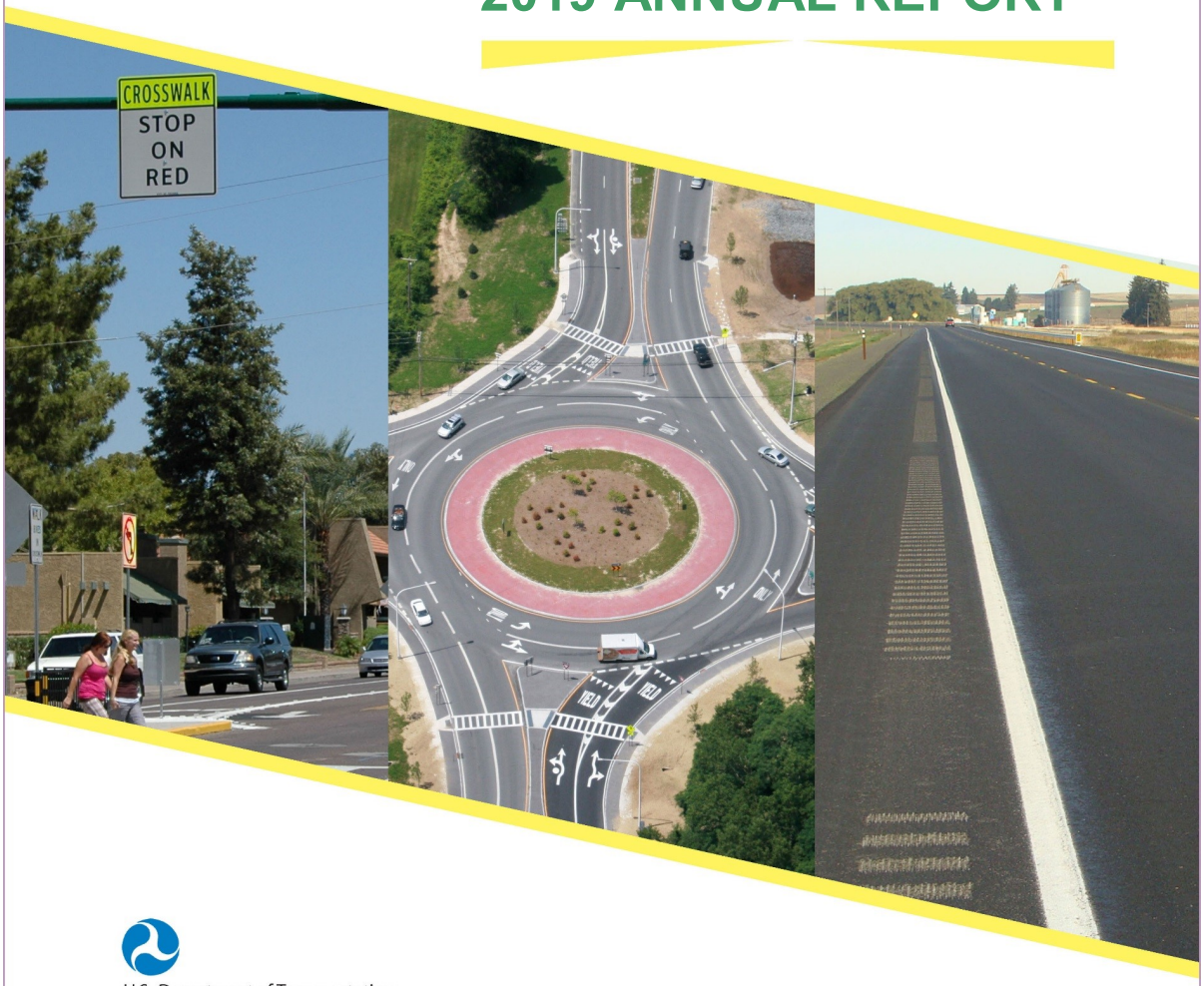
IOWA

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2019 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

Progress continues to be made toward implementing a more data-informed approach for identifying locations and potential countermeasures for safety improvements. The Iowa DOT has established a Safety Analysis Incorporation (SAI) group, with representatives from various offices across the DOT, to oversee the development of tools and processes to advance the consideration of safety at all stages of project development. Some efforts overseen by the SAI group include: calibration of the Highway Safety Manual (HSM) safety performance functions (SPFs) to Iowa conditions, publication of an Iowa-specific list of crash modification factors (CMFs), development of a suite of HSM spreadsheet tools to evaluate project impacts and alternatives, and replacement of Iowa's historical intersection crash rates with SPFs calculated using open-source software.

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 state's HSIP funds are distributed amongst two different pots: statewide and districts. Statewide projects are identified by central office staff based on research/study results, and can involve a mixture of hot-spot and systemic improvements. District projects are identified by the districts, based on their judgment or the results of a safety study, such as their District Road Safety Plan. All projects are selected for funding by central office staff. District projects are approved for funding based on whether they were identified by their respective District Road Safety Plan or whether the benefit-cost ratio exceeds one. District projects are typically designed in-house, but the majority of statewide projects are designed by an outside consultant. All projects are tracked by central office staff, including crashes, costs, and construction dates. Crashes for 3 to 5 years pre-construction are compared 3 to 5 years of post-construction crashes, and a benefit-cost analysis is conducted for all projects.

Where is HSIP staff located within the State DOT?

Operations

HSIP staff are located in the Traffic & Safety Bureau, which is located in the Operations Division of the Iowa DOT.

How are HSIP funds allocated in a State?

- Formula via Districts/Regions

The Traffic & Safety Bureau retains 20 percent of the funds for statewide initiatives while the remaining funds are allocated by formula to the DOT's six districts. The distribution formula is based on the split amongst districts of the state's serious injury and fatal crashes. Districts 1 and 6 each receive 16 percent of the funds, while the remaining four districts each receive 12 percent of the funds.

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

Iowa's HSIP addresses local roads through the HSIP-Secondary program. This program was established in 2013 as a $2 million yearly set-aside out of Iowa's HSIP to address safety issues on the secondary (county-

owned) roadway system. This program is focused on providing funding for projects that incorporate systemic, low-cost safety improvements, typically costing less than $10,000 per mile. Typical countermeasures include rumble strips, grooved-in pavement markings, paved shoulders, improved signage, and guardrail updates. This past year, the HSIP-Secondary program switched from utilizing federal HSIP funding to state funds.

Safety improvements on other local roads, including county, city, and tribal roads, are addressed via the state's Transportation Safety Improvement Program (TSIP). TSIP is a competitive, application-based program that awards approximately $7 million in state funds annually for safety projects on and off the state system. Funding is provided in three categories: the completion of studies, the purchase of traffic control devices, and the construction of larger infrastructure projects.

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

- Districts/Regions
- Traffic Engineering/Safety

Describe coordination with internal partners.

Iowa DOT districts are typically charged with developing and overseeing HSIP projects, so they are consulted early and often in the HSIP planning process. HSIP projects are chosen that align with SHSP emphasis areas, typically intersections and lane departures. A large majority of funding goes toward addressing lane departure crashes through shoulder improvements, most commonly paving existing shoulders. District Road Safety Plans have been completed, so the districts utilize the project recommendations that resulted from the data-driven, risk-based plans, either by submitting these as HSIP candidate projects, or by addressing locations with their own forces.

Identify which external partners are involved with HSIP planning.

- Other-None.

Describe coordination with external partners.

None.

Program Methodology

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

Yes
FileName:
HSIP Manual FINAL FY 19.pdf

An update to the HSIP Manual is planned to occur in the Fall of 2019.

Select the programs that are administered under the HSIP.

- HSIP (no subprograms)

Date of Program Methodology:5/1/2017

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
All crashes	Volume	

What project identification methodology was used for this program?

- Crash frequency
- Other-Risk Factors

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?

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?

49

HSIP funds are used to address which of the following systemic improvements?

- Cable Median Barriers
- High friction surface treatment

- Pavement/Shoulder Widening
- Rumble Strips

What process is used to identify potential countermeasures?

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- SHSP/Local road safety plan

Does the State HSIP consider connected vehicles and ITS technologies?

No

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.

Iowa is in the early stages of implementing the HSM. The foundation for increased usage is being laid by calibrating the SPFs in the HSM to local conditions. The SPFs will be used to screen the system for locations that could benefit from a safety improvement.

Although the state has been using CMFs for years, the number of CMFs available on the CMF clearinghouse has grown exponentially, yet there remains many countermeasures for which a good CMF does not exist - especially for those countermeasures that typically occur simultaneously (such as paving shoulders and adding rumble strips). Therefore, the need for state-specific CMFs was identified, and a list of approximately 70 CMFs was published in August 2019.

Finally, a consultant is developing a state-specific framework for conducting safety evaluations consistent with HSM methods, via a spreadsheet tool. The rural two-lane and rural multilane versions of the tool should be operational by 2020.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

State Fiscal Year

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$17,808,950	$16,865,403	94.7%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$0	$0	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$0	$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$17,808,950	$16,865,403	94.7%

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%

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

0%

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

0%

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%

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

Impediments to fully obligating programmed HSIP funds include proper estimating and long development timelines. Initial cost estimates tend to be high in order to account for project uncertainties and to avoid having to ask for more money at a later time. Project development timelines can be affected by multiple external forces including coordination, clearances, and unforeseen circumstances. Our goal is to work with project sponsors and project managers to improve the accuracy of cost estimates and to minimize time delays in order to obligate HSIP funds to the fullest extent.

General Listing of Projects

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

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
HSIPX-000-T(1)--3L-00	Roadway	Rumble strips - center	850	Miles	$1885442	$2094936	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	0	55	State Highway Agency	Systematic	Lane Departure	Rumble Strips
HSIPX-000-T(2)--3L-00	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified	4	Intersections	$604640	$671822	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other Freeways & Expressways	0	65	State Highway Agency	Systemic	Intersections	Intersection Awareness
IHSIPX-035-2(469)73--08-77	Roadway	Pavement surface - high friction surface	3	Interchange Ramps	$168378	$187087	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	0	45	State Highway Agency	Systemic	Lane Departure	HFST
HSIPX-052-2(120)--3L-31	Intersection traffic control	Modify control - two-way stop to roundabout	1	Intersections	$1419941	$9222736	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Other	2,100	45	State Highway Agency	Spot	Intersections	Alternative Intersections
IHSIPX-080-1(493)58--08-15	Roadside	Barrier - cable	16	Miles	$4001644	$4446271	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	22,600	70	State Highway Agency	Systemic	Lane Departure	Mecian Cable Barrier
HSIPX-092-5(68)--3L-91	Shoulder treatments	Pave existing shoulders	14	Miles	$2157291	$2396990	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	0	55	State Highway Agency	Systemic	Lane Departure	Paved Shoulders
HSIPX-136-3(51)--3L-31	Shoulder treatments	Pave existing shoulders	4.5	Miles	$728395	$809328	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Other	2,650	55	State Highway Agency	Systemic	Lane Departure	Paved Shoulders
HSIPX-150-3(74)--3L-10	Shoulder treatments	Pave existing shoulders	0.7	Miles	$107501	$119446	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	10,600	40	State Highway Agency	Systemic	Lane Departure	Paved Shoulders
HSIPX-220-0(17)--3L-48	Shoulder treatments	Pave existing shoulders	5	Miles	$482509	$536121	HSIP (23 U.S.C. 148)	Rural	Major Collector	2,100	55	State Highway Agency	Systemic	Lane Departure	Paved Shoulders
HSIPX-346-1(18)--3L-19	Roadway	Roadway narrowing (road diet, roadway reconfiguration)	0.3	Miles	$49602	$55113	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	3,600	35	State Highway Agency	Systemic	Speed-Related	Geometric Strategies

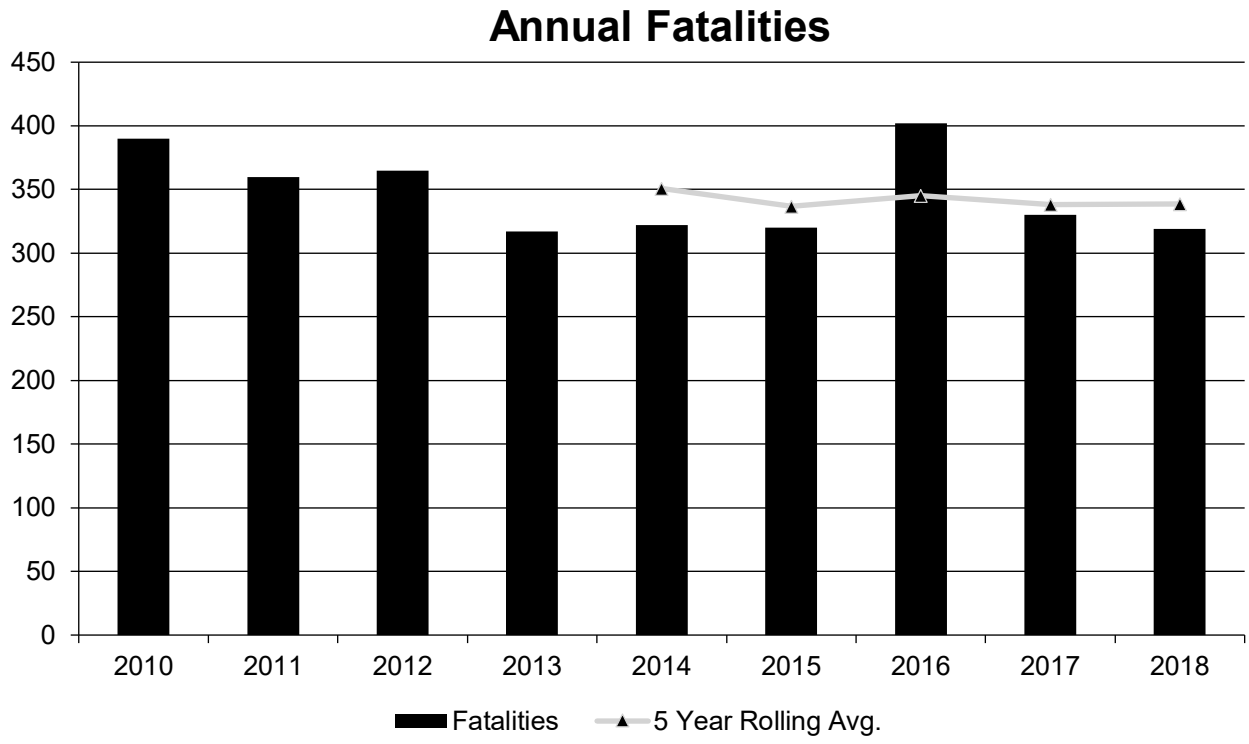
Since "varies" was not a valid option for the AADT entries, segments with widely varying AADTs were entered as "0".

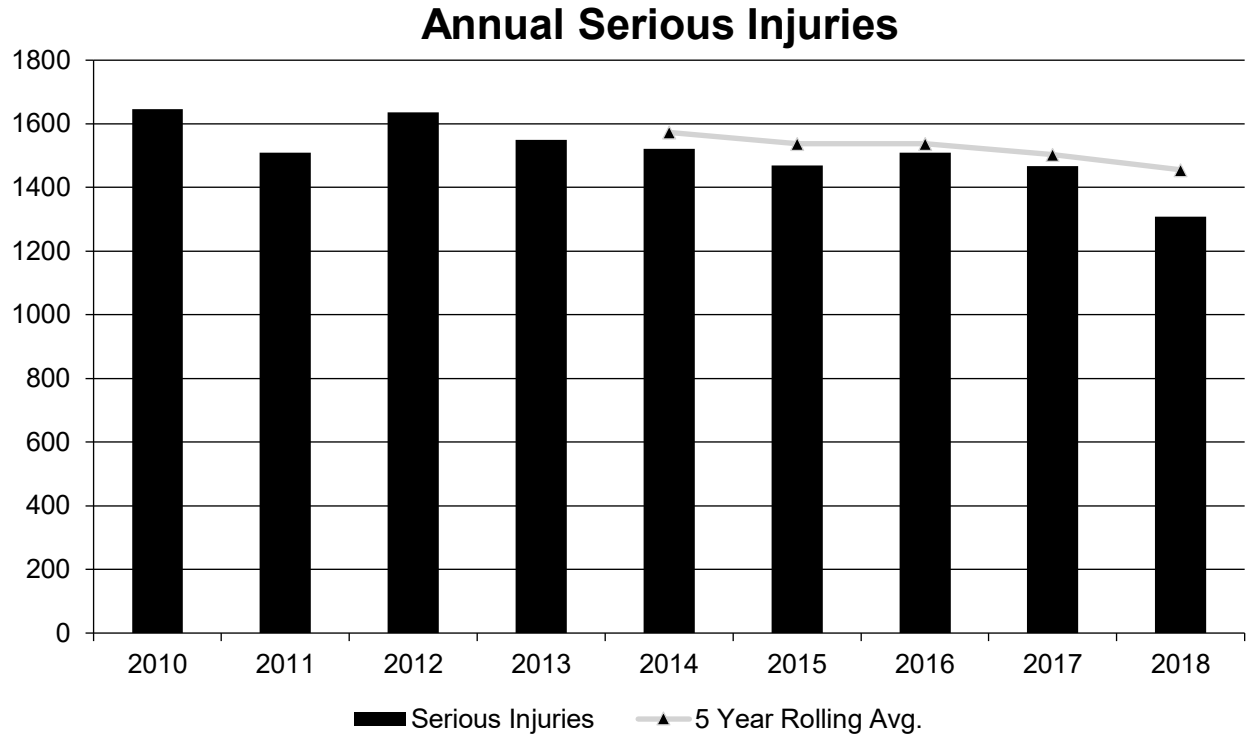
Safety Performance

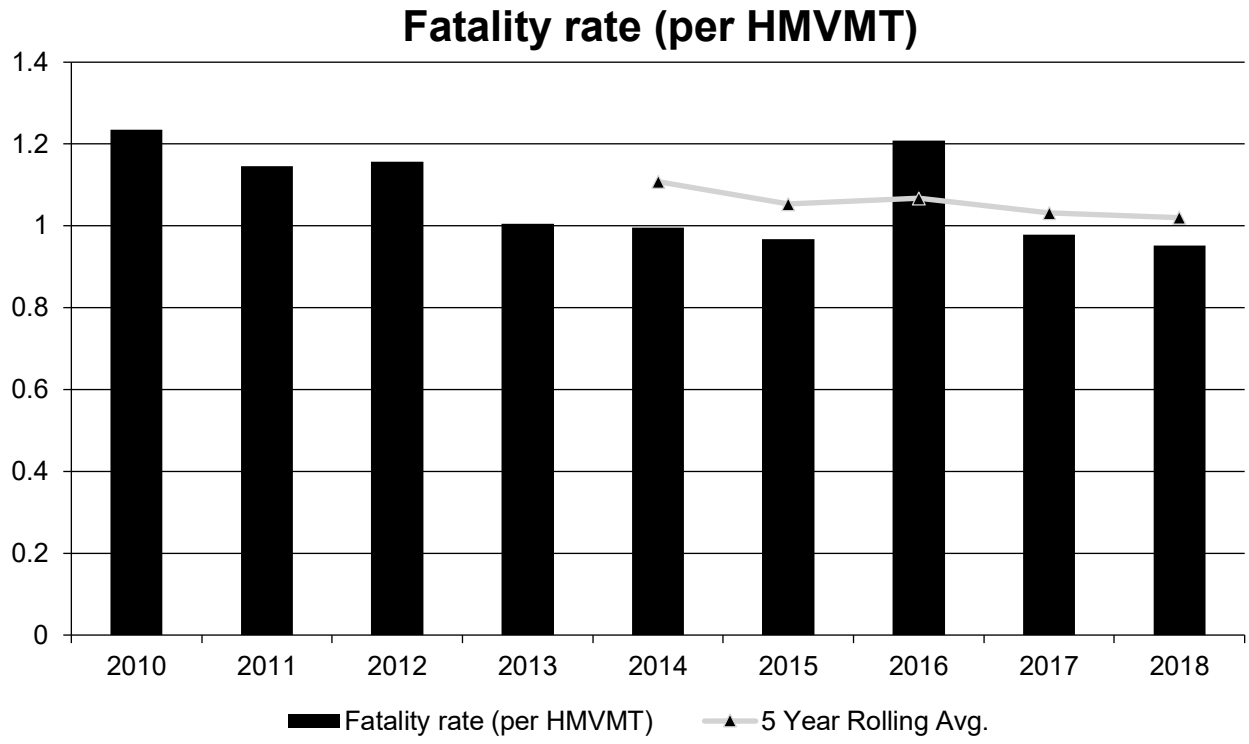
General Highway Safety Trends

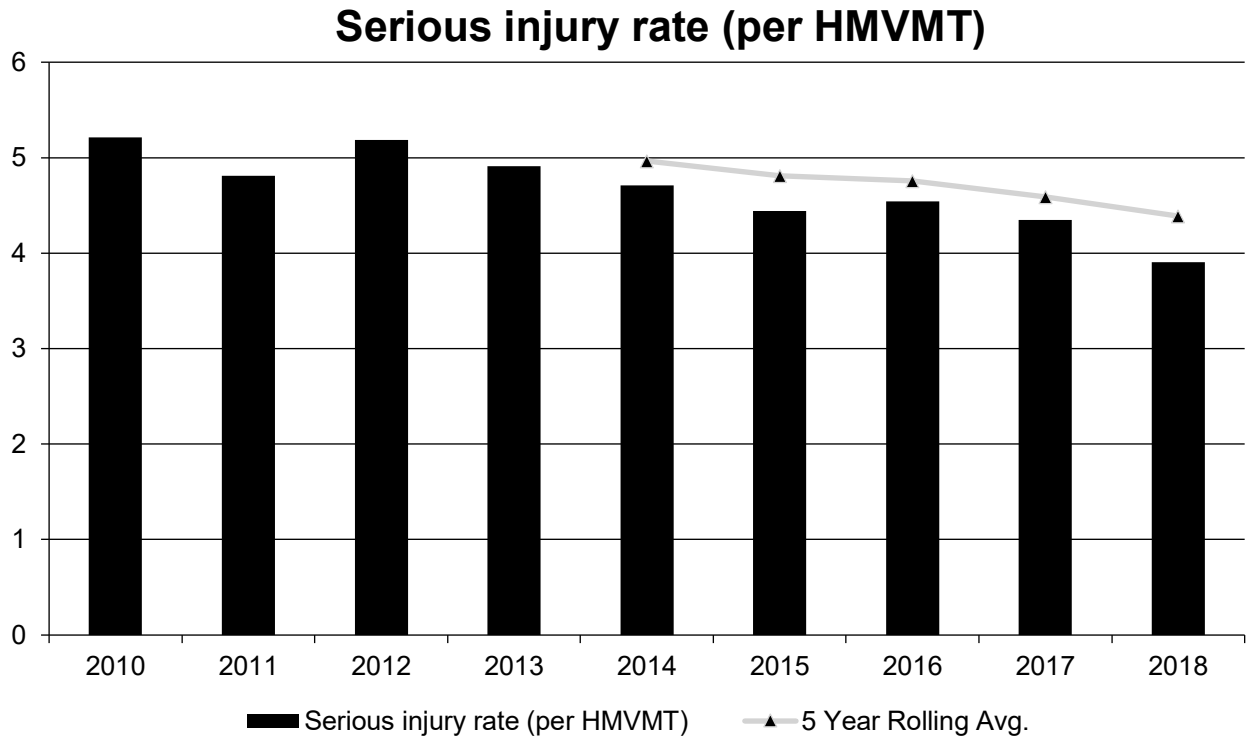
Present data showing the general highway safety trends in the State for the past five years.

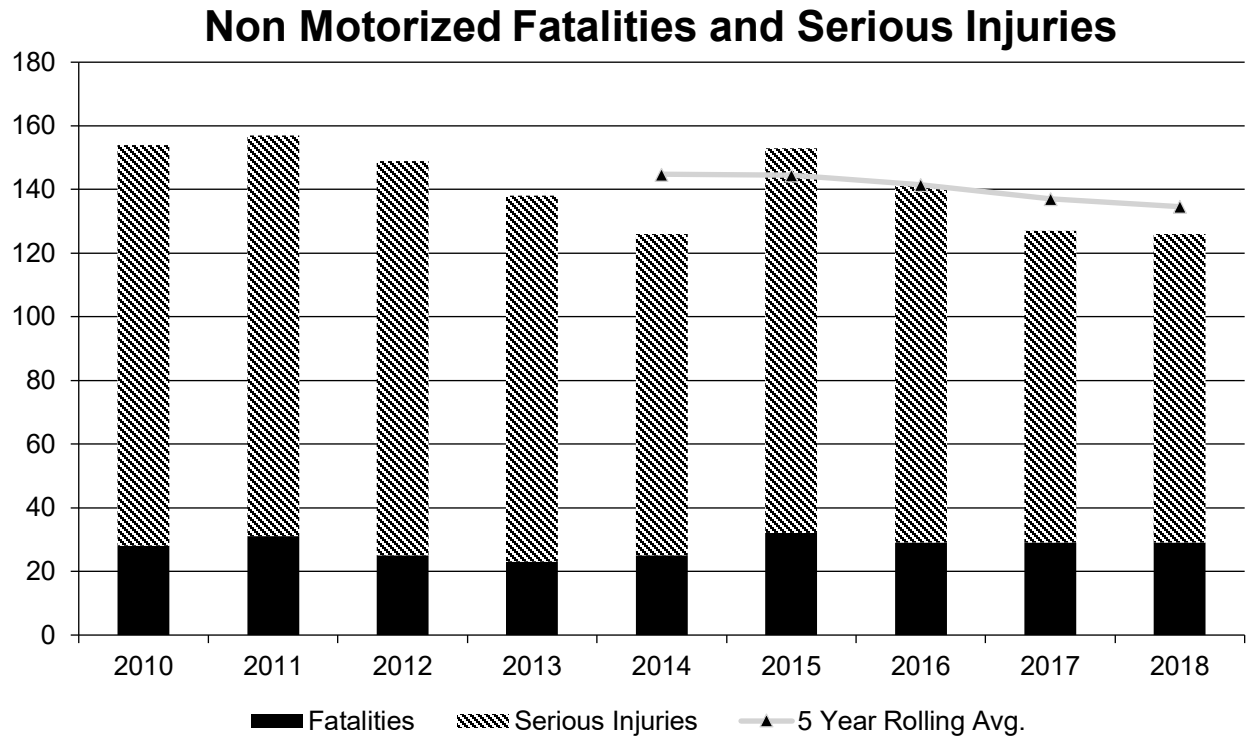
PERFORMANCE MEASURES	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fatalities	390	360	365	317	322	320	402	330	319
Serious Injuries	1,647	1,510	1,637	1,549	1,522	1,470	1,510	1,467	1,309
Fatality rate (per HMVMT)	1.235	1.146	1.156	1.005	0.996	0.967	1.209	0.978	0.952
Serious injury rate (per HMVMT)	5.215	4.807	5.184	4.911	4.707	4.440	4.540	4.347	3.907
Number non-motorized fatalities	28	31	25	23	25	32	29	29	29
Number of non-motorized serious injuries	126	126	124	115	101	121	112	98	97


Annual Fatalities
450
400
350
300
250
200
150
100
50
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
1800
1600
1400
1200
1000
800
600
400
200
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
6
5
4
3
2
1
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Describe fatality data source.

State Motor Vehicle Crash Database

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

Year 2018

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	25.6	79.2	0.47	1.47
Rural Principal Arterial (RPA) - Other Freeways and Expressways	28.6	77	0.53	1.43
Rural Principal Arterial (RPA) - Other	32	99.6	0.59	1.85
Rural Minor Arterial	44.6	142.8	1.77	5.67
Rural Minor Collector	32.6	128.4	4.35	17.14
Rural Major Collector	77	292.8	2.49	9.49
Rural Local Road or Street	64	240	6.76	25.33

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)**
Urban Principal Arterial (UPA) - Interstate	13	53.2	0.44	1.82
Urban Principal Arterial (UPA) - Other Freeways and Expressways	11.6	47.2	0.4	1.62
Urban Principal Arterial (UPA) - Other	20.8	127	0.71	4.35
Urban Minor Arterial	35.8	220.2	0.98	6.02
Urban Minor Collector	1.6	5.8	2.35	8.52
Urban Major Collector	20.2	121.2	1.43	8.59
Urban Local Road or Street	36	273.6	1.43	10.89

Year 2018

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	173.8	666.6	0.84	3.22
County Highway Agency	117	461.6	2.15	8.47
Town or Township Highway Agency				
City or Municipal Highway Agency	46.8	323	0.67	4.62
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				

Safety Performance Targets

Safety Performance Targets

Calendar Year 2020 Targets *

Number of Fatalities:345.8

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

A simple trend analysis of historical fatality data was performed. An integrated moving average model was run to estimate how much risk would be associated with each set of predictions. Our working

group settled on using a 75% confidence level. This means we are at least 75% confident the actual 5-year rolling average will be less than the target.

Number of Serious Injuries:1396.2

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

simple trend analysis of historical serious injury data was performed. An integrated moving average model was run to estimate how much risk would be associated with each set of predictions. Our working group settled on using a 75% confidence level. This means we are at least 75% confident the actual 5-year rolling average will be less than the target.

Fatality Rate:1.011

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

A simple trend analysis of historical fatality data was performed. An integrated moving average model was run to estimate how much risk would be associated with each set of predictions. Our working group settled on using a 75% confidence level. This means we are at least 75% confident the actual 5-year rolling average will be less than the target. This target supports the SHSP goal of continuing to reduce the fatality rate to 1.000 per HMVMT by 2020.

Serious Injury Rate:4.083

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

A simple trend analysis of historical serious injury data was performed. An integrated moving average model was run to estimate how much risk would be associated with each set of predictions. Our working group settled on using a 75% confidence level. This means we are at least 75% confident the actual 5-year rolling average will be less than the target. This target supports the SHSP goal of continuing to reduce the serious injury rate below 4.300 per HMVMT by 2020.

Total Number of Non-Motorized Fatalities and Serious Injuries:138.1

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

A simple trend analysis of historical non-motorized fatality and serious injury data was performed. An integrated moving average model was run to estimate how much risk would be associated with each set of predictions. Our working group settled on using a 75% confidence level. This means we are at least 75% confident the actual 5-year rolling average will be less than the target.

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

The DOT's safety target working group established the methodology for setting the performance targets, using the same process as last year. The chosen targets and a description of the methodology were shared with representatives from the Governor's Traffic Safety Bureau for comment. None were received.

A draft safety memo outlining the chosen targets and methodology was sent to all MPOs in the state with a

request for comments. No substantive comments regarding the targets or the methodology were received during the comment period.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2018 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.

The state of Iowa met each of the five safety performance targets for calendar year 2018.

Applicability of Special Rules

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

No

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	2012	2013	2014	2015	2016	2017	2018
Number of Older Driver and Pedestrian Fatalities	55	59	56	52	61	50	50
Number of Older Driver and Pedestrian Serious Injuries	131	157	145	91	129	115	129

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio

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

Overall since fiscal year 2001, the state's HSIP expenditures have resulted in a benefit-cost ratio of approximately 6 to 1. Some of the highest B-C ratios resulted from roadway signs, lighting, and roadside improvements.

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

- HSIP Obligations
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- Policy change

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

Iowa DOT's local road safety initiative, HSIP-Secondary, has historically been funded with a $2 million set-aside out of the state's HSIP allocation. Recently, the state received approval to swap federal funds for state funds in many of the DOT's programs. HSIP-Secondary was one of the programs selected to utilize swap funds. Therefore, starting in FY 19 and moving forward, all new HSIP-Secondary projects will be funded with state funds. However, some HSIP-Secondary projects that were already programmed were also switched over to state funds, which ultimately reduced the amount of HSIP funds that were obligated in FY 19.

This program change will necessitate identifying at least $2 million in additional HSIP funding opportunities to make up for the loss of the federally funded HSIP-Secondary Program.

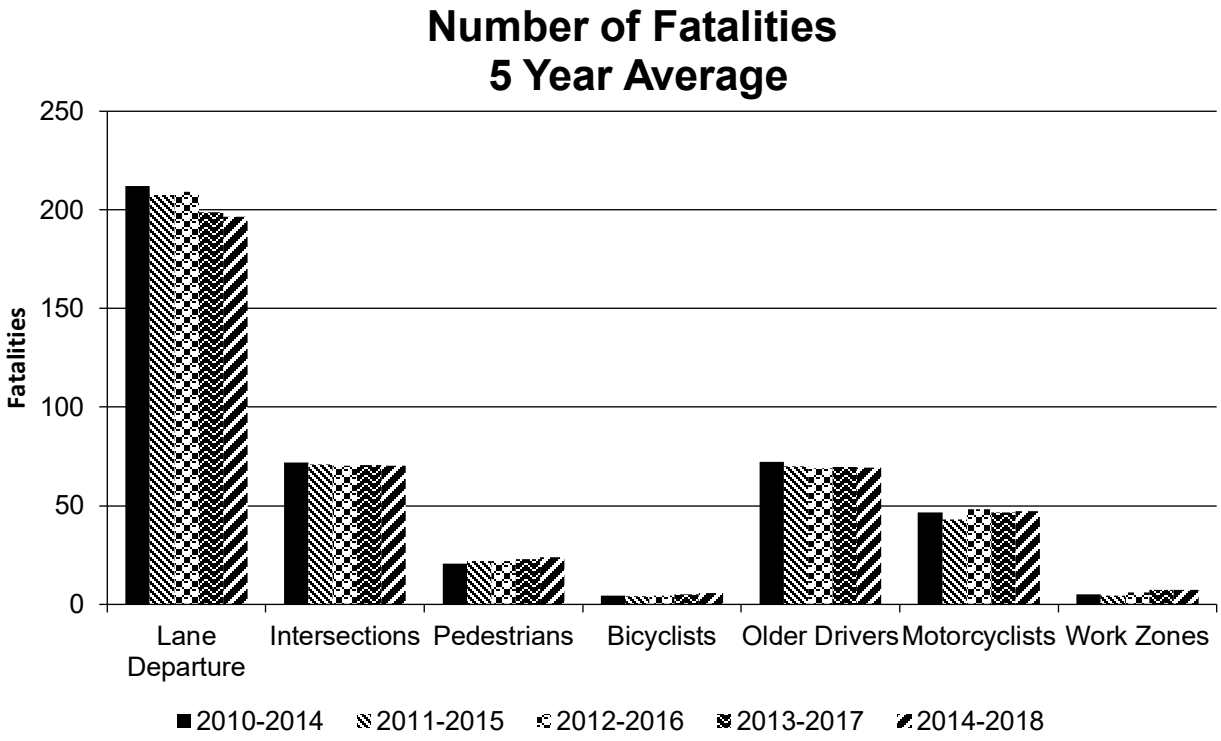
Effectiveness of Groupings or Similar Types of Improvements

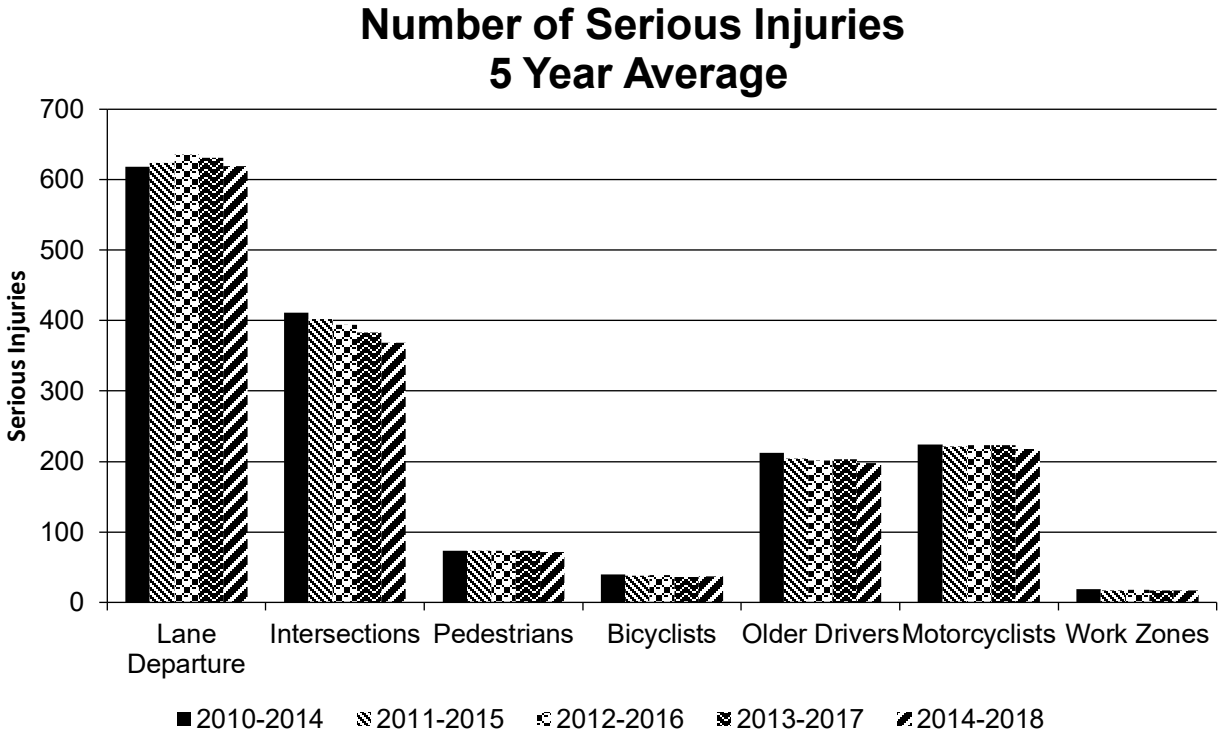
Present and describe trends in SHSP emphasis area performance measures.

Year 2018

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		196.6	619.4	0.59	1.85
Intersections		70.2	368.6	0.21	1.1

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)
Pedestrians		23.8	71.6	0.07	0.21
Bicyclists		5.8	36.6	0.01	0.11
Older Drivers		69.2	198.2	0.21	0.59
Motorcyclists		47.2	217.4	0.14	0.65
Work Zones		7.4	17.4	0.02	0.05


Number of Fatalities
5 Year Average
Fatalities
250
200
150
100
50
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
Work Zones
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018


Number of Serious Injuries
5 Year Average
Serious Injuries
700
600
500
400
300
200
100
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Older Drivers
Motorcyclists
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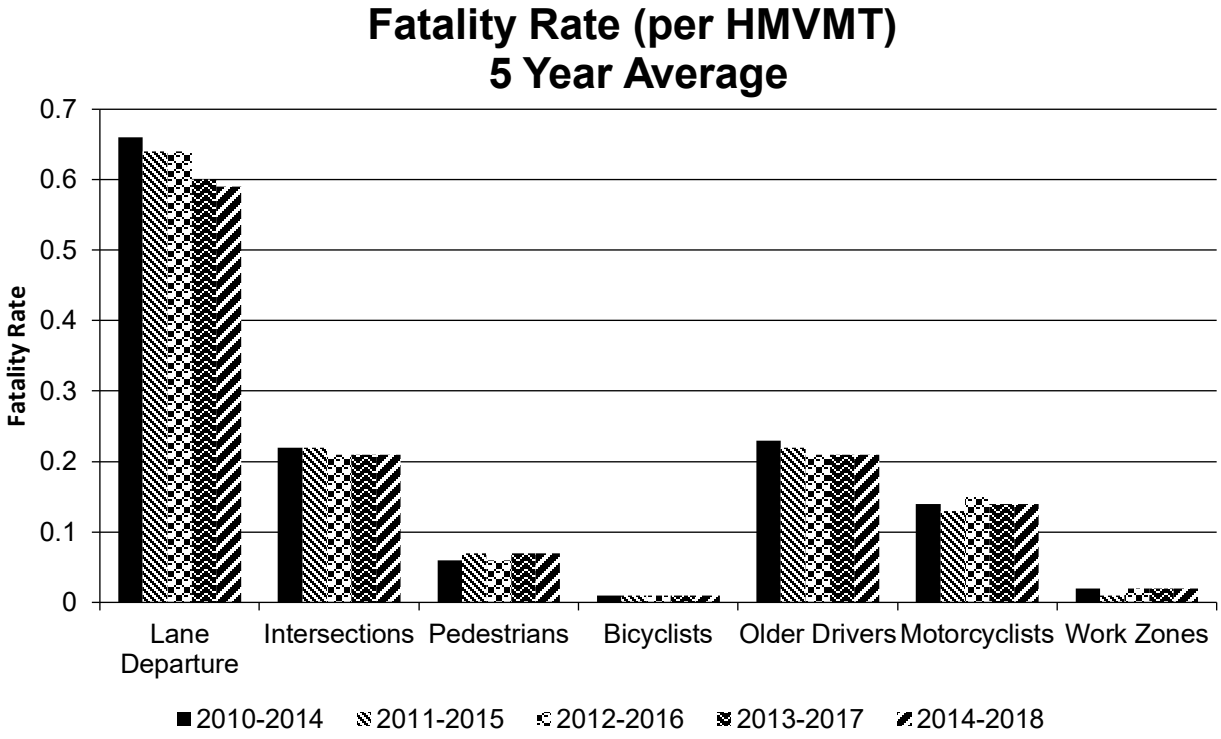
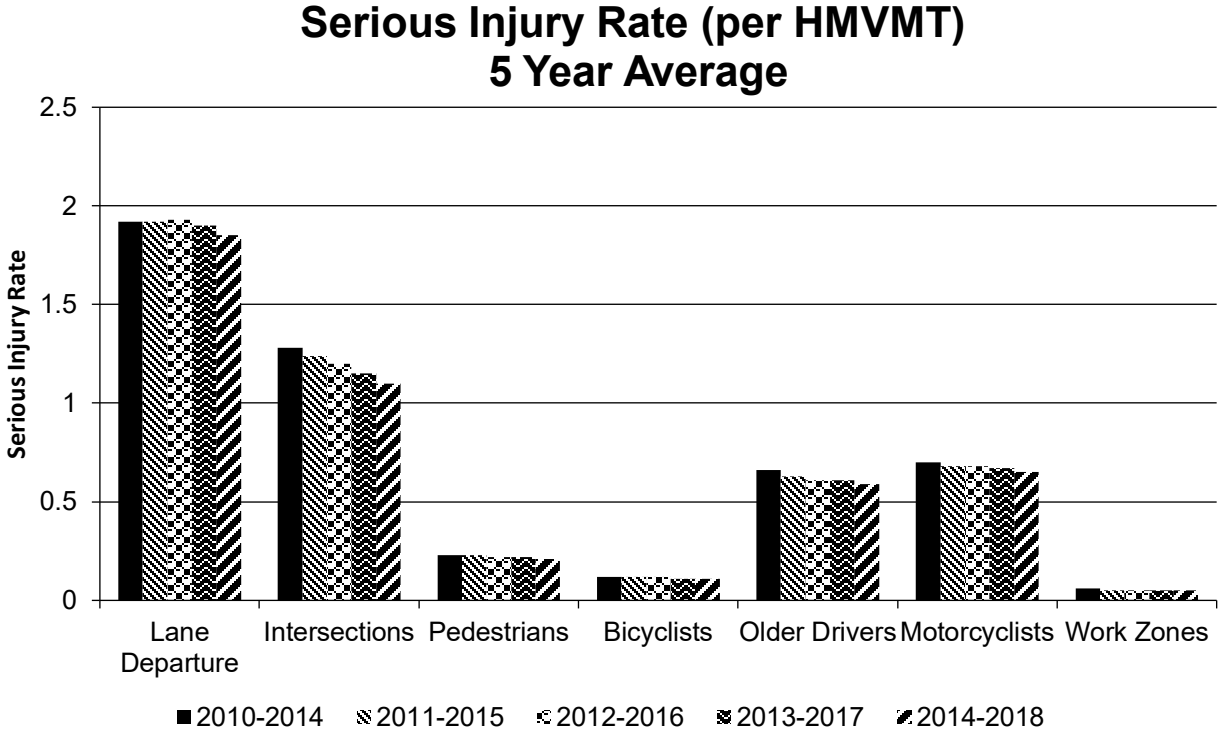
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018





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

No

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)
Optional														

Compliance Assessment

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

12/20/2018

What are the years being covered by the current SHSP?

From: 2019 To: 2023

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

2023

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

ROAD TYPE	MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		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	100								

ROAD TYPE	MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		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	100		
	AADT Year (80)	100	100								
	Type of Governmental Ownership (4)	100	100					100	100	100	100
INTERSECTION	Unique Junction Identifier (120)			100	100						
	Location Identifier for Road 1 Crossing Point (122)			100	100						
	Location Identifier for Road 2 Crossing Point (123)			100	100						
	Intersection/Junction Geometry (126)			100	100						
	Intersection/Junction Traffic Control (131)			100	100						
	AADT for Each Intersecting Road (79)			100	100						
	AADT Year (80)			100	100						
	Unique Approach Identifier (139)			100	100						
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				

ROAD TYPE	MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	
	Roadway Type at Beginning of Ramp Terminal (195)					100	100				
	Roadway Type at End Ramp Terminal (199)					100	100				
	Interchange Type (182)					100	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**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

*Based on Functional Classification

It is understood that individual data elements may not be 100% accurate at all times due to reporting lags.

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 required - state is already compliant.

Did the State conduct an HSIP program assessment during the reporting period?

No

When does the State plan to complete its next HSIP program assessment.

2019

Optional Attachments

Program Structure:

HSIP Manual FINAL FY 19.pdf
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.