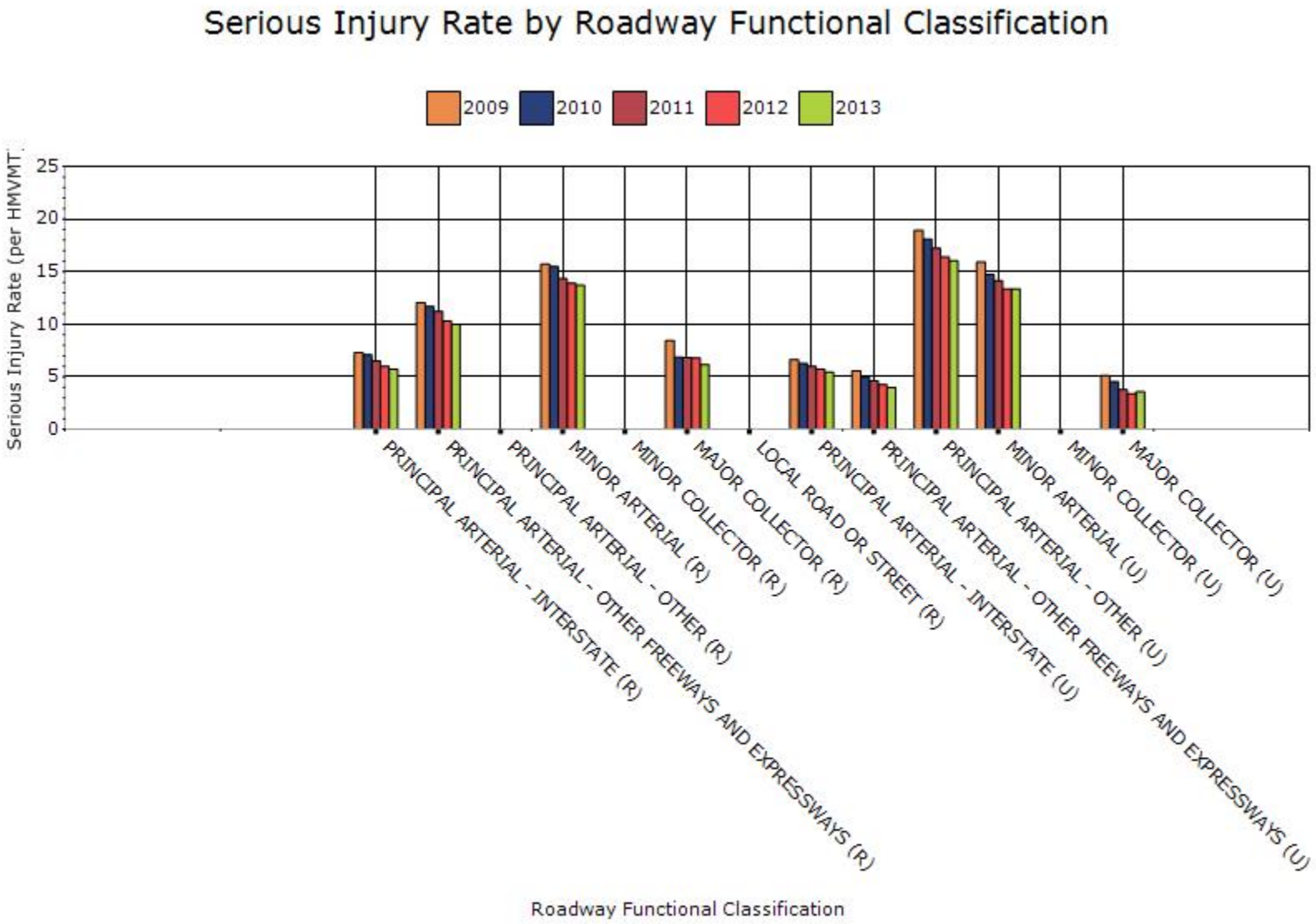
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	105.8	542.6	1.12	5.72
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	196.2	972.4	2.01	9.97
RURAL PRINCIPAL ARTERIAL - OTHER	0	0	0	0
RURAL MINOR ARTERIAL	87.4	446.2	2.68	13.69
RURAL MINOR COLLECTOR	0	0	0	0
RURAL MAJOR COLLECTOR	7.2	46.6	0.96	6.17
RURAL LOCAL ROAD OR STREET	0	0	0	0
URBAN PRINCIPAL	155	1369.8	0.62	5.44

ARTERIAL - INTERSTATE				
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	62.6	465.2	0.54	3.98
URBAN PRINCIPAL ARTERIAL - OTHER	633.4	5601	1.81	16.03
URBAN MINOR ARTERIAL	190.6	1719.2	1.48	13.36
URBAN MINOR COLLECTOR	0	0	0	0
URBAN MAJOR COLLECTOR	8.6	81.4	0.36	3.56


Fatalities by Roadway Functional Classification
2009
2010
2011
2012
2013
1000
800
600
400
200
0
# of Fatalities
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
Roadway Functional Classification

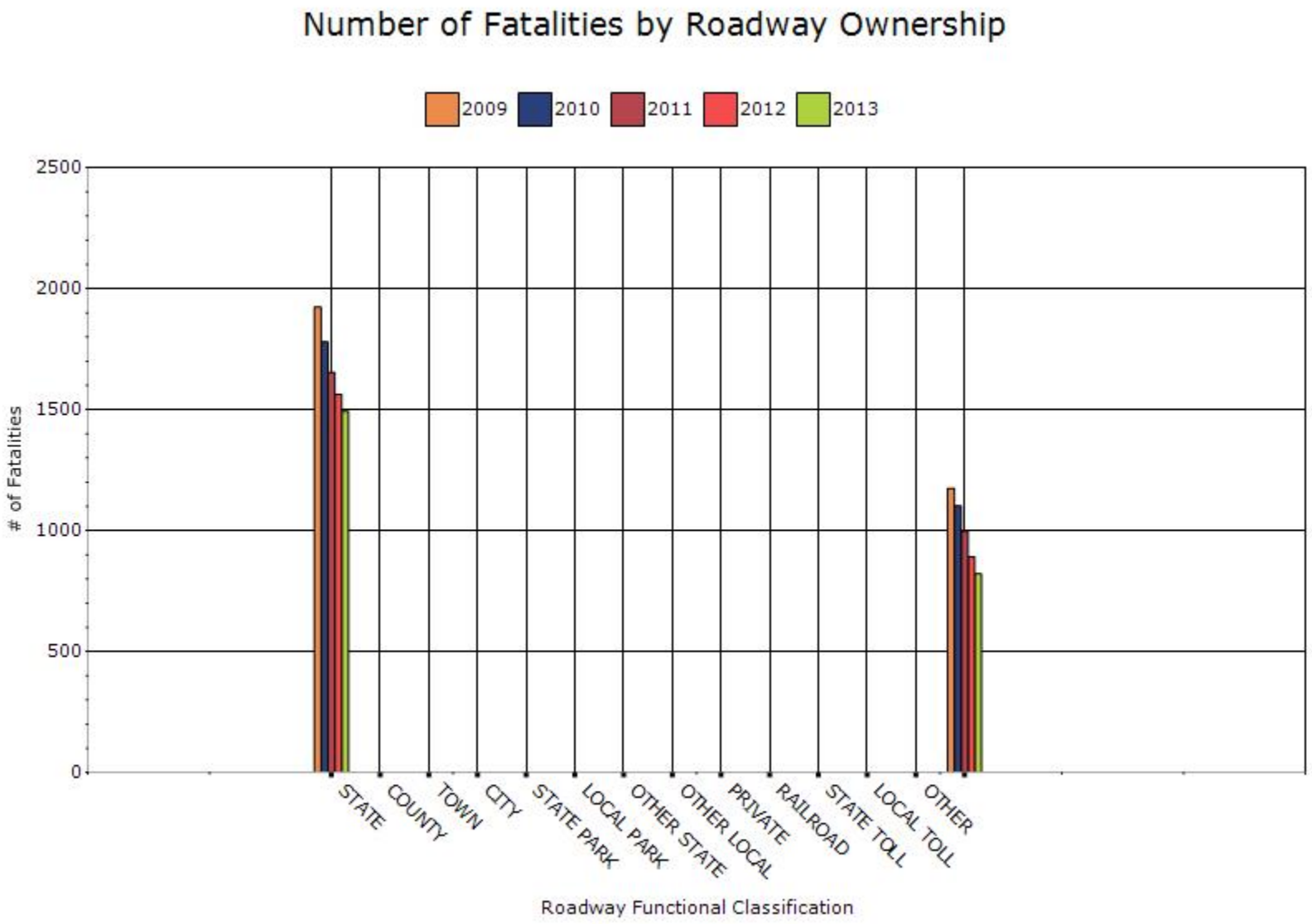

Serious Injuries by Roadway Functional Classification
2009
2010
2011
2012
2013
# of Serious Injuries
8000
6000
4000
2000
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
Roadway Functional Classification

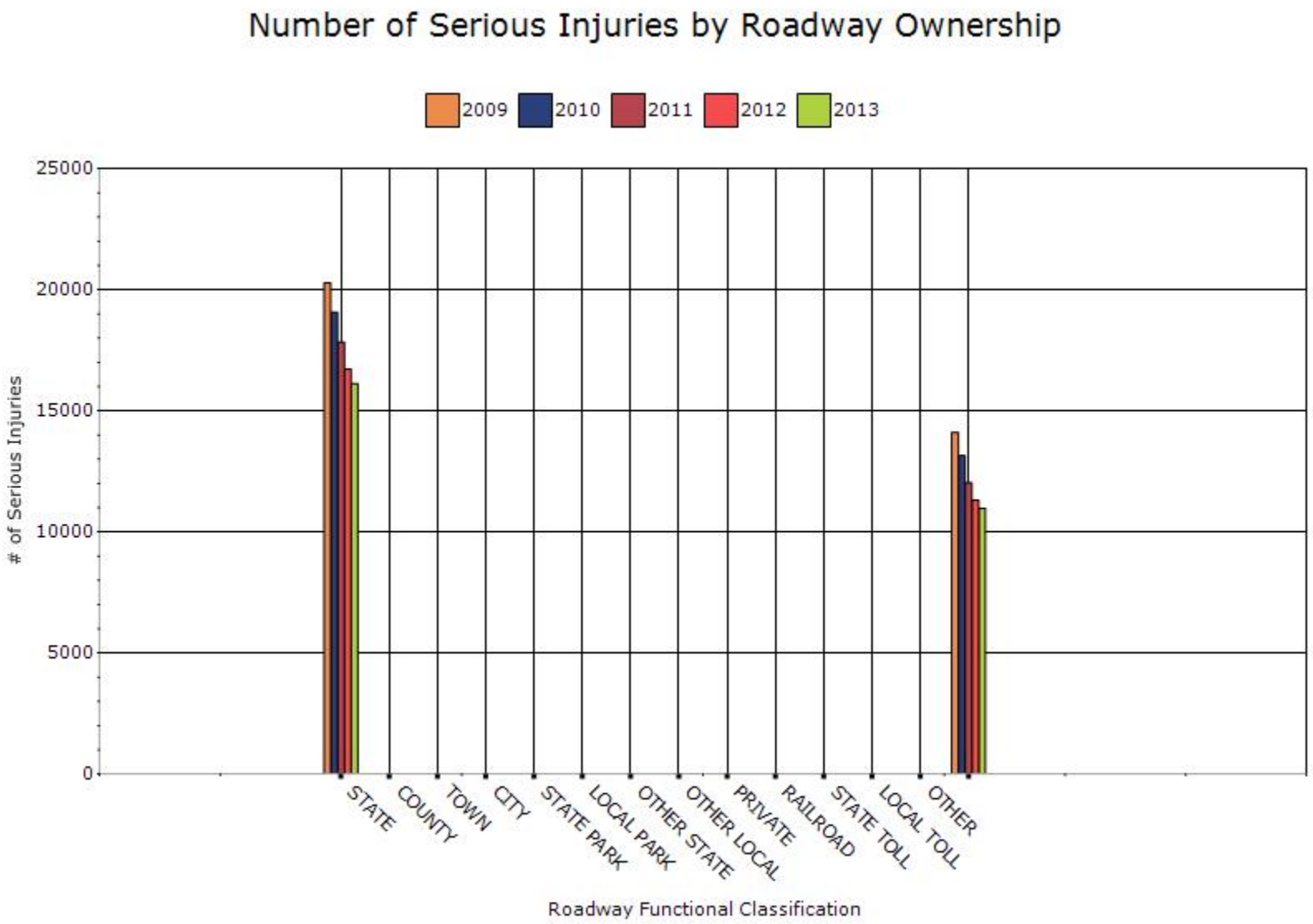

Fatality Rate by Roadway Functional Classification
2009
2010
2011
2012
2013
Fatality Rate (per HMVMT)
0
1
2
3
4
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
Roadway Functional Classification

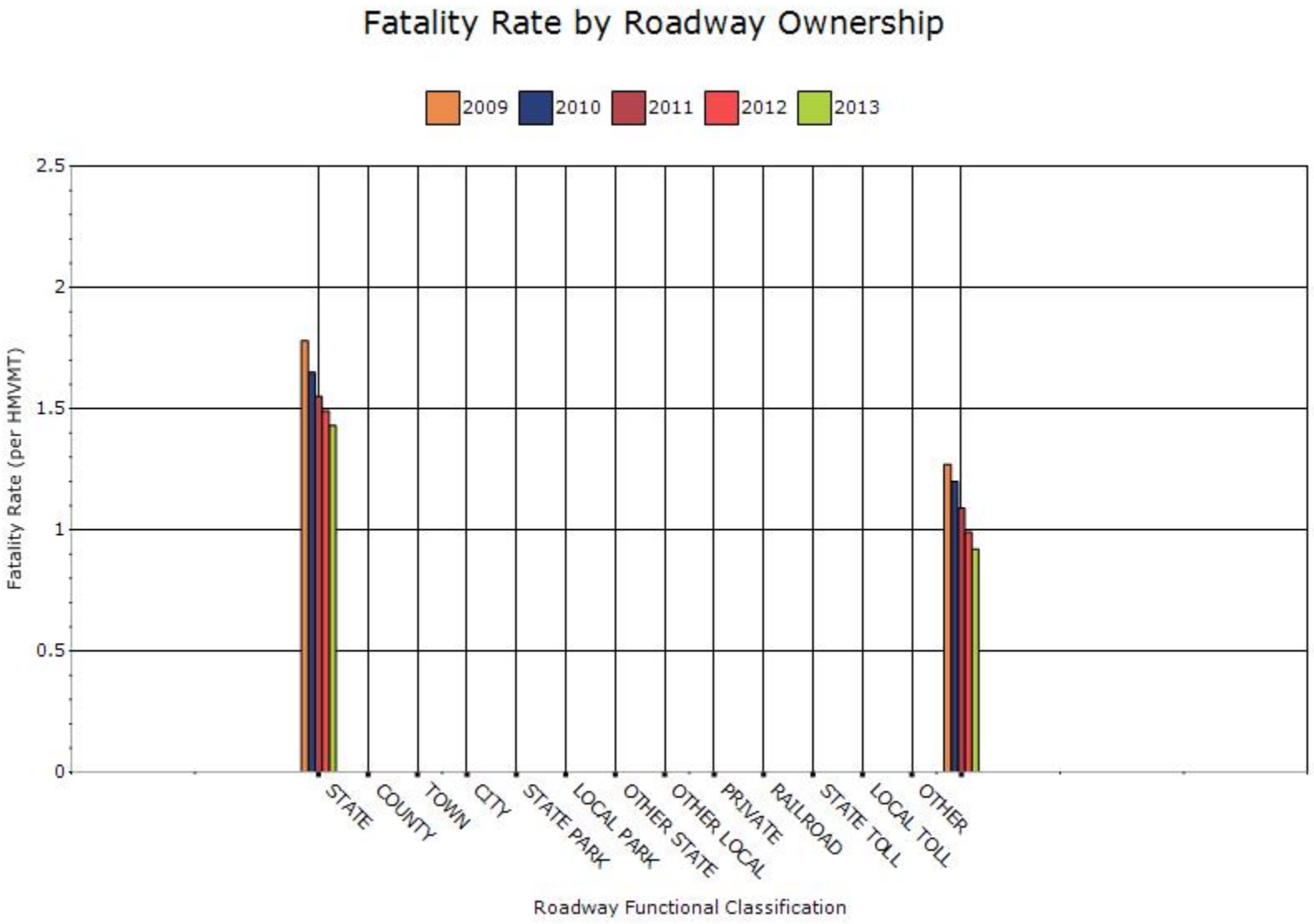

Serious Injury Rate by Roadway Functional Classification
2009
2010
2011
2012
2013
Serious Injury Rate (per HMVMT)
25
20
15
10
5
0
PRINCIPAL ARTERIAL - INTERSTATE (R)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (R)
PRINCIPAL ARTERIAL - OTHER (R)
MINOR ARTERIAL (R)
MINOR COLLECTOR (R)
MAJOR COLLECTOR (R)
LOCAL ROAD OR STREET (R)
PRINCIPAL ARTERIAL - INTERSTATE (U)
PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS (U)
PRINCIPAL ARTERIAL - OTHER (U)
MINOR ARTERIAL (U)
MINOR COLLECTOR (U)
MAJOR COLLECTOR (U)
Roadway Functional Classification

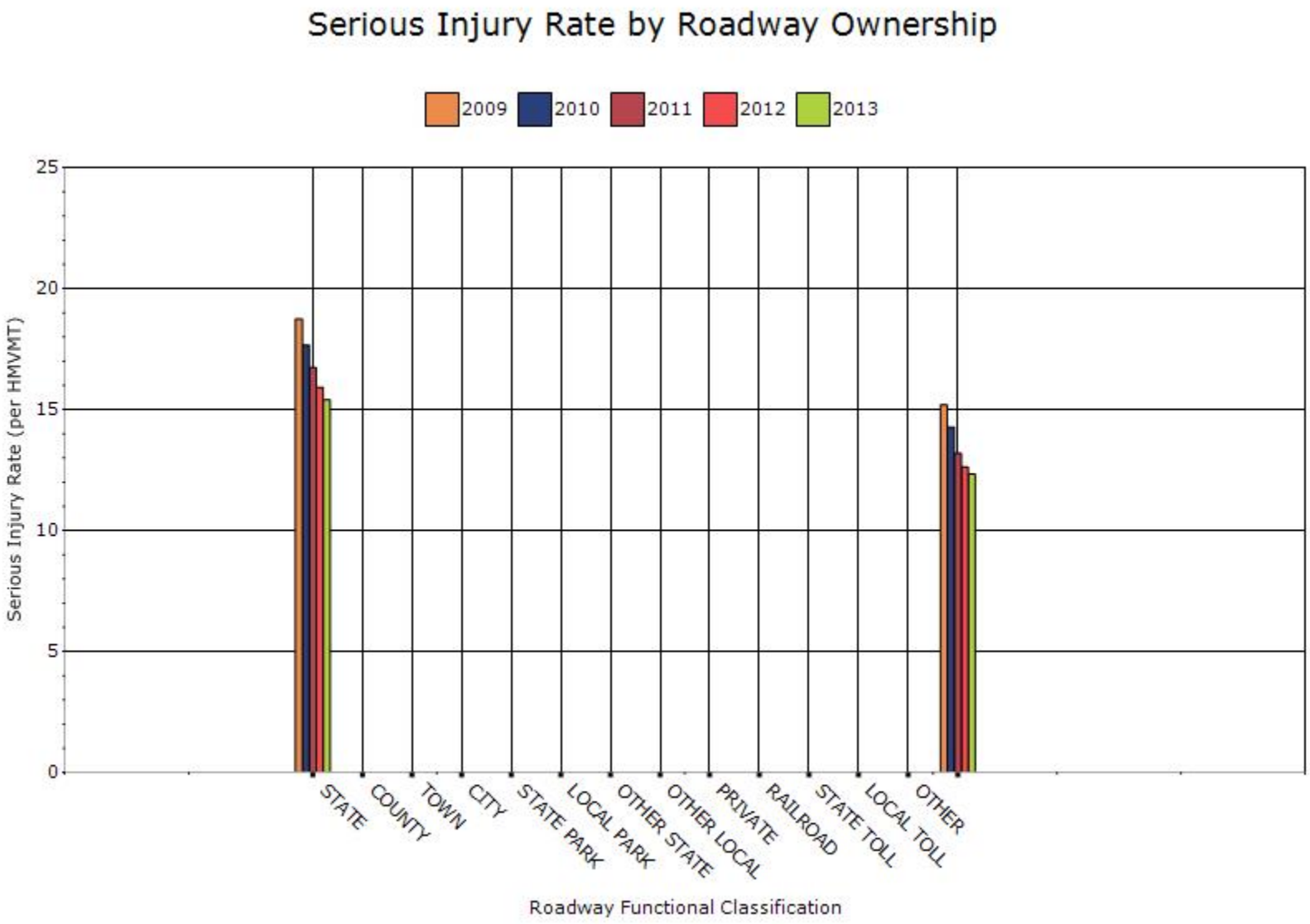
Year - 2013

Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	1493	16113	1.43	15.41
COUNTY HIGHWAY AGENCY	0	0	0	0
TOWN OR TOWNSHIP HIGHWAY AGENCY	0	0	0	0
CITY OF MUNICIPAL HIGHWAY AGENCY	0	0	0	0
STATE PARK, FOREST, OR RESERVATION AGENCY	0	0	0	0
LOCAL PARK, FOREST OR RESERVATION AGENCY	0	0	0	0
OTHER STATE AGENCY	0	0	0	0
OTHER LOCAL AGENCY	0	0	0	0
PRIVATE (OTHER THAN RAILROAD)	0	0	0	0
RAILROAD	0	0	0	0
STATE TOLL AUTHORITY	0	0	0	0
LOCAL TOLL AUTHORITY	0	0	0	0
OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, UNIVERSITY)	0	0	0	0
LOCAL ROADS	821.4	10972.4	0.92	12.33


Number of Fatalities by Roadway Ownership
2009
2010
2011
2012
2013
2500
2000
1500
1000
500
0
# of Fatalities
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification


Number of Serious Injuries by Roadway Ownership
2009
2010
2011
2012
2013
25000
20000
15000
10000
5000
0
# of Serious Injuries
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification


Fatality Rate by Roadway Ownership
2009
2010
2011
2012
2013
2.5
2
1.5
1
0.5
0
Fatality Rate (per HMVMT)
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification


Serious Injury Rate by Roadway Ownership
2009
2010
2011
2012
2013
Serious Injury Rate (per HMVMT)
25
20
15
10
5
0
STATE
COUNTY
TOWN
CITY
STATE PARK
LOCAL PARK
OTHER STATE
OTHER LOCAL
PRIVATE
RAILROAD
STATE TOLL
LOCAL TOLL
OTHER
Roadway Functional Classification

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

There are no general highway safety trends on which we would like to elaborate at this time.

Application of Special Rules

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

Older Driver Performance Measures	2009	2010	2011	2012	2013
Fatality rate (per capita)	2.168	2.08	2.008	1.968	1.96
Serious injury rate (per capita)	11.02	10.57	10.17	10.098	9.954
Fatality and serious injury rate (per capita)	13.188	12.652	12.18	12.07	11.918

*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
2005	2019	426	2445	166
2006	2003	385	2388	168
2007	1745	353	2098	170
2008	1775	336	2111	174
2009	1827	340	2167	173
2010	1725	371	2096	174
2011	1746	340	2086	176
2012	1802	343	2145	182

2013	1764	351	2115	186

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:

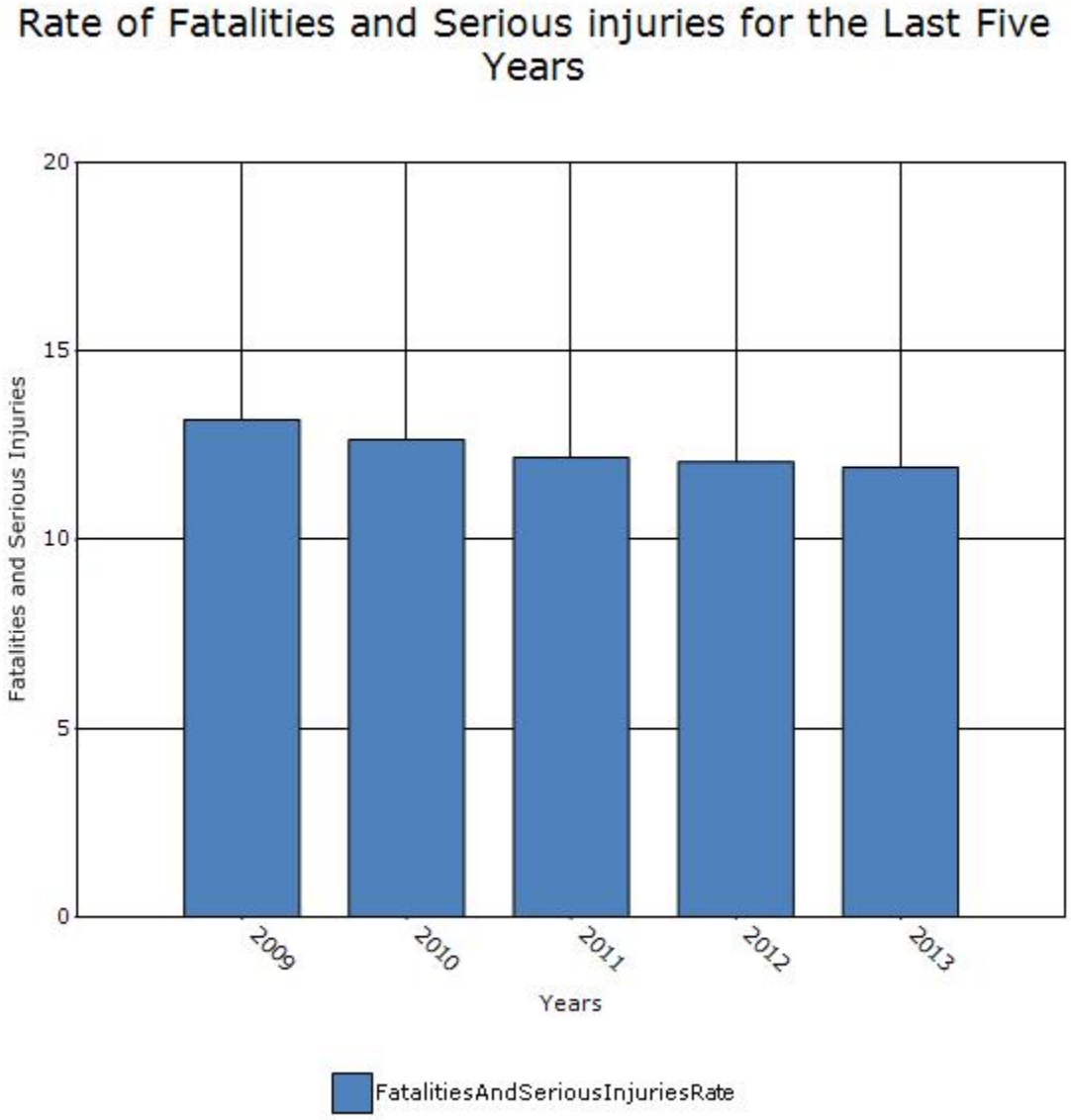
2009: 2167 / 173 = 12.53
2010: 2096 / 174 = 12.05
2011: 2086 / 176 = 11.85
2012: 2145 / 182 = 11.79
2013: 2115 / 186 = 11.37

(12.53 + 12.05 + 11.85 + 11.79 + 11.37) = 59.59 / 5 = 11.918

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



Does the older driver special rule apply to your state?

No

Assessment of the Effectiveness of the Improvements (Program Evaluation)

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

☐ None

☒ Benefit/cost

☐ Policy change

☐ Other:

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

☐ Shift Focus to Fatalities and Serious Injuries

☐ Include Local Roads in Highway Safety Improvement Program

☐ Organizational Changes

☒ None

☐ Other:

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

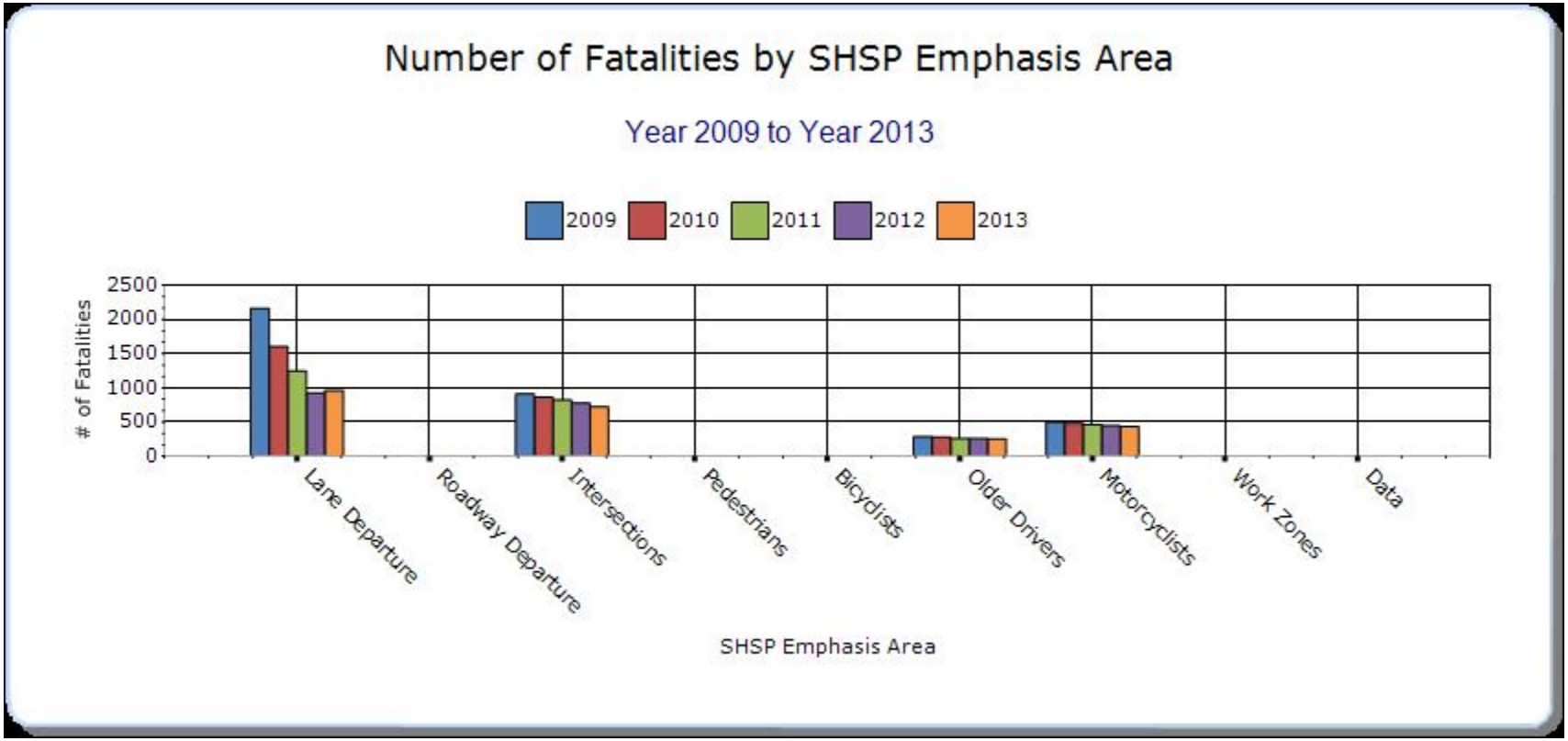
There were no significant program changes during the reporting period.

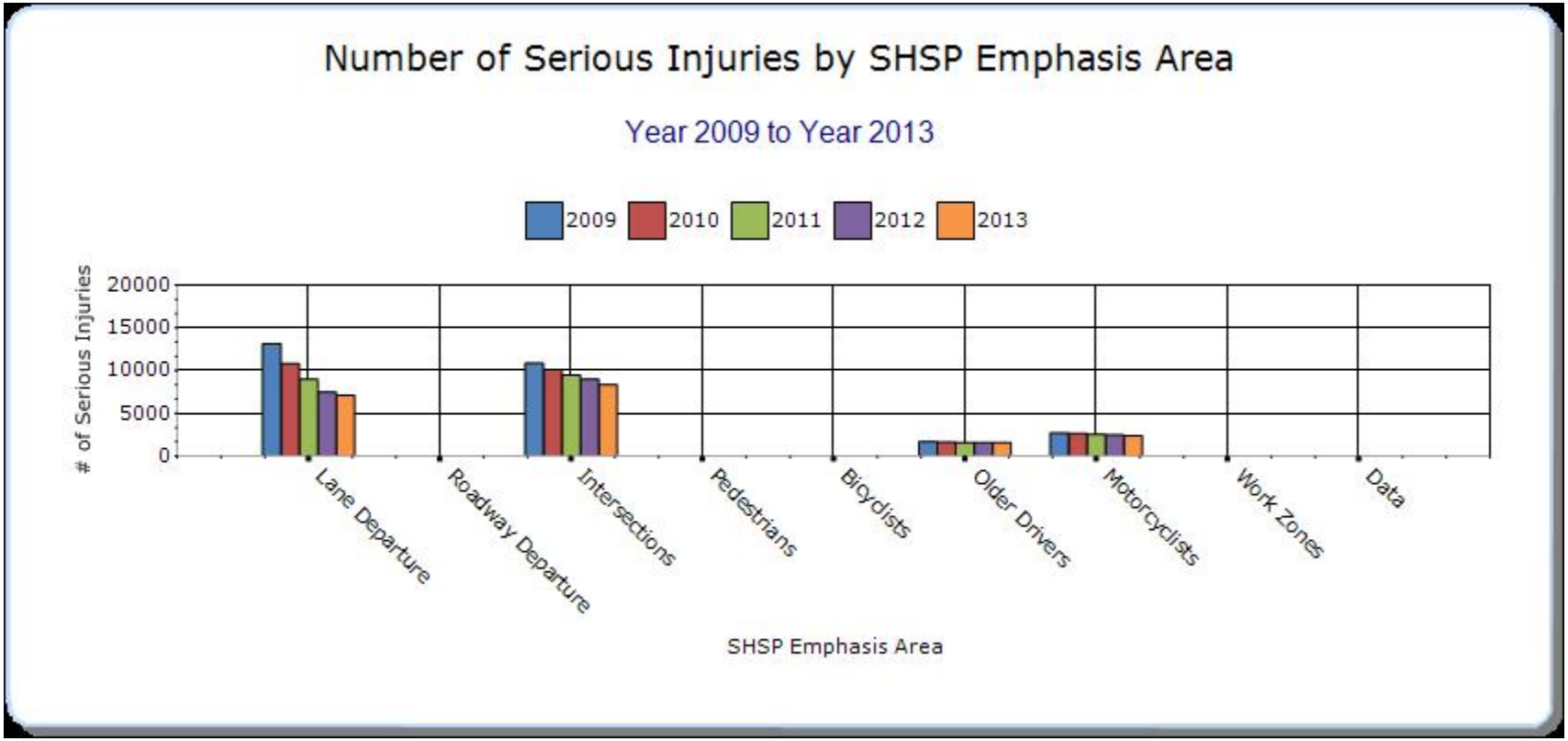
SHSP Emphasis Areas

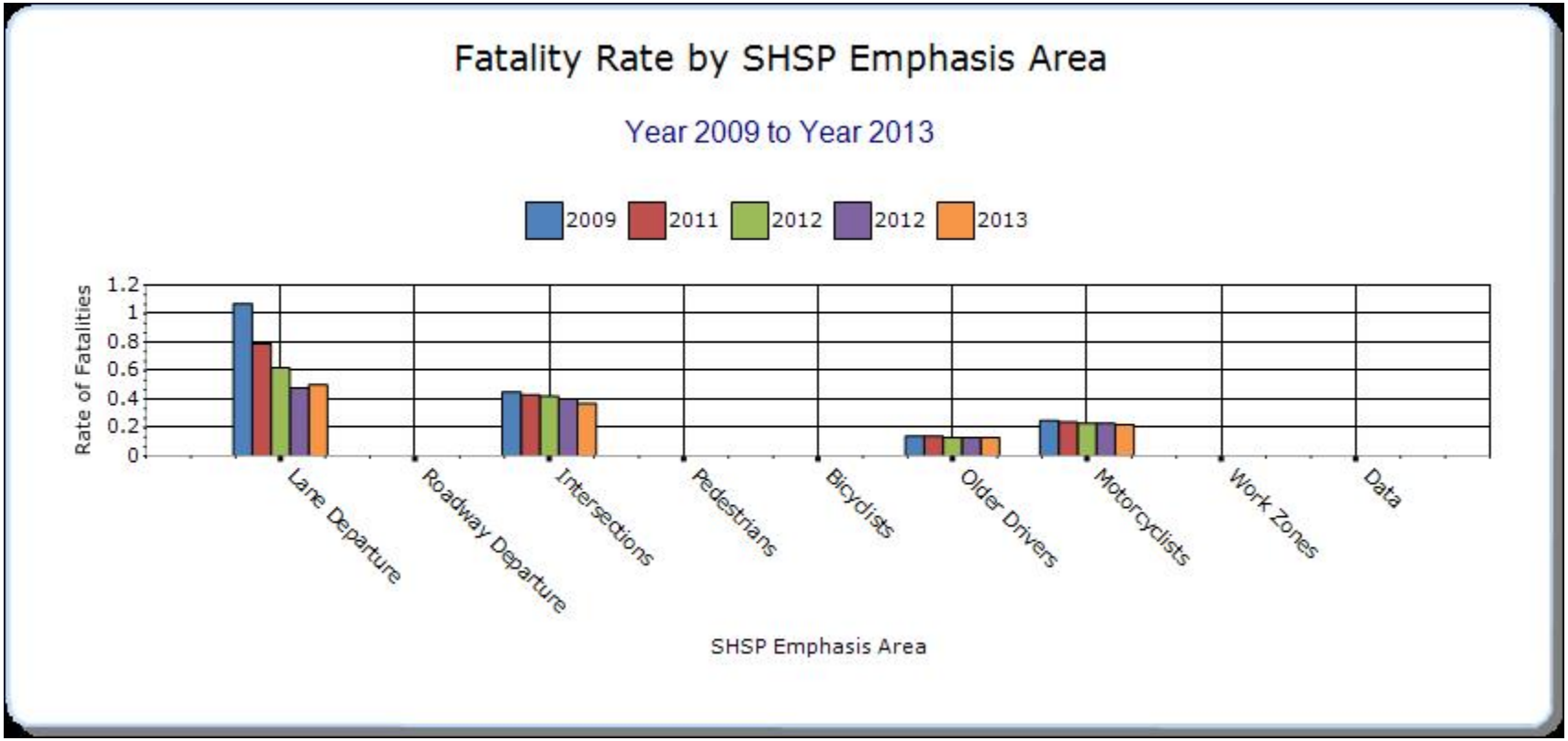
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

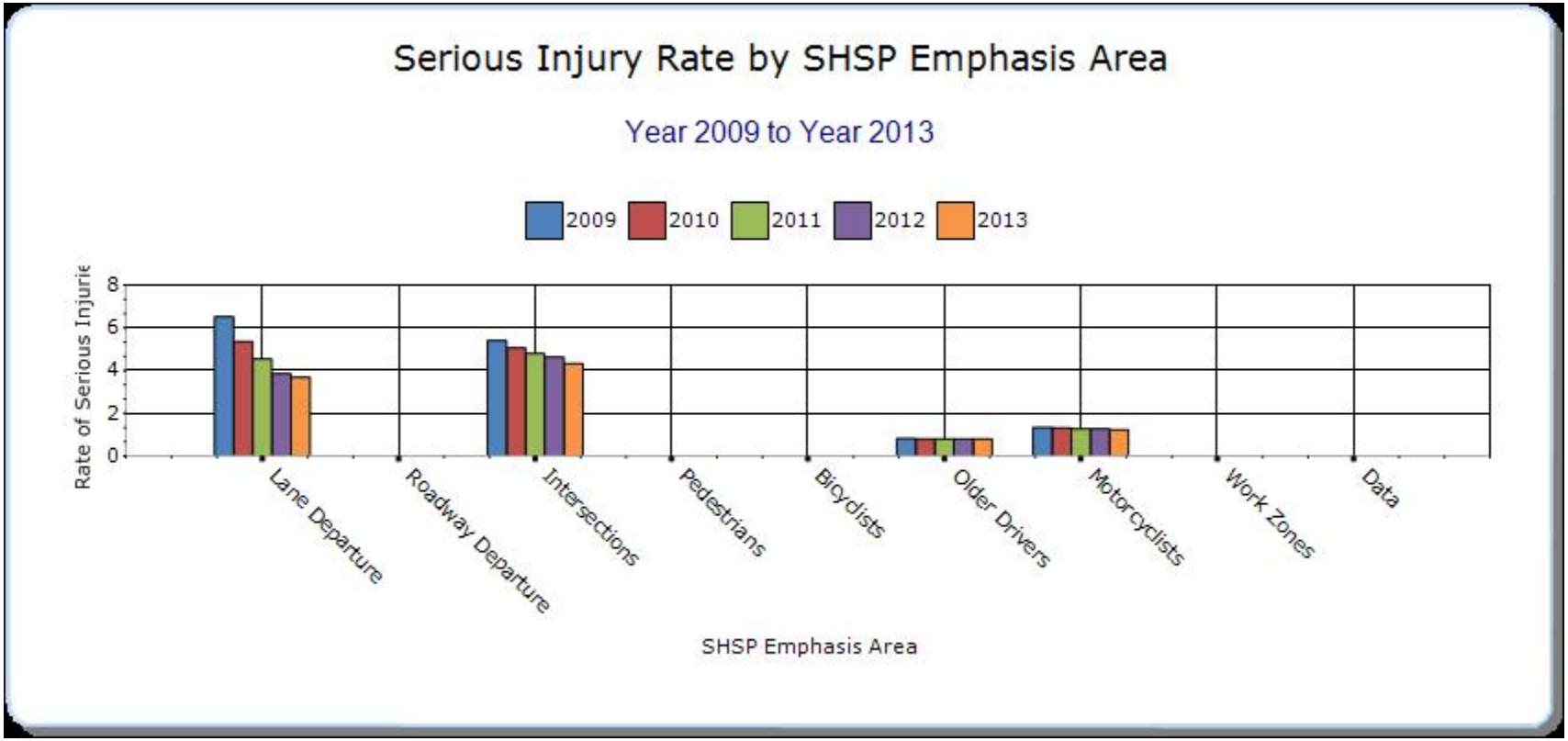
Year - 2013

HSIP-related SHSP Emphasis Areas	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Lane Departure	All	959.4	7137.2	0.5	3.69	0	0	0
Intersections	All	720.2	8379.4	0.37	4.33	0	0	0
Older Drivers	All	251.2	1573.2	0.13	0.81	0	0	0
Motorcyclists	All	431	2397.2	0.22	1.24	0	0	0
Impaired Driving	All	791.2	2446.4	0.41	1.26	0	0	0
Teen Drivers	All	97.2	1154.6	0.05	0.6	0	0	0
Pedestrians and Bicyclists	All	599	2410.4	0.31	1.25	0	0	0


Number of Fatalities by SHSP Emphasis Area
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Fatalities
2500
2000
1500
1000
500
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
SHSP Emphasis Area


Number of Serious Injuries by SHSP Emphasis Area
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Serious Injuries
20000
15000
10000
5000
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
SHSP Emphasis Area


Fatality Rate by SHSP Emphasis Area
Year 2009 to Year 2013
2009
2011
2012
2012
2013
Rate of Fatalities
1.2
1
0.8
0.6
0.4
0.2
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
SHSP Emphasis Area

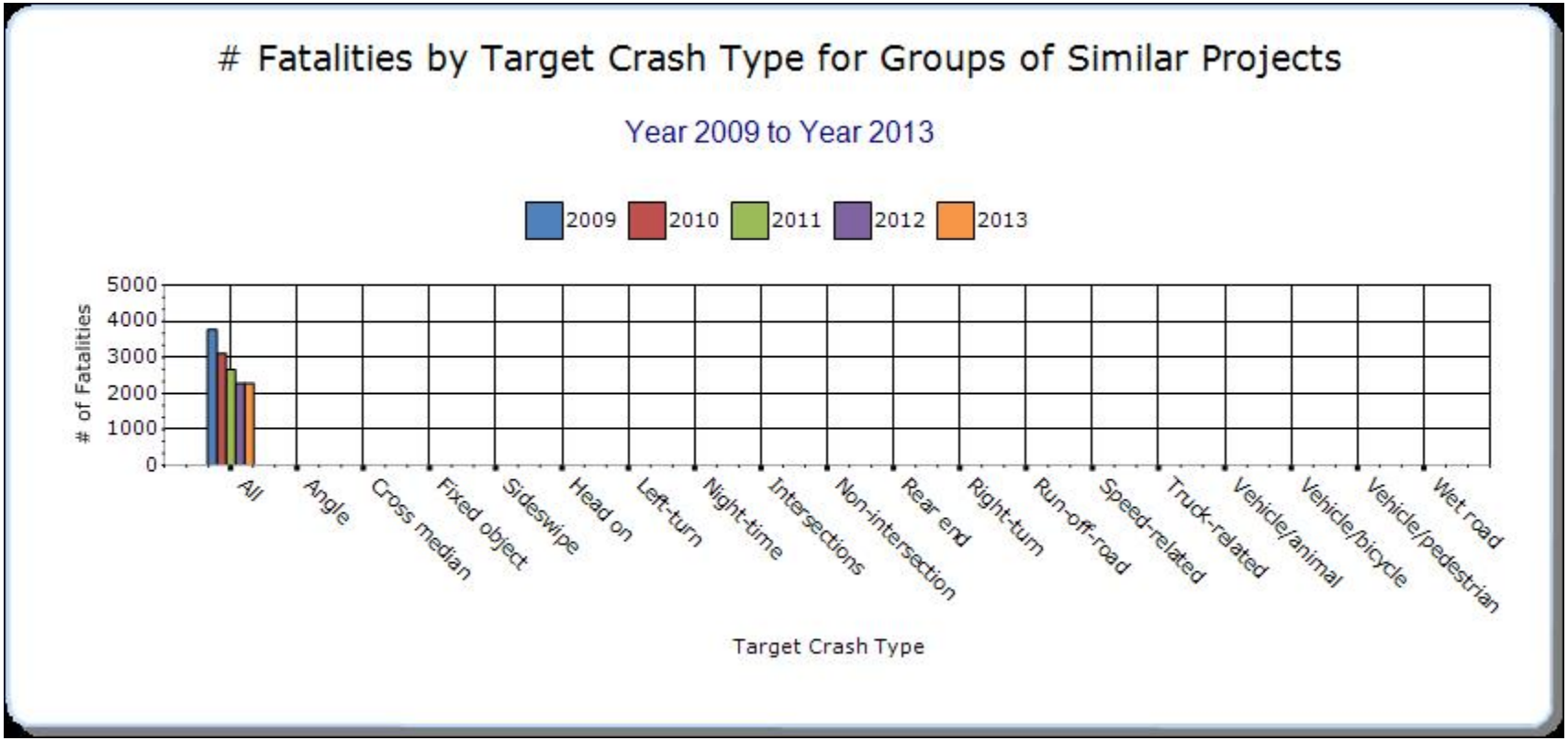

Serious Injury Rate by SHSP Emphasis Area
Year 2009 to Year 2013
2009
2010
2011
2012
2013
Rate of Serious Injurie
8
6
4
2
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
SHSP Emphasis Area

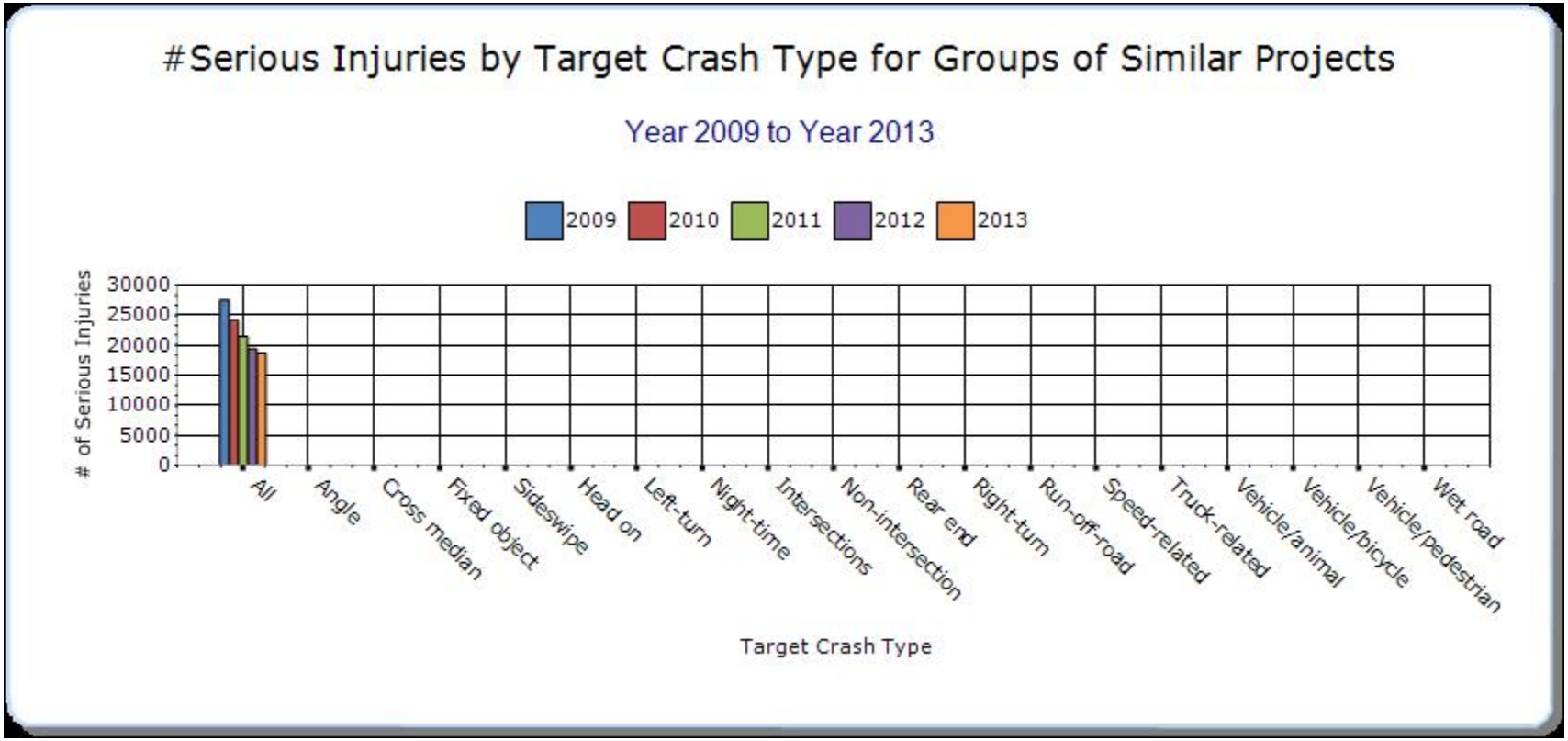
Groups of similar project types

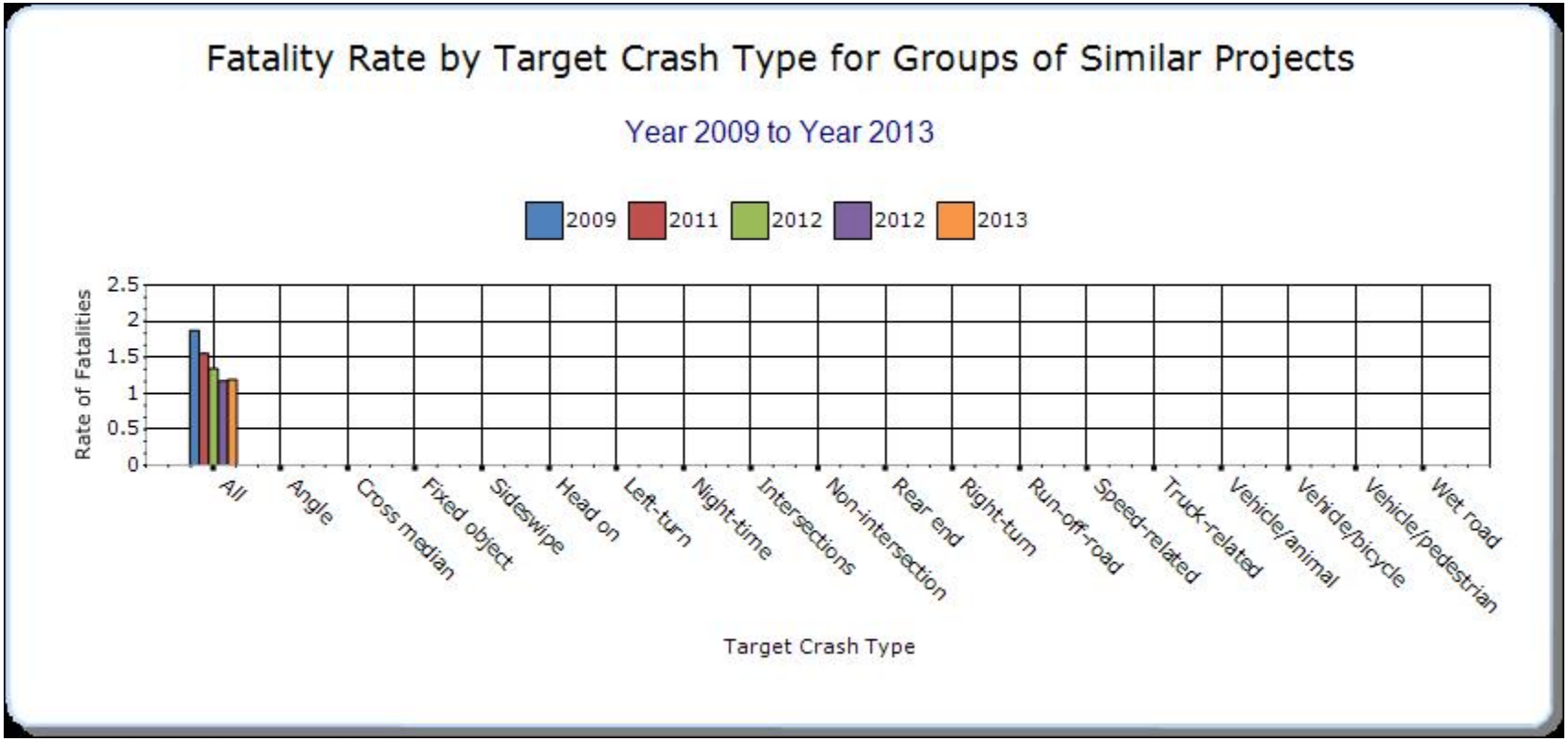
Present the overall effectiveness of groups of similar types of projects.

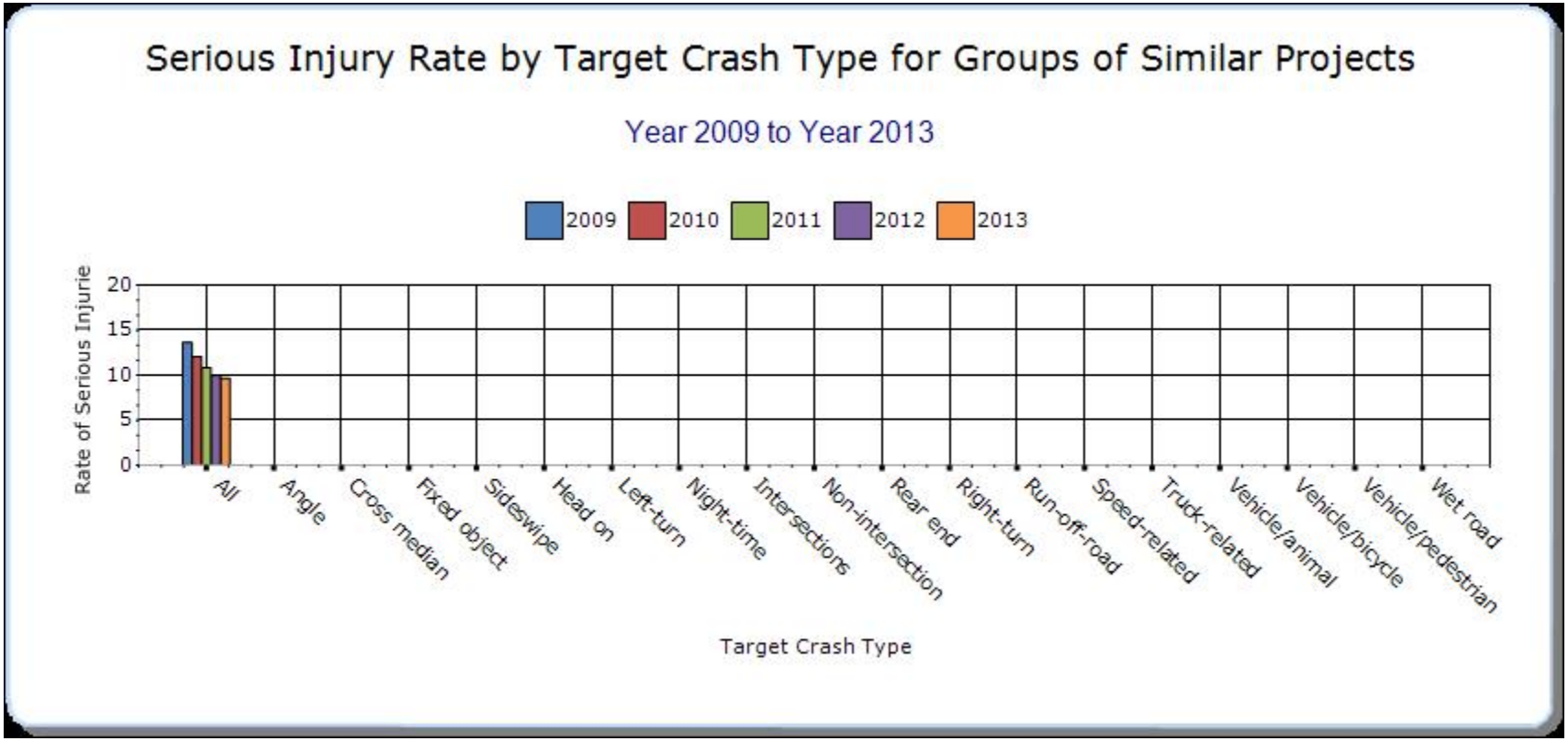
Year - 2013

HSIP Sub-program Types	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3
Bicycle Safety	All	110	792.49	0.06	0.41	0	0	0
Pedestrian Safety	All	479.2	1607	0.25	0.83	0	0	0
Segments	All	959.4	7137.2	0.5	3.69	0	0	0
Intersection	All	733.6	9178.6	0.38	4.74	0	0	0


Fatalities by Target Crash Type for Groups of Similar Projects
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Fatalities
5000
4000
3000
2000
1000
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


#Serious Injuries by Target Crash Type for Groups of Similar Projects
Year 2009 to Year 2013
2009
2010
2011
2012
2013
# of Serious Injuries
30000
25000
20000
15000
10000
5000
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Fatality Rate by Target Crash Type for Groups of Similar Projects
Year 2009 to Year 2013
2009
2011
2012
2012
2013
Rate of Fatalities
2.5
2
1.5
1
0.5
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type

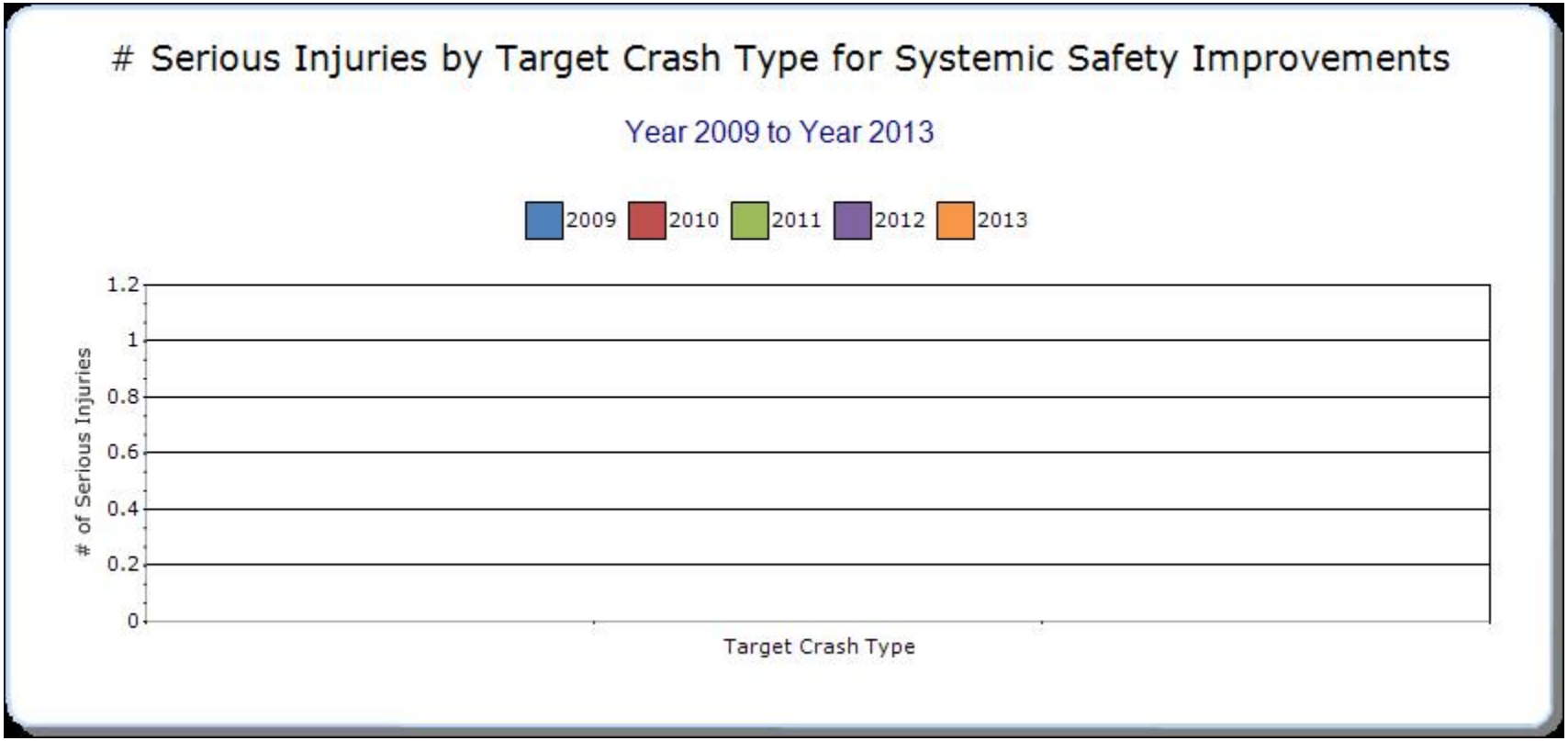

Serious Injury Rate by Target Crash Type for Groups of Similar Projects
Year 2009 to Year 2013
2009
2010
2011
2012
2013
Rate of Serious Injurie
20
15
10
5
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type

Systemic Treatments

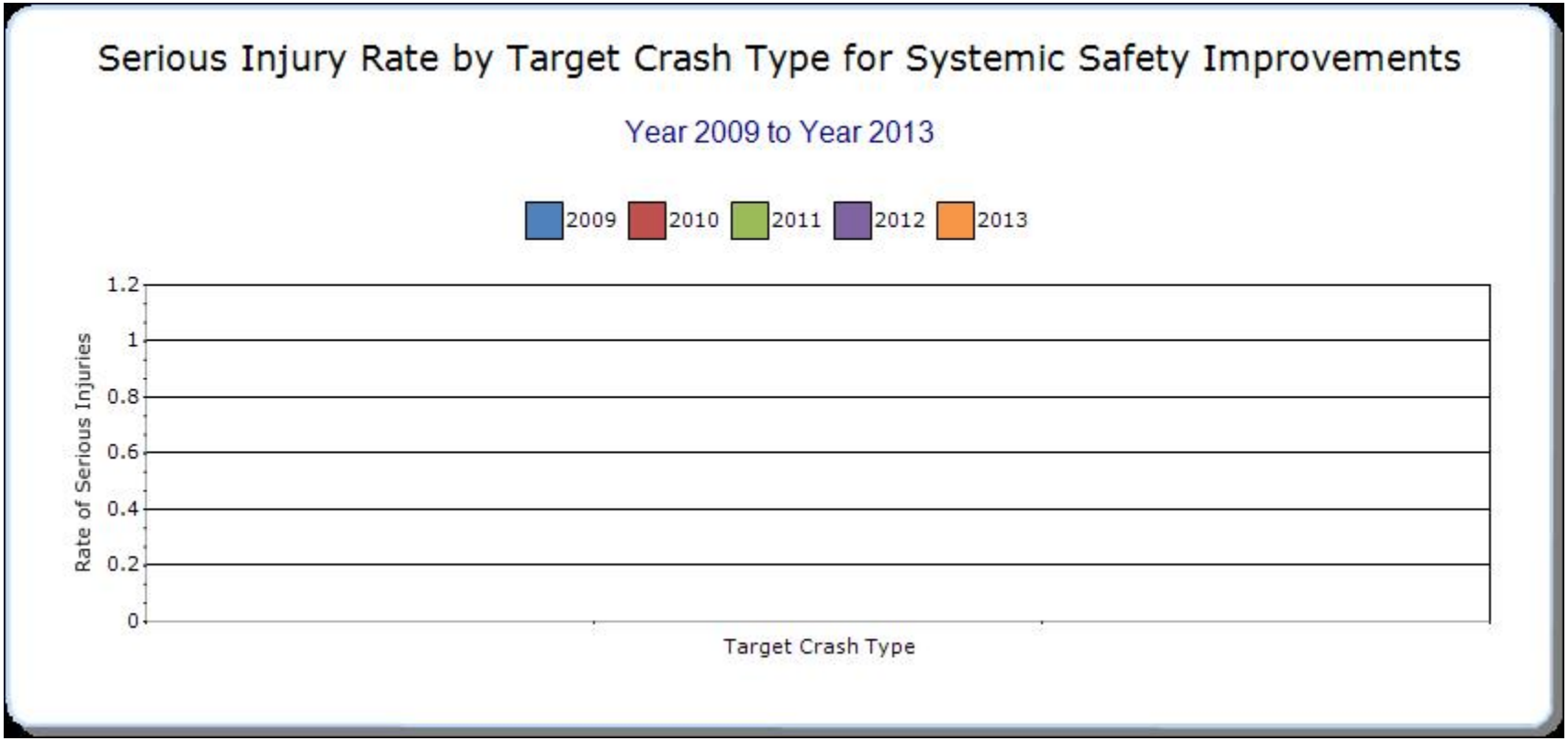
Present the overall effectiveness of systemic treatments.

Systemic improvement	Target Crash Type	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)	Other-1	Other-2	Other-3


Fatalities by Target Crash Type for Systemic Safety Improvements
Year 2009 to Year 2013
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
# of Fatalities
Target Crash Type


Serious Injuries by Target Crash Type for Systemic Safety Improvements
Year 2009 to Year 2013
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
# of Serious Injuries
Target Crash Type


Fatality Rate by Target Crash Type for Systemic Safety Improvements
Year 2009 to Year 2013
2009
2011
2012
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Fatalities
Target Crash Type


Serious Injury Rate by Target Crash Type for Systemic Safety Improvements
Year 2009 to Year 2013
2009
2010
2011
2012
2013
1.2
1
0.8
0.6
0.4
0.2
0
Rate of Serious Injuries
Target Crash Type

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

Due to the low volume of systemic improvement projects deployed during the reporting period, the department is not reporting on their performance at this time. Any performance reporting would need to be at a region or statewide level and due to the limited number of projects, it would prove difficult to determine the effect of the systemic projects. The department is working with the Federal Highway Administration to develop a program to address lane departure crashes on a systemic basis. An implementation plan is currently being developed to determine how to deploy these projects in a manner which will have the greatest effect in reducing lane departure crashes.

Due to changes in Florida's crash report form in 2010, crash trends for the Aggressive Driving and Distracted Driving emphasis areas are not being reported at this time. As with the other emphasis areas, efforts are underway to address these crash types.

The optional project evaluation shown in the next question (36) is a product created by the FDOT's Crash Reduction Analysis System Hub (CRASH). The projects listed are one which were funded with HSIP or HRRR funds and completed the construction phase during the 2010 calendar year. Crashes for the before period occurred a minimum of 1 year and maximum of 3 years before the construction begin date. Crashes for the after period occurred a minimum of 1 year after the construction end date and a maximum of 36 months after the construction end date. The benefit for the projects was calculated using the change in the total number of crashes from the before period to the after period, multiplied by the FDOT's average cost per crash ($195,791 / crash in 2014). The cost benefit ratio of each project was calculated by dividing the project benefit by the project cost. Information about the project cost and countermeasures deployed is provided by FDOT district staff.

Project Evaluation

Provide project evaluation data for completed projects (optional).

Location	Functional Class	Improvement Category	Improvement Type	Bef-Fatal	Bef-Serious Injury	Bef-All Injuries	Bef-PDO	Bef-Total	Aft-Fatal	Aft-Serious Injury	Aft-All Injuries	Aft-PDO	Aft-Total	Evaluation Results (Benefit/ Cost Ratio)
195536-3	Urban Principal Arterial - Other	Roadway	Pavement surface - high friction surface	1	0	53	11	0	1	0	41	25	0	-0.0978955
195840-0		Roadway	Pavement surface - high friction surface	1	0	68	163	0	2	0	101	215	0	-5.02430868865686
197647-3	Rural Principal Arterial - Other Freeways and Expressways	Roadway	Pavement surface - high friction surface	0	0	3	7	0	0	0	4	1	0	0.3059234375
20779	Rural Minor	Intersection	Auxiliary lanes - add left-	1	0	14	18	0	1	0	7	13	0	1.070871467639

6-3	Arterial	geometry	turn lane											02
208628-2	Urban Minor Arterial	Intersection geometry	Intersection geometrics - modify intersection corner radius	0	0	2	6	0	0	0	1	5	0	0.196972837022133
209361-4	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - modify turn lane storage	1	0	20	29	0	0	0	37	27	0	-2.23065905610107
209361-4	Urban Principal Arterial - Other	Intersection geometry	Splitter island - install on one or more approaches	1	0	18	28	0	0	0	32	26	0	-1.39038153647515
209574-6	Urban Principal Arterial - Other	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	0	0	0	0	0	0	0	0	1	0	-0.955087366706017
209574-6	Urban Principal Arterial - Other	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	0	0	0	0	0	0	0	0	1	0	-0.575855882352941
209698-1	Urban Principal Arterial - Other	Pedestrians and bicyclists	Install sidewalk	0	0	72	34	106	0	0	69	71	140	-33.28447

209698-1	Urban Principal Arterial - Other	Pedestrians and bicyclists	Install sidewalk	0	0	72	34	0	0	0	69	71	0	-9.32338095238095
210376-5	Rural Principal Arterial - Other Freeways and Expressways	Shoulder treatments	Pave existing shoulders	0	0	9	21	0	1	0	7	12	0	1.2207015054348
210376-6	Rural Principal Arterial - Other Freeways and Expressways	Shoulder treatments	Pave existing shoulders	0	0	24	13	0	1	0	23	11	0	0.266927062031357
210376-6	Rural Principal Arterial - Other Freeways and Expresswa	Shoulder treatments	Pave existing shoulders	0	0	24	13	0	1	0	23	11	0	0.287716385011021

	ys													
210376-7	Rural Principal Arterial - Other Freeways and Expressways	Shoulder treatments	Pave existing shoulders	3	0	14	9	0	1	0	7	11	0	0.670845325501713
210376-7	Rural Principal Arterial - Other Freeways and Expressways	Shoulder treatments	Pave existing shoulders	3	0	14	9	0	1	0	7	11	0	0.793134837962963
210429-3	Rural Principal Arterial - Other Freeways and Expressways	Intersection geometry	Auxiliary lanes - add right-turn lane	0	0	19	20	0	0	0	24	9	0	9.70864462809917
21042	Rural Principal	Intersection	Auxiliary lanes - add right-	0	0	7	8	0	0	0	4	0	0	12.97410240963

9-3	Arterial - Other Freeways and Expressways	geometry	turn lane											86
212943-4	Rural Principal Arterial - Interstate	Intersection geometry	Auxiliary lanes - extend acceleration/deceleration lane	0	0	11	13	0	0	0	5	2	0	4.76854871060172
254677-2		Roadway signs and traffic control	Curve-related warning signs and flashers	0	0	8	6	0	0	0	12	5	0	-9.03650769230769
254677-2		Intersection traffic control	Intersection flashers - add overhead (continuous)	0	0	1	0	0	0	0	2	1	0	-4.01622564102564
254677-2		Access management	Change in access - close or restrict existing access	0	0	5	4	0	0	0	3	8	0	-3.76521153846154
254677-2		Access management	Change in access - close or restrict existing access	2	0	155	236	0	3	0	181	209	0	0
254677-2		Access managemen	Change in access - close or	1	0	1	0	0	0	0	0	0	0	0.851265217391

		t	restrict existing access											304
254677-2		Access management	Change in access - close or restrict existing access	4	0	61	46	0	2	0	44	52	0	4.61938838475499
254677-2		Access management	Change in access - close or restrict existing access	0	0	27	35	0	0	0	22	35	0	5.79263313609467
254677-2		Pedestrians and bicyclists	Pedestrian signal	0	0	4	2	0	0	0	3	1	0	6.02433846153846
254677-2		Roadway delineation	Roadway delineation - other	4	0	43	25	0	4	0	31	22	0	16.3159166666667
254677-2		Roadway	Rumble strips - edge or shoulder	0	0	11	17	0	0	0	3	7	0	22.5912692307692
254677-2		Roadway	Rumble strips - edge or shoulder	0	0	14	13	0	0	0	3	3	0	39.5347211538462
254677-2		Roadway	Rumble strips - edge or shoulder	3	0	123	115	0	2	0	117	87	0	45.3219907407407
254677-2		Roadway	Rumble strips - edge or shoulder	5	0	54	35	0	2	0	37	34	0	89.382847826087
254677-2		Roadway	Rumble strips - edge or shoulder	4	0	148	284	0	4	0	134	188	0	158.968187186301
41133	Urban	Roadway	Rumble strips - edge or	7	0	301	344	0	6	0	287	287	0	64.36964383561

7-1	Principal Arterial - Other		shoulder											64
415569-1	Rural Minor Arterial	Roadside	Barrier- metal	0	0	8	5	0	0	0	5	2	0	0.626282023259013
416086-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	0	0	45	27	0	0	0	30	15	0	8.56783954619125
417244-2	Rural Minor Arterial	Shoulder treatments	Pave existing shoulders	8	0	47	29	0	6	0	43	18	0	0.596379701660268
419366-1	Urban Principal Arterial - Other	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	0	0	54	37	0	0	0	32	30	0	14.1948475
419496-1	Rural Principal Arterial - Other Freeways and Expressways	Roadway	Rumble strips - unspecified or other	0	0	4	5	0	0	0	7	13	0	-0.934766059027778

419804-1	Rural Principal Arterial - Interstate	Roadside	Barrier- metal	14	0	200	278	0	10	0	233	347	0	-9.25719962194477
419850-1	Urban Minor Arterial	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	0	0	26	39	0	0	0	22	41	0	1.91951960784314
419947-1	Urban Minor Arterial	Lighting	Continuous roadway lighting	1	0	84	188	0	1	0	75	194	0	0.727847583643123
419947-1	Urban Minor Arterial	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified	1	0	22	20	0	0	0	12	16	0	6.97751743865585
420234-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified	1	0	21	21	0	0	0	14	18	0	10.2937569303713
420236-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified	0	0	9	13	0	0	0	3	2	0	19.401179769059
420978-1		Lighting	Continuous roadway lighting	6	0	67	61	0	4	0	83	49	0	-0.323889164598842

421480-4	Urban Principal Arterial - Other	Pedestrians and bicyclists	Install sidewalk	1	0	48	52	0	1	0	50	54	0	-1.51775968992248
421503-1	Rural Minor Arterial	Roadway	Rumble strips - edge or shoulder	7	0	95	42	0	6	0	80	47	0	3.58950166666667
421770-1	Rural Principal Arterial - Other Freeways and Expressways	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	1	0	17	12	0	0	0	9	6	0	9.78955
422282-1	Rural Principal Arterial - Other Freeways and Expressways	Lighting	Continuous roadway lighting	1	0	16	23	0	0	0	12	22	0	6.34997837837838
422392-1	Urban Principal Arterial -	Intersection geometry	Auxiliary lanes - add left-turn lane	1	0	64	33	0	0	0	50	37	0	0.897375416666667

	Other													
422393-1	Urban Principal Arterial - Other	Roadway	Pavement surface - high friction surface	1	0	35	32	0	0	0	45	27	0	-0.139850714285714
422397-1	Urban Minor Arterial	Roadway	Pavement surface - high friction surface	0	0	9	6	0	0	0	3	1	0	0.717900333333333
422398-1	Rural Principal Arterial - Other Freeways and Expressways	Roadway	Pavement surface - high friction surface	1	0	8	11	0	0	0	9	11	0	0
422400-1	Urban Minor Arterial	Roadway	Pavement surface - high friction surface	1	0	15	6	0	2	0	12	3	0	0.575855882352941
422401-x		Roadway	Pavement surface - high friction surface	1	0	6	9	0	1	0	12	7	0	-0.237322424242424
422402-1	Urban Principal Arterial -	Roadway	Pavement surface - high friction surface	0	0	11	11	0	0	0	15	8	0	-0.108772777777

	Other													778
422499-1	Rural Principal Arterial - Interstate	Roadway	Pavement surface - high friction surface	3	0	31	20	0	1	0	23	17	0	0.248320292682927
422663-1	Urban Principal Arterial - Other	Access management	Change in access - close or restrict existing access	0	0	12	5	0	0	0	3	3	0	11.9650055555556
422667-1	Urban Major Collector	Roadway	Rumble strips - edge or shoulder	6	0	107	98	0	2	0	76	41	0	46.9210904023236
422668-1	Urban Minor Arterial	Roadway	Rumble strips - edge or shoulder	2	0	53	63	0	0	0	27	33	0	55.539199671339
422699-1	Rural Principal Arterial - Other Freeways and Expressways	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	0	0	15	1	0	0	0	5	10	0	0.286819888460316
422705-1	Rural Principal	Roadway	Roadway delineation -	3	0	51	42	0	3	0	49	56	0	-14.30253666197

	Arterial - Other	delineation	other											93
423047-1	Urban Principal Arterial - Other	Roadway	Pavement surface - high friction surface	3	0	169	205	0	1	0	170	173	0	18.4602942857143
423220-1	Rural Minor Arterial	Roadway	Rumble strips - edge or shoulder	2	0	7	7	0	0	0	5	2	0	1.67661179828735
423222-1	Rural Principal Arterial - Other Freeways and Expressways	Roadway	Rumble strips - edge or shoulder	0	0	8	1	0	0	0	7	4	0	-7.83164
423222-1	Rural Principal Arterial - Other Freeways and Expressways	Roadway	Rumble strips - edge or shoulder	2	0	14	2	0	0	0	7	7	0	15.66328

423222-1	Rural Principal Arterial - Other Freeways and Expressways	Roadway	Rumble strips - edge or shoulder	0	0	19	8	0	2	0	6	12	0	27.41074
423256-1	Urban Principal Arterial - Interstate	Roadway	Pavement surface - high friction surface	0	0	3	3	0	0	0	3	3	0	0
423256-1	Urban Principal Arterial - Interstate	Roadway	Pavement surface - high friction surface	0	0	30	17	0	0	0	2	0	0	18.6270507399577
423273-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	1	0	16	29	0	0	0	18	13	0	44.6094782410572
423274-1	Urban Principal Arterial - Other	Access management	Change in access - miscellaneous/unspecified	0	0	20	15	0	0	0	24	10	0	0.109380446927374
42327	Urban Minor	Intersection	Auxiliary lanes - add left-	1	0	10	2	0	0	0	12	2	0	-0.533333514932

5-1	Arterial	geometry	turn lane											935
423277-1	Rural Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	0	0	2	1	0	0	0	3	1	0	-1.13854482862892
423280-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	4	0	12	8	0	2	0	14	5	0	2.31764752303352
423281-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	0	0	6	4	0	0	0	7	6	0	-6.4515289310663
423376-6		Roadway	Rumble strips - edge or shoulder	1	0	6	6	0	1	0	7	7	0	-3.52576465609609
423377-1	Rural Major Collector	Roadway	Rumble strips - edge or shoulder	1	0	2	2	0	0	0	0	3	0	4.07592222499792
423378-1	Rural Major Collector	Intersection geometry	Auxiliary lanes - add left-turn lane	0	0	3	6	0	0	0	5	4	0	0
423379-1	Rural Major	Intersection geometry	Auxiliary lanes - add left-turn lane	0	0	31	26	0	2	0	29	15	0	12.3034179001308

	Collector													
423515-1	Urban Minor Arterial	Intersection geometry	Auxiliary lanes - modify turn lane storage	0	0	18	47	0	0	0	22	79	0	-22.8106019417476
423515-1	Urban Minor Arterial	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	0	0	21	36	0	2	0	25	50	0	-12.6725566343042
423517-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add left-turn lane	0	0	16	52	0	1	0	12	18	0	33.0788447488585
423518-1	Urban Minor Arterial	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	0	0	30	13	0	1	0	14	16	0	15.9829387755102
423552-1	Urban Principal Arterial - Other	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	0	0	31	32	0	1	0	21	37	0	2.61927759197324
424115-1	Urban Minor Arterial	Lighting	Continuous roadway lighting	1	0	23	32	0	1	0	23	20	0	67.8710460178525
424711-1	Rural Minor Arterial	Roadway	Rumble strips - edge or shoulder	3	0	42	43	0	2	0	37	43	0	5.315592760181

424731-1	Urban Principal Arterial - Other	Pedestrians and bicyclists	Install sidewalk	0	0	1	2	0	0	0	0	1	0	0.862515418502203
424731-1	Urban Principal Arterial - Other	Pedestrians and bicyclists	Install sidewalk	0	0	1	2	0	0	0	0	1	0	5.84450746268657
424733-1	Urban Minor Arterial	Intersection geometry	Auxiliary lanes - add two-way left-turn lane	0	0	3	7	0	0	0	4	8	0	-1.66630638297872
424804-1	Rural Principal Arterial - Other Freeways and Expressways	Roadway	Rumble strips - edge or shoulder	1	0	31	29	0	1	0	25	21	0	6.86308257009369
424805-1	Rural Principal Arterial - Other Freeways and Expresswa	Roadway	Rumble strips - edge or shoulder	1	0	35	31	0	1	0	26	38	0	0.629392165025339

	ys													
425134-1	Urban Principal Arterial - Other	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified	0	0	9	18	0	0	0	8	18	0	2.42778315105523
425585-1	Urban Principal Arterial - Other	Intersection geometry	Auxiliary lanes - add right-turn lane	0	0	3	1	0	0	0	3	3	0	-1.31666689082864
426724-1	Rural Minor Arterial	Intersection geometry	Splitter island - install on one or more approaches	0	0	14	2	0	0	0	16	5	0	-1.22369375
427033-1	Urban Principal Arterial - Interstate	Roadside	Barrier end treatments (crash cushions, terminals)	1	0	44	64	0	0	0	48	75	0	-8.10968639053254
427033-2	Urban Principal Arterial - Interstate	Roadside	Barrier end treatments (crash cushions, terminals)	1	0	113	174	0	2	0	110	127	0	45.4680521327014
427517-1	Urban Principal Arterial - Other	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified	0	0	18	41	0	0	0	11	41	0	8.20680838323353

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 non-infrastructure 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.

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.