WYOMING

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2018 ANNUAL REPORT

U.S. Department of Transportation
Federal Highway Administration

Photo source: Federal Highway Administration

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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.”

Executive Summary

WYDOT has an established HSIP program with processes in place for the collection of data, implementation of projects, and annual reporting. Each fiscal year, historically, Wyoming obligates a majority of their HSIP apportionments, these funds are obligated on projects, which are eligible under the requirements of the program. WYDOT effectively manages the HSIP and their Highway Safety Program manager is responsible for both the behavioral and engineering aspects of the program, reporting to both NHTSA and FHWA. This overarching management of the program provides for a consistent approach to addressing highway safety needs throughout the State.

The Highway Safety Program continues to be process driven and consistent when approaching HSIP projects and reporting requirements. WYDOT is currently inconsistent between the Highway Safety Program and other programs within the DOT. Safety elements are often included on projects that are funded through sources other than HSIP. WYDOT is working towards a standard process of coordination between programs to ensure that safety projects and safety project elements are being identified and prioritized before the funding is utilized. This ensures WYDOT efficiently and effectively utilizes the available funding on high value projects and project elements.

Progress is being made through the Safety Innovation Team that consists of the Highway Safety Program, Traffic Program, Planning Program and Highway Development Program. The Highway Safety Program has established a new position to oversee Safety Management.

WYDOT is also improving their process for the evaluation of safety benefits from projects and project elements that are implemented using HSIP funding. The Safety Management System provides a mechanism for quantifying the benefits of safety treatments which in turn allows for more effective utilization of HSIP funds on future HSIP projects and project elements.

WYDOT Highway Safety continues to implement the HSIP through strategies, activities, and/or projects on public roads that are consistent with their data driven Strategic Highway Safety Plan (SHSP) with the goal of reducing fatal and serious injury crashes.

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 Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

Program Structure

Program Administration

Describe the general structure of the HSIP in the State.

The HSIP is based upon the goals and areas identified in the SHSP. HSIP eligibility policies focus on addressing the greatest safety needs within the State. Rural road safety needs are addressed through the HRRR program (which is a subset of the HSIP) managed through an agreement with the UW LTAP Center. The greatest safety needs are identified through the Safety Management System (SMS) which establishes a mechanism for the prioritization of HSIP funding.

WYDOT considers crash, roadway and traffic data when identifying potential HSIP projects. The SMS allows for various programs and Districts to optimize the use of safety funds on the State's roadways. The SMS allows WYDOT decision makers to identify the locations that warrant attention and then select the most cost effective safety treatments to propose at each potential project location.

WYDOT implements both spot location treatments for high-crash/high-risk locations as well as systemic safety improvement projects. Due to the rural nature of Wyoming the majority of HSIP projects address rural road safety needs. Safety strategies proven to be effective on rural roads are applied using HSIP funds.

Where is HSIP staff located within the State DOT?

Operations

Enter additional comments here to clarify your response for this question or add supporting information.

How are HSIP funds allocated in a State?

Other-Safety Management System

Enter additional comments here to clarify your response for this question or add supporting information.

Describe how local and tribal roads are addressed as part of HSIP.

The local county roads and tribal 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 (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.

Traffic Engineering/Safety
Planning
Operations
Districts/Regions
Local Aid Programs Office/Division
Governors Highway Safety Office

Enter additional comments here to clarify your response for this question or add supporting information.

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 HSIP planning.

Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
Governors Highway Safety Office
Local Technical Assistance Program
Local Government Agency
Tribal Agency

Enter additional comments here to clarify your response for this question or add supporting information.

Describe coordination with external partners.

WYDOT is structured with the WHP and Governors Rep for Highway Safety (NHTSA) within its organization. The Highway Safety Office chairs a Safety Management Committee that meets 3-4 times per year to discuss, investigate, plan and direct the numerous safety partners throughout the state on the SHSP and other higher level issues regarding Highway Safety.

Program areas and strategies are discussed to assist other safety partners in their efforts to reduce fatal and serious injury crashes in the State.

Have any program administration practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of HSIP Administration on which the State would like to elaborate?

Yes

Describe other aspects of HSIP Administration on which the State 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

Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?

No

To upload a copy of the State processes, attach files below.

File Name:

Enter additional comments here to clarify your response for this question or add supporting information.

WYDOT has an operating policy regarding Highway Safety that needs updating as the Safety Management System becomes more widely used for Planning, Implementation and Evaluation of the HSIP. The operating policy is under review by WYDOT leadership.

Select the programs that are administered under the HSIP.

Intersection

2018 Wyoming Highway Safety Improvement Program
Horizontal Curve
Roadway Departure
Low-Cost Spot Improvements
Sign Replacement And Improvement
Local Safety
HRRR
Other-Guardrail upgrade/replacement

Enter additional comments here to clarify your response for this question or add supporting information.

Program: Horizontal Curve

Date of Program Methodology: 10/9/2009

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

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

What project identification methodology was used for this program? [Check all that apply]

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

Are local road projects identified using the same methodology as state roads?

Describe the methodology used to identify local road projects as part of this program.

How are projects under this program 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: HRRR

Date of Program Methodology: 9/12/2018

What is the justification for this program? [Check all that apply]

Other-local rural road safety program

What is the funding approach for this program? [Check one]

Funding set-aside

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes		Other-Site survey

What project identification methodology was used for this program? [Check all that apply]

Crash frequency
Other-Wyoming Rural Road Safety Program methodology

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

Yes

Are local road projects identified using the same methodology as state roads?

No

Describe the methodology used to identify local road projects as part of this program.

Separate methodology developed through the University of Wyoming LTAP Center

How are projects under this program 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

Program: Intersection

Date of Program Methodology: 10/9/2011

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

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? [Check all that apply]

Crash frequency
Probability of specific crash types

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

Yes

Are local road projects identified using the same methodology as state roads?

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 projects under this program 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: Local Safety

Date of Program Methodology: 10/9/2008

What is the justification for this program? [Check all that apply]

Other-HRRR subset of HSIP

What is the funding approach for this program? [Check one]

Funding set-aside

What data types were used in the program methodology? [Check all that apply]

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? [Check all that apply]

Crash frequency
Probability of specific crash types

2018 Wyoming Highway Safety Improvement Program
Excess proportions of specific crash types

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

Yes

Are local road projects identified using the same methodology as state roads?

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 projects under this program 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: Low-Cost Spot Improvements

Date of Program Methodology: 10/9/2011

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes **Exposure** **Roadway**

All crashes	Traffic Volume	Horizontal curvature
Fatal crashes only		Functional classification
Fatal and serious injury crashes only		Roadside features

What project identification methodology was used for this program? [Check all that apply]

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

Are local road projects identified using the same methodology as state roads?

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 projects under this program 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: Roadway Departure

Date of Program Methodology: 10/9/2006

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

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

What project identification methodology was used for this program? [Check all that apply]

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

Are local road projects identified using the same methodology as state roads?

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 projects under this program 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

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

Program: Sign Replacement And Improvement

Date of Program Methodology: 10/9/2008

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area
Other-Systemic approach to Lane Departure/Roadway Departure

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

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

What project identification methodology was used for this program? [Check all that apply]

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

Are local road projects identified using the same methodology as state roads?

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 projects under this program 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

Other-Relative age of signage and functional classification : 1

Program: Other-Guardrail upgrade/replacement

Date of Program Methodology: 2/2/2015

What is the justification for this program? [Check all that apply]

Addresses SHSP priority or emphasis area
Other-Systemic approach to Lane Departure/Roadway Departure

What is the funding approach for this program? [Check one]

Competes with all projects

What data types were used in the program methodology? [Check all that apply]

Crashes	Exposure	Roadway
All crashes	Volume	Roadside features

What project identification methodology was used for this program? [Check all that apply]

Expected crash frequency with EB adjustment

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

Yes

Are local road projects identified using the same methodology as state roads?

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 projects under this program 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 percentage of HSIP funds address systemic improvements?

33

HSIP funds are used to address which of the following systemic improvements? Please check all that apply.

Cable Median Barriers
Rumble Strips
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
Horizontal curve signs

Enter additional comments here to clarify your response for this question or add supporting information.

What process is used to identify potential countermeasures? [Check all that apply]

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

Enter additional comments here to clarify your response for this question or add supporting information.

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

Describe how the State HSIP considers connected vehicles and ITS technologies.

Projects included in the HSIP address information to drivers about roadway conditions primarily in winter weather. Also variable speed limits and other communication technologies are part of the HSIP.

Does the State use the Highway Safety Manual to support HSIP efforts?

Yes

Please describe how the State uses the HSM to support HSIP efforts.

HSM methodologies are part of the Safety Management System. The Safety Management System was developed based upon the HSM.

Have any program methodology practices used to implement the HSIP changed since the last reporting period?

No

Are there any other aspects of the HSIP methodology on which the State would like to elaborate?

No

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Federal Fiscal Year

Enter additional comments here to clarify your response for this question or add supporting information.

Wyoming is using the last full federal fiscal year to report information to the HSIP annual report. This corresponds to the available complete crash data and statistics.

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$27,296,271	$19,938,457	73.04%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$5,690,405	$5,690,405	100%
Penalty Funds (23 U.S.C. 164)	$5,690,405	$5,690,405	100%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$0	$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	$3,141,277	$3,141,277	100%
State and Local Funds	$0	$0	0%
Totals	$41,818,358	$34,460,544	82.41%

Enter additional comments here to clarify your response for this question or add supporting information.

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

$600,000

How much funding is obligated to local or tribal safety projects?

$200,000

Enter additional comments here to clarify your response for this question or add supporting information.

A total of $400,000 was planned for HRRR projects which includes the Wind River Reservation. None of the projects were implemented in FY 17.

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

2018 Wyoming Highway Safety Improvement Program
$1,057,000

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

$1,057,000

Enter additional comments here to clarify your response for this question or add supporting information.

Funding for Highway Safety Inventory, Planning and Studies and Preliminary Engineering.

How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?

0%

How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?

0%

Enter additional comments here to clarify your response for this question or add supporting information.

Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.

WYDOT doesn't have a problem obligating the HSIP funds.

Does the State want to elaborate on any other aspects of it’s progress in implementing HSIP projects?

No

General Listing of Projects

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

													RELATIONSHIP TO SHSP	
PROJECT NAME	**IMPROVEMENT CATEGORY**	**SUBCATEGORY**	**OUTPUTS**	**OUTPUT TYPE**	**HSIP PROJECT COST($)**	**TOTAL PROJECT COST($)**	**FUNDING CATEGORY**	**FUNCTIONAL CLASSIFICATION**	**AADT**	**SPEED**	**OWNERSHIP**	**METHOD FOR SITE SELECTION**	**EMPHASIS AREA**	**STRATEGY**
test									0					

Enter additional comments here to clarify your response for this question or add supporting information.

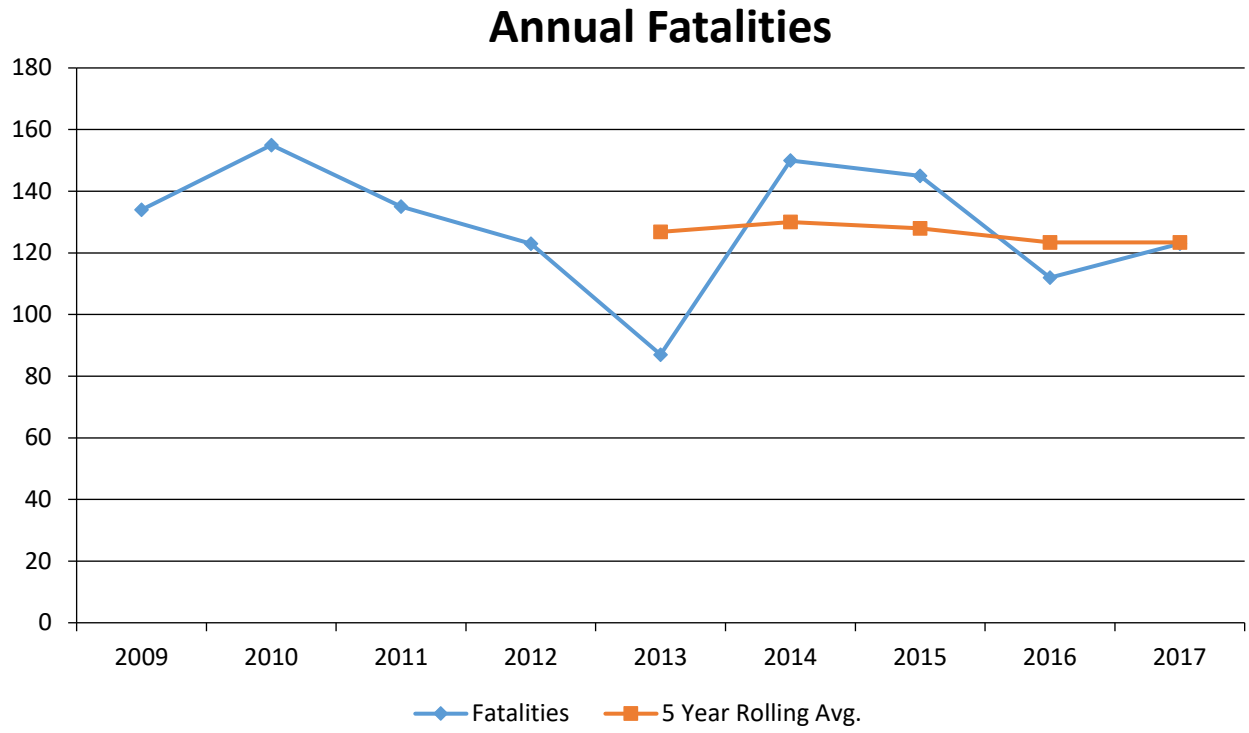
Project Listing provided in Project Implementation Attachment: 2018 HSIP Report Project List.xlsx

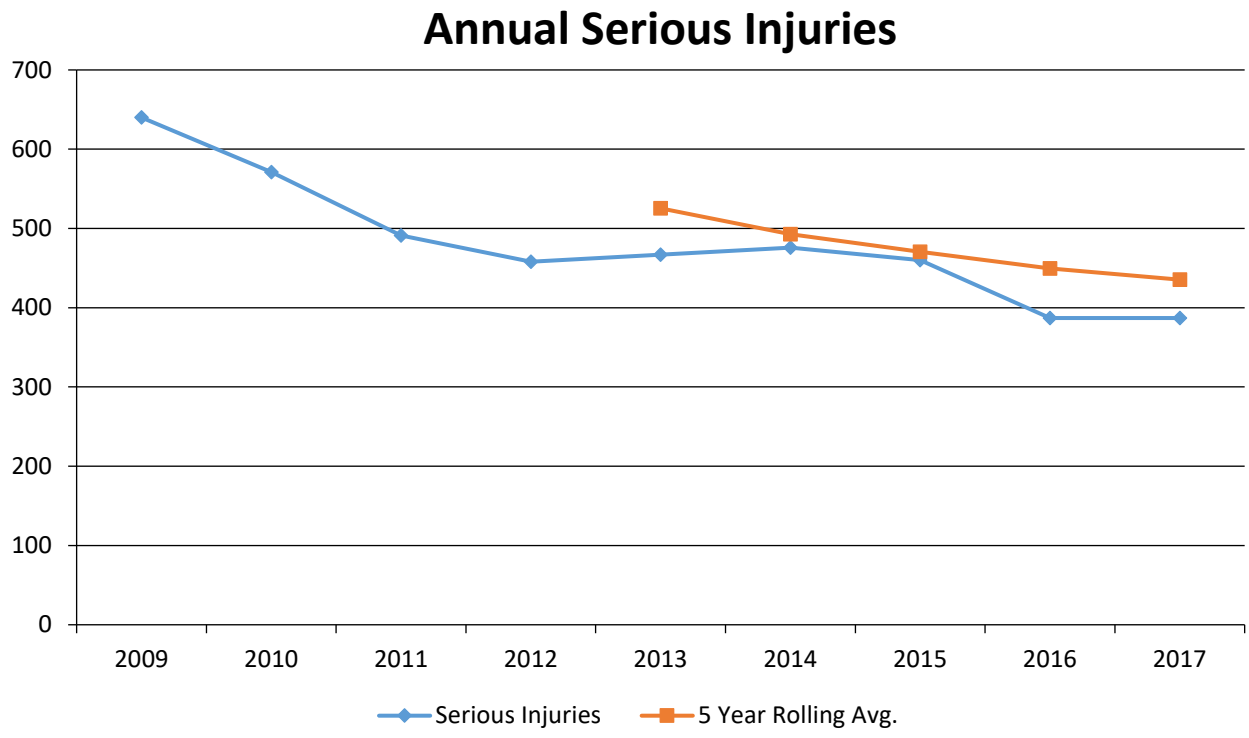
Safety Performance

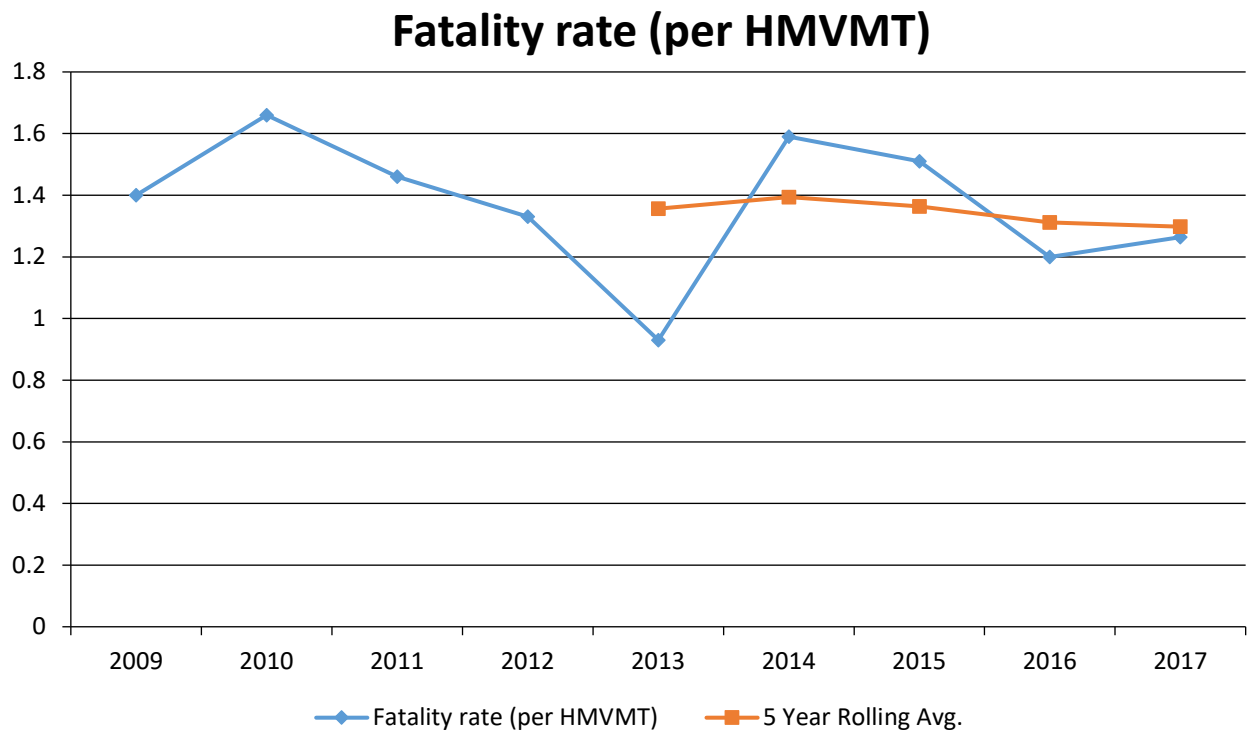
General Highway Safety Trends

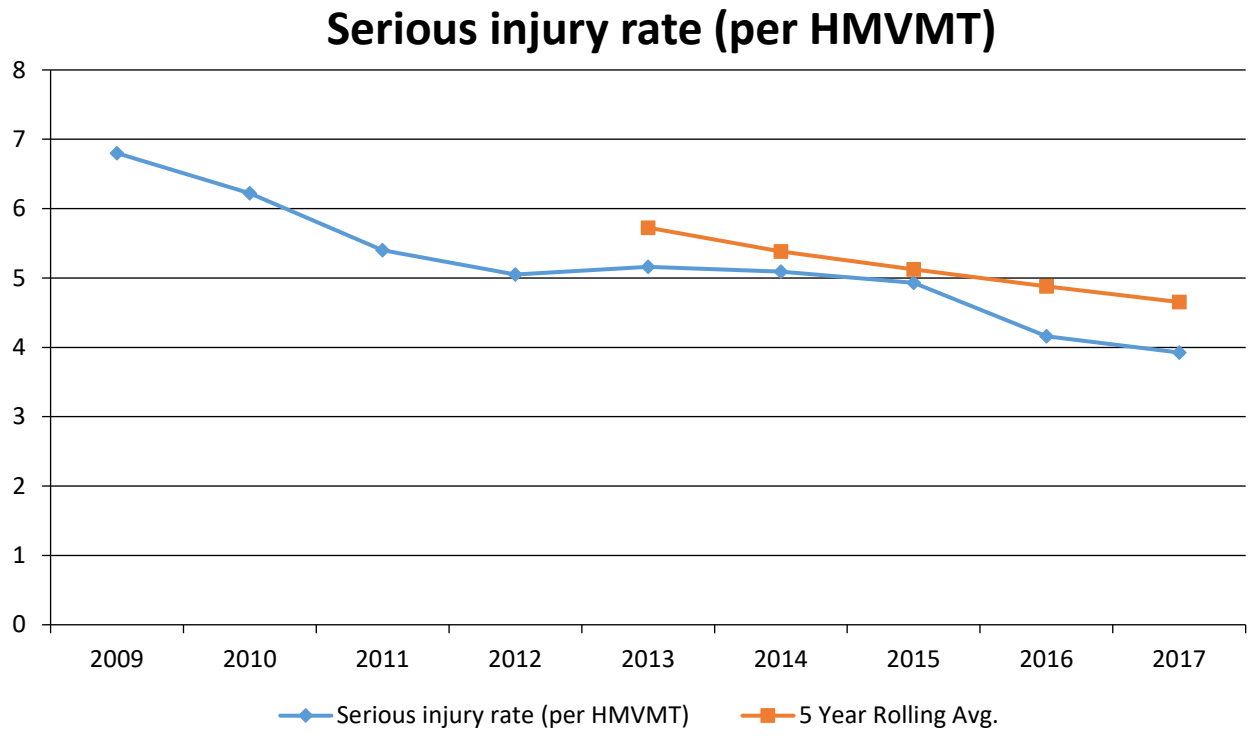
Present data showing the general highway safety trends in the State for the past five years.

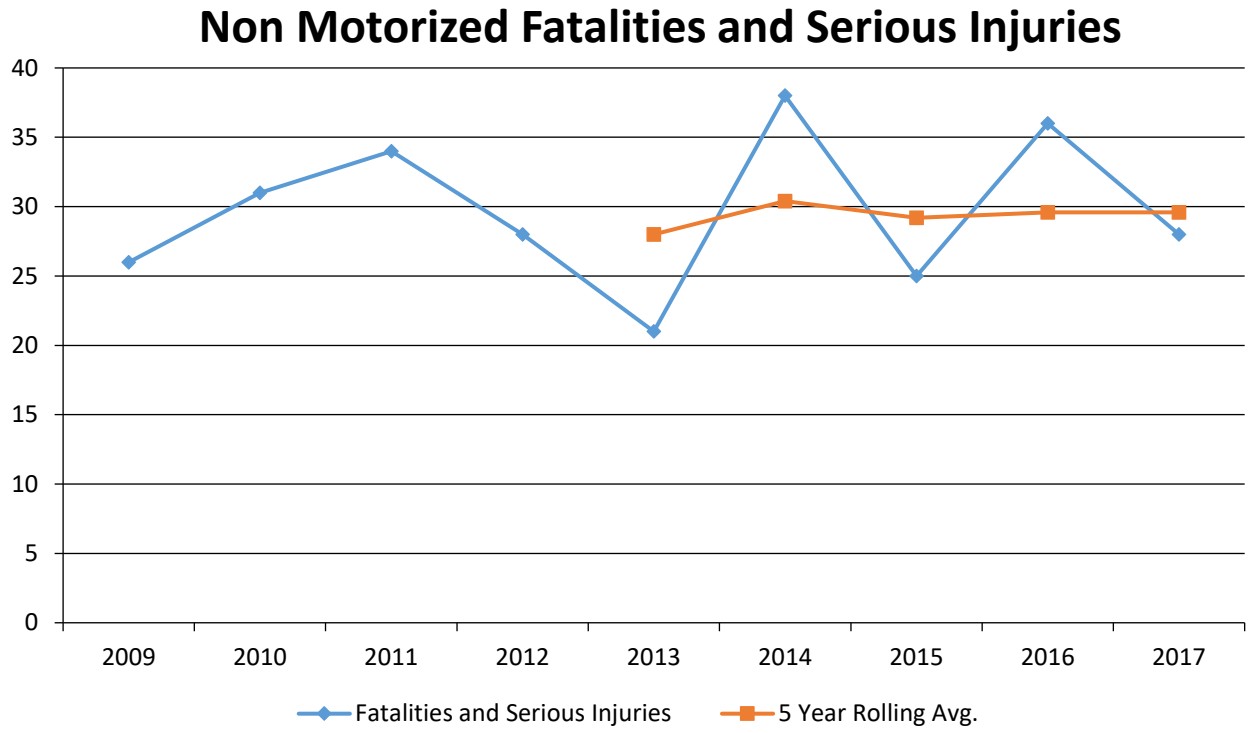
PERFORMANCE MEASURES	2009	2010	2011	2012	2013	2014	2015	2016	2017
Fatalities	134	155	135	123	87	150	145	112	123
Serious Injuries	640	571	491	458	467	476	460	387	387
Fatality rate (per HMVMT)	1.400	1.660	1.460	1.330	0.930	1.590	1.510	1.200	1.264
Serious injury rate (per HMVMT)	6.800	6.220	5.400	5.050	5.160	5.090	4.930	4.160	3.925
Number non-motorized fatalities	4	3	7	6	4	10	5	6	6
Number of non-motorized serious injuries	22	28	27	22	17	28	20	30	22


Annual Fatalities
180
160
140
120
100
80
60
40
20
0
2009
2010
2011
2012
2013
2014
2015
2016
2017
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
700
600
500
400
300
200
100
0
2009
2010
2011
2012
2013
2014
2015
2016
2017
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2009
2010
2011
2012
2013
2014
2015
2016
2017
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
8
7
6
5
4
3
2
1
0
2009
2010
2011
2012
2013
2014
2015
2016
2017
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Enter additional comments here to clarify your response for this question or add supporting information.

Describe fatality data source.

FARS

Enter additional comments here to clarify your response for this question or add supporting information.

To the maximum extent possible, present this data by functional classification and ownership.

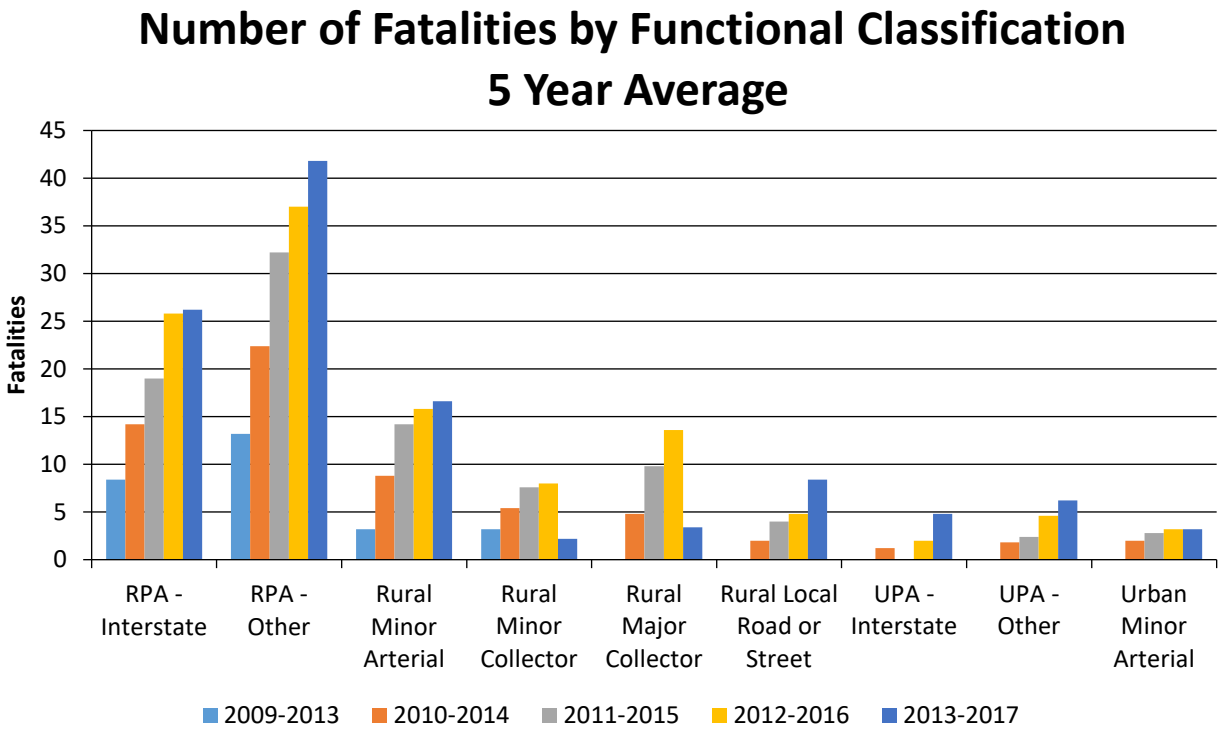
Year 2017

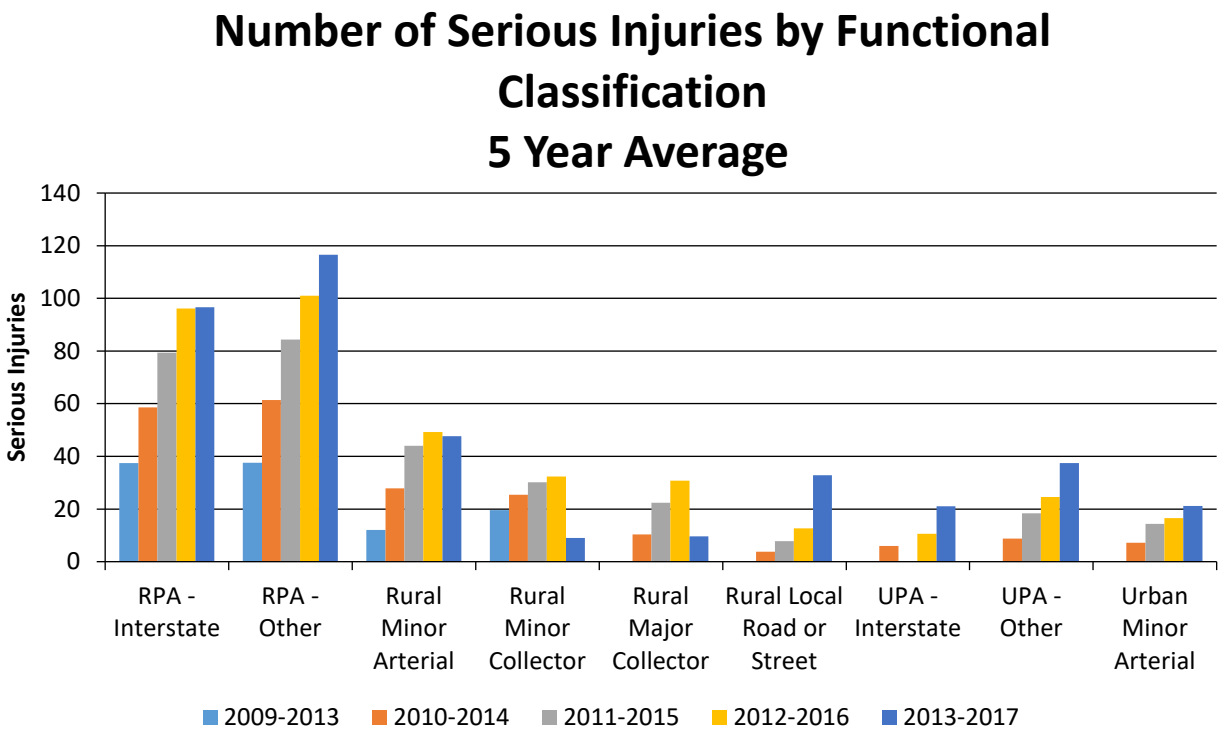
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate	26.2	96.6	1.04	3.85
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	41.8	116.6	2.1	5.87
Rural Minor Arterial	16.6	47.6	3.15	9.04
Rural Minor Collector	2.2	9	0.23	0.93
Rural Major Collector	3.4	9.6	0.5	1.4

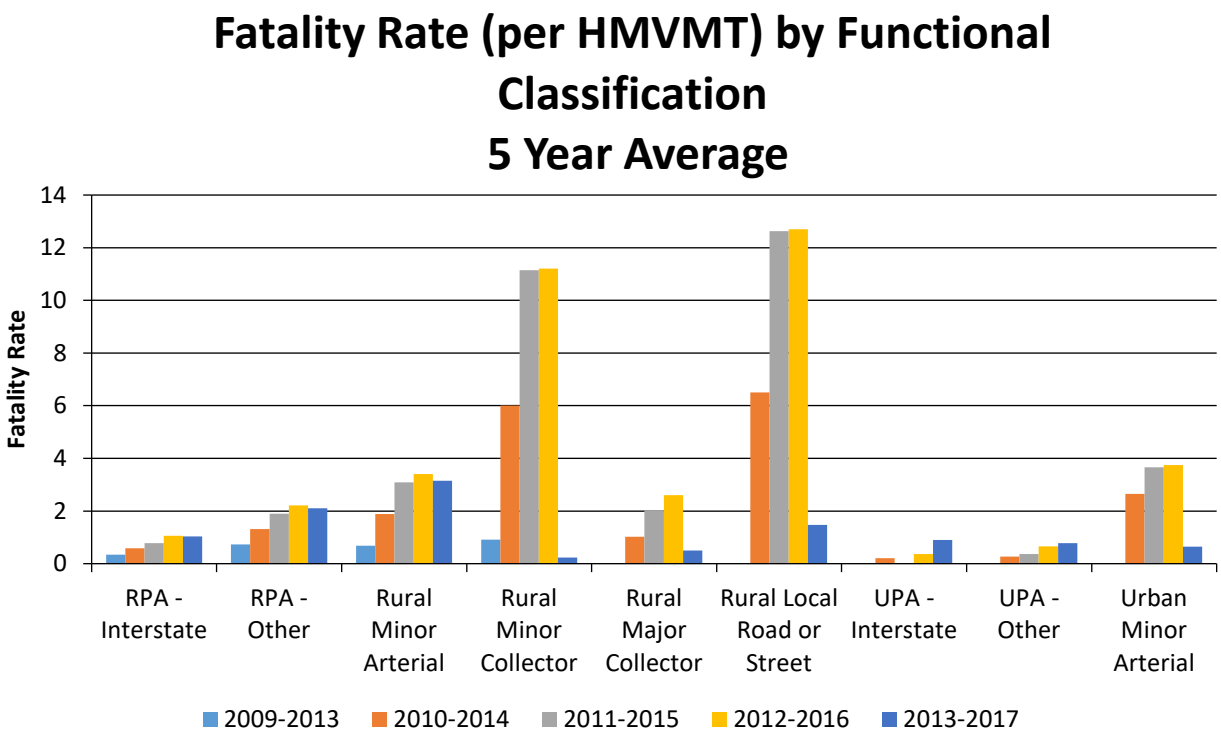
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Local Road or Street	8.4	32.8	1.47	8.38
Urban Principal Arterial (UPA) - Interstate	4.8	21	0.9	3.93
Urban Principal Arterial (UPA) - Other Freeways and Expressways				
Urban Principal Arterial (UPA) - Other	6.2	37.4	0.78	4.71
Urban Minor Arterial	3.2	21.2	0.65	4.29
Urban Minor Collector				
Urban Major Collector				
Urban Local Road or Street				

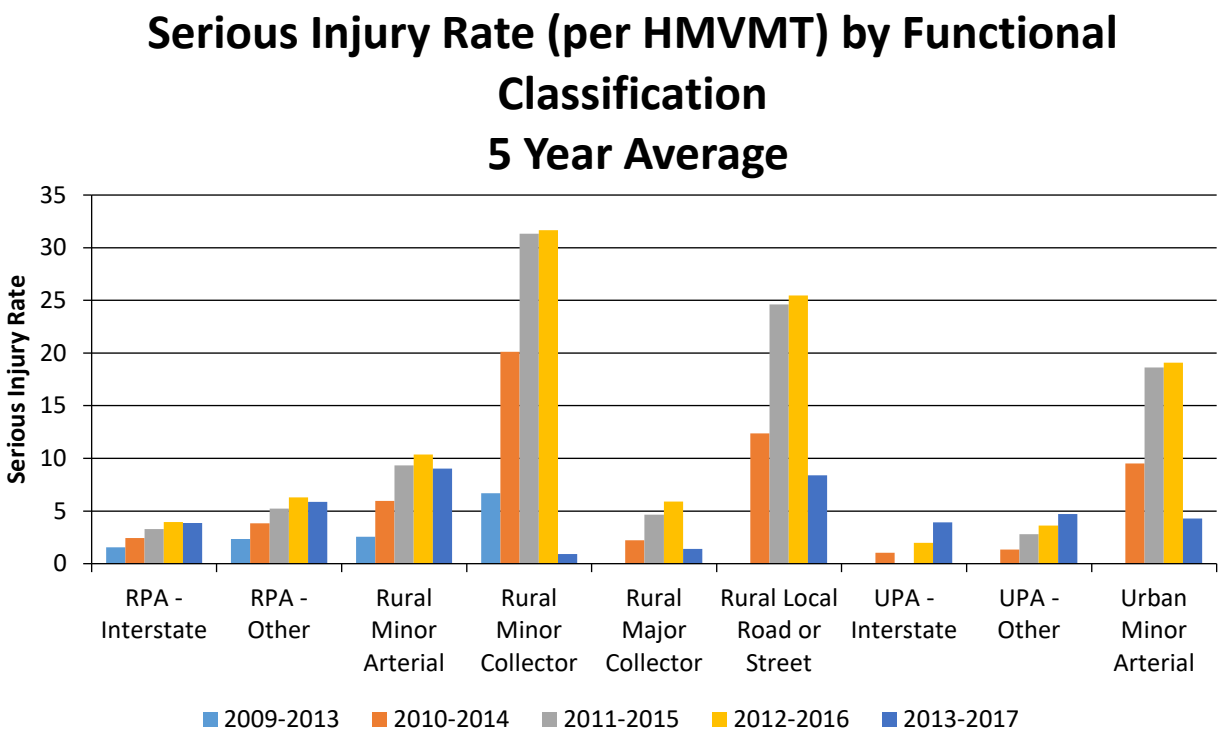
Year 2017

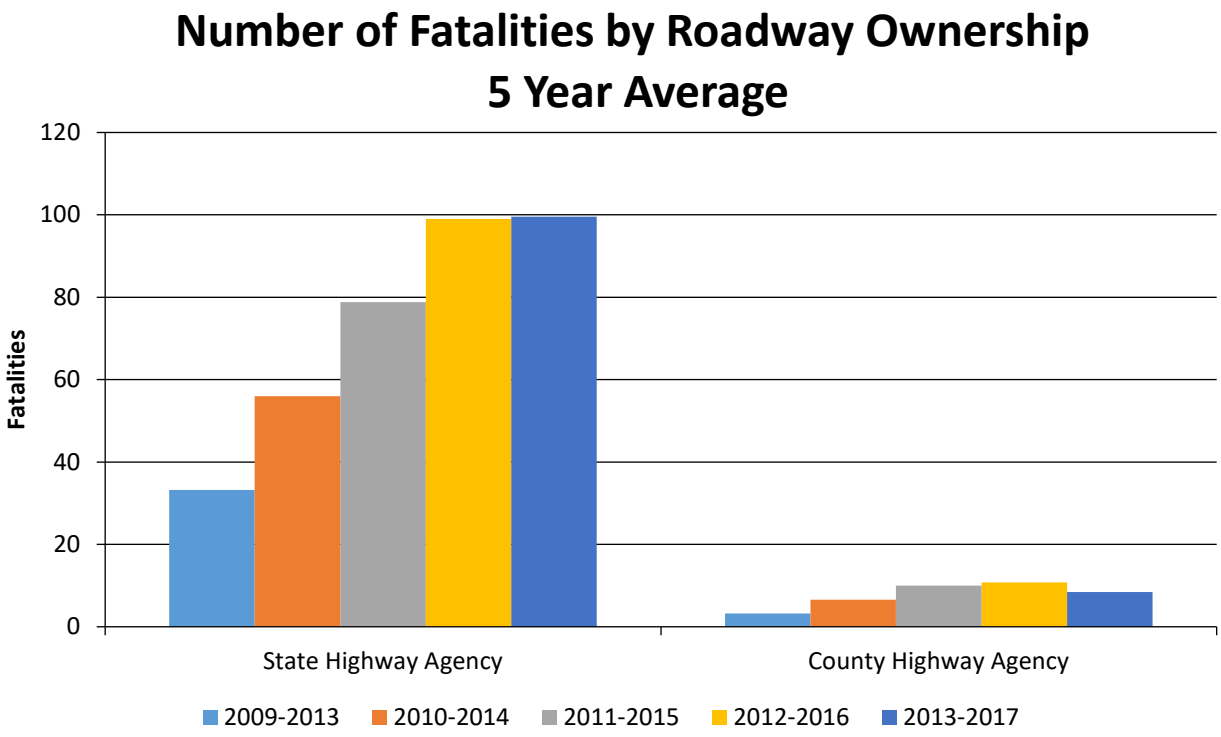
Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency	99.6	329		
County Highway Agency	8.4	32.8		
Town or Township Highway Agency				
City of Municipal Highway Agency				
State 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, University)				
Indian Tribe Nation				

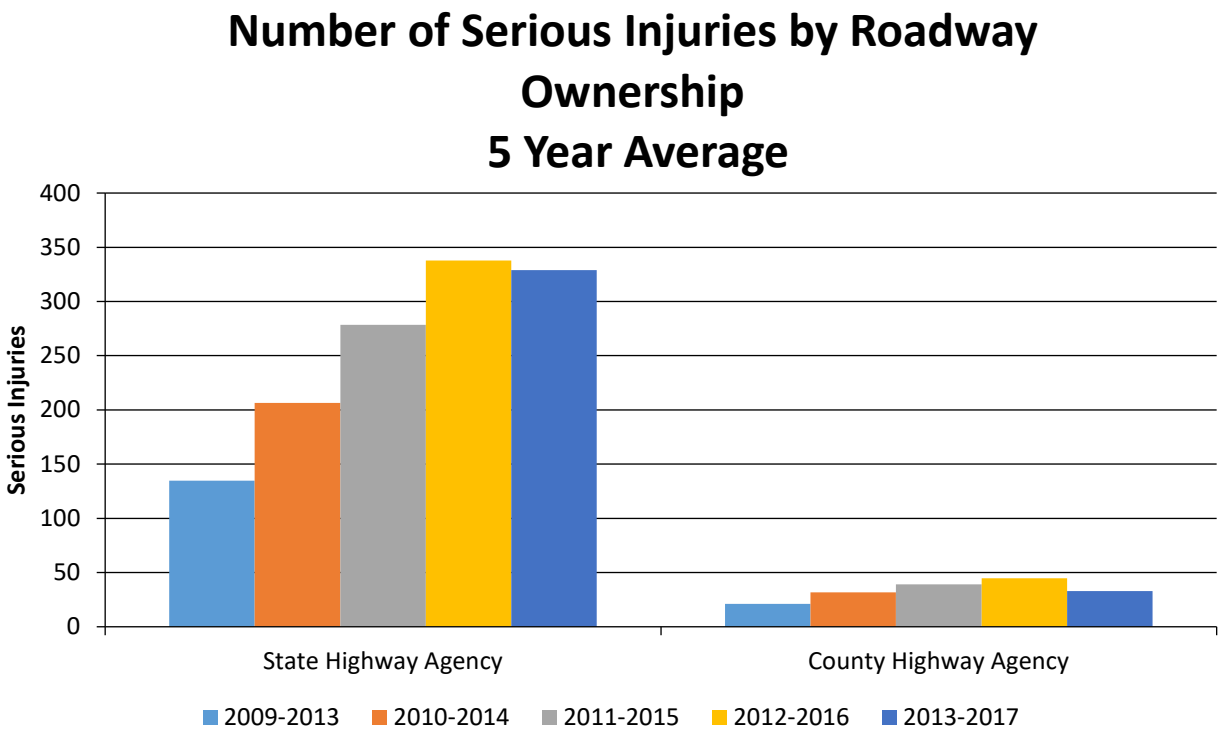

Number of Fatalities by Functional Classification
5 Year Average
Fatalities
45
40
35
30
25
20
15
10
5
0
RPA - Interstate
RPA - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
UPA - Interstate
UPA - Other
Urban Minor Arterial
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017

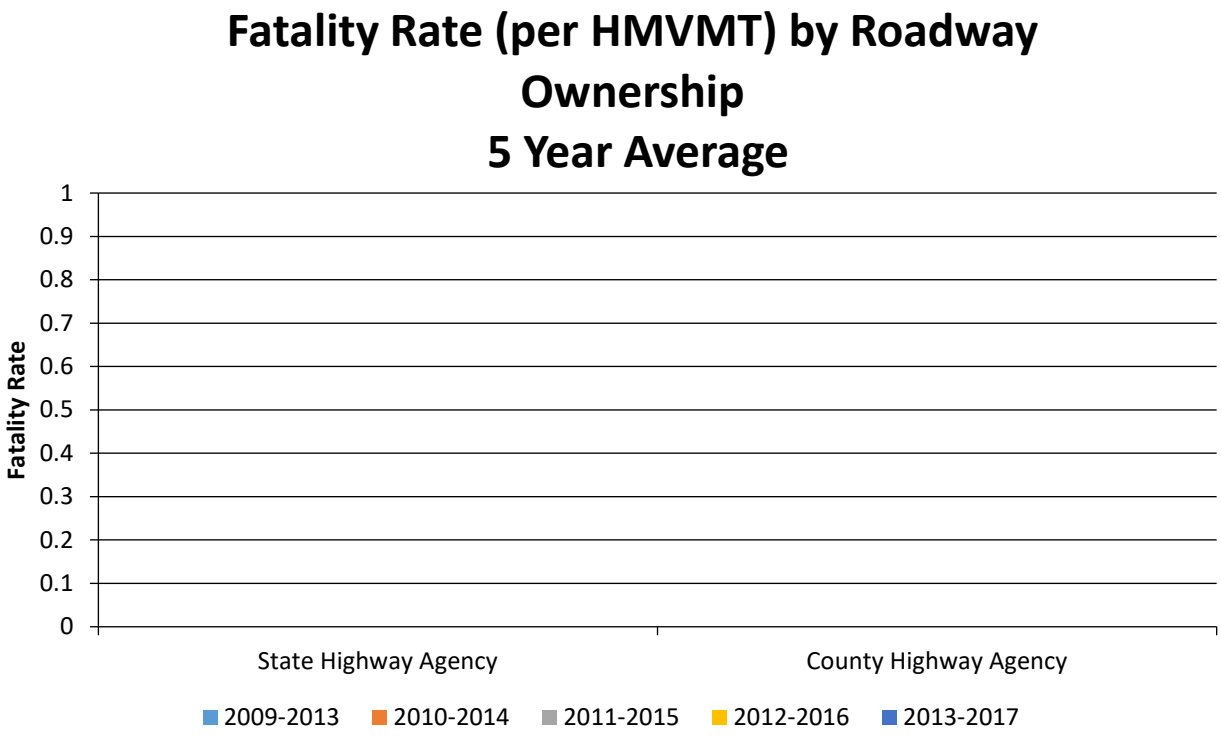

Number of Serious Injuries by Functional Classification
5 Year Average
Serious Injuries
140
120
100
80
60
40
20
0
RPA - Interstate
RPA - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
UPA - Interstate
UPA - Other
Urban Minor Arterial
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017

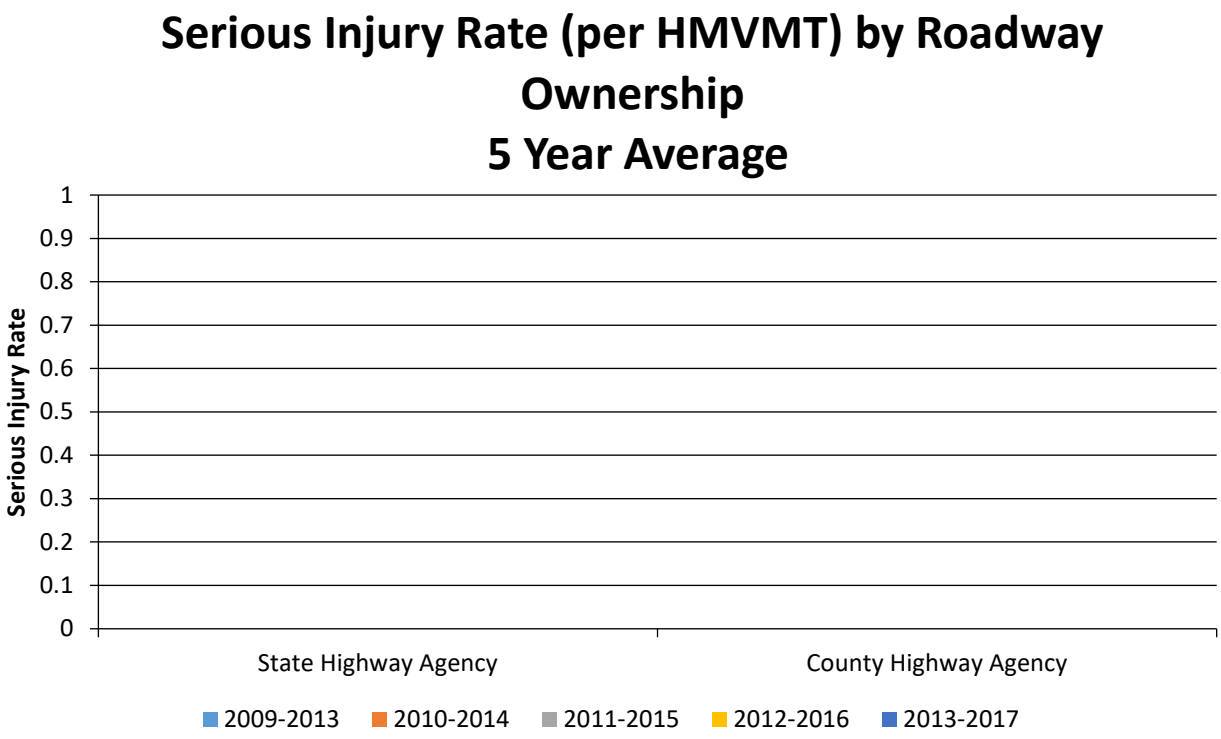

Fatality Rate (per HMVMT) by Functional Classification
5 Year Average
Fatality Rate
14
12
10
8
6
4
2
0
RPA - Interstate
RPA - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
UPA - Interstate
UPA - Other
Urban Minor Arterial
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Serious Injury Rate (per HMVMT) by Functional Classification
5 Year Average
Serious Injury Rate
35
30
25
20
15
10
5
0
RPA - Interstate
RPA - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
UPA - Interstate
UPA - Other
Urban Minor Arterial
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Number of Fatalities by Roadway Ownership
5 Year Average
Fatalities
120
100
80
60
40
20
0
State Highway Agency
County Highway Agency
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Number of Serious Injuries by Roadway Ownership
5 Year Average
Serious Injuries
400
350
300
250
200
150
100
50
0
State Highway Agency
County Highway Agency
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Fatality Rate (per HMVMT) by Roadway Ownership
5 Year Average
Fatality Rate
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
State Highway Agency
County Highway Agency
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017



Enter additional comments here to clarify your response for this question or add supporting information.

Are there any other aspects of the general highway safety trends on which the State would like to elaborate?

No

Safety Performance Targets

Safety Performance Targets

Calendar Year 2019 Targets *

Number of Fatalities 130.0

Describe the basis for established target, including how it supports SHSP goals.

The Target was established by coordination with safety partners. The SHSP goal is to reduce fatalities.

Number of Serious Injuries 470.0

Describe the basis for established target, including how it supports SHSP goals.

The Target was established by coordination with safety partners. The SHSP goal is to reduce serious injuries.

Fatality Rate 1.400

Describe the basis for established target, including how it supports SHSP goals.

The Target was established by coordination with safety partners. The SHSP goal is to reduce fatalities.

Serious Injury Rate 5.440

Describe the basis for established target, including how it supports SHSP goals.

The Target was established by coordination with safety partners. The SHSP goal is to reduce serious injuries.

Total Number of Non-Motorized Fatalities and Serious Injuries 30.0

Describe the basis for established target, including how it supports SHSP goals.

The Target was established by coordination with safety partners. The SHSP goal is to reduce fatalities and serious injuries.

Enter additional comments here to clarify your response for this question or add supporting information.

Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.

Coordination meetings were held with the two MPO's in the State regarding the establishment of targets for the State. The MPO's were presented with the established targets at a formal meeting. Concurrence with the overall State targets was requested from both MPO's.

Does the State want to report additional optional targets?

No

Enter additional comments here to clarify your response for this question or add supporting information.

Applicability of Special Rules

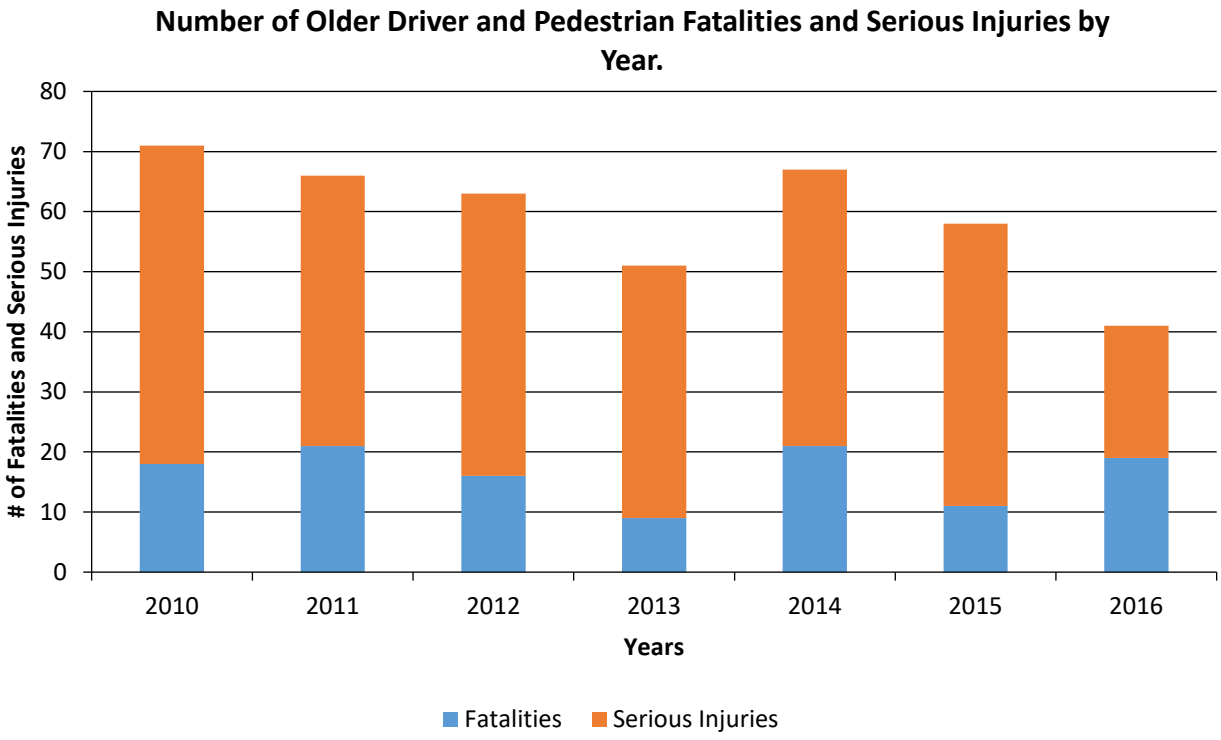
Does the HRRR special rule apply to the State for this reporting period?

No

Enter additional comments here to clarify your response for this question or add supporting information.

Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2010	2011	2012	2013	2014	2015	2016
Number of Older Driver and Pedestrian Fatalities	18	21	16	9	21	11	19
Number of Older Driver and Pedestrian Serious Injuries	53	45	47	42	46	47	22



Enter additional comments here to clarify your response for this question or add supporting information.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

Other-Funding utilized for Safety related treatments

Enter additional comments here to clarify your response for this question or add supporting information.

Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.

Trend comparisons for fatal and serious injuries along with all crashes year to year. The trend for the State is down in both fatal and serious injuries.

Wyoming continues to utilize the full funding that is available for Safety Treatments on its roadways.

What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?

More systemic programs
HSIP Obligations

Enter additional comments here to clarify your response for this question or add supporting information.

Are there any significant programmatic changes that have occurred since the last reporting period?

No

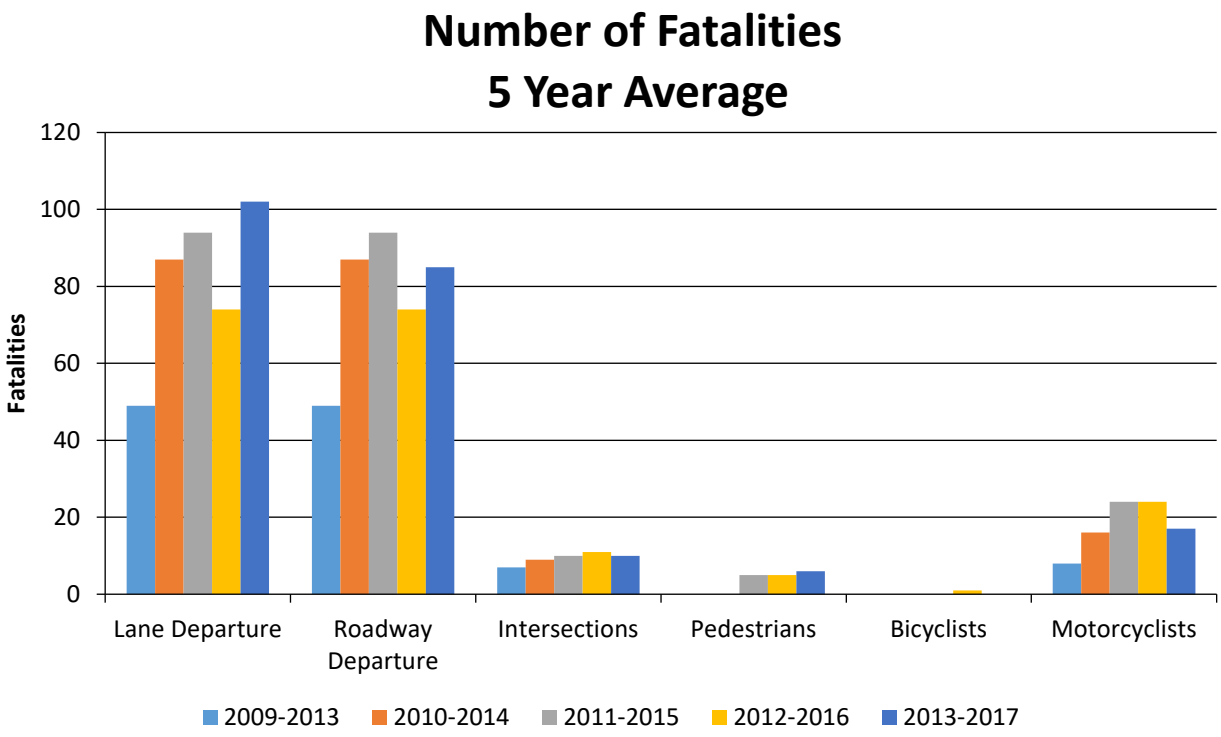
Effectiveness of Groupings or Similar Types of Improvements

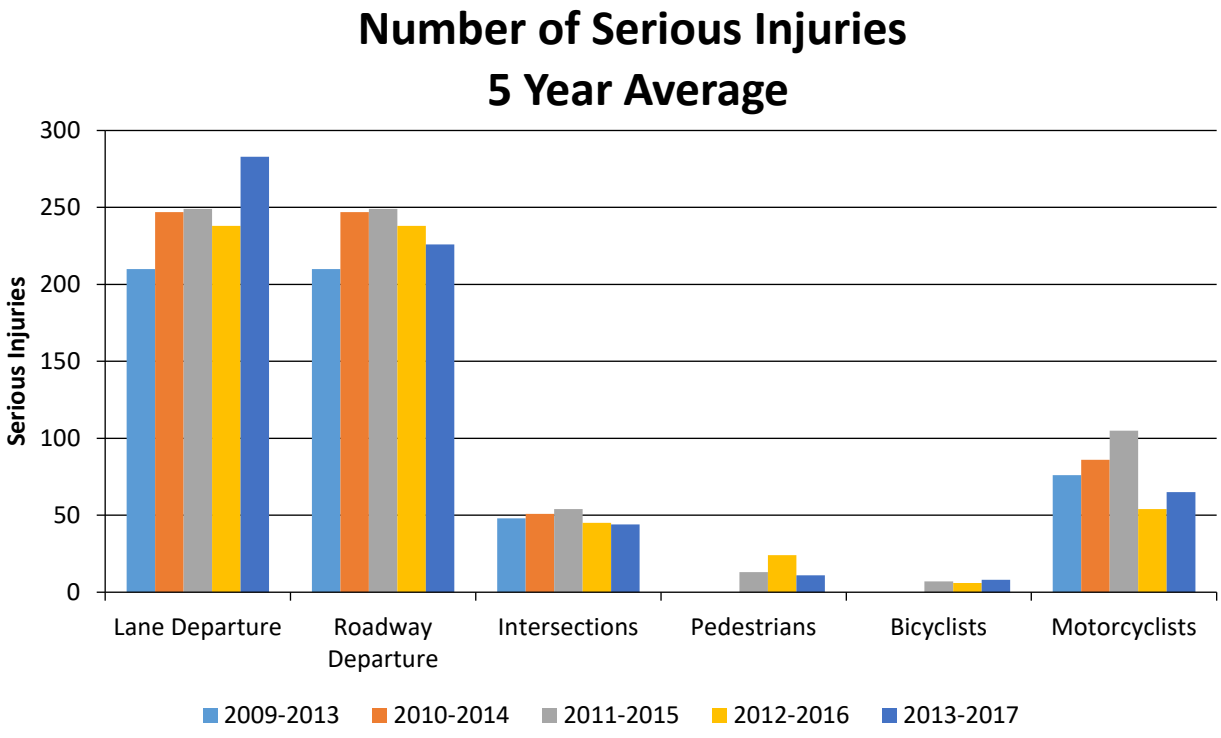
Present and describe trends in SHSP emphasis area performance measures.

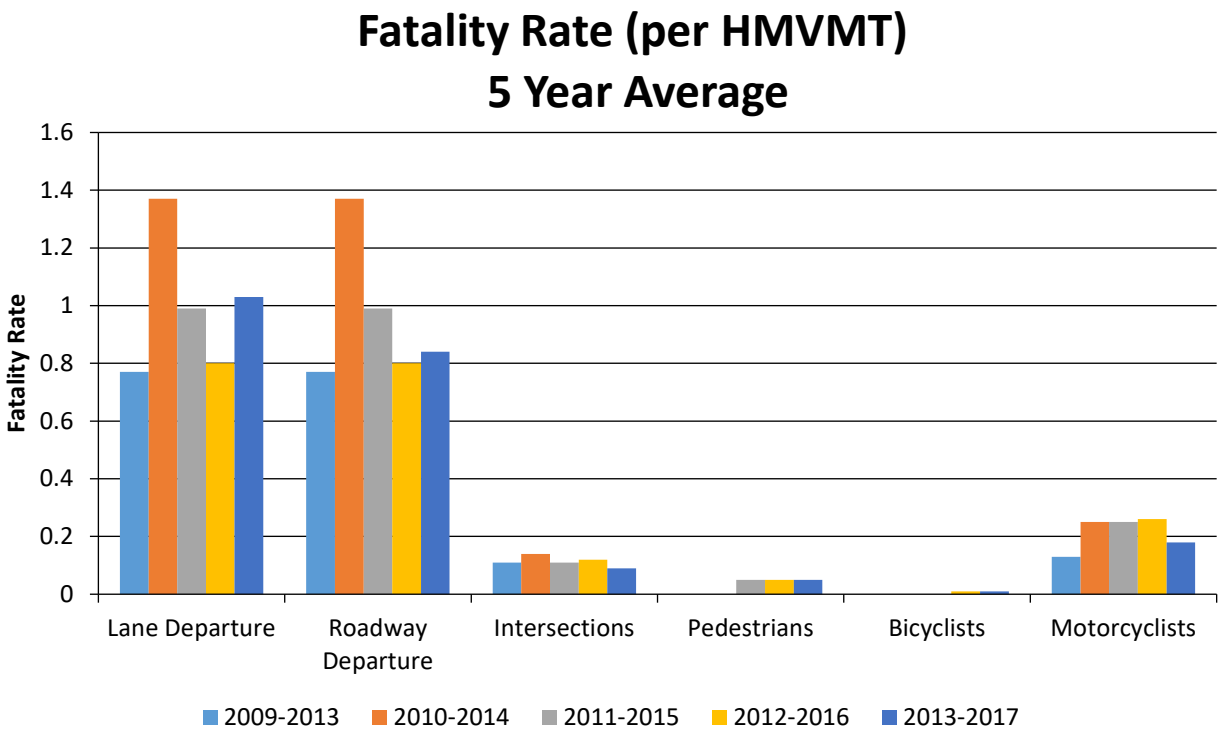
Year 2017

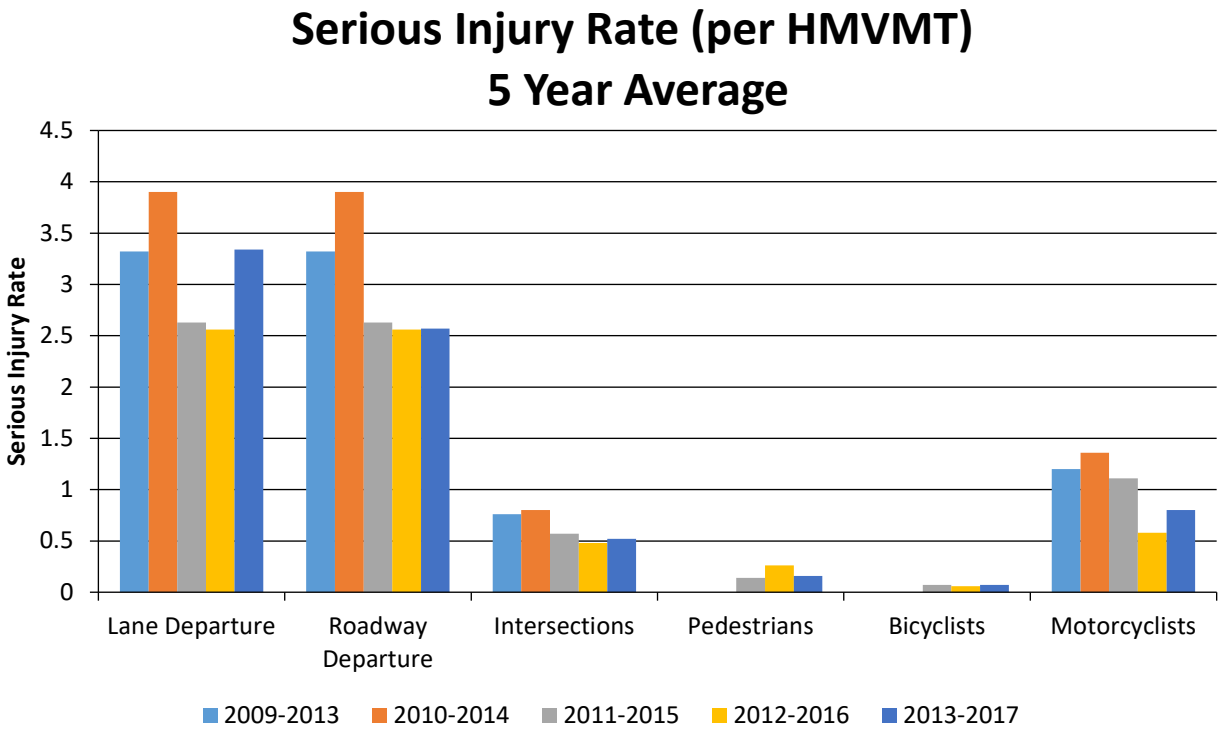
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Lane Departure	Run-off-road	102	283	1.03	3.34

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Roadway Departure	Run-off-road	85	226	0.84	2.57
Intersections	All	10	44	0.09	0.52
Pedestrians	All	6	11	0.05	0.16
Bicyclists	All	0	8	0.01	0.07
Motorcyclists	All	17	65	0.18	0.8


Number of Fatalities
5 Year Average
Fatalities
120
100
80
60
40
20
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Motorcyclists
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Number of Serious Injuries
5 Year Average
Serious Injuries
300
250
200
150
100
50
0
Lane Departure
Roadway Departure
Intersections
Pedestrians
Bicyclists
Motorcyclists
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017





Enter additional comments here to clarify your response for this question or add supporting information.

Has the State completed any countermeasure effectiveness evaluations during the reporting period?

No

Enter additional comments here to clarify your response for this question or add supporting information.

Research is underway with the University of Wyoming to look at the crash modification factors of various treatments specific to Wyoming. This research in not yet completed.

Project Effectiveness

Provide the following information for previously implemented projects that the State evaluated this reporting period.

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
None														

Enter additional comments here to clarify your response for this question or add supporting information.

Are there any other aspects of the overall HSIP effectiveness on which the State would like to elaborate?

No

Compliance Assessment

What date was the State's current SHSP approved by the Governor or designated State representative?

07/10/2017

What are the years being covered by the current SHSP?

From: 2017 To: 2022

When does the State anticipate completing it's next SHSP update?

2022

Enter additional comments here to clarify your response for this question or add supporting information.

Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.

	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
MIRE NAME (MIRE NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT										
Segment Identifier (12)	100	100					100	100	100	100
Route Number (8)	100	100								
Route/Street Name (9)	100	100								
Federal Aid/Route Type (21)	100	100								
Rural/Urban Designation (20)	100	100					100	100		
Surface Type (23)	100	100					100	100		
Begin Point Segment Descriptor (10)	100	100					100	100	100	100
End Point Segment Descriptor (11)	100	100					100	100	100	100
Segment Length (13)	100	100								
Direction of Inventory (18)	100	100								
Functional Class (19)	100	100					100	100	100	100
Median Type (54)	100	100								
Access Control (22)	100	0								

MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
One/Two Way Operations (91)	100	100								
Number of Through Lanes (31)	100	100					100	100		
Average Annual Daily Traffic (79)	100	25					100	25		
AADT Year (80)	100	25								
Type of Governmental Ownership (4)	100	100					100	100	100	100
INTERSECTION										
Unique Junction Identifier (120)			100	0						
Location Identifier for Road 1 Crossing Point (122)			100	0						
Location Identifier for Road 2 Crossing Point (123)			100	0						
Intersection/Junction Geometry (126)			100	0						
Intersection/Junction Traffic Control (131)			100	0						
AADT for Each Intersecting Road (79)			100	0						
AADT Year (80)			100	0						
Unique Approach Identifier (139)			100	0						
INTERCHANGE/RAMP										
Unique Interchange Identifier (178)					100	100				
Location Identifier for Roadway at Beginning of Ramp Terminal (197)					100	100				
Location Identifier for Roadway at Ending Ramp Terminal (201)					100	100				
Ramp Length (187)					100	100				
Roadway Type at Beginning of Ramp Terminal (195)					50	100				
Roadway Type at End Ramp Terminal (199)					50	100				

MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
Interchange Type (182)					50	100				
Ramp AADT (191)					50	100				
Year of Ramp AADT (192)					50	100				
Functional Class (19)					50	100				
Type of Governmental Ownership (4)					50	100				
Totals (Average Percent Complete):	**100.00**	**86.11**	**100.00**	**0.00**	**68.18**	**100.00**	**100.00**	**91.67**	**100.00**	**100.00**

*Based on Functional Classification

Enter additional comments here to clarify your response for this question or add supporting information.

With the large amount of federal lands in Wyoming with many paved and un-paved roadways it would be helpful in the Federal Government agencies would provide their roadway information to WYDOT so that it can be included.

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

The State of Wyoming through the Department of Transportation Planning program will continue to pursue the necessary data collection to complete the MIRE fundamental data elements on all public roads. One glaring problem is the Federal Land agencies NOT providing this data to WYDOT.

Provide the suspected serious injury identifier, definition and attributes used by the State for both the crash report form and the crash database using the table below. Please also indicate whether or not these elements are compliant with the MMUCC 4th edition criteria for data element P5. Injury Status, suspected serious injury.

CRITERIA	SUSPECTED SERIOUS INJURY IDENTIFIER(NAME)	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY DEFINITION	MMUCC 4TH EDITION COMPLIANT *	SUSPECTED SERIOUS INJURY ATTRIBUTES(DESCRIPTORS)	MMUCC 4TH EDITION COMPLIANT *
Crash Report Form	Suspected Serious Injury	Yes	N/A	Yes	N/A	Yes
Crash Report Form Instruction Manual	Suspected Serious Injury	Yes	N/A	Yes	N/A	Yes
Crash Database	Suspected Serious Injury	Yes	N/A	Yes	N/A	Yes
Crash Database Data Dictionary	Suspected Serious Injury	Yes	N/A	Yes	N/A	Yes

Enter additional comments here to clarify your response for this question or add supporting information.

Did the State conduct an HSIP program assessment during the reporting period?
No

When does the State plan to complete it’s next HSIP program assessment.

2020

Enter additional comments here to clarify your response for this question or add supporting information.

Optional Attachments

Program Structure:

Project Implementation:

2018 HSIP Report Project List.xlsx

Safety Performance:

Evaluation:

Compliance Assessment:

Glossary

5 year rolling average	means the average of five individuals, 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.