



# WASHINGTON

## HIGHWAY SAFETY IMPROVEMENT PROGRAM 2017 ANNUAL REPORT



U.S. Department of Transportation  
Federal Highway Administration

Photo source: Federal Highway Administration

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## Disclaimer

### **Protection of Data from Discovery Admission into Evidence**

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section [HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.”

23 U.S.C. 409 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

## **Executive Summary**

The Washington state HSIP program funds both local safety (70%) and state highway safety (30%) programs. The program continues to be successful with a slight drop in fatality crash (-14), increase in serious injury (109), non-motorized fatalities (+6) and non-motorized serious injuries (+94). Projects going forward using HSIP funds target the top two (both priority one) infrastructure focus areas identified in the SHSP (Run-Off-the-Road and Intersections). The Department has made significant strides in implementation and use of the HSM and uses data driven decision making throughout planning and project development. MIRE compliance is on track to meet federal rules.

The HSIP program has had a major benefit and effect on road safety in Washington state. While state highways have allocated state funds to support safety efforts, in addition to HSIP funds, the majority of local road safety efforts are funded by the HSIP program. With 70% of fatal and serious injury crashes in the priority one focus areas, the HSIP provides a primary means for the state to have any possibility to achieving its Target Zero vision by 2030.

## 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 as the basis for establishing emphasis area.

#### **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.**

The following Divisions all participate in WSDOT safety activities:

Design

Planning,

Traffic Operations,

Safety,

Local Programs

Governors Highway Safety Office

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

Other-Funds are allocated centrally

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

WSDOT allocates funds through both reactive and proactive approaches. The data driven categories are derived from emphasis areas contained within Target Zero and are used to target specific crash types and contributing factors to crashes.

**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](http://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 Run-Off-the-Road 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 run-off-road 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.**

**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 Multimodal Safety Executive Committee (MSEC). 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

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highway safety program through the MSEC provides department-wide and multimodal coordination and input on highway and modal safety issues. Oversight is the responsibility for Quality Assurance & Transportation System Safety Division who see that the MSEC 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. MSEC is comprised of program directors from all of the major highways divisions (Design, Planning, Program Management, Traffic Operations, Local Programs, Quality Assurance & Transportation System Safety, and Strategic Analysis & Reporting) and modes (Ferries, Rail, Aviation, Bicycle, Pedestrian and Transit.) The Highway Safety Issue Group provides technical support to the MSEC 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

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.**

Note that LTAP is actually an internal partner in Washington State, not an external partner, and is located in the Local Programs division.

We also see FHWA as an internal partner in the process and have routine meetings to discuss and consider approaches to crash reduction and carrying out the program.

### **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 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?**

No

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

Yes

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

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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.

**Program Methodology**

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

No

**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.**

- 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

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

The state HSIP program focuses primarily on Collision Analysis Locations (CALs), which are generally focused on low-cost spot modifications at specific crash locations and Intersection Analysis Locations (IALs) related to Intersection safety.

The local HSIP program primarily focuses on a County Safety Program, with emphasis on Roadway Departure crashes and Intersection crashes, and a City Safety Program, with emphasis on Intersection crashes and Pedestrian crashes.

**Program:** Other-State - Collision Analysis Corridors

**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]**

<b>Crashes</b>	<b>Exposure</b>	<b>Roadway</b>
Fatal and serious injury crashes only	Traffic Volume	Median width Horizontal curvature Functional classification 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
- Available funding : 2
- Other-Fatal & serious injury crash history : 3

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

**Program:** Other-State - Collision 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]**

<b>Crashes</b>	<b>Exposure</b>	<b>Roadway</b>
Fatal and serious injury crashes only	Traffic Volume	Median width Horizontal curvature Functional classification 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?**

Competitive application process

**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 & serious injury crash history : 2

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

**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]**

<b>Crashes</b>	<b>Exposure</b>	<b>Roadway</b>
Fatal and serious injury crashes only	Volume	Functional classification 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 & serious injury crash history : 2

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

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

**Date of Program Methodology:** 1/1/2011

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

Addresses SHSP priority or emphasis area

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

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]**

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Crash frequency

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

Yes

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

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

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

**Rank of Priority Consideration**

Ranking based on B/C : 1

Available funding : 2

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

**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**

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Fatal and serious injury crashes only Lane miles

**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?**

Yes

**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?**

Other-Allocation of funds to each county based on rate of fatal & serious injury crashes per mile

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**

Available funding : 2

Other-Completion of Local Road Safety Plan : 1

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

**What percentage of HSIP funds address systemic improvements?**

50

**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

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Horizontal curve signs

High friction surface treatment

**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.**

Use of statistical analysis tools to perform 5th E approach (evaluation, analysis and diagnosis)

**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.

**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.

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

No

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

Yes

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

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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.

## 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)	\$78,854,423	\$44,795,549	56.81%
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)	\$1,302,568	\$400,000	30.71%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$0	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$63,544,989	\$36,233,872	57.02%
State and Local Funds	\$90,088,289	\$90,088,289	100%
Section 402: State and Community Highway Safety	\$7,512,047	\$5,696,970	75.84%
FAST Act: Section 405	\$10,386,649	\$7,396,378	71.21%
<b>Totals</b>	<b>\$251,688,965</b>	<b>\$184,611,058</b>	<b>73.35%</b>

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

HSIP, Other Federal Funds, and State and Local funds represent Calendar Year 2016. Programmed and obligated funds are both based on projects in the 2016 STIP. Note that most projects include some safety elements and countermeasures, in larger or smaller shares of other projects using federal funds. These projects are not captured here, in part because it would be very difficult to break out the safety funding versus non-safety funding within those projects. It should be noted that the state and local funds included in the table are what was "committed" to the projects as part of a match, but are not officially "obligated" as they are not federal funds.

Local Agency Projects: Programmed values are from the 2016 STIP. Obligated values are from SPORT (internal database) for projects in the 2016 STIP.

State Projects: Programmed values are from the 2016 STIP. Obligated values for HSIP funds are from FMIS (FMIS Business Objects with HSIP recodes) for projects in the 2016 STIP. This is calculated by taking the total

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HSIP obligations and subtracting the local HSIP obligations. Obligated values for Other Federal-aid Funds are from FATS (internal database) for projects in the 2016 STIP. This is calculated by assuming the difference between programmed and obligated funds in FATS is the difference for state projects (as it was mostly state projects identified in the FATS database).

Behavioral Projects: Behavioral funds are administered by the Washington Traffic Safety Commission (WTSC). These figures represent federal fiscal year 2017, including carry forward funds for some categories. Programmed reflects funds that have been transferred from NHTSA to the WTSC. Obligated funds are not yet available (for funds that have been allocated to specific projects aside from Section 402 funds), so programmed funding levels are shown.

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

\$167,462,348

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

\$140,101,715

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

Note that the local funding shown in answer to this question does not include any of the behavioral funds/programs shown in Question 23. Only the split for infrastructure-related projects is shown. Also note that for HSIP funds, the funding is split 70% programmed/obligated for local safety projects, 30% programmed/obligated for state safety projects.

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

\$17,898,696

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

\$13,093,348

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

Note that none of the HSIP funds are directed to non-infrastructure projects. These funds represent only the behavioral funds shown in Question 23.

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

\$0

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

\$0

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

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

WSDOT provides much of its HSIP appropriation to its local partners. Providing matching funds may be challenging for some agencies.

**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)

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**General Listing of Projects**

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

													RELATIONSHIP TO SHSP	
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	EMPHASIS AREA	STRATEGY
Adams County - Safety Data Collection & Analysis	Non-infrastructure	Data/traffic records			\$180000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
Adams County - Lee Rd #12421 Safety Improvements	Roadside	Roadside grading			\$313500		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.
City of Auburn - Traffic Signal Safety Improvements	Intersection traffic control	Modify traffic signal timing - general retiming			\$412575		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 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 using closures or turn restrictions.
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 - 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 - 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.
City of Bellingham - N. State St./E. Laurel St. Pedestrian Safety	Pedestrians and bicyclists	Modify existing crosswalk			\$350000		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.1 - Improve safety at pedestrian crossings by investing in and installing refuge islands, and shortening crossing distances with curb extensions.
City of Bothell - 228th St. SE at Bothell Everett Hwy (SR 527)	Intersection geometry	Auxiliary lanes - add left-turn lane			\$2330000		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.3 - Provide/improve left- and right-turn channelization.

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													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
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 by clearing vegetation, extending crossing times, adding pedestrian leading intervals or adding pedestrian scale illumination.
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.
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	Other	Data	
Chelan County - Chumstick Hwy #93350 Safety	Roadway signs and traffic control	Curve-related warning signs and flashers			\$467500		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 - 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 - Washougal River Rd & Lockwood Creek Rd	Roadside	Barrier- metal			\$1332945		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, cable barrier, concrete barriers, crash cushions, and others.
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 - 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 - Hayes Rd N & S Safety Improvements	Roadside	Barrier- metal			\$546165		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, cable barrier, concrete barriers, crash

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													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
														cushions, and others.
Columbia County - Safety Data Collection & Analysis (Countywide Clear Zone Inventory)	Non-infrastructure	Data/traffic records			\$27000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
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	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
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, cable barrier, concrete barriers, crash cushions, and others.
Columbia County - Lyons Ferry Rd #22290	Intersection geometry	Intersection geometry - other			\$138490		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Intersections	INT 3.4 - Improve visibility of intersections on approaches.
Cowlitz County - Install/Upgrade Curve Warning Signs	Roadway signs and traffic control	Curve-related warning signs and flashers			\$109000		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.
Cowlitz County - South Pekin Road Guardrail	Roadside	Barrier- metal			\$118000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail, cable barrier, concrete barriers, crash cushions, and others.
Cowlitz County - Willow Grove Road Guardrail	Roadside	Barrier- metal			\$568000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install/maintain roadside safety hardware such as guardrail, cable barrier, concrete barriers, crash

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													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
														cushions, and others.
Douglas County - Rock Island Rd - Safety Improvements	Roadside	Barrier- metal			\$25825		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, cable barrier, concrete barriers, crash cushions, and others.
Douglas County - McNeil Canyon Rd - Runaway Truck Ramp	Roadside	Roadside - other			\$563705		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, cable barrier, concrete barriers, crash cushions, and others.
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 - 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 - Citywide Safety Improvements	Pedestrians and bicyclists	Modify existing crosswalk			\$450000		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Systemic	Pedestrians	PED 4.6 - Invest in and construct roadway reconfigurations, roundabouts, and other FHWA proven safety countermeasures specific to pedestrian safety.
City of Everett - Pacific Avenue and Broadway Safety	Pedestrians and bicyclists	Modify existing crosswalk			\$780000		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.6 - Invest in and construct roadway reconfigurations, roundabouts, and other FHWA proven safety countermeasures specific to pedestrian safety.
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.

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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	RELATIONSHIP TO SHSP	
													EMPHASIS AREA	STRATEGY
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 - Other	0		City of Municipal Highway Agency	Systemic	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 - Other	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.7 - Employ signal coordination.
City of Federal Way - Citywide Flashing Yellow Arrow Conversions	Intersection traffic control	Modify traffic signal - add flashing yellow arrow			\$913600		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.8 - Employ flashing yellow arrows at signals.
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	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
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 - Data Collection - Guardrail & Signing	Non-infrastructure	Data/traffic records			\$22500		HSIP (23 U.S.C. 148)		0		County Highway Agency	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
Franklin County - 2015 and 2016 County Safety Improvements	Roadside	Roadside grading			\$795795		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Design safer slopes and ditches to prevent rollovers.
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

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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
														delineation, especially in curves.
Grant County - 2014 Signing Improvements	Roadway signs and traffic control	Curve-related warning signs and flashers			\$813410		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.
Grant County - Safety Data Collection - Guardrail	Non-infrastructure	Data/traffic records			\$36540		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
Grant County - 2014 County Safety Improvements - RPMs, Rumble Strips, LED Flashing Signs	Roadway	Rumble strips - unspecified or other			\$189030		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.
Grays Harbor County - 2014 County Guardrail Project	Roadside	Barrier- metal			\$1012763		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, cable barrier, concrete barriers, crash cushions, and others.
Island County - County Guardrail	Roadside	Barrier- metal			\$758384		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, cable barrier, concrete barriers, crash cushions, and others.
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.
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 - Citywide Safety Improvements	Intersection traffic control	Modify traffic signal timing - general retiming			\$350000		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.7 - Employ signal coordination.

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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 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 - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.11 - Implement restricted access to properties/driveways adjacent to intersections using closures or turn restrictions.
City of Kent - Citywide Traffic Control Signal System Upgrade	Intersection traffic control	Modify traffic signal - add flashing yellow arrow			\$400000		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Systemic	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	Spot	Intersections	INT 1.1 - Install or convert intersections to roundabouts.
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 - 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 - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.2 - Invest in and increase the use of rectangular rapid flashing beacons and pedestrian hybrid beacons 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 by clearing vegetation, extending crossing times, adding pedestrian leading intervals or adding pedestrian scale illumination.
Kittitas County - Kittitas County Road Safety Improvements -	Roadside	Barrier- metal			\$594900		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

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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
Westside Rd and Huntzinger Road														guardrail, cable barrier, concrete barriers, crash cushions, and others.
Kittitas County - Safety Plan Development	Non-infrastructure	Transportation safety planning			\$54000		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		County Highway Agency	Other	Data	
Klickitat County - Safety Data Collection - Signing	Non-infrastructure	Data/traffic records			\$135000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
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	Other	Data	
Klickitat County - Bridge Rail & Guardrail Upgrades	Roadside	Barrier- metal			\$163500		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, cable barrier, concrete barriers, crash cushions, and others.
Klickitat County - County Signing Improvements	Roadway signs and traffic control	Curve-related warning signs and flashers			\$266000		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.
Klickitat County - BZ Glenwood Highway High Friction Surface Treatment	Roadway	Pavement surface - high friction surface			\$275000		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 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, cable barrier, concrete barriers, crash cushions, and others.
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 - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.

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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 Lakewood - Steilacoom Boulevard Safety Improvements	Intersection traffic control	Modify traffic signal timing - general retiming			\$2405000		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
Lewis County - 2014 Flexible Guideposts	Roadway delineation	Delineators post-mounted or on barrier			\$107448		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.
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 hardware such as guardrail, cable barrier, concrete barriers, crash cushions, and others.
Lincoln County - Safety Data Collection	Non-infrastructure	Data/traffic records			\$31500		HSIP (23 U.S.C. 148)		0		County Highway Agency	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
Lincoln County - Enhanced Pavement Surface Treatments	Roadway	Pavement surface - high friction surface			\$433958		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.
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.
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 - 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 - 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 - Other	0		City of Municipal Highway Agency	Systemic	Intersections	INT 1.7 - Employ signal coordination.

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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 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 - Other	0		City of Municipal Highway Agency	Spot	Intersections	
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, cable barrier, concrete barriers, crash cushions, and others.
Mason County - County Road Safety Plan	Non-infrastructure	Transportation safety planning			\$90000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Other	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 - Run Off the Road Data Collection	Non-infrastructure	Data/traffic records			\$27000		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
Okanogan County - 2015 Signing Upgrades	Roadway signs and traffic control	Sign sheeting - upgrade or replacement			\$161671		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.
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)		0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
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 - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.2 - Invest in and increase the use of rectangular rapid flashing beacons and pedestrian hybrid beacons where these crosswalk enhancements are needed.
Pacific County - Signing Upgrades	Roadway signs and traffic control	Sign sheeting - upgrade or replacement			\$137960		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Improve roadway signing and

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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
														shoulder delineation, especially in curves.
City of Pasco - Oregon Avenue (SR 397) Corridor	Intersection geometry	Auxiliary lanes - add two-way left-turn lane			\$875900		HSIP (23 U.S.C. 148)	Urban Principal Arterial - 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 - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.2 - Invest in and increase the use of rectangular rapid flashing beacons and pedestrian hybrid beacons where these crosswalk enhancements are needed.
Pierce County - County Safety Improvements	Roadway	Rumble strips - center			\$260312		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 1.1 - Install centerline rumble strips.
Pierce County - Guardrail Improvements	Roadside	Barrier- metal			\$788818		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, cable barrier, concrete barriers, crash cushions, and others.
Pierce County - 218th Ave E #88870	Speed management	Radar speed signs			\$137100		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		County Highway Agency	Systemic	Speeding	SPE 2.5 - Support the limited use of speed feedback signs to warn motorists that they are exceeding the speed limit.
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 - 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 - 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 - Other	0		County Highway Agency	Spot	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 - Other	0		County Highway Agency	Systemic	Pedestrians	PED 4.1 - Improve safety at pedestrian crossings by investing in and installing refuge islands, and

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													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
														shortening crossing distances with curb extensions.
Pierce County - 112th St E & A St E Signal	Intersection traffic control	Intersection traffic control - other			\$1000000		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		County Highway Agency	Spot	Intersections	
Pierce County - 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 - 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 - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.7 - Employ signal coordination.
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 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 to warn motorists that they are exceeding the speed limit.
City of Shoreline - Aurora Ave. N - 192nd to 205th	Access management	Raised island - install new			\$2178589		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.11 - Implement restricted access to properties/driveways adjacent to intersections using closures or turn restrictions.
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.
Skagit County - Cook Rd #63000	Intersection traffic control	Intersection flashers - add overhead (actuated)			\$58400		HSIP (23 U.S.C. 148)	Rural Major Collector	0		County Highway Agency	Spot	Intersections	INT 3.3 - Provide advance warning of intersections using dynamic signal warning flashers.
Snohomish County - High Friction Surface Treatment	Roadway	Pavement surface - high friction surface			\$1355913		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.
City of Spokane - Maxwell-Mission	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			\$434900		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 4.1 - Improve safety at pedestrian

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													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
Avenue Lane Reduction														crossings by installing refuge islands, scale lighting, and shortening crossing 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 pedestrian crossings by installing refuge islands, scale lighting, and shortening crossing distances.
Spokane County - Countywide Signing Upgrades	Roadway signs and traffic control	Curve-related warning signs and flashers			\$333000		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.
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	Other	Data	LDX 3.7 - Locate and inventory fixed objects inside the clear zone to support development of programs and projects to reduce the severity of run-off-road crashes.
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 - 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	Spot	Intersections	INT 3.1 - Redesign intersection approaches to improve sight distances.
City of Spokane Valley - Citywide Safety Improvements	Pedestrians and bicyclists	Pedestrian warning signs - add/modify flashers			\$400000		HSIP (23 U.S.C. 148)	Urban Major Collector	0		City of Municipal Highway Agency	Systemic	Pedestrians	PED 4.2 - Invest in and increase the use of rectangular rapid flashing beacons and pedestrian hybrid beacons where these crosswalk enhancements are needed.
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 - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.3 - Provide/improve left- and right-turn channelization.
City of Spokane Valley -	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			\$608900		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		City of Municipal Highway Agency	Spot	Intersections	INT 4.1 - Improve safety at pedestrian

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													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
McDonald Road Diet - 16th Ave N to Mission Ave														crossings by installing refuge islands, scale lighting, and shortening crossing distances.
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, cable barrier, concrete barriers, crash cushions, and others.
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.
Thurston County - County Road Safety Plan	Non-infrastructure	Transportation safety planning			\$180000		HSIP (23 U.S.C. 148)		0		County Highway Agency	Other	Data	
Thurston County - Mud Bay Rd NW & Delphi Rd NW	Intersection traffic control	Modify traffic signal - add flashing yellow arrow			\$71000		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		County Highway Agency	Systemic	Intersections	INT 1.8 - Employ flashing yellow arrows at signals.
Thurston County - Countywide Signing Upgrades	Roadway signs and traffic control	Curve-related warning signs and flashers			\$141600		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.
Thurston County - Steamboat Island Rd NW #14810	Roadway	Rumble strips - edge or shoulder			\$102600		HSIP (23 U.S.C. 148)	Rural Minor 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 - Other	0		City of Municipal Highway Agency	Spot	Intersections	INT 1.11 - Implement restricted access to properties/driveways adjacent to intersections using closures or turn restrictions.
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	Spot	Pedestrians	PED 4.2 - Invest in and increase the use of rectangular rapid flashing beacons and pedestrian hybrid beacons where these crosswalk enhancements are needed.
City of Wenatchee -	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

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													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
Wenatchee Signage Safety														intersections by providing enhanced signing and delineation.
City of Wenatchee - SR 285 and SR 285 Couplet - Miller St. to Ferry St.	Pedestrians and bicyclists	Pedestrian signal - Pedestrian Hybrid Beacon			\$895952		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Pedestrians	PED 4.2 - Invest in and increase the use of rectangular rapid flashing beacons and pedestrian hybrid beacons where these crosswalk enhancements are needed.
Whatcom County - County Roadway Safety Program	Roadway	Rumble strips - edge or shoulder			\$680000		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		County Highway Agency	Systemic	Lane Departure	LDX 2.4 - Install center and/or edge line rumble strips.
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.
WSDOT - WSDOT: SR 285/Wenatchee Area - Paving	Roadway delineation	Longitudinal pavement markings - remarking			\$74048.35		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Spot	Lane Departure	LDX 2.1 - Improve roadway signing and shoulder delineation, especially in curves.
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.
City of Seattle - Lake City Way Traffic Safety Project	Non-infrastructure	Road safety audits			\$400000		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		City of Municipal Highway Agency	Spot	Intersections	
SR 290/Park Rd Railroad Crossing - Improvement	Railroad grade crossings	Upgrade railroad crossing signal			\$276105		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
SR 290/Vista Rd Railroad Crossing - Improvement	Railroad grade crossings	Upgrade railroad crossing signal			\$90034		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
SR 290/Pines Rd Railroad Crossing - Improvement	Railroad grade crossings	Upgrade railroad crossing signal			\$174066		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
2015-2017 ER Regionwide Basic Safety - Signing	Roadway signs and traffic control	Sign sheeting - upgrade or replacement			\$49427		HSIP (23 U.S.C. 148)	multiple roads	0		State Highway Agency	Systemic	depends on sign used	
Eastern Region Regionwide Curve Warning Chevron Signing	Roadway signs and traffic control	Curve-related warning signs and flashers			\$110250		HSIP (23 U.S.C. 148)	multiple roads	0		State Highway Agency	Systemic	Lane Departure	

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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	RELATIONSHIP TO SHSP	
													EMPHASIS AREA	STRATEGY
ER/US 2 & US 395 Intersection Improvements - Durable Striping & Signing	Intersection traffic control	Intersection traffic control - other			\$ 1,812,755.00		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other Freeways and Expressways	0		State Highway Agency	Spot	Intersections	
Eastern Region Intersection Safety Implementation Program	Intersection geometry				\$568400		HSIP (23 U.S.C. 148)	multiple roads	0		State Highway Agency	Systemic	Intersections	
SR 290/Park Rd Railroad Crossing - Improvement	Railroad grade crossings	Railroad grade crossing gates			\$276105		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
SR 290/Vista Rd Railroad Crossing - Improvement	Railroad grade crossings	Railroad grade crossing gates			\$90034		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
SR 290/Pines Rd Railroad Crossing - Improvement	Railroad grade crossings	Railroad grade crossing gates			\$174066		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
2015-2017 ER Regionwide Basic Safety - Signing	Roadway signs and traffic control	Curve-related warning signs and flashers			\$49427		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Lane Departure	
Eastern Region Regionwide Curve Warning Chevron Signing	Roadway signs and traffic control	Curve-related warning signs and flashers			\$110250		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Lane Departure	
ER/US 2 & US 395 Intersection Improvements - Durable Striping & Signing	Roadway delineation	Longitudinal pavement markings - remarking			\$1812755		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other Freeways and Expressways	0		State Highway Agency	Systemic	Intersections	
Eastern Region Intersection Safety Implementation Program	Roadway	Roadway - restripe to revise separation between opposing lanes and/or shoulder widths			\$568400		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Intersections	
Eastern Region Guardrail Installation & Retrofit	Roadside	Barrier- metal			\$186200		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
2015-2017 Eastern Region Regionwide Basic Safety - Guardrail	Roadside	Barrier- metal			\$539000		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
US 2/Day Mt Spokane Railroad Crossing - Improvement	Railroad grade crossings	Railroad grade crossing gates			\$60023		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
Eastern Region HMA Route Rumble Strips -	Roadway	Rumble strips - edge or shoulder			\$27968		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	

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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	RELATIONSHIP TO SHSP	
													EMPHASIS AREA	STRATEGY
Install Rumble Strips														
Eastern Region BST Rumble Strips A - Install Rumble Strip	Roadway	Rumble strips - edge or shoulder			\$20563		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
SR 26/Thacker Road - Intersection Improvements	Intersection traffic control	Intersection traffic control - other			\$43595		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other Freeways and Expressways	0		State Highway Agency	Systemic	Intersections	
SR 171/Beech St Intersection - Safety Improvements	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified			\$72049		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Spot	Intersections	
SR 283/Adams Road - Intersection Improvements	Intersection geometry	Intersection geometrics - miscellaneous/other/unspecified			\$16660		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Systemic	Intersections	
SR 17/West of Moses Lake - Left Turn Lane	Intersection geometry	Auxiliary lanes - add left-turn lane			\$201885		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Spot	Intersections	
SR 28/5th Street Intersection Improvements	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			\$81638		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
SR 28/North of East Wenatchee - Safety Improvements	Intersection geometry	Auxiliary lanes - miscellaneous/other/unspecified			\$33600		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Spot	Intersections	
SR 28/North of East Wenatchee - Two Way Left Turn Lane	Intersection geometry	Auxiliary lanes - add two-way left-turn lane			\$59975		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Spot	Intersections	
US 2/4 Mi W of Waterville High Friction Surface Treatment	Roadway	Pavement surface - high friction surface			\$180589		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 9/Francis Rd - Intersection Improvements	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified			\$19637		HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Systemic	Intersections	
SR 11/Cook Road - Intersection Improvements	Intersection traffic control	Modify traffic signal - miscellaneous/other/unspecified			\$276890		HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Systemic	Intersections	
SR 536/SR 20 Vic to Mount Vernon - Rumblestrip Installation	Roadway	Rumble strips - edge or shoulder			\$122067		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Systemic	Roadway Departure	
Northwest Region Guardrail Installation (15-17)	Roadside	Barrier- metal			\$46158		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	

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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	RELATIONSHIP TO SHSP	
													EMPHASIS AREA	STRATEGY
SR 9/Van Zandt - Railroad Crossing Improvements	Railroad grade crossings	Railroad grade crossing gates			\$288561		HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Systemic	Intersections	
SR 544/SR 539 to Everson - Rumblestrip Installation	Roadway	Rumble strips - edge or shoulder			\$289106		HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Systemic	Roadway Departure	
Northwest Region Intersection Safety Implementation (15-17)	Roadside	Roadside - other			\$8256		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
SR 9/Bowen Rd Vic. to Sumas Ave Vic. - Rumblestrip Installation	Roadway	Rumble strips - edge or shoulder			\$103711		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 525/148th St SW Vic to 132nd St SW - Paving & ADA Compliance	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			\$176763		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Pedestrians	
Northwest Region Guardrail Update (15-18)	Roadside	Barrier- metal			\$1710100		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
SR 900/S 133rd St - Intersection Improvements	Intersection traffic control	Intersection signing - miscellaneous/other/unspecified			\$989706		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Systemic	Intersections	
US 2/Roosevelt Rd Vicinity to SR 522 Vicinity - Rumble Strip Installation	Roadway	Rumble strips - edge or shoulder			\$181960		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 18/Tiger Mountain Pass Vicinity - Glare Screen	Roadway	Roadway - other			\$301842		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other Freeways and Expressways	0		State Highway Agency	Spot	Lane Departure	
SR 522/Paradise Lake Rd Vicinity to Fales Rd Vicinity - Rumble Strip Installation	Roadway	Rumble strips - edge or shoulder			\$148035		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
I-5/Northbound Martin Luther King Jr Way - Barrier Extension	Roadside	Barrier - other			\$411739		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
I-90/I-405 I/C - Southbound to Westbound Ramp (090 S1 00926) - High Friction Surface	Roadway	Pavement surface - high friction surface			\$225610		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Systemic	Lane Departure	

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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	RELATIONSHIP TO SHSP	
													EMPHASIS AREA	STRATEGY
I-90/Preston Interchange Vicinity - Guardrail	Roadside	Barrier- metal			\$413395		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
Northwest Regionwide Curve Warning Signs (15-17)	Roadway signs and traffic control	Curve-related warning signs and flashers			\$709342		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
I-5/I-405 Interchange - Southbound I-5 to I-405 - High Friction Surface	Roadway	Pavement surface - high friction surface			\$335366		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Systemic	Lane Departure	
SR 202/SR 520 to 228th Ave NE - ADA Compliance	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			\$195037		HSIP (23 U.S.C. 148)	Urban Minor Arterial	0		State Highway Agency	Systemic	Pedestrians	
SR 99/SR 525 Interchange Vic to Lincoln Way Vic - ADA Compliance	Pedestrians and bicyclists	Miscellaneous pedestrians and bicyclists			\$247666		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Pedestrians	
15-17 Olympic Region Shoulder Rumble Strips - Install Rumble Strips	Roadway	Rumble strips - edge or shoulder			\$54442		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
15-17 Olympic Region Centerline Rumble Strips - Install Rumble Strips	Roadway	Rumble strips - edge or shoulder			\$245160		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
Olympic Region - Intersection Safety Implementation Program	Roadway delineation	Longitudinal pavement markings - new			\$196000		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
Olympic Region Guardrail Installations	Roadside	Barrier- metal			\$41332		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 397/S Yew St Vicinity - Roadside Improvements	Roadside	Barrier - other			\$249693		HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Spot	Roadway Departure	
SR 397/E Bruneau Ave - Railroad Crossing Improvements	Railroad grade crossings	Railroad grade crossing gates			\$63092		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
SR 240/Airport Way - Railroad Crossing Improvements	Railroad grade crossings	Railroad grade crossing gates			\$7036		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	

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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	RELATIONSHIP TO SHSP	
													EMPHASIS AREA	STRATEGY
SR 240/Kennewick Vicinity - Install 4-Strand Cable Median Barrier	Roadside	Barrier - cable			\$79474		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 240/SR 224/Van Giesen Street - Intersection Improvements	Intersection geometry	Intersection geometry - other			\$30874		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
I-182/Pasco Vicinity - Install 4-Strand Cable Median Barrier	Roadside	Barrier - cable			\$419439		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
15-17 SCR - Guardrail Installations	Roadside	Barrier- metal			\$39200		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
US 12/Yakima Vicinity - Install 4-Strand Cable Median Barrier	Roadside	Barrier - cable			\$215282		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
SR 241/Forsell Rd/Green Valley Rd - Intersection Improvements	Roadway delineation	Roadway delineation - other			\$381417		HSIP (23 U.S.C. 148)	Rural Major Collector	0		State Highway Agency	Systemic	Intersections	
US 97/McDonald Rd and Becker Rd - Intersection Improvements	Intersection traffic control	Intersection traffic control - other			\$11870		HSIP (23 U.S.C. 148)	Rural Minor Collector	0		State Highway Agency	Systemic	Intersections	
US 97/2nd Ave Vicinity - Roadside Improvements	Roadside	Roadside - other			\$66732		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Roadway Departure	
I-82/Yakima Vicinity - Install 4-Strand Cable Median Barrier	Roadside	Barrier - cable			\$1201220		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Systemic	Roadway Departure	
15-17 SCR Region Wide Basic Safety - Signing	Roadway signs and traffic control	Roadway signs (including post) - new or updated			\$19200		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Lane Departure	
SCR Region Wide Curve Warning Signing - Chevron Alignment 2	Roadway signs and traffic control	Curve-related warning signs and flashers			\$452995		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
US 97/Old Highway 10 - Railroad Crossing Improvements	Railroad grade crossings	Railroad grade crossings - other			\$96267		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	

2017 Washington Highway Safety Improvement Program

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	RELATIONSHIP TO SHSP	
													EMPHASIS AREA	STRATEGY
SR 240/Steptoe Roundabout Improvements	Intersection traffic control	Modify control - modifications to roundabout			\$145649		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Intersections	
15-17 SCR - Intersection Safety Implementation Program	Intersection geometry	Intersection geometry - other			\$25536		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Intersections	
US 97/Branch Road - Intersection Improvements	Intersection geometry	Intersection geometry - other			\$7278		HSIP (23 U.S.C. 148)	Rural Minor Arterial	0		State Highway Agency	Spot	Intersections	
US 97/SR 22 - Intersection Improvements	Intersection geometry	Intersection geometry - other			\$537477		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Spot	Intersections	
SR 4 and SR 432 Centerline Rumble Strips - Safety	Roadway	Rumble strips - edge or shoulder			\$279663		HSIP (23 U.S.C. 148)	Rural Principal Arterial - Other	0		State Highway Agency	Systemic	Lane Departure	
SR 503, 503 Spur, 504 and 505 - Centerline Rumble Strips	Roadway	Rumble strips - edge or shoulder			\$65753		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Systemic	Lane Departure	
SR 503/Padden Parkway - Intersection Improvements	Intersection geometry	Intersection geometry - other			\$287845		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Other	0		State Highway Agency	Spot	Intersections	
I-5/NB NE 39th St & SR 500/NE 15th Ave - Intersection Improvements	Intersection traffic control	Intersection traffic control - other			\$164483		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Spot	Intersections	
I-5/Northbound Off Ramp at Fourth Plain Blvd - Intersection Improvements	Intersection geometry	Intersection geometry - other			\$403985		HSIP (23 U.S.C. 148)	Urban Principal Arterial - Interstate	0		State Highway Agency	Spot	Intersections	
SWR Regionwide Basic Safety - Guardrail 2015-17	Roadside	Barrier- metal			\$368000		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
SWR - Regionwide Curve Warning Signing Phase II	Roadway signs and traffic control	Curve-related warning signs and flashers			\$169540		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	
SWR - Intersection Safety Implementation Program	Intersection geometry	Intersection geometry - other			\$50960		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Spot	Intersections	
SWR Regionwide Safety - Shoulder	Roadway	Rumble strips - edge or shoulder			\$333200		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Roadway Departure	

2017 Washington Highway Safety Improvement Program

													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
Rumble Strips Phase 1														
SW Region/Clark County Locations - High Friction Surfacing	Roadway	Pavement surface - high friction surface			\$392000		HSIP (23 U.S.C. 148)	multiple locations	0		State Highway Agency	Systemic	Lane Departure	

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

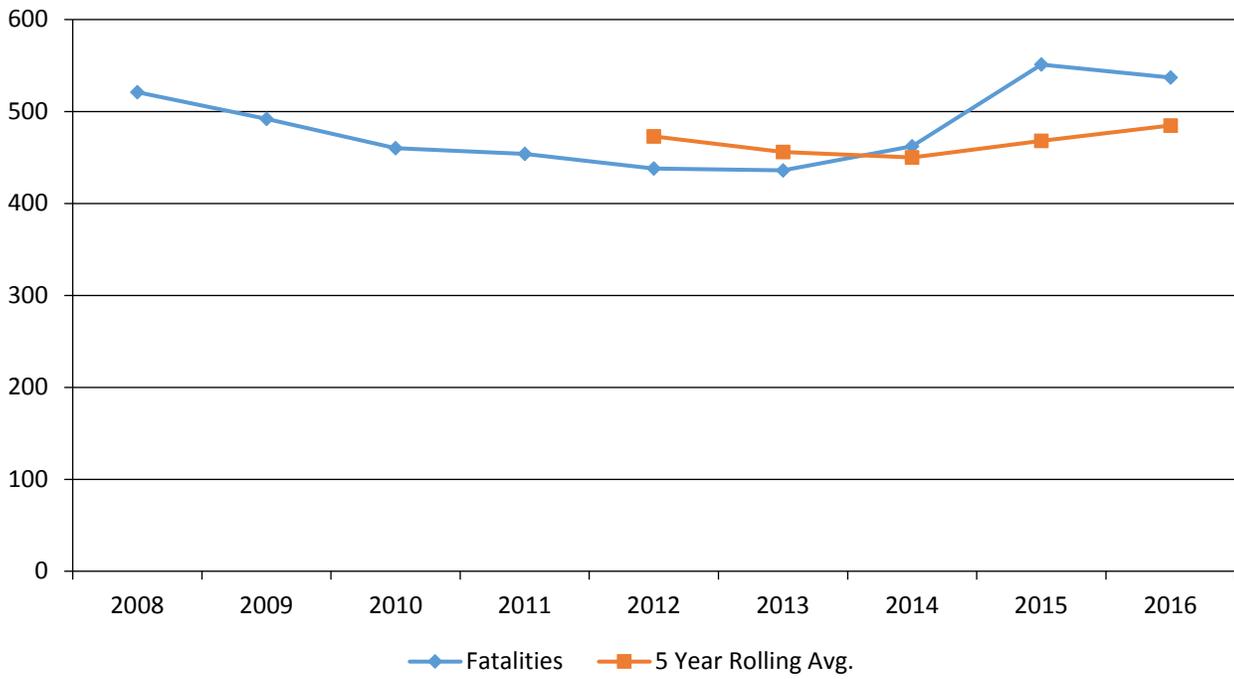
## Safety Performance

### *General Highway Safety Trends*

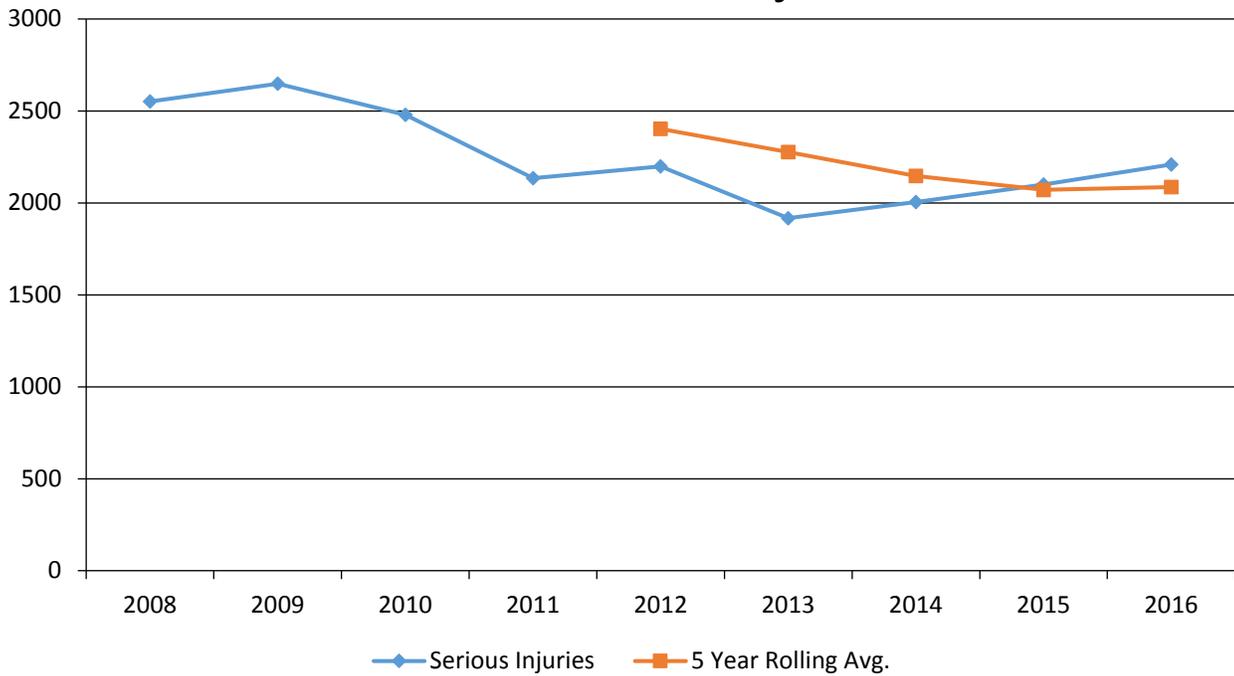
Present data showing the general highway safety trends in the State for the past five years.

PERFORMANCE MEASURES	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fatalities	521	492	460	454	438	436	462	551	537
Serious Injuries	2,552	2,648	2,478	2,135	2,199	1,917	2,005	2,100	2,209
Fatality rate (per HMVMT)	0.940	0.871	0.804	0.797	0.774	0.762	0.796	0.924	0.900
Serious injury rate (per HMVMT)	4.603	4.690	4.333	3.748	3.885	3.351	3.453	3.520	3.703
Number non-motorized fatalities	73	71	69	79	87	61	85	100	106
Number of non-motorized serious injuries	401	399	408	402	447	343	408	393	487

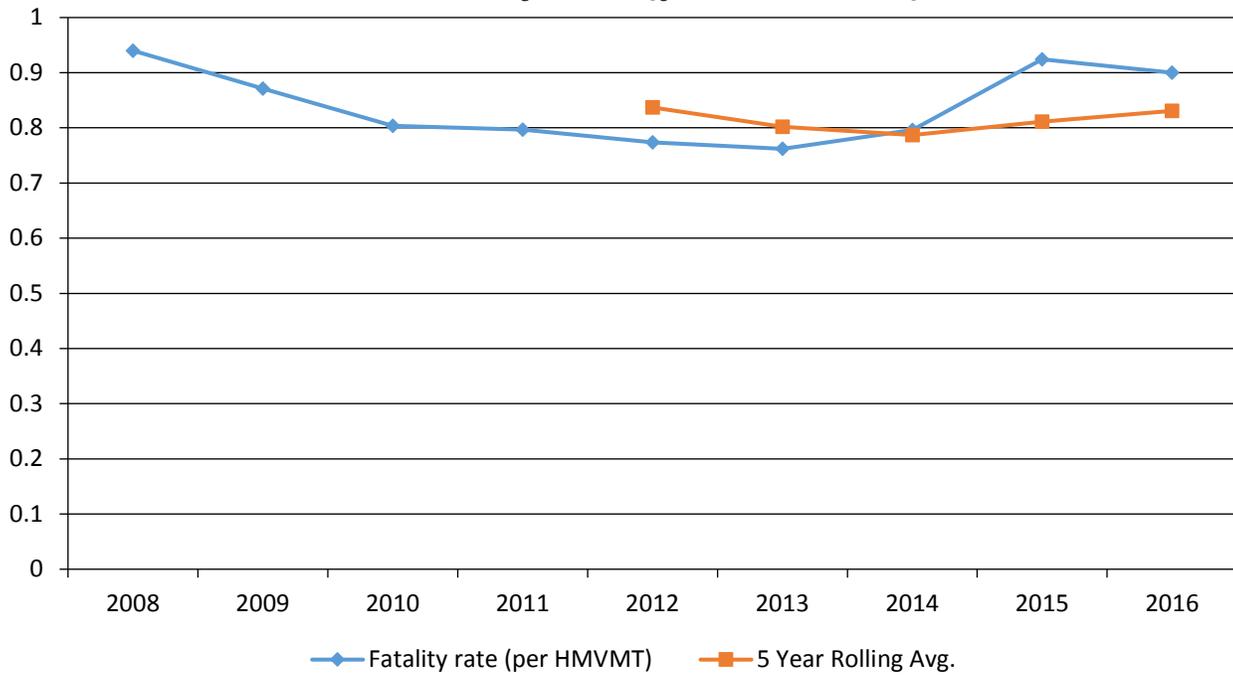
### Annual Fatalities



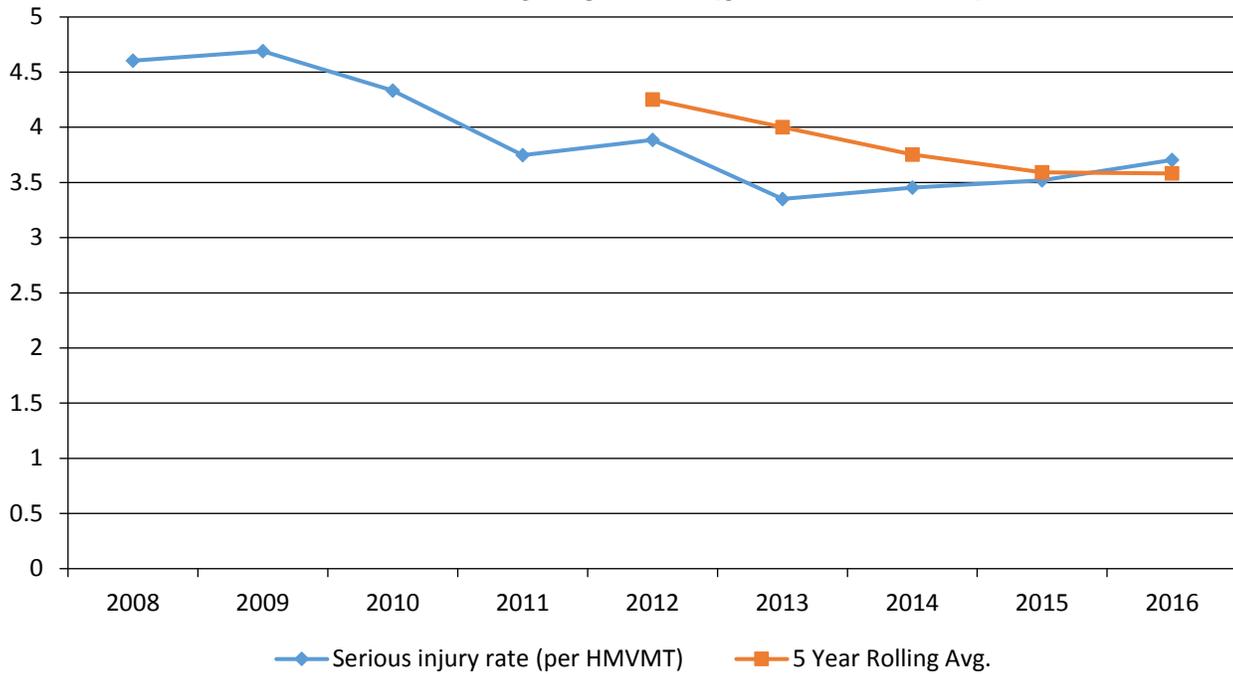
### Annual Serious Injuries



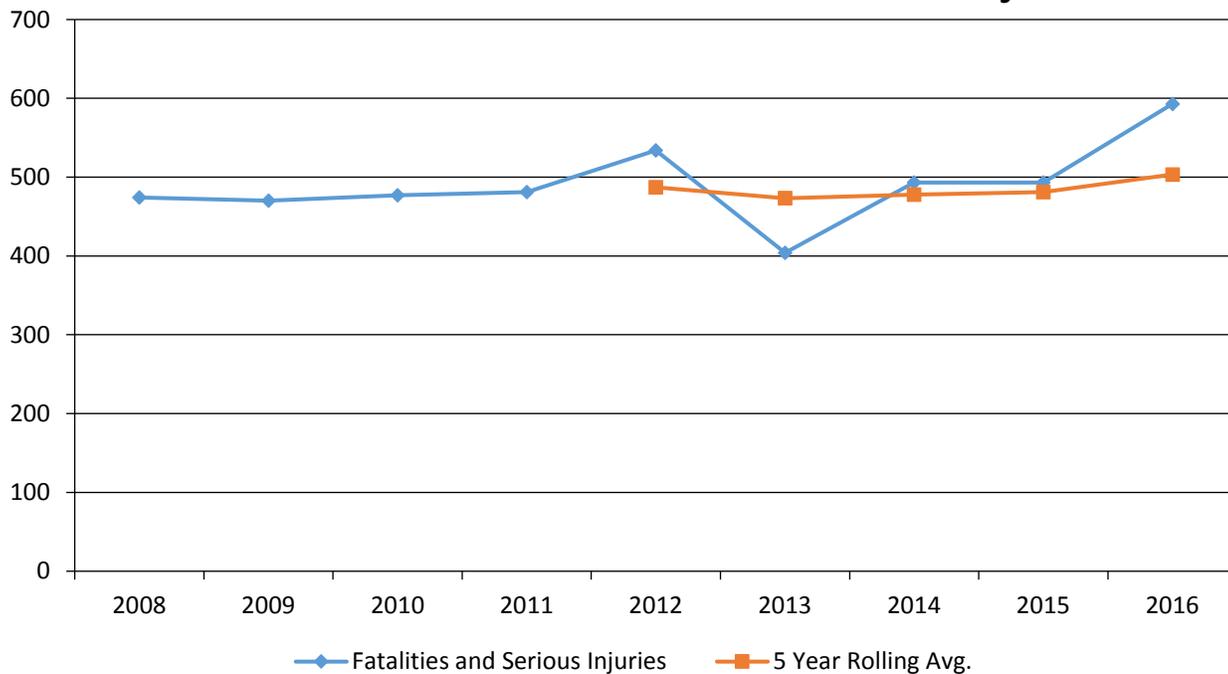
### Fatality rate (per HMVMT)



### Serious injury rate (per HMVMT)



## Non Motorized Fatalities and Serious Injuries



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

1. Fatality data is from the preliminary 2016 Q4 release based on the Annual Report File (ARF). Note that the ARF is used because final FARS data is only available up to 2014.
2. Serious injury data is from the WSDOT Engineering Crash Database and represents reported crashes involving at least one motor vehicle and meeting the requirements of RCW 46.52.070, RCW 46.52.030 and WAC 446-85-010.

**Describe fatality data source.**

FARS

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

Fatality data is from the preliminary 2016 Q4 release of the WA-FARS Analytical File, and the final 2015 WA-FARS, the best available data. Final NHTSA FARS data is only available up to 2014.

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

**Year 2016**

## 2017 Washington Highway Safety Improvement Program

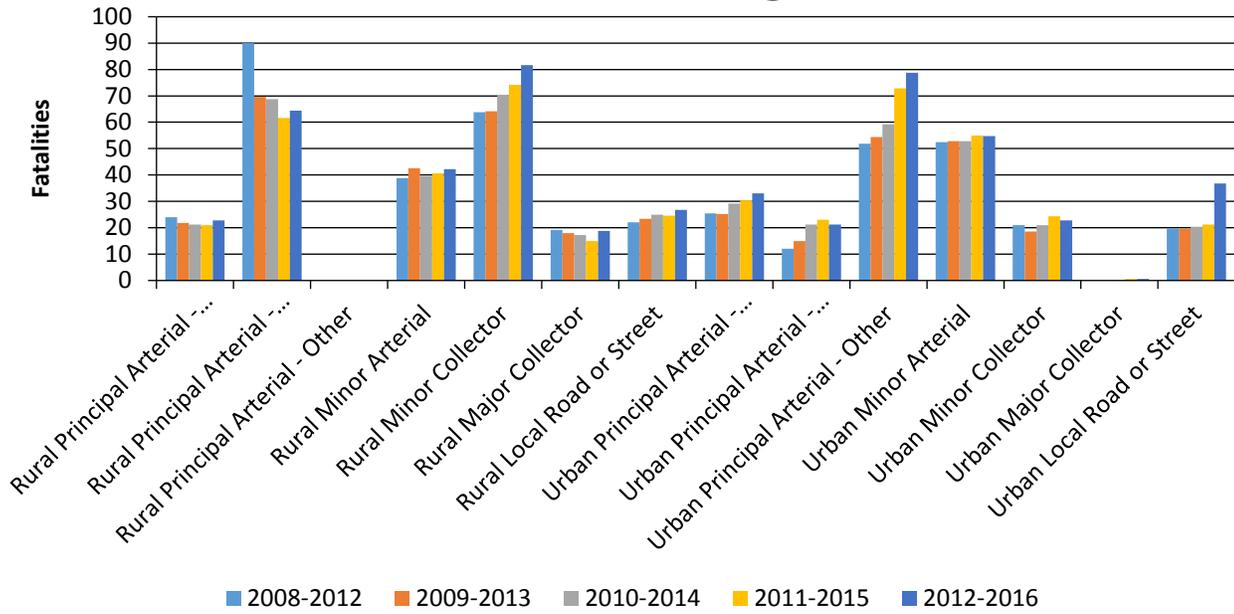
Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial - Interstate	22.8	47.6	0.5	1.05
Rural Principal Arterial - Other Freeways and Expressways	64.4	42.8	3.73	2.5
Rural Principal Arterial - Other	0	93.8	0	4.24
Rural Minor Arterial	42.2	85.6	1.98	4.03
Rural Minor Collector	81.6	49	2.31	1.38
Rural Major Collector	18.8	0.2	1.75	0.02
Rural Local Road or Street	26.8	0.2	2.33	0.02
Urban Principal Arterial - Interstate	33	116	0.29	1.01
Urban Principal Arterial - Other Freeways and Expressways	21.2	102.8	0.39	1.86
Urban Principal Arterial - Other	78.8	199.2	0.84	2.14
Urban Minor Arterial	54.8	64.4	0.72	0.84
Urban Minor Collector	22.8	8.4	0.68	0.25
Urban Major Collector	0.6	0	0.56	0
Urban Local Road or Street	36.8	0	0.78	0

2017 Washington Highway Safety Improvement Program

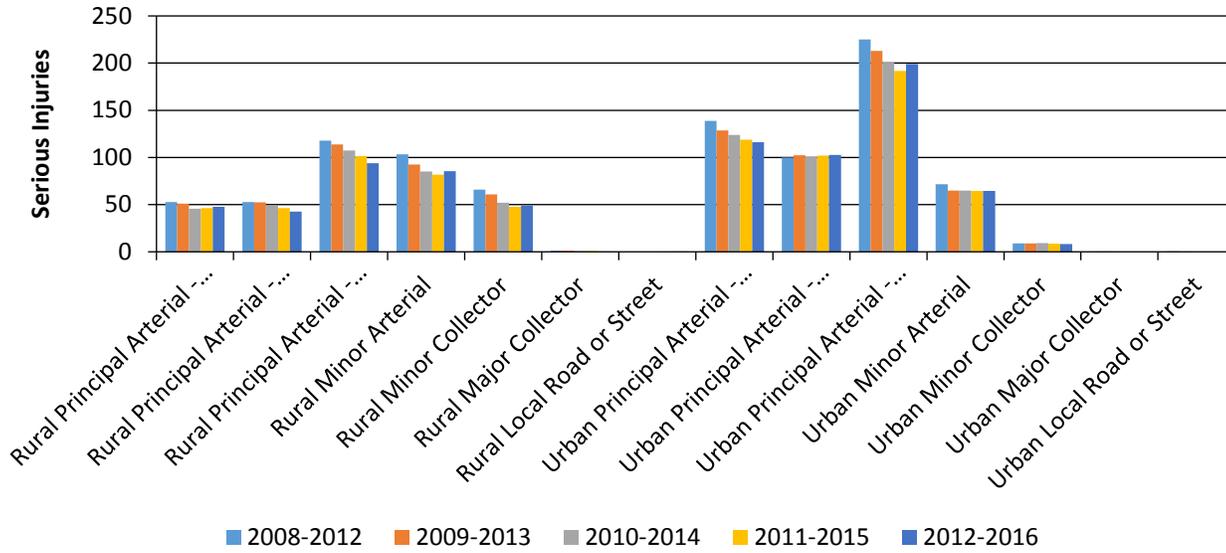
**Year 2016**

<b>Roadways</b>	<b>Number of Fatalities (5-yr avg)</b>	<b>Number of Serious Injuries (5-yr avg)</b>	<b>Fatality Rate (per HMVMT) (5-yr avg)</b>	<b>Serious Injury Rate (per HMVMT) (5-yr avg)</b>
State Highway Agency	225.6	810.2	0.69	2.49
County Highway Agency	136	490.4	1.43	5.17
Town or Township Highway Agency	0	0	0	0
City of Municipal Highway Agency	123	785.4	0.75	4.77
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

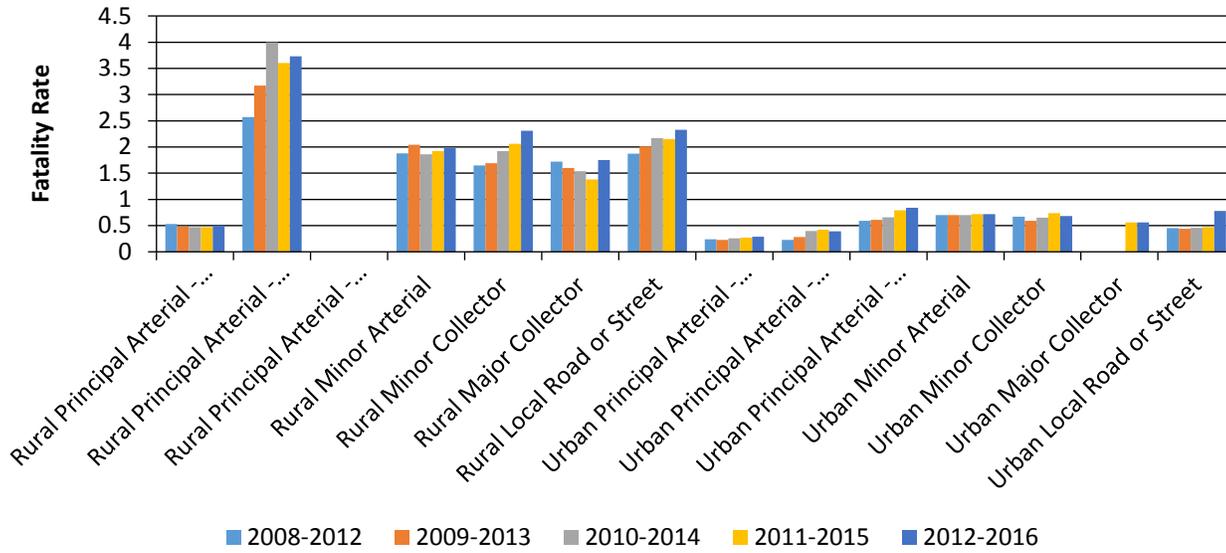
## Number of Fatalities by Functional Classification 5 Year Average



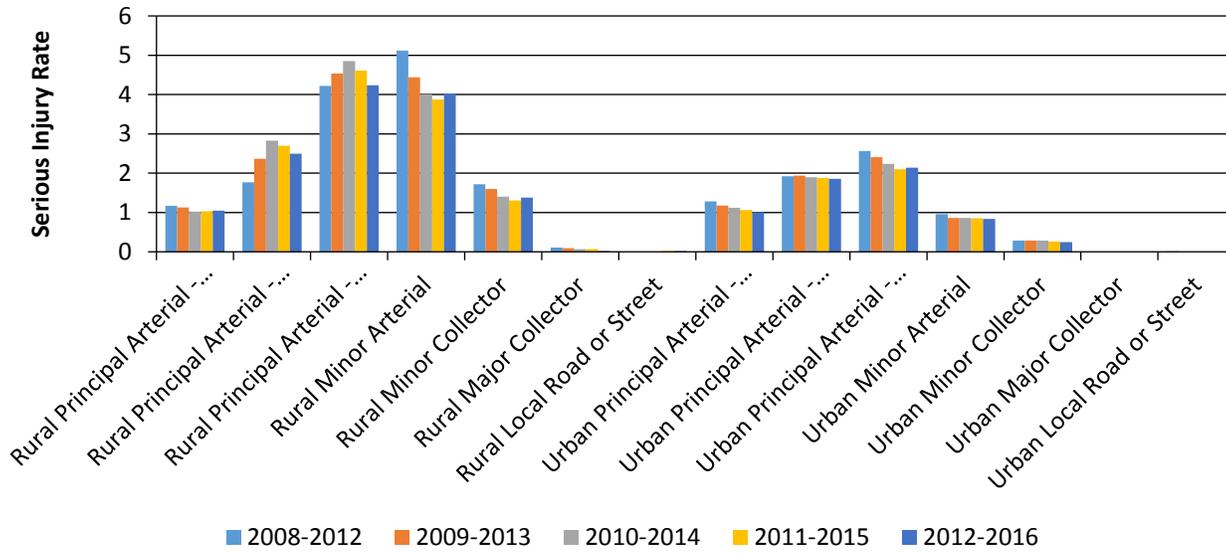
## Number of Serious Injuries by Functional Classification 5 Year Average



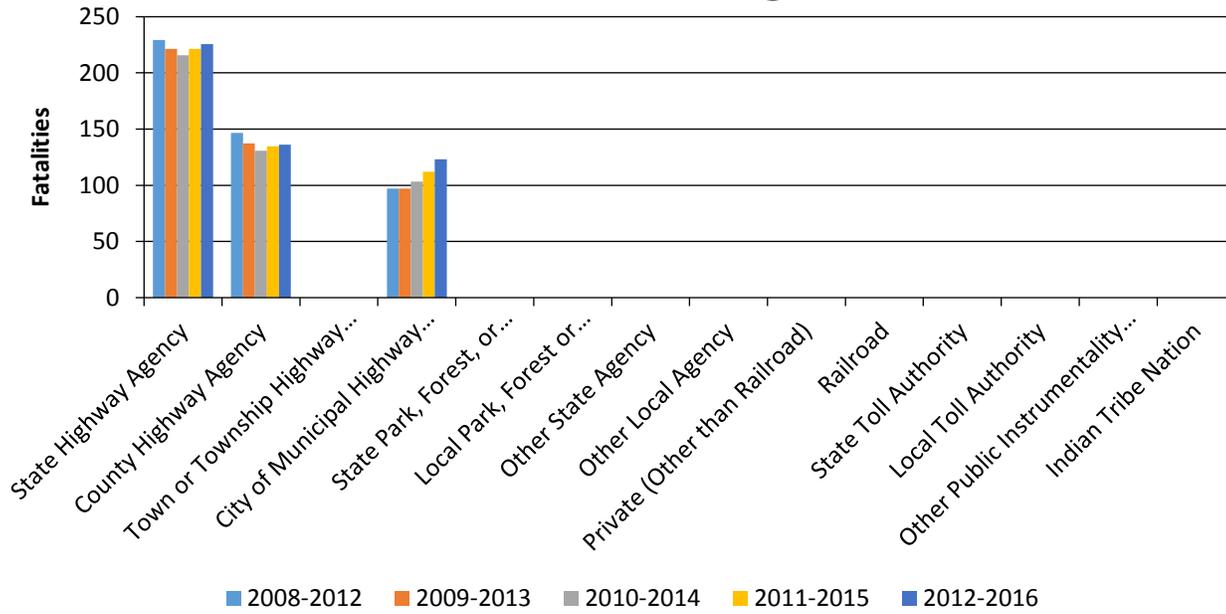
## Fatality Rate (per HMVMT) by Functional Classification 5 Year Average



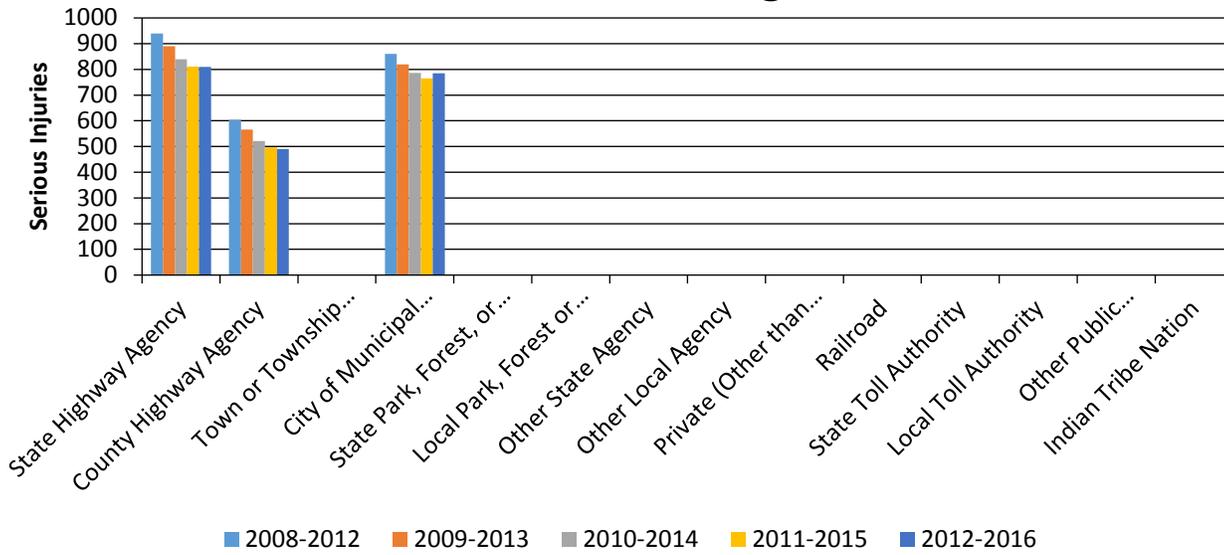
## Serious Injury Rate (per HMVMT) by Functional Classification 5 Year Average



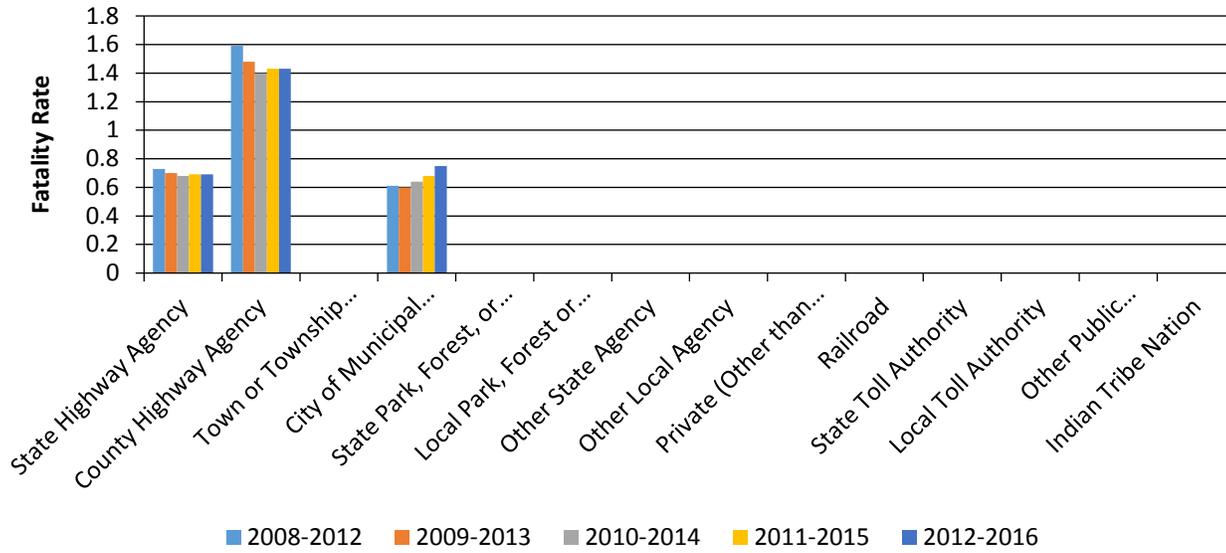
## Number of Fatalities by Roadway Ownership 5 Year Average



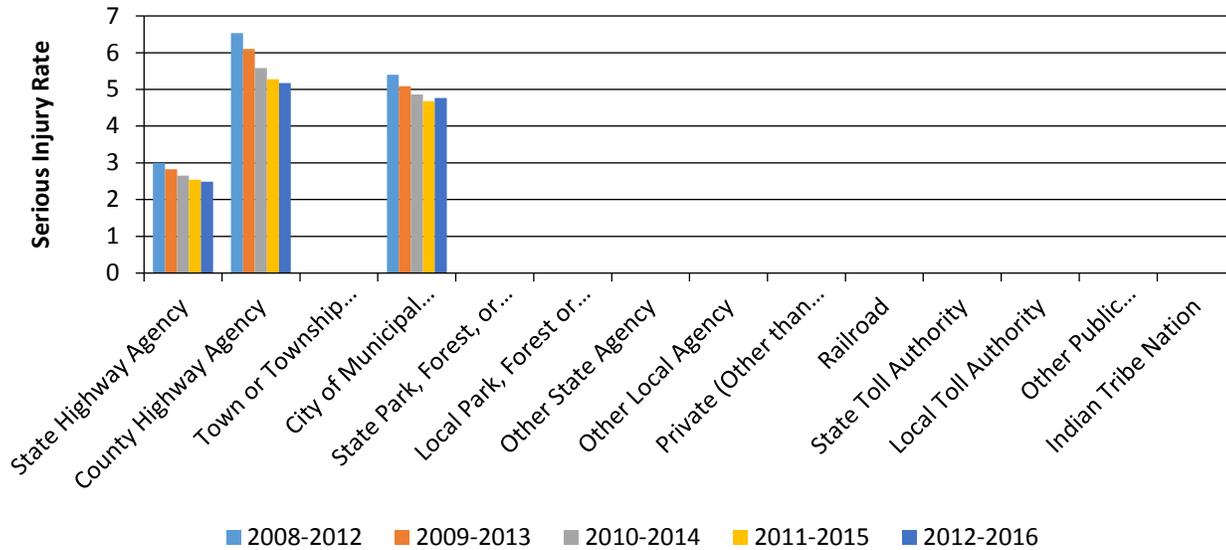
## Number of Serious Injuries by Roadway Ownership 5 Year Average



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



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



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

Notes for functional class safety performance metrics:

1. The VMT reflects the official HPMS VMT by functional class.
2. The number of fatalities reported reflects the number of fatalities on all public roads.
3. The number of serious injuries reported reflects those that occurred on the state owned highway system: functional class information is not available on the non-state highway system for serious injuries. XY coordinates are only available for serious injury crashes from 2010 onwards (i.e. serious injuries sustained in 2008 and 2009 do not have associated XY coordinates).
4. Any serious injury rates for facilities other than interstates or freeways would not reflect actual serious injury rates because the VMT reported is for all public roads while the serious injuries reported only reflect those injuries sustained on state highways.
5. The HSIP reporting system does not allow WSDOT to specify an 'Other' functional class category which would reflect the serious injuries on non-state highways.

Note for ownership safety performance metrics:

1. The City of Municipal Highway Agency category reflect both city and roads classified as miscellaneous.

2017 Washington Highway Safety Improvement Program

**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 2018 Targets \***

**Number of Fatalities** 415.5

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

The rolling 5-year average for 2012 through 2016 was used as the baseline (484.8). This baseline was then projected using a straight line to a zero fatality value in the year 2030 (consistent with the target for fatalities set in Target Zero, the WA state SHSP).

**Number of Serious Injuries** 1788.0

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

The rolling 5-year average for 2012 through 2016 was used as the baseline (2086). This baseline was then projected using a straight line to a zero fatality value in the year 2030 (consistent with the target for fatalities set in Target Zero, the WA state SHSP).

**Fatality Rate** 0.709

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

The rolling 5-year average for 2012 through 2016 was used as the baseline (0.828). This baseline was then projected using a straight line to a zero fatality value in the year 2030 (consistent with the target for fatalities set in Target Zero, the WA state SHSP).

**Serious Injury Rate** 3.058

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

The rolling 5-year average for 2012 through 2016 was used as the baseline (3.568). This baseline was then projected using a straight line to a zero fatality value in the year 2030 (consistent with the target for fatalities set in Target Zero, the WA state SHSP).

**Total Number of Non-Motorized Fatalities and Serious Injuries** 431.4

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

The rolling 5-year average for 2012 through 2016 was used as the baseline (503). This baseline was then projected using a straight line to a zero fatality value in the year 2030 (consistent with the target for fatalities set in Target Zero, the WA state SHSP).

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

1. Fatality data is from the preliminary 2016 Q4 release of the WA-FARS Analytical File, and the final 2015 WA-FARS, the best available data (final NHTSA FARS data is only available up to 2014).
2. Serious injury data is from the WSDOT Engineering Crash Database and represents reported crashes involving at least one motor vehicle and meeting the requirements of RCW 46.52.070, RCW 46.52.030 and WAC 446-85-010.
3. The rolling 5-year average for 2012-2016 is used as the baseline for the target setting. A 'Target Zero approach' is followed for the proposed target setting method. Using the baseline point, a straight line is projected to a zero value at 2030 (the Target Zero goal). The proposed target, using this method, is set for 2018.
4. VMT data used for the target setting are from the state HPMS (Submittal June 2017)

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

WSDOT has spent over a year working with its state highway safety partners in establishing safety performance targets. It worked with the SHSO first to come to early agreement on potential methods in developing performance targets. The Department proposed to maintain its zero goal based on its recent update of Washington's SHSP. While there were concerns, the SHSO agreed. The DOT and SHSO worked closely to ensure common definitions, methods and data rules for during the assessment period. The DOT and SHSO also met with its federal partners to ensure both the state and federal approaches were consistent and agreed to with all parties. The Department made significant effort to involve the MPOs in target setting, and regularly met with a technical committee, working group and oversight group to answer questions and receive input as the Agencies move forward on target setting. The Department has developed a data portal and a spreadsheet tool for use by the MPOs, and has provided and analyzed data as requested by MPOs.

**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

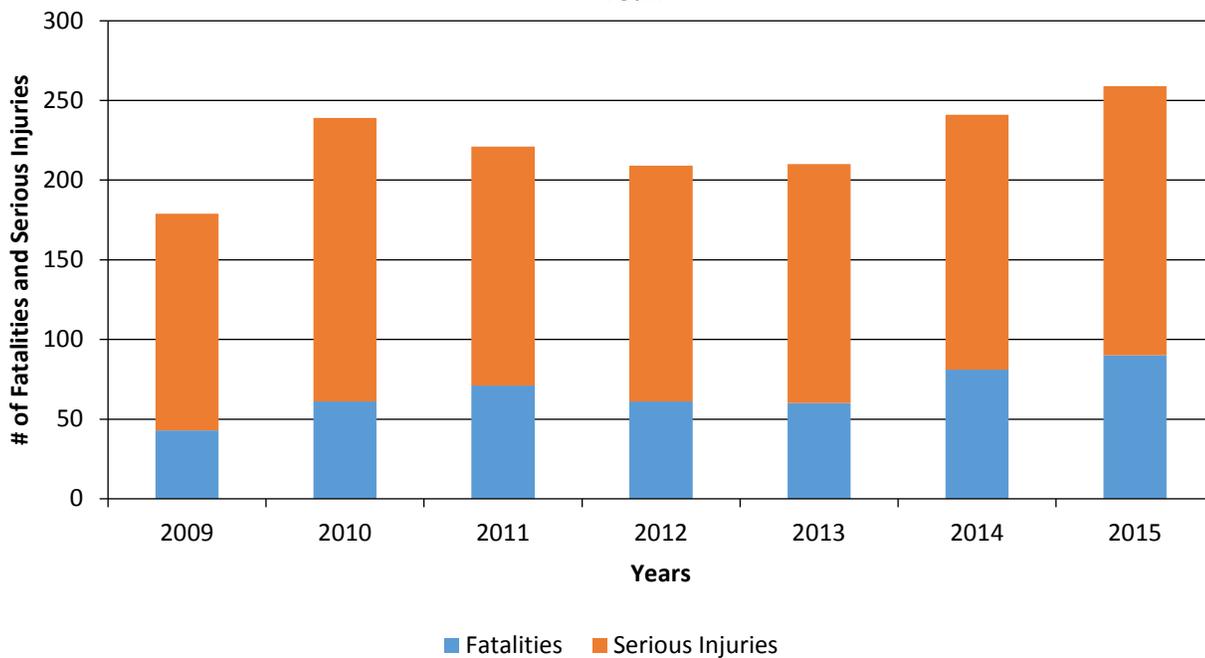
2017 Washington Highway Safety Improvement Program

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 for the past seven years.

PERFORMANCE MEASURES	2009	2010	2011	2012	2013	2014	2015
Number of Older Driver and Pedestrian Fatalities	43	61	71	61	60	81	90
Number of Older Driver and Pedestrian Serious Injuries	136	178	150	148	150	160	169

**Number of Older Driver and Pedestrian Fatalities and Serious Injuries by Year.**



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 2012, we compare the 5-year rolling average from 2008-2012 with the 5-year rolling average from 2012-2016. This overlaps the year 2012 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:** 2008-2012 = 802.8 fatal/serious crashes vs 2012-2016 = 708.6 fatal/serious crashes, or a 12% decrease.

**County Roads:** 2008-2012 = 647.8 fatal/serious crashes vs 2012-2016 = 533.2 fatal/serious crashes, or an 18% decrease.

**City Streets:** 2008-2012 = 994.8 fatal/serious crashes vs 2012-2016 = 950.4 fatal/serious crashes, or a 4% decrease.

Note that state highways that serve as city streets (in cities of 25,000+ 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?**

2017 Washington Highway Safety Improvement Program

More systemic programs  
 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.**

The HSIP shows success through increased awareness of safety and data-driven processes. This is accomplished through the fact that the HSIP programs are structured to deliver projects that support the SHSP. These programs thus emphasize to local agencies the focus/goals/vision of the SHSP (eliminating fatalities and serious injuries) and encourage use of data-driven processes and proven strategies.

The HSIP also shows success through increased focus on local road safety. This is accomplished primarily by the state's commitment to provide HSIP funding to local agencies through a data-driven approach that shares the proportionate share of funds with the local agencies based on their fatal and serious injury crashes.

In addition, the HSIP shows success through the addition of more systemic programs. Both a portion of state HSIP funds and city HSIP funds are now dedicated to systemic safety programs. And all of the county HSIP funds are dedicated to systemic safety efforts.

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

No

***Effectiveness of Groupings or Similar Types of Improvements***

**Present and describe trends in SHSP emphasis area performance measures.**

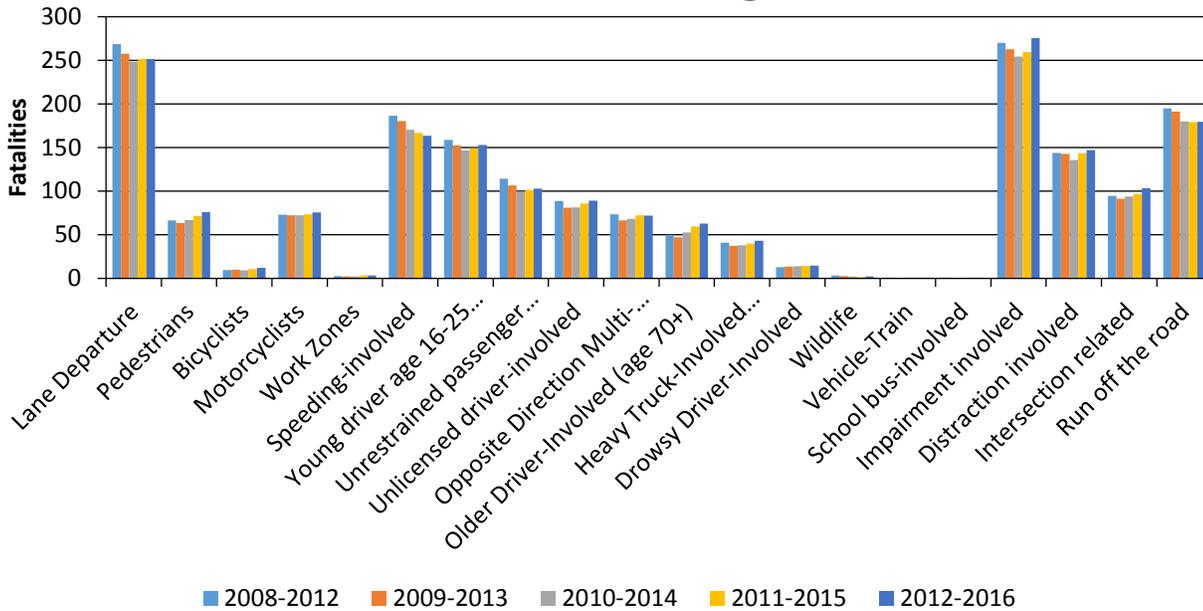
**Year 2016**

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		251.6	812.2	0.43	1.39			
Pedestrians		75.8	310.4	0.13	0.53			
Bicyclists		12	105.2	0.02	0.18			
Motorcyclists		75.6	378.2	0.13	0.65			
Work Zones		3.4	28	0	0.05			
Speeding-involved		163.6	540.6	0.28	0.92			

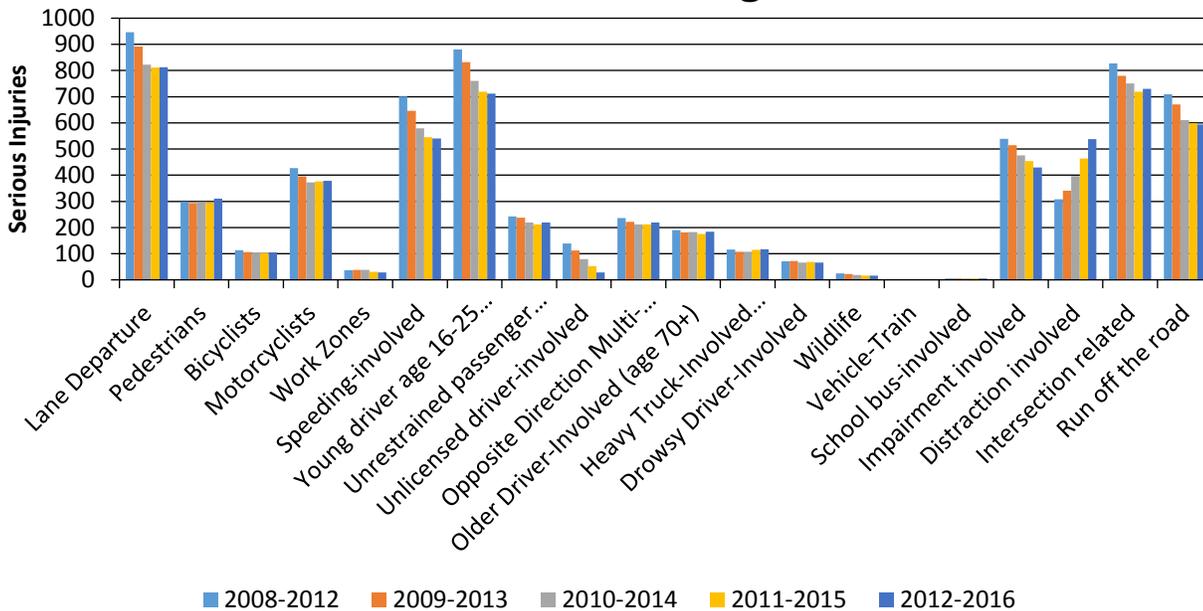
## 2017 Washington Highway Safety Improvement Program

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		153	711.4	0.26	1.22			
Unrestrained passenger vehicle occupant		103	219.2	0.18	0.38			
Unlicensed driver-involved		89.2	28.2	0.15	0.05			
Opposite Direction Multi-vehicle (Headon)		72	219	0.12	0.38			
Older Driver-Involved (age 70+)		63	184.2	0.11	0.31			
Heavy Truck-Involved (GVWR>10,000 lbs)		43	117.6	0.07	0.2			
Drowsy Driver-Involved		14.8	66.4	0.03	0.11			
Wildlife		2.2	15.6	0	0.03			
Vehicle-Train		1	1.4	0	0			
School bus-involved		0.8	5	0	0.01			
Impairment involved		275.6	429.4	0.47	0.74			
Distraction involved		147.2	537.6	0.25	0.91			
Intersection related		103.4	730.2	0.18	1.25			
Run off the road		179.6	593.2	0.31	1.01			

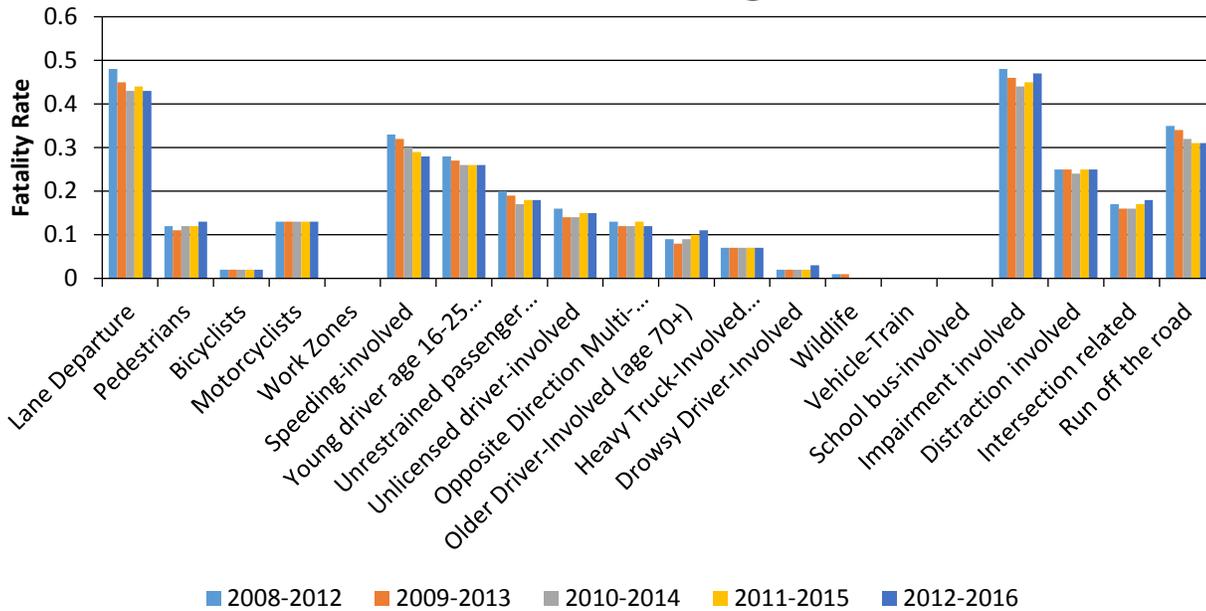
## Number of Fatalities 5 Year Average



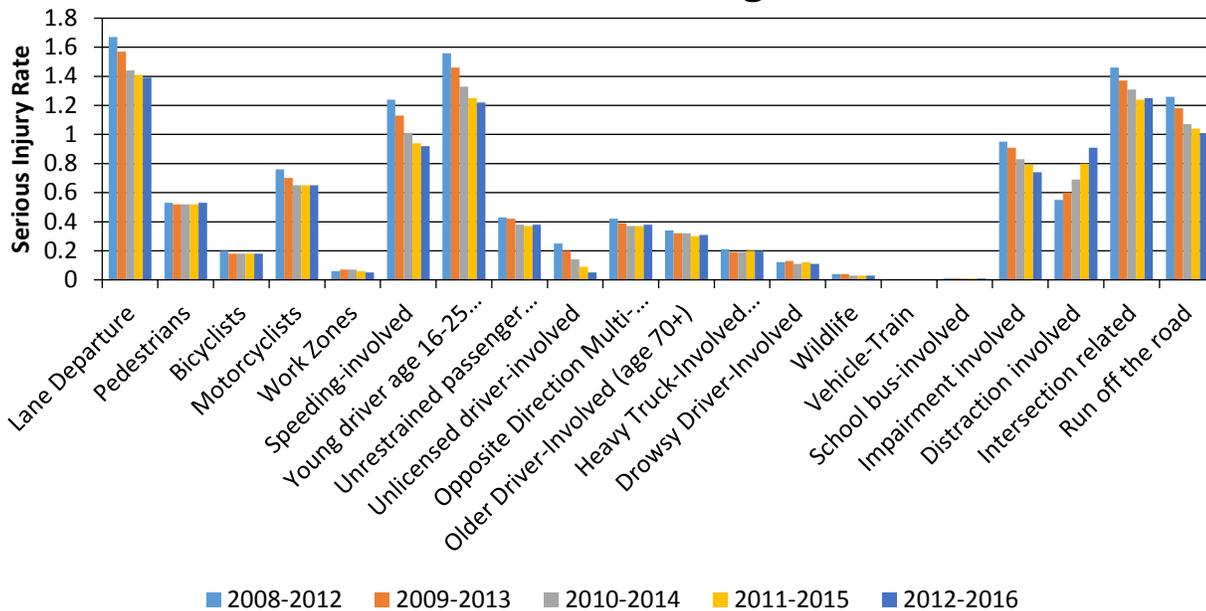
## Number of Serious Injuries 5 Year Average



## 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.**

The fatalities, serious injuries, and VMT are based on the official MAP-21 snapshot. The emphasis areas are consistent with the SHSP, Target Zero (2016).

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

No

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

**Project Effectiveness**

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

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL INJURY BEFORE	ALL INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
NA														

**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.**

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

MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
<b>ROADWAY SEGMENT</b>										
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								

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MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
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
<b>INTERSECTION</b>										
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						
<b>INTERCHANGE/RAMP</b>										
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				

2017 Washington Highway Safety Improvement Program

MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
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				
<b>Totals (Average Percent Complete):</b>	<b>100.00</b>	<b>84.67</b>	<b>87.50</b>	<b>75.63</b>	<b>88.64</b>	<b>90.91</b>	<b>100.00</b>	<b>88.89</b>	<b>100.00</b>	<b>98.40</b>

**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 that isn't always captured on a highway construction contract. In other words, we can't report what we don't know.

**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.

Jurisdiction	Estimated Percent complete	Approximate accuracy of estimate
WSDOT (state)	94%	+/- 90%
WSDOT (local)	20%	+/- 60%
CRAB (county)	65%	+/- 80%
Federal	20%	+/- 60%
Tribal	20%	+/- 60%
Non-DOT (state)	50%	+/- 60%

**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.**

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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
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.**

The Washington Traffic Safety Commission has funded a joint project with The Washington State Patrol and Department of Transportation to update Washington’s Crash Report and Crash Report Instruction Manual to better align with the recently released MMUCC 5<sup>th</sup> Edition. This effort will include the MMUCC 4<sup>th</sup> Edition criteria for P5, Injury Status, Suspected Serious Injury and is scheduled to be released to law enforcement on January 1, 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?**

No

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

2020

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

We will discuss with our FHWA Division on timing.

## **Optional Attachments**

Program Structure:

Project Implementation:

[Washington State HSIP Projects.xlsm](#)

Safety Performance:

Evaluation:

Compliance Assessment:

## Glossary

<b>5 year rolling average</b>	means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).
<b>Emphasis area</b>	means a highway safety priority in a State’s SHSP, identified through a data-driven, collaborative process.
<b>Highway safety improvement project</b>	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.
<b>HMVMT</b>	means hundred million vehicle miles traveled.
<b>Non-infrastructure projects</b>	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.
<b>Older driver special rule</b>	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.
<b>Performance measure</b>	means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.
<b>Programmed funds</b>	mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.
<b>Roadway Functional Classification</b>	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.
<b>Strategic Highway Safety Plan (SHSP)</b>	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.
<b>Systematic</b>	refers to an approach where an agency deploys countermeasures at all locations across a system.
<b>Systemic safety improvement</b>	means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.
<b>Transfer</b>	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.