

## **WASHINGTON**

# **HIGHWAY SAFETY IMPROVEMENT PROGRAM 2018 ANNUAL REPORT**



Federal Highway Administration

Photo source: Federal Highway Administration

## **Table of Contents**

Table of Contents	
Disclaimer	
Executive Summary	4
Introduction	5
Program Structure	5
Program Administration	
Program Methodology	
Project Implementation	
Funds Programmed	29
General Listing of Projects	31
Safety Performance	
General Highway Safety Trends	51
Safety Performance Targets	64
Applicability of Special Rules	66
Evaluation	68
Program Effectiveness	68
Effectiveness of Groupings or Similar Types of Improvements	69
Year 2017	69
Project Effectiveness	74
Compliance Assessment	75

### **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**

WSDOT is seeing significant increase in growth and travel demand statewide. This increasing exposure trend is leading to fatal and serious crash frequency increases statewide. The state set inspirational goals to achieve zero fatal and serious crashes by 2030. This inspirational goal will not be carried forward in the next year, as increasing crash trend indicate that it is highly unlikely that these goals are achievable. The state believes is setting reasonable targets, but still will emphasize the zero based goals by 2030 in the programming of projects. The program is transitioning from a reactive spot based program to a proactive systemic approach where 70% of the projects are likely to be using a systemic application. The state believes that this approach will lead to addressing crash potential before crashes occur. WSDOT provides much of the HSIP funding to local roads at about 70% of its total federal safety funds. It supplements this amount with substantial state funding for state owned highways. This is also true for the Sec 130 funds which WSDOT is providing solely to the local system in the following year, and is also investing how to address bike and pedestrians at rail crossings.

While the program is seeing increasing crash trends due to growth, its strong partnerships and commitment to safety is continuing benefit to reduced crash potential. Future emphasis areas of pedestrians, rail terminals, compact roundabouts and high friction surface treatments will occur.

#### 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.

Washington uses a centralized approach for determining HSIP projects within the state. This includes the development and analysis of priorities using WSDOT strategic highway safety plan "Target Zero" as the basis for establishing emphasis areas. The program structure has both reactive and proactive approaches to reducing crash potential. The reactive component focuses on spot locations, intersections and segments. The proactive components focus on specific contributing factors and crash types and most of the proactive approaches use systemic methods to develop a ranked list of potential projects. Spot location projects use a benefit/analysis for prioritization of the program of projects.

#### Where is HSIP staff located within the State DOT?

Other-multiple organizations

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

WSDOT does not have specific HSIP staff. Multiple Division's participate in development and implementation of the program. WSDOT Local Programs allocates approximately 70% of the HSIP funds.

#### How are HSIP funds allocated in a State?

Central Office via Statewide Competitive Application Process SHSP Emphasis Area Data Other-Funds are allocated centrally

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

Sub categories of funds are allocated based on SHSP emphasis areas with a team of a multidisciplinary team recommending improvement sub-categories to WSDOT Highway Safety Executive Committee. Local HSIP funds are allocated via competitive statewide application process.

2018 Washington Highway Safety Improvement Program

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

Washington uses a data-driven process to determine HSIP funding levels for state vs local roads. The current SHSP, "Washington Strategic Highway Safety Plan: Target Zero," (www.targetzero.com) has specified priority levels for types/causes/categories of fatal & serious injury crashes based on crash type, driver behaviors, or user type. The top 2 infrastructure related priorities are Lane Departure crashes (priority 1) and Intersection crashes (priority 1).

To determine the HSIP funding allocation between state and local roadways, WSDOT evaluates the number of fatal & serious injury lane departure and intersection-related crashes statewide for a consecutive 5-year period. WSDOT calculates the ratio of crashes on local agency responsibility roads to those on state highways then allocates HSIP funding between state and local roadways based on that percentage. Currently, local agencies receive 70% of HSIP funds and the state receives 30%.

# 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
Districts/Regions
Local Aid Programs Office/Division
Governors Highway Safety Office
Other-Local Programs

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

WSDOT interacts with the G/SHSO routinely, and is also actively seeking interaction with MPO/RTPOs. All disciplines are active or consultant in the development of the program.

#### Describe coordination with internal partners.

Oversight for the 70% of the HSIP funds that are directed to local agencies is assigned to the Local Programs division for management (to identify local agency priorities, distribution of funds to counties & cities, individual project selection, federal oversight, project delivery, etc.).

Responsibility for the 30% of the HSIP funds that are directed to the state is managed by the WSDOT Highway Safety Executive Committee (HSEC). WSDOT does not have a specific highway safety office solely responsible for the HSIP within the DOT, but is a matrixed team. Implementation of highway safety is done collaboratively across all of the department's divisions and coordinated between all modes. The highway safety program through the HSEC provides department - wide and multimodal coordination and input on highway and modal safety issues. Oversight is the responsibility for Transportation Safety, Quality and Enterprise Risk Division who sees that the HSEC policy and procedures are carried out throughout each of the respective divisions. Roles and responsibilities of each office are defined by a matrix with agreement by the Directors. H

2018 Washington Highway Safety Improvement Program
SEC is comprised of program directors from all of the major highways divisions (Design, Program
Management, Traffic Operations, Transportation Safety, Quality and Enterprise Risk, Development). The
Highway Safety Issue Group provides technical support to the HSEC and is comprised of each Headquarter
Division and Regional participants from each of WSDOT six regions.

#### Identify which external partners are involved with HSIP planning.

Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
Governors Highway Safety Office
Local Technical Assistance Program
Local Government Agency
Tribal Agency
Law Enforcement Agency
Academia/University
FHWA

Other-WSDOT has organized a Safety Target Setting Organization to establish targets. A safety data business plan group is also in place to assist with WSDOT Safety Data needs identification Other-MPOs are part of target setting activities

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

All coordinate through development of the Strategic Highway Safety Plan.

Describe coordination with external partners.

WSDOT interacts and coordinates with multiple external partners as part of development of Target Zero and in setting targets. WSDOT routinely meets with MPOs and State Highway Safety Office (SHSO) and its federal divisions in carrying out its safety program activities.

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

Yes

Describe HSIP program administration practices that have changed since the last reporting period.

WSDOT has updated its approach to its safety program. The program is approximately 70% proactive (systemic) safety and 30% reactive. The program follows the emphasis areas of Target Zero, the state's Strategic Highway Safety Plan.

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.

WSDOT has developed an Safety Improvement Program implementation plan to clearly tie the SHSP emphasis area to WSDOT safety program. The plan identifies safety-sub categories to each SHSP emphasis area, and also identifies performance measures for each sub-category. The Department also reports performance monthly as part of performance reporting activities. The state is beginning to update that plan in fall 2018.

#### Program Methodology

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

No

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

File Name:

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

No, there is no HSIP manual, but documents are developed and maintained by various divisions necessary to carry out the program.

Select the programs that are administered under the HSIP.

Median Barrier

Intersection

Horizontal Curve

**Bicycle Safety** 

Roadway Departure

**Low-Cost Spot Improvements** 

Local Safety

Pedestrian Safety

HRRR

Other-State - Collision Analysis Corridors

Other-State - Collision Analysis Locations

Other-State - Intersection Analysis Locations

Other-Local - City Safety Program

Other-Local - County Safety Program

Other-Compact Roundabouts

Other-High Friction Surface Treatments

Other-Barrier and Terminal Modifications

Other-Rumble Strips

Other-Operational Assessments

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

**Program:** Bicycle Safety

2018 Washington Highway Safety Imp	provement Program	
Date of Program Methodology:	10/1/2018	
What is the justification for this pro	ogram? [Check all that apply]	
Addresses SHSP priority or emphasis	area	
What is the funding approach for th	nis program? [Check one]	
Other-Competes with other vulnerable	e road user projects	
What data types were used in the pr	rogram methodology? [Check all tha	at apply]
Crashes	Exposure	Roadway
Fatal and serious injury crashes only	Traffic Volume	Other-Shoulders
What project identification methodo	ology was used for this program? [C	Check all that apply]
Other-Process under development		
Are local roads (non-state owned an	nd operated) included or addressed i	in this program?
No		
Are local road projects identified us	sing the same methodology as state r	roads?
Describe the methodology used to id	lentify local road projects as part of	this program.
How are projects under this program	m advanced for implementation?	
Select the processes used to prioritize relative importance of each process rankings. If weights are entered, the both processes the same rank and ske	in project prioritization. Enter either esum must equal 100. If ranks are	er the weights or numerical entered, indicate ties by giving
Rank of Priority Consideration		
Other-Ranking by B/C and other factor	ors: 100	

Horizontal Curve

**Program:** 

Date of Program Methodology:
What is the justification for this program? [Check all that apply]
What is the funding approach for this program? [Check one]
What data types were used in the program methodology? [Check all that apply]
Crashes Exposure Roadwa
What project identification methodology was used for this program? [Check all that apply]
Are local roads (non-state owned and operated) included or addressed in this program?
Are local road projects identified using the same methodology as state roads?
Describe the methodology used to identify local road projects as part of this program.
How are projects under this program advanced for implementation?
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).
Program: HRRR
Date of Program Methodology:
What is the justification for this program? [Check all that apply]
What is the funding approach for this program? [Check one]

Page 10 of 80

What data types were u	sed in the program methodology? [Check all that	apply]
Crashes	Exposure	Roadway
What project identificat	tion methodology was used for this program? [Ch	eck all that apply]
Are local roads (non-sta	ate owned and operated) included or addressed in	this program?
Are local road projects	identified using the same methodology as state roa	ads?
Describe the methodolo	gy used to identify local road projects as part of the	his program.
How are projects under	this program advanced for implementation?	
relative importance of e rankings. If weights are	d to prioritize projects for implementation. For the each process in project prioritization. Enter either e entered, the sum must equal 100. If ranks are entered and skip the next highest rank (as an example)	the weights or numerical ntered, indicate ties by giving
Program:	Intersection	
Date of Program Metho	odology:	
What is the justification	n for this program? [Check all that apply]	
What is the funding app	proach for this program? [Check one]	
What data types were u	sed in the program methodology? [Check all that	apply]
Crashes	Exposure	Roadway

What project identification methodology was used for this program? [Check all that apply]
Are local roads (non-state owned and operated) included or addressed in this program?
Are local road projects identified using the same methodology as state roads?
Describe the methodology used to identify local road projects as part of this program.
How are projects under this program advanced for implementation?
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).
Program: Local Safety
Date of Program Methodology:
What is the justification for this program? [Check all that apply]
What is the funding approach for this program? [Check one]
What data types were used in the program methodology? [Check all that apply]
Crashes Exposure Roadway
What project identification methodology was used for this program? [Check all that apply]
Are local roads (non-state owned and operated) included or addressed in this program?

Describe the methodology used to i	dentify local road projects as pa	rt of this program.
How are projects under this progra	am advanced for implementation	n?
relative importance of each process	s in project prioritization. Enter he sum must equal 100. If ranks	s are entered, indicate ties by giving
Program:	Low-Cost Spot Improvements	
Date of Program Methodology:		
What is the justification for this pro	ogram? [Check all that apply]	
What is the funding approach for t	this program? [Check one]	
What data types were used in the p	orogram methodology? [Check a	ll that apply]
Crashes	Exposure	Roadway
What project identification method	dology was used for this progran	n? [Check all that apply]
Are local roads (non-state owned a	nd operated) included or addres	ssed in this program?
Are local road projects identified u	using the same methodology as st	ate roads?
Describe the methodology used to i	dentify local road projects as pa	rt of this program.

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

2018	Washington	Highway	Safety	<b>Improvement</b>	Program
2010	w asimilgion	mgnway	Saicty	IIIDIOACIIICIII	i iogiaiii

How are projects under this program advanced for implementation?

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).

Program:	Median Barrier	
Date of Program Methodology:		
What is the justification for this prog	gram? [Check all that apply]	
What is the funding approach for thi	is program? [Check one]	
What data types were used in the pro	ogram methodology? [Check all that a	apply]
Crashes	Exposure	Roadwa
What project identification methodo	logy was used for this program? [Che	ck all that apply]
Are local roads (non-state owned and	d operated) included or addressed in t	his program?
Are local road projects identified usi	ing the same methodology as state road	ds?
Describe the methodology used to ide	entify local road projects as part of thi	is program.
How are projects under this program	n advanced for implementation?	

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 e	Safety Improvement Program entered, the sum must equal 100. If ranks are entered ank and skip the next highest rank (as an example: 1,	,
Program:	Pedestrian Safety	
Date of Program Method	ology:	
What is the justification fo	or this program? [Check all that apply]	
What is the funding appro	oach for this program? [Check one]	
What data types were use	d in the program methodology? [Check all that apply	]
Crashes	Exposure	Roadway
What project identificatio	n methodology was used for this program? [Check all	l that apply]
Are local roads (non-state	owned and operated) included or addressed in this p	rogram?
Are local road projects ide	entified using the same methodology as state roads?	
Describe the methodology	used to identify local road projects as part of this pro	ogram.
How are projects under th	nis program advanced for implementation?	
relative importance of eac rankings. If weights are e	to prioritize projects for implementation. For the met th process in project prioritization. Enter either the w entered, the sum must equal 100. If ranks are entered ank and skip the next highest rank (as an example: 1,	eights or numerical , indicate ties by giving

Page 15 of 80

Roadway Departure

**Program:** 

Date of Program Methodology:			
What is the justification for this program? [Check all that apply]			
What is the funding approach for the	his program? [Check one]		
What data types were used in the pr	program methodology? [Check all that apply]		
Crashes	Exposure	Roadway	
What project identification method	lology was used for this program? [Check all that apply]		
Are local roads (non-state owned ar	nd operated) included or addressed in this program?		
Are local road projects identified using the same methodology as state roads?			
Describe the methodology used to identify local road projects as part of this program.			
How are projects under this program advanced for implementation?			
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).			
Program:	Other-State - Collision Analysis Corridors		
Date of Program Methodology:	1/1/2012		
What is the justification for this pro	ogram? [Check all that apply]		

Addresses SHSP priority or emphasis area

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

Median width
Horizontal curvature
Traffic
Volume

Traffic
Volume

Roadside features
Other-Roadway data required for
the HSM predictive method

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

Crash frequency Expected crash frequency with EB adjustment Excess expected crash frequency using SPFs Excess expected crash frequency with the EB adjustment

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

No

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

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

How are projects under this program advanced for implementation?

Competitive application process

Other-Project selection criteria approved by executive management; projects reviewed and approved by a technical panel

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Rank of Priority Consideration**

Ranking based on B/C: 1

2018 Washington Highway Safety Improvement Program Available funding: 2		
Other-Fatal and serious injury crash history: 3		
Program:	Other-State - Collision Analysis Locations	
<b>Date of Program Methodology:</b> 1/1/2012		
What is the justification for this program? [Check all that apply]		

Addresses SHSP priority or emphasis area

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

Funding set-aside

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

Crashes	Exposure	Roadway
		Median width
		Horizontal curvature
Fatal and serious injury crashes only	Traffic	Functional classification
	Volume	Roadside features
		Other-Roadway data required for
		the HSM predictive method

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

Expected crash frequency with EB adjustment Excess expected crash frequency using SPFs Excess expected crash frequency with the EB adjustment

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

No

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

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

How are projects under this program advanced for implementation?

2018 Washington Highway Safety Improvement Program Competitive application process selection committee

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Rank of Priority Consideration**

Ranking based on B/C: 1 Available funding: 3

Other-Fatal and serious injury crash history: 2

**Program:** Other-State - Intersection Analysis

Locations

**Date of Program Methodology:** 1/1/2012

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

Addresses SHSP priority or emphasis area

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

Funding set-aside

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

Crashes Exposure Roadway

Functional classification
Fatal and serious injury crashes only

Volume

Other-Roadway data required for the HSM predictive method

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

Expected crash frequency with EB adjustment Excess expected crash frequency with the EB adjustment

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

No

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

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

How are projects under this program advanced for implementation?

Competitive application process

Other-Project selection criteria approved by executive management; projects reviewed and approved by a technical panel

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Rank of Priority Consideration**

Ranking based on B/C: 1 Available funding: 3

Other-Fatal and serious injury crash history: 2

**Program:** Other-Local - City Safety Program

**Date of Program Methodology:** 1/1/2018

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

Addresses SHSP priority or emphasis area

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

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

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

Crash frequency

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

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

Yes

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

How are projects under this program advanced for implementation?

Competitive application process Other-Completion of a Local Road Safety Plan

Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).

#### **Rank of Priority Consideration**

Ranking based on B/C: 1 Available funding: 3

Other-Completion of a Local Road Safety Plan: 2

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

Cities are required (as of 2018) to submit a Local Road Safety Plan if they apply for systemic safety funding for risk-based projects.

**Program:** Other-Local - County Safety Program

**Date of Program Methodology:** 1/1/2014

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

Addresses SHSP priority or emphasis area

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

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

What project identification methodol	ogy was used for this program? [Check all th	at apply]
Crash frequency		
Are local roads (non-state owned and	operated) included or addressed in this prog	ram?
Yes		
Are local road projects identified using	ng the same methodology as state roads?	
Yes		
Describe the methodology used to ide	ntify local road projects as part of this progra	am.
How are projects under this program	advanced for implementation?	
Other-Allocation of funds to each count Other-Completion of a local road safety	ry based on rate of fatal and serious injury crasher plan	es per mile
relative importance of each process in rankings. If weights are entered, the	projects for implementation. For the method project prioritization. Enter either the weigh sum must equal 100. If ranks are entered, in the next highest rank (as an example: 1, 2, 2	hts or numerical dicate ties by giving
Rank of Priority Consideration		
Available funding: 2		
Other-Completion of Local Road Safety	y Plan: 1	
Program:	Other-Compact Roundabouts	
Date of Program Methodology:		
What is the justification for this prog	ram? [Check all that apply]	
What is the funding approach for this	s program? [Check one]	
What data types were used in the pro	gram methodology? [Check all that apply]	
Crashes	Exposure	Roadway

2018 Washington Highway Safety Important What project identification methodol	orovement Program  logy was used for this program? [Check all that apply]	
Are local roads (non-state owned and	d operated) included or addressed in this program?	
Are local road projects identified using	ng the same methodology as state roads?	
Yes		
Describe the methodology used to ide	entify local road projects as part of this program.	
How are projects under this program	n advanced for implementation?	
relative importance of each process in rankings. If weights are entered, the	e projects for implementation. For the methods selected, in project prioritization. Enter either the weights or nume sum must equal 100. If ranks are entered, indicate ties be ip the next highest rank (as an example: 1, 2, 2, 4).	erical
Program.	Other-High Friction Surface Treatments	
Date of Program Methodology:		
What is the justification for this prog	gram? [Check all that apply]	
What is the funding approach for this	is program? [Check one]	
What data types were used in the pro	ogram methodology? [Check all that apply]	
Crashes	Exposure	Roadway
What project identification methodol	logy was used for this program? [Check all that apply]	
Are local roads (non-state owned and	d operated) included or addressed in this program?	

Yes		
Describe the methodology used to ide	entify local road projects as part of this program.	
How are projects under this program	n advanced for implementation?	
relative importance of each process i rankings. If weights are entered, the	e projects for implementation. For the methods selected, in project prioritization. Enter either the weights or numer sum must equal 100. If ranks are entered, indicate ties by ip the next highest rank (as an example: 1, 2, 2, 4).	ical
Program:	Other-Barrier and Terminal Modifications	
Date of Program Methodology:		
What is the justification for this prog	gram? [Check all that apply]	
What is the funding approach for thi	is program? [Check one]	
What data types were used in the pro	ogram methodology? [Check all that apply]	
Crashes	Exposure	Roadway
What project identification methodo	logy was used for this program? [Check all that apply]	
Are local roads (non-state owned and	d operated) included or addressed in this program?	
Are local road projects identified usi	ng the same methodology as state roads?	
Yes		
Describe the methodology used to ide	entify local road projects as part of this program.	

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

2018	Washington	Highway	Safety	Improv	ement F	rogram

How are	e projects	under this r	rogram advance	d for im	plementation?

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).

Program:	Other-Rumble Strips	
Date of Program Methodology:		
What is the justification for this prog	gram? [Check all that apply]	
What is the funding approach for the	is program? [Check one]	
What data types were used in the pro-	ogram methodology? [Check all that ap	oply]
Crashes	Exposure	Roadwa
What project identification methodo	ology was used for this program? [Check	k all that apply]
Are local roads (non-state owned and	d operated) included or addressed in th	is program?
Are local road projects identified usi	ing the same methodology as state roads	s?
	entify local road projects as part of this	program.
How are projects under this program		

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

2018 Washington Highway Safety Improvement Program 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). **Program:** Other-Operational Assessments **Date of Program Methodology:** What is the justification for this program? [Check all that apply] What is the funding approach for this program? [Check one] What data types were used in the program methodology? [Check all that apply] Crashes **Exposure** Roadway What project identification methodology was used for this program? [Check all that apply] Are local roads (non-state owned and operated) included or addressed in this program? Are local road projects identified using the same methodology as state roads? Yes Describe the methodology used to identify local road projects as part of this program. How are projects under this program advanced for implementation? 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).

What percentage of HSIP funds address systemic improvements?

70

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

Cable Median Barriers
Rumble Strips
Install/Improve Signing
Install/Improve Pavement Marking and/or Delineation
Upgrade Guard Rails
Clear Zone Improvements
Horizontal curve signs
High friction surface treatment
Other-compact roundabouts

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
Road Safety Assessment
Crash data analysis
SHSP/Local road safety plan
Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
Other-Use of HSM, Statistical 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?

Yes

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

ITS technology is an appropriate countermeasure for safety and could be a selected countermeasure to address fatal and serious crashes. A new office has been created within WSDOT related to connected vehicles.

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.

WSDOT uses the HSM throughout its HSIP efforts. The state uses SafetyAnalyst for screen of projects. Has developed a guide on safety analysis in planning and design.

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

Yes

Describe program methodology practices that have changed since the last reporting period.

WSDOT is updating its program structure with new safety sub-categories within its safety program. These efforts are still underway and hope to be completed in fall of 2018.

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.

WSDOT continues to focus on data driven safety analysis throughout its program efforts. WSDOT is using performance based practical design and a sustainable safety approach. WSDOT has focused on data driven approaches through identifying the 5th E of safety as Evaluation, analysis and diagnosis. It is thought that this approach allows for the targeting of specific crash types and contributing factors, and also maximizes the return on safety benefit for selected countermeasures. WSDOT is developing new systemic sub-categories that focus on rural road crashes.

## **Project Implementation**

**Funds Programmed** 

Reporting period for HSIP funding.

Calendar 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)	\$18,451,952	\$6,500,356	35.23%
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)	\$930,533	\$12,958,418	1392.58%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$12,694,508	\$101,279	0.8%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$16,611,809	\$8,335,974	50.18%
State and Local Funds	\$16,535,250	\$1,085,225	6.56%
Totals	\$65,224,052	\$28,981,252	44.43%

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

It should be noted that the for both the 23 USC 130(e)(2) and the 23 USC 164 funds WSDOT has chosen to shift obligation between federal programs to better manage its existing federal funds and obligation authority. It should also be noted that WSDOT supplements federal safety funds with state funds.

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

70%

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

70%

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

The state allocates approximately 70% of its HSIP funds to local governments. The state then supplements its program with additional state funds. The state program is typically in the range of \$100-\$150M including HSIP Funding.

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

0%

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

0%

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?

\$16,611,809

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.

WSDOT provides much of its HSIP appropriation to its local partners. Delivery of federally-funded projects with all of the attendant paperwork/regulations can make delivery of these projects by local agencies a challenge, especially considering the low-cost nature of many 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.

WSDOT believes that having the ability to use HSIP funds for non-infrastructure improvements is important to reestablish. It would also be helpful to continue to emphasize that expenditure for safety software and data is appropriate. Given the changes under MAP-21 and FAST additional wording would be beneficial in 23 USC 409 and 23 USC 148 that highlights that safety shared with Safety Partners (MPOs, Health, State Police, SHSO) is protected for the agency sharing and receiving the data when used for HSIP purposes (e.g., SHSP, Target Setting, Safety Planning, Public Awareness). MPOs in our opinion are reluctant to use this data because of potential liability concerns.

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

													RELATIONS	SHIP 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
Adams County - McKinney/Thacker Rd Safety Project	Roadway	Superelevation / cross slope			\$910000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Design safer slopes and ditches to prevent rollovers.
City of Auburn - Auburn Way South (SR 164) Corridor Safety Improvements	Access management	Change in access - miscellaneous/unspecified			\$2333108		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.11 - Implement restricted access to properties/driveways adjacent to intersections.
City of Auburn - A Street SE and 37th Street SE	Intersection traffic control	Intersection traffic control - other			\$792260		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	
City of Auburn - A Street SE Corridor Signal Improvements	Intersection traffic control	Modify traffic signal timing - general retiming			\$458500		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Auburn - 22nd Street NE and I Street NE Roundabout	Intersection traffic control	Modify control - two-way stop to roundabout			\$1057500		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.1 - Install or convert intersections to roundabouts.
Benton County - 2017 Safety - Roadside Improvements	Roadside	Roadside grading			\$463800		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Design safer slopes and ditches to prevent rollovers.
Benton County - 2017 Guardrail Inventory	Non-infrastructure	Data/traffic records			\$54000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	No Sites	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone.
City of Bremerton - Bremerton Highway Safety Improvements, Phase 2	Lighting	Lighting - other			\$1085100		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.4 - Improve sight distance and visibility at pedestrian crossings.
City of Bremerton - West Belfair Valley and Tracyton Beach Roads	Roadway	Pavement surface - high friction surface			\$1675490		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Spot	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
City of Burlington - George Hopper Road Signal	Intersection traffic control	Modify traffic signal timing - general retiming			\$753822		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
Chelan County - Countywide Roadway Safety Plan	Non-infrastructure	Transportation safety planning			\$180000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	No Sites	Data	
Chelan County - Countywide	Roadway signs and traffic control	Curve-related warning signs and flashers			\$271500		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and

		ny ampio vanone i regium											RELATIONS	SHIP 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
Signing Improvements														shoulder delineation, especially in curves.
Chelan County - Countywide Striping Improvements	Roadway delineation	Longitudinal pavement markings - new			\$375600		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Clallam County - Guardrail Improvements	Roadside	Barrier- metal			\$364990		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Clallam County - Black Diamond Rd #31030	Roadside	Roadside grading			\$268000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Design safer slopes and ditches to prevent rollovers.
Clark County - Hazel Dell Avenue Adaptive Traffic Signals	Intersection traffic control	Modify traffic signal timing - signal coordination			\$1004000		HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		County Highway Agency	Systemic	Intersections	INT 1.7 - Employ signal coordination.
Clark County - Curve Safety Improvement	Roadway	Pavement surface - high friction surface			\$331000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
Clark County - NE 259th St & NE 72nd Ave Intersection	Roadside	Roadside grading			\$441500		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Intersections	INT 3.1 - Redesign intersection approaches to improve sight distances.
Clark County - NE 63rd St & NE 58th Ave Signal	Intersection traffic control	Intersection traffic control - other			\$925500		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Intersections	
Columbia County - Safety Data Collection & Analysis (Countywide Sign Upgrade)	Non-infrastructure	Data/traffic records			\$98000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	No Sites	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone.
Columbia County - Tucannon Road - Phase 3	Roadside	Barrier- metal			\$168750		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Cowlitz County - 2017 Safety - Guardrail	Roadside	Barrier- metal			\$377000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.

													RELATIONS	SHIP 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
Cowlitz County - 2017 Safety - Warning Signs	Roadway signs and traffic control	Curve-related warning signs and flashers			\$427000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Cowlitz County - 2017 Safety - Curve Data Collection	Non-infrastructure	Data/traffic records			\$99000		HSIP (23 U.S.C. 148)		0		County Highway Agency	No Sites	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone.
Douglas County - 2017 Douglas Co. Rumble Strips	Roadway	Rumble strips - center			\$49300		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 1.1 - Install centerline rumble strips.
Douglas County - Rock Island Rd - Safety Improvements	Roadside	Barrier- metal			\$37970		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Douglas County - McNeil Canyon Rd - Runaway Truck Ramp	Roadside	Roadside - other			\$551560		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
City of Edmonds - SR 99 Illumination - 220th St SW to 212th St SW	Lighting	Continuous roadway lighting			\$684000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.4 - Install illumination at locations with nighttime crashes.
City of Edmonds - 228th St SW Corridor Improvements	Roadway	Roadway - other			\$4234000		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	
City of Everett - Pacific Avenue and Broadway Safety	Pedestrians and bicyclists	Modify existing crosswalk			\$780000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.6 - Invest in and construct roadway reconfigurations.
City of Everett - Everett Citywide Intersection Signing	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$965566		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.13 - Improve visibility of intersections by providing enhanced signing and delineation.
City of Everett - Everett Mall Way Intersection Safety	Intersection traffic control	Modify traffic signal timing - general retiming			\$498091		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Everett - Broadway - 10th St. to 19th St. Intersection Safety	Intersection traffic control	Modify traffic signal timing - general retiming			\$531344		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Federal Way - Citywide Adaptive Traffic Control System	Intersection traffic control	Modify traffic signal timing - signal coordination			\$1000000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.

													RELATIONS	SHIP 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
City of Federal Way - Military Rd S / S 298th St Compact Roundabout	Intersection traffic control	Modify control - two-way stop to roundabout			\$803436		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.1 - Install or convert intersections to roundabouts.
Ferry County - Curve Signing Upgrades	Roadway signs and traffic control	Curve-related warning signs and flashers			\$259618		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Ferry County - Safety Data Collection	Non-infrastructure	Data/traffic records			\$31500		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	No Sites	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone.
Ferry County - Enhanced Pavement Surface Treatments	Roadway	Pavement surface - high friction surface			\$363471		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
City of Fircrest - Traffic Signal Safety Improvements	Intersection traffic control	Modify traffic signal - add flashing yellow arrow			\$337560		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.8 - Employ flashing yellow arrows at signals.
Franklin County - 2017 Safety - Rumble Bars	Roadway	Rumble strips - edge or shoulder			\$123900		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.4 - Install center and/or edge line rumble strips.
Franklin County - 2017 Safety - Flexible Guideposts	Roadway delineation	Delineators post-mounted or on barrier			\$158500		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Franklin County - 2017 Safety - Countywide Intersections	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			\$292500		HSIP (23 U.S.C. 148)	Rural Local Road or Street	0		County Highway Agency	Systemic	Intersections	INT 1.13 - Improve visibility of intersections by providing enhanced signing and delineation.
Garfield County - 2014 Highway Safety Project	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$272500		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Garfield County - Countywide Bridge Guardrail Retrofit & Upgrade	Roadside	Barrier- metal			\$594000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Grant County - Centerline & Shoulder Rumble Strips	Roadway	Rumble strips - center			\$957800		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.4 - Install center and/or edge line rumble strips.

													RELATIONS	SHIP 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
Grant County - Horizontal Curve Signs - Phase 3	Roadway signs and traffic control	Curve-related warning signs and flashers			\$630200		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Island County - County Signing Upgrades	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$152242		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Island County - Island Co. 2017 Safety - Guardrail	Roadside	Barrier- metal			\$312000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Island County - Island Co. 2017 Safety - Flexible Guideposts	Roadway delineation	Delineators post-mounted or on barrier			\$44500		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Island County - Island Co. 2017 Safety - Shoulder Paving	Shoulder treatments	Pave existing shoulders			\$495000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	
City of Kenmore - 62nd Avenue NE Corridor Safety	Speed management	Traffic calming feature			\$813200		HSIP (23 U.S.C. 148)	Urban Local Road or Street	0		City of Municipal Highway Agency	Spot	Speeding	SPE 2.2 - Use traffic-calming and other design factors to influence driver speed.
City of Kennewick - Clearwater Ave Leslie Rd. to US 395	Access management	Change in access - close or restrict existing access			\$2120000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.11 - Implement restricted access to properties/driveways adjacent to intersections.
City of Kent - Kent Valley Signal System	Intersection traffic control	Modify traffic signal - add flashing yellow arrow			\$869153		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.8 - Employ flashing yellow arrows at signals.
City of Kent - SR 515 (108th Ave. SE) and SE 208th St. Intersection Safety	Intersection geometry	Auxiliary lanes - add left-turn lane			\$700000		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.3 - Provide/improve left- and right-turn channelization.
King County - 2014 County Safety Selection	Roadway	Pavement surface - high friction surface			\$3180500		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
King County - Mini Roundabouts in Highline and Fairwood	Intersection traffic control	Modify control - two-way stop to roundabout			\$737826		HSIP (23 U.S.C. 148)	Rural Local Road or Street	0		County Highway Agency	Systemic	Intersections	INT 1.1 - Install or convert intersections to roundabouts.

													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
King County - King Co. 2017 High Friction Surface Treatment	Roadway	Pavement surface - high friction surface			\$3270000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
City of Kirkland - Citywide Safety and Traffic Flow Improvement	Intersection traffic control	Modify traffic signal timing - signal coordination			\$300000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.7 - Employ signal coordination.
City of Kirkland - Lakefront Pedestrian and Bicycle Improvements	Pedestrians and bicyclists	Pedestrian warning signs - add/modify flashers			\$989400		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.2 - Increase the use of RRFB and PHB where these crosswalk enhancements are needed.
City of Kirkland - Juanita Drive Quick Wins	Pedestrians and bicyclists	Modify existing crosswalk			\$1287395		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.4 - Improve sight distance and visibility at pedestrian crossings.
Kittitas County - Roadside Hazard Safety Improvements - Countywide	Roadside	Barrier- metal			\$689000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Klickitat County - County Road Safety Plan	Non-infrastructure	Transportation safety planning			\$112500		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	No Sites	Data	
Klickitat County - Klickitat County 2017 Safety Program	Roadway signs and traffic control	Curve-related warning signs and flashers			\$589500		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
City of Lakewood - 40th Ave. SW and 96th St. SW Safety	Roadside	Barrier- metal			\$823350		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
City of Lakewood - Dekoven Drive Traffic Calming	Intersection traffic control	Modify control - two-way stop to roundabout			\$212000		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.1 - Install or convert intersections to roundabouts.
City of Lakewood - Military Rd. & 112th St. Safety	Intersection traffic control	Modify traffic signal timing - general retiming			\$788500		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Lakewood - Steilacoom Boulevard Safety Improvements	Intersection traffic control	Modify traffic signal timing - general retiming			\$2405000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
Lewis County - 2014 County Road Safety Improvements	Roadside	Barrier- metal			\$1214939		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety

		.)p10 (4e 110g											RELATIONS	SHIP 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
														hardware such as guardrail.
Lewis County - 2017 Safety - Guideposts (Phase I)	Roadway delineation	Delineators post-mounted or on barrier			\$203500		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Lewis County - 2017 Safety - Signing & Clear Zone (Phase II)	Roadside	Roadside grading			\$912000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Design safer slopes and ditches to prevent rollovers.
Lincoln County - Safety Data Collection	Non-infrastructure	Data/traffic records			\$31500		HSIP (23 U.S.C. 148)		0		County Highway Agency	No Sites	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone.
Lincoln County - FFY 2014 Safety - Signing Upgrades	Roadway signs and traffic control	Curve-related warning signs and flashers			\$138975		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Lincoln County - 2017 Countywide Guardrail Installation	Roadside	Barrier- metal			\$630500		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
City of Longview - Washington Way & 15th Ave. Corridor Traffic Signal Improvements	Intersection traffic control	Modify traffic signal - add flashing yellow arrow			\$670450		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.4 - Improve sight distance and visibility at pedestrian crossings.
City of Lynnwood - SR 99 and SR 524 Safety Improvements	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$931000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.13 - Improve visibility of intersections by providing enhanced signing and delineation.
City of Lynnwood - SR 99 and SR 524 Real-Time Adaptive Signal Control Implementation	Intersection traffic control	Modify traffic signal timing - signal coordination			\$472500		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Marysville - Citywide Intersection Improvement Project	Intersection traffic control	Modify traffic signal timing - general retiming			\$422000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.7 - Employ signal coordination.
City of Marysville - State Ave 1st St. to 88th St. NE	Intersection traffic control	Intersection traffic control - other			\$1744000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	

													RELATIONS	SHIP 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
Mason County - Guardrail Improvements	Roadside	Barrier- metal			\$291179		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Mason County - County Road Safety Plan	Non-infrastructure	Transportation safety planning			\$90000		HSIP (23 U.S.C. 148)		0		County Highway Agency	No Sites	Data	
Mason County - Bear Creek Dewatto Rd	Roadside	Roadside grading			\$265864		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Design safer slopes and ditches to prevent rollovers.
City of Mountlake Terrace - 220th St SW Adaptive Signal System	Intersection traffic control	Modify traffic signal timing - signal coordination			\$725750		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
Okanogan County - 2017 Countywide Sign Safety	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$122959		HSIP (23 U.S.C. 148)	Rural Local Road or Street	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Okanogan County - Countywide Guardrail Safety	Roadside	Barrier- metal			\$542500		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Okanogan County - Countywide Roadside Hazard Removal	Roadside	Removal of roadside objects (trees, poles, etc.)			\$91600		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.3 - Remove/relocate objects, such as trees and utility poles.
City of Olympia - Pacific Avenue Pedestrian Crossing Improvements	Pedestrians and bicyclists	Pedestrian warning signs - add/modify flashers			\$327405		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.2 - Increase the use of RRFB and PHB where these crosswalk enhancements are needed.
Pacific County - Pacific Co. 2017 Safety - Guardrail	Roadside	Barrier- metal			\$218500		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Pacific County - Pacific Co. 2017 Safety - Signing	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$156300		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
Pacific County - Camp One Rd/Heckard Rd Intersection Realignment	Intersection geometry	Intersection geometrics - modify skew angle			\$159000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Intersections	INT 3.1 - Redesign intersection approaches to improve sight distances.

													RELATIONS	SHIP 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
City of Pasco - Oregon Avenue (SR 397) Corridor - Phase 1	Intersection geometry	Auxiliary lanes - add two-way left-turn lane			\$875900		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.3 - Provide/improve left- and right-turn channelization.
City of Pasco - N. 20th Ave. Safety Improvements	Pedestrians and bicyclists	Pedestrian signal - Pedestrian Hybrid Beacon			\$1373500		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.2 - Increase the use of RRFB and PHB where these crosswalk enhancements are needed.
Pierce County - High Friction Surface Treatment	Roadway	Pavement surface - high friction surface			\$1172300		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
Pierce County - Spanaway Loop Road So./Steele Street So./Wollochet Drive NW	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			\$191200		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Intersections	INT 3.2 - Add back plates with retro- reflective borders to signals.
Pierce County - High Friction Surface Treatment & Centerline Rumble Strips	Roadway	Pavement surface - high friction surface			\$763000		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
Pierce County - Road Safety-176th Street East Signals	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			\$229400		HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		County Highway Agency	Systemic	Intersections	INT 3.2 - Add back plates with retro- reflective borders to signals.
Pierce County - 38th Ave E & 152nd St E - Signal	Intersection traffic control	Intersection traffic control - other			\$769590		HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		County Highway Agency	Systemic	Intersections	
Pierce County - Military Rd & Bresemann Blvd S Safety Improvements	Pedestrians and bicyclists	Medians and pedestrian refuge areas			\$206100		HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		County Highway Agency	Systemic	Pedestrians	PED 4.1 - Improve safety at ped xings by installing refuge islands and shortening xing distances.
Pierce County - Road Safety- Canyon Road East Signals	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			\$440100		HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		County Highway Agency	Systemic	Intersections	INT 3.2 - Add back plates with retro- reflective borders to signals.
City of Puyallup - River Road and 9th St SW Safety Improvements	Intersection traffic control	Modify traffic signal timing - signal coordination			\$1689000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Puyallup - 5th Street SW/NW Adaptive Traffic Control	Intersection traffic control	Modify traffic signal timing - signal coordination			\$900000		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.

													RELATIONS	SHIP 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
City of Renton - SW 43rd St./SE Carr Rd./SE 176th St./SE Petrovitsky Rd. Corridor Safety Project	Intersection traffic control	Modify traffic signal timing - general retiming			\$660000		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Seattle - Vision Zero - High Friction Surface Treatments	Roadway	Pavement surface - high friction surface			\$407523		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
City of Seattle - Vision Zero - Signalized Intersections	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified			\$502000		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 4.3 - Improve sight distance and/or visibility between motor vehicles and pedestrians.
City of Shoreline - Radar Speed Sign Installations	Speed management	Radar speed signs			\$119514		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Spot	Speeding	SPE 2.5 - Support the limited use of speed feedback signs.
City of Shoreline - Meridian Ave. N. and N. 155th Street Intersection Phase Changes	Intersection traffic control	Modify traffic signal timing - general retiming			\$352385		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Spokane - Monroe St Lane Reduction & Hardscape Project 1	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			\$1886600		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 4.1 - Improve safety at ped xings by installing refuge islands and shortening xing distances.
City of Spokane - Monroe St Lane Reduction & Hardscape Project 2	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			\$1886600		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 4.1 - Improve safety at ped xings by installing refuge islands and shortening xing distances.
City of Spokane - Maxwell-Mission Avenue Lane Reduction	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			\$434900		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 4.1 - Improve safety at ped xings by installing refuge islands and shortening xing distances.
City of Spokane - Crestline Street Lane Reduction	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			\$721200		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 4.1 - Improve safety at ped xings by installing refuge islands and shortening xing distances.
Spokane County - Safety Data Collection & Evaluation	Non-infrastructure	Data/traffic records			\$98775		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	No Sites	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone.

													RELATIONS	SHIP 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
Spokane County - 2016 Spokane County Signal Safety	Intersection traffic control	Modify traffic signal timing - general retiming			\$476300		HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		County Highway Agency	Systemic	Intersections	INT 1.7 - Employ signal coordination.
Spokane County - Glenrose Rd & Carnahan Rd Safety Improvements	Alignment	Horizontal and vertical alignment			\$771600		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Intersections	INT 3.1 - Redesign intersection approaches to improve sight distances.
Spokane County - Argonne Road Overlay - MP 2.55 to MP 4.13	Roadway	Pavement surface - high friction surface			\$297000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
City of Spokane Valley - Citywide Reflective Signal Back Plates	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			\$80100		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Systemic	Intersections	INT 3.2 - Add back plates with retro- reflective borders to signals.
City of Spokane Valley - Citywide Signal Backplates	Intersection traffic control	Modify traffic signal - add backplates with retroreflective borders			\$123830		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Systemic	Intersections	INT 3.2 - Add back plates with retro- reflective borders to signals.
City of Spokane Valley - Pines Rd. (SR 27) and Grace Ave. Intersection Safety	Intersection geometry	Auxiliary lanes - add two-way left-turn lane			\$671050		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.3 - Provide/improve left- and right-turn channelization.
Stevens County - 2015 Countywide Safety Improvements (2015 Guardrail Improvements)	Roadside	Barrier- metal			\$243547		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
City of Tacoma - Pacific Ave. (SR 7) Corridor - Intersection Signal Improvements	Intersection traffic control	Modify traffic signal timing - signal coordination			\$945166		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Tacoma - South Tacoma Way Corridor Safety Improvements	Intersection traffic control	Modify traffic signal timing - general retiming			\$923930		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
City of Tacoma - East Portland Avenue Safety Improvements	Intersection traffic control	Modify traffic signal timing - general retiming			\$1368535		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
Thurston County - County Road Safety Plan	Non-infrastructure	Transportation safety planning			\$180000		HSIP (23 U.S.C. 148)		0		County Highway Agency	No Sites	Data	

	·												RELATIONS	SHIP 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
Thurston County - High Friction Surface Treatment	Roadway	Pavement surface - high friction surface			\$2000000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 2.3 - Increase road surface skid resistance using high friction surface treatments.
Thurston County - 2018 Highway Safety Improvements	Roadway	Rumble strips - center			\$1287000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.4 - Install center and/or edge line rumble strips.
City of Vancouver - Mill Plain Blvd 104th to NE Chkalov Dr.	Access management	Change in access - close or restrict existing access			\$2180000		HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.11 - Implement restricted access to properties/driveways adjacent to intersections.
Walla Walla County - Middle Waitsburg Rd - MP 6.10 to MP 7.92	Alignment	Horizontal and vertical alignment			\$1142000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.2 - Improve roadway geometry.
City of Wenatchee - Citywide Pedestrian Safety	Pedestrians and bicyclists	Pedestrian warning signs - add/modify flashers			\$395900		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Systemic	Pedestrians	PED 4.2 - Increase the use of RRFB and PHB where these crosswalk enhancements are needed.
City of Wenatchee - Wenatchee Signage Safety	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$149950		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.13 - Improve visibility of intersections by providing enhanced signing and delineation.
Whatcom County - Guardrail Safety Program	Roadside	Barrier- metal			\$899500		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail.
Whitman County - Countywide Signing & Clear Zone Improvements	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$600000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
City of Yakima - Fruitvale Blvd at River Rd & River Rd at N 34th Ave Roundabouts	Intersection traffic control	Modify control - two-way stop to roundabout			\$1012898		HSIP (23 U.S.C. 148)		0		City of Municipal Highway Agency	Spot	Intersections	INT 1.1 - Install or convert intersections to roundabouts.
Yakima County - Yakima Valley Hwy & Van Belle Rd. Intersection Conflict Warning	Intersection traffic control	Intersection flashers - add "when flashing" warning sign- mounted			\$187200		HSIP (23 U.S.C. 148)	Urban Major Collector	0		County Highway Agency	Systemic	Intersections	INT 1.9 - Provide dynamic intersection warning (real-time) to drivers.
Franklin County - Hailey Road Railroad Crossing	Railroad grade crossings	Railroad grade crossing signing			\$95000		RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Rural Local Road or Street	0		County Highway Agency	Spot	Vehicle-Train	

													RELATIONS	HIP 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
City of Mount Vernon - 4th Street N/Riverside Drive RR Crossing	Railroad grade crossings	Railroad grade crossing gates			\$1447950		RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Urban Principal Arterial (UPA) - Other	0		City of Municipal Highway Agency	Spot	Vehicle-Train	
Port of Bellingham - Harris Avenue Crossing	Railroad grade crossings	Protective devices			\$350000		RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Urban Major Collector	0		Other Local Agency	Spot	Vehicle-Train	
Walla Walla County - Port Kelly Railroad Crossing	Railroad grade crossings	Railroad grade crossing gates			\$586300		RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Rural Local Road or Street	0		County Highway Agency	Spot	Vehicle-Train	
Walla Walla County - Dodd Road Railroad Crossing	Railroad grade crossings	Railroad grade crossing gates			\$481030		RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	Rural Major Collector	0		County Highway Agency	Spot	Vehicle-Train	
Spokane County - Bigelow Gulch Rd. - Project 2	Roadway	Roadway widening - add lane(s) along segment			\$145800		Other Federal- aid Funds (i.e. STBG, NHPP)	Rural Major Collector	0		County Highway Agency	Spot	Lane Departure	LDX 2.2 - Improve roadway geometry.
Traffic Operations Assessments	Non-infrastructure	Transportation safety planning		assestment	\$416639	\$416639	Penalty Funds (23 U.S.C. 164)	Region wide	0		State Highway Agency	Systemic	multiple areas	
NCR Centerline Rumble Strips/Section B	Roadway	Rumble strips - edge or shoulder		Miles	\$1284638	\$1284638	Penalty Funds (23 U.S.C. 164)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
NCR Traffic Operation Assessments	Non-infrastructure	Transportation safety planning		assestment	\$631680	\$631680	Penalty Funds (23 U.S.C. 164)	Region wide	0		State Highway Agency	Systemic	multiple areas	
Olympic Region - Intersection Safety Implementation Program 15-17	Roadway signs and traffic control	Roadway signs and traffic control - other		Signs	\$820928	\$820928	Penalty Funds (23 U.S.C. 164)	Region wide	0		State Highway Agency	Systemic	Intersections	
SWR - Regionwide Curve Warning Signing Phase II	Roadway signs and traffic control	Curve-related warning signs and flashers		Curves	\$377481	\$377481	Penalty Funds (23 U.S.C. 164)	Region wide	0		State Highway Agency	Systemic	Lane Departure	
I-5/Northbound Off Ramp at Fourth Plain Blvd - Intersection Improvements	Intersection traffic control	Intersection traffic control - other		Signal heads	\$306559	\$306559	Penalty Funds (23 U.S.C. 164)	Urban Principal Arterial (UPA) - Interstate	0		State Highway Agency	Spot	Intersections	
SR 510/Meridian Rd SE - Roundabout	Intersection traffic control	Modify control - traffic signal to roundabout		Intersections	\$1981589	\$1981589	Penalty Funds (23 U.S.C. 164)	Urban Minor Arterial	0		State Highway Agency	Spot	Intersections	
Eastern Region HMA Route Rumble Strips - Install Rumble Strip	Roadway	Rumble strips - edge or shoulder		Miles	\$340106	\$340106	Penalty Funds (23 U.S.C. 164)	Rural Minor Arterial	0		State Highway Agency	Systemic	Roadway Departure	
NCR 15-17 Regionwide Shoulder Rumble Strip	Roadway	Rumble strips - edge or shoulder		Miles	\$712348	\$712348	Penalty Funds (23 U.S.C. 164)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	

J	,	ny miprovomone i rogram											RELATIONS	SHIP 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
SR 8/Winslow Dr SW to Vic US 101 - Safety Improvements	Roadside	Removal of roadside objects (trees, poles, etc.)		Locations	\$958873	\$958873	Penalty Funds (23 U.S.C. 164)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 240/SR 224/Van Giesen Street - Intersection Improvements	Intersection geometry	Auxiliary lanes - add acceleration lane		Intersections	\$407589	\$407589	Penalty Funds (23 U.S.C. 164)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
US 101/Evergreen Parkway to Vic Crosby Blvd - Install Cable Barrier	Roadside	Barrier - cable		Miles	\$154224	\$1077196	Penalty Funds (23 U.S.C. 164)	Urban Principal Arterial (UPA) - Other Freeways and Expressways	0		State Highway Agency	Systemic	Roadway Departure	
US 195/Cheney- Spokane Rd - New Interchange	Interchange design	Convert at-grade intersection to interchange		Interchanges	\$5695587	\$5695587	Penalty Funds (23 U.S.C. 164)	Urban Principal Arterial (UPA) - Other Freeways and Expressways	0		State Highway Agency	Spot	Intersections	
Northwest Region Intersection Safety Implementation (15-17)	Roadway signs and traffic control	Roadway signs and traffic control - other		Signs	\$486963	\$486963	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Spot	Roadway Departure	
Traffic Operation Assessments - NWR	Non-infrastructure	Transportation safety planning		assestment	\$531148	\$531148	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
NCR 17-19 Regionwide Curve Warning Sign Update	Roadway signs and traffic control	Curve-related warning signs and flashers		Signs	\$893884	\$893884	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
NCR 15-17 Regionwide Guardrail Installations	Roadside	Barrier - concrete		Miles	\$301124	\$301124	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
NCR 15-17 Regionwide Intersection Safety Implementation	Intersection traffic control	Intersection traffic control - other		Locations	\$116468	\$843277	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Spot	Intersections	
Traffic Operation Assessments	Non-infrastructure	Transportation safety planning		assestment	\$541441	\$541441	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	multiple areas	
Olympic Region - Guardrail Installations	Roadside	Barrier- metal		Miles	\$464486	\$2830747	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
SWR - Traffic Operation Assessments	Non-infrastructure	Transportation safety planning		assestment	\$541439	\$541439	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	multiple areas	
SW Region/Clark County Locations - High Friction Surfacing	Roadway	Pavement surface - high friction surface		Locations	\$399261	\$399261	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Lane Departure	

													RELATIONS	HIP 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
SWR Regionwide Safety - Shoulder Rumble Strips Phase II	Roadway	Rumble strips - edge or shoulder		Locations	\$391200	\$391200	HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Systemic	Roadway Departure	
SW Region/Regionwide Curve Warning Sign Update 2017- 2019	Roadway signs and traffic control	Curve-related warning signs and flashers		Signs	\$347894	\$347894	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Lane Departure	
South Central Region - Traffic Operation Assessments	Non-infrastructure	Transportation safety planning		assestment	\$541441	\$541441	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	multiple areas	
SCR 17-19 Region Wide - Shoulder Rumble Strips	Roadway	Rumble strips - edge or shoulder		Miles	\$390400	\$390400	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
15-17 SCR - Intersection Safety Implementation Program	Intersection traffic control	Intersection traffic control - other		Intersections	\$685759	\$685759	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Spot	Intersections	
15-17 SCR - Guardrail Installations	Roadside	Barrier- metal		Miles	\$263580	\$263580	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
Eastern Region Intersection Safety Implementation Program	Intersection traffic control	Intersection traffic control - other		Intersections	\$755473	\$755473	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Spot	Intersections	
Eastern Region Traffic Operation Assessment	Non-infrastructure	Transportation safety planning		assestment	\$541440	\$541440	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	multiple areas	
Eastern Region Curve Warning Sign Update 2017- 19	Roadway signs and traffic control	Curve-related warning signs and flashers		Curves	\$165748	\$1268248	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Lane Departure	
Eastern Region Shoulder Rumble Strip Installation 2017-19	Roadway	Rumble strips - edge or shoulder		Miles	\$390000	\$390000	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
I-5/NB Martin Luther King Jr Way - Barrier Extension	Roadside	Barrier- metal		Miles	\$561198	\$561198	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
I-5/NB NE 39th St & SR 500/NE 15th Ave - Intersection Improvements	Intersection traffic control	Modify traffic signal timing - signal coordination		Locations	\$275677	\$275677	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Interstate	0		State Highway Agency	Spot	Intersections	
I-5/300th St NW to Anderson Rd - Cable Barrier Upgrade	Roadside	Barrier - cable		Miles	\$335214	\$3049881	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Interstate	0		State Highway Agency	Systemic	Roadway Departure	

J	,												RELATIONS	HIP 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
I-5/Northbound Lakeway Dr Vicinity - Guardrail Installation	Roadside	Barrier- metal		Miles	\$89819	\$89819	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
I-5/SR 11 to Samish River Vic - Cable Barrier Upgrade	Roadside	Barrier - cable		Miles	\$145063	\$1044574	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
I-5/SR 11 Vic to SR 548 Vic - Cable Barrier Upgrade	Roadside	Barrier - cable		Miles	\$296008	\$2695040	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
SR 9/Francis Rd - Intersection Improvements	Intersection geometry	Intersection geometrics - re- assign existing lane use		Lanes	\$575154	\$2994745	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 548/Kickerville Rd - Intersection Improvements	Intersection traffic control	Modify control - all-way stop to roundabout		Intersections	\$1091423	\$1091423	HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Spot	Intersections	
SR 24/ Bench Rd Intersection Improvements	Intersection traffic control	Modify control - all-way stop to roundabout		Intersections	\$239112	\$239112	HSIP (23 U.S.C. 148)	Urban Major Collector	0		State Highway Agency	Spot	Intersections	
SR 241/Forsell Rd/Green Valley Rd - Intersection Improvements	Intersection traffic control	Intersection traffic control - other		Intersections	\$836762	\$836762	HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Spot	Intersections	
SR 397/S Yew St Vicinity - Roadside Improvements	Roadside	Removal of roadside objects (trees, poles, etc.)		Miles	\$246367	\$246367	HSIP (23 U.S.C. 148)	Urban Major Collector	0		State Highway Agency	Spot	Roadway Departure	
US 97/Branch Road - Intersection Improvements	Intersection traffic control	Intersection flashers - add advance intersection warning sign-mounted		Intersections	\$70505	\$70505	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Spot	Intersections	
US 97/Progressive - Intersection Improvements	Intersection traffic control	Intersection flashers - add advance intersection warning sign-mounted		Intersections	\$68282	\$68282	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Spot	Intersections	
SR 20/Cascade Rd Vic to Goodell Creek Campground - Rumblestrip	Roadway	Rumble strips - edge or shoulder		Miles	\$940543	\$940543	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Systemic	Roadway Departure	
SR 20/Westbound Diablo Dam Rd Vicinity - Guardrail Installation	Roadside	Barrier- metal		Miles	\$30979	\$30979	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Systemic	Roadway Departure	
SR 20/Newhalem to Lillian Creek - Rumblestrip Installation	Roadway	Rumble strips - edge or shoulder		Miles	\$197736	\$1112805	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Systemic	Roadway Departure	
SR 20/Lillian Creek to Granite Creek - Rumblestrip Installation	Roadway	Rumble strips - edge or shoulder		Miles	\$968112	\$968112	HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Systemic	Roadway Departure	

													RELATIONS	HIP 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
Eastern Region BST Rumble Strips A - Install Rumble Strip	Roadway	Rumble strips - edge or shoulder		Miles	\$342137	\$342137	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
Eastern Region BST Rumble Strips B - Install Rumble Strip	Roadway	Rumble strips - edge or shoulder		Miles	\$347633	\$347633	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
NCR 17-19 Regionwide Shoulder Rumble Strip Installation	Roadway	Rumble strips - edge or shoulder		Miles	\$391200	\$391200	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
SR 22 ET AL/Benton and Yakima Co- Centerline Rumble Strips	Roadway	Rumble strips - edge or shoulder		Miles	\$363473	\$363473	HSIP (23 U.S.C. 148)	Corridor wide	0		State Highway Agency	Systemic	Roadway Departure	
US 2/Bickford Ave SE to Roosevelt Rd Vic - Safety Improvements	Roadway	Roadway - other		Lanes	\$303475	\$303475	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	multiple areas	
US 2/Roosevelt Rd Vic to SR 522 Vic - Rumble Strip Installation	Roadway	Rumble strips - edge or shoulder		Miles	\$242442	\$242442	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 20/Banta Rd - Intersection Safety Improvements	Intersection geometry	Auxiliary lanes - add auxiliary through lane		Lanes	\$1703872	\$2147872	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 525/SB Alderwood Mall Pkwy - Intersection Improvements	Intersection traffic control	Intersection traffic control - other		Intersections	\$182874	\$1265343	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 546/Northwood Rd - Intersection Improvements	Intersection traffic control	Intersection traffic control - other		Intersections	\$354958	\$354958	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
US 2/W of Coles Corner - Roadside Safety	Roadside	Barrier- metal		Miles	\$276070	\$276070	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
US 2/SR 207 Coles Corner - Two Way Left Turn Lane	Intersection geometry	Auxiliary lanes - add two-way left-turn lane		Lanes	\$561689	\$697821	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 17/Airway Drive to Phoenix Drive - Roadside Safety Improvements	Roadside	Roadside grading		Miles	\$265282	\$265282	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 17/I-90 to Broadway Ave Safety Improvements	Roadway	Roadway - other		Locations	\$843233	\$843233	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	

													RELATIONS	HIP 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
SR 26/Thacker Road - Intersection Improvements	Intersection traffic control	Intersection flashers - add advance intersection warning sign-mounted		Signs	\$659672	\$659672	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 26/SR 243 Intersection Improvements	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified		Miles	\$151275	\$151275	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 28/5th Street Intersection Improvements	Intersection traffic control	Intersection traffic control - other		Intersections	\$186900	\$1359649	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 28/17th to 19th St. E. Wenatchee - Two Way Left Turn Lane	Intersection geometry	Auxiliary lanes - add two-way left-turn lane		Lanes	\$444538	\$444538	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Intersections	
SR 28/North of East Wenatchee - Safety Improvements	Intersection traffic control	Intersection flashers - add miscellaneous/other/unspecified		Signal heads	\$202604	\$202604	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
US 97/Brays Landing Rd Intersection Improvements	Intersection geometry	Auxiliary lanes - add left-turn lane		Lanes	\$453500	\$453500	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 171/Beech St Intersection - Safety Improvements	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified		Intersections	\$95965	\$95965	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 7/Pedestrian Crossing - Safety Improvement	Pedestrians and bicyclists	Pedestrian warning signs - add/modify flashers		Signs	\$558207	\$558207	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Pedestrians	
US 12/Monte Brady Rd to Schouweiler Rd - Study	Non-infrastructure	Transportation safety planning		assestment	\$336000	\$336000	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	multiple areas	
SR 14/Marble Rd Vicinity to Belle Center Rd - Safety Improvements	Roadway	Roadway widening - curve		Curves	\$4039890	\$4039890	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 500/NE 42nd Ave and 54th Ave Intersections - Safety Evaluation	Non-infrastructure	Transportation safety planning		assestment	\$96000	\$96000	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	multiple areas	
SR 503/Padden Parkway - Intersection Improvements	Intersection geometry	Auxiliary lanes - add right-turn lane		Lanes	\$354190	\$354190	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 503/NE 154th St to SR 502 - Median Barrier	Roadway	Roadway - restripe to revise separation between opposing lanes and/or shoulder widths			\$168590	\$168590	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
US 97/2nd Ave Vicinity - Roadside Improvements	Roadside	Barrier - concrete		Miles	\$343489	\$343489	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	

													RELATIONS	HIP 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
US 97/SR 22 to Lateral A - Corridor Intersection Safety	Non-infrastructure	Transportation safety planning		assestment	\$334080	\$334080	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
US 395/Deer Park - Intersection Improvement Study	Non-infrastructure	Transportation safety planning		assestment	\$138220	\$138220	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Intersections	
Northwest Region Curve Warning Signs (15-17)	Roadway signs and traffic control	Curve-related warning signs and flashers		Curves	\$1601537	\$1601537	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Lane Departure	
SR 18/Soosette Creek Vic to Issaquah Hobart Rd Vic - Cable Barrier	Roadside	Barrier - cable		Miles	\$118599	\$851721	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other Freeways and Expressways	0		State Highway Agency	Systemic	Roadway Departure	
SR 20/SR 536 Vic to Pulver Rd Vic - Cable Barrier Upgrade	Roadside	Barrier - cable		Miles	\$134281	\$964211	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 99/Tukwila Int'l Blvd to Holden St Vic - Cable Barrier Upgrade	Roadside	Barrier - cable		Miles	\$796483	\$796483	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 522/North Creek Vic to NE 195th St - Cable Barrier Upgrade	Roadside	Barrier - cable		Miles	\$710099	\$710099	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other Freeways and Expressways	0		State Highway Agency	Systemic	Roadway Departure	
SR 539/Ten Mile Rd Vic to Nooksack River Overflow Br - Cable Barrier	Roadside	Barrier - cable		Miles	\$83313	\$766013	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other Freeways and Expressways	0		State Highway Agency	Systemic	Roadway Departure	
SR 17/Prior Farms - Left Turn Lane	Intersection geometry	Auxiliary lanes - add left-turn lane		Lanes	\$425285	\$425285	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Intersections	
15-17 Olympic Region Centerline Rumble Strips - Install Rumble Strips	Roadway	Rumble strips - edge or shoulder		Miles	\$330883	\$330883	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
15-17 Olympic Region Shoulder Rumble Strips - Install Rumble Strips	Roadway	Rumble strips - edge or shoulder		Miles	\$318618	\$318618	HSIP (23 U.S.C. 148)	Region wide	0		State Highway Agency	Systemic	Roadway Departure	
SR 3/Kitsap Way to SR 305 - Install Cable Barrier	Roadside	Barrier - cable		Miles	\$250250	\$4662138	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 16/Olympic Dr NW to Burley Olalla Rd - Install Cable Barrier	Roadside	Barrier - cable		Miles	\$336648	\$2331005	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other Freeways and Expressways	0		State Highway Agency	Systemic	Roadway Departure	

		ry improvement i rogram											RELATIONS	HIP 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
SR 4 Centerline Rumblestrips - Safety	Roadside	Barrier - cable		Miles	\$254748	\$254748	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
US 101/SR 101 Alternate I/S Vic to Raymond - Centerline Rumble Strips	Roadway	Rumble strips - center		Miles	\$229954	\$229954	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Lane Departure	
US 12/Low Rd - Intersection Safety Improvements	Intersection geometry	Auxiliary lanes - add left-turn lane		Lanes	\$311117	\$311117	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 17/US 395 to 0.15 North of Mesa - Shoulder Rumble Strips	Roadway	Rumble strips - edge or shoulder		Miles	\$16776	\$16776	HSIP (23 U.S.C. 148)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 240/Steptoe Roundabout Improvements	Intersection geometry	Splitter island - unspecified		Intersections	\$217022	\$217022	HSIP (23 U.S.C. 148)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 524/Locust & Larch Way - Intersection Improvements	Intersection traffic control	Modify control - all-way stop to roundabout		Intersections	\$0	\$4303816	Other Federal- aid Funds (i.e. STBG, NHPP)	Urban Minor Arterial	0		State Highway Agency	Systemic	Intersections	
SR 542/SR 9 East Junction- Intersection Improvements	Intersection traffic control	Modify control - all-way stop to roundabout		Intersections	\$0	\$1409091	Other Federal- aid Funds (i.e. STBG, NHPP)	Rural Minor Arterial	0		State Highway Agency	Systemic	Intersections	
US 2/Jct SR 206 Intersection Analysis of Alternatives	Non-infrastructure	Transportation safety planning		assestment	\$0	\$496320	Other Federal- aid Funds (i.e. STBG, NHPP)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	multiple areas	
US 2/Deer Rd to Day Mt Spokane Rd - Corridor Improvements	Roadway	Roadway - other		Locations	\$0	\$3720017	Other Federal- aid Funds (i.e. STBG, NHPP)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Systemic	Intersections	
US 395/Deer Park Corridor Safety Improvements	Intersection geometry	Intersection geometry - other		Locations	\$0	\$4268026	Other Federal- aid Funds (i.e. STBG, NHPP)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Systemic	Intersections	
SR 546/Depot Rd and Bender Rd - Intersections Improvements	Intersection geometry	Intersection geometry - other		Locations	\$0	\$4101812	Other Federal- aid Funds (i.e. STBG, NHPP)	Rural Principal Arterial (RPA) - Other	0		State Highway Agency	Spot	Intersections	
SR 503/4th Plain to 107th St - Median Curb	Access management	Median crossover - close crossover		Miles	\$0	\$286474	Other Federal- aid Funds (i.e. STBG, NHPP)	Urban Principal Arterial (UPA) - Other	0		State Highway Agency	Spot	Intersections	

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

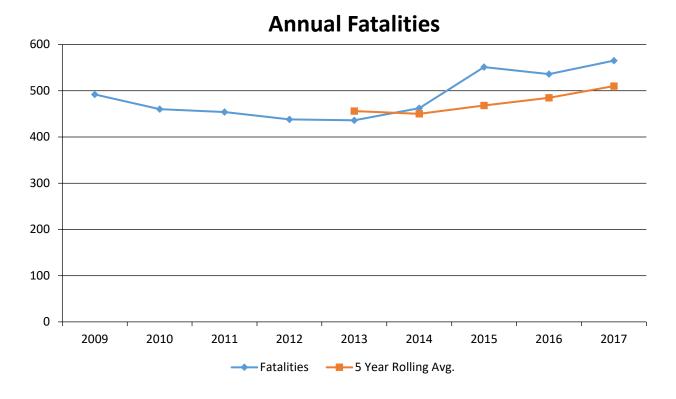
The total cost shown are for HSIP fund only and do not include WSDOT associated cost, the cost are primarily borne by associated state and local funds, as well as direct project support that is considered as distributed funds for WSDOT.

### **Safety Performance**

#### General Highway Safety Trends

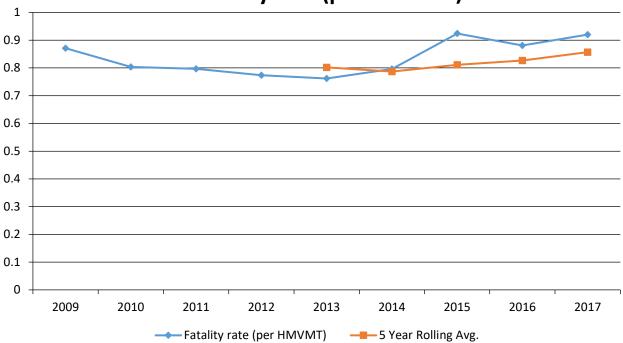
Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2009	2010	2011	2012	2013	2014	2015	2016	2017
Fatalities	492	460	454	438	436	462	551	536	565
Serious Injuries	2,648	2,478	2,135	2,201	1,916	2,004	2,100	2,217	2,224
Fatality rate (per HMVMT)	0.871	0.804	0.797	0.774	0.762	0.796	0.924	0.881	0.920
Serious injury rate (per HMVMT)	4.690	4.333	3.748	3.888	3.349	3.452	3.520	3.643	3.621
Number non-motorized fatalities	71	69	79	87	61	85	100	105	122
Number of non-motorized serious injuries	399	408	402	449	343	408	393	489	453

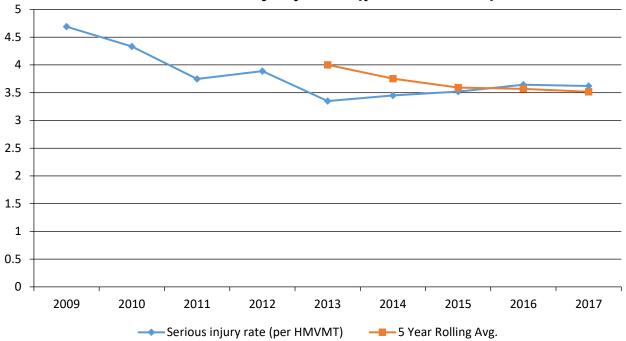


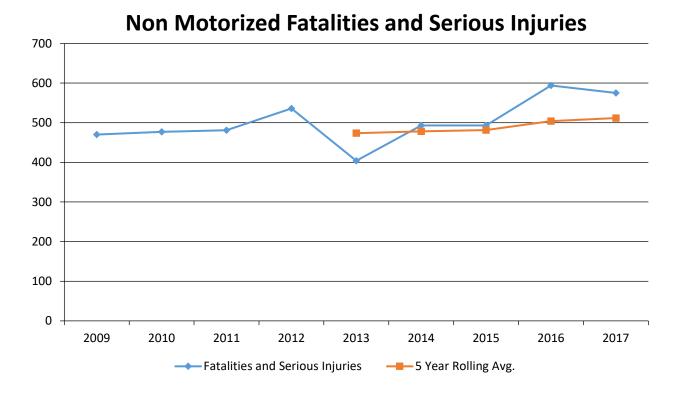
#### **Annual Serious Injuries** Serious Injuries ── 5 Year Rolling Avg.

### **Fatality rate (per HMVMT)**



### Serious injury rate (per HMVMT)





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

Describe fatality data source.

**FARS** 

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

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

**Year 2017** 

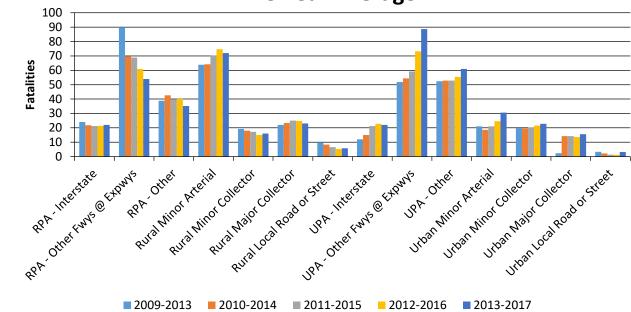
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate	22	60.8	4.75	13.16
Rural Principal Arterial (RPA) - Other Freeways and Expressways	54	48.2	31.33	27.81
Rural Principal Arterial (RPA) - Other	35.2	98.8	15.76	44.35
Rural Minor Arterial	72	94.8	33.57	44.15
Rural Minor Collector	16	55.6	4.58	15.9
Rural Major Collector	23	0.2	21.7	0.18

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Local Road or Street	5.8	0.2	5.1	0.17
Urban Principal Arterial (UPA) - Interstate	22	133.8	1.87	11.32
Urban Principal Arterial (UPA) - Other Freeways and Expressways	88.6	106	15.41	18.63
Urban Principal Arterial (UPA) - Other	61	220.2	6.39	23.07
Urban Minor Arterial	30.6	64	3.96	8.29
Urban Minor Collector	22.8	8.2	6.58	2.37
Urban Major Collector	15.6	0	146.49	0
Urban Local Road or Street	3.2	0	0.66	0

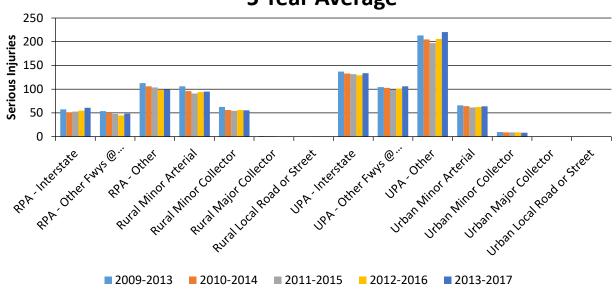
#### **Year 2017**

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	238.2	891.4	7.15	26.8
County Highway Agency	140	531.4	14.59	55.37
Town or Township Highway Agency	0	0	0	0
City of Municipal Highway Agency	119.2	784.6	7.53	49.61
State Park, Forest, or Reservation Agency	0	0	0	0
Local Park, Forest or Reservation Agency	0	0	0	0
Other State Agency	0	0	0	0
Other Local Agency	0	0	0	0
Private (Other than Railroad)	0	0	0	0
Railroad	0	0	0	0
State Toll Authority	0	0	0	0
Local Toll Authority	0	0	0	0
Other Public Instrumentality (e.g. Airport, School, University)	0	0	0	0
Indian Tribe Nation	0	0	0	0

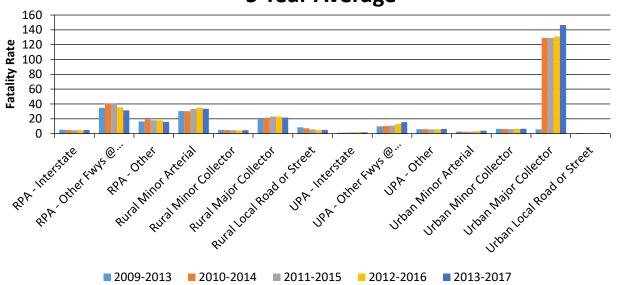
## Number of Fatalities by Functional Classification 5 Year Average



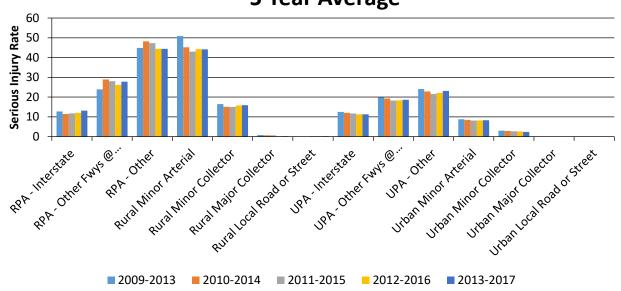
# Number of Serious Injuries by Functional Classification 5 Year Average



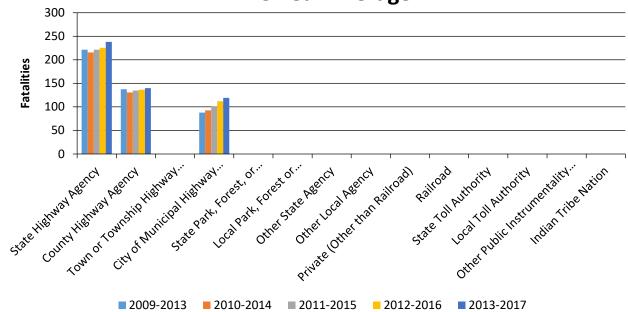
# Fatality Rate (per HMVMT) by Functional Classification 5 Year Average



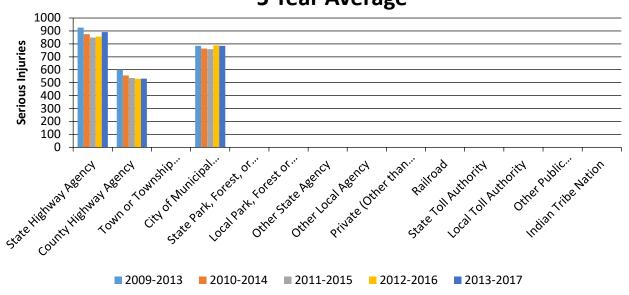
# Serious Injury Rate (per HMVMT) by Functional Classification 5 Year Average



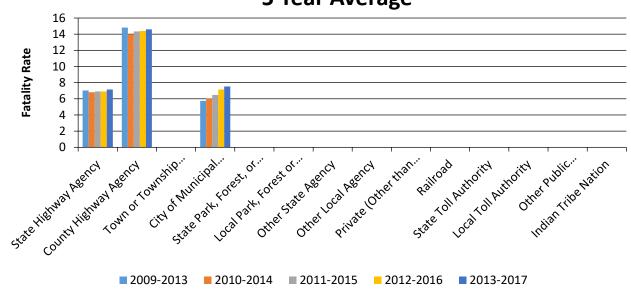
## Number of Fatalities by Roadway Ownership 5 Year Average



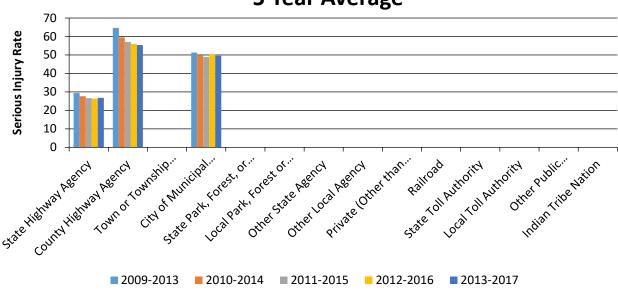
# Number of Serious Injuries by Roadway Ownership 5 Year Average



# Fatality Rate (per HMVMT) by Roadway Ownership 5 Year Average



# Serious Injury Rate (per HMVMT) by Roadway Ownership 5 Year Average



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

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

No

Safety Performance Targets
Safety Performance Targets

Calendar Year 2019 Targets \*

**Number of Fatalities** 

489.2

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

The linear trend line of the five year rolling average was used to set the target unless the target showed an increase this way: then the 5-year average value for 2013-2017 was used to set the target for 2019. The target for Fatalities was set on the linear trend line of the 5-year rolling average. Fatalities is a performance measure in the SHSP.

**Number of Serious Injuries** 

1855.2

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

The linear trend line of the five year rolling average was used to set the target unless the target showed an increase this way: then the 5-year average value for 2013-2017 was used to set the target for 2019. The target for Serious Injuries was set on the linear trend line of the 5-year rolling average. Serious injuries is a performance measure in the SHSP.

**Fatality Rate** 

0.813

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

The linear trend line of the five year rolling average was used to set the target unless the target showed an increase this way: then the 5-year average value for 2013-2017 was used to set the target for 2019. The target for Fatality Rate was set on the linear trend line of the 5-year rolling average. The SHSP does not use rates as a performance metric.

**Serious Injury Rate** 

3.068

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

The linear trend line of the five year rolling average was used to set the target unless the target showed an increase this way: then the 5-year average value for 2013-2017 was used to set the target for 2019. The target for Serious Injury Rate was set on the linear trend line of the 5-year rolling average. The SHSP does not use rates as a performance metric.

**Total Number of Non-Motorized Fatalities and Serious Injuries** 

511.8

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

The linear trend line of the five year rolling average was used to set the target unless the target showed an increase this way: then the 5-year average value for 2013-2017 was used to set the target for 2019. The target for Non-Motorized Fatalities and Serious Injuries was set equal the 5-year rolling average for 2013 - 2017. Pedestrian and bicyclist fatalities and serious injuries are part of two emphasis areas in the 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.

WSDOT worked directly with partners in setting targets this year. Including multiple meetings with SHSO and MPOs. The MPO meetings included outreach to technical, coordinating and executive committees. In addition, WSDOT developed worksheets for describing MPO proportional share of safety targets for tracking purposes. The WSDOT also made presentations to governing bodies of a number of the MPOs.

2018 Washington Highway Safety Improvement Program **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?

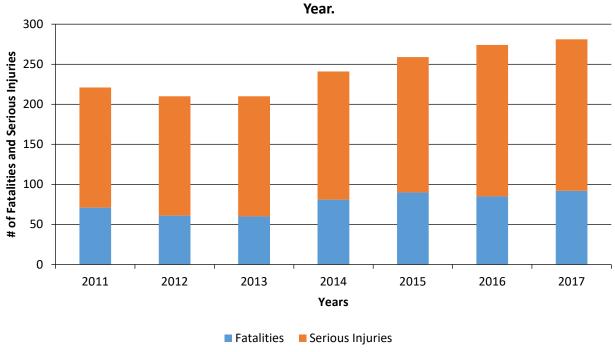
Yes

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	71	61	60	81	90	85	92
Number of Older Driver and Pedestrian Serious Injuries	150	149	150	160	169	189	189

### Number of Older Driver and Pedestrian Fatalities and Serious Injuries by



2018 Washington Highway Safety Improvement Program
Enter additional comments here to clarify your response for this question or add supporting information.

#### **Evaluation**

#### **Program Effectiveness**

#### How does the State measure effectiveness of the HSIP?

Change in fatalities and serious injuries Benefit/Cost Ratio

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

While HSIP effectiveness has historically been tracked using B/C for each project (and overall), that is now shifting to a measure of the change in fatalities and serious injuries overall. This is due to the fact that a greater proportion of projects are now risk-based, which is not something measurable by a typical B/C ratio.

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

While fatal and serious injury crashes have been on the rise across all jurisdictional road types since a low in 2013, we continue to measure overall progress by jurisdictional type of road (state, county, city). Since each of these jurisdiction types is primarily funded through separate programs within the HSIP, this seems like a reasonable approach to monitor progress.

For projects completed in calendar year 2013, we compare the 5-year rolling average from 2009-2013 with the 5-year rolling average from 2013-2017. This overlaps the year 2013 in each data set, which then is really a comparison of the 4 years before the projects were completed with the 4 years after the projects were completed. By jurisdictional road type, those comparisons show:

State Highways: 2009-2013 = 771.4 fatal/serious crashes vs 2013-2017 = 733.6 fatal/serious crashes, or a 5% decrease.

County Roads: 2009-2013 = 604.2 fatal/serious crashes vs 2013-2017 = 534.8 fatal/serious crashes, or an 11% decrease.

City Streets: 2009-2013 = 949.4 fatal/serious crashes vs 2013-2017 = 956.8 fatal/serious crashes, or a 1% increase.

Note that state highways that serve as city streets (in cities of 27,500+ population) are included in the city streets data here.

This data seems to highlight that the full systemic safety approach on county roadways, implemented in 2010 (with projects being completed primarily in 2012-2013), is showing some effectiveness (with a greater decrease than that seen on state or city roadways). Additional years of data and years of investment on the county road network in this manner should help to solidify these early results.

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

More systemic programs
Policy change
Organizational change
Increased awareness of safety and data-driven process
Increased focus on local road safety

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

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

Yes

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

WSDOT has updated its approach in its safety program. The program is about 70% prevention (systemic) and 30% reactive (crash based). The program has new sub-categories for high friction surface treatment, vulnerable road users, terminals and rail modifications, and field operational assessments.

Effectiveness of Groupings or Similar Types of Improvements

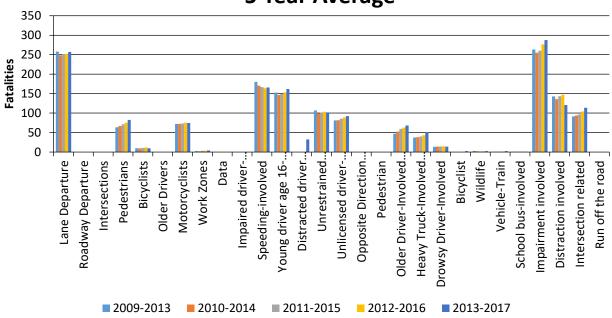
Present and describe trends in SHSP emphasis area performance measures.

#### **Year 2017**

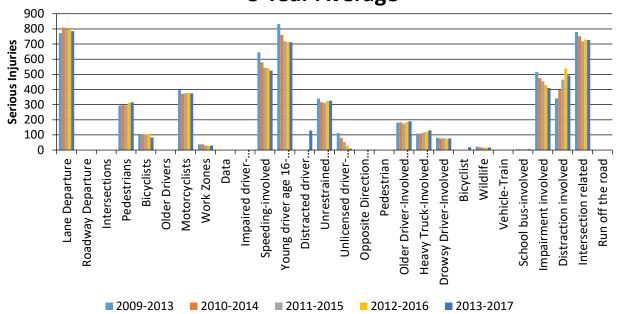
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Lane Departure		257.2	785	4.33	13.2	0	0	0
Roadway Departure		0	0	0	0	0	0	0
Intersections		0	0	0	0	0	0	0
Pedestrians		82.4	315.2	1.38	5.29	0	0	0
Bicyclists		9.6	83.4	0.16	1.41	0	0	0
Older Drivers		0	0	0	0	0	0	0
Motorcyclists		74.6	375.2	1.25	6.31	0	0	0
Work Zones		4	29	0.07	0.49	0	0	0
Data		0	0	0	0	0	0	0
Impaired driver-involved		0	0	0	0	0	0	0
Speeding-involved		165.8	524.6	2.79	8.83	0	0	0

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)	Other 1	Other 2	Other 3
Young driver age 16-25 involved		161.8	712.2	2.72	11.97	0	0	0
Distracted driver involved		32.6	129.2	0.53	2.1	0	0	0
Unrestrained passenger vehicle occupant		102	326.6	1.72	5.49	0	0	0
Unlicensed driver-involved		92.4	9	1.55	0.15	0	0	0
Opposite Direction Multivehicle (Headon)		0	0	0	0	0	0	0
Pedestrian		0	0	0	0	0	0	0
Older Driver-Involved (age 70+)		68	189.6	1.14	3.19	0	0	0
Heavy Truck-Involved (GVWR>10,000 lbs)		50.8	130.2	0.85	2.19	0	0	0
Drowsy Driver-Involved		14	77	0.24	1.29	0	0	0
Bicyclist		2.6	18.6	0.04	0.3	0	0	0
Wildlife		2.6	17.2	0.04	0.29	0	0	0
Vehicle-Train		2.6	1.2	0.04	0.02	0	0	0
School bus-involved		0.8	5.8	0.01	0.1	0	0	0
Impairment involved		287.4	410.2	4.83	6.91	0	0	0
Distraction involved		120.6	492	2.04	8.34	0	0	0
Intersection related		113.8	727	1.91	12.22	0	0	0
Run off the road		0	0	0	0	0	0	0

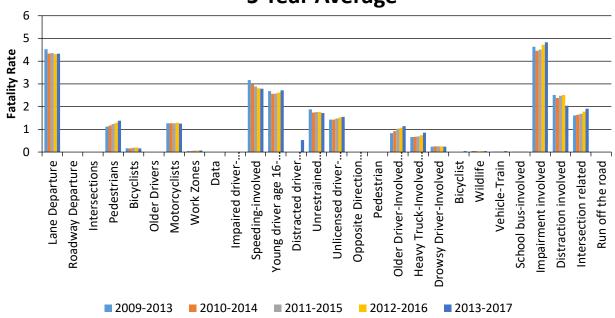
## Number of Fatalities 5 Year Average



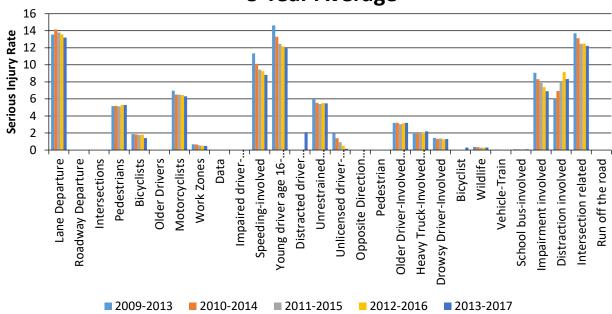
## Number of Serious Injuries 5 Year Average



## Fatality Rate (per HMVMT) 5 Year Average



## Serious Injury Rate (per HMVMT) 5 Year Average



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

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

2018 Washington Highway Safety Improvement Program
Enter additional comments here to clarify your response for this question or add supporting information.

#### Project Effectiveness

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

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

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

No

### **Compliance Assessment**

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

08/18/2016

What are the years being covered by the current SHSP?

From: 2012 To: 2014

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.

The state is in the process of updating the SHSP.

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

	NON LOCA ROADS - S	AL PAVED SEGMENT		AL PAVED FERSECTION		CAL PAVED - RAMPS	LOCAL PAV	/ED ROADS	UNPAVE	D ROADS
MIRE NAME (MIRE NO.)	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT										
Segment Identifier (12)	100	100					100	100	100	98
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	9					100	100		
Begin Point Segment Descriptor (10)	100	100					100	100	100	98
End Point Segment Descriptor (11)	100	100					100	100	100	98
Segment Length (13)	100	100								
Direction of Inventory (18)	100	100								
Functional Class (19)	100	100					100	100	100	98
Median Type (54)	100	5								

	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
Access Control (22)	100	10								
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	100	100
INTERSECTION										
Unique Junction Identifier (120)			0	0						
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	5						
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				
Roadway Type at Beginning of Ramp Terminal (195)					100	100				

	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 Type at End Ramp Terminal (199)					100	100				
Interchange Type (182)					0	0				
Ramp AADT (191)					75	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	84.67	87.50	75.63	88.64	90.91	100.00	88.89	100.00	98.40

<sup>\*</sup>Based on Functional Classification

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

Many current production data elements have been collected over a period of decades with varying degrees of precision and accuracy. We also know that changes to the system take place without our knowledge/involvement, such as a local developer doing work on our highway system. This data is not always captured on a highway construction contract. We are therefore, unable to identify and report these changes.

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.

WSDOT is in the process of implementing ESRI's Roads and Highways and Transcend Tools that will help us capture the remaining elements on our state routes and CRAB is in the process of forming a MIRE technical steering committee for the purpose of coordinating the collection the counties MIRE FDE's elements. WSDOT has been invited to participate on this committee which should also help bridge any gaps we may have between state and county roadways. The challenge is going to be getting the local system collected which is where we would rely on the Local Programs Office for outreach and coordination with local agencies to help with this effort.

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	Serious Injury	No	N/A	No	N/A	No
Crash Report Form Instruction Manual	Suspected Serious Injury	Yes	Suspected Serious Injury (Serious Injury) — applies to any injury other than fatal that results in one or more of the following:  Severe lacerations resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood, broken or distorted extremity, crush injuries, suspected skull, chest, or abdominal injury other than bruises or minor lacerations, significant burns, unconsciousness when taken from the scene, paralysis.	Yes	N/A	Yes
Crash Database	Suspected Serious Injury	Yes	N/A	Yes	N/A	Yes

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 Database Data Dictionary	Suspected Serious Injury	Yes	Applies when law enforcement officer observes any injury that results in one or more of the following:  •Severe lacerations resulting in exposure of underlying tissues/muscle/organs or resulting in significant loss of blood  •Broken or distorted extremity (arm or leg)or Crush injuries  •Suspected skull, chest or abdominal injury other than bruises or minor lacerations  •Significant burns (2nd/3rd degree over 10% or more of the body)  •Unconsciousness when taken from the crash scene Paralysis	Yes	N/A	Yes

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

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?

Yes

Describe the purpose and outcomes of the State's HSIP program assessment.

The WSDOT reviewed its overall program and approach to HSIP projects and reporting this assessment was not formal.

Ontional	<b>Attachments</b>
Oblibiiai	Allacillients

Program Structure:
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.