Highway Safety Improvement Program

Data Driven Decisions

Wisconsin
Highway Safety Improvement Program
2016 Annual Report

Prepared by: WI

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 following report outlines the details of projects obligated in SFY2016 for Wisconsin's Highway Safety Improvement Program (HSIP). Also included are program methodologies, historical crash data and safety trends, information on subprograms, and project evaluation data.

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.

HSIP applications from local governments are solicited by the WisDOT Regions as part of the regular HSIP Program. All applications derived from local governments are selected and submitted voluntarily by local governments. Projects on the local system or sponsored by local governments must meet the same requirements and follow the same process as HSIP applications submitted by WisDOT Regions for improvements on the State Trunk Network.

In addition, Wisconsin has continued the High Risk Rural Roads Program (HRRRP) despite its formal elimination in MAP-21. Wisconsin has developed a statewide data analysis methodology which identifies county rural roads with run-off-road non-intersection crash issues. Counties with such corridors are offered a field review of the corridor that identifies potential treatments and are invited to apply for HSIP funding to implement some or all of the identified treatment options. A primary goal of the HRRRP is to install low-cost safety treatments on these roadways to mitigate KA crash rates as quickly as possible. It is unlikely these county trunk highways would receive federal investments outside of the HRRRP.

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

Design
Planning
Operations
Other-Division of State Patrol
Other-Division of Motor Vehicles

Briefly describe coordination with internal partners.

The HSIP Program is managed by WisDOT's Division of Transportation Investment Management (DTIM) and the Bureau of State of Highway Programs (BSHP). DTIM/BSHP makes all final application approvals or denials and related project change or cost increase requests. However, DTIM/BSHP coordinates its efforts with several internal partners that both directly and indirectly influence the decision making process. Below is a summary of these partners and their role in the program.

- Division of Motor Vehicles (DMV): DMV receives, edits, and maintains all law enforcement crash report files.

- Traffic Safety Council (TSC): The TSC is comprised of representatives from Division of Transportation System Development (DTSD), DTIM, DMV, Division of State Patrol (DSP), and various Executive Offices within WisDOT. Among this group's responsibilities is developing and maintaining the Wisconsin Strategic Highway Safety Plan (SHSP), which helps guide the safety efforts of the HSIP Program.

- Safety Engineer Executive Group (SEEG): This is a high-level group comprised of representatives from DTSD and DTIM management. Its focus is to identify safety trends and issues to develop and offer direction and initiatives to both the HSIP Program and the TSC on important safety engineering issues throughout the state.

- Traffic Safety Engineering Workgroup (TSEWG): TSEWG is comprised of the State HSIP Coordinator, State Traffic Safety Engineer, and the Regional Traffic Safety Engineers. In some cases, the Regional HSIP Coordinators also participate. This group identifies and evaluates potential safety initiatives both within and outside of the HSIP Program, provides peer support, and reviews proposed HSIP projects. After a

group evaluation, a recommendation to approve or not approve is forwarded to the State HSIP Coordinator for final review.

- State Project Oversight Engineers: The State Project Oversight Engineers are a critical component of the joint process with the TSEWG for application review and approval. The DTSD State Project Oversight Engineers, Regional Traffic Safety Engineers, the State Traffic Safety Engineer, and the State HSIP Coordinator provide a consensus approval or disapproval of HSIP funding after a comprehensive in-person peer review. Each Region has one Project Oversight Engineer. State Project Oversight Engineers only review applications originating from the Region in which they are assigned. This consensus approval or disapproval is advisory to DTIM/BSHP.

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

Other-University of Wisconsin-Madison's Traffic Operations and Safety Laboratory (UW TOPS Lab)
Other-FHWA
Other-Local municipalities and counties

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

Other-updated HSIP Guidelines in the Program Management Manual

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

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Program Methodology

Select the programs that are administered under the HSIP.

Median Barrier

Program: **Median Barrier**
Date of Program Methodology: **1/1/2005**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
Other-All CMC	Other-Centerline miles	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?
No

How are highway safety improvement projects advanced for implementation?
Other-Non-competitive application process

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

Available funding	1

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

5%

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

Cable Median Barriers

What process is used to identify potential countermeasures?

Engineering Study
Road Safety Assessment
Other-County Traffic Safety Commission recommendations

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

Other-no change

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

A key component in the development of the HSIP is the Project Evaluation Factor (PEF). The PEF is a measurement that is used to evaluate and compare proposed projects. It provides a comparison of the estimated crash reduction potential of a proposed improvement with the overall cost of the project. Although it has similarities to a benefit/cost analysis, it does not include all of the elements of a traditional benefit/cost analysis tool for ranking the relative merits of a group of projects, and should not be compared to a benefit/cost analysis.

An Excel-based program is used to perform a safety project analysis and computes the PEF. The following provides a general overview of several key elements of the PEF:

- All costs associated with the project (design, utilities, real estate, construction, etc.) must be included in the PEF calculation, regardless of whether HSIP funds are requested for all elements of the project. Cost estimates must be in current year dollars.
- The analysis requires crash data from the most recent 5-year period for which crash information is available. Ideally, the analysis would include crash data from the most recent calendar year. For example, an analysis submitted in 2016 would include crash information from the 2011-2015 period. However, given that: (a) it can take several months after the end of a calendar year for the Department to finalize crash information and integrate the crash information into departmental datasets; and (b) it can take several months for a safety proposal to be developed and scoped, the use of an additional, older year of crash data is allowed. For example, an analysis submitted in calendar year 2016 may use crash data from either the 2011-2015 period or the 2010-2014 period.
  For local projects, it is the responsibility of the project sponsor to compile and provide the required crash data to the regional office for the PEF evaluation.
- Although Wisconsin designs solutions to reduce all crashes, a number of targeted engineering, educational and enforcement efforts have been implemented with the defined goal of reducing crashes involving serious injuries and fatalities. Because of this focus on reducing serious injuries and fatalities, the PEF scoring mechanism assigns higher values to Type A and Fatal crashes.
- The current values used within the PEF tool to calculate the potential crash reduction benefits of a safety improvement are influenced by the Highway Safety Manual (HSM) developed by the American Association of State Highway and Transportation Officials

(AASHTO). The current crash severity values are adjusted to approximate 2015 dollars using the Consumer Price Index, correlating to the most recent year of available crash data.

- Standardized crash reduction factors are included in the Excel tool for a wide range of safety improvements. These factors are based on national safety research and are regularly updated as new research becomes available.
- Projects generally require a PEF of 1.0 or greater for approval. However, the HSIP Review Committee acknowledges the PEF contains many variables and that sometimes additional expense is needed to sufficiently address a safety issue. As such, the HSIP Review Committee may consider applications with a PEF greater than or equal to 0.9 for approval. Projects with a PEF less than 0.9 will not be approved.
- Projects treating locations identified on the annual "Locations of Interest Report" (LOIR) may be approved with a PEF of 0.50 or greater. LOIR locations with a PEF less than 0.5 will not be approved.
- The PEF requirement is generally waived for projects identified through a statewide safety analysis. The PEF requirement is currently waived for:
    - High Risk Rural Roads Program projects
    - Crossover Median Crash Initiative projects
    - Bridge Friction Treatment Initiative projects
    - Beam Guard Initiative projects

Progress in Implementing Projects

Funds Programmed

Reporting period for Highway Safety Improvement Program funding.

State Fiscal Year

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

Funding Category	Programmed*		Obligated	
HSIP (Section 148)	$23,759,694.00	88 %	$23,759,694.00	88 %
HRRRP (SAFETEA-LU)	$642,967.00	2 %	$642,967.00	2 %
State and Local Funds	$2,482,121.00	9 %	$2,482,121.00	9 %
Totals	$26,884,782.00	100%	$26,884,782.00	100%

How much funding is programmed to local (non-state owned and operated) safety projects?
$4,717,357.00
How much funding is obligated to local safety projects?
$4,717,357.00

How much funding is programmed to non-infrastructure safety projects?
$1,015,000.00
How much funding is obligated to non-infrastructure safety projects?
$1,015,000.00

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?
$20,504,492.00

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

Project delays can make it challenging to fully utilize HSIP funding. Such delays occur for a variety of reasons, including changes in project scope during the design process (which triggers a required re-evaluation of the project), changes in associated projects that are linked to the HSIP project, and unforeseen issues arising during the project development process. WisDOT continues to work on developing a list of HSIP projects that could be advanced from later program years into earlier program years to ensure that HSIP funding is fully utilized even if projects are delayed or fall out of the program.

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

None at this time.

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
1000-08-90	Roadside Barrier - cable	0 Miles	695250	772500	HSIP (Section 148)		0	0	VAR	Roadway Departure	
1000-20-74	Roadway signs and traffic control Roadway signs (including post) - new or updated	0 Miles	1990542.95	1990542.95	HSIP (Section 148)		0	0	VAR	Roadway Departure	
1000-20-80	Roadway signs and traffic control Curve-related warning signs and flashers	0 Miles	221887.93	221887.93	HSIP (Section 148)		0	0	VAR	Roadway Departure	
1000-99-61	Non-infrastructure Data/traffic records	0 Miles	36000	40000	HSIP (Section 148)		0	0	n/a	Data	
1022-03-03	Roadway Pavement surface - high friction surface	0 Miles	22500	25000	HSIP (Section 148)		0	0	IH	Roadway Departure	
1030-06-04	Roadway Pavement surface - high friction surface	0.07 Miles	121500	135000	HSIP (Section 148)		0	0	IH	Roadway Departure	
1050-02-01	Access management Change in access - close or restrict existing access	0.17 Miles	69525	77250	HSIP (Section 148)		0	0	STH	Intersections	

1053-02-60	Roadway Pavement surface - high friction surface	4.33 Miles	19845.42	22050.47	HSIP (Section 148)		0	0	STH	Roadway Departure	
1058-20-71	Roadside Barrier - cable	0.685 Miles	102403.51	113781.68	HSIP (Section 148)		0	0	STH	Roadway Departure	
1060-49-00	Roadside Barrier - cable	8.709 Miles	333720	370800	HSIP (Section 148)		0	0	IH	Roadway Departure	
1071-06-79	Roadside Barrier - cable	2.61 Miles	339282	376980	HSIP (Section 148)		0	0	IH	Roadway Departure	
1071-06-81	Roadside Barrier - cable	1.831 Miles	170705.13	189672.37	HSIP (Section 148)		0	0	IH	Roadway Departure	
1080-13-70	Roadway Pavement surface - high friction surface	0.03 Miles	109039.9	121155.44	HSIP (Section 148)		0	0	USH	Roadway Departure	
1090-02-04	Roadway Pavement surface - high friction surface	0 Miles	36000	40000	HSIP (Section 148)		0	0	IH	Roadway Departure	
1090-37-70	Roadside Barrier end treatments (crash cushions, terminals)	1.95 Miles	337759.83	375288.7	HSIP (Section 148)		0	0	IH	Roadway Departure	
1090-38-00	Roadway Pavement surface - high friction surface	0.426 Miles	93627	104030	HSIP (Section 148)		0	0	IH	Roadway Departure	
1100-05-01	Roadway Pavement surface - high friction surface	0 Miles	36000	40000	HSIP (Section 148)		0	0	USH	Roadway Departure	
1120-29-71	Roadway Pavement surface - high friction surface	0.19 Miles	747025.54	830028.38	HSIP (Section 148)		0	0	USH	Roadway Departure	

1146-44-71	Intersection geometry Intersection geometrics - modify intersection corner radius	0.071 Miles	474728.14	527475.71	HSIP (Section 148)		0	0	STH	Intersections	
1160-01-06	Roadway Pavement surface - high friction surface	0 Miles	16454.7	18283	HSIP (Section 148)		0	0	IH	Roadway Departure	
1160-01-76	Roadway Pavement surface - high friction surface	0 Miles	40674.6	45194	HSIP (Section 148)		0	0	IH	Roadway Departure	
1176-03-71	Roadside Barrier - cable	1.37 Miles	206969.8	229966.44	HSIP (Section 148)		0	0	USH	Roadway Departure	
1195-02-70	Access management Median crossover - unspecified	0.209 Miles	1122853.04	1247614.49	HSIP (Section 148)		0	0	USH	Roadway Departure	
1202-00-61	Roadway Pavement surface - high friction surface	0.07 Miles	80323.02	89247.8	HSIP (Section 148)		0	0	USH	Roadway Departure	
1401-02-72	Intersection geometry Auxiliary lanes - add left-turn lane	0.622 Miles	1257102.78	1396780.87	HSIP (Section 148)		0	0	STH	Intersections	
1520-02-71	Access management Median crossover - unspecified	0.545 Miles	1474200	1638000	HSIP (Section 148)		0	0	STH	Intersections	
2025-00-00	Intersection geometry Intersection geometrics - miscellaneous/other/unspecified	0.221 Miles	157500	175000	HSIP (Section 148)		0	0	STH	Intersections	
2050-05-01	Intersection geometry Auxiliary lanes - miscellaneous/other/unspecified	0 Miles	148320	164800	HSIP (Section 148)		0	0	CTH	Intersections	

2060-17-70	Roadway Rumble strips - edge or shoulder	7.876 Miles	331078.19	367864.66	HSIP (Section 148)		0	0	STH	Roadway Departure	
2070-08-70	Intersection traffic control Modify traffic signal - modify signal mounting (spanwire to mast arm)	0.28 Miles	725062.67	805625.19	HSIP (Section 148)		0	0	CTH	Intersections	
2216-02-70	Intersection geometry Auxiliary lanes - miscellaneous/other/unspecified	0 Miles	166956.38	185507.09	HSIP (Section 148)		0	0	CTH	Intersections	
2300-01-72	Roadway Pavement surface - high friction surface	0.228 Miles	128468.34	142742.6	HSIP (Section 148)		0	0	STH	Roadway Departure	
2695-10-70	Intersection traffic control Intersection traffic control - other	0.2 Miles	835287.26	928096.95	HSIP (Section 148)		0	0	CTH	Intersections	
2753-01-00	Intersection geometry Intersection geometry - other	0.09 Miles	94368.6	104854	HSIP (Section 148)		0	0	CTH	Intersections	
2758-04-70	Intersection geometry Intersection geometry - other	0.227 Miles	349257.96	388064.4	HSIP (Section 148)		0	0	CTH	Intersections	
2774-01-00	Intersection traffic control Modify control - two-way stop to roundabout	0.28 Miles	127231	141367.78	HSIP (Section 148)		0	0	CTH	Intersections	
2984-04-77	Intersection traffic control Modify traffic signal - modify signal mounting (spanwire to mast arm)	0.191 Miles	206087.31	228985.9	HSIP (Section 148)		0	0	VAR	Intersections	
2984-04-97	Intersection traffic control Modify traffic signal - modify signal mounting	0 Miles	174703.99	194115.54	HSIP (Section 148)		0	0	VAR	Intersections	

	(spanwire to mast arm)										
3738-06-60	Intersection traffic control Modify traffic signal - miscellaneous/other/unspecified	3 Miles	119085.66	148857.08	HSIP (Section 148)		0	0	STH	Intersections	
3773-01-00	Alignment Horizontal curve realignment	1.271 Miles	175876	195417.78	HSIP (Section 148)		0	0	CTH	Roadway Departure	
3854-01-00	Roadway signs and traffic control Roadway signs and traffic control - other	2.56 Miles	32445	36050	HSIP (Section 148)		0	0	CTH	Roadway Departure	
4430-15-71	Access management Median crossover - unspecified	0.987 Miles	907070	1007855.56	HSIP (Section 148)		0	0	STH	Roadway Departure	
4538-05-00	Roadway signs and traffic control Roadway signs and traffic control - other	3.322 Miles	37728.9	41921	HSIP (Section 148)		0	0	CTH	Roadway Departure	
4986-11-71	Intersection geometry Auxiliary lanes - add right-turn lane	0.053 Miles	138344	153715.56	HSIP (Section 148)		0	0	LOC	Intersections	
5002-01-73	Roadway Pavement surface - high friction surface	2.533 Miles	416997.23	463330.25	HRRRP (SAFETEA-LU)		0	0	CTH	Roadway Departure	
5140-03-70	Intersection traffic control Modify control - two-way stop to roundabout	0.325 Miles	1530000	1700000	HSIP (Section 148)		0	0	STH	Intersections	
5198-01-30	Roadway signs and traffic control Roadway signs and traffic control - other	7.17 Miles	50985	56650	HRRRP (SAFETEA-LU)		0	0	CTH	Roadway Departure	
5290-02-60	Roadway Pavement surface - high friction surface	0 Miles	846866.24	940962.49	HSIP (Section 148)		0	0	STH	Roadway Departure	

5350-00-74	Intersection geometry Auxiliary lanes - add left-turn lane	0.322 Miles	1012500	1125000	HSIP (Section 148)		0	0	USH	Intersections	
5476-01-30	Roadway signs and traffic control Roadway signs and traffic control - other	5.092 Miles	40652.1	45169	HSIP (Section 148)		0	0	CTH	Roadway Departure	
5809-00-30	Roadway signs and traffic control Roadway signs and traffic control - other	10.968 Miles	112320	124800	HSIP (Section 148)		0	0	CTH	Roadway Departure	
5817-00-30	Roadway signs and traffic control Roadway signs and traffic control - other	8.028 Miles	71910	79900	HRRRP (SAFETEA-LU)		0	0	CTH	Roadway Departure	
5992-09-75	Intersection traffic control Modify traffic signal - miscellaneous/other/unspecified	0 Miles	29200.5	32445	HSIP (Section 148)		0	0	LOC	Intersections	
6220-04-75	Roadway Rumble strips - edge or shoulder	5.333 Miles	123227.07	136918.97	HSIP (Section 148)		0	0	STH	Roadway Departure	
6430-07-60	Roadway Rumble strips - edge or shoulder	6.02 Miles	123957.32	137730.36	HSIP (Section 148)		0	0	USH	Roadway Departure	
6999-03-79	Intersection traffic control Modify traffic signal - modify signal mounting (spanwire to mast arm)	0.88 Miles	315087.3	350097	HSIP (Section 148)		0	0	STH	Intersections	
6999-06-78	Intersection traffic control Pavement markings - miscellaneous/other/unspecified	0.077 Miles	170626.94	189585.49	HSIP (Section 148)		0	0	LOC	Intersections	
7080-00-74	Intersection geometry Intersection geometrics - miscellaneous/other/unspe	0.02 Miles	192395.62	213772.92	HSIP (Section 148)		0	0	USH	Intersections	

	cified										
7130-00-07	Intersection geometry Auxiliary lanes - add left-turn lane	0 Miles	23175	25750	HSIP (Section 148)		0	0	STH	Intersections	
7130-01-72	Intersection geometry Splitter island - install on one or more approaches	0.64 Miles	1121138	1245708.89	HSIP (Section 148)		0	0	STH	Intersections	
7130-01-74	Roadway Roadway - other	0.06 Miles	347625	386250	HSIP (Section 148)		0	0	STH	Roadway Departure	
7712-02-72	Roadway Roadway widening - travel lanes	2.089 Miles	1462644.63	1625160.7	HSIP (Section 148)		0	0	STH	Roadway Departure	
7894-03-01	Roadway signs and traffic control Roadway signs and traffic control - other	8.41 Miles	20682.9	22981	HRRRP (SAFETEA-LU)		0	0	CTH	Roadway Departure	
7995-02-34	Intersection traffic control Modify traffic signal - miscellaneous/other/unspecified	0.01 Miles	38184.89	42427.66	HSIP (Section 148)		0	0	LOC	Intersections	
8510-02-06	Roadway Roadway widening - curve	0.32 Miles	74160	82400	HSIP (Section 148)		0	0	STH	Roadway Departure	
8520-01-74	Intersection geometry Intersection geometrics - realignment to align offset cross streets	0.78 Miles	307641.82	341824.24	HSIP (Section 148)		0	0	STH	Intersections	
9286-04-71	Roadway signs and traffic control Roadway signs and traffic control - other	3.992 Miles	82392.23	91546.92	HRRRP (SAFETEA-LU)		0	0	CTH	Roadway Departure	
0955-00-01	Non-infrastructure Educational efforts	0	202500	225000	HSIP (Section		0	0	n/a	Education	

					148)						
0956-00-01	Non-infrastructure Enforcement	0	675000	750000	HSIP (Section 148)		0	0	n/a	Enforcement	

Progress in Achieving Safety Performance Targets

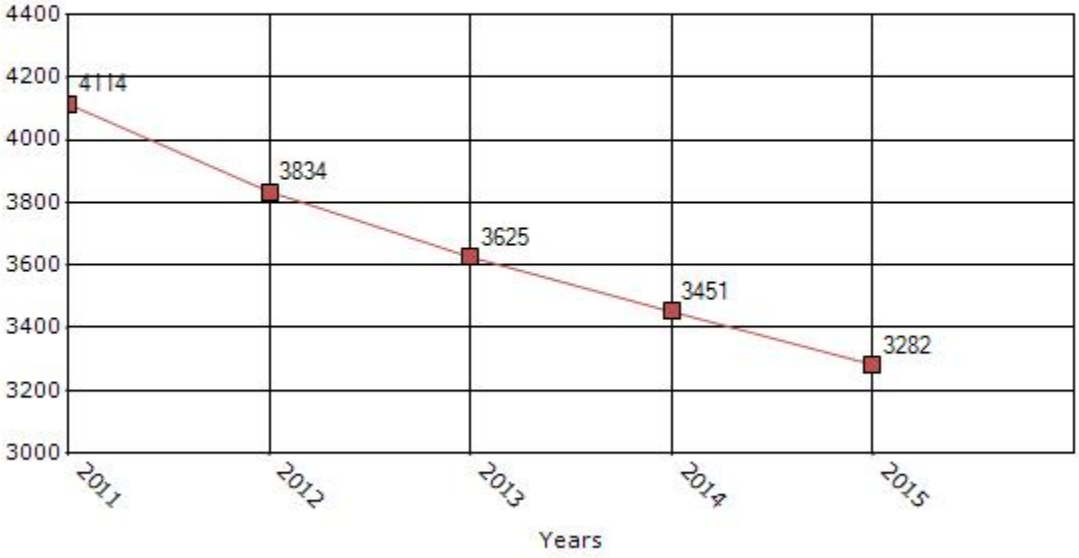
Overview of General Safety Trends

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

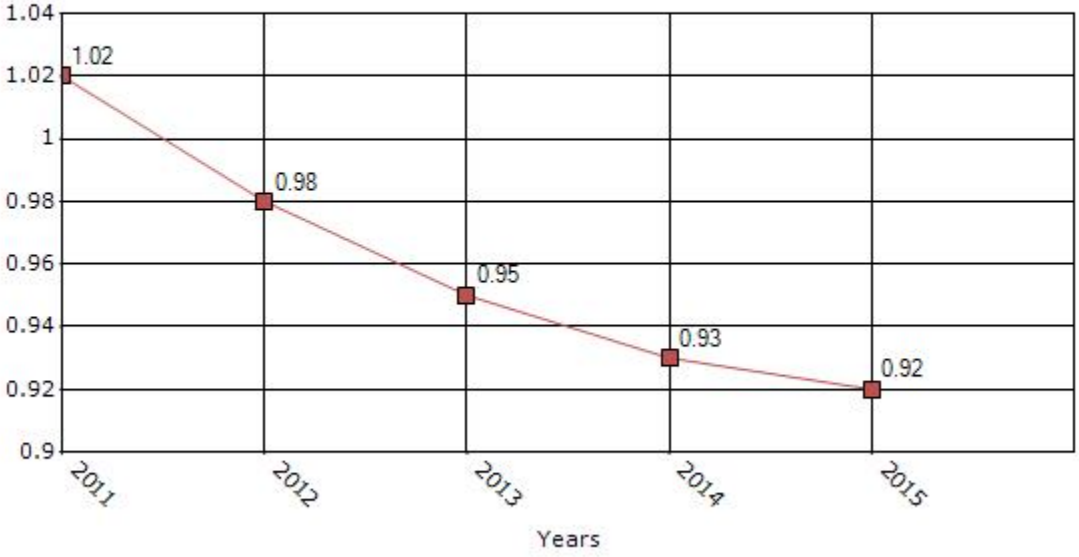
Performance Measures*	2011	2012	2013	2014	2015
Number of fatalities	599	571	559	551	549
Number of serious injuries	4114	3834	3625	3451	3282
Fatality rate (per HMVMT)	1.02	0.98	0.95	0.93	0.92
Serious injury rate (per HMVMT)	7.03	6.55	6.16	5.83	5.53

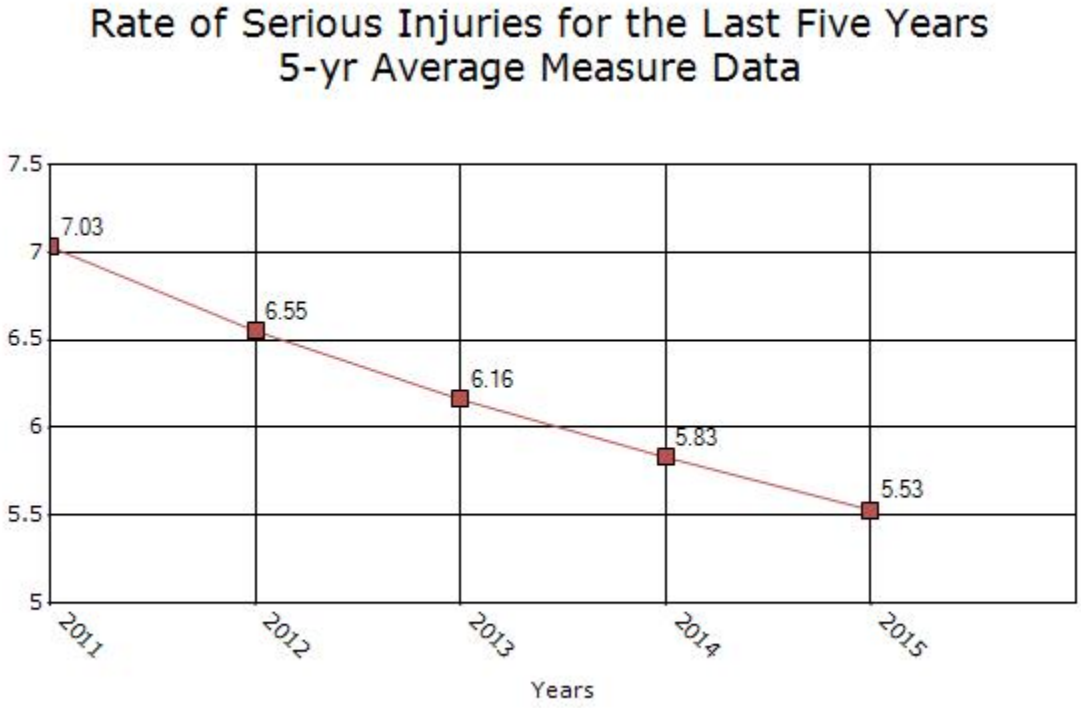
*Performance measure data is presented using a five-year rolling average.

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

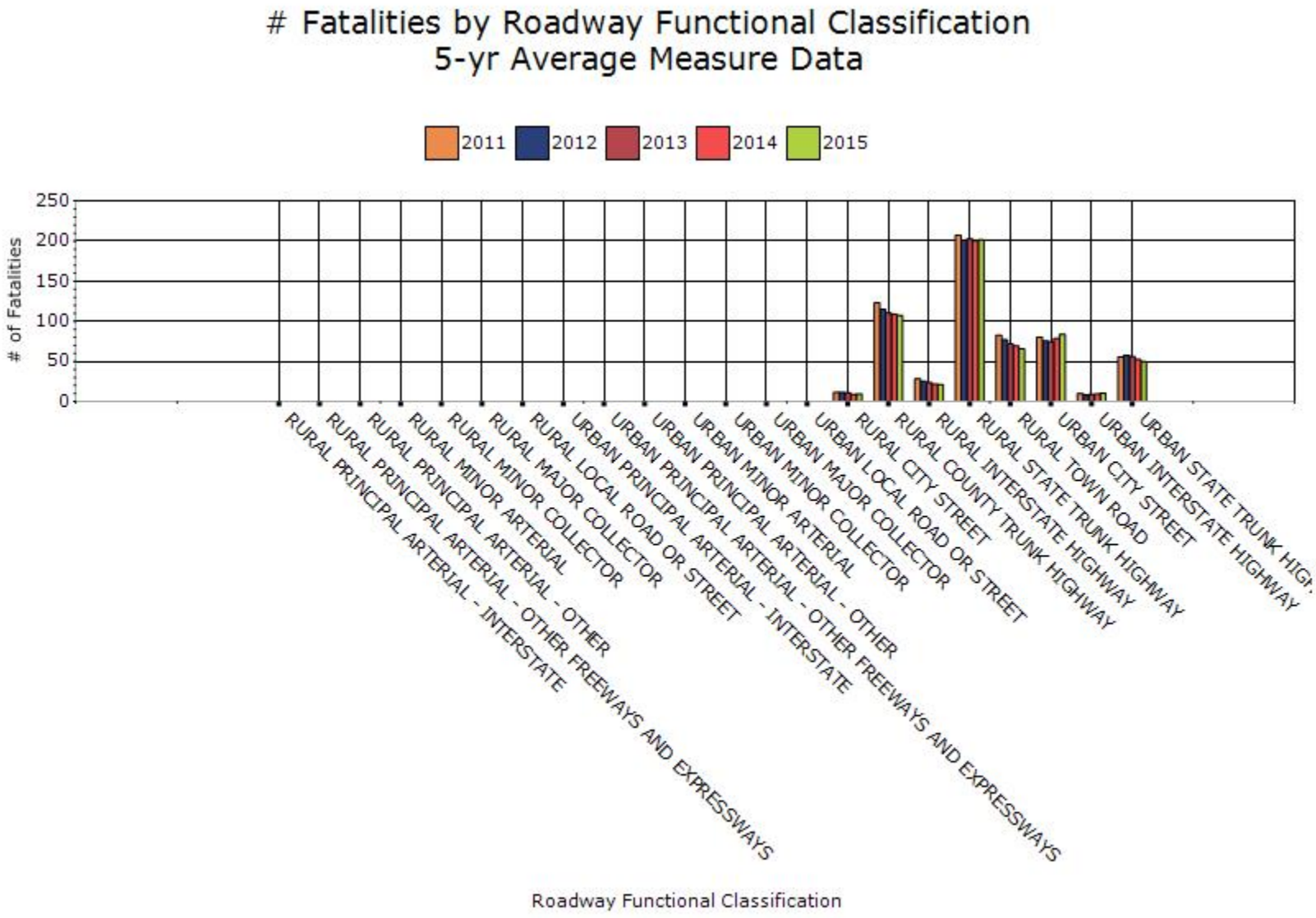


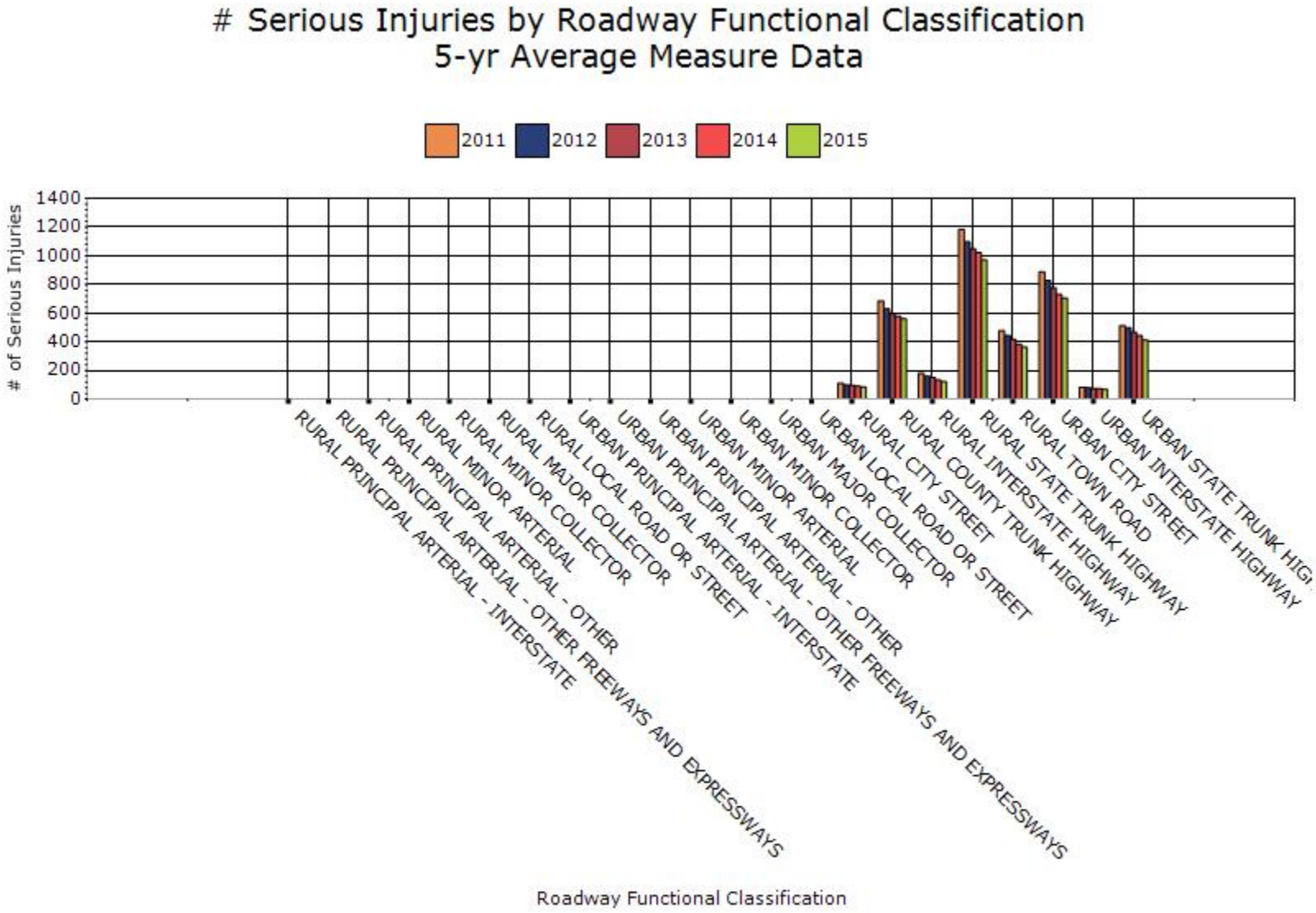

Rate of Serious Injuries for the Last Five Years
5-yr Average Measure Data
7.5
7
6.5
6
5.5
5
7.03
6.55
6.16
5.83
5.53
2011
2012
2013
2014
2015
Years

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 CITY STREET	9.6	83.6		
RURAL COUNTY TRUNK HIGHWAY	107.2	559.8		
RURAL INTERSTATE HIGHWAY	21.2	121		
RURAL STATE TRUNK HIGHWAY	201.6	971		
RURAL TOWN ROAD	65.6	361.6		
URBAN CITY STREET	83.8	705		
URBAN INTERSTATE HIGHWAY	10.4	67.8		
URBAN STATE TRUNK HIGHWAY	49.8	412.2		


Fatalities by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Fatalities
250
200
150
100
50
0
RURAL PRINCIPAL ARTERIAL - INTERSTATE
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
RURAL PRINCIPAL ARTERIAL - OTHER
RURAL MINOR ARTERIAL
RURAL MINOR COLLECTOR
RURAL MAJOR COLLECTOR
RURAL LOCAL ROAD OR STREET
URBAN PRINCIPAL ARTERIAL - INTERSTATE
URBAN PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
URBAN PRINCIPAL ARTERIAL - OTHER
URBAN MINOR ARTERIAL
URBAN MINOR COLLECTOR
URBAN MAJOR COLLECTOR
URBAN LOCAL ROAD OR STREET
RURAL CITY STREET
RURAL COUNTY TRUNK HIGHWAY
RURAL INTERSTATE HIGHWAY
RURAL STATE TRUNK HIGHWAY
RURAL TOWN ROAD
URBAN CITY STREET
URBAN INTERSTATE HIGHWAY
URBAN STATE TRUNK HIGH
Roadway Functional Classification


Serious Injuries by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Serious Injuries
1400
1200
1000
800
600
400
200
0
RURAL PRINCIPAL ARTERIAL - INTERSTATE
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
RURAL PRINCIPAL ARTERIAL - OTHER
RURAL MINOR ARTERIAL
RURAL MINOR COLLECTOR
RURAL MAJOR COLLECTOR
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URBAN CITY STREET
URBAN INTERSTATE HIGHWAY
URBAN STATE TRUNK HIGH
Roadway Functional Classification

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

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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	**2010**	**2011**	**2012**	**2013**	**2014**
Fatality rate (per capita)			0.1	0.09	0.09
Serious injury rate (per capita)			0.32	0.31	0.3
Fatality and serious injury rate (per capita)			0.42	0.41	0.39

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

((F+SI 2014 Drivers and Pedestrians 65 years of age and older/2014 Population Figure)+

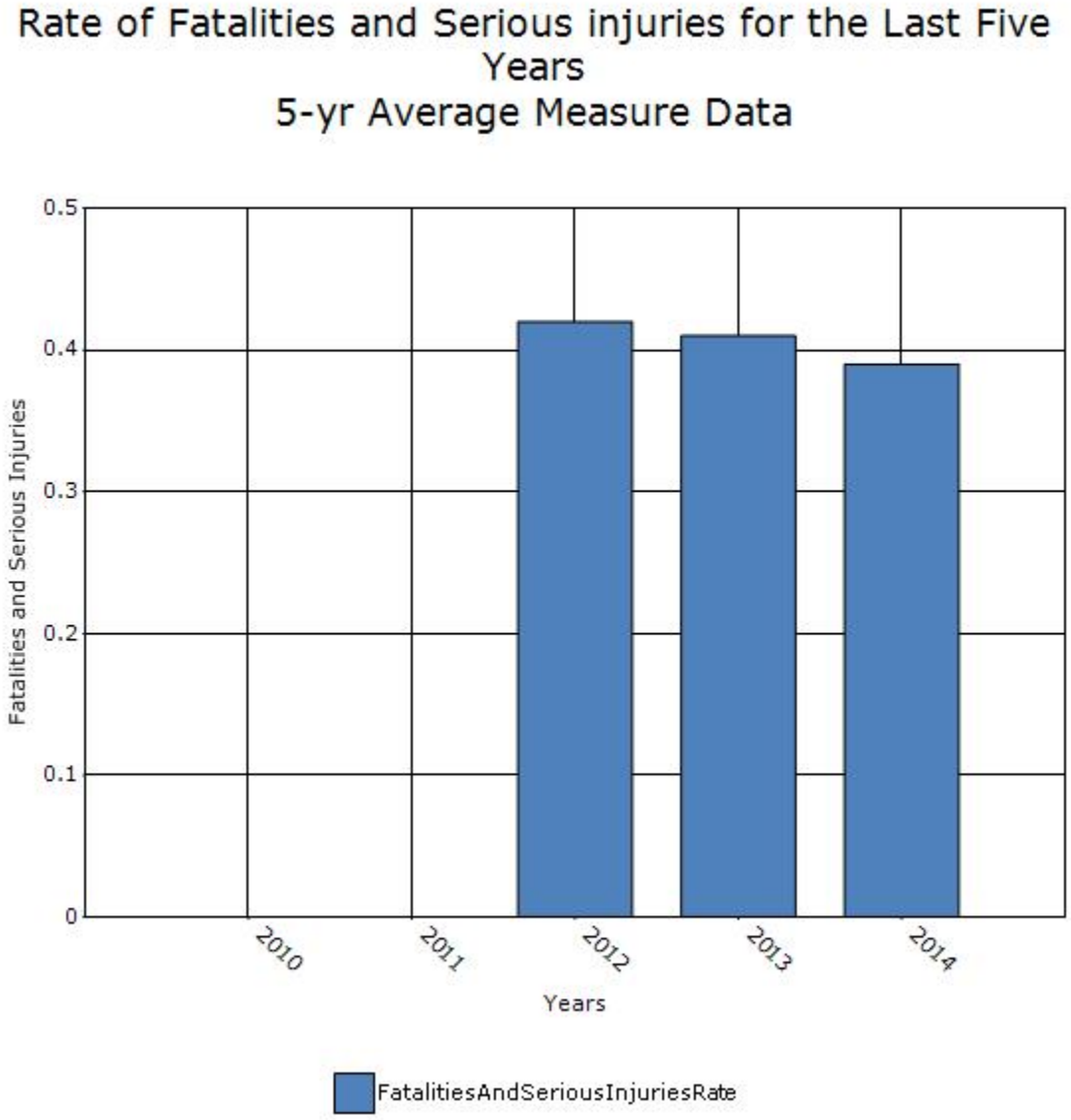
((F+SI 2013 Drivers and Pedestrians 65 years of age and older/2013 Population Figure)+

(F+SI 2012 Drivers and Pedestrians 65 years of age and older/2012 Population Figure)+

(F+SI 2011 Drivers and Pedestrians 65 years of age and older/2011 Population Figure)+

(F+SI 2010 Drivers and Pedestrians 65 years of age and older/2010 Population Figure))/5

((295/876) + (323/849) + (338/824) + (337/792) + (310/780))/5



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-Reduction in fatalities and serious injuries over the past 5 years

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

None

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

None.

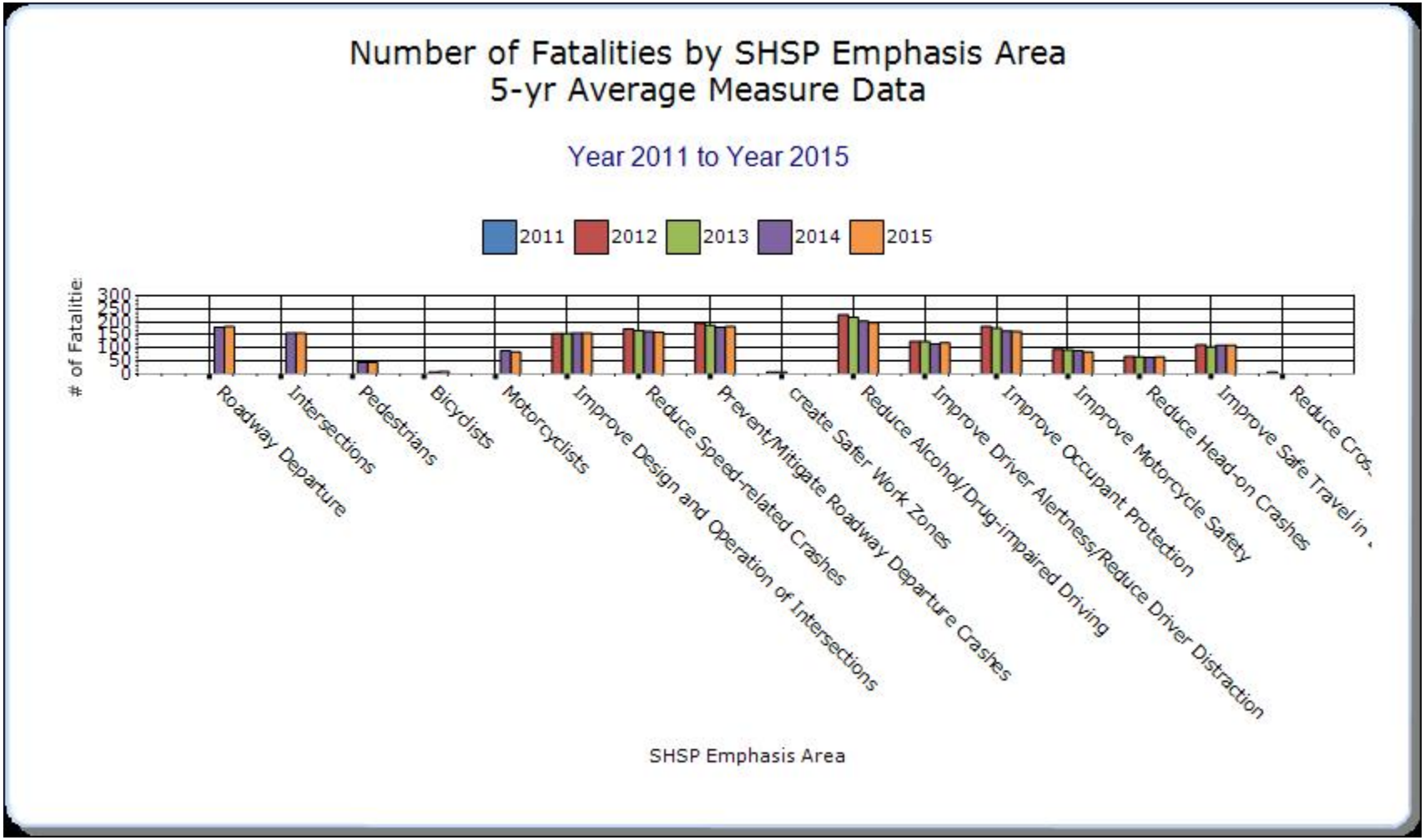
SHSP Emphasis Areas

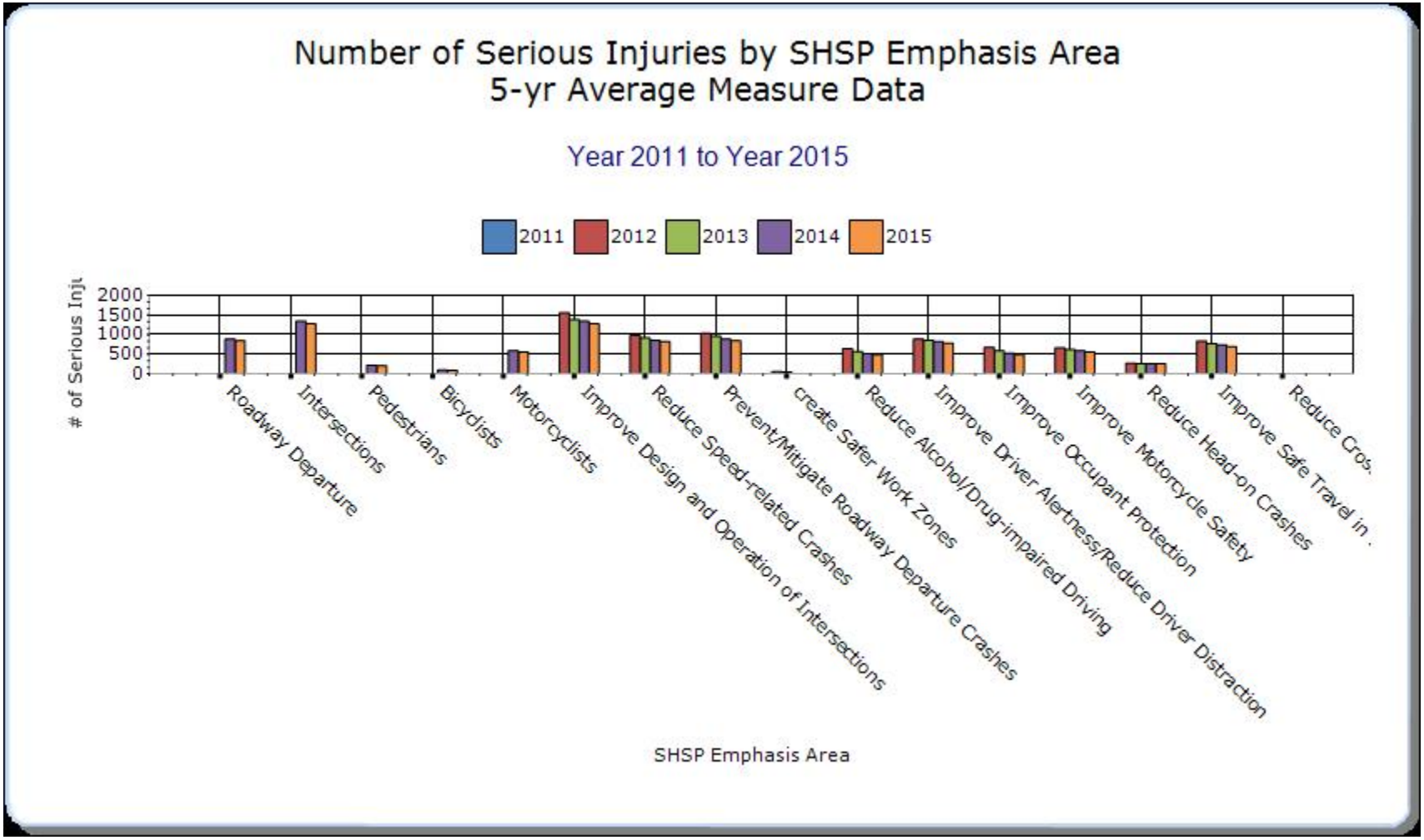
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

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)	Number of Crashes	Number of Non-fatal injuries	Other-3
Pedestrians		46	212			1248	1196	
Bicyclists		10	91			1013	923	
Improve Design and Operation of Intersections		157	1277			43711	20315	
Reduce Speed-related Crashes		161	828			18903	7713	
Prevent/Mitigate Roadway Departure Crashes		182	844			19347	6527	
Reduce Alcohol/Drug-impaired Driving		197	490			5076	2823	
Improve Driver Alertness/Reduce Driver Distraction		120	782			21663	9357	
Improve Occupant Protection		164	493					
Improve Motorcycle Safety		85	559			2287	2095	
Reduce Head-on Crashes		66	258			1467	1360	
Improve Safe Travel in Bad		111	694			32212	10376	

Weather								
Reduce Cross Median Crashes								





Groups of similar project types

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

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
SKIP	updated crash data related to crossover median crashes is currently under development.							

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
SKIP	updated crash data related to crossover median crashes is currently under development.							

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

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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)
xxxx			Project evaluation analysis under development at time this report was submitted.											

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.
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.