HAWAII

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2018 ANNUAL REPORT

U.S. Department of Transportation
Federal Highway Administration

Photo source: Federal Highway Administration

Table of Contents

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

State of Hawaii 2018 U.S.C. 148(g) Annual Highway Safety Improvement Program (HSIP) Report

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.

HDOT uses the Number-Rate (N-R) Method, which establishes a minimum crash frequency and accounts for exposure. Listings for intersection locations on State roadways use a minimum criteria for a 3-year period and listings for non-intersection locations on State roadways use sliding 0.3-mile segments with a minimum criteria for a 3-year period. This method uses the best availability of required data and is manageable by our limited manpower.

Locations identified by the N-R method will be further analyzed in a Benefit-Cost (B/C) analysis procedure by incorporating crash costs established by FHWA and crash reduction factors (CRF). The crash costs will assign more weight to fatal and high severity crashes.

Project Prioritization and Selection uses the annual High-Accident Listings, which ranks the locations by crash rates, and injury severity to determine possible project locations. Project locations where existing, planned or recently completed projects are already addressing concerns are eliminated. Appropriate countermeasures for each location are determined, preliminary estimates for improvements are computed, CRFs are selected, and Benefit/Cost (B/C) ratios to prioritize individual listings are calculated.

“HSIP Field Investigation” of candidate projects are conducted using HSIP Field Investigation procedures and involving the following parties: Traffic Safety engineers, District engineers and maintenance workers, Traffic Design engineers, and the police. Field investigations of existing conditions are conducted to better understand deficiencies. Projects are selected to initiate based on revised scope of work and B/C. If funds are available, additional projects are selected according to overall priority. Note that projects may also be initiated if identified as priority according to the Hawaii Strategic Highway Safety Plan (SHSP).

Project Evaluation uses 3 year before and after crash history. Evaluation data is submiited to FHWA through the online HSIP reporting tool annually.

Where is HSIP staff located within the State DOT?

Engineering

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

HSIP staff is located in the Hawaii State Department of Transportation, Highways Division, Traffic Branch, Traffic Safety Section

How are HSIP funds allocated in a State?

Other-Central Office

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

High accident listings and accident data for county roads are submitted to the county offices for internal design use. Local agencies can submit project proposals to be considered on the Statewide Transportation Improvement Program (STIP) and the projects can be funded through the HSIP funds if they are cost-effective. In addition, HRRRP Funds are offered to the counties.

HSIP funds for State roadway projects are divided among the 4 different counties.

All projects are submitted through the Traffic Safety Section.

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

High accident listings and accident data for county roads are submitted to the county offices for internal design use. Local agencies can submit project proposals to be considered on the Statewide Transportation Improvement Program (STIP) and the projects can be funded through HSIP funds if they are cost-effective. In addition, HRRRP Funds are offered to the counties.

Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.

Traffic Engineering/Safety
Design
Planning
Maintenance
Operations
Other-Highway Safety Office assists with the management of non-infrastructure HSIP funds.

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

Describe coordination with internal partners.

The HSIP projects are initiated through the analysis of crash data and traffic volume counts obtained by the

Planning Branch. The HSIP project locations are evaluated to determine if other projects submitted by internal partners (Design, Planning, Maintenance, or Operations) can be coordinated or project scope can be incorporated within existing projects.

Internal partners assist with project selection preparation of preliminary project scope through field investigations. Partners from the offices of design, maintenance and law enforcement (external) participate in the preliminary project scope.

Identify which external partners are involved with HSIP planning.

Local Government Agency
Other-Police departments

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

Police department representatives have participated in preliminary project scoping through field investigations. Their input on enforcement and knowledge of the area are instrumental to the overall traffic safety recommendations .

Local government agencies would be involved when projects on local roads are proposed.

Describe coordination with external partners.

HSIP projects can be initiated through review of high accident listings and accident data for county roads submitted to the county offices. Local agencies can submit project proposals to be considered on the STIP

Police department officers are requested to participate in field investigations of potential HSIP project locations. They provide personal knowledge of the area and can make safety recommendations that may be incorporated within HSIP projects.

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.

Statewide projects are submitted to be considered on the STIP.

2018 Hawaii Highway Safety Improvement Program
Focus is more on corridor low-cost safety improvements versus black spots.

Program Methodology

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

Yes

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

File Name:
HSIP report2006.doc

Select the programs that are administered under the HSIP.

HRRR

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

Program:	HRRR
Date of Program Methodology:	9/9/2006

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

FHWA focused approach to safety

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
Fatal and serious injury crashes only	Lane miles	Functional classification

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

Crash frequency
Crash rate

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.

Methodology for local roads use the crash frequency because of the lack of traffic volume data. Methodology for State roads use the crash rate.

How are projects under this program advanced for implementation?

Other-Submitted to be included in the STIP. Follow with collaboration with the Districts.

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
Cost Effectiveness : 3

What percentage of HSIP funds address systemic improvements?

72

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

Rumble Strips

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
Crash data analysis

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?

No

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

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

No

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

HDOT is currently working with a vendor to upgrade our current archaic database. The new database will take care of the accident data backlog and provide enhanced analyses and reporting capabilities. Some of the new analyses tools will incorporate the Highway Safety Manual. Additional HSM analyses can be implemented with the development of the new database.

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?

Yes

Describe other aspects of the HSIP methodology on which the State would like to elaborate.

During this period, run off roadway and median crossover type accidents were targeted. HDOT is currently focusing on reducing fatalities and serious injury type accidents by implementing cost-effective safety improvement projects along corridors with a history of these types of accidents. In Hawaii, these types of accidents have a greater potential of reducing fatalities and serious injury accidents cost-effectively, in comparison to "black spot" type projects. HDOT is collaborating with the University of Hawaii to develop a Systemic Roadway Departure Plan. With the development of this plan, HDOT hopes to address more systemic safety improvements with proven low-cost safety countermeasures.

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.

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$9,554,624	$1,136,211	11.89%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$2,578,892	$2,578,892	100%
Penalty Funds (23 U.S.C. 164)	$2,578,892	$2,578,892	100%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$587,500	$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$15,299,908	$6,293,995	41.14%

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

The penalty transfer is impacting the HSIP core obligation rate. Our administration plans to introduce legislation to attain compliance.
We would like to have more projects initiated and assigned for design and construction. There is an inability of design staff to handle the workload. Areas such as: 106, right-of-way, and environmental requirements delay projects.

The obligated percentage is based on the latest project status report available. We anticipate obligating more HSIP funds before the end of FFY18.

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

$0

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

$0

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

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

$4,778,000

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

$4,778,000

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

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.

The penalty transfer is impacting the HSIP core obligation rate. We would like to have more projects initiated and assigned for design and construction. We plan on utilizing IDIQ type contracts to facilitate the implementation of cost-effective safety improvements.

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

Yes

Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

Progress of all HSIP projects is monitored very closely. HSIP program staff follow-up with project managers and fiscal staff on a regular basis to track project schedules and make adjustments and modifications to the program to minimize the potential for lapsing funds, as well as spend HSIP funds efficiently.

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**
H-1 Safety Improvements, Vicinity of MP 0.0 to Waiawa O/P	Roadway	Rumble strips - edge or shoulder	9	Miles		$9500000	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Interstate	0	55	State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
Kamehameha Hwy Safety Improvements, Kahekili Hwy to Waikane Valley Rd	Roadway	Rumble strips - edge or shoulder	3.1	Miles		$3700000	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0	35	State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
Mamalahoa Hwy Safety Improvements, MP 3.9 to MP 6.9	Roadway	Rumble strips - edge or shoulder	3	Miles		$3500000	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0	50	State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
Honoapiilani Hwy Safety Improvements, Kapoli St to Papalaua Bch	Roadway	Rumble strips - edge or shoulder	5.2	Miles		$3200000	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0	45	State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
Piilani Hwy Safety Improvements, North Kihei Rd to Wailea Ike Dr	Roadway	Rumble strips - edge or shoulder	7.1	Miles		$1300000	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0	45	State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
Highway Statistics Program and Traffic Monitoring System	Non-infrastructure	Data/traffic records				$4778000		Project is statewide and covers many functional classifications	0		Project is statewide and covers State and County ownerships	Project is statewide	Data	Use crash data sources to identify high-risk locations
Statewide District Safety Improvements	Roadway	Roadway - other				$3476547.81		Project is statewide and covers many functional classifications	0		State Highway Agency	Project is statewide	Lane Departure	Install rumble strips

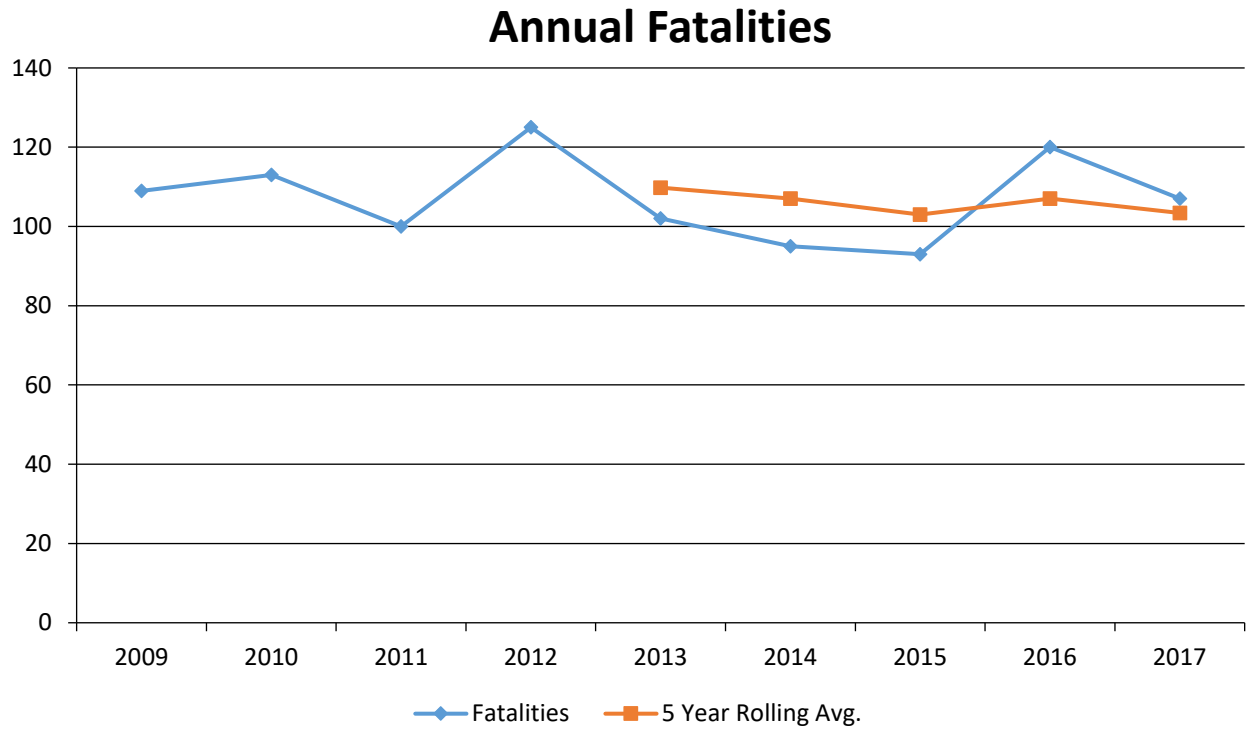
Enter additional comments here to clarify your response for this question or add supporting information.

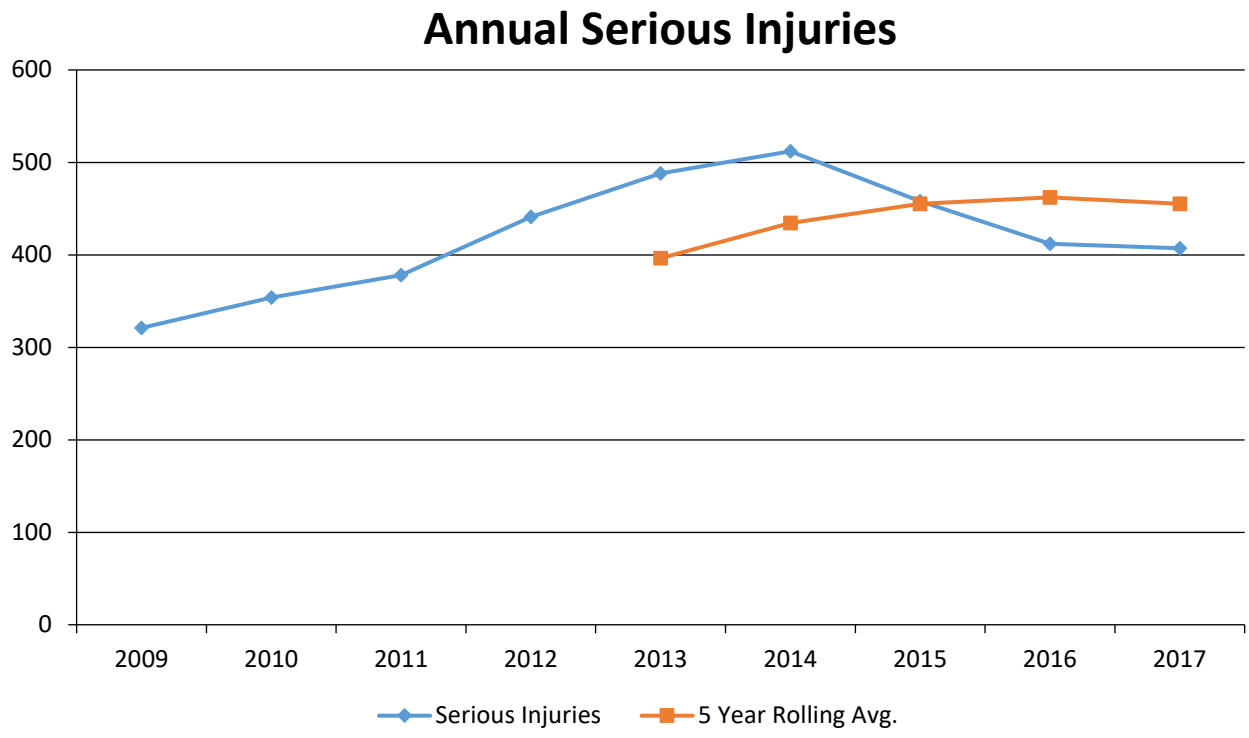
Safety Performance

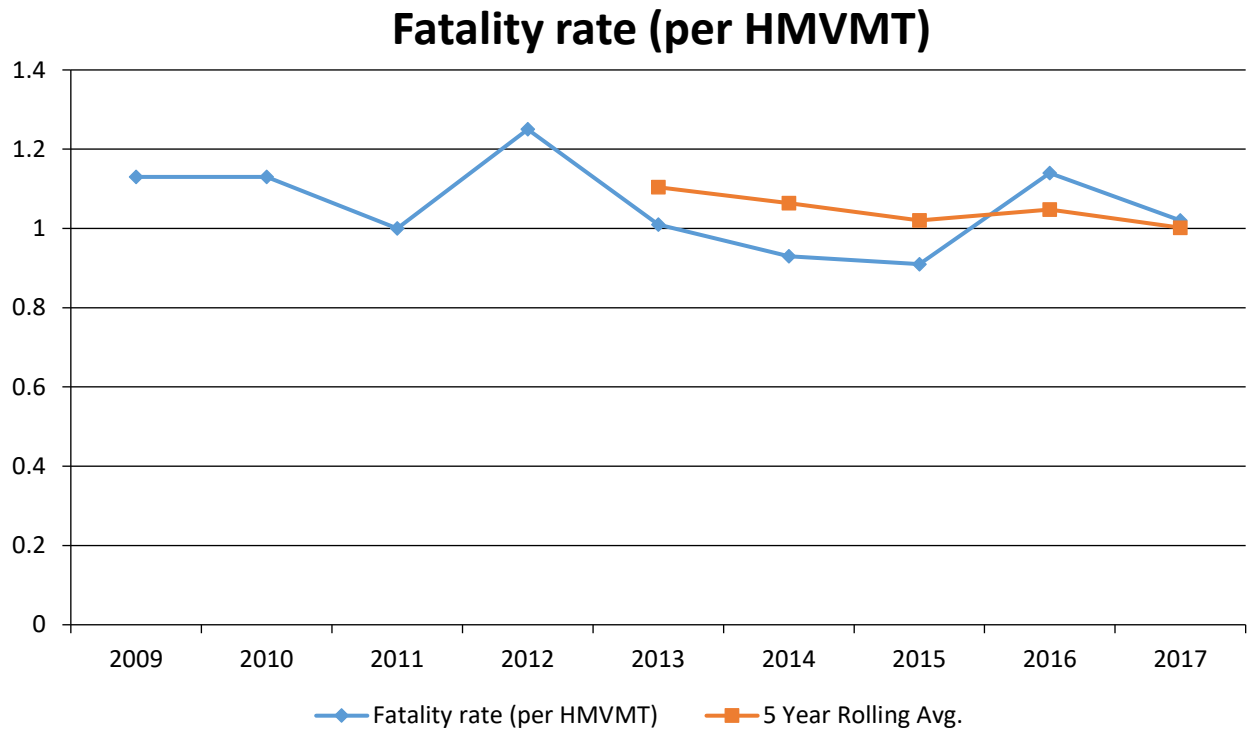
General Highway Safety Trends

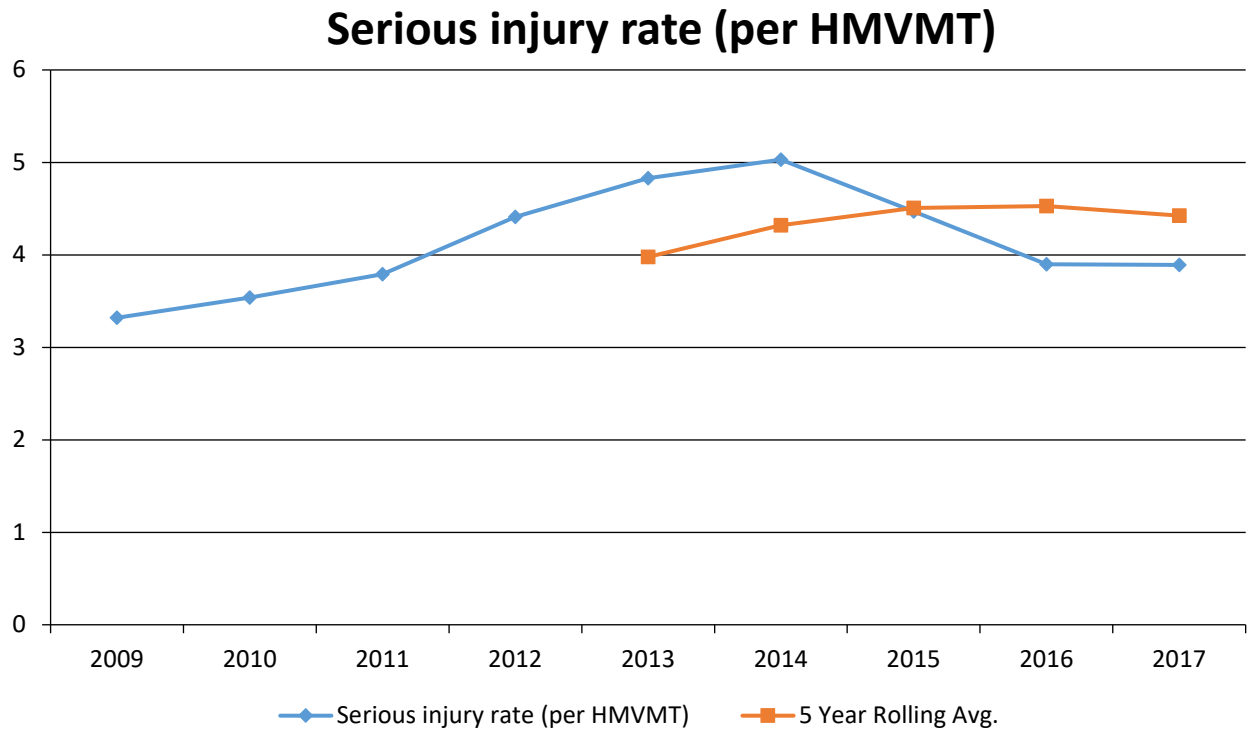
Present data showing the general highway safety trends in the State for the past five years.

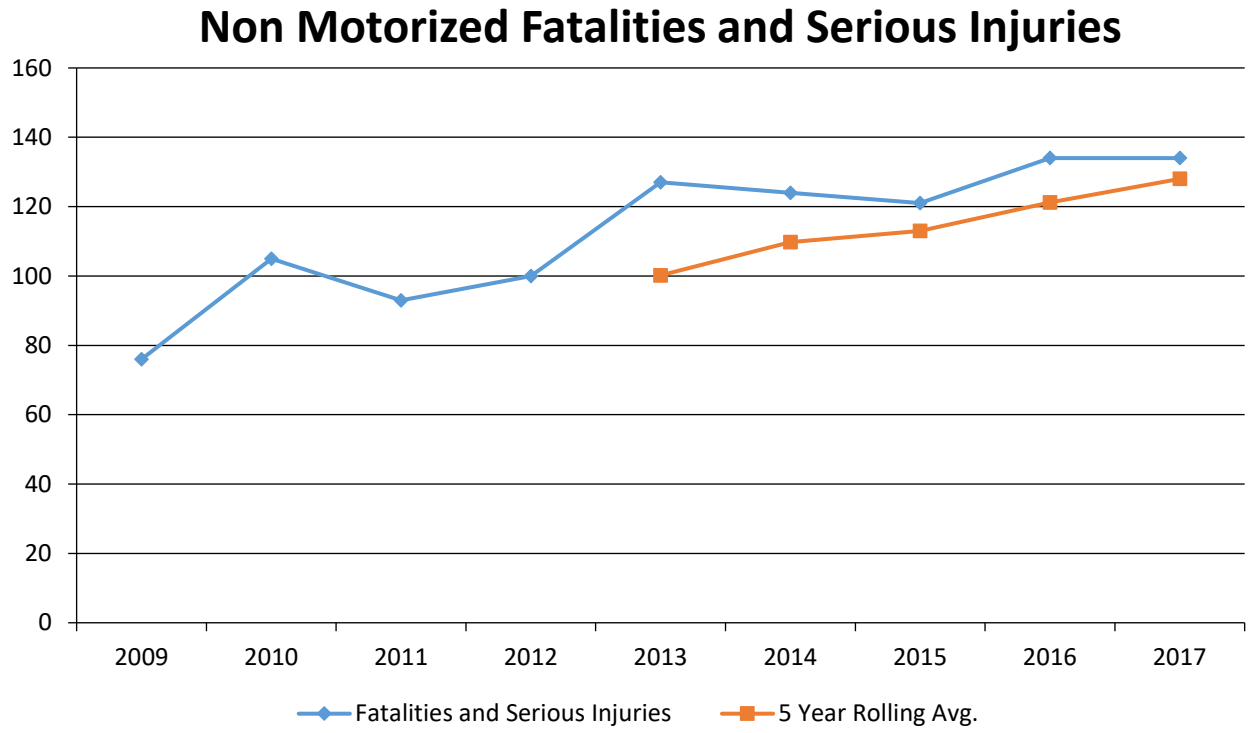
PERFORMANCE MEASURES	2009	2010	2011	2012	2013	2014	2015	2016	2017
Fatalities	109	113	100	125	102	95	93	120	107
Serious Injuries	321	354	378	441	488	512	458	412	407
Fatality rate (per HMVMT)	1.130	1.130	1.000	1.250	1.010	0.930	0.910	1.140	1.020
Serious injury rate (per HMVMT)	3.320	3.540	3.790	4.410	4.830	5.030	4.470	3.900	3.890
Number non-motorized fatalities	19	29	25	28	27	32	30	32	32
Number of non-motorized serious injuries	57	76	68	72	100	92	91	102	102


Annual Fatalities
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
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)
1.4
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)
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.

Please note that serious injury data for 2017 has not been completely received for us to conduct a manual count. The same number as the previous year was used to allow the program to process without leaving a blank response.
We are addressing the timeliness of our data and plan to have more to report next year.
Figures in 2017 Serious Injuries, Serious Injury Rate, and number of non-motorized serious injuries in the 5 year average table and the annual table are based on estimated 2017 serious injury data.

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.

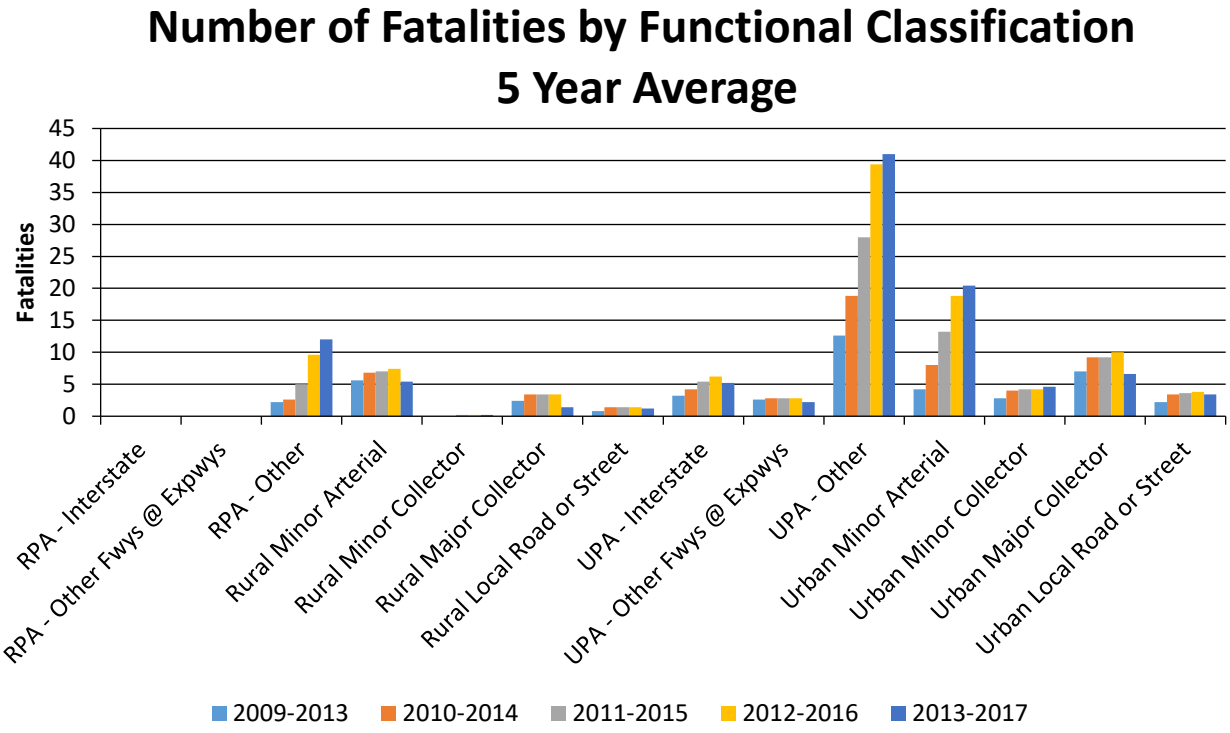
Year 2017

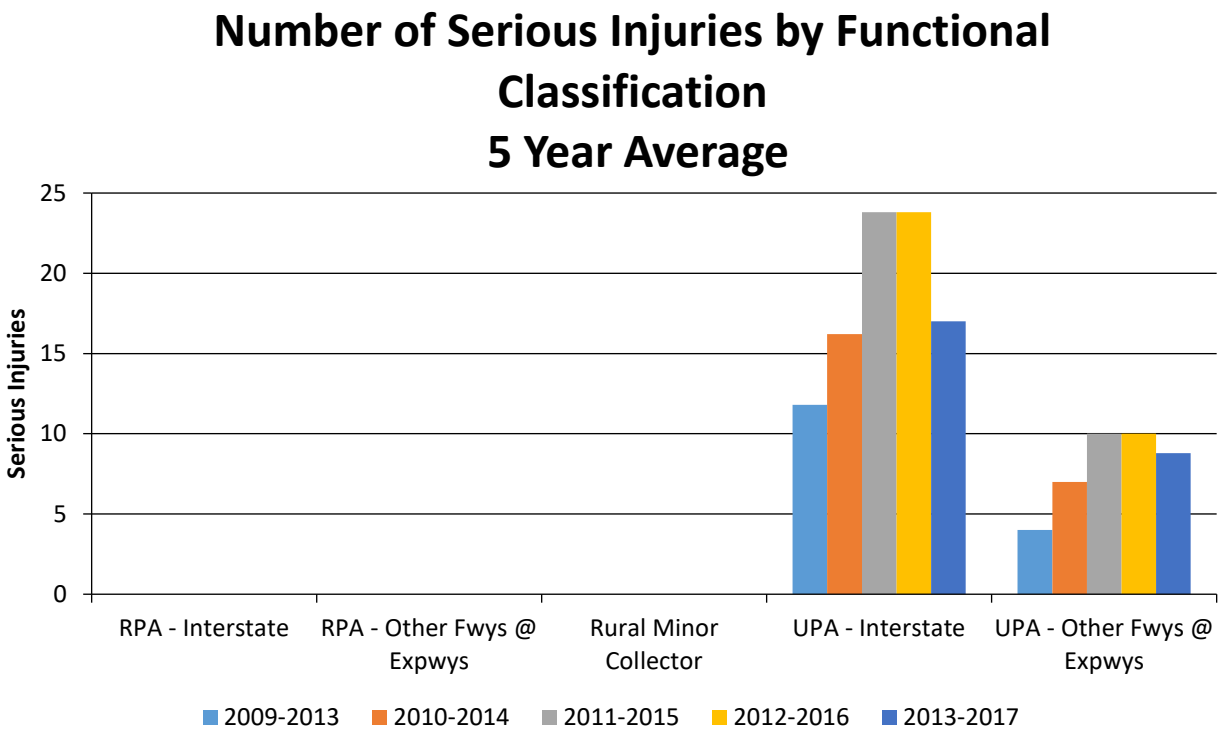
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate				
Rural Principal Arterial (RPA) - Other Freeways and Expressways				

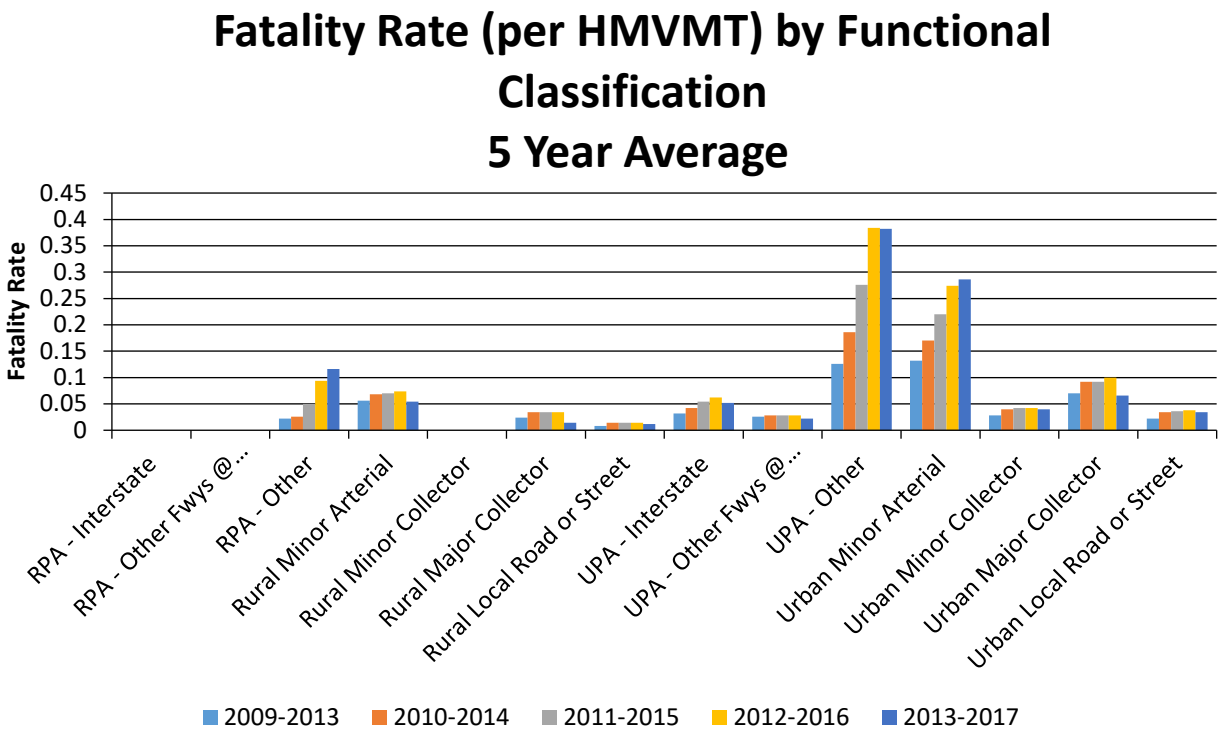
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Other	12		0.12	
Rural Minor Arterial	5.4		0.05	
Rural Minor Collector	0.2			
Rural Major Collector	1.4		0.01	
Rural Local Road or Street	1.2		0.01	
Urban Principal Arterial (UPA) - Interstate	5.2	17	0.05	0.17
Urban Principal Arterial (UPA) - Other Freeways and Expressways	2.2	8.8	0.02	0.09
Urban Principal Arterial (UPA) - Other	41		0.38	
Urban Minor Arterial	20.4		0.29	
Urban Minor Collector	4.6		0.04	
Urban Major Collector	6.6		0.07	
Urban Local Road or Street	3.4		0.03	

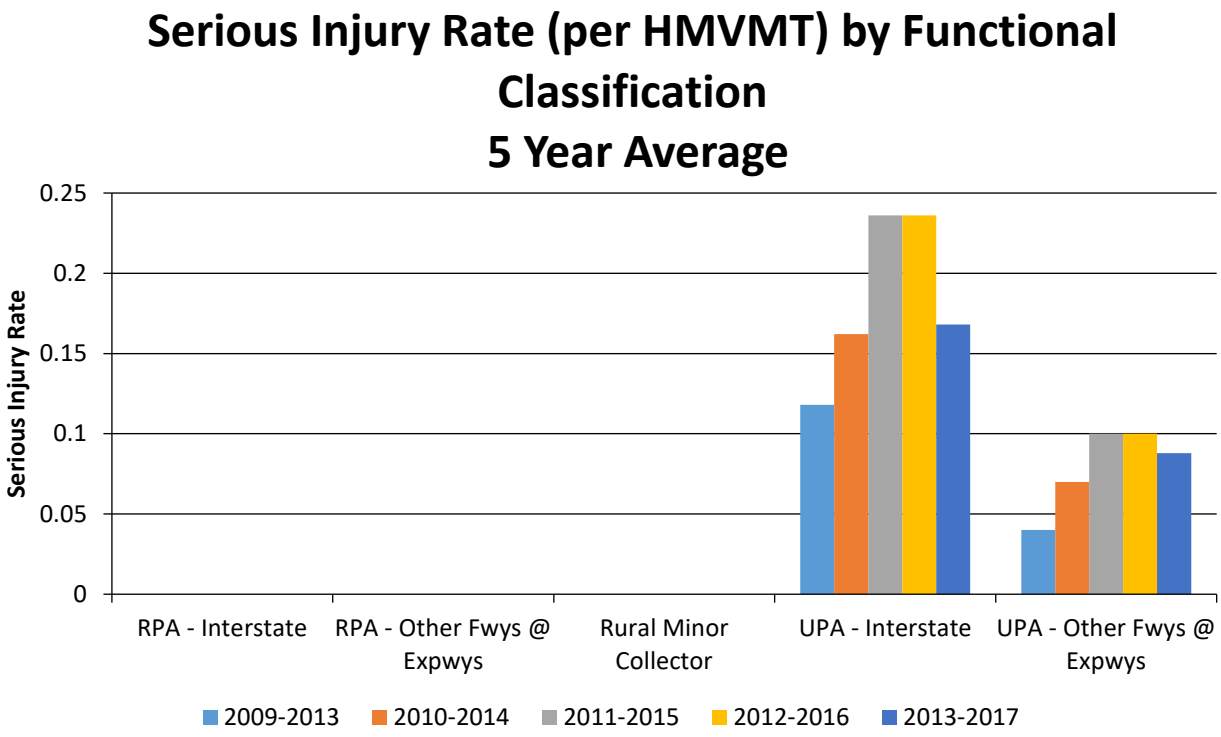
Year 2017

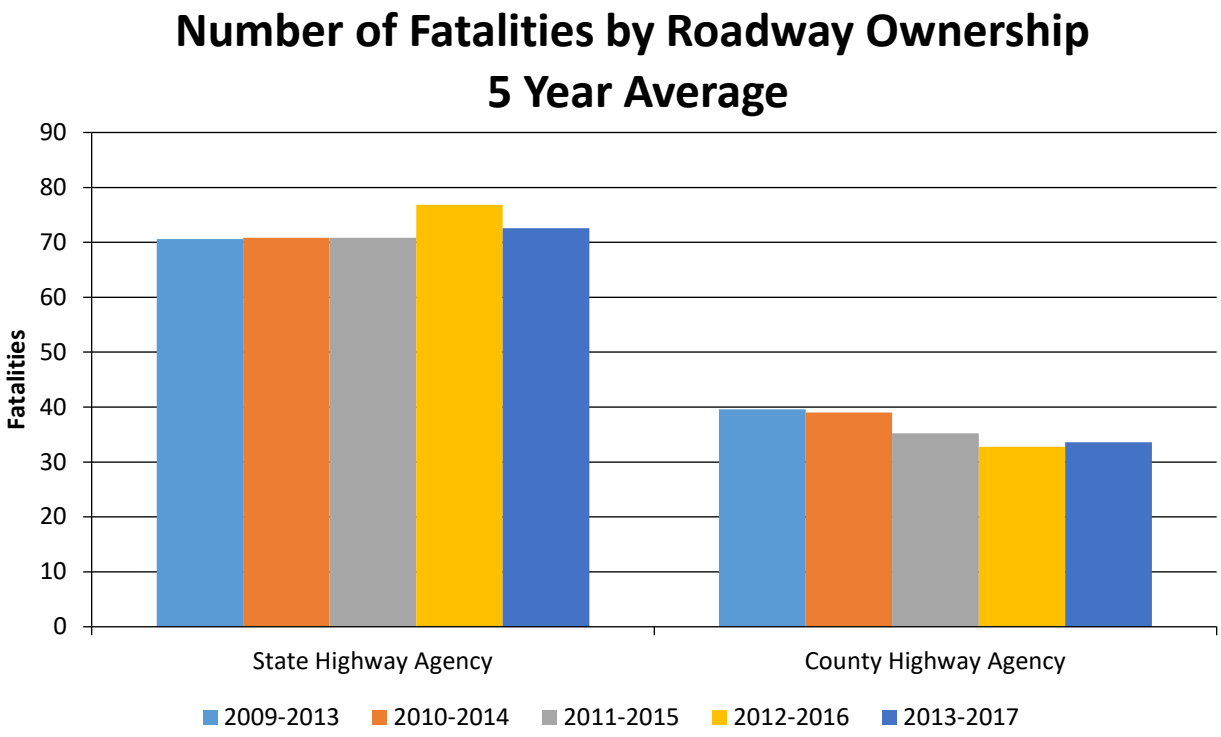
Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency	72.6	45.8	0.56	0.45
County Highway Agency	33.6		25.15	
Town or Township Highway Agency				
City of Municipal Highway Agency				
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				

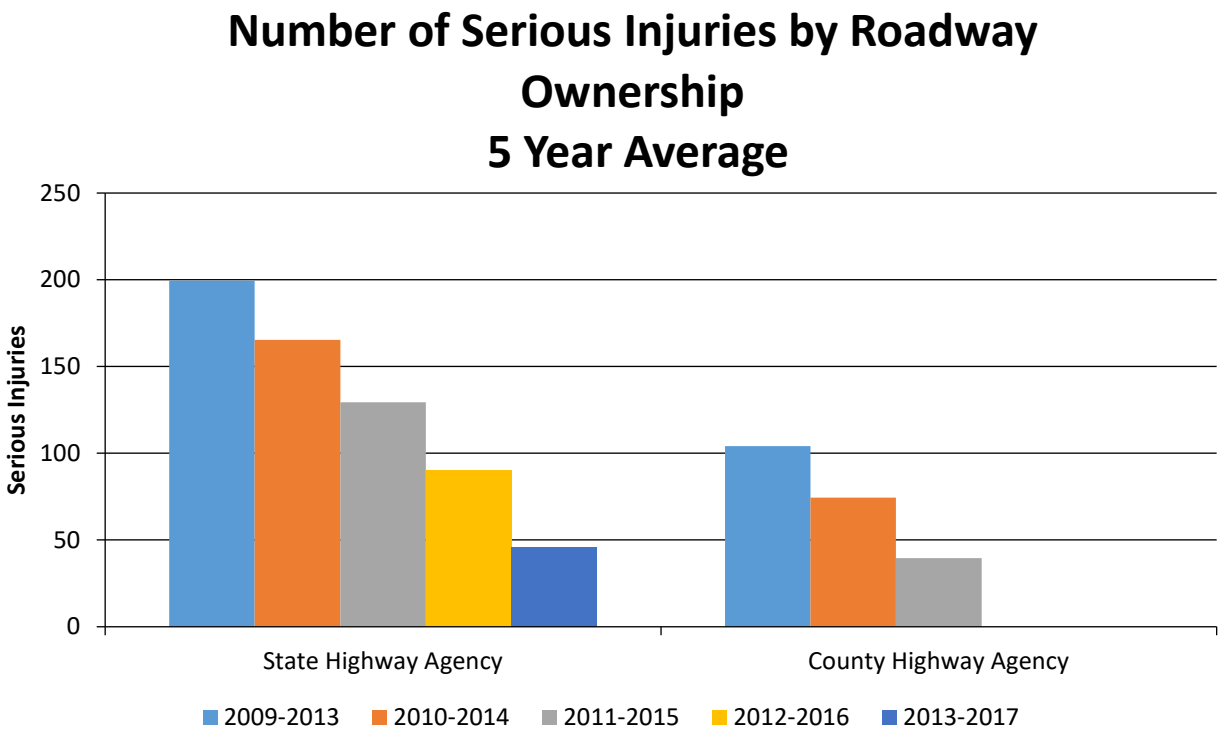

Number of Fatalities by Functional Classification
5 Year Average
Fatalities
45
40
35
30
25
20
15
10
5
0
RPA - Interstate
RPA - Other Fwys @ Expwys
RPA - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
UPA - Interstate
UPA - Other Fwys @ Expwys
UPA - Other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

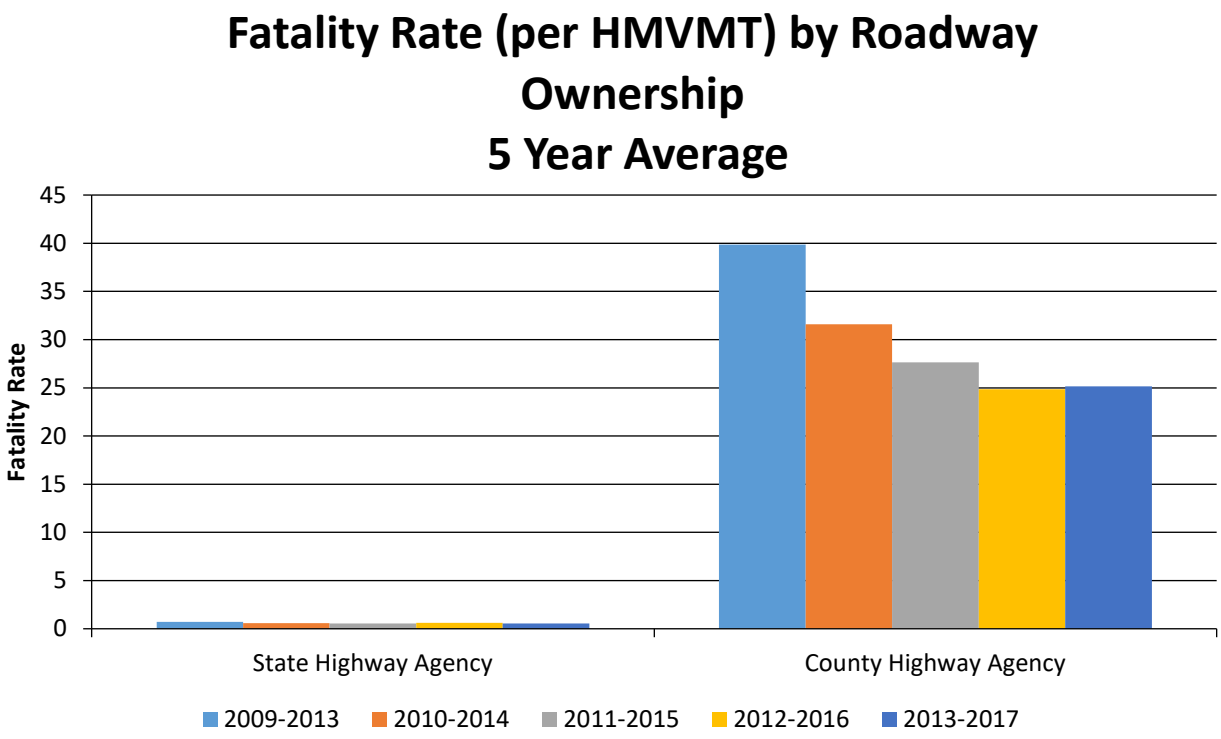

Number of Serious Injuries by Functional Classification
5 Year Average
Serious Injuries
25
20
15
10
5
0
RPA - Interstate
RPA - Other Fwys @ Expwys
Rural Minor Collector
UPA - Interstate
UPA - Other Fwys @ Expwys
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017

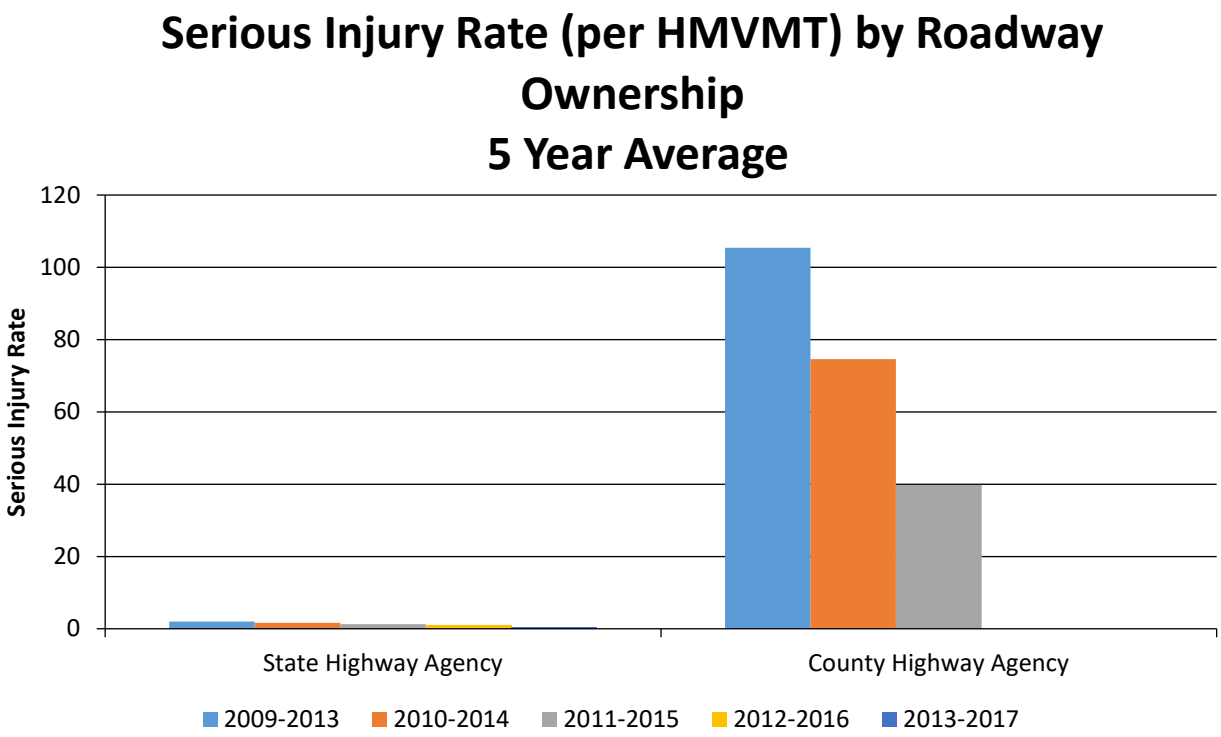

Fatality Rate (per HMVMT) by Functional Classification
5 Year Average
Fatality Rate
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
RPA - Interstate
RPA - Other Fwys @...
RPA - Other
Rural Minor Arterial
Rural Minor Collector
Rural Major Collector
Rural Local Road or Street
UPA - Interstate
UPA - Other Fwys @...
UPA - Other
Urban Minor Arterial
Urban Minor Collector
Urban Major Collector
Urban Local Road or Street
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Serious Injury Rate (per HMVMT) by Functional Classification
5 Year Average
Serious Injury Rate
0.25
0.2
0.15
0.1
0.05
0
RPA - Interstate
RPA - Other Fwys @ Expwys
Rural Minor Collector
UPA - Interstate
UPA - Other Fwys @ Expwys
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Number of Fatalities by Roadway Ownership
5 Year Average
Fatalities
90
80
70
60
50
40
30
20
10
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
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
45
40
35
30
25
20
15
10
5
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.

We are currently addressing the timeliness of our data. Due to previous manpower shortage, it was difficult to keep up with the workflow. We shifted our priorities to increase the timeliness of the database. We are currently working with a vendor to replace the existing obsolete database and address the data backlog. Data for next year's report should reflect more complete and current data.
Data for functional classification previous to 2012 was not collected. Data above are annual statistics due to unavailable 5 year average data. Since data for County Roadways is complete until 2011, we are only able to extract functional classifications that only exist for State Roadways for 2012 - 2015 (Urban principal Arterial - Interstate and Urban Principal Arterial - Other Freeways and Expressways).

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

Yes

Provide additional discussion related to general highway safety trends.

We are currently addressing the timeliness of our data. During this FFY we have selected a vendor through an RFP to upgrade our current obsolete database, replace it with a more robust system, and address the backlog of data. Data for next year's report should reflect more current data years as the development of the database is currently underway.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2019 Targets *

Number of Fatalities	96.0

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

The numerical value estimated for the number of fatalities in 2019 was calculated based on past historical data with an SHSP goal of reducing fatalities toward the ultimate goal of zero deaths.

Number of Serious Injuries	413.0

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

The numerical value estimated for the number of serious injuries in 2019 was calculated based on past historical data with an SHSP of reducing the number of severe accidents for future years.

Fatality Rate	0.916

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

The numerical value estimated for the fatality rate in 2019 was calculated based on past historical data with an SHSP goal of reducing fatalities toward the ultimate goal of zero deaths.

Serious Injury Rate	3.950

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

The numerical value estimated for the serious injury rate in 2019 was calculated based on past historical data with an SHSP of of reducing the number of severe accidents for future years.

Total Number of Non-Motorized Fatalities and Serious Injuries	120.7

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

The numerical value estimated for the number of non-motorized fatalities and serious injuries in 2019 was calculated based on past historical data with an SHSP of reducing the number of fatal and severe accidents for future years. Bicyclists and Pedestrians Safety is and emphasis area in HDOT's SHSP.

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.

Last year we held a Safety Target Setting Coordination & Training Workshop sponsored by FHWA and NHTSA. Members from the State Highway Safety Office (SHSO), Oahu MPO, Maui MPO, Department of Health and Department of Transportation were invited. The instructors assisted our state by providing background, requirements and methods for us to use. The performance measures provided in the HSIP report match those in the Highway Safety Plan. We have provided our performance measures to the MPOs to assist them with developing their performance measures.

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

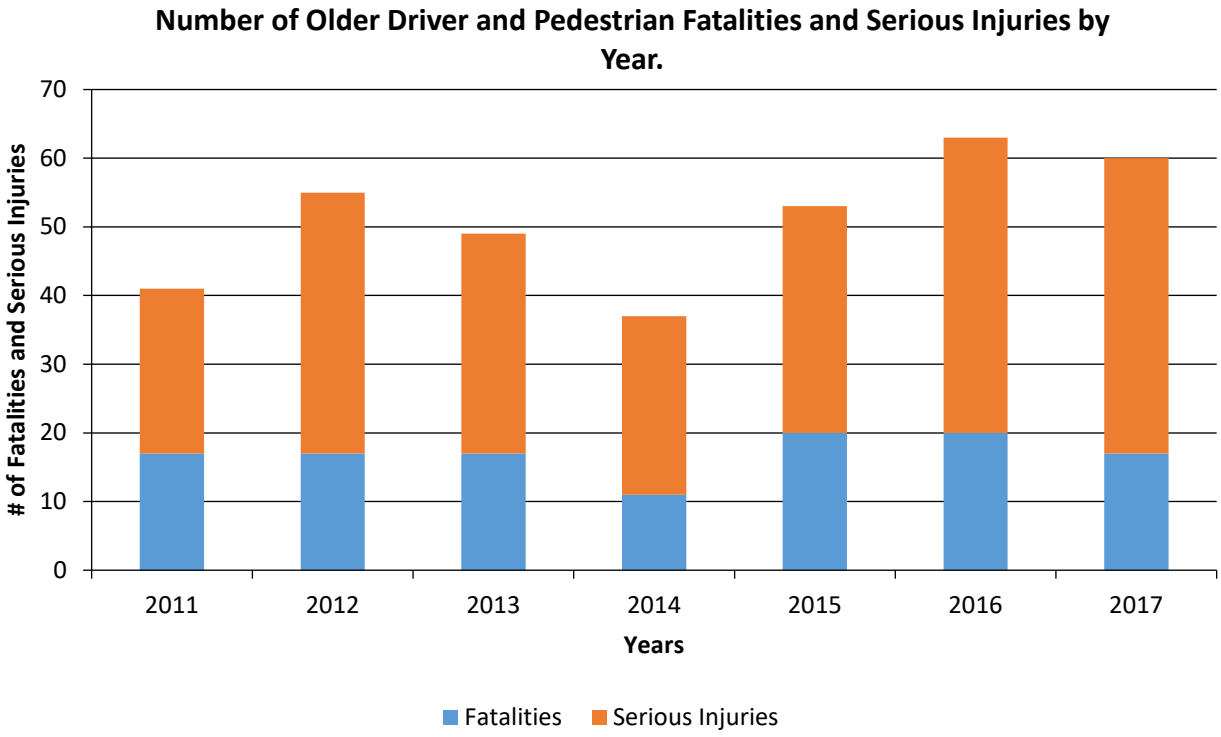
Does the HRRR special rule apply to the State for this reporting period?

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	2011	2012	2013	2014	2015	2016	2017
Number of Older Driver and Pedestrian Fatalities	17	17	17	11	20	20	17
Number of Older Driver and Pedestrian Serious Injuries	24	38	32	26	33	43	43



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

We have not received all major traffic accidents reports for 2017 from the police departments at this time.

Since this program does not allow for any blanks in the above table, we have decided to use the previous year's number for the serious injuries for older driver and pedestrians to complete this response.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

Benefit/Cost Ratio

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.

If benefit/cost ratio is greater than 1 it is determined to be an indicator of success.

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

HSIP Obligations

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

We need to continuously track the completion of HSIP projects to make sure there are no lapsing funds.

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

Yes

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

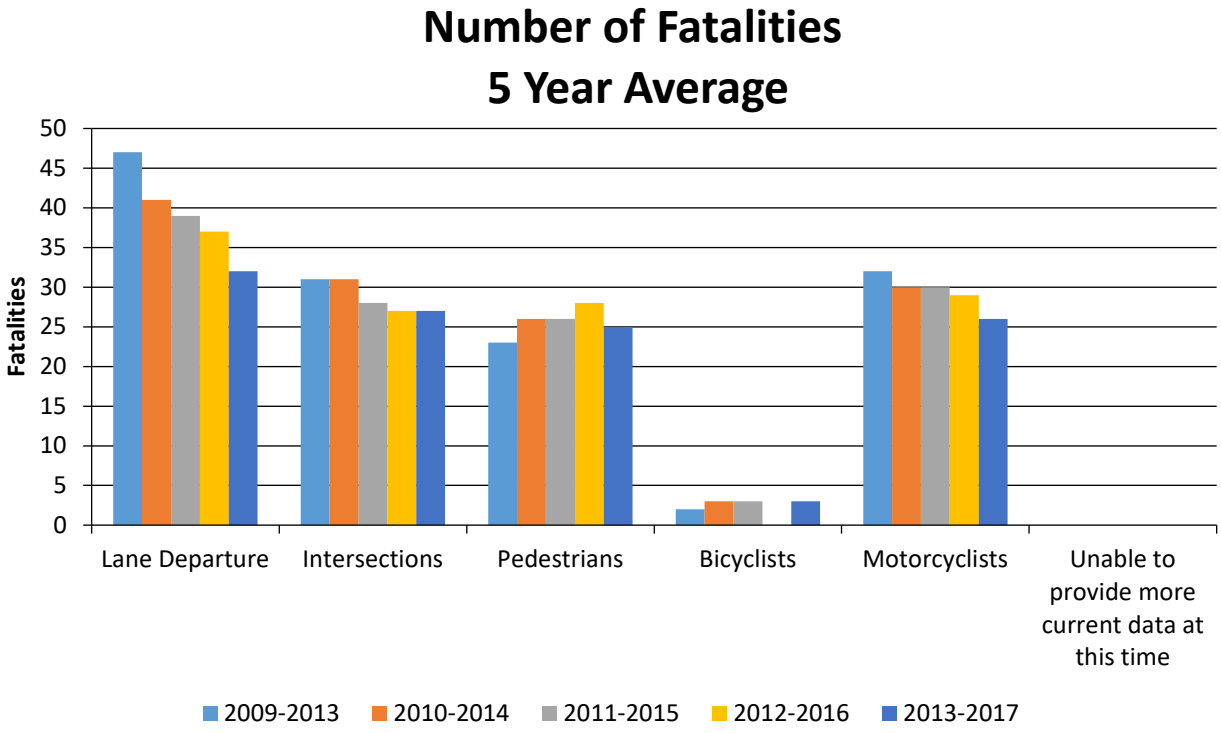
We are currently addressing the timeliness of our data. Due to previous manpower shortage, it was difficult to keep up with the workflow. Although we are still short on manpower, we have reshifted our priorities to increase the timeliness of the database. We have selected a vendor through an RFP to replace the existing obsolete database and address the data backlog. Data for next year's report should reflect more current data years.

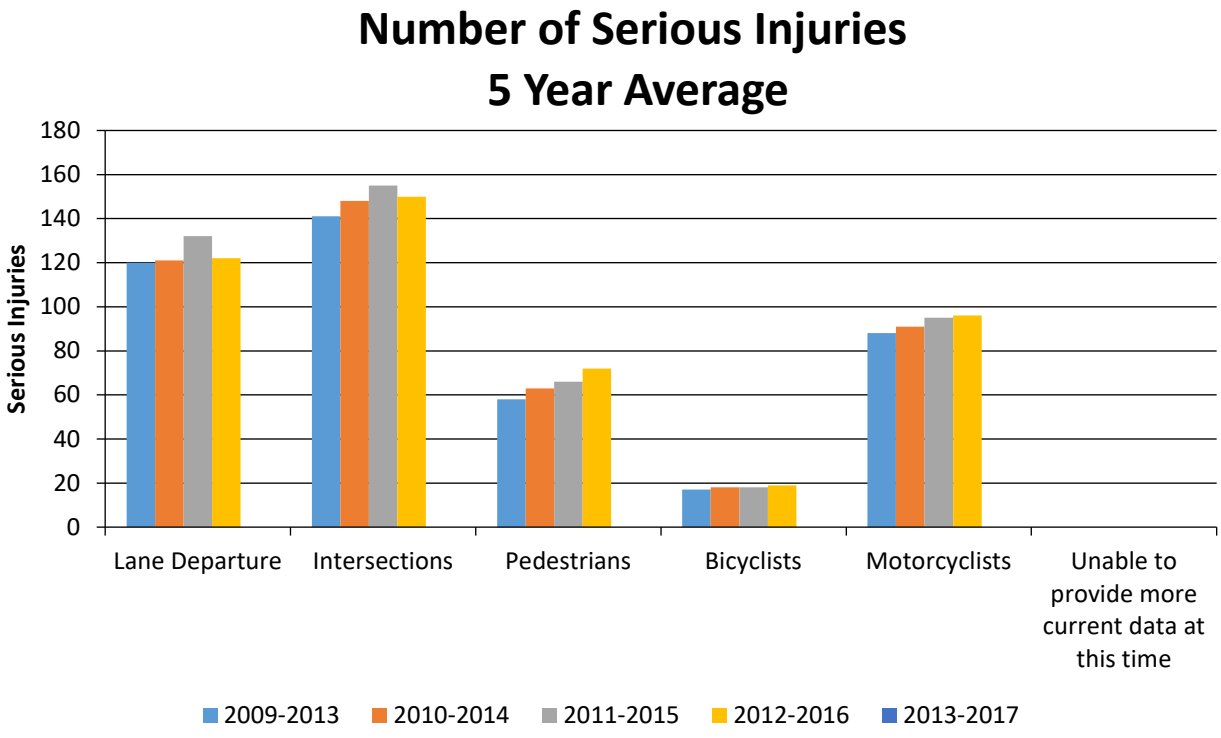
Effectiveness of Groupings or Similar Types of Improvements

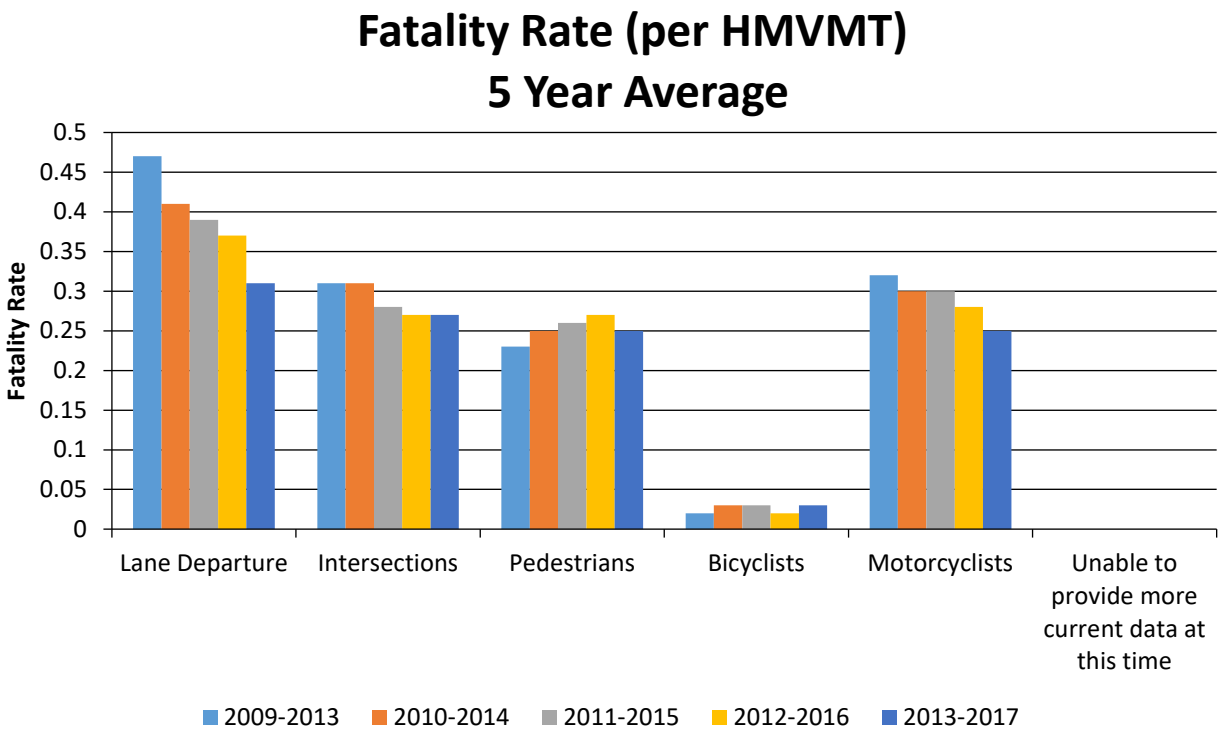
Present and describe trends in SHSP emphasis area performance measures.

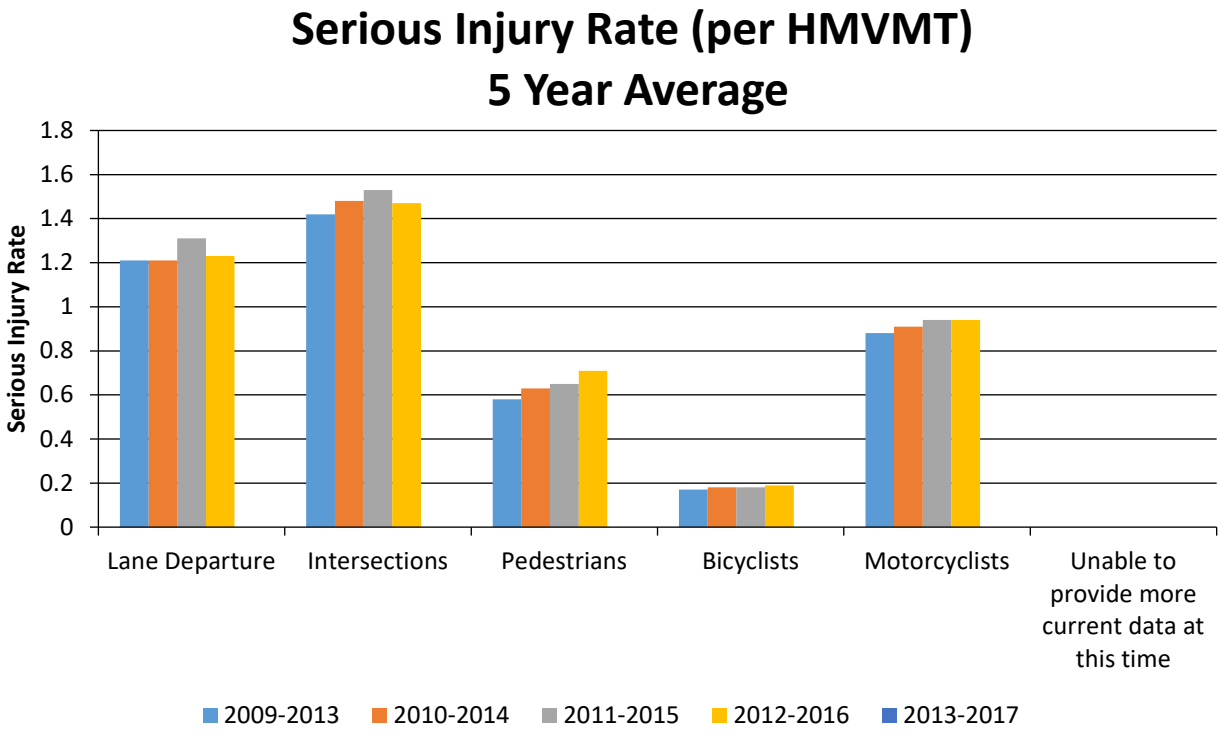
Year 2017

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		32		0.31	
Intersections		27		0.27	
Pedestrians		25		0.25	
Bicyclists		3		0.03	
Motorcyclists		26		0.25	
Unable to provide more current data at this time					


Number of Fatalities
5 Year Average
Fatalities
50
45
40
35
30
25
20
15
10
5
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Motorcyclists
Unable to provide more current data at this time
2009-2013
2010-2014
2011-2015
2012-2016
2013-2017


Number of Serious Injuries
5 Year Average
Serious Injuries
180
160
140
120
100
80
60
40
20
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Motorcyclists
Unable to provide more current data at this time
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.

2017 Serious injury data has not been reported since it is incomplete at this time

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

2018 Hawaii Highway Safety Improvement Program

No

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

HDOT is collaborating with the University of Hawaii to develop a System Roadway Departure Plan. With the development of this plan, HDOT hopes to address more systemic safety improvements with proven low-cost safety countermeasures. After the plan is complete, HDOT would evaluate the effectiveness of the countermeasures.

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)
Choose option not to report at this time														

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?

Yes

Describe any other aspects of HSIP effectiveness on which the State would like to elaborate.

The State of Hawaii consider fatal and serious injury accidents for all analyses along with the total number of major traffic accidents. We will be working towards providing more of the requested data with next year's submittal.

Compliance Assessment

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

01/01/2013

What are the years being covered by the current SHSP?

From: 2013 To: 2018

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

2019

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	0	0
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	0	0
End Point Segment Descriptor (11)	100	100					100	100	0	0
Segment Length (13)	100	100								
Direction of Inventory (18)	100	100								
Functional Class (19)	100	100					100	100	0	0
Median Type (54)	100	100								
Access Control (22)	100	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
One/Two Way Operations (91)	100	100								
Number of Through Lanes (31)	100	100					100	100		
Average Annual Daily Traffic (79)	100	100					100	0		
AADT Year (80)	100	100								
Type of Governmental Ownership (4)	100	100					100	100	0	0
INTERSECTION										
Unique Junction Identifier (120)			0	0						
Location Identifier for Road 1 Crossing Point (122)			0	0						
Location Identifier for Road 2 Crossing Point (123)			0	0						
Intersection/Junction Geometry (126)			0	0						
Intersection/Junction Traffic Control (131)			0	0						
AADT for Each Intersecting Road (79)			0	0						
AADT Year (80)			0	0						
Unique Approach Identifier (139)			0	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)					0	100				
Roadway Type at End Ramp Terminal (199)					0	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)					0	100				
Ramp AADT (191)					100	100				
Year of Ramp AADT (192)					100	100				
Functional Class (19)					100	100				
Type of Governmental Ownership (4)					100	100				
Totals (Average Percent Complete):	**100.00**	**100.00**	**0.00**	**0.00**	**72.73**	**100.00**	**100.00**	**88.89**	**0.00**	**0.00**

*Based on Functional Classification

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

One of the members on the TRCC is from the Planning Branch, who maintains the roadway data elements. They are aware of the requirements to have complete MIRE fundamental data elements on all public roads by September 30, 2026.
Note that all interchange/ramps are state-owned.

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.

No actions at this time.
We suggest the Highway Performance Monitoring System (HPMS) coordinate with MIRE to meet the requirements.

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	Incapacitating	No	N/A	No	N/A	No
Crash Report Form Instruction Manual	Incapacitating	No	Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred. Often defined as "needing help from the scene."	No	Severe lacerations, broken or distorted limbs, skull or chest injuries, abdominal injuries, unconsciousness at or when taken from the accidents scene, unable to leave the accident scene without assistance.	No
Crash Database	Incapacitating	No	N/A	No	N/A	No
Crash Database Data Dictionary	Incapacitating	No	Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities the person was capable of performing before the injury occurred. Often defined as "needing help from the scene."	No	Severe lacerations, broken or distorted limbs, skull or chest injuries, abdominal injuries, unconsciousness at or when taken from the accidents scene, unable to leave the accident scene without assistance.	No

Please describe the actions the State is taking to become compliant by April 15, 2019.

The revision of the crash report form and the crash report form instruction manual to include new serious injury definitions has been approved by our TRCC and has been sent and approved by our Director of Transportation. Letters to the police departments and sheriffs office has been sent for dissemination with an go-live date request of January 1, 2019.
We are also working with our current vendor to implement database changes according to the revised crash form.

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.

2018

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

We will be working with our FHWA office to conduct an HSIP program assessment.

Optional Attachments

Program Structure:

HSIP report2006.doc

Project Implementation:

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.