



Highway Safety Improvement Program  
*Data Driven Decisions*

Connecticut  
Highway Safety Improvement Program  
2016 Annual Report

Prepared by: CT

## 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 reporting period for 2016 is from October 1, 2014 to September 30, 2015.

The HSIP is administrated and managed by the Safety Engineering Section located within the Division of Traffic Engineering, Bureau of Engineering and Construction.

This reporting period, CTDOT has obligated more systemic and systematic safety improvements in the HSIP program compared to past reporting periods. While CTDOT's traditional site analysis approach, known as the suggested List of Surveillance Study Sites (SLOSSS), results in safety investments at specific locations, the systemic and systematic approach leads to widespread implementation of projects to reduce the potential for fatalities and/or serious injuries, whether or not crashes have occurred at any given site. Because many of CT's fatal and serious injury crashes are spread out across all public roads, the systematic/systemic approach provides an alternate method to identify and implement low-cost safety countermeasure addressing specific risk factors across the entire roadway network. Systematic/systemic analysis is a compliment to site-specific analysis, and can be very effective in implementing low-cost safety improvements.

CT is currently updating its SHSP and it is likely that additional emphasis will be placed on systematic and systemic improvements.

Below are notes that explain why data has not been entered for specific questions:

Q25: CTDOT crash record database does not have the capability to query for serious injuries based on functional classification

Q32: CT is in the process of updating its SHSP and some of the emphasis areas will be changing. The data shown for this question includes some existing and proposed emphasis areas. Overall each emphasis area has remained the same or trending downward for each of the four performance measures.

Q33 & Q34: CTDOT crash record database does not have the capability to query on targeted crash types for the selected systemic improvements

## 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

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

Local Roads are addressed by the Local Road Accident Reduction Program (LRARP). The LRARP provides federal funding for safety-related improvements not on the state-numbered highway system, to address hazardous elements identified at specific locations and along roadway sections. The Crash Data and Analysis Office commenced coding all local road crashes data in 2007 and complete local road crash information is now available at the crash repository at the UCONN. Since traffic volume data for the majority of local roads is not available, an analytical analysis of crashes on non-state maintained roadways to determine project selection has not been possible. Therefore, the Department annually solicits the nine Council of Governments (COGs) in CT for recommended improvements on behalf of their member towns, to address identified hazardous elements. These improvements may include signal enhancements, minor geometric improvements, roadside obstacles, sight line conditions, hazards to pedestrians and poor or unmarked roadways. In the future when more local road data is available, the methodology for selection of improvements under the LRARP will be reevaluated. In the interim, the Department has expanded the Local Road Program in order to consider system-wide improvement projects designed to address run-off-road fixed-object collisions on local roads. The project cost eligible for federal participation is currently capped at \$500,000 per location. All locations are reviewed and investigated by the Division of Traffic Engineering and the Division of Highway Design.

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

Design  
Planning  
Maintenance  
Operations  
Governors Highway Safety Office  
Other-Traffic Engineering

**Briefly describe coordination with internal partners.**

Responsibility for carrying out the administration of the HSIP within the Department is assigned to the Division of Traffic Engineering and the Bureau of Policy and Planning-Crash Data and Analysis Section. The Department actively collects and compiles crash data with the intent of addressing problematic conditions that are identified. Identification and surveillance of locations displaying higher than expected accident rates on the state highway system are accomplished primarily through a computerized surveillance system utilizing traffic record files maintained by the Bureau of Policy and Planning. Those files consist of (1) a crash record file, (2) an average daily traffic file, (3) an inventory of certain roadway characteristics. The inventory file identifies locations as being either rural or urban, as either a section of highway, section of expressway, intersection with another state highway, intersection with a town road (or signalized drive) or expressway interchange and further by number of lanes and control of access. Some groups having few locations are merged with similar groups. The Bureau of Policy and Planning runs a computer program utilizing the three files described above. The results are lists of locations that have a higher than expected crash rate. These lists are referred to as SLOSS lists (Suggested List of Surveillance Study Sites). In that computer program, average crash rates and number of crashes are computed for the various groups of locations. Based upon those average values, a threshold of abnormally high numbers and rates is developed for each location. Locations equaling or exceeding the threshold are reviewed. The thresholds are changed occasionally based upon prior experience with these lists. The process described above is not intended to be the sole determinant in identifying locations having problematic characteristics. Many locations with crash rates not abnormally high will demonstrate crash type or severity patterns symptomatic of the problematic characteristic for a particular location. An example would be a pattern of run-off-the-road crashes at a curve. Some other locations may have design characteristics similar to a design characteristic determined to be problematic (e.g., rigid sign posts, poor sight line). These may also be considered for safety improvement.

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

Metropolitan Planning Organizations  
Other-Safety Circuit Rider Program  
Other-State University

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

Other-The Department has begun investigating low cost systematic proven safety countermeasures to enhance the HSIP program

Other-The work by UCONN has vastly improved the quality, timeliness and accessibility of crash data and CTDOT's ability to analyze the data

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

Projects can qualify for the Department's HSIP funds and placement on the HSIP Safety Project Plan when they are initiated from the following sources:

- Suggested List of Surveillance Study Sites (SLOSS)
- Local Road Accident Reduction Program (LRARP)
- Railway-Highway Grade Crossing Program (RHGCP)
- Projects supporting SHSP Emphasis Areas
- Section 402/405 Safety Programs (NHTSA)
- Section 154 (Open Container Requirements)
- High Risk Rural Roads

### Program Methodology

**Select the programs that are administered under the HSIP.**

Horizontal Curve

Local Safety

Other-spot improvement  
(SLOSS)

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**Program:** Horizontal Curve

**Date of Program Methodology:** 7/1/2015

**What data types were used in the program methodology?**

<i>Crashes</i>	<i>Exposure</i>	<i>Roadway</i>
All crashes	Volume	Horizontal curvature
	Population	Functional classification
		Roadside features

**What project identification methodology was used for this program?**

Probability of specific crash types

**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.

Horizontal curves projects on local roads are based on risk factors.

**How are highway safety improvement projects advanced for implementation?**

selection committee

**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).**

Available funding	100
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**Program:** Local Safety

**Date of Program Methodology:** 7/1/2008

**What data types were used in the program methodology?**

<i>Crashes</i>	<i>Exposure</i>	<i>Roadway</i>
Other-As supplied by the applicant		Functional classification

**What project identification methodology was used for this program?**

Crash 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?

No

If no, describe the methodology used to identify local road projects as part of this program. Submittals by the regional planning organizations. The submittals that meet the program's criteria are funded.

**How are highway safety improvement projects advanced for implementation?**

Other-Submittals are checked for accuracy and if the improvement yields a b/c ratio greater than 1.0, the submittals are forwarded to financial to obtain funding

**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

Ranking based on B/C	50
Available funding	50

**Program:** Other-spot improvement (SLOSSS)

**Date of Program Methodology:** 1/1/1967

**What data types were used in the program methodology?**

<i>Crashes</i>	<i>Exposure</i>	<i>Roadway</i>
All crashes	Volume	

**What project identification methodology was used for this program?**

Critical rate

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

No

**How are highway safety improvement projects advanced for implementation?**

selection committee

**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).**

Incremental B/C	100
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**What proportion of highway safety improvement program funds address systemic improvements?**

78%

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

Rumble Strips  
Traffic Control Device Rehabilitation  
Install/Improve Signing  
Install/Improve Pavement Marking and/or Delineation  
Upgrade Guard Rails  
Add/Upgrade/Modify/Remove Traffic Signal

**What process is used to identify potential countermeasures?**

Engineering Study  
Road Safety Assessment

**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

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

CTDOT is considering a major change to the Local Road Accident Reduction Program (LRARP). Each of the 9 council of governments (COG's) in the State will be encouraged to prepare a regional transportation safety plan to identify the region's critical safety needs and guide investment decisions to reduce fatalities and serious injuries on secondary roads for all road users, while promoting safe travel for all modes. These plans would also be used to generate candidate HSIP projects.

## Progress in Implementing Projects

### Funds Programmed

Reporting period for Highway Safety Improvement Program funding.

Federal Fiscal Year

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

Funding Category	Programmed*		Obligated	
<b>HSIP (Section 148)</b>	\$29,319,118.00	67 %	\$34,609,790.00	69 %
<b>HRRRP (SAFETEA-LU)</b>	\$0.00	0 %	\$147,103.00	0 %
<b>HRRR Special Rule</b>	\$2,145,181.00	5 %	\$2,145,181.00	4 %
<b>Penalty Transfer - Section 154</b>	\$10,219,682.00	23 %	\$10,219,682.00	20 %
<b>Other Federal-aid Funds (i.e. STP, NHPP)</b>	\$0.00	0 %	\$274,500.00	1 %
<b>State and Local Funds</b>	\$2,289,293.00	5 %	\$2,985,121.00	6 %
<b>Totals</b>	\$43,973,274.00	100%	\$50,381,377.00	100%

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

\$400,000.00

How much funding is obligated to local safety projects?

\$413,500.00

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

\$3,425,653.00

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

\$3,852,988.00

**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?**

\$14,055,615.00

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

Adequate staffing levels to deliver HSIP projects. Continue to rehire engineers when people leave to assume other jobs in the Department and/or rely more heavily on the use of consultant engineers.

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

The State's SHSP is currently being updated to meet the requirements of MAP-21 and the FAST ACT.

**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
<b>0172-402CN+</b>	Intersection traffic control Modify traffic signal - modernization/replacement	3 Numbers	13881	13881	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0174-0391PE</b>	Intersection traffic control Modify traffic signal - modernization/replacement	2 Numbers	70000	70000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0173-0453PE</b>	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	1 Numbers	159000	159000	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians	enhancing pedestrians amenities
<b>0171-0393PE</b>	Intersection traffic control Modify traffic signal - modernization/replacement	1 Numbers	35000	35000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti

<b>0148-0200R W</b>	Interchange design Interchange design - other	1 Numbers	45000	50000	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0171-0356CN +</b>	Intersection traffic control Modify traffic signal - modernization/replacement	1 Numbers	15308	15308	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersections
<b>0173-0443CN</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	225 Numbers	26943 60	26943 60	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersections
<b>0174-0382CN</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	99 Numbers	12426 80	12426 80	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersections
<b>0173-0442PE</b>	Roadside Barrier- metal	9 Miles	92500	92500	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	protecting motorists from roadside hazards
<b>0170-3337PL</b>	Non-infrastructure Transportation safety planning	1 Numbers	45000 0	50000 0	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0170-3336PE</b>	Roadway Rumble strips - center	74 Miles	75000	75000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the

											roadway
<b>0172-0398CN +</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	2 Numbe rs	87198	87198	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0172-0427CN +</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	155 Numbe rs	96825	96825	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0042-0315R W+</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	13680 0	15200 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Bicyclists	enhancin g bicycle amenities
<b>0148-0202CN +</b>	Intersection geometry Auxiliary lanes - add auxiliary through lane	1 Numbe rs	13230	13230	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0172-0435PE</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	8 Numbe rs	70000	70000	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0174-0347CN +</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	2 Numbe rs	49340	49340	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy

											intersecti
<b>0170-3254PE</b>	Intersection traffic control Intersection flashers - modify existing	115 Numbe rs	19500 0	19500 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0017-0183RW+</b>	Intersection geometry Intersection geometrics - miscellaneous/other/unspe cified	1 Numbe rs	32490 0	36100 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0173-0455PE</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	52500	52500	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0173-0454PE</b>	Intersection traffic control Modify traffic signal timing - adjust clearance interval (yellow change and/or all- red)	695 Numbe rs	10260 00	11400 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0171-0381CN</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	25 Numbe rs	11760 00	11760 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0009-0098PE+</b>	Intersection geometry Intersection geometrics - miscellaneous/other/unspe cified	1 Numbe rs	13500	15000	HSIP (Sectio n 148)		0	0	Town or Townshi p Highway Agency	Intersectio ns	improvin g the design & operation of hwy

											intersecti
<b>0174-0377RW</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	2 Numbe rs	50000	50000	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0148-0202PE+</b>	Intersection geometry Auxiliary lanes - add auxiliary through lane	1 Numbe rs	34000	34000	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0170-3310CN</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	58 Miles	20260 0	20260 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0093-0206PL</b>	Non-infrastructure Transportation safety planning	1 Numbe rs	15825 81	15825 81	HSIP (Sectio n 148)		0	0	State Highway Agency	Data	
<b>0170-3260PE+</b>	Roadway Rumble strips - center	24 Miles	15000	15000	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0170-3254CN</b>	Intersection traffic control Intersection flashers - modify existing	115 Numbe rs	95914 0	95914 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0174-0394PE</b>	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	45 Numbe rs	15900 0	15900 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities

<b>0042-0315CN</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	3754512	4171680	HSIP (Section 148)		0	0	State Highway Agency	Bicyclists	enhancing bicycle amenities
<b>0171-0381CN +</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	25 Numbers	311708	311708	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians	enhancing pedestrian amenities
<b>0084-0108PE +</b>	Intersection traffic control Modify control - two-way stop to roundabout	1 Numbers	250000	250000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0174-0382CN +</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	99 Numbers	77268	77268	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0174-0347CN +</b>	Intersection traffic control Modify traffic signal - modernization/replacement	2 Numbers	37762	37762	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0170-3254CN +</b>	Intersection traffic control Intersection flashers - modify existing	115 Numbers	403888	403888	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0017-0186CN</b>	Roadway Roadway widening - travel lanes	1 Miles	1912500	2125000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design &

											operation of hwy intersecti
<b>0170-3260CN</b>	Roadway Rumble strips - center	24 Miles	212640	469520	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0171-0398PE</b>	Intersection traffic control Modify traffic signal timing - adjust clearance interval (yellow change and/or all-red)	800 Numbers	145800	162000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0174-0360CN</b>	Intersection traffic control Modify traffic signal - modernization/replacement	1 Numbers	471400	471400	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0042-0315PE +</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	54000	60000	HSIP (Section 148)		0	0	State Highway Agency	Bicyclists	enhancing bicycle amenities
<b>0042-0315CN +</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	592441	769268	HSIP (Section 148)		0	0	State Highway Agency	Bicyclists	enhancing bicycle amenities
<b>0173-0438RW</b>	Intersection traffic control Modify traffic signal - modernization/replacement	3 Numbers	50000	50000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0171-0372R</b>	Pedestrians and bicyclists Pedestrian signal - modify	45 Numbers	950000	950000	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians	enhancing

W	existing	rs			n 148)				Agency		pedestria ns amenities
<b>0172-0440PE</b>	Intersection traffic control Modify traffic signal timing - adjust clearance interval (yellow change and/or all- red)	435 Numbe rs	76500 0	85000 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0171-0372PE</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	125 Numbe rs	80250	80250	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0170-3312CN</b>	Intersection traffic control Intersection flashers - modify existing	134 Numbe rs	17989 20	17989 20	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0092-0640CN +</b>	Intersection geometry Auxiliary lanes - add left- turn lane	1 Numbe rs	95757	95757	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0174-0399PE</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	2 Numbe rs	10500 0	10500 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0170-3344PL</b>	Non-infrastructure Transportation safety planning	1 Numbe rs	36000 0	40000 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Data	

<b>0170-3350PE</b>	Roadway Rumble strips - center	208 Miles	75000	75000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0106-0126PE</b>	Intersection traffic control - other	1 Numbers	405000	450000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0170-3260PE +</b>	Roadway Rumble strips - center	24 Numbers	10000	10000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0093-0206PL +</b>	Non-infrastructure Transportation safety planning	1 Numbers	177335	177335	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0174-0360CN +</b>	Intersection traffic control - Modify traffic signal - modernization/replacement	1 Numbers	16468	16468	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0084-0108PE</b>	Intersection traffic control - Modify control - two-way stop to roundabout	1 Numbers	600000	600000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0012-0095CN</b>	Roadway Roadway widening - curve	1 Numbers	1463724	1626360	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation

											of hwy intersecti
<b>0171-0382CN</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	50 Numbe rs	29267 20	29267 20	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0170-3312CN +</b>	Intersection traffic control Intersection flashers - modify existing	134 Numbe rs	15330 6	15330 6	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0170-3186PL +</b>	Non-infrastructure Transportation safety planning	1 Numbe rs	22500 0	25000 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Data	
<b>0173-0453PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	28 Numbe rs	53000	53000	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0153-0118CN +</b>	Intersection geometry Intersection geometry - other	1 Numbe rs	62580 8	69534 2	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0102-0354CN</b>	Intersection geometry Auxiliary lanes - add left- turn lane	1 Numbe rs	17438 4	19376 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0138-0212R W</b>	Intersection geometry Intersection geometry - other	1 Numbe rs	50000	50000	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design &

											operation of hwy intersecti
<b>0172-0451PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	1050 Numbe rs	13610 7	13610 7	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0172-0435PE +</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	8 Numbe rs	36500 0	36500 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0172-0443PE</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	8 Numbe rs	34000 0	34000 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0170-3360PL</b>	Non-infrastructure Transportation safety planning	1 Numbe rs	18018 00	20020 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Data	
<b>0170-3055CN +</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	168 Numbe rs	14710 3	14894 3	HRRR Special Rule		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0170-3291TR</b>	Non-infrastructure Enforcement	118 Numbe rs	92128 8	10236 53	HRRR Special Rule		0	0	State Highway Agency	aggressive driving	changing driver behavior
<b>0173-0469PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	205 Numbe rs	24000 0	24000 0	HRRR Special Rule		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway

<b>0172-0451PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	1050 Numbe rs	98389 3	98389 3	HRRR Special Rule		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0158-0201PE +</b>	Intersection geometry Intersection geometry - other	1 Numbe rs	85500	95000	Other Federal -aid Funds (i.e. STP, NHPP)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0158-0201PE +</b>	Intersection geometry Intersection geometry - other	1 Numbe rs	18900 0	21000 0	Other Federal -aid Funds (i.e. STP, NHPP)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0172-402CN+</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	3 Numbe rs	13881	13881	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0174-0391PE</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	2 Numbe rs	70000	70000	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0173-0453PE</b>	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	1 Numbe rs	15900 0	15900 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns

											amenities
<b>0171-0393PE</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	35000	35000	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0148-0200RW</b>	Interchange design Interchange design - other	1 Numbe rs	45000	50000	HSIP (Sectio n 148)		0	0	State Highway Agency	Data	
<b>0171-0356CN+</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	15308	15308	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0173-0443CN</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	225 Numbe rs	26943 60	26943 60	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0174-0382CN</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	99 Numbe rs	12426 80	12426 80	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0173-0442PE</b>	Roadside Barrier- metal	9 Miles	92500	92500	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	protectin g motorists from roadside

											hazards
<b>0170-3337PL</b>	Non-infrastructure Transportation safety planning	1 Numbers	450000	500000	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0170-3336PE</b>	Roadway Rumble strips - center	74 Miles	75000	75000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0172-0398CN +</b>	Intersection traffic control Modify traffic signal - modernization/replacement	2 Numbers	87198	87198	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0172-0427CN +</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	155 Numbers	96825	96825	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0042-0315RW+</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	136800	152000	HSIP (Section 148)		0	0	State Highway Agency	Bicyclists	enhancing bicycle amenities
<b>0148-0202CN +</b>	Intersection geometry Auxiliary lanes - add auxiliary through lane	1 Numbers	13230	13230	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0172-0435PE</b>	Intersection traffic control Modify traffic signal - modernization/replacement	8 Numbers	70000	70000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation

											of hwy intersecti
<b>0174-0347CN +</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	2 Numbe rs	49340	49340	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0170-3254PE</b>	Intersection traffic control Intersection flashers - modify existing	115 Numbe rs	19500 0	19500 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0017-0183RW+</b>	Intersection geometry Intersection geometrics - miscellaneous/other/unspe cified	1 Numbe rs	32490 0	36100 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0173-0455PE</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	52500	52500	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0173-0454PE</b>	Intersection traffic control Modify traffic signal timing - adjust clearance interval (yellow change and/or all- red)	695 Numbe rs	10260 00	11400 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0171-0381CN</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	25 Numbe rs	11760 00	11760 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria

											ns amenities
<b>0009-0098PE +</b>	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	1 Numbers	13500	15000	HSIP (Section 148)		0	0	Town or Township Highway Agency	Intersections	improving the design & operation of hwy intersections
<b>0174-0377RW</b>	Intersection traffic control Modify traffic signal - modernization/replacement	2 Numbers	50000	50000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersections
<b>0148-0202PE +</b>	Intersection geometry Auxiliary lanes - add auxiliary through lane	1 Numbers	34000	34000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersections
<b>0170-3310CN</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	58 Miles	202600	202600	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0093-0206PL</b>	Non-infrastructure Transportation safety planning	1 Numbers	1582581	1582581	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0170-3260PE +</b>	Roadway Rumble strips - center	24 Miles	15000	15000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0170-3254CN</b>	Intersection traffic control Intersection flashers -	115 Numbers	959140	959140	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles

	modify existing	rs			n 148)				Agency		on the roadway
<b>0174-0394PE</b>	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	45 Numbers	15900 0	15900 0	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians	enhancing pedestrians amenities
<b>0042-0315CN</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	37545 12	41716 80	HSIP (Section 148)		0	0	State Highway Agency	Bicyclists	enhancing bicycle amenities
<b>0171-0381CN +</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	25 Numbers	31170 8	31170 8	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians	enhancing pedestrians amenities
<b>0084-0108PE +</b>	Intersection traffic control Modify control - two-way stop to roundabout	1 Numbers	25000 0	25000 0	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0174-0382CN +</b>	Intersection traffic control Intersection signing - add enhanced regulatory sign (double-up and/or oversize)	99 Numbers	77268	77268	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0174-0347CN +</b>	Intersection traffic control Modify traffic signal - modernization/replacement	2 Numbers	37762	37762	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti

<b>0170-3254CN +</b>	Intersection traffic control Intersection flashers - modify existing	115 Numbe rs	40388 8	40388 8	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0017-0186CN</b>	Roadway Roadway widening - travel lanes	1 Miles	19125 00	21250 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0170-3260CN</b>	Roadway Rumble strips - center	24 Miles	21264 0	46952 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0171-0398PE</b>	Intersection traffic control Modify traffic signal timing - adjust clearance interval (yellow change and/or all- red)	800 Numbe rs	14580 00	16200 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0174-0360CN</b>	Intersection traffic control Modify traffic signal - modernization/replacemen t	1 Numbe rs	47140 0	47140 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0042-0315PE +</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	54000	60000	HSIP (Sectio n 148)		0	0	State Highway Agency	Bicyclists	enhancin g bicycle amenities
<b>0042-0315CN +</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.76 Miles	59244 1	76926 8	HSIP (Sectio n 148)		0	0	State Highway Agency	Bicyclists	enhancin g bicycle amenities
<b>0173-</b>	Intersection traffic control	3	50000	50000	HSIP		0	0	State	Intersectio	improvin

<b>0438RW</b>	Modify traffic signal - modernization/replacement	Numbers			(Section 148)				Highway Agency	ns	g the design & operation of hwy intersecti
<b>0171-0372RW</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	45 Numbers	950000	950000	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians	enhancing pedestrians amenities
<b>0172-0440PE</b>	Intersection traffic control Modify traffic signal timing - adjust clearance interval (yellow change and/or all-red)	435 Numbers	765000	850000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0171-0372PE</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	125 Numbers	80250	80250	HSIP (Section 148)		0	0	State Highway Agency	Pedestrians	enhancing pedestrians amenities
<b>0170-3312CN</b>	Intersection traffic control Intersection flashers - modify existing	134 Numbers	1798920	1798920	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0092-0640CN+</b>	Intersection geometry Auxiliary lanes - add left-turn lane	1 Numbers	95757	95757	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0174-0399PE</b>	Intersection traffic control Modify traffic signal -	2 Numbers	105000	105000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the

	modernization/replacement	rs			n 148)				Agency		design & operation of hwy intersecti
<b>0170-3344PL</b>	Non-infrastructure Transportation safety planning	1 Numbers	360000	400000	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0170-3350PE</b>	Roadway Rumble strips - center	208 Miles	75000	75000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0106-0126PE</b>	Intersection traffic control - other	1 Numbers	405000	450000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0170-3260PE +</b>	Roadway Rumble strips - center	24 Numbers	10000	10000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0093-0206PL +</b>	Non-infrastructure Transportation safety planning	1 Numbers	177335	177335	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0174-0360CN +</b>	Intersection traffic control - Modify traffic signal - modernization/replacement	1 Numbers	16468	16468	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design & operation of hwy intersecti
<b>0084-0108PE</b>	Intersection traffic control - Modify control - two-way stop to roundabout	1 Numbers	600000	600000	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improving the design &

											operation of hwy intersecti
<b>0012-0095CN</b>	Roadway Roadway widening - curve	1 Numbers	1463724	1626360	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improvin g the design & operation of hwy intersecti
<b>0171-0382CN</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	50 Numbers	2926720	2926720	HSIP (Section 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0170-3312CN +</b>	Intersection traffic control Intersection flashers - modify existing	134 Numbers	153306	153306	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0170-3186PL +</b>	Non-infrastructure Transportation safety planning	1 Numbers	225000	250000	HSIP (Section 148)		0	0	State Highway Agency	Data	
<b>0173-0453PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	28 Numbers	53000	53000	HSIP (Section 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0153-0118CN +</b>	Intersection geometry Intersection geometry - other	1 Numbers	625808	695342	HSIP (Section 148)		0	0	State Highway Agency	Intersections	improvin g the design & operation of hwy intersecti
<b>0102-0354CN</b>	Intersection geometry Auxiliary lanes - add left-	1 Numbe	174384	193760	HSIP (Sectio		0	0	State Highway	Intersectio ns	improvin g the

	turn lane	rs			n 148)				Agency		design & operation of hwy intersecti
<b>0138-0212RW</b>	Intersection geometry Intersection geometry - other	1 Numbe rs	50000	50000	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0172-0451PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	1050 Numbe rs	13610 7	13610 7	HSIP (Sectio n 148)		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0172-0435PE+</b>	Intersection traffic control Modify traffic signal - modernization/replacement	8 Numbe rs	36500 0	36500 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0172-0443PE</b>	Intersection traffic control Modify traffic signal - modernization/replacement	8 Numbe rs	34000 0	34000 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0170-3360PL</b>	Non-infrastructure Transportation safety planning	1 Numbe rs	18018 00	20020 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Data	
<b>0170-3055CN+</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	168 Numbe rs	14710 3	14894 3	HRRR Special Rule		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway

<b>0170-3291TR</b>	Non-infrastructure Enforcement	118 Numbe rs	92128 8	10236 53	HRRR Special Rule		0	0	State Highway Agency	aggressive driving	changing driver behavior
<b>0173-0469PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	205 Numbe rs	24000 0	24000 0	HRRR Special Rule		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0172-0451PE</b>	Roadway signs and traffic control Roadway signs (including post) - new or updated	1050 Numbe rs	98389 3	98389 3	HRRR Special Rule		0	0	State Highway Agency	Roadway Departure	keep vehicles on the roadway
<b>0158-0201PE +</b>	Intersection geometry Intersection geometry - other	1 Numbe rs	85500	95000	Other Federal -aid Funds (i.e. STP, NHPP)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0158-0201PE +</b>	Intersection geometry Intersection geometry - other	1 Numbe rs	18900 0	21000 0	Other Federal -aid Funds (i.e. STP, NHPP)		0	0	State Highway Agency	Intersectio ns	improvin g the design & operation of hwy intersecti
<b>0042-0315R W+</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.75 Numbe rs	13680 0	15200 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0042-0315CN</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.75 Numbe rs	37545 12	41716 80	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria

											ns amenities
<b>0042-0315PE +</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.75 Numbe rs	54000	60000	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0042-0315CN +</b>	Roadway Roadway narrowing (road diet, roadway reconfiguration)	2.75 Numbe rs	59244 1	76926 8	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0171-0372PE</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	125 Numbe rs	80250	80250	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0171-0372RW</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	45 Numbe rs	95000 0	95000 0	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0171-0381CN</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	25 Numbe rs	11760 00	11760 00	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0171-0381CN +</b>	Pedestrians and bicyclists Pedestrian signal - modify existing	25 Numbe rs	31170 8	31170 8	HSIP (Sectio n 148)		0	0	State Highway Agency	Pedestrian s	enhancin g pedestria ns amenities
<b>0171-</b>	Pedestrians and bicyclists	50	29267	29267	HSIP		0	0	State	Pedestrian	enhancin

<b>0382CN</b>	Pedestrian signal - modify existing	Numbers	20	20	(Section 148)				Highway Agency	s	g pedestrians amenities
<b>0173-0453PE</b>	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	260 Numbers	53000	53000	HSIP (Section 148)		0	0	State Highway Agency	Pedestrian s	enhancing pedestrians amenities
<b>0173-0453PE</b>	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	260 Numbers	159000	159000	HSIP (Section 148)		0	0	State Highway Agency	Pedestrian s	enhancing pedestrians amenities
<b>0174-0394PE</b>	Pedestrians and bicyclists Miscellaneous pedestrians and bicyclists	400 Numbers	159000	159000	HSIP (Section 148)		0	0	State Highway Agency	Pedestrian s	enhancing pedestrians amenities

## Progress in Achieving Safety Performance Targets

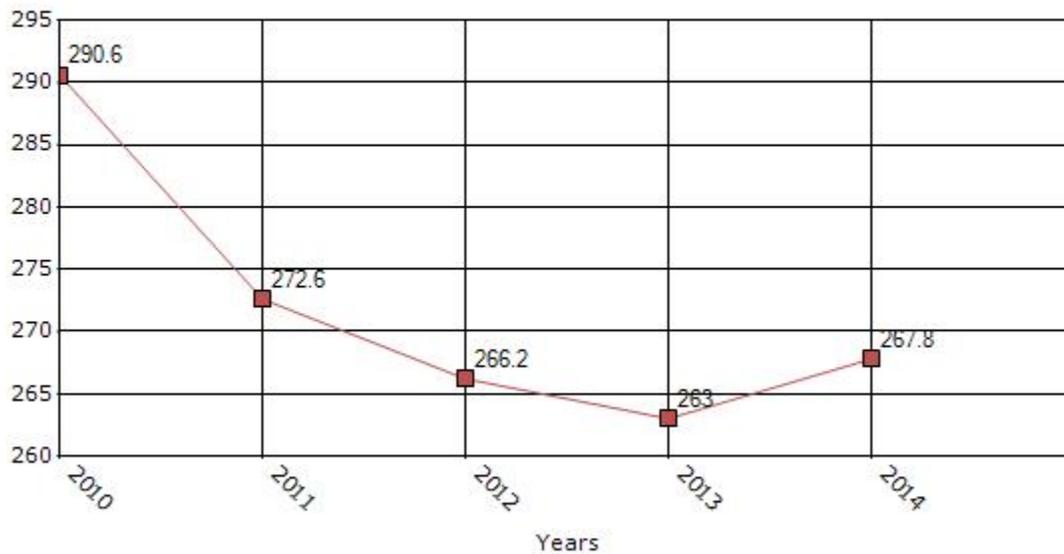
### Overview of General Safety Trends

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

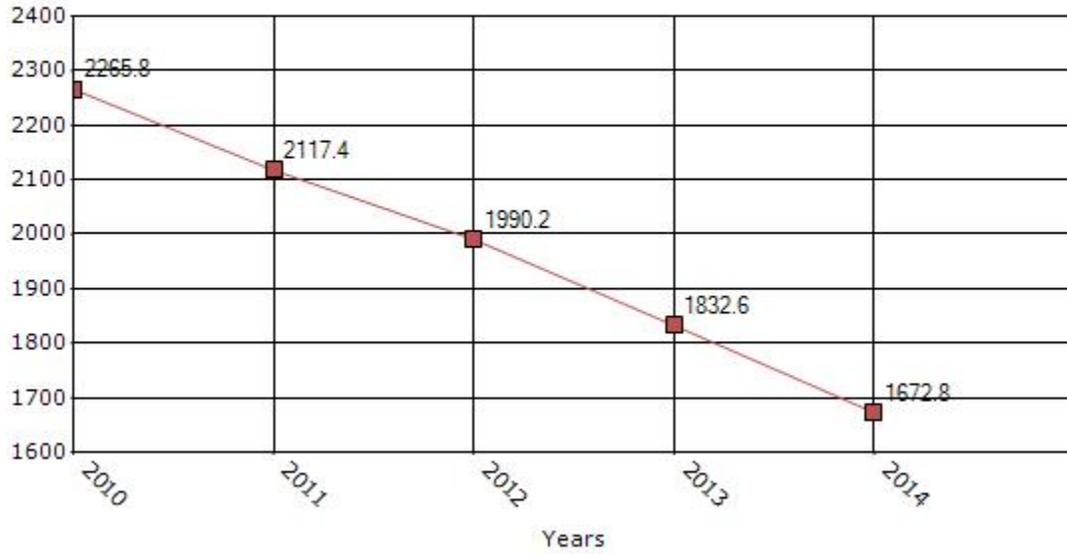
Performance Measures*	2010	2011	2012	2013	2014
Number of fatalities	290.6	272.6	266.2	263	267.8
Number of serious injuries	2265.8	2117.4	1990.2	1832.6	1672.8
Fatality rate (per HMVMT)	0.916	0.862	0.846	0.84	0.858
Serious injury rate (per HMVMT)	7.156	6.706	6.338	5.866	5.362

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

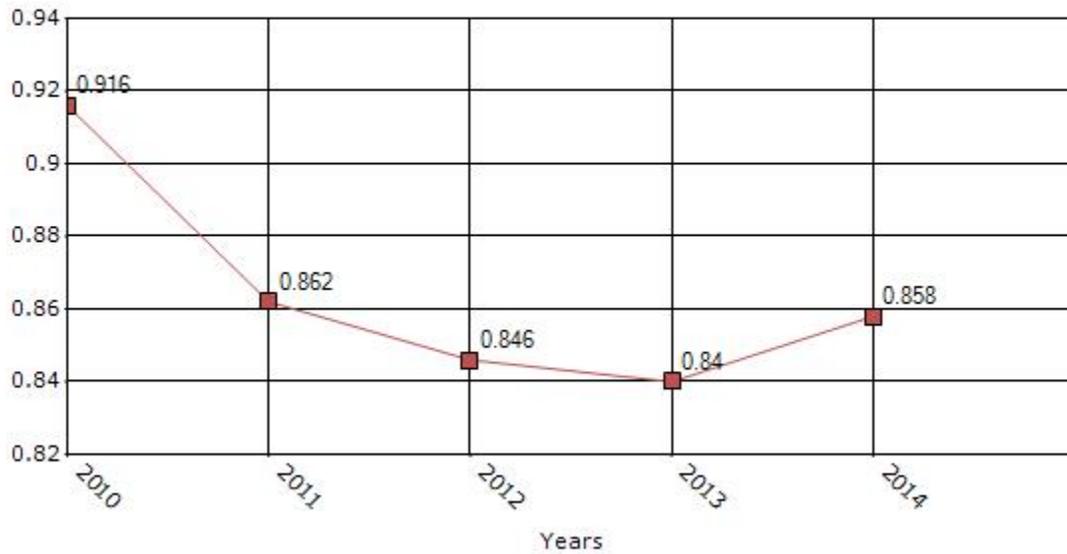
Number of Fatalities for the Last Five Years  
5-yr Average Measure Data



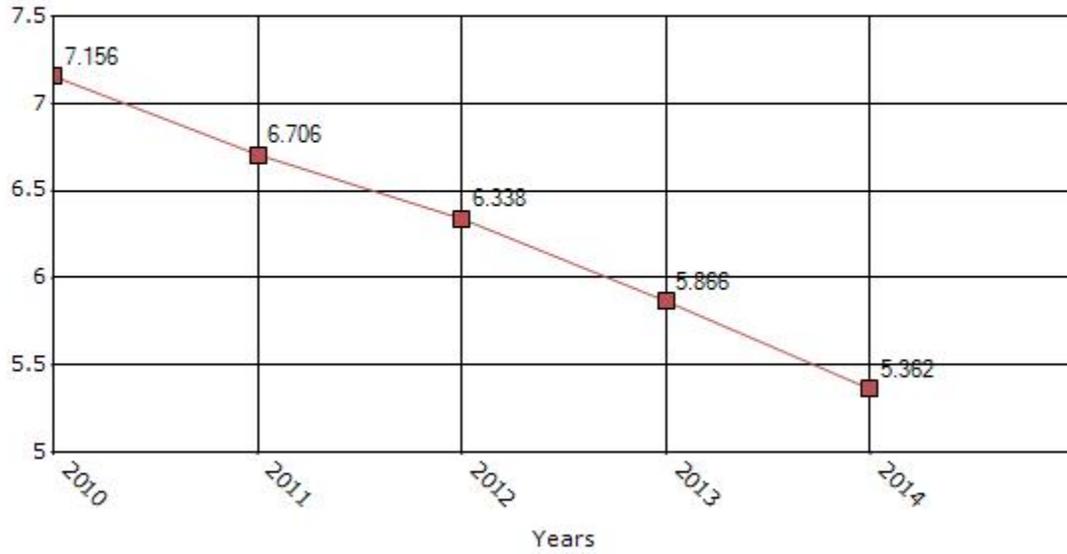
### Number of Serious Injuries for the Last Five Years 5-yr Average Measure Data



### Rate of Fatalities for the Last Five Years 5-yr Average Measure Data



### Rate of Serious Injuries for the Last Five Years 5-yr Average Measure Data



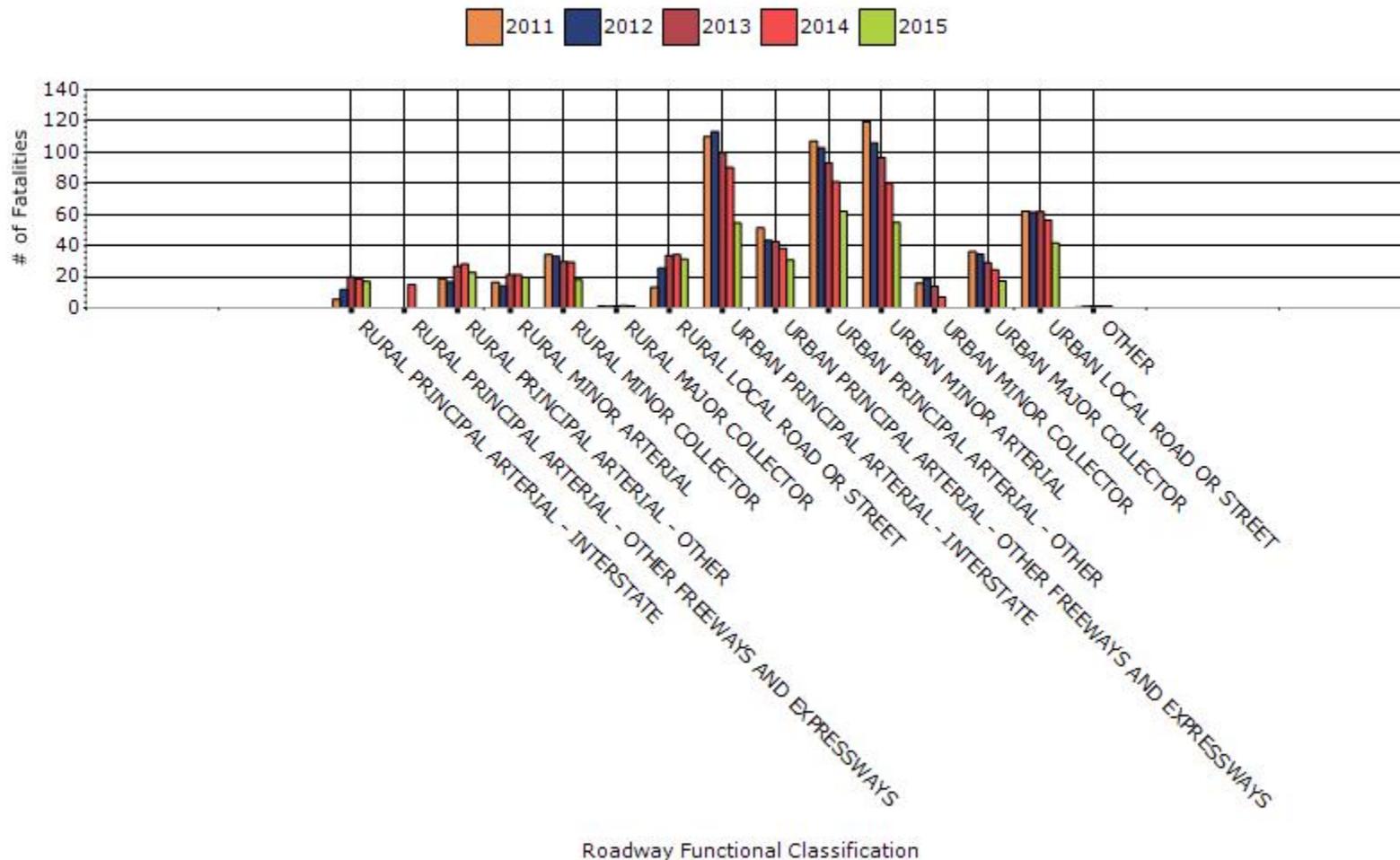
To the maximum extent possible, present performance measure\* data by functional classification and ownership.

### Year - 2015

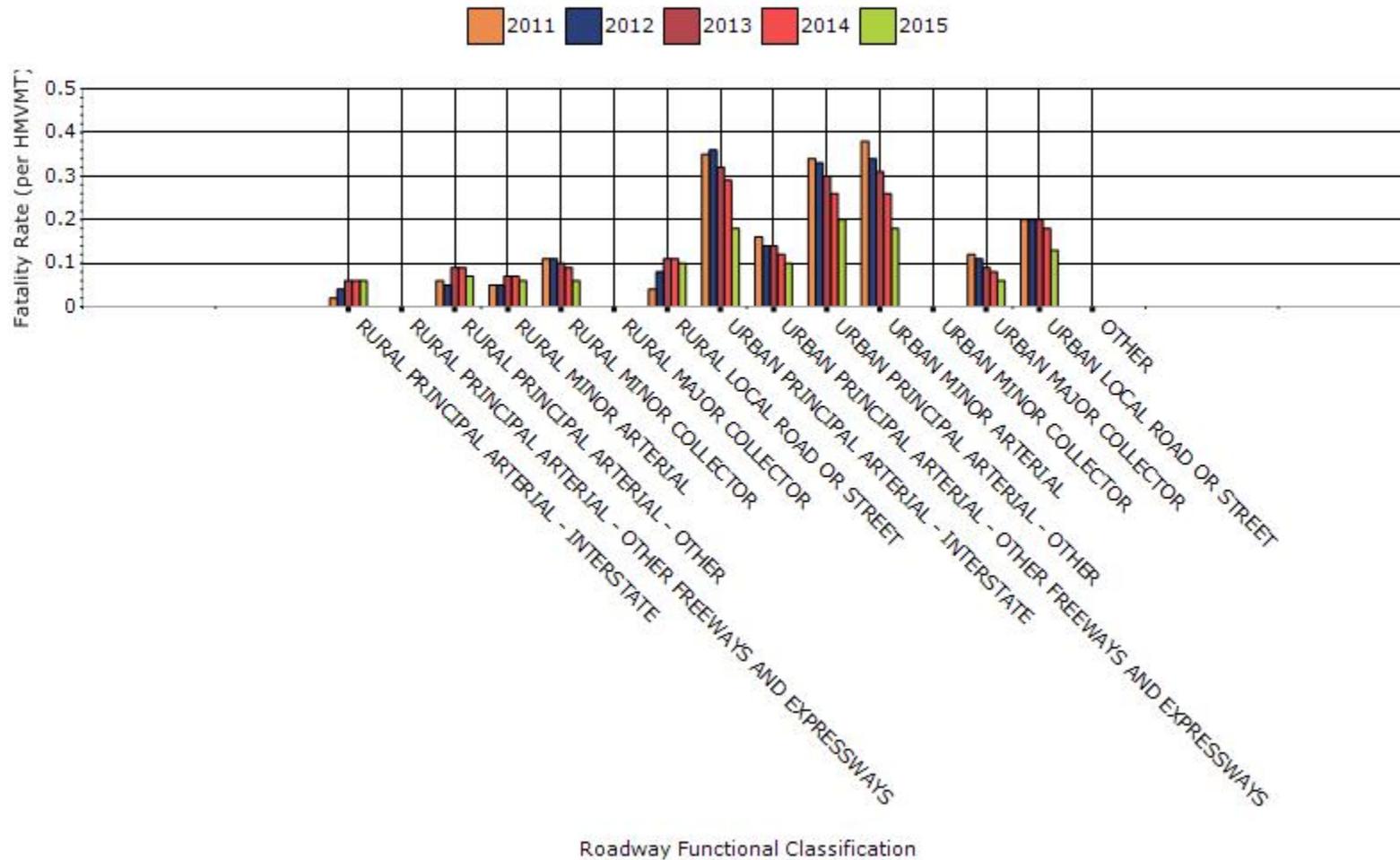
Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	17.2		0.06	
RURAL PRINCIPAL ARTERIAL - OTHER	22.8		0.07	
RURAL MINOR ARTERIAL	19.6		0.06	
RURAL MINOR COLLECTOR	18.2		0.06	
RURAL MAJOR COLLECTOR	1.4			
RURAL LOCAL ROAD OR STREET	31.4		0.1	
URBAN PRINCIPAL ARTERIAL - INTERSTATE	54.6		0.18	
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS	30.8		0.1	

<b>URBAN PRINCIPAL ARTERIAL - OTHER</b>	62.2		0.2	
<b>URBAN MINOR ARTERIAL</b>	54.8		0.18	
<b>URBAN MAJOR COLLECTOR</b>	17.4		0.06	
<b>URBAN LOCAL ROAD OR STREET</b>	41.6		0.13	
<b>OTHER</b>	1.4			

### # Fatalities by Roadway Functional Classification 5-yr Average Measure Data



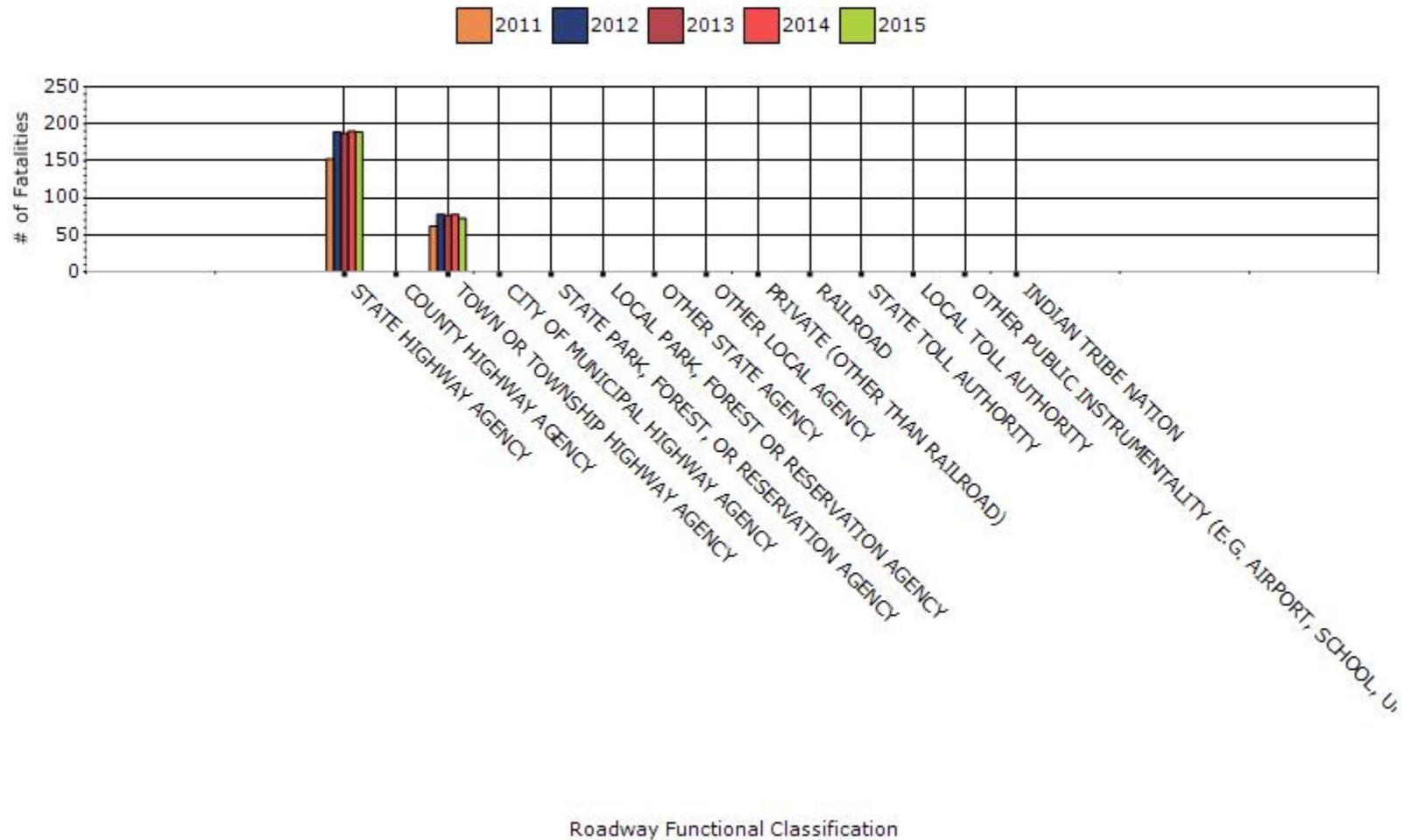
### Fatality Rate by Roadway Functional Classification 5-yr Average Measure Data



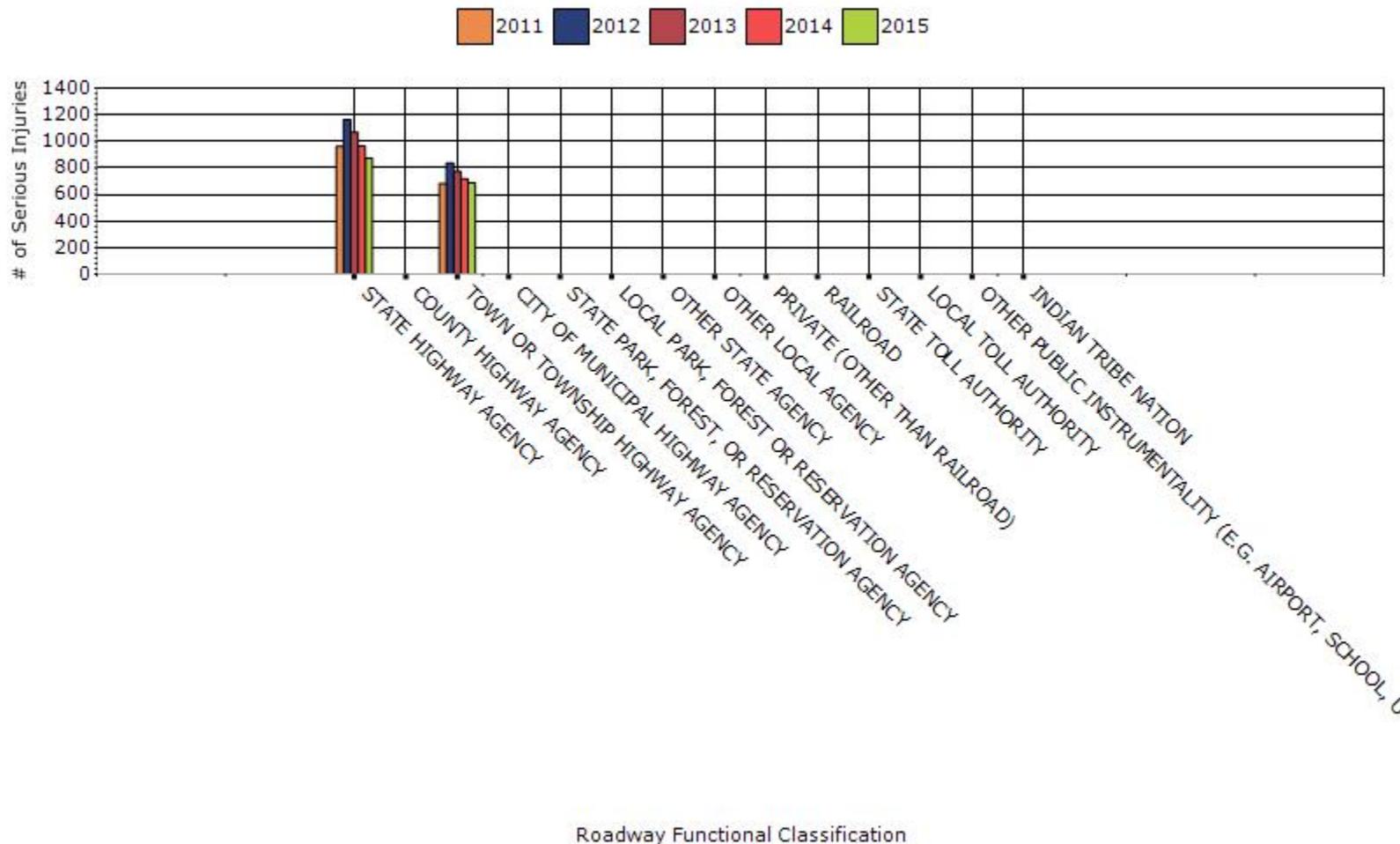
**Year - 2015**

<b>Roadway Ownership</b>	<b>Number of fatalities</b>	<b>Number of serious injuries</b>	<b>Fatality rate (per HMVMT)</b>	<b>Serious injury rate (per HMVMT)</b>
<b>STATE HIGHWAY AGENCY</b>	188.8	874.8		
<b>TOWN OR TOWNSHIP HIGHWAY AGENCY</b>	72.2	686.8		

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



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





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

See attached report prepared by the Department's Highway Safety Office.

### Application of Special Rules

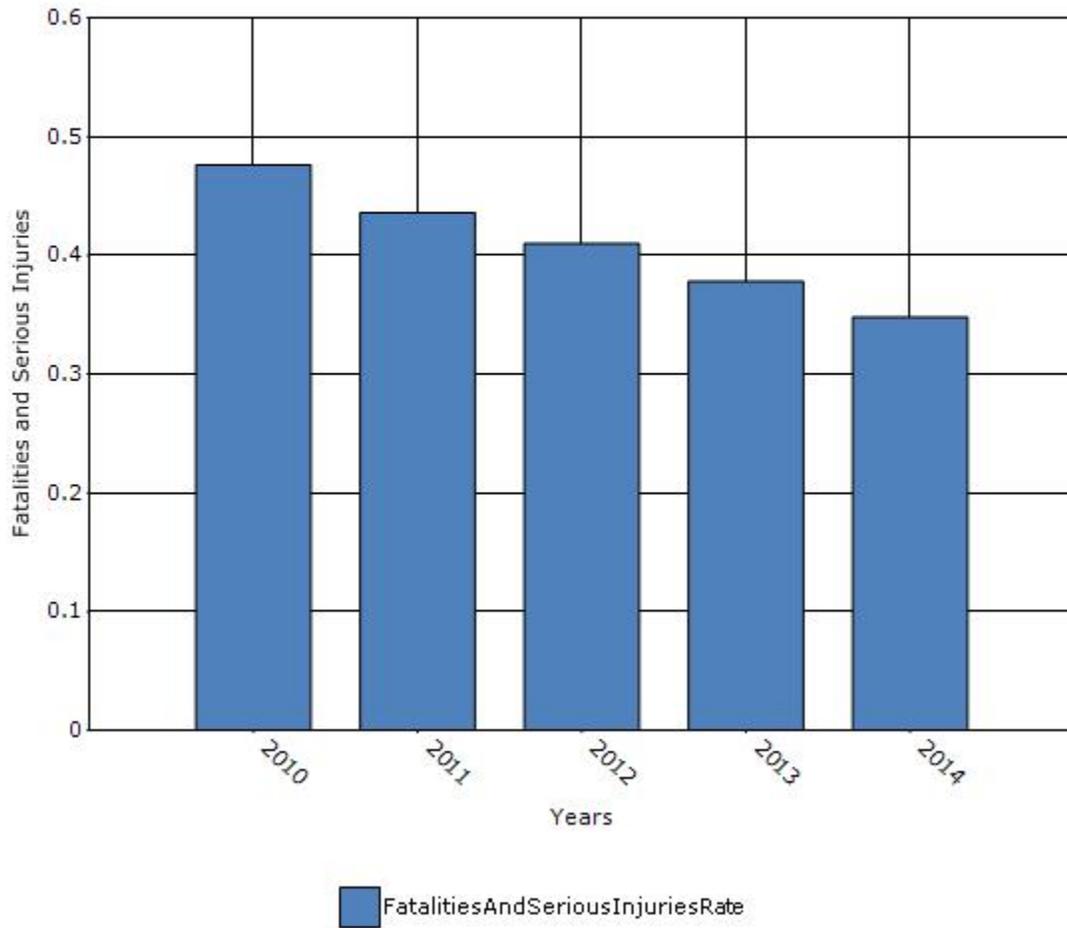
**Present the rate of traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65.**

<b>Older Driver</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Performance Measures</b>					
<b>Fatality rate (per capita)</b>	0.11	0.102	0.102	0.094	0.102
<b>Serious injury rate (per capita)</b>	0.366	0.334	0.308	0.284	0.244
<b>Fatality and serious injury rate (per capita)</b>	0.476	0.436	0.41	0.378	0.348

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

see attachment.

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



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?**

Other-It's premature to demonstrate effectiveness & success in the HSIP program at this time since the agency has just recently started to put more emphasis on systemic safety which now includes all public roads.

**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  
Other-More focus on systemic safety

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

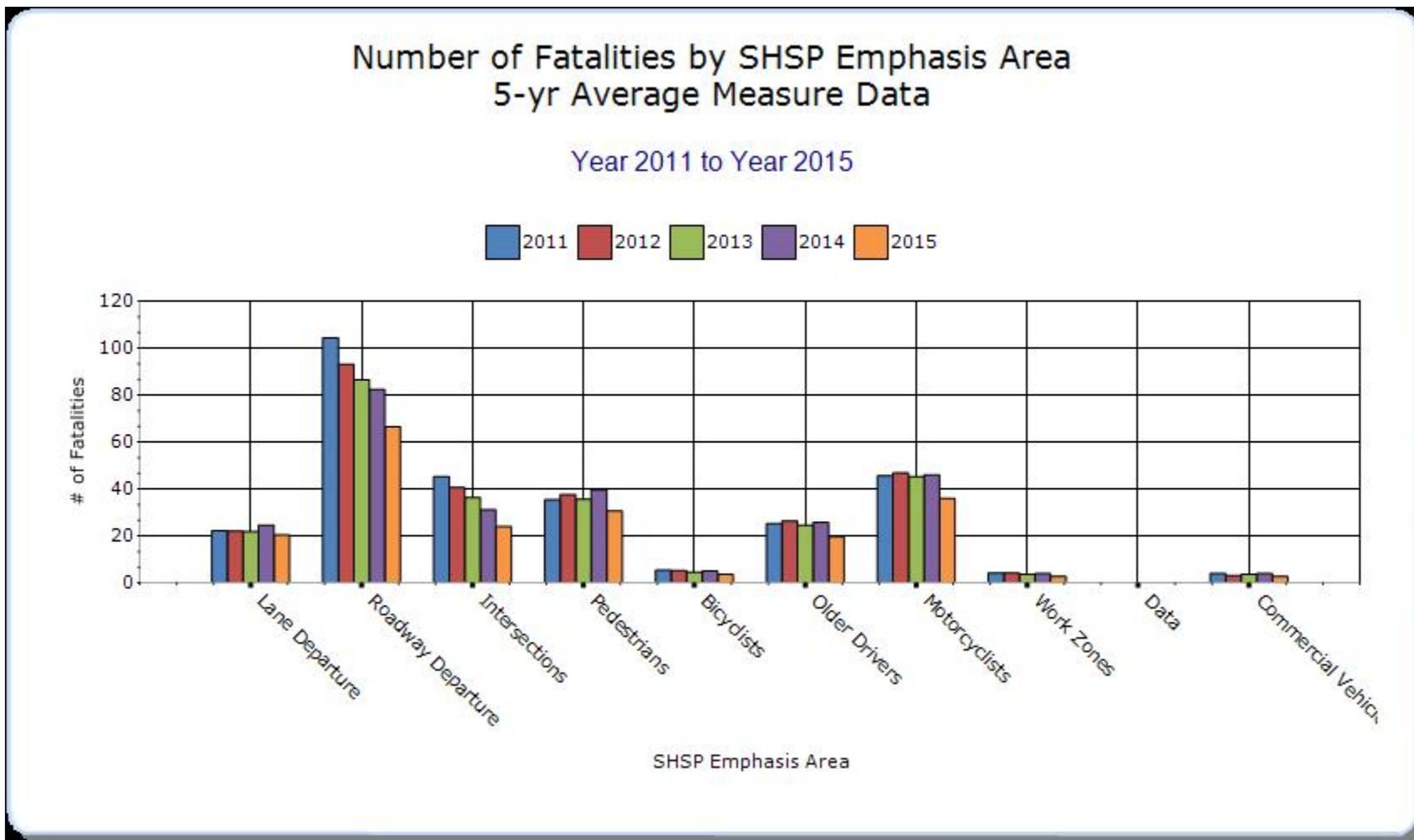
none at this time.

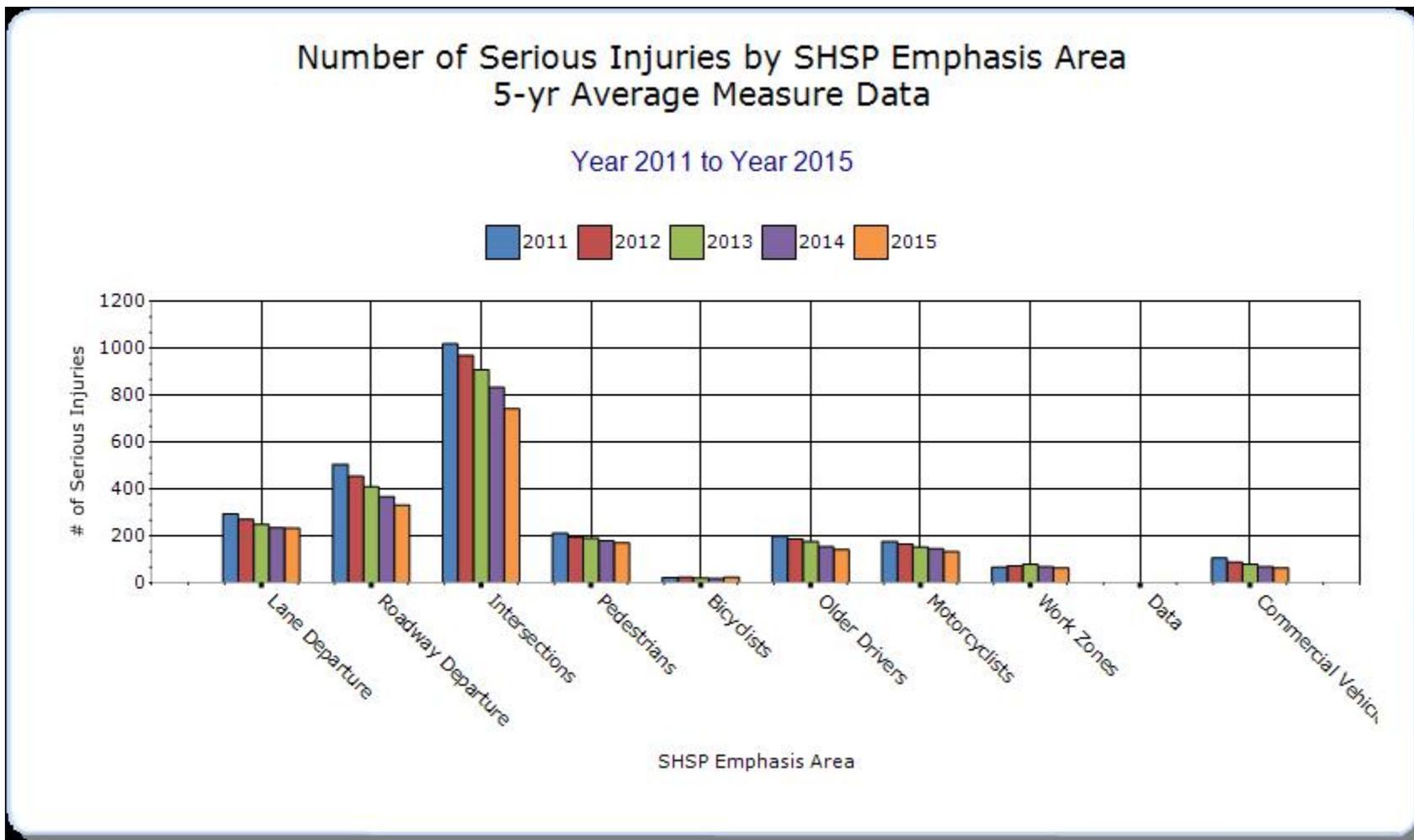
## SHSP Emphasis Areas

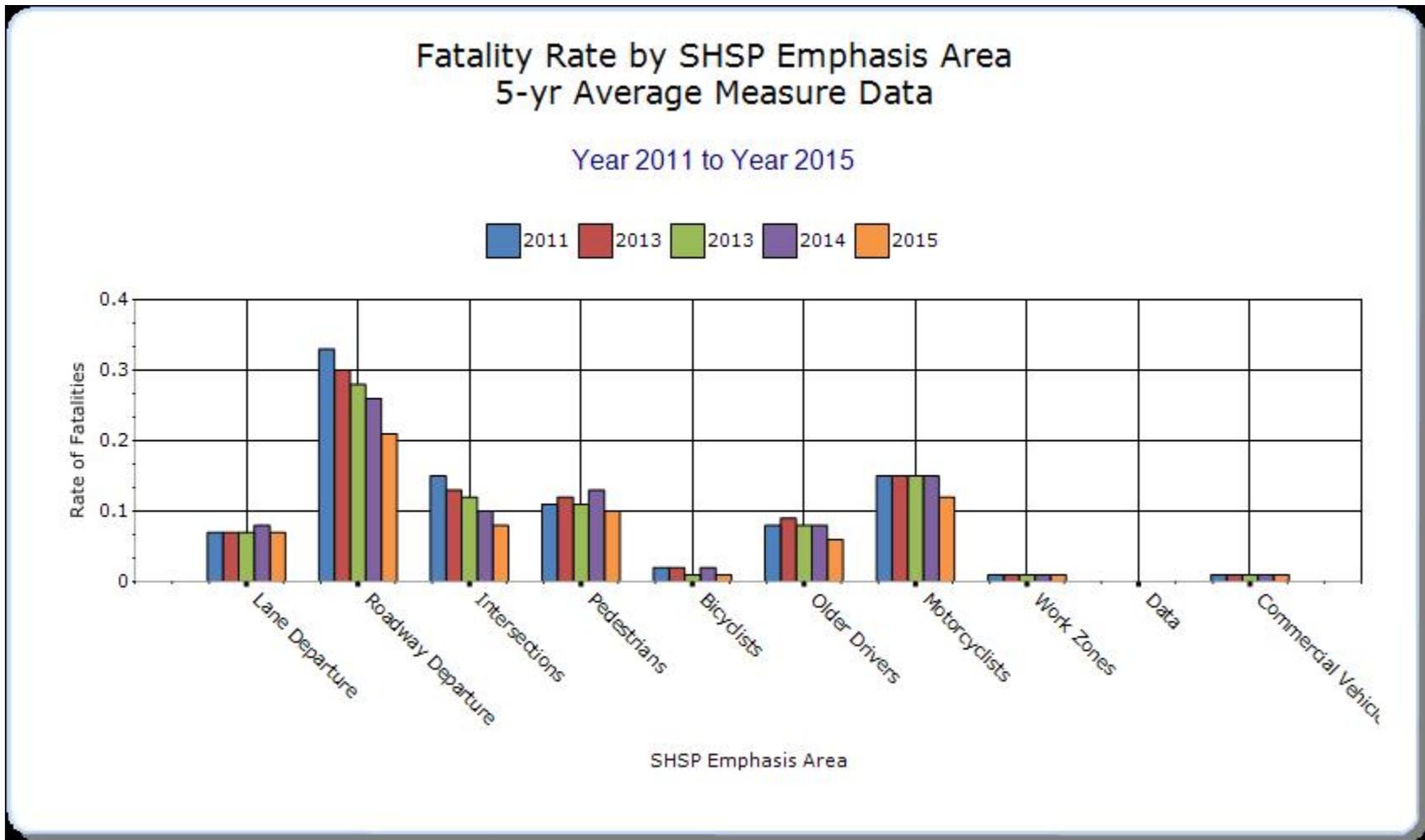
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

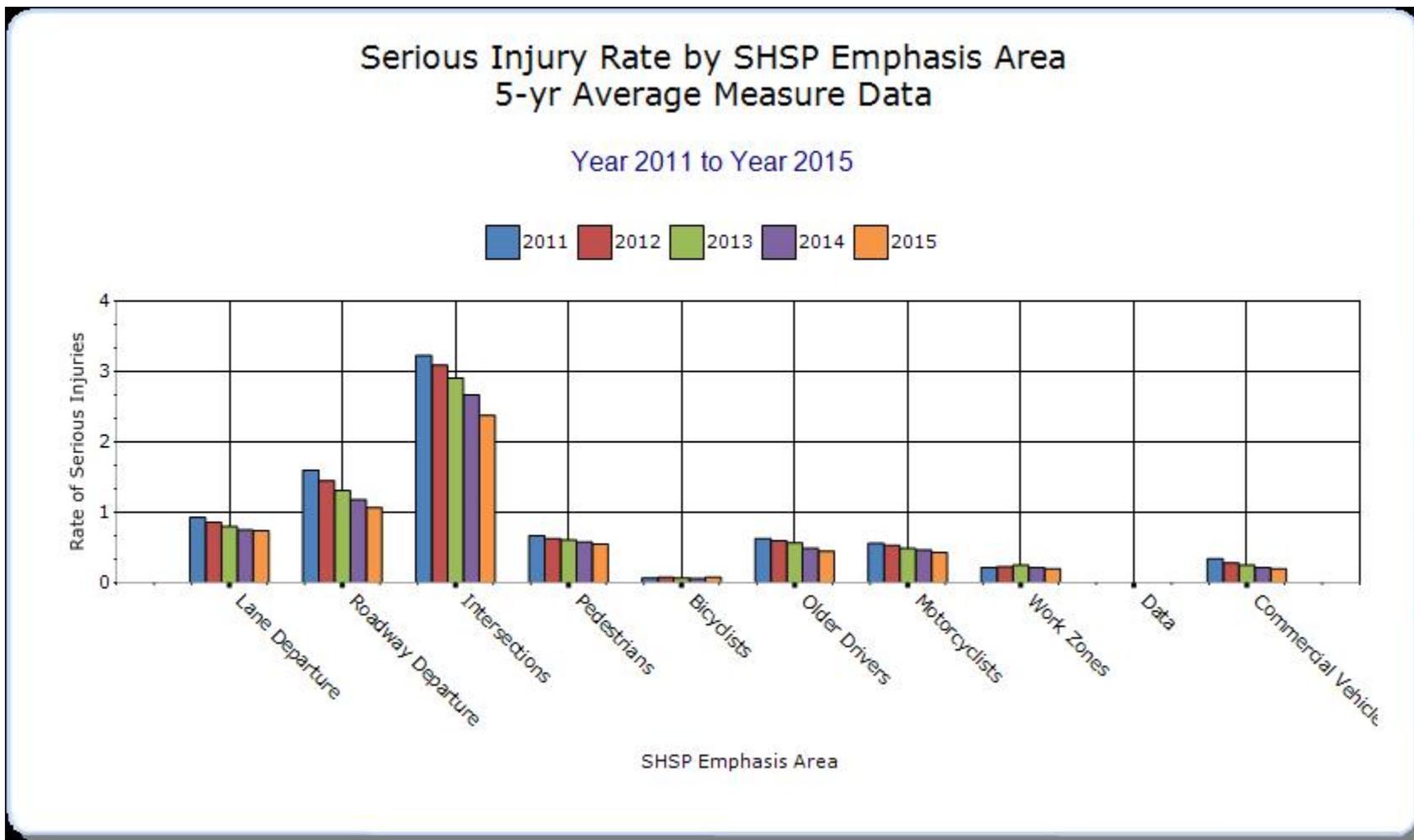
### Year - 2015

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		20.4	232.4	0.07	0.74			
Roadway Departure		66.6	331.8	0.21	1.07			
Intersections		24	741.8	0.08	2.38			
Pedestrians		30.6	170.6	0.1	0.55			
Bicyclists		3.6	23.4	0.01	0.08			
Older Drivers		19.8	141.6	0.06	0.45			
Motorcyclists		36	133.8	0.12	0.43			
Work Zones		2.8	63.6	0.01	0.2			
Commercial Vehicles		2.8	63.6	0.01	0.2			









Groups of similar project types

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

**Year - 2015**

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
Horizontal Curve	Fixed object							

**Systemic Treatments**

Present the overall effectiveness of systemic treatments.

**Year - 2015**

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
Rumble Strips	All							



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

HSIP funding has helped CT see a decreasing trend in some crash types over the last few years, just not fatalities and serious injuries. With sustained funding associated with the FAST ACT and a new SHSP, CT hopes to meet or exceed its overall safety goals of reducing the number of fatalities and serious injuries on all public roads.

## 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)
Vernon--Rte 83 from Green Circle Road to Pitkin Road	Urban Principal Arterial - Other	Access management	Access management - other			41	115	156			22	100	122	3

## **Optional Attachments**

### **Sections**

**Progress in Achieving Safety Performance**

**Targets: Overview of General Safety Trends**

Progress in Achieving Safety Performance Targets:

Application of Special Rules

### **Files Attached**

[Hwy Safety Report FFY 2015.pdf](#)

[Special rules 65 and older for drivers and peds.xlsx](#)

## 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.

**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.