Highway Safety Improvement Program

Data Driven Decisions

Wyoming
Highway Safety Improvement Program
2016 Annual Report

Prepared by: WY

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 Highway Safety Improvement Program (HSIP) for FY 2015 is moving toward better alignment with the performance targets of the State of Wyoming through the use of the WYDOT Safety Management System (SMS).

The data requirements for the optimal use of the SMS are large and it has been a number of years getting to the point we are at now with the ability to describe the issues and problems facing the highway system, rural road system and local roads in Wyoming. The HSIP is beginning to take a more rounded approach to all of the issues and problems facing the State.

Projects are selected and programmed by the various WYDOT Districts. The Districts are utilizing the information produced by the Highway Safety Office to better align projects with the Strategic Highway Safety Plan which targets the main safety problem areas for the state highway system. County and local road officials work closely with the University of Wyoming Local technical transfer office to identify and address safety concerns on roadways under their direction and control.

Overall the HSIP for the State of Wyoming is moving in the right direction in regard to safety problem identification and projects to address those issues in a cost effective manner. The Highway Safety Office continues to monitor and evaluate the performance of the highway system in Wyoming.

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?

District

If District, how are the HSIP funds allocated?
Other-Judgement based upon data and rating system used to ID specific projects for highway safety funding

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

The local county roads are included in the HSIP by the Wyoming rural road safety program (WRRSP) administered by the UW LTAP center. The program reviews crash and roadway feature data to develop high risk road locations. The work done by the LTAP then includes assistance in putting projects together with the local jurisdictions to address the identified roadway safety needs.

There are two MPO's in Wyoming and they are represented on the Safety Mangagement Committee that identifies emphasis areas for the SHSP. Projects are proposed and developed by the MPO's with regard to their own identified needs and assistance is provided in data and information.

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

Design
Planning
Operations
Governors Highway Safety Office

Briefly describe coordination with internal partners.

Internal partners are asked to provide their expertise in the various areas that they represent. The coordination is required at many levels based upon the policies of WYDOT. Information is developed and disemminated by the Highway Safety Office. The information is used to make decisions regarding project programming and design by the other WYDOT programs responsible for that part of the project development and implementation.

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

Metropolitan Planning Organizations
Governors Highway Safety Office
Local Government Association

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

Other-No program administration practices have changed since the last report

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

The Highway Safety Office has been the lead in developing a Safety Management System (SMS) for WYDOT. The SMS is maturing rapidly and becoming the go to place for counter measures and projects that have higher benefit/cost ratios. The SMS is based upon the principles contained in the Highway Safety Manual and is very dependent upon data. The SMS development has been a long process but it is now on the verge of driving the HSIP project selection process for WYDOT.

Program Methodology

Select the programs that are administered under the HSIP.

Intersection	Horizontal Curve	Crash Data
Roadway Departure	Low-Cost Spot Improvements	Sign Replacement And Improvement
Local Safety	Other-Guardrail upgrade/replacement	

Program: **Intersection**
Date of Program Methodology: **10/9/2011**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*

All crashes
Fatal crashes only
Fatal and serious injury crashes only

Traffic Volume

Functional classification
Other-Rural Intersections and the type of traffic control present for example signalized or not

What project identification methodology was used for this program?
Crash frequency
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.
Rural off sytem intersections are studied independently from on system intersections. Urban intersections are also studied within the community that they exist. A statewide program does not currently exist.

How are highway safety improvement projects advanced for implementation?
Other-Disrtict and Traffic operations input

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

Program: **Horizontal Curve**
Date of Program Methodology: **10/9/2009**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic	Horizontal curvature
Fatal crashes only	Volume	
Fatal and serious injury crashes		Functional classification

only
Roadside features

What project identification methodology was used for this program?
Crash frequency
Relative severity index
Probability of specific crash types

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-Disrtict and Traffic operations input

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

Ranking based on B/C	2
Available funding	1

Program: **Crash Data**
Date of Program Methodology: **10/9/2008**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic	Horizontal curvature
Fatal crashes only	Volume	
Fatal and serious injury crashes only		Functional classification
		Roadside features
Other-Safety Index rating system		

What project identification methodology was used for this program?
Crash frequency
Relative severity index
Crash rate
Critical rate
Probability of specific crash types
Excess proportions 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.
Crash Data is tailored for the specific study that is being conducted for the other roadways whether they be rural counties or urban communities. The Wyoming rural road safety program is utilized for HRRR projects.

How are highway safety improvement projects advanced for implementation?
Other-Data improvement projects are developed and implemented by the WY traffic records coordinating committe

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
Cost Effectiveness	2

Program: **Roadway Departure**
Date of Program Methodology: **10/9/2006**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic	Horizontal curvature
Fatal crashes only	Volume	
Fatal and serious injury crashes only		Functional classification
		Roadside features

What project identification methodology was used for this program?
Crash frequency
Relative severity index
Crash rate
Critical rate
Probability of specific crash types
Excess proportions 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.
The local roads utilize specific studies to determine project needs.

How are highway safety improvement projects advanced for implementation?
Other-District and Traffic operations input

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
Judgement based - some systemic geometric improvements and some crashed based	2

Program: **Low-Cost Spot Improvements**
Date of Program Methodology: **10/9/2011**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic	Horizontal curvature
Fatal crashes only	Volume	
Fatal and serious injury crashes only		Functional classification
		Roadside features

What project identification methodology was used for this program?
Crash frequency
Relative severity index
Crash rate
Critical rate
Probability of specific crash types
Excess proportions of specific crash types

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-District and Traffic operations input

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

Ranking based on B/C	1
Available funding	2

Program: **Sign Replacement And Improvement**
Date of Program Methodology: **10/9/2008**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic	
Fatal crashes only	Volume	
Fatal and serious injury crashes only		
		Functional classification
		Other-Age and condition of signs

What project identification methodology was used for this program?

Crash frequency
Relative severity index
Crash rate
Critical rate
Probability of specific crash types
Excess proportions of specific crash types
Other-Age of signs in combination with functional classification of the roadway is the main factor

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.
Sign replacement and improvement projects are done through the WRRSP methodology for Counties. For Urban communities these type of projects are done on a corridor basis.

How are highway safety improvement projects advanced for implementation?

Other-District and Traffic operatins input

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	2
Relative age of signage and functional classification	1

Program: **Local Safety**
Date of Program Methodology: **10/9/2008**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Traffic Volume	Other-A simple roadway drive through rating is used to identify roadway features needing improvement

What project identification methodology was used for this program?
Crash frequency
Probability of specific crash types
Excess proportions 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.
The Wyoming Rural Road Safety Program (WRRSP) utilizes crash data and drive through surveys to rank and prioritize local road safety needs and assists in identifying projects to address needs.

How are highway safety improvement projects advanced for implementation?
Competitive application process
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).
Rank of Priority Consideration

Available funding	2
Cost Effectiveness	1

Program: **Other-Guardrail upgrade/replacement**
Date of Program Methodology: **2/2/2015**

What data types were used in the program methodology?

Crashes	*Exposure*	*Roadway*
All crashes	Volume	Roadside features

What project identification methodology was used for this program?
Expected crash frequency with EB adjustment

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.
Work with the LTAP center using the WRRSP

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).
Rank of Priority Consideration

Available funding	1

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

70%

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

Cable Median Barriers
Rumble Strips
Traffic Control Device Rehabilitation
Pavement/Shoulder Widening
Install/Improve Signing
Install/Improve Pavement Marking and/or Delineation
Upgrade Guard Rails
Clear Zone Improvements
Install/Improve Lighting
Add/Upgrade/Modify/Remove Traffic Signal

What process is used to identify potential countermeasures?

Engineering Study
Other-Use of Crash Information to identify over-represented crash types to be addressed
Other-Safety Management System

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

Highway Safety Manual

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

The Highway Safety Methodology has been included in the Safety Management System. The ratings and comparisons of safety locations is done with expected crash frequencies. This allows for those locations where there has not been a crash in the last five years to be considered in the analysis for where to spend safety funding.

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	
HSIP (Section 148)	$11,000,000.00	49 %	$10,851,649.98	49 %
HRRRP (SAFETEA-LU)	$540,000.00	2 %	$344,021.51	2 %
Penalty Transfer - Section 154	$5,300,000.00	24 %	$5,287,359.47	24 %
Penalty Transfer – Section 164	$5,475,000.00	25 %	$5,465,345.74	25 %
Totals	$22,315,000.00	100%	$21,948,376.70	100%

How much funding is programmed to local (non-state owned and operated) safety projects?
$540,000.00
How much funding is obligated to local safety projects?
$630,023.00

How much funding is programmed to non-infrastructure safety projects?
$1,110,044.00
How much funding is obligated to non-infrastructure safety projects?
$1,110,044.00

How much funding was transferred in to the HSIP from other core program areas during the reporting period?
$0.00
How much funding was transferred out of the HSIP to other core program areas during the reporting period?
$0.00

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

There are no impediments to obligating the HSIP funding.

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

Wyoming is moving forward with the use of its Safety Management System. The transition from many projects being based upon engineering judgment to the utilization of the SMS will benefit the State in getting the best projects done first in the years to come.

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
0300047 - Gillette/WYO 50 & 4J RD	Intersection geometry Intersection geometrics - miscellaneous/other /unspecified	Miles	7239		HSIP (Section 148)	Rural Principal Arterial - Other			State Highway Agency	Local Coordination/Intersections	Local Coordination/Intersections
1507037 - Chief Joseph Highway	Roadway	Miles	54294		HSIP (Section 148)	Rural Major Collector			State Highway Agency	Roadway Departure	
B099075 - UW Tech Transfer	Non-infrastructure Transportation safety planning	Numbers	27270		HSIP (Section 148)	Statewide Transportation planning locals			N/A	Local Coordination	
B142029 - District 2 Guardrail	Roadside Barrier-metal	Miles	34279		HSIP (Section 148)	Rural Major Collector			State Highway Agency	Roadway Departure	Guardrail Improvements

B151035 - Dist 1 Guardrail Upgrade	Roadside Barrier-metal	Miles	69662		HSIP (Section 148)	Rural Major Collector			State Highway Agency	Roadway Departure	Guardrail Improvements
B151104 - District 1 Thermoplastic Markings	Roadway delineation Improve retroreflectivity	Miles	247736		HSIP (Section 148)	Urban Principal Arterial - Other			State Highway Agency	Lane Departure	
B151109 - US 85, WYO 213, WYO 215, WYO 216, US 30	Miscellaneous	Miles	19587		HSIP (Section 148)	Rural Principal Arterial - Other			State Highway Agency	Roadway Departure	
B152105 - District 2 Thermoplastic Markings	Roadway delineation Improve retroreflectivity	Miles	281593		HSIP (Section 148)	Urban Principal Arterial - Other			State Highway Agency	Lane Departure	
B153106 - District 3 Thermoplastic Markings	Roadway delineation Improve retroreflectivity	Miles	205065		HSIP (Section 148)	Urban Principal Arterial - Other			State Highway Agency	Lane Departure	
B154020 - District 4 Guardrail	Roadside Barrier-metal	Miles		1271378	HSIP (Section 148)	Rural Principal Arterial - Other			State Highway Agency	Roadway Departure	Guardrail Improvement
B154107 - District 4	Roadway delineation Improve	Miles	174543		HSIP (Secti	Urban Principal			State Highw	Lane Departure	

Thermoplastic Markings	retroreflectivity				on 148)	Arterial - Other			ay Agency		
B155108 - District wide Thermoplastic Markings	Roadway delineation Improve retroreflectivity	Miles	305295		HSIP (Section 148)	Urban Principal Arterial - Other			State Highway Agency	Lane Departure	
B159034 - Statewide Epoxy Striping	Roadway delineation Longitudinal pavement markings - new	Miles	1839477		HSIP (Section 148)	Rural Major Collector			State Highway Agency	Lane Departure	
B159044 - HRRR/Statewide Signs	Roadway signs and traffic control Roadway signs (including post) - new or updated	Numbers	258731.2		HSIP (Section 148)	Rural Local Road or Street			County Highway Agency	Local Coordination	
B159045 - Statewide Rumble Strips	Roadway Rumble strips - edge or shoulder	Miles	672320		HSIP (Section 148)	Rural Major Collector			State Highway Agency	Roadway Departure	Install rumble strips
B169021 - Statewide Rumble Strips	Roadway Rumble strips - center	Miles	1932483		HSIP (Section 148)	Rural Major Collector			State Highway Agency	Roadway Departure	Install Rumble Strips
CN04111 - Various Cnty Rds - Sweetwat	Roadway signs and traffic control Roadway signs (including post) -	Numbers	99541.71		HSIP (Section 148)	Rural Local Road or Street			County Highway Agenc	Roadway Departure	

er	new or updated								y		
CN22035 - HRRR/Teton Cnty	Roadway signs and traffic control Roadway signs (including post) - new or updated	Numbers	77008		HSIP (Section 148)	Rural Local Road or Street			County Highway Agency	Roadway Departure	
I803149 - District One Sign and Post Upgrade	Roadway signs and traffic control Sign sheeting - upgrade or replacement	Numbers	20079		HSIP (Section 148)	Rural Principal Arterial - Interstate			State Highway Agency	Roadway Departure	
N212116 - Casper South / WYO 220	Roadway Roadway - other	Miles	1282135		HSIP (Section 148)	Rural Principal Arterial - Other			State Highway Agency	Roadway Departure	
N212117 - Casper / Indian Springs	Roadway Roadway - other	Miles	632045		HSIP (Section 148)	Urban Principal Arterial - Other			State Highway Agency	Roadway Departure	
N341110 - Casper / US20/26 / Guardrail	Roadside Barrier-metal	Miles	824943		HSIP (Section 148)	Rural Principal Arterial - Other			State Highway Agency	Roadway Departure	Improve Guardrail
N341111 - Casper - Shoshoni	Roadway Roadway - other	Miles	288650		HSIP (Section 148)	Rural Principal Arterial - Other			State Highway Agency	Roadway Departure	
P212096 - Casper	Miscellaneous	Miles	287246		HSIP (Secti	Urban Principal			State Highw	Lane Departure	

Streets					on 148)	Arterial - Other			ay Agenc y		
CN02103 - HRRR / various Cnty Rds - Laramie Cnty	Roadway signs and traffic control Roadway signs (including post) - new or updated	Num bers	35563. 71		HRRR P (SAFE TEA- LU)	Rural Local Road or Street			County Highw ay Agenc y	Roadway Departure	
CN15021 - HRRR / Hot Springs Cnty	Roadside Barrier- metal	Miles	100000		HRRR P (SAFE TEA- LU)	Rural Local Road or Street			County Highw ay Agenc y	Roadway Departure	
HRRR015 - University of Wyoming FY 2015 T2 Center	Non-infrastructure Transportation safety planning				HRRR P (SAFE TEA- LU)						
'0254147 - Casper Marginal North Section	Roadway Roadway - other	Miles	200000 0		Penalt y Transf er - Sectio n 154	Rural Principal Arterial - Interstat e			State Highw ay Agenc y	Roadway Departure	
N212094 - Casp/Wes t Belt Loop/Sec 2	Roadway Roadway - other	Miles	189816 0.99		Penalt y Transf er - Sectio n 154	Rural Principal Arterial - Other			State Highw ay Agenc y	Roadway Departure	
PMDT015	Non-infrastructure		155318		Penalt						

- Patrol mobile Data Terminals	Data/traffic records	Numbers	3		y Transfer - Section 154						
U258012 - Casp/Wyo Blvd/Turn Ln/05	Intersection geometry Auxiliary lanes - add left-turn lane	Numbers	326193.01		Penalty Transfer - Section 154	Urban Principal Arterial - Other			State Highway Agency	Intersections	
N104087 - Hoback - Jackson	Roadside Roadside grading	Miles	391814 5.86		Penalty Transfer – Section 164	Rural Principal Arterial - Other			State Highway Agency	Roadway Departure	
N212094 - Casper Streets	Miscellaneous	Miles	206183 9.01		Penalty Transfer – Section 164	Urban Principal Arterial - Other			State Highway Agency	Lane Departure	
P541014 - Rawlins Streets / Intersection	Intersection traffic control Intersection traffic control - other	Numbers	55595. 56		Penalty Transfer – Section 164	Urban Principal Arterial - Other			State Highway Agency	Intersections	
U258012 - Casp/Wyo Blvd/Turn Ln/05	Intersection traffic control Intersection traffic control - other	Numbers	391789 .95		Penalty Transfer – Sectio	Urban Principal Arterial - Other			State Highway Agency	Intersections	

					n 164						

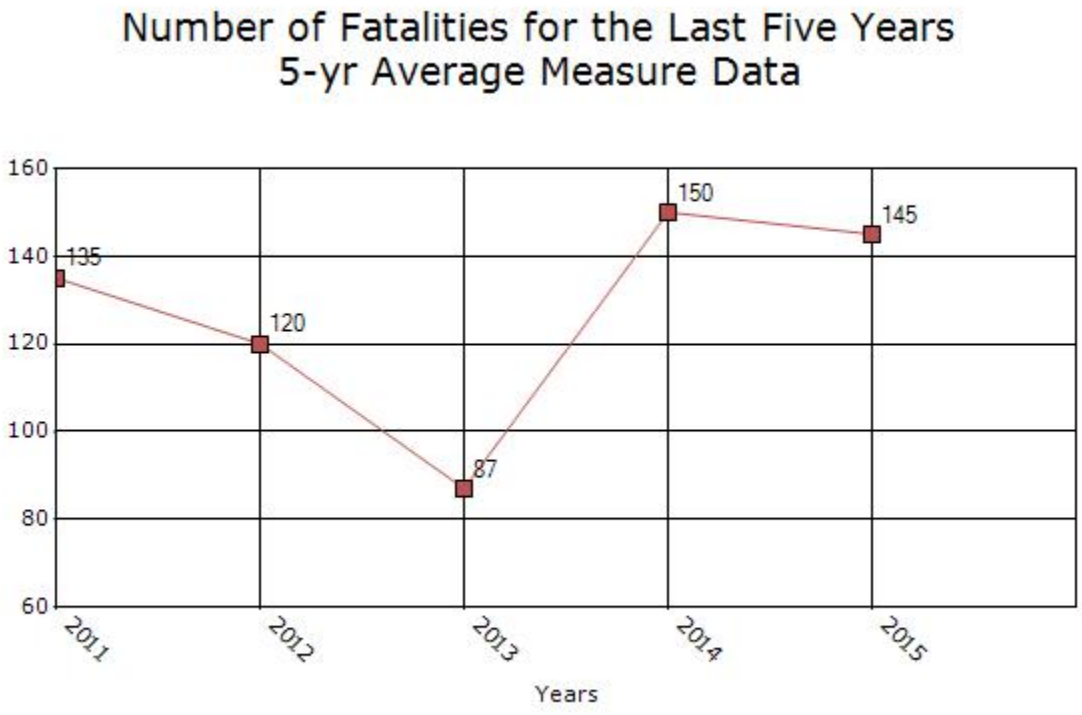
Progress in Achieving Safety Performance Targets

Overview of General Safety Trends

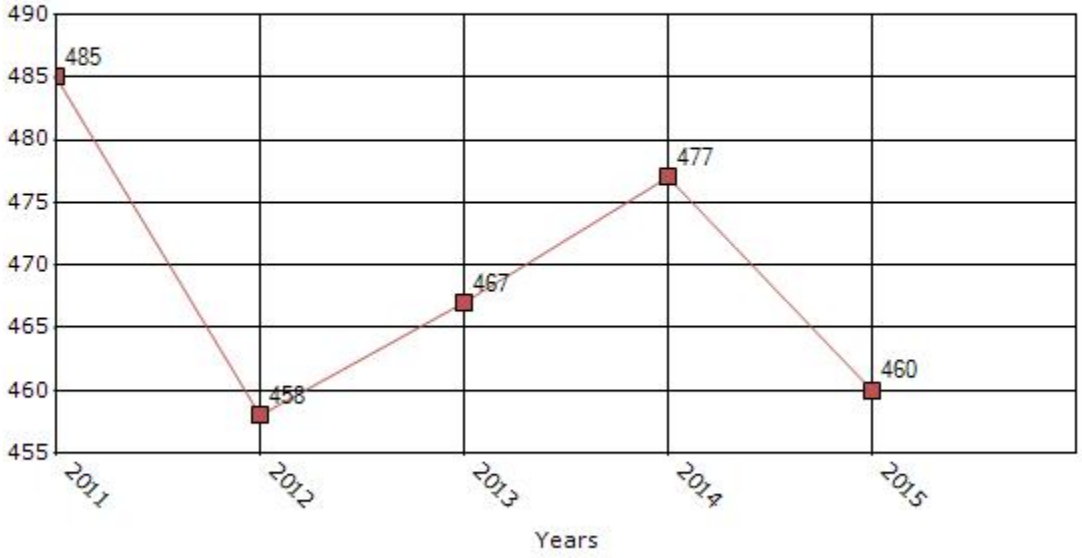
Present data showing the general highway safety trends in the state for the past five years.

Performance Measures*	2011	2012	2013	2014	2015
Number of fatalities	135	120	87	150	145
Number of serious injuries	485	458	467	477	460
Fatality rate (per HMVMT)	1.84	1.73	1.3	2.37	1.53
Serious injury rate (per HMVMT)	6.61	6.6	7.38	7.54	4.85

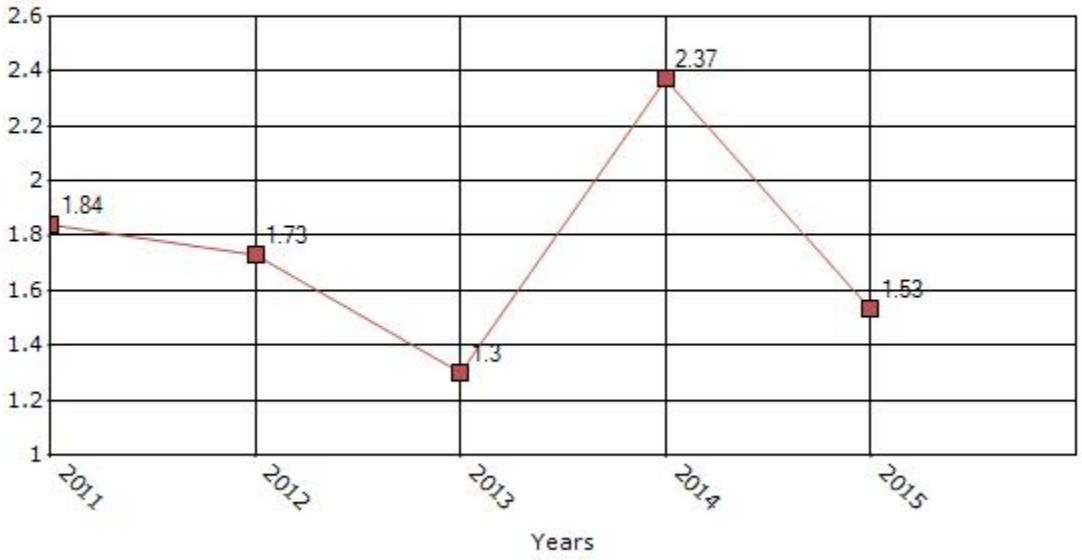
*Performance measure data is presented using a five-year rolling average.

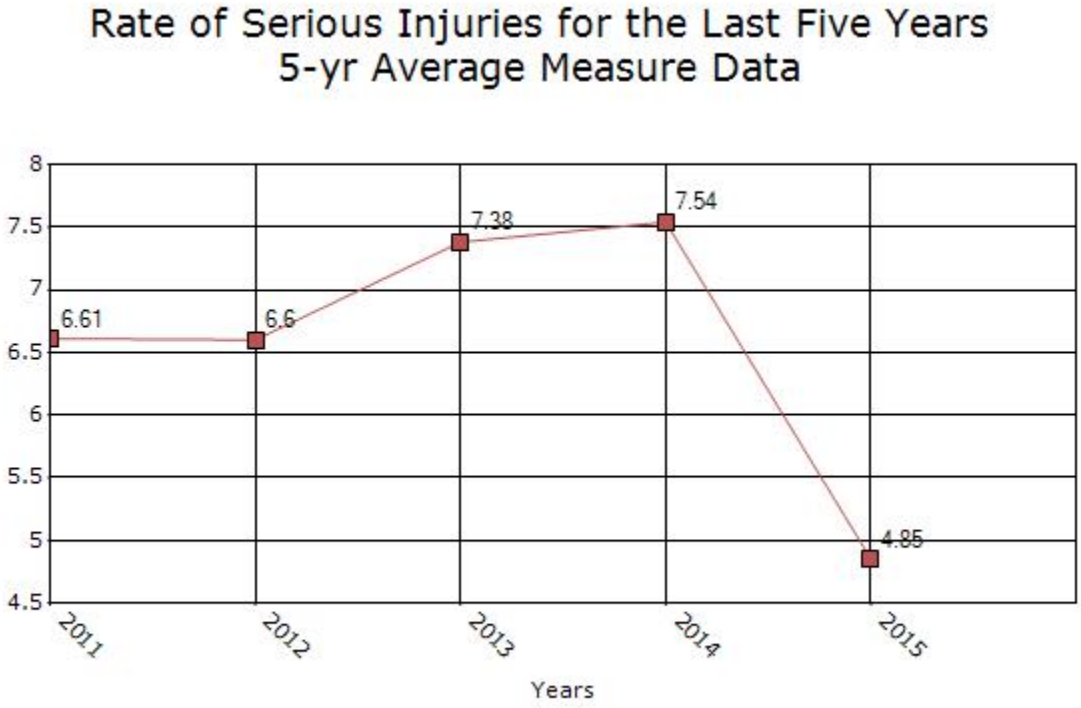


Number of Serious Injuries for the Last Five Years
5-yr Average Measure Data



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

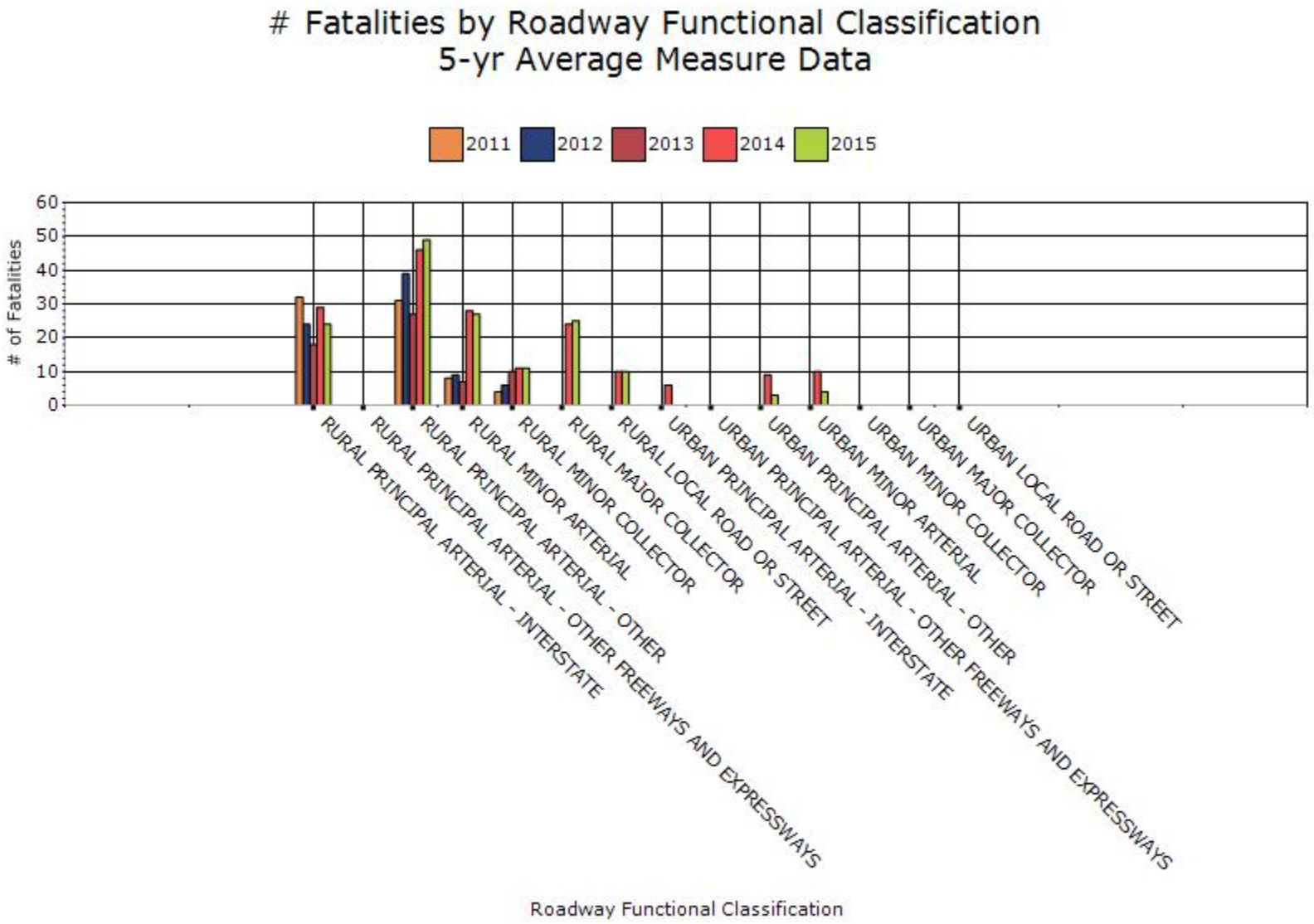


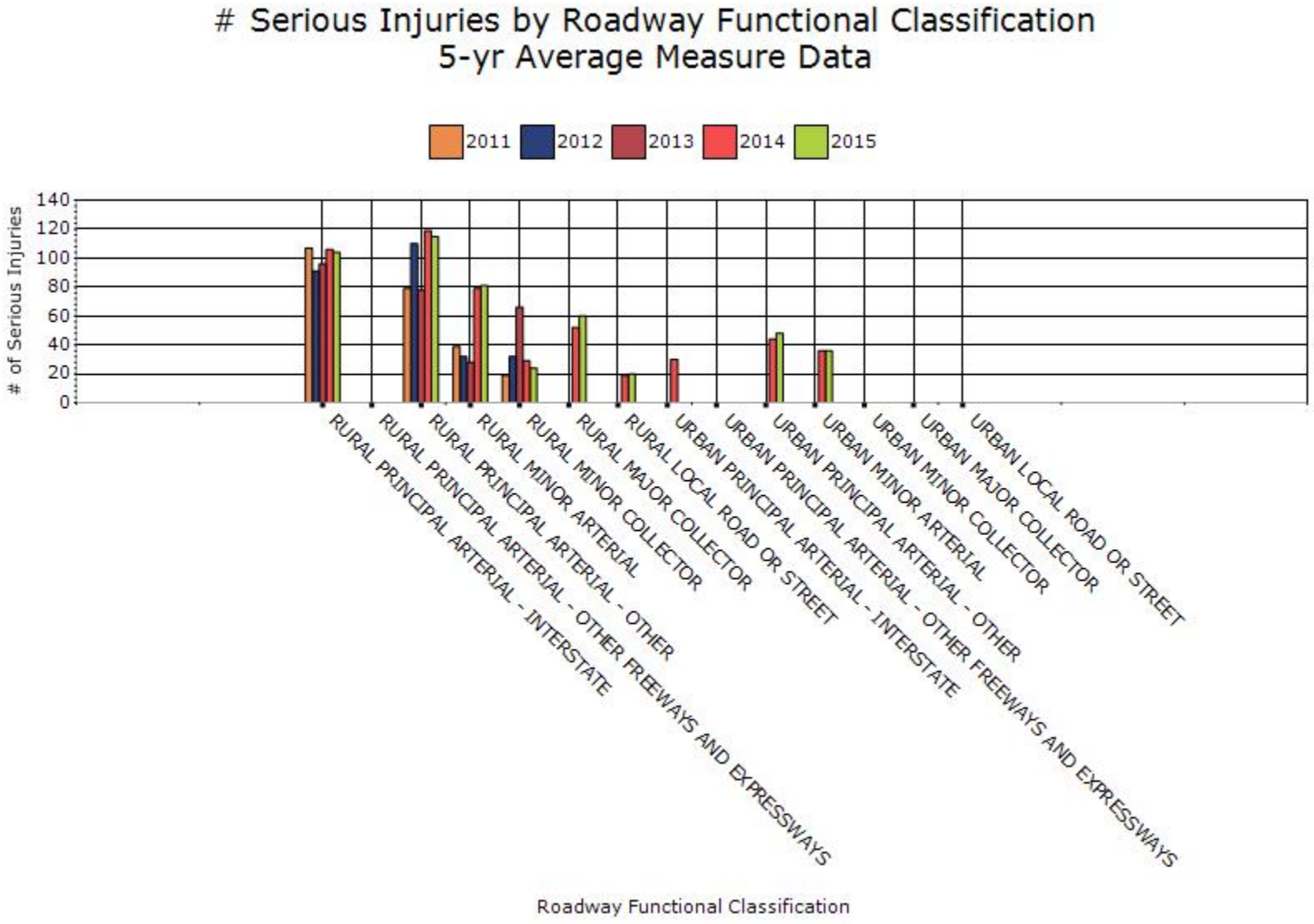

Rate of Serious Injuries for the Last Five Years
5-yr Average Measure Data
8
7.5
7
6.5
6
5.5
5
4.5
6.61
6.6
7.38
7.54
4.85
2011
2012
2013
2014
2015
Years

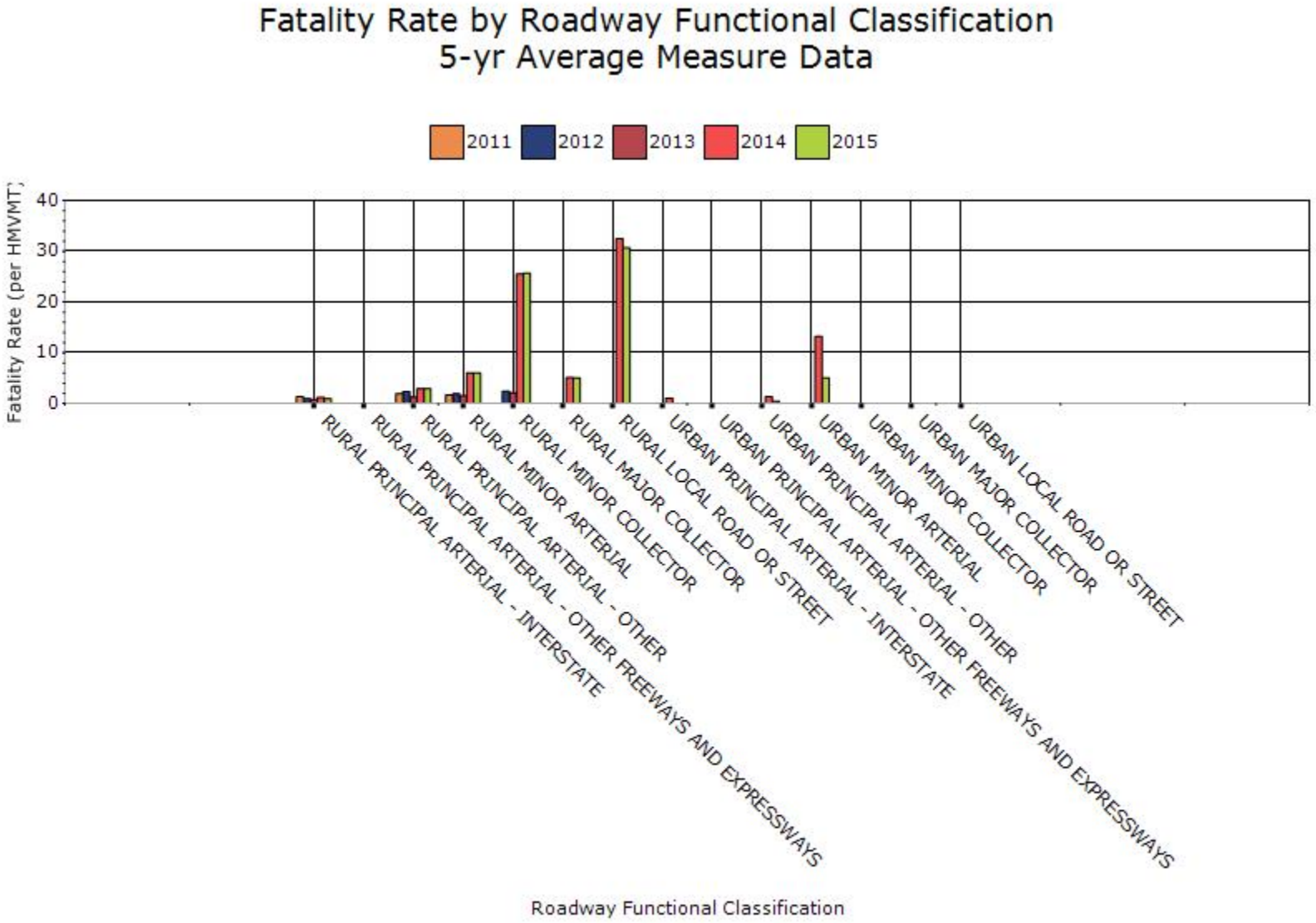
To the maximum extent possible, present performance measure* data by functional classification and ownership.

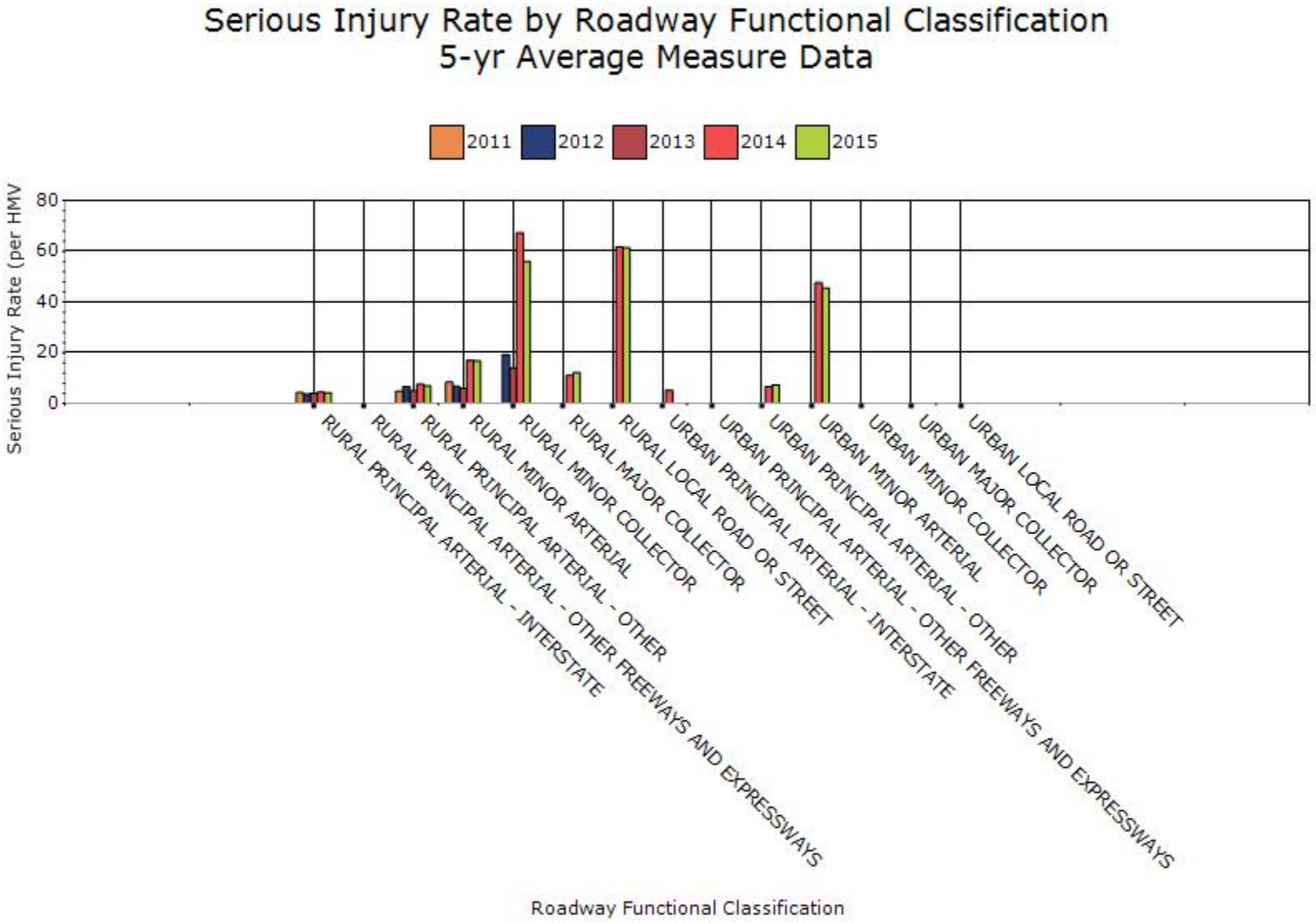
Year - 2015

Function Classification	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
RURAL PRINCIPAL ARTERIAL - INTERSTATE	24	104	0.97	4.2
RURAL PRINCIPAL ARTERIAL - OTHER	49	115	2.95	6.92
RURAL MINOR ARTERIAL	27	81	6	16.8
RURAL MINOR COLLECTOR	11	24	25.69	56.06
RURAL MAJOR COLLECTOR	25	60	5.06	12.15
RURAL LOCAL ROAD OR STREET	10	20	30.66	61.33
URBAN PRINCIPAL ARTERIAL - OTHER	3	48	0.46	7.36
URBAN MINOR ARTERIAL	4	36	5.06	45.52


Fatalities by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Fatalities
60
50
40
30
20
10
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
Roadway Functional Classification

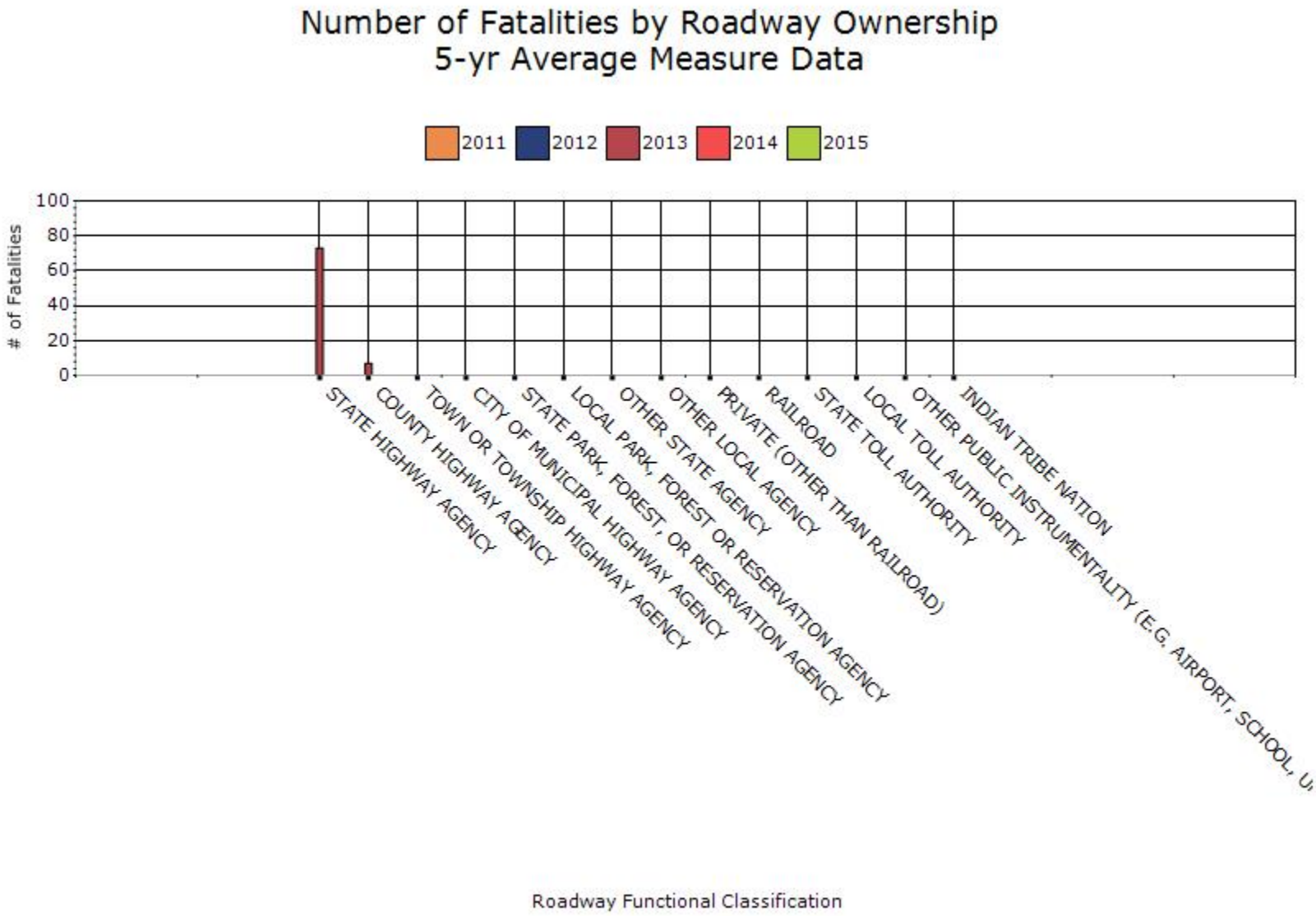

Serious Injuries by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Serious Injuries
140
120
100
80
60
40
20
0
RURAL PRINCIPAL ARTERIAL - INTERSTATE
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
RURAL PRINCIPAL ARTERIAL - OTHER
RURAL MINOR ARTERIAL
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
Roadway Functional Classification

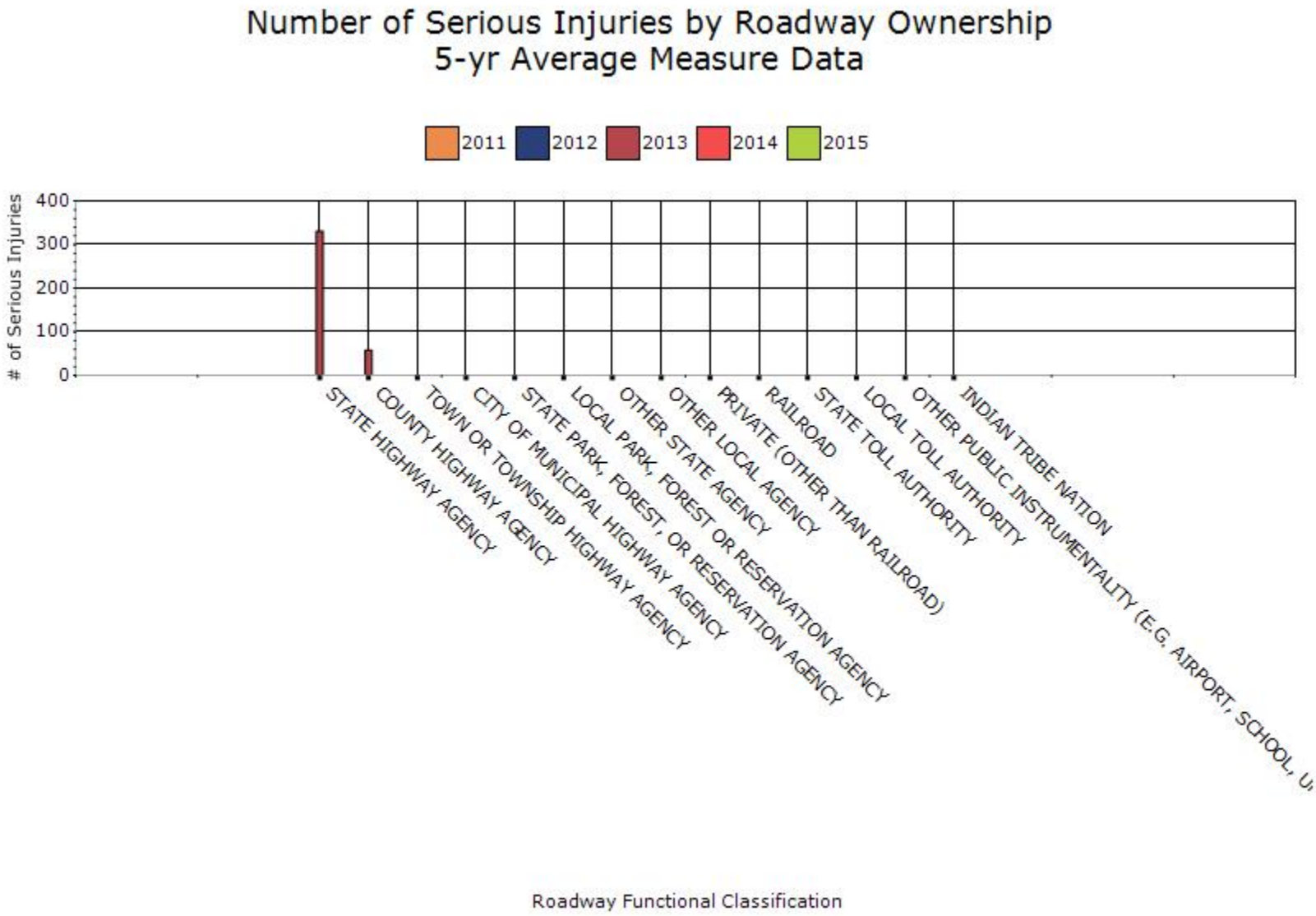

Fatality Rate by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
Fatality Rate (per HMVMT)
40
30
20
10
0
RURAL PRINCIPAL ARTERIAL - INTERSTATE
RURAL PRINCIPAL ARTERIAL - OTHER FREEWAYS AND EXPRESSWAYS
RURAL PRINCIPAL ARTERIAL - OTHER
RURAL MINOR ARTERIAL
RURAL MINOR 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
Roadway Functional Classification


Serious Injury Rate by Roadway Functional Classification
5-yr Average Measure Data
2011
2012
2013
2014
2015
Serious Injury Rate (per HMV
80
60
40
20
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
Roadway Functional Classification

Year - 2013

Roadway Ownership	Number of fatalities	Number of serious injuries	Fatality rate (per HMVMT)	Serious injury rate (per HMVMT)
STATE HIGHWAY AGENCY	73	331		
COUNTY HIGHWAY AGENCY	7	58		


Number of Fatalities by Roadway Ownership
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Fatalities
100
80
60
40
20
0
STATE HIGHWAY AGENCY
COUNTY HIGHWAY AGENCY
TOWN OR TOWNSHIP HIGHWAY AGENCY
CITY OF MUNICIPAL HIGHWAY AGENCY
STATE PARK, FOREST, OR RESERVATION AGENCY
LOCAL PARK, FOREST OR RESERVATION AGENCY
OTHER STATE AGENCY
OTHER LOCAL AGENCY
PRIVATE (OTHER THAN RAILROAD)
RAILROAD
STATE TOLL AUTHORITY
LOCAL TOLL AUTHORITY
OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, U
INDIAN TRIBE NATION
Roadway Functional Classification


Number of Serious Injuries by Roadway Ownership
5-yr Average Measure Data
2011
2012
2013
2014
2015
# of Serious Injuries
400
300
200
100
0
STATE HIGHWAY AGENCY
COUNTY HIGHWAY AGENCY
TOWN OR TOWNSHIP HIGHWAY AGENCY
CITY OF MUNICIPAL HIGHWAY AGENCY
STATE PARK, FOREST, OR RESERVATION AGENCY
LOCAL PARK, FOREST OR RESERVATION AGENCY
OTHER STATE AGENCY
OTHER LOCAL AGENCY
PRIVATE (OTHER THAN RAILROAD)
RAILROAD
STATE TOLL AUTHORITY
LOCAL TOLL AUTHORITY
OTHER PUBLIC INSTRUMENTALITY (E.G. AIRPORT, SCHOOL, U
INDIAN TRIBE NATION
Roadway Functional Classification

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

Fatalities are lower over the past year. Serious injuries are also lower than the previous year. This overall trend is good. We have seen in Wyoming the numbers of fatalities and serious injuries go up and down over the last five years, but are trending downward overall.

This is a good indication that the projects and activities utilizing HSIP funding are making a positive impact. The goal now is to optimize the impact that can be made with the available funding for Highway Safety projects.

Application of Special Rules

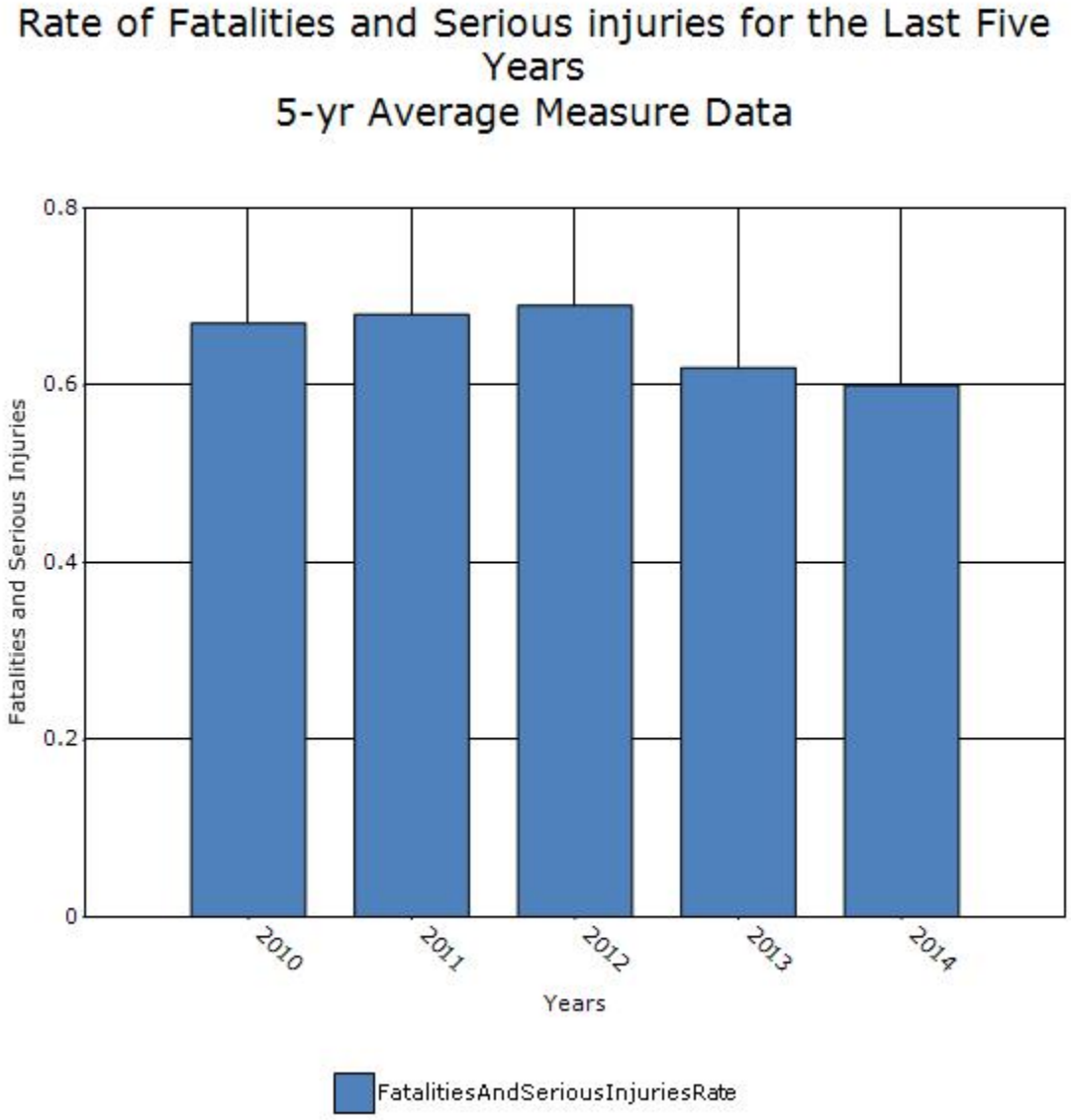
Present the rate of traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65.

Older Driver Performance Measures	**2010**	**2011**	**2012**	**2013**	**2014**
Fatality rate (per capita)	0.076	0.11	0.136	0.156	0.166
Serious injury rate (per capita)	0.206	0.292	0.382	0.466	0.43
Fatality and serious injury rate (per capita)	0.67	0.68	0.69	0.62	0.6

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

Older Drivers and Pedestrians Special Rule										
	# People 65 & older Per 1000	Number Driv & Ped with F+SI	#F+SI/Rate	5 Year Average	Year					
2005	120	86	0.72							

2006			120	68	0.57					
2007			120	62	0.52					
2008			66	57	0.86					
2009			67	46	0.69	0.67	2009			
2010			70	50	0.71	0.67	2010			
2011			72	43	0.60	0.68	2011			
2012			75	44	0.59	0.69	2012			
2013			78	41	0.53	0.62	2013			
2014			80	45	0.56	0.60	2014			
The State of Wyoming's 5-year fatality and serious injuries per capita for drivers and pedestrians										
who were 65 years of age or older for the periods ending in 2012 and 2014 decreased from 0.7										
to 0.6. Therefore the Special Rule would not apply to the State of Wyoming.										
	Reports									
	August 31, 2014				2006 - 2010	2008 - 2012				
	5 Year Average				0.7	0.7				
	August 31, 2015				2007 - 2011	2009 - 2013				
	5 Year Average				0.7	0.6				
	August 31, 2016				2008 - 2012	2010 - 2014				
	5 Year Average				0.7	0.6				



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-Better project selection based upon benefits and costs

Other-Movement towards target setting and performance measures to access the HSIP.

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

Other-Adoption of the SMS to drive project selection decisions

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

The Safety Management System is moving toward utilizing the Highway Safety Manual methodology of expected crashes. This allows for the comparison of roadway segments that may have experienced low crashes in the past five years but still have deficiencies that need to be addressed.

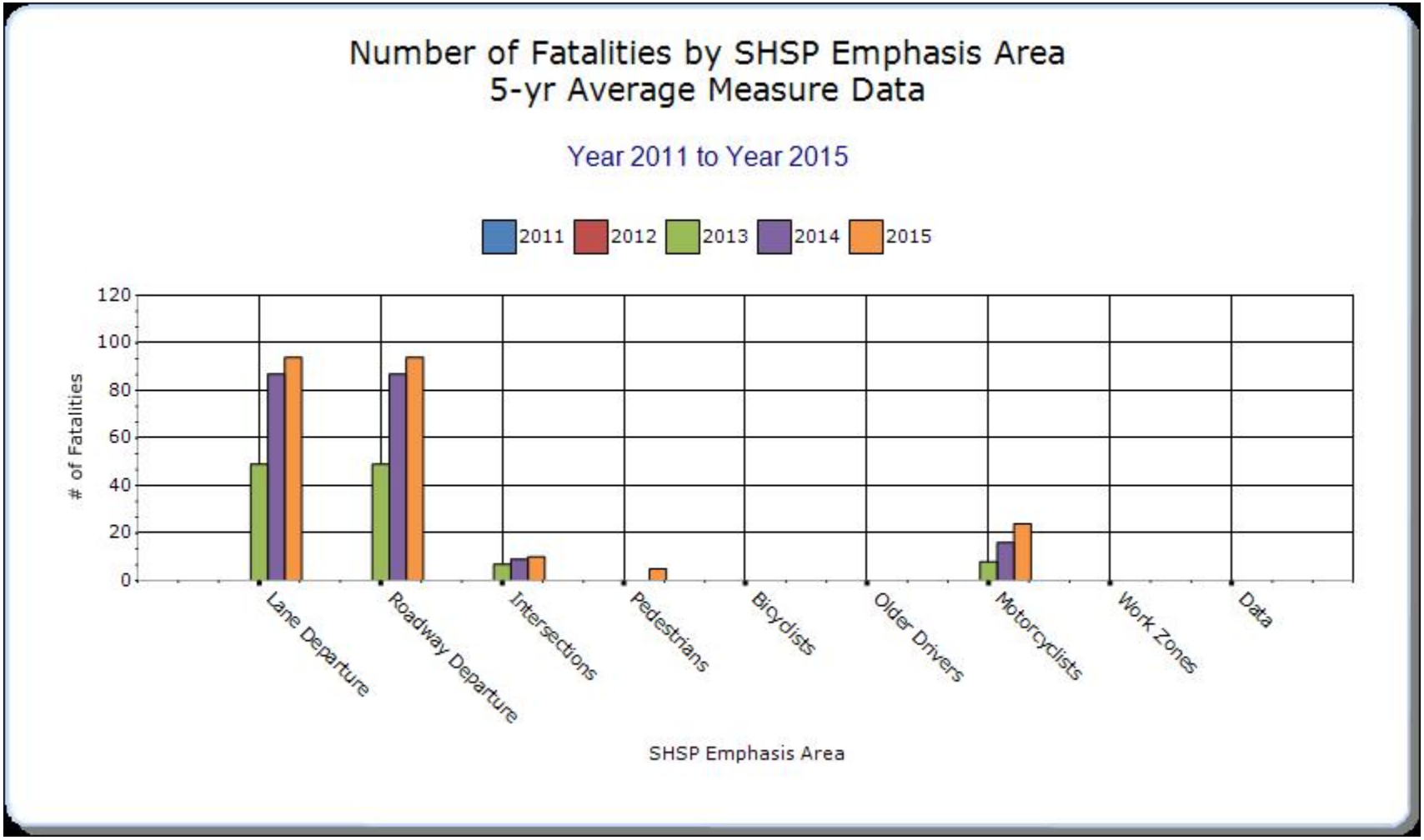
The benefits and costs of applying a treatment to these segments can be better analyzed for consideration.

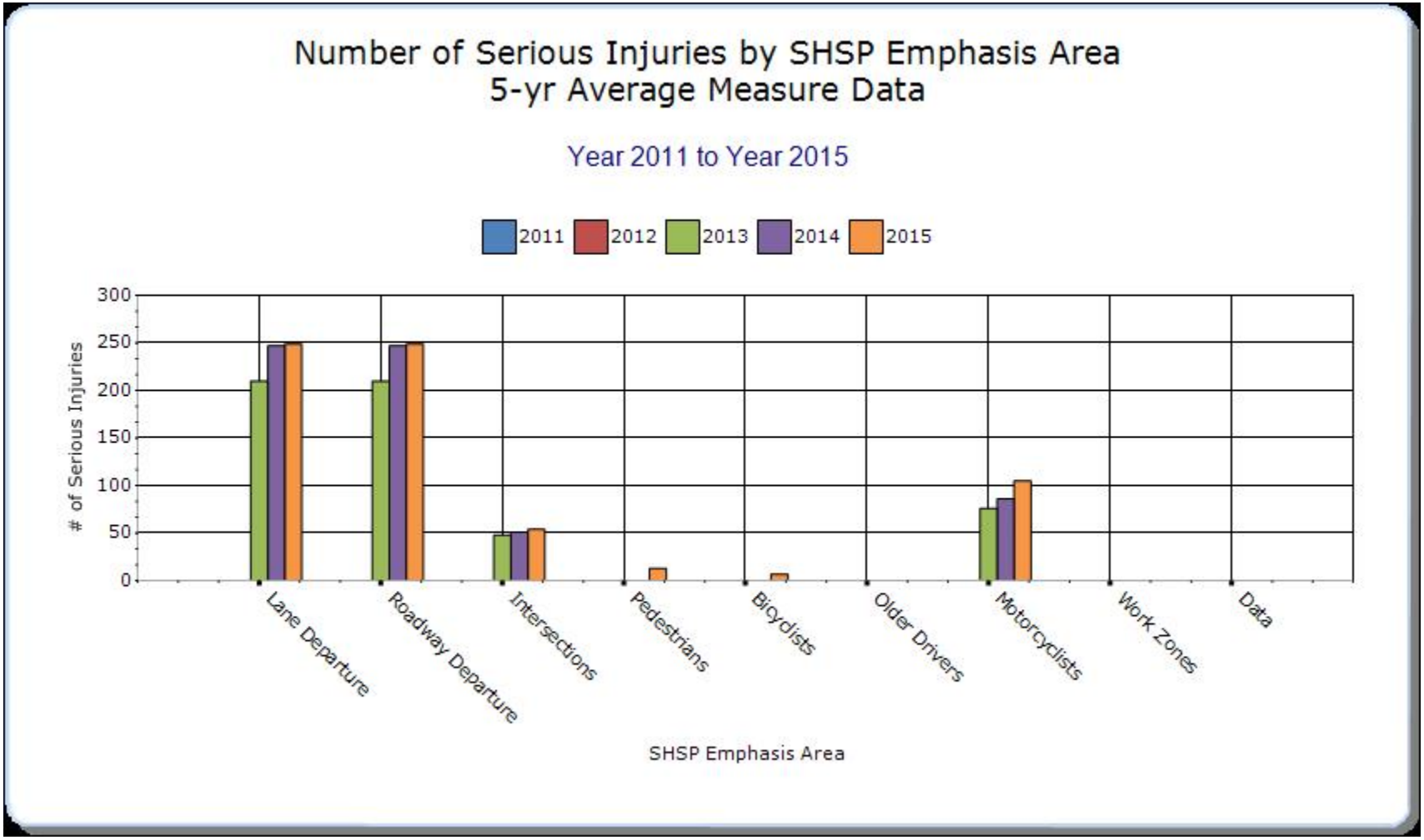
SHSP Emphasis Areas

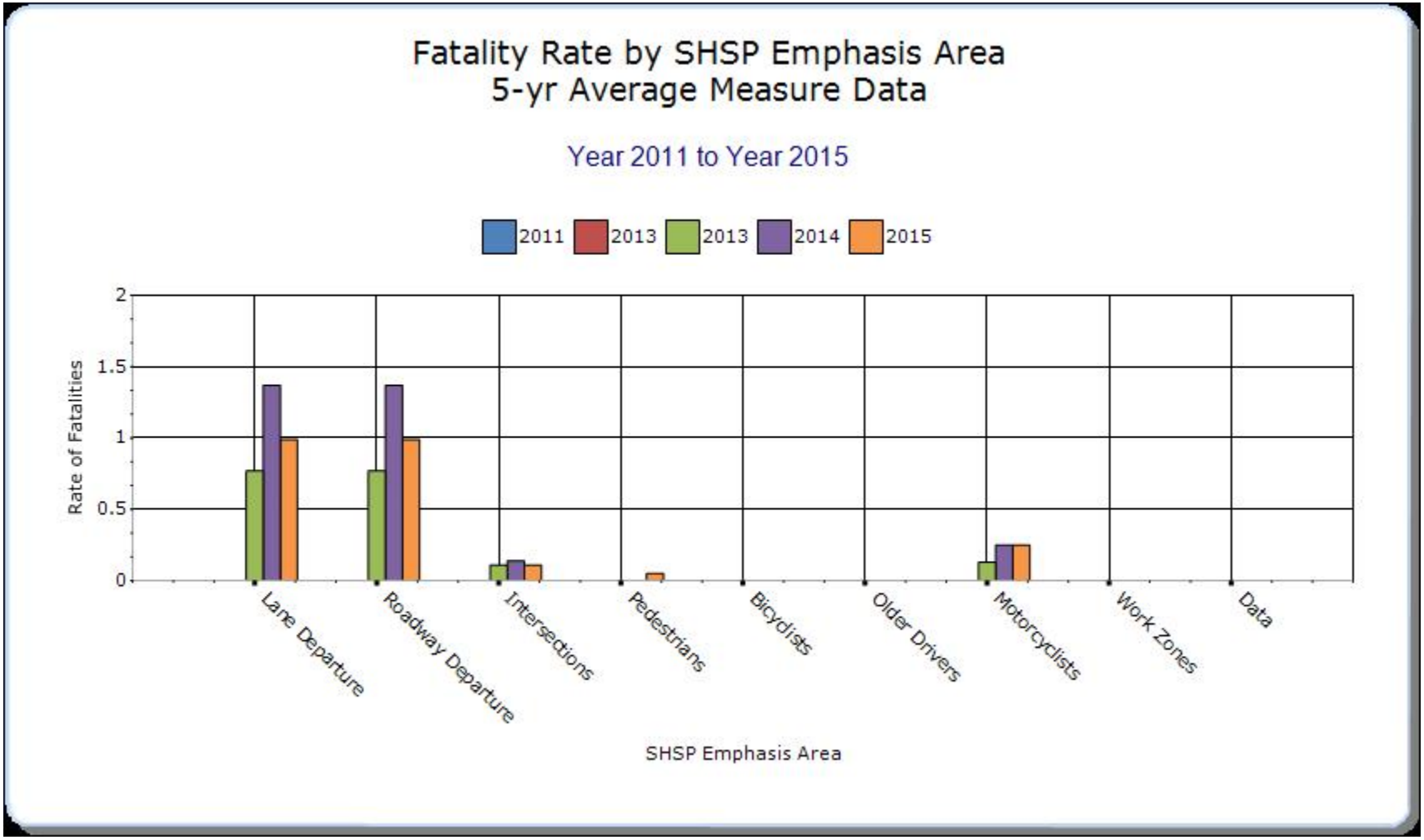
For each SHSP emphasis area that relates to the HSIP, present trends in emphasis area performance measures.

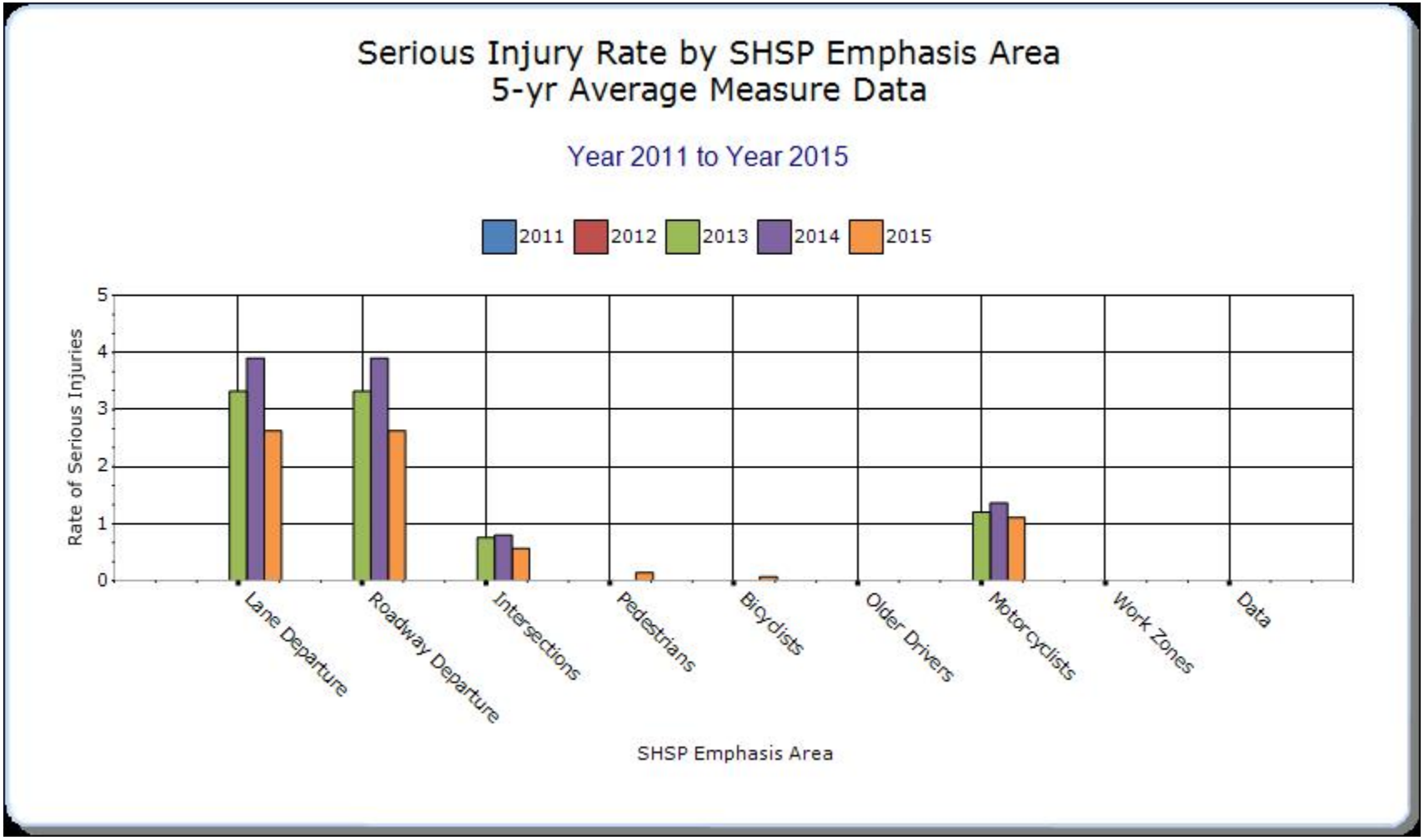
Year - 2015

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	Run-off-road	94	249	0.99	2.63			
Roadway Departure	Run-off-road	94	249	0.99	2.63			
Intersections	All	10	54	0.11	0.57			
Pedestrians	All	5	13	0.05	0.14			
Bicyclists			7		0.07			
Motorcyclists	All	24	105	0.25	1.11			


Number of Fatalities by SHSP Emphasis Area
5-yr Average Measure Data
Year 2011 to Year 2015
2011
2012
2013
2014
2015
120
100
80
60
40
20
0
# of Fatalities
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
SHSP Emphasis Area


Number of Serious Injuries by SHSP Emphasis Area
5-yr Average Measure Data
Year 2011 to Year 2015
2011
2012
2013
2014
2015
300
250
200
150
100
50
0
# of Serious Injuries
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
SHSP Emphasis Area


Fatality Rate by SHSP Emphasis Area
5-yr Average Measure Data
Year 2011 to Year 2015
2011
2013
2013
2014
2015
Rate of Fatalities
2
1.5
1
0.5
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
Data
SHSP Emphasis Area

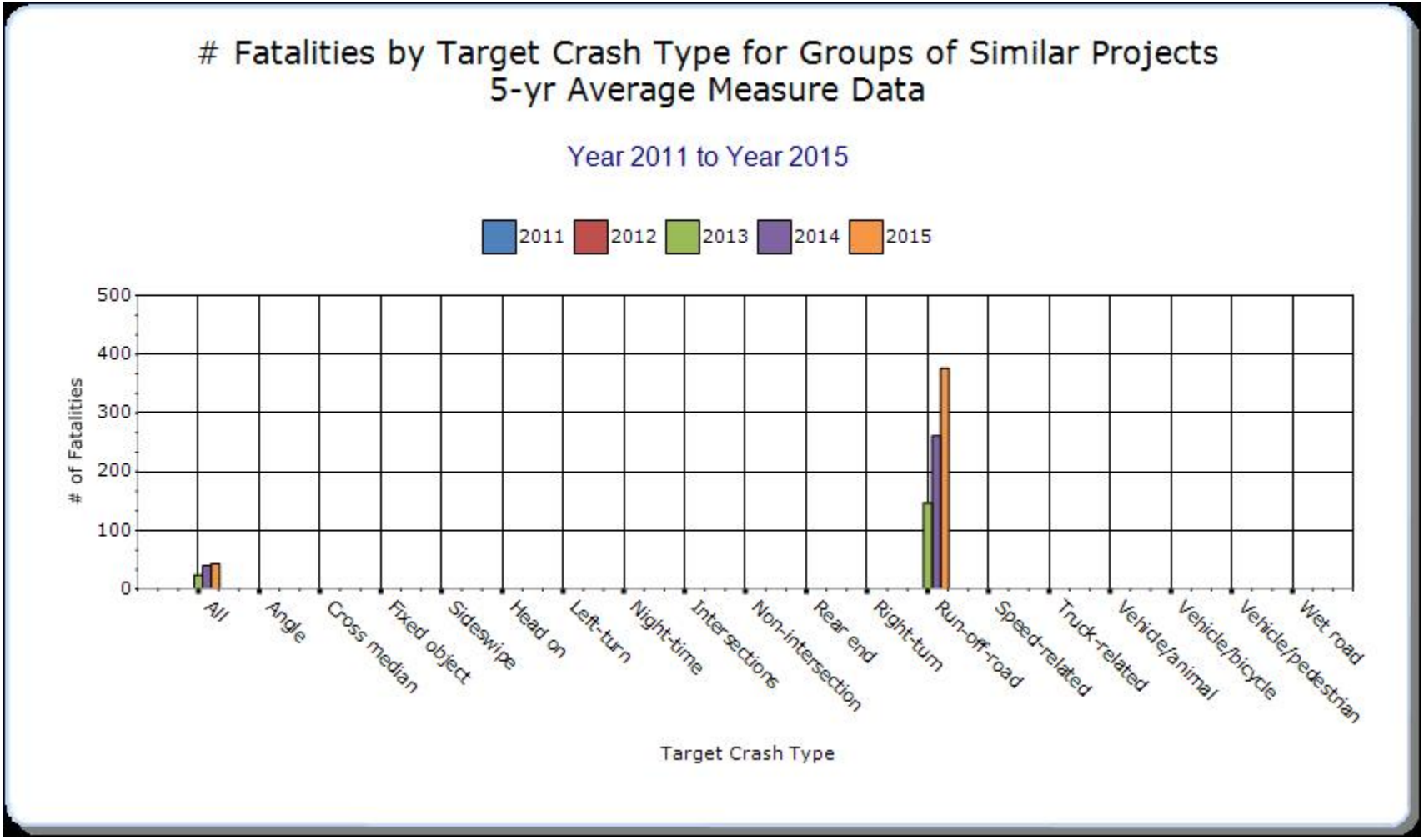


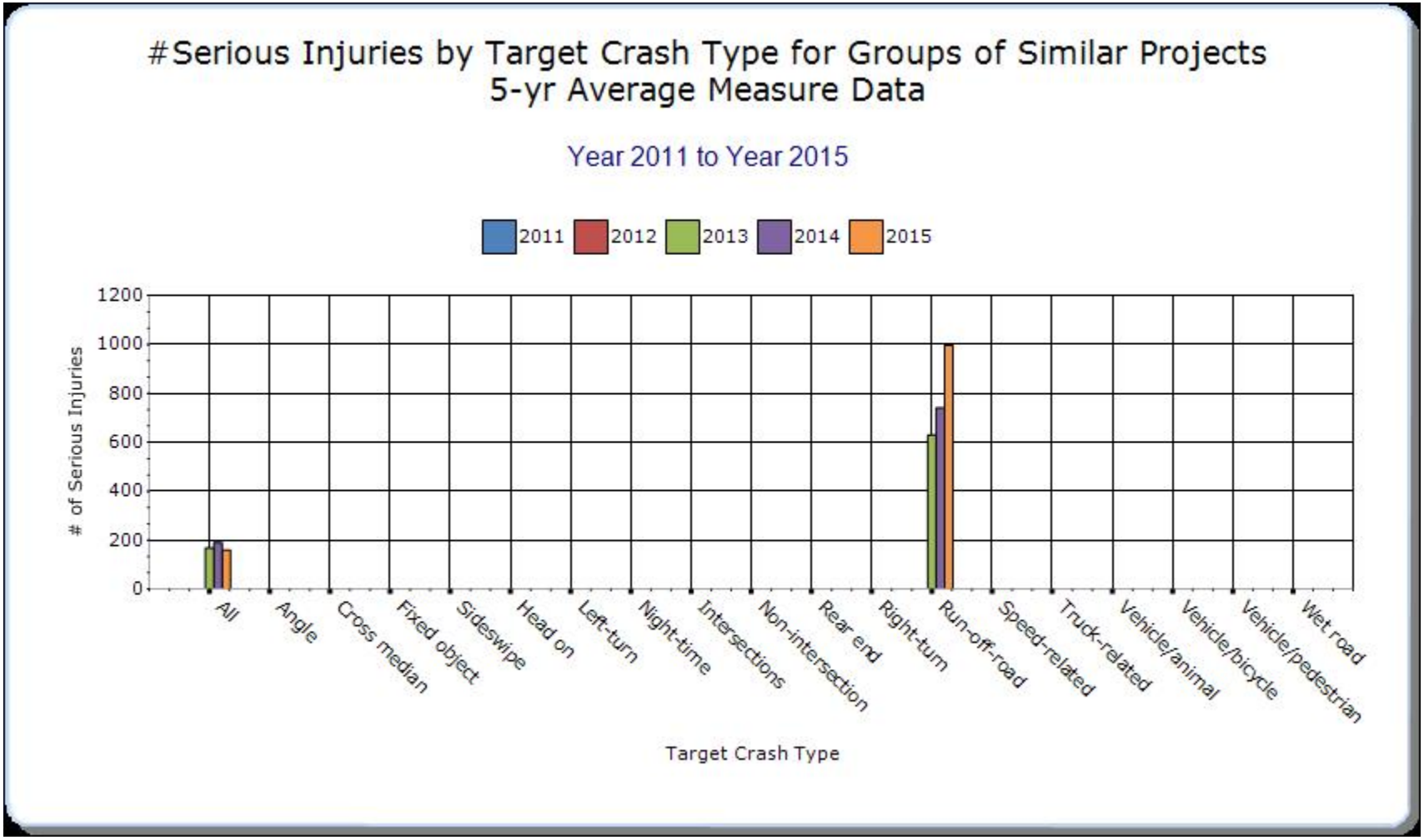
Groups of similar project types

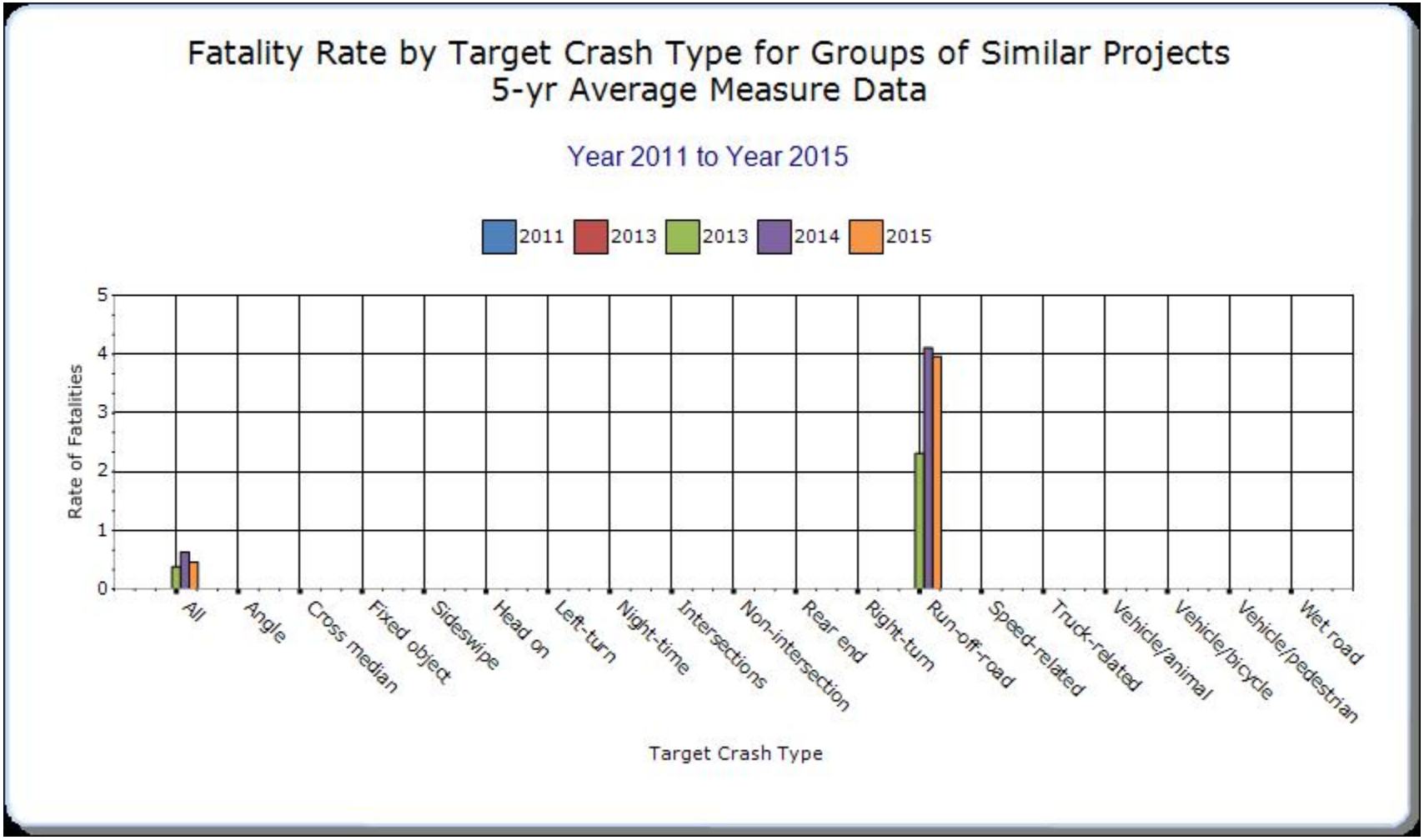
Present the overall effectiveness of groups of similar types of projects.

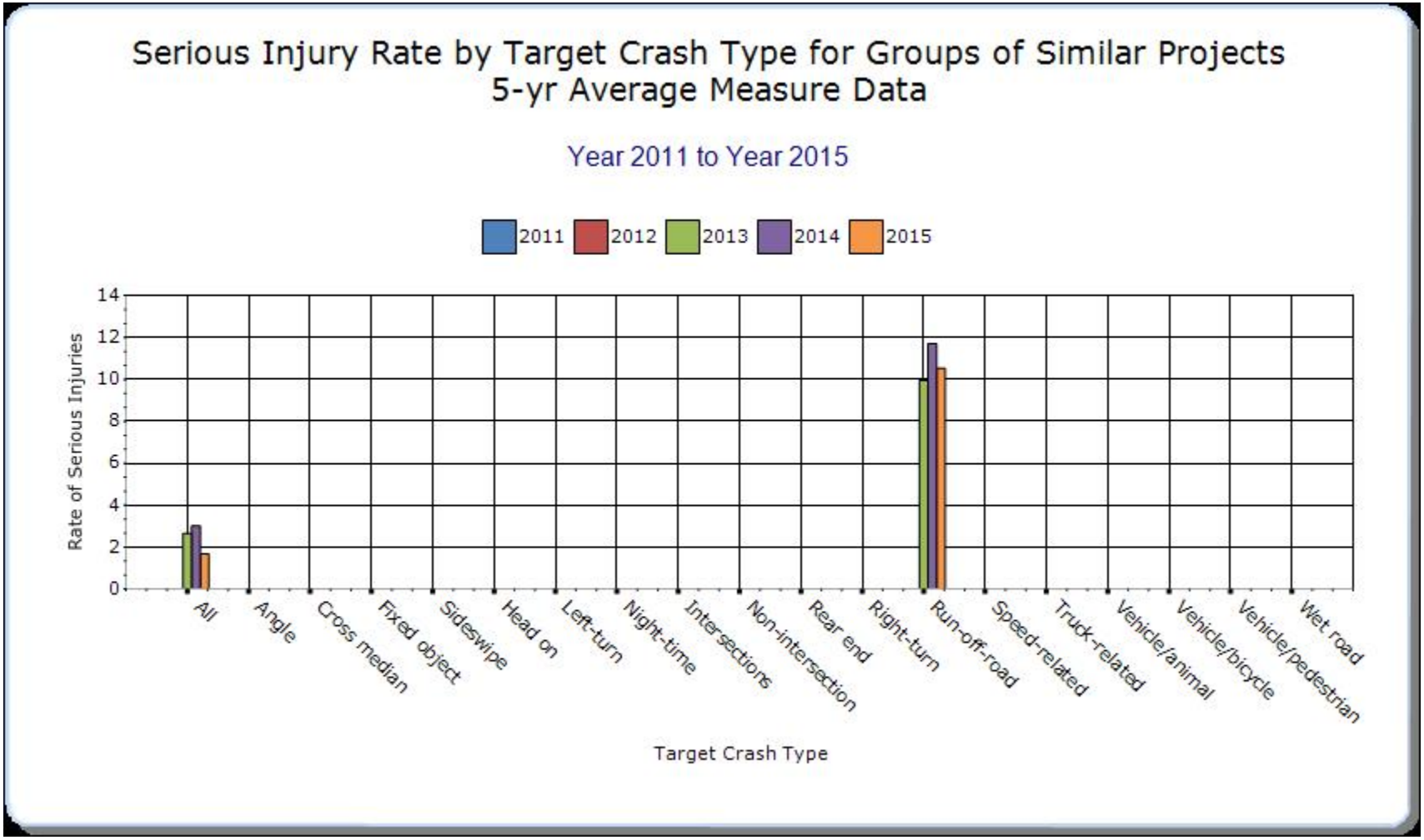
Year - 2015

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
Local Safety	All	33	106	0.35	1.12			
Roadway Departure	Run-off-road	94	249	0.99	2.63			
Horizontal Curve	Run-off-road	94	249	0.99	2.63			
Intersection	All	10	54	0.11	0.57			
Other-Guardrail upgrade/replacement	Run-off-road	94	249	0.99	2.63			
Sign Replacement And Improvement	Run-off-road	94	249	0.99	2.63			


Fatalities by Target Crash Type for Groups of Similar Projects
5-yr Average Measure Data
Year 2011 to Year 2015
2011
2012
2013
2014
2015
# of Fatalities
500
400
300
200
100
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


#Serious Injuries by Target Crash Type for Groups of Similar Projects
5-yr Average Measure Data
Year 2011 to Year 2015
2011
2012
2013
2014
2015
# of Serious Injuries
1200
1000
800
600
400
200
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type


Fatality Rate by Target Crash Type for Groups of Similar Projects
5-yr Average Measure Data
Year 2011 to Year 2015
2011
2013
2013
2014
2015
Rate of Fatalities
0
1
2
3
4
5
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Target Crash Type

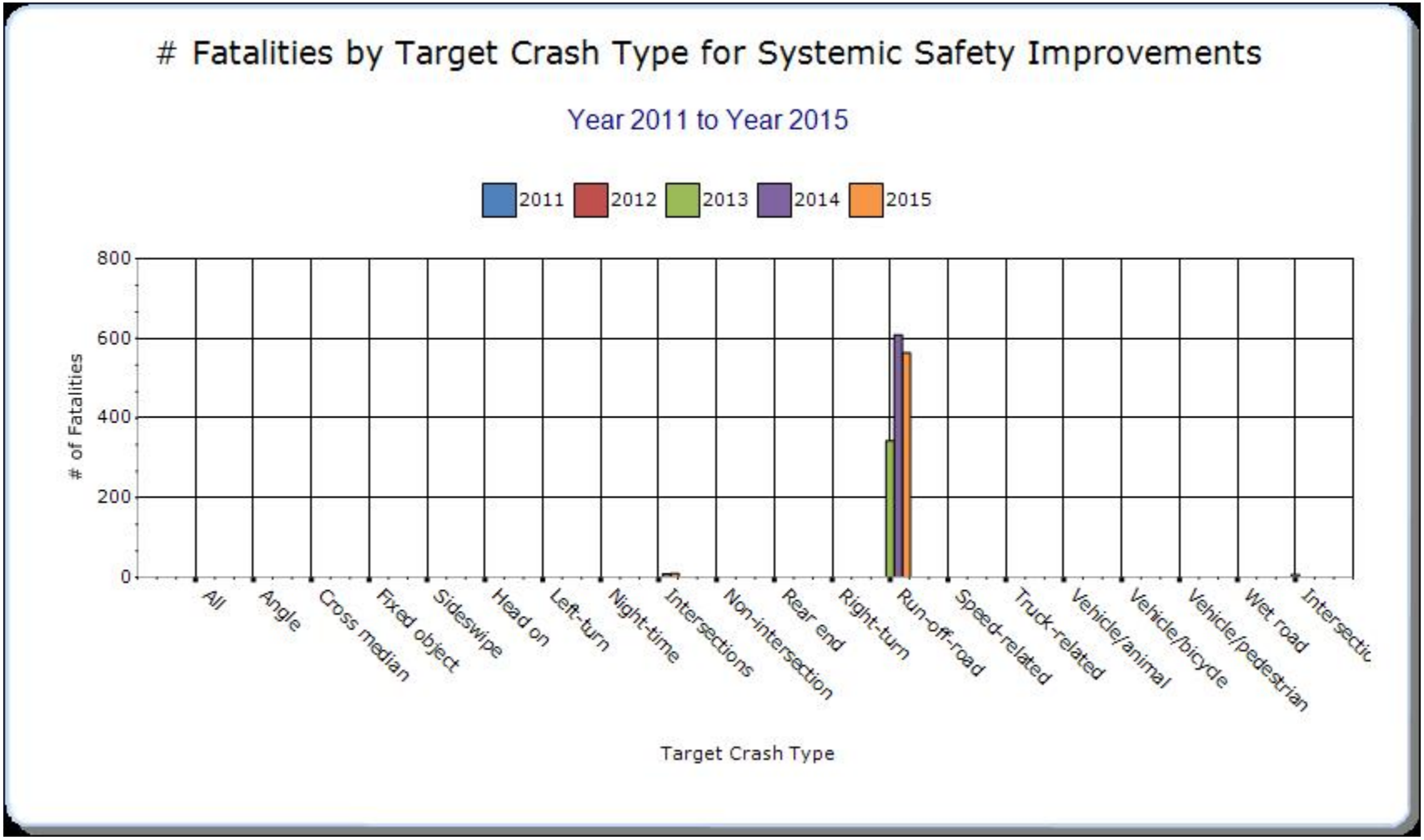


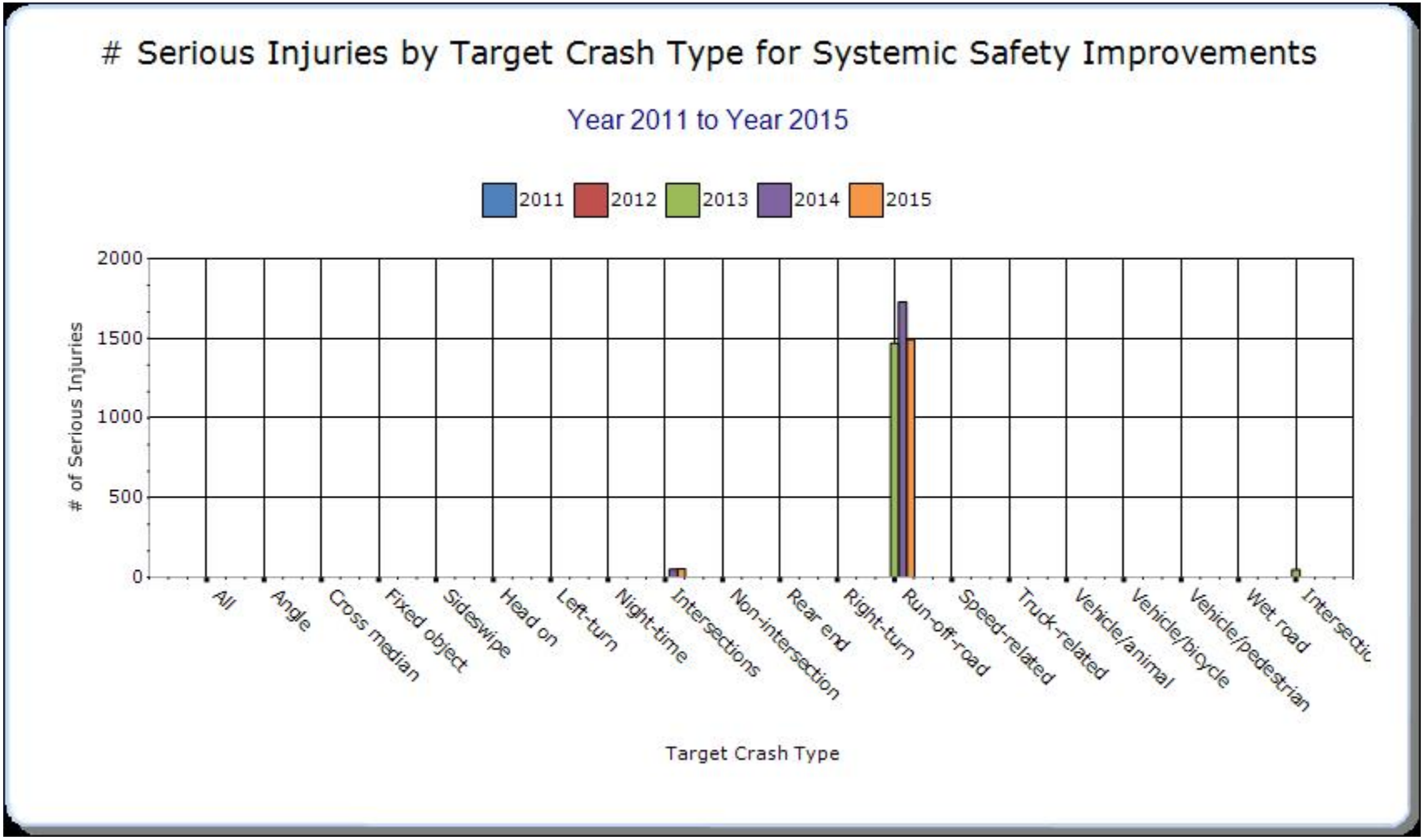
Systemic Treatments

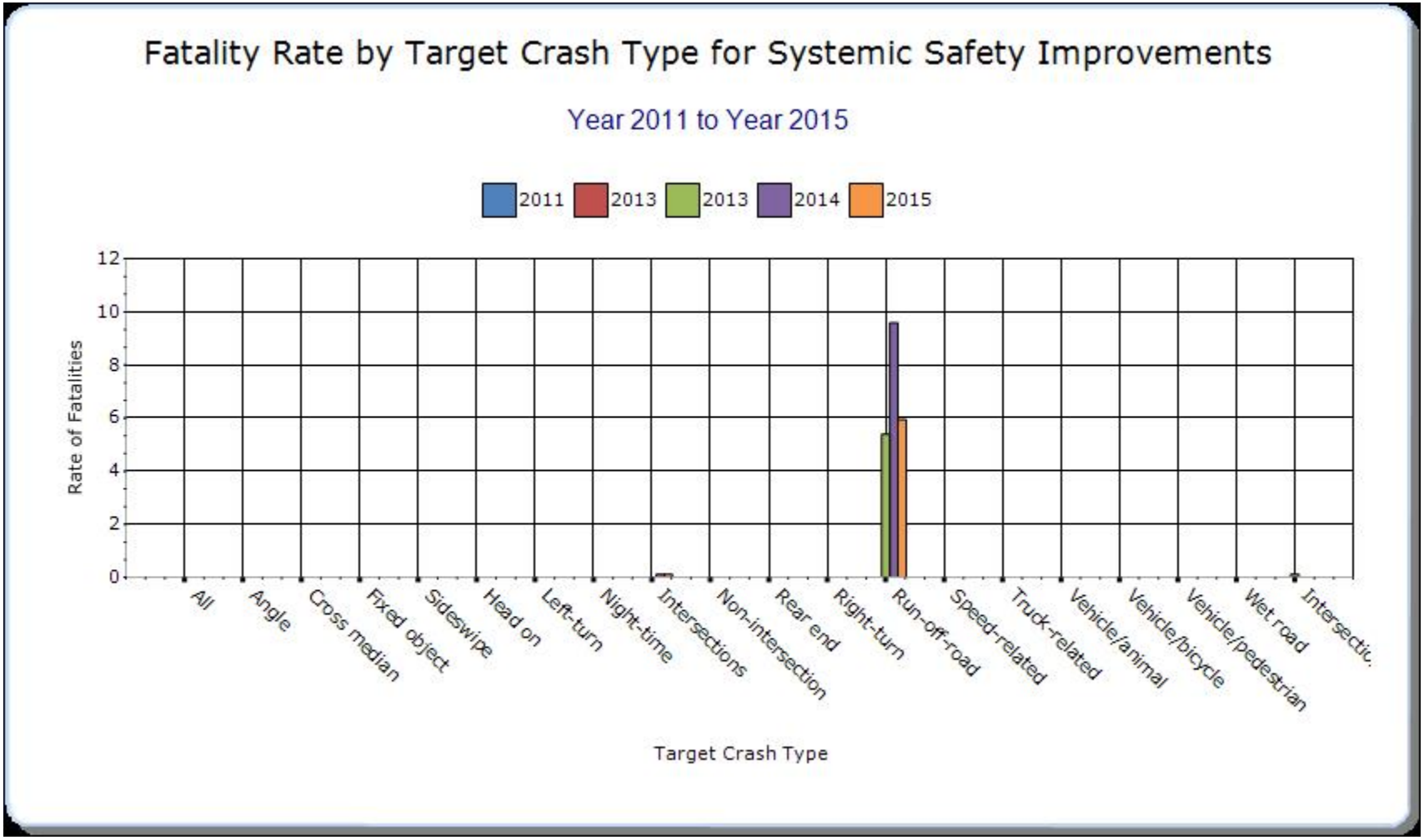
Present the overall effectiveness of systemic treatments.

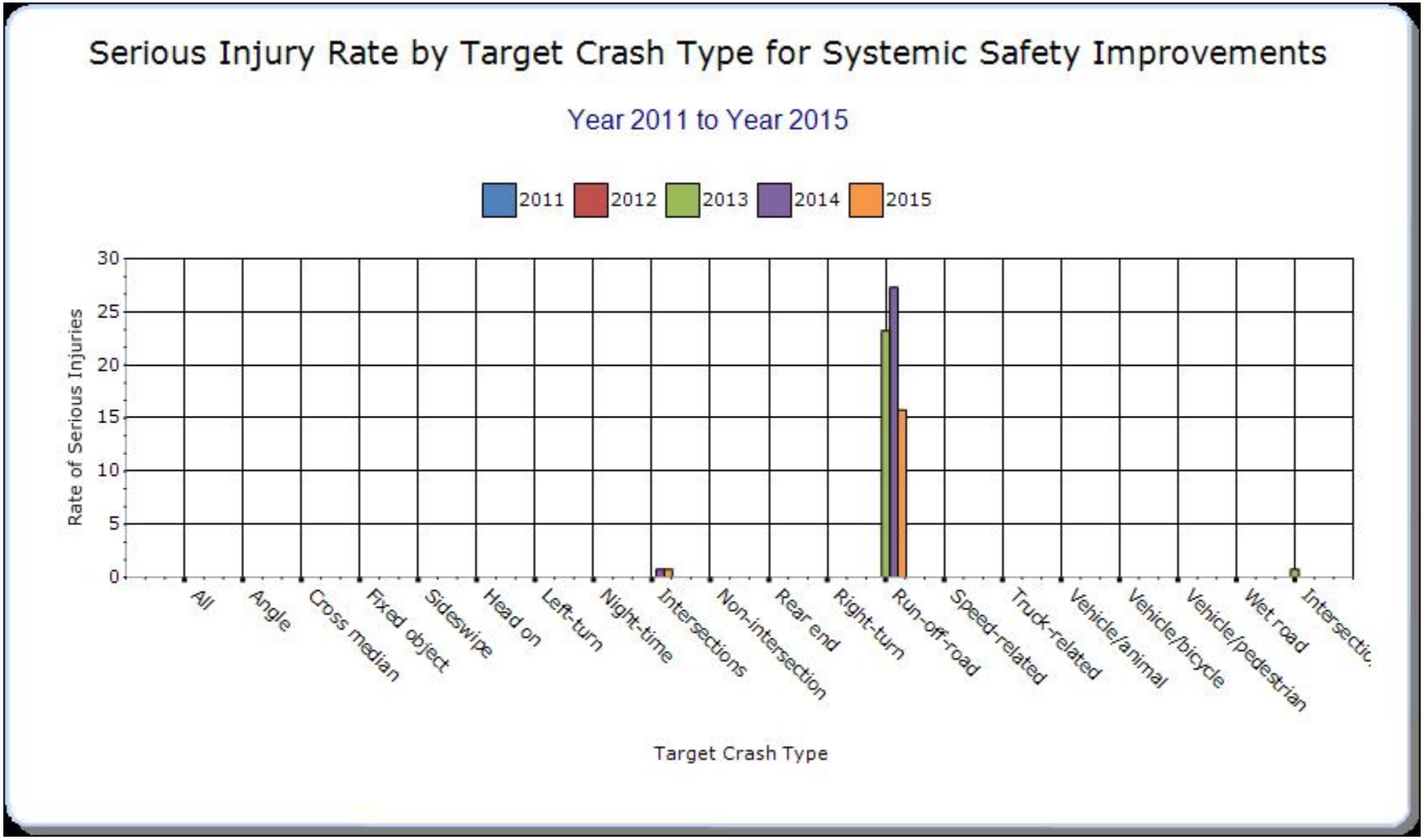
Year - 2015

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
Add/Upgrade/Modify/Remove Traffic Signal	Intersections	10	54	0.11	0.76			
Install/Improve Signing	Run-off-road	94	249	0.99	2.63			
Pavement/Shoulder Widening	Run-off-road	94	249	0.99	2.63			
Clear Zone Improvements	Run-off-road	94	249	0.99	2.63			
Upgrade Guard Rails	Run-off-road	94	249	0.99	2.63			
Install/Improve Pavement Marking and/or Delineation	Run-off-road	94	249	0.99	2.63			
Rumble Strips	Run-off-road	94	249	0.99	2.63			


Fatalities by Target Crash Type for Systemic Safety Improvements
Year 2011 to Year 2015
2011
2012
2013
2014
2015
800
600
400
200
0
# of Fatalities
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Intersectic
Target Crash Type


Serious Injuries by Target Crash Type for Systemic Safety Improvements
Year 2011 to Year 2015
2011
2012
2013
2014
2015
# of Serious Injuries
2000
1500
1000
500
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Intersectic
Target Crash Type


Fatality Rate by Target Crash Type for Systemic Safety Improvements
Year 2011 to Year 2015
2011
2013
2013
2014
2015
Rate of Fatalities
12
10
8
6
4
2
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Intersectic
Target Crash Type


Serious Injury Rate by Target Crash Type for Systemic Safety Improvements
Year 2011 to Year 2015
2011
2012
2013
2014
2015
Rate of Serious Injuries
30
25
20
15
10
5
0
All
Angle
Cross median
Fixed object
Sideswipe
Head on
Left-turn
Night-time
Intersections
Non-intersection
Rear end
Right-turn
Run-off-road
Speed-related
Truck-related
Vehicle/animal
Vehicle/bicycle
Vehicle/pedestrian
Wet road
Intersectic
Target Crash Type

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

None

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)
None														

Projects are not evaluated by specific project. Data required is too large at this time. Database improvements are being done so that evaluations can be done in the future.

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.