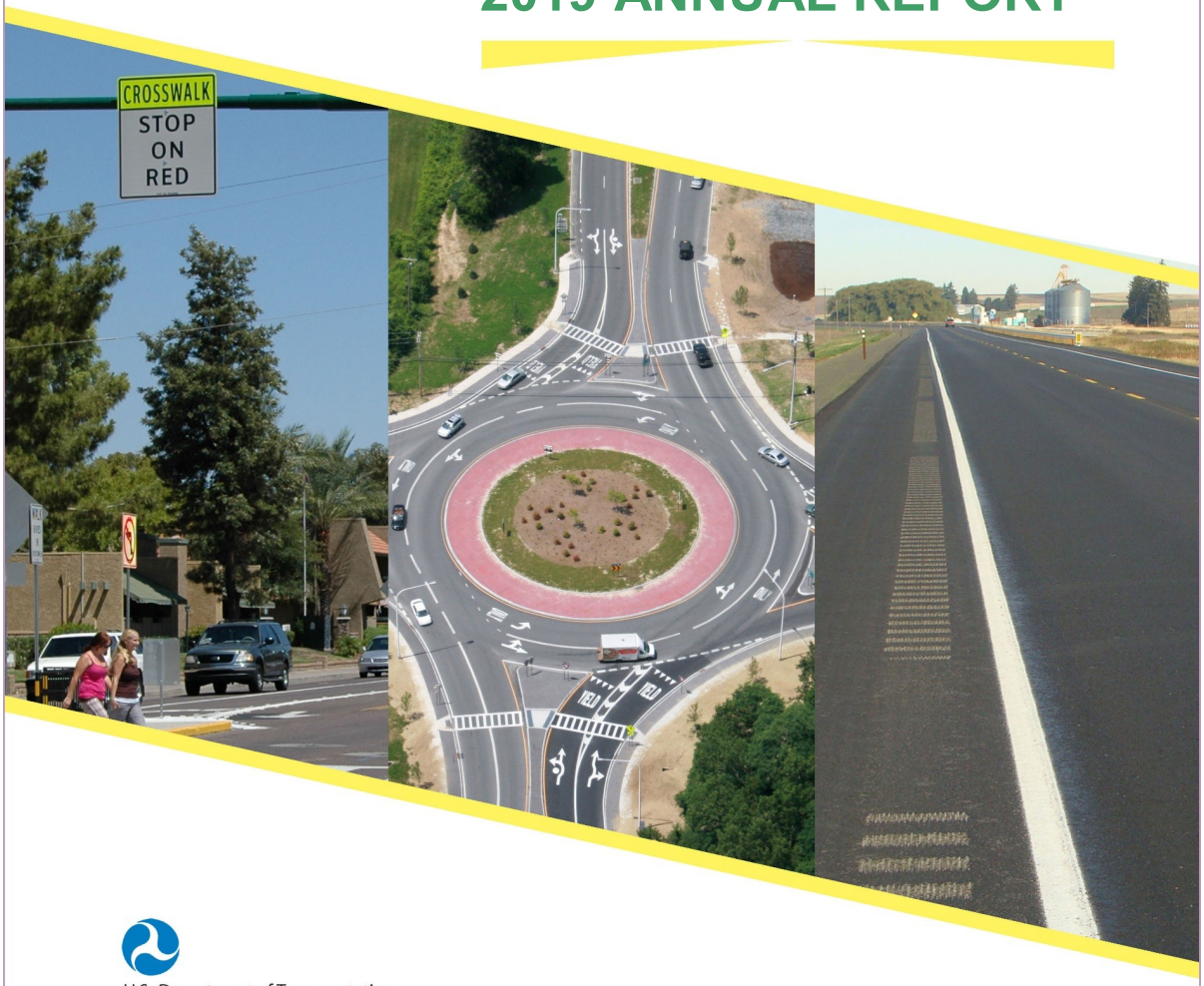
HAWAII

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

State of Hawaii 2019 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

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

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, High Risk Rural Roads Program (HRRRP) Funds are offered to the counties for project proposals and consideration.

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.

Hawaii does not have any tribal roads.

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

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

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

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 investigation of potential HSIP project locations. They provide personal knowledge of the area and can make safety recommendations that my be incorporated within HSIP projects.

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

Statewide projects are submitted to be considered on the STIP.

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
FileName:
HSIP report2006.doc

Select the programs that are administered under the HSIP.

- HRRR

Program: HRRR

Date of Program Methodology:9/9/2006

What is the justification for this program?

- FHWA focused approach to safety

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway

Fatal and serious injury crashes only Lane miles Functional classification

What project identification methodology was used for this program?

- 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?

75

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

- Install/Improve Pavement Marking and/or Delineation
- Rumble Strips

What process is used to identify potential countermeasures?

- Crash data analysis
- Engineering Study

Does the State HSIP consider connected vehicles and ITS technologies?

No

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

No

HDOT will be implementing Highway Safety Manual (HSM) Predictive Methodology into our system. The implementation will include loading and massaging the roadway feature data, setting up the libraries, processing, and performing HSM processing to determine Crash Modification Factors (CMF)s, Expected Crashes, Safety Index scores based upon HSM predictive method, Safety Comparable Index, and Safety Rating. Completion of this implementation is expected next year.

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 the programmed and obligated funding for each applicable funding category.

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$9,762,755	$1,025,313	10.5%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$0	0%
Penalty Funds (23 U.S.C. 154)	$2,638,475	$2,638,475	100%
Penalty Funds (23 U.S.C. 164)	$2,638,475	$2,638,475	100%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$1,200,000	$3,126,370	260.53%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$0	0%
State and Local Funds	$0	$0	0%
Totals	$16,239,705	$9,428,633	58.06%

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 FFY19.

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%

HSIP funds are available to the local agencies for safety projects, as requested.

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

$2,710,950

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

$2,710,950

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.

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.

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.

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
Maui Installation of Enhanced Pavement Marking and New Milled Rumble Strips	Roadway	Roadway - other	2.46	Miles		$130713.46	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Urban	Principal Arterial-Other	17,690	30	State Highway Agency	Systemic	Lane Departure	Implement low-cost safety countermeasure
Kamehameha Highway Safety Improvements, Waikane Valley Road to the Vicinity of Kahekili Highway	Roadway	Rumble strips - edge or shoulder	2.7	Miles		$81495	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
State of Hawaii Advanced Crash Analysis (SHACA)	Non-infrastructure	Data/traffic records				$820550	Penalty Funds (23 U.S.C. 164)	N/A	N/A	0				Data	Improve timeliness of crsah reports and linkage of crash data
Maui Installation of Enhanced Pavement Marking and New Milled Rumble Strips	Roadway	Roadway - other	2.46	Miles		$16858.98	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Urban	Principal Arterial-Other	17,690	30	State Highway Agency	Systemic	Lane Departure	Implement low-cost safety countermeasure
Statewide - State Planning Program FF2019	Non-infrastructure	Transportation safety planning				$1130000	Penalty Funds (23 U.S.C. 154)	Multiple/Varies	Multiple/Varies	0				Data	Use crash data sources to identify high-risk locations.
Statewide - State Planning Program FF2019	Non-infrastructure	Transportation safety planning				$760400	Penalty Funds (23 U.S.C. 154)	Multiple/Varies	Multiple/Varies	0				Data	Use crash data sources to identify high-risk locations.
Oahu Installation of Enhanced Pavement Marking and New Rumble Strip	Roadway	Roadway - other	13.7	Miles		$3873338.49	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	0		State Highway Agency	Systemic	Lane Departure	Implement low-cost safety countermeasure

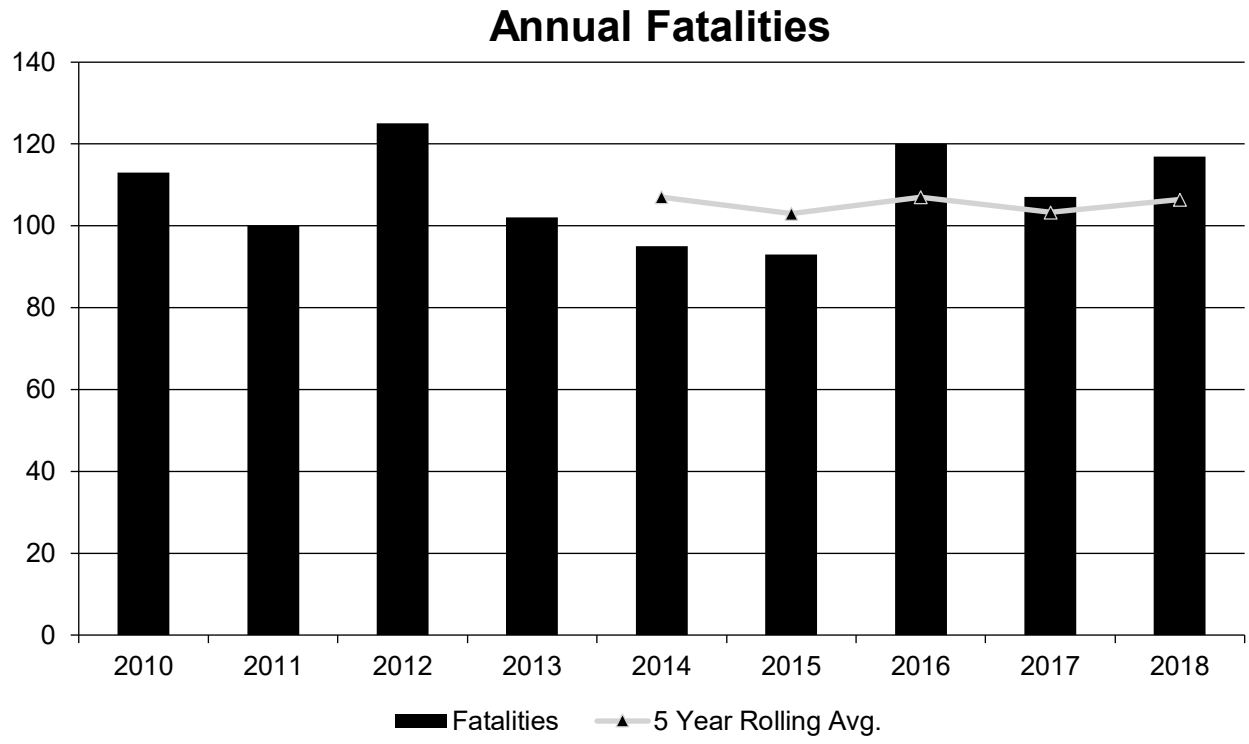
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
Maui Installation of Enhanced Pavement Marking and New Milled Rumble Strips	Roadway	Roadway - other	1.45	Miles		$307707.85	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Urban	Principal Arterial-Other	29,300	45	State Highway Agency	Systemic	Lane Departure	Implement low-cost safety countermeasure
Piilani Highway Safety Improvements, North Kihei Road to Vicinity of Wailea Ike Drive	Roadway	Rumble strips - center	7.3	Miles		$1708488.71	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Urban	Principal Arterial-Other	0		State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
Oahu Installation of Enhanced Pavement Marking and New Rumble Strip	Roadway	Roadway - other				$1123730.60	RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Lane Departure	Install Rumble Strips
Interstate Route H-1 Safety Improvements, Palailai Interchange to Waiawa Overpass	Roadway	Rumble strips - edge or shoulder	9.1	Miles		$1123730.60	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Interstate	0		State Highway Agency	Systemic	Lane Departure	Install Rumble Strips

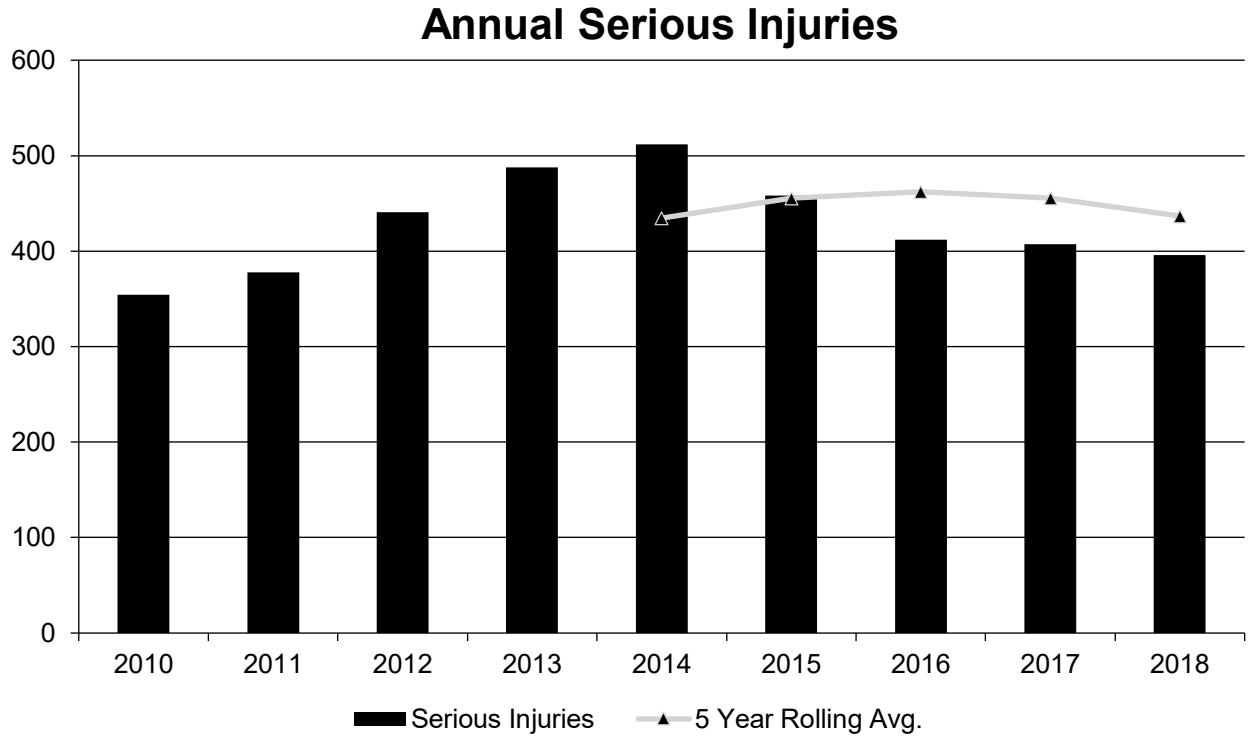
Safety Performance

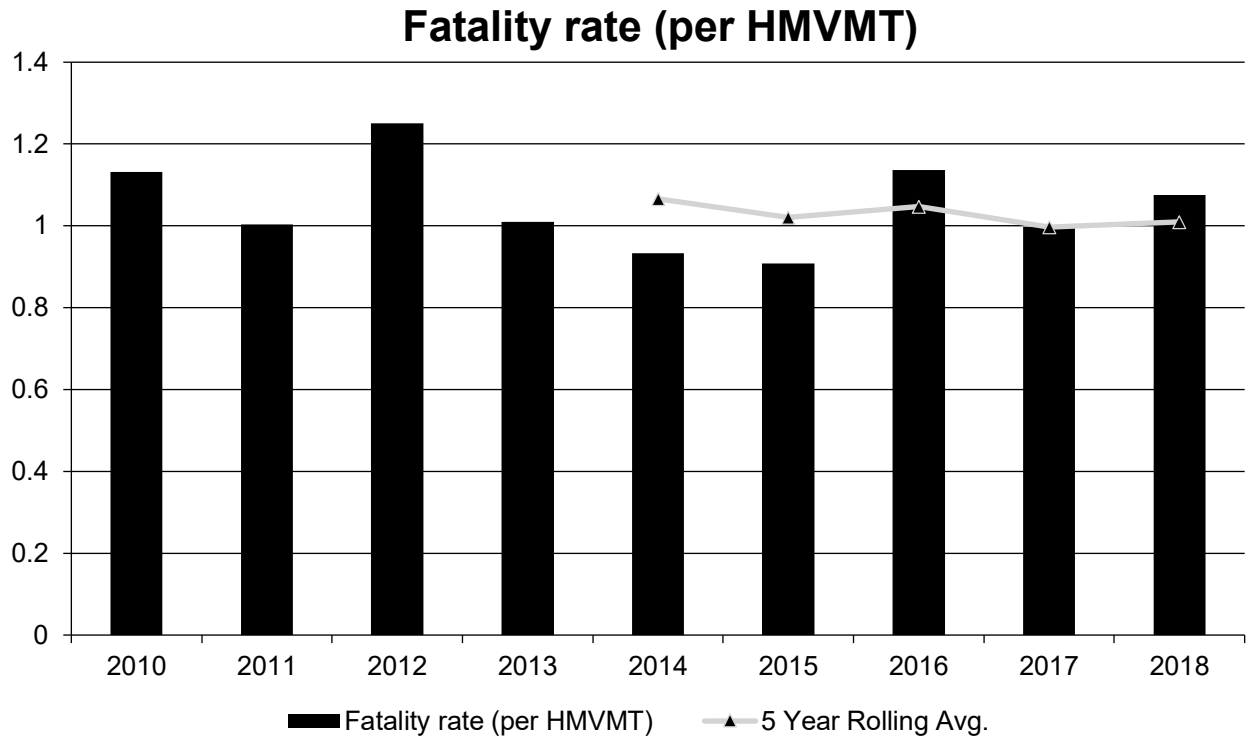
General Highway Safety Trends

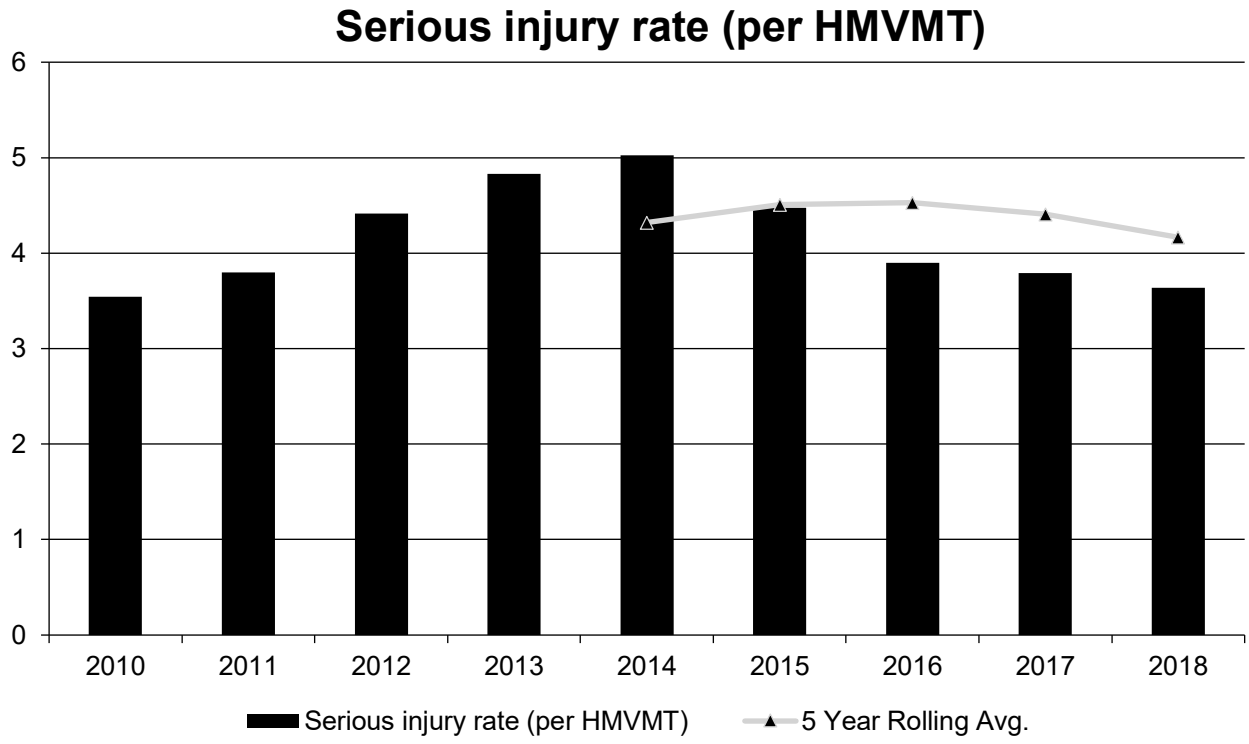
Present data showing the general highway safety trends in the State for the past five years.

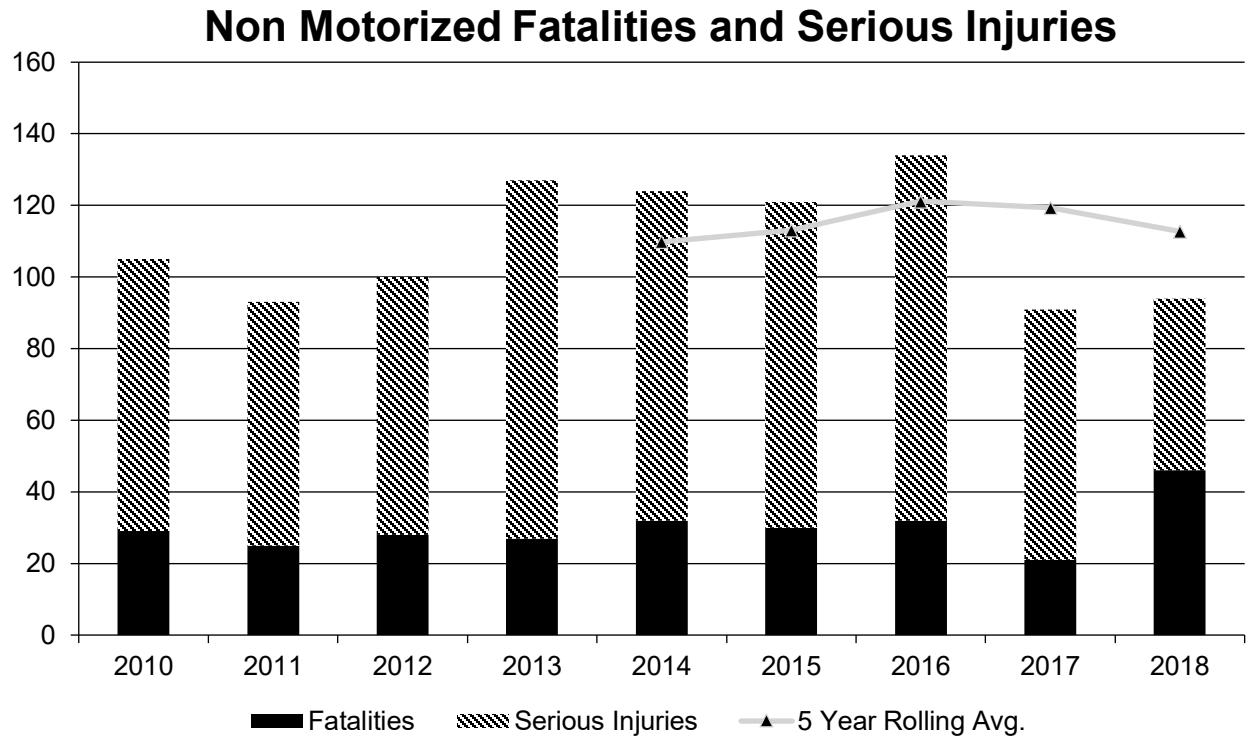
PERFORMANCE MEASURES	2010	2011	2012	2013	2014	2015	2016	2017	2018
Fatalities	113	100	125	102	95	93	120	107	117
Serious Injuries	354	378	441	488	512	458	412	407	396
Fatality rate (per HMVMT)	1.131	1.004	1.251	1.010	0.933	0.908	1.136	0.997	1.075
Serious injury rate (per HMVMT)	3.542	3.795	4.412	4.833	5.028	4.472	3.900	3.792	3.637
Number non-motorized fatalities	29	25	28	27	32	30	32	21	46
Number of non-motorized serious injuries	76	68	72	100	92	91	102	70	48


Annual Fatalities
140
120
100
80
60
40
20
0
2010
2011
2012
2013
2014
2015
2016
2017
2018
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
600
500
400
300
200
100
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.



Please note that serious injury data for 2018 is incomplete. The numbers presented are what is available at this time.
We are working with the vendors of the different police agencies to obtain the missing data. Next year's report shall be more complete.
Figures in the 2018 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 data available.

Describe fatality data source.

FARS

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				
Rural Principal Arterial (RPA) - Other Freeways and Expressways				
Rural Principal Arterial (RPA) - Other	16.2		0.15	

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 Minor Arterial	3		0.03	
Rural Minor Collector				
Rural Major Collector				
Rural Local Road or Street	0.8		0.01	
Urban Principal Arterial (UPA) - Interstate	5.6		0.05	
Urban Principal Arterial (UPA) - Other Freeways and Expressways				
Urban Principal Arterial (UPA) - Other	45.6		0.43	
Urban Minor Arterial	25.2		0.24	
Urban Minor Collector				
Urban Major Collector				
Urban Local Road or Street	3.2		0.03	

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	72.2		0.68	
County Highway Agency	34.2		32.51	
Town or Township Highway Agency				
City or 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				

We are currently addressing the accuracy of our data. Although the backlog of data has been addressed, we are working with our vendor on quality control. The jurisdiction and ownership is something that is presently being worked on. Data for next year's report should reflect more complete and current data.

Provide additional discussion related to general highway safety trends.

We are currently addressing the accuracy of our data. During this FFY we are working with our vendor to address quality control of the backlog that was recently entered. 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 2020 Targets *

Number of Fatalities:100.8

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

The numerical value estimated for the number of fatalities in 2020 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:401.4

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

The numerical value estimated for the number of serious injuries in 2020 was calculated based on past historical data with an SHSP goal of reducing the number of severe accidents for future years.

Fatality Rate:0.935

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

The numerical value estimated for the number of fatality rate in 2020 was calculated based on past historical data with an SHSP goal of reducing fatalities toward the ultimate goal of zero deaths.

Serious Injury Rate:3.721

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

The numerical value estimated for the number of serious injury rate in 2020 was calculated based on past historical data with an SHSP goal of reducing the number of severe accidents for future years.

Total Number of Non-Motorized Fatalities and Serious Injuries:101.8

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 2020 was calculated based on past historical data with an SHSP goal of reducing the number of fatal and severe accidents for future years. Bicyclists and Pedestrians Safety is an emphasis area in HDOT's SHSP.

The value for the fatality rate for the HSP performance target should be changed to .935 to match the performance target submitted above.

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

The numbers in the HSIP report should match the numbers in the HSP. However, when entering the data in this ORT, I was unable to edit the value for the fatality rate. The value should be .935 to match the HSP. We provided data last year to Oahu Metropolitan Planning Organization (OMPO) to assist them in reporting their performance targets.
Members of the OMPO and SHSO are on the SHSP committee where we collaboratively agree to future goals.

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 number of serious injuries, serious injury rate and non-motorized fatalities and serious injuries have decreased from the projected 2018 Safety Performance Targets based on data available at this time of reporting. With the change in the title of serious injury on the motor vehicle accident report, it may have brought about uncertainty on the definition of a serious injury. We are working with a representative from the Department of Health through the Traffic Records Coordinating Committee to explain the differences in the types of injuries and the value in reporting injuries accurately.

The number of fatalities and fatality rate has increased from the projected 2018 Safety Performance Targets. The number of pedestrian fatalities in 2018 accounted for around 38% of the total fatalities. The number of pedestrian fatalities almost tripled from 2017 to 2018. This has brought us to focus on pedestrian safety and implementing plans and countermeasures to increase safety.

Applicability of Special Rules

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

No

Although the number of fatality rate on rural roads has increased over the most recent 2-year period, we do not feel the HRRR special rule should apply.
The number of fatalities on rural major and minor collectors and rural local roads went from zero in 2015, 2016 and 2017 to one in 2018.
The fatality that occurred in 2018 involved a single vehicle collision This vehicle was stopped on a grassy shoulder and the driver who exited the vehicle tried to stop it as it started to move forward. The vehicle door hit a tree and trapped him as it collided into a tree. Although this is a very unfortunate event, we do not know of any countermeasure that could be applied to have prevented this accident.

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	17	11	20	13	20	17	24

PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018
Number of Older Driver and Pedestrian Serious Injuries	32	26	33	34	43	34	34

2018 Serious injury data has not been reported since it is incomplete at this time.

Since this program requires 7 years of data in the table above, 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

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

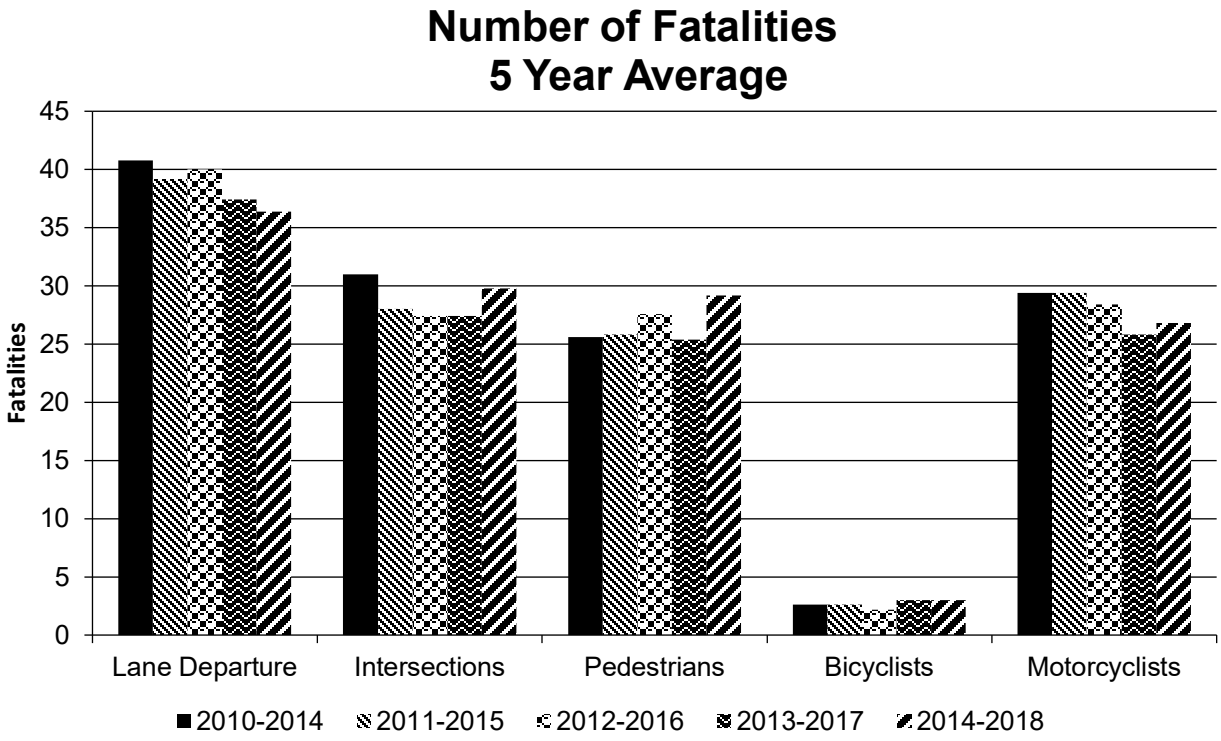
We need to continuously track the completion of HSIP projects to make sure there are no lapsing funds.

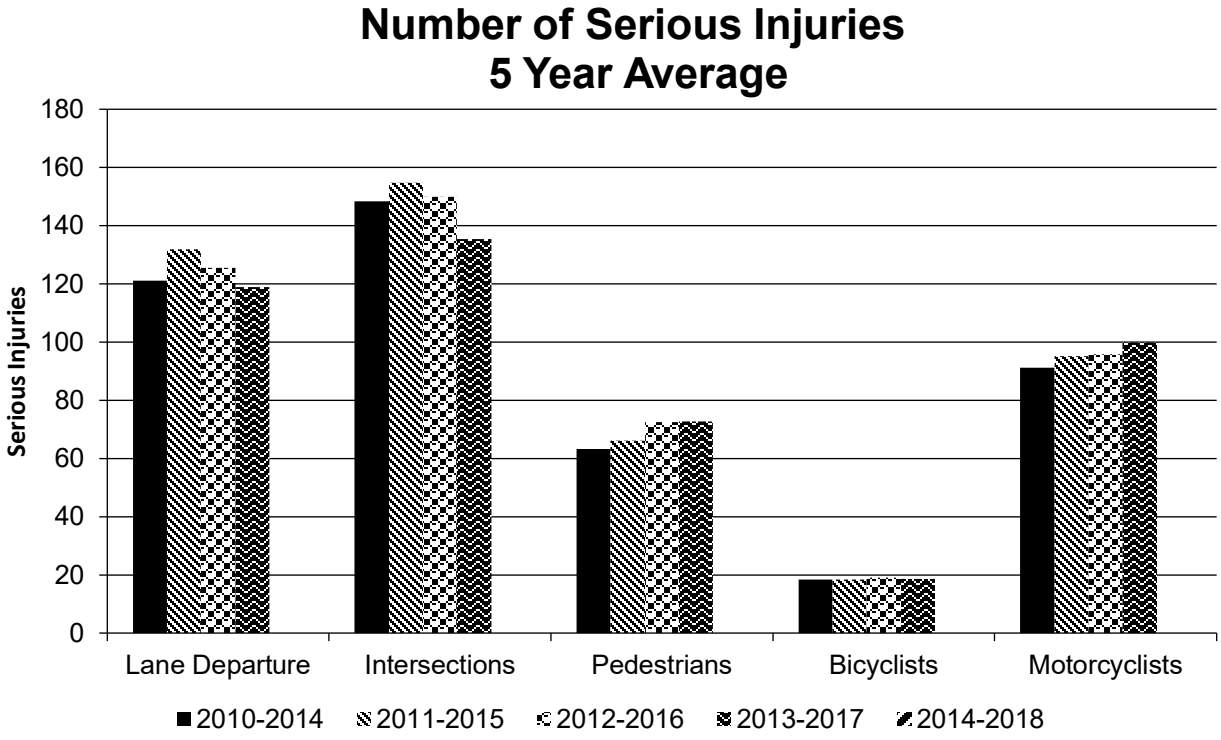
Effectiveness of Groupings or Similar Types of Improvements

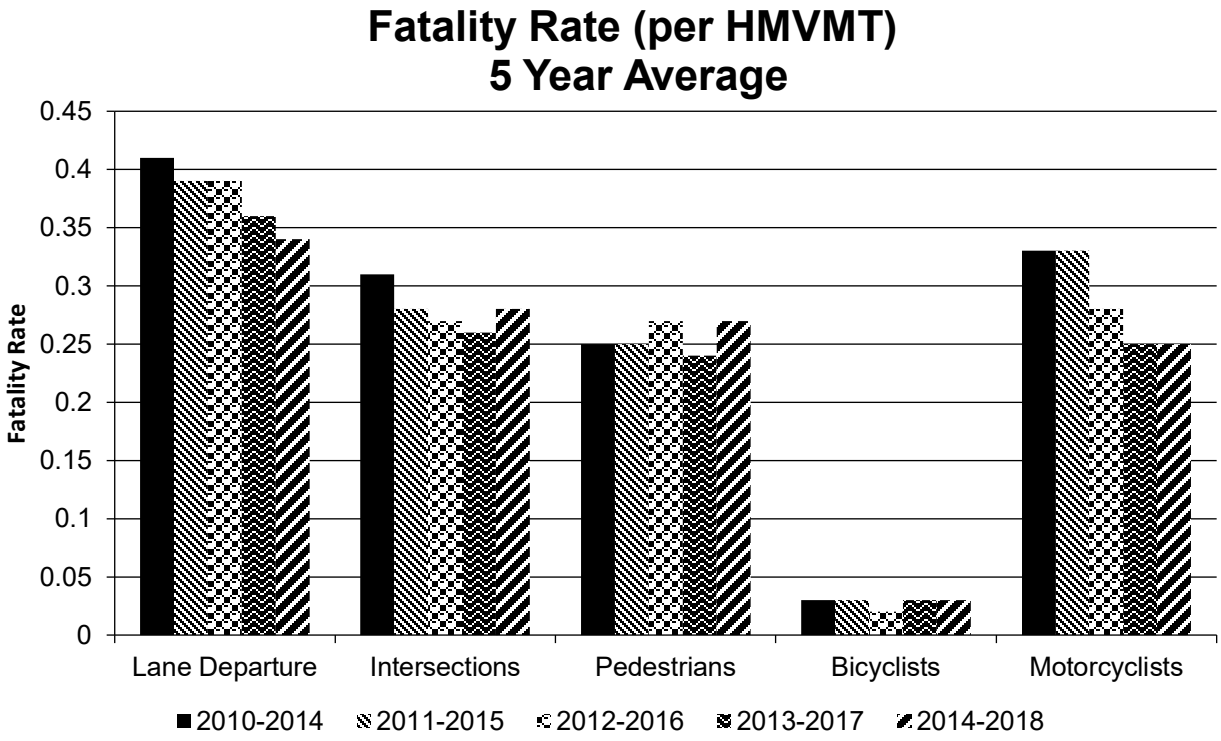
Present and describe trends in SHSP emphasis area performance measures.

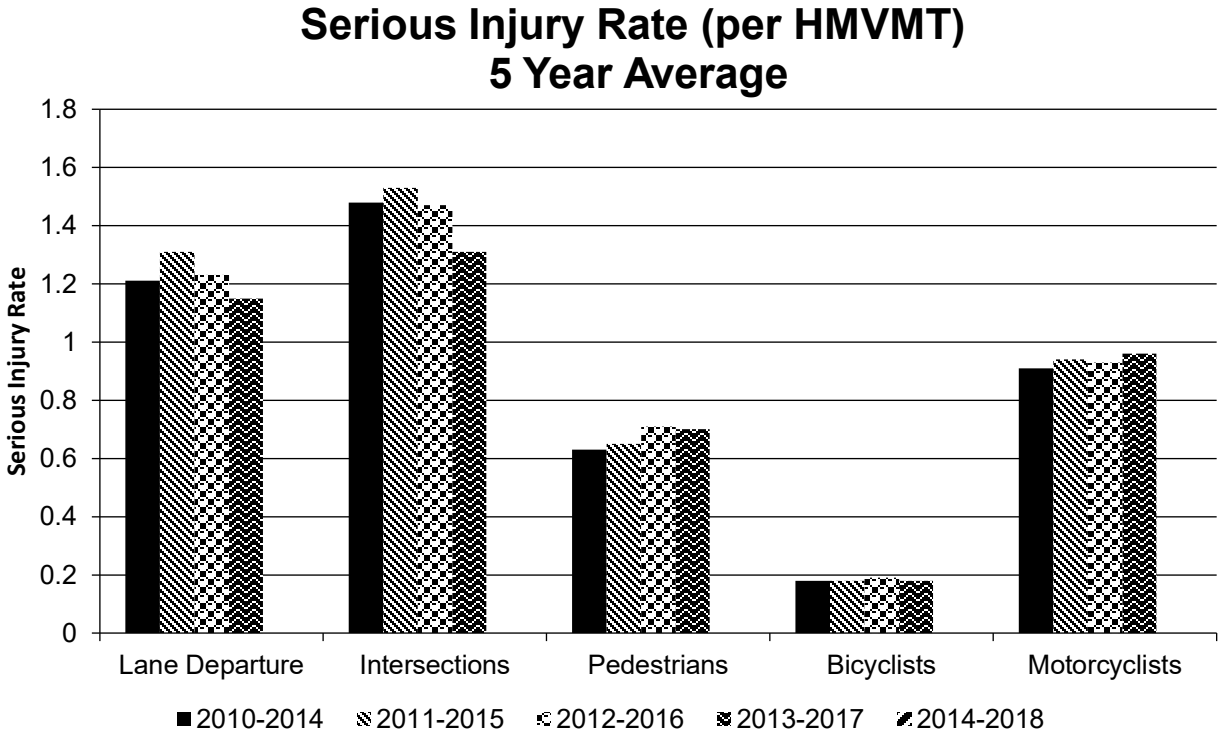
Year 2018

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		36.4		0.34	
Intersections		29.8		0.28	
Pedestrians		29.2		0.27	
Bicyclists		3		0.03	
Motorcyclists		26.8		0.25	


Number of Fatalities
5 Year Average
Fatalities
45
40
35
30
25
20
15
10
5
0
Lane Departure
Intersections
Pedestrians
Bicyclists
Motorcyclists
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018


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
2010-2014
2011-2015
2012-2016
2013-2017
2014-2018





2018 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?

No

HDOT is collaborating with the University of Hawaii to develop a Systemic Roadway Departure Plan. With the development of the plan, HDOT plans 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														

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

The State of Hawaii considers 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 as our database becomes more complete and accurate.

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

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		
	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		
	End Point Segment Descriptor (11)	100	100					100	100		
	Segment Length (13)	100	100								
	Direction of Inventory (18)	100	100								
	Functional Class (19)	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			
	AADT Year (80)	100	100								
	Type of Governmental Ownership (4)	100	100					100	100		
INTERSECTION	Unique Junction Identifier (120)										
	Location Identifier for Road 1 Crossing Point (122)										
	Location Identifier for Road 2 Crossing Point (123)										
	Intersection/Junction Geometry (126)										
	Intersection/Junction Traffic Control (131)										
	AADT for Each Intersecting Road (79)										
	AADT Year (80)										
	Unique Approach Identifier (139)										
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				
	Roadway Type at End Ramp Terminal (199)						100				
	Interchange Type (182)						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

No changes according to our Planning Branch, who collects and manages the data.

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) coordinates with MIRE to meet the requirements.

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

No

We will work together with FHWA to coordinate an assessment.

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

2019

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.