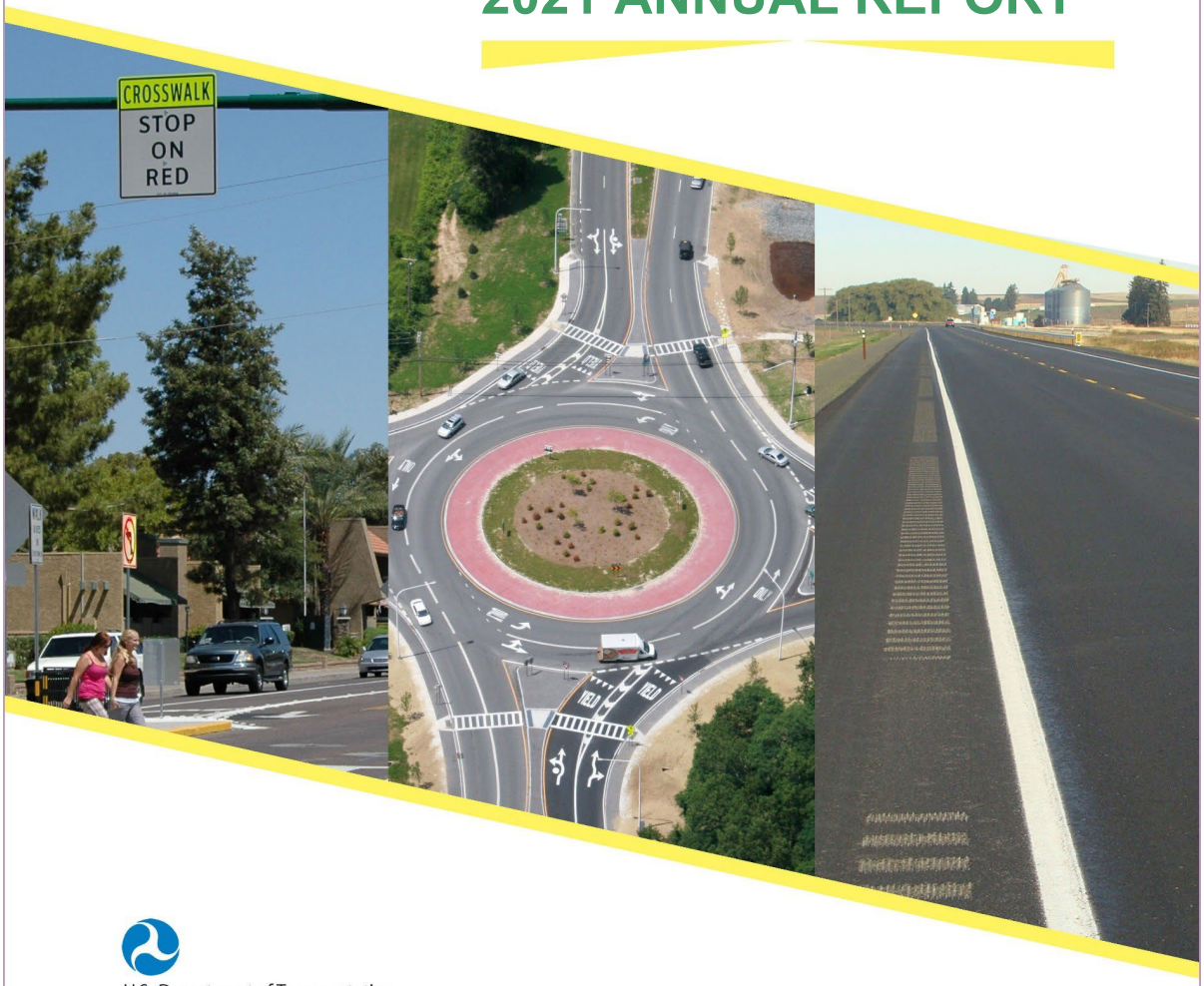
WASHINGTON

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2021 ANNUAL REPORT



U.S. Department of Transportation
Federal Highway Administration

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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. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.23 U.S.C. 409 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

Executive Summary

WSDOT saw crash increases in 2020 for both fatalities and serious injuries. Contributing factor information indicates that speeding, extreme speeding events, and driving under the influence of drugs/alcohol were key factors leading to the increase. It is surmised that with less volume speeds increased. County and City roads saw significant fatality increases overall. State fatalities were down in 2020 versus 2019. While crashes for those who walk and bike were similar to 2019 in frequency, the overall percent of crashes resulting in fatal or serious injury were higher. WSDOT continued to maintain aspirational targets for the safety program. Recognizing that an alternative setting increasing crashes was less desirable, although might help WSDOT avoid penalties. WSDOT has developed an implementation plan to describe its approach to highway safety and will continue to do so as a matter of practice. Discussions were held with the MPOs and WTSC on a routine basis. WSDOT is working closely with WTSC to develop an action plan for safety partners moving forward and both agencies see value in messaging what bold actions are necessary to achieve the 2030 targets, and to highlight opportunities to the Safety Commissioners and Legislature. The Department continues to implement Target Zero by continuing to advance its practices toward the Safe System. The program continues to become more systemic and proactive within the safety program.

Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

Program Structure

Program Administration

Describe the general structure of the HSIP in the State.

The WSDOT strategic highway safety plan "Target Zero" is the basis for establishing the structure of WSDOT's approach to programming safety funds for both WSDOT highways and local roads. WSDOT requires local road safety plans for local agencies to be eligible to receive HSIP funding at both the county and city level. Currently, WSDOT provides 70% of HSIP funds to local roads, and supplements the state program with additional state funding. Target Zero emphasis areas and strategies are reviewed and WSDOT determines through an analysis of the leading contributing factors, crash types and behaviors in implementing its safety program. Target Zero also contains strategies (countermeasures) that would benefit State or local agencies. Washington uses a centralized approach for determining HSIP locations within the state using network screening to identify a ranked set of location for further analysis and evaluation. The "Getting to Zero" implementation plan provides specific information on ranking methods. Once develop the ranked lists are provided to WSDOT regions for use in determining appropriate approaches to address the contributing factors and crash types at the respective locations. The I2 Safety subprogram structure has both crash reduction and prevention (systemic) approaches to reducing crash potential. The reduction category focuses on spot locations, intersections and segments using the excess crashes approach. The prevention category focuses on specific contributing factors and crash types to develop a ranked list of potential projects. The projects are based on benefit/cost analysis for the prioritization of the program of projects. Systemic approaches may use network benefit cost or local benefit cost for the purposes of prioritization. WSDOT completed a ten year implementation plan that contains additional information on WSDOT Safety Program.

Where is HSIP staff located within the State DOT?

Other-Transportation Safety and Systems Analysis; Local Programs

WSDOT uses a matrixed approach to safety and does not have staff dedicated for the HSIP. Reporting activities are completed by the Transportation Safety and Systems Analysis and Local Programs Divisions.

How are HSIP funds allocated in a State?

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

For Local Programs a competitive Application is used. For WSDOT, the SHSP is used to derive funding

subcategories, and data is used to guide potential funding levels. The Implementation plan highlights this approach.

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

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

To determine the HSIP funding allocation between state and local roadways, WSDOT evaluates the number of fatal & serious injury crashes in the priority 1 emphasis areas (lane departure and intersection-related) 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%.

The 70% of funding that goes to local agency safety is divided into a County Safety Program and a City Safety Program. Both programs now require that local agencies submit a Local Road Safety Plan to be eligible to apply for HSIP funding. The County Safety Program is focused on fatal and serious injury crash potential with a fully systemic approach to prioritizing safety projects. The City Safety Program is both prevention (systemic) and reduction (spot locations), with spot safety projects being prioritized by competitive benefit/cost ratio statewide. Systemic projects for both counties and cities are prioritized by cost effectiveness of the proposed projects, factoring in the crash data & LRSP prioritized projects for each agency, the cost of the proposed countermeasures, the number of locations being addressed, and the effectiveness of the countermeasures proposed.

Tribal roads are also eligible for funding, but must be included as part of a county or city list of proposed projects (tribes, counties, and cities are all encouraged to include such projects on prioritized lists). Based on fatal and serious injury crash data, a standalone tribal safety call for projects would not receive enough funding to be viable as a separate statewide call for projects.

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

- Design
- Districts/Regions
- Governors Highway Safety Office
- Local Aid Programs Office/Division
- Operations
- Planning
- Traffic Engineering/Safety
- Other-Active Transportation
- Other-Capital Program
- Other-Transportation Safety and Systems Analysis

Describe coordination with internal partners.

WSDOT is multimodal and multidisciplinary. The Highway Safety Issue Group includes representatives from the Regions and HQ Divisions and participants may come from planning, programming, design, operations, local programs or transportation safety. A safety panel also exists with individuals from multiple discipline areas who review projects and countermeasures for inclusion in the safety program. The Highway Safety Executive Committee includes Traffic Operations, Design, Capital Programming and Transportation Safety and Systems

Analysis. WSDOT meets quarterly to discuss technical issues within the Highway Safety Issue Group and monthly for policy issues with the Directors of Transportation Safety and Systems Analysis, Capital Programs, Development and Traffic Operations.

Identify which external partners are involved with HSIP planning.

- Academia/University
- FHWA
- Governors Highway Safety Office
- Law Enforcement Agency
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency
- 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-Department of Health
- Other-Department of Licensing
- Other-Adminstrator of the Courts
- Other-Superintendent of Public Instruction
- Other-Association of Washington Cities
- Other-Washington State Association of Counties
- Other-Health Care Authority
- Other-National Highway Safety Administration
- Other-Federal Motor Carrier Safety Administration

Describe coordination with external partners.

WSDOT interacts and coordinates with multiple external partners as part of the development of Target Zero and in setting targets. WSDOT routinely meets with MPOs and State Highway Safety Office (SHSO), as well as federal division in carrying out its safety program activities. In Target Setting, WSDOT will meet with the WTSC and MPOs as necessary to determine the appropriate method for setting targets in the state. WSDOT will also coordinate at this time with MPO Technical, Coordinating or Executive Committees as necessary for getting agreement on Targets. For development of the SHSP, WSDOT and the WTSC form multiple working groups to assign chapter development, data analysis and oversight of the document. WSDOT and WTSC work closely to get partner input and agreement depending on the specifics of each section of the SHSP. The WTSC is made up of Department Heads and works to form and provide Traffic Safety Policy recommendations and direction for consideration by the Governor. Often, WSDOT together with different agencies and the WTSC, will make legislative presentations and submit proposed legislation or funding requests. WSDOT also works very closely with city and county agencies to assist with analysis and evaluation of safety plans and projects. WSDOT has quarterly meetings with Federal Partners to highlight concerns and inform each other of ongoing activities.

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

WSDOT continues to tie the SHSP emphasis areas, priorities and strategies to the WSDOT safety subprogram development. WSDOT will submit its 2022 implementation plan and how the program is administered with an outline for each of the safety subcategories, the methods used, and how B/C is used within each subcategory. Each subcategory is highlighted within the implementation plan. The department is tracking fatal and serious crashes through various means, and has developed a dashboard to track COVID-19 issues.

Program Methodology

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

No

WSDOT does not have a HSIP manual.

Select the programs that are administered under the HSIP.

- Horizontal Curve
- HRRR
- Intersection
- Median Barrier
- Roadway Departure
- Other-State - Collision Analysis Corridors
- Other-State - Collision Analysis Locations
- Other-State - Intersection Analysis Locations
- Other-Local - City Safety Program
- Other-Local - County Safety Program
- Other-High Friction Surface Treatments
- Other-Barrier and Terminal Modifications
- Other-Rumble Strips
- Other-Operational Assessments
- Other-BCT conversion
- Other-Redirectional land forms
- Other-Data and performance improvement
- Other-Active Transportation Safety

Program: Horizontal Curve

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Other-Speed differential	

What project identification methodology was used for this program?

- 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?

How are projects under this program advanced for implementation?

- Other-systemic approach

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

Other-ranking based on systemic B/C:1

Program: HRRR

Date of Program Methodology:1/1/2014

What is the justification for this program?

- Other-FHWA HRRR Special Rule

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Volume • Lane miles	

What project identification methodology was used for this program?

- 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

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

Available funding:3
Cost Effectiveness:2
Other-Completion of LRSP:1

Program: Intersection

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Volume	• Functional classification

What project identification methodology was used for this program?

- Other-systemic b/c

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

No

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

How are projects under this program advanced for implementation?

- Other-ranked list

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

Program: Median Barrier

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		• Median width • Functional classification

What project identification methodology was used for this program?

- Crash frequency

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

No

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

How are projects under this program advanced for implementation?

- Other-ranked list

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

Program: Roadway Departure

Date of Program Methodology:9/26/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?
Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
	• Traffic • Volume • Other-speed	• Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Other-type of crash

Are local roads (non-state owned and operated) included or addressed in this program?
No

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

How are projects under this program advanced for implementation?

- Other-ranked list

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
Other-systemic b/c:1

Program: Other-State - Collision Analysis Corridors

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Volume	

What project identification methodology was used for this program?

- 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?

How are projects under this program advanced for implementation?

- Other-Safety Panel Review

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

Program: Other-State - Collision Analysis Locations

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Volume	

What project identification methodology was used for this program?

- 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?

How are projects under this program advanced for implementation?

- Other-Safety Panel Review

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

Program: Other-State - Intersection Analysis Locations

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only	• Volume	

What project identification methodology was used for this program?

- 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?

How are projects under this program advanced for implementation?

- Other-Safety Panel Review

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

Program: Other-Local - City Safety Program

Date of Program Methodology:1/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		

What project identification methodology was used for this program?

- 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

How are projects under this program advanced for implementation?

- Competitive application process
- Other-Completion of a LRSP

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

Rank of Priority Consideration

Ranking based on B/C:2
Available funding:4
Cost Effectiveness:3
Other-Completion of LRSP:1

Program: Other-Local - County Safety Program

Date of Program Methodology:1/1/2014

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Fatal and serious injury crashes only		

What project identification methodology was used for this program?

- 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

How are projects under this program advanced for implementation?

- Competitive application process
- Other-Completion of a LRSP

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:3
Cost Effectiveness:2
Other-Completion of LRSP:1

Program: Other-High Friction Surface Treatments

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• Other-wet weather crashes		• Functional classification

What project identification methodology was used for this program?

- Crash frequency

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

No

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

How are projects under this program advanced for implementation?

- Other-ranked list

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

Other-systemic b/c:1

Program: Other-Barrier and Terminal Modifications

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
		• Functional classification

What project identification methodology was used for this program?

- Other-functional classification
- Other-systemic b/c

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

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

How are projects under this program advanced for implementation?

- Other-inventory

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

Program: Other-Rumble Strips

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
	• Volume	• Horizontal curvature

What project identification methodology was used for this program?

- Other-functional classification

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

No

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

How are projects under this program advanced for implementation?

- Other-ranked list

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

Other-systemic b/c:1

Program: Other-Operational Assessments

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
		• Other-assesment of field conditions

What project identification methodology was used for this program?

- Other-field conditions

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

No

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

How are projects under this program advanced for implementation?

- Other-ranked list

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

Program: Other-BCT conversion

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
		• Functional classification • Other-presence of BCT

What project identification methodology was used for this program?

- Other-based on functional classification and roadway type

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

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

How are projects under this program advanced for implementation?

- Other-inventory

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

Other-systemic approach:1

Program: Other-Redirectional land forms

Date of Program Methodology:6/1/2018

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Funding set-aside

What data types were used in the program methodology?

Crashes	Exposure	Roadway
		• Other-Redirectional Landform in median

- Other-bridge pier

What project identification methodology was used for this program?

- Other-presence of condition

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

No

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

How are projects under this program advanced for implementation?

- Other-addressed system wide

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

Other-systemic approach:1

Program: Other-Data and performance improvement

Date of Program Methodology:8/18/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Other-Funding set aside as available

What data types were used in the program methodology?

Crashes	Exposure	Roadway

What project identification methodology was used for this program?

- Other-Data or performance improvements needed

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

No

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

How are projects under this program advanced for implementation?

- Other-HSEC Selection

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

Rank of Priority Consideration

Available funding:1

Data and performance improvements occur infrequently but projects are typically assessed on an individual basis and how the investment is intended to address administrative or subprogram needs.

Program: Other-Active Transportation Safety

Date of Program Methodology:8/18/2021

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
• All crashes	• Other-low income household • Other-concentration of people with a disability • Other-Concentration of people of color • Other-Potential for walking/cycling • Other-destination proximity • Other-trail proximity • Other-intermodal connectivity	• Other-system issues

What project identification methodology was used for this program?

- Other-WSDOT developed approach

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

No

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

How are projects under this program advanced for implementation?

- Other-ranked lists

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

Other-WSDOT developed criteria:1

Process for ranking is continuing to evolve.

What percentage of HSIP funds address systemic improvements?

70

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

- Add/Upgrade/Modify/Remove Traffic Signal
- Cable Median Barriers
- Clear Zone Improvements
- High friction surface treatment
- Horizontal curve signs
- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Other-Compact Roundabouts
- Pavement/Shoulder Widening
- Rumble Strips
- Safety Edge
- Upgrade Guard Rails

WSDOT targets 70% of its program towards systemic investments and is transitioning to the subcategories overtime. Percentage of funding may vary.

What process is used to identify potential countermeasures?

- Crash data analysis

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

WSDOT develops a Crash Analysis Report to evaluate countermeasure alternatives within the reduction category of the safety program. The analysis is typically for spot locations and assess the context, and contributing factors leading to crashes. These reports are assessed by a safety panel of regional and headquarter offices before a preferred alternative is selected to move forward in the programming process.

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, and in the future connected vehicles will be, considered as an appropriate countermeasure for safety. The countermeasure would need to be shown to have a positive crash reduction potential for fatal and serious crashes. An office exists within WSDOT related to connected vehicles and the State Safety Engineer interacts with that office. Washington has a committee dealing with CAT related to safety. WSDOT included CAT in its strategic highway safety plan, and is developing an approach to perform a stripping pilot project for CAT purposes.

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

Yes

Please describe how the State uses the HSM to support HSIP efforts.

WSDOT uses the HSM throughout its HSIP efforts. The state uses SafetyAnalyst for screening of state projects. WSDOT has developed and updated its guide on safety analysis in planning and design and when and how to use the HSM for those activities. WSDOT has executive orders that direct policy around the use of the HSM. Local HSIP projects priorities are typically derived from the SHSP emphasis areas, and do not use the HSM predictive and network screening methods because of data limitations. For Local Agencies we follow guidance from the HSM for applying CMFs for our spot location (benefit/cost) projects. WSDOT also continues to investigate the use of IHSDM in design of projects. HSM methods are used for Intersection Analysis Locations, Crash Analysis Locations, and Crash Analysis Corridors project selection through the Crash Analysis Report.

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

Additional subcategories have been included for Active Transportation, and Data and Performance Management. The program continues to evolve with incorporation of the safe system.

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

WSDOT continues to focus on data driven safety analysis throughout its program efforts. WSDOT is using performance based practical design and a sustainable safety approach. WSDOT has focused on data driven approaches through identifying the 5th E of safety as Evaluation, analysis and diagnosis. It is thought that this approach allows for the targeting of specific crash types and contributing factors, and also maximizes the return on safety benefit for selected countermeasures. WSDOT outlined the systemic subcategories that focus on road crashes related to road users, intersection, and lane departure crash types. The safety program continues to evolve on an ongoing basis.

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

Calendar Year

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	$65,820,903	$37,198,302	56.51%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$2,920,544	0%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$0	$13,817,226	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$0	$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$9,554,617	0%
State and Local Funds	$0	$0	0%
Totals	$65,820,903	$63,490,689	96.46%

Numbers shown about are reported on calendar year.

Programmed funds include local safety projects and state Program Management P3 safety projects and I-2 that are not ADA.
State and Local funds are not obligated (so are shown at 100% obligation).

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

64%

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

26%

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

1%

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

1%

0.50% of programmed safety funds are for local safety data improvement projects.
0.66% of obligated safety funds are for local safety data improvement projects.

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?

$36,000,000
WSDOT flexed $36M into the HSIP in FFY 2019 and the flexed out the same amount in FFY 2020. Overall, HSIP funding was fully maintained.

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

WSDOT provides much of its HSIP appropriation to its local partners. Delivery of federally-funded projects with all of the attendant paperwork/regulations can make delivery of these projects by local agencies a challenge, especially considering the low-cost nature of many safety improvements. This has especially been true for the environmental approval process, as other agencies that must approve documentation have been understaffed and have lowered the priority of local projects in their approval processes. Also revenue reductions due to the pandemic in Washington have reduced available funds to both the state and locals. It is also very difficult when projects involved working with Railroads.

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 and is hopeful for change at based on current transportation discussion. 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 data shared with Safety Partners (MPOs, Health, State Police, SHSO) is protected for the agency sharing and receiving the data when used for HSIP purposes (e.g., SHSP, Target Setting, Safety Planning, Public Awareness). MPOs in our opinion are reluctant to use this data because of potential liability concerns.

General Listing of Projects

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

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
Adams County - Booker Rd and SR 26 Intersection	Roadway	Rumble strips - transverse			$609600		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Intersections	INT 3.2 - Install transverse rumble strips on rural stop-controlled approaches.
City of Auburn - Auburn Way S Curve - Poplar St. SE Vicinity	Roadway	Pavement surface – high friction surface			$262700		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Lane Departure	LDX 3.2 - Improve pavement friction using high friction surface treatments.
City of Bainbridge Island - High School Road Signage & Safety	Pedestrians and bicyclists	Modify existing crosswalk			$324600		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.3 - Increase sight distance and visibility at pedestrian and bicyclist crossings.
City of Battle Ground - Captain Strong & Chief Umtuch School Zone Upgrades	Speed management	Traffic calming feature			$115130		HSIP (23 U.S.C. 148)	Urban	Local Road or Street	0		City or Municipal Highway Agency	Systemic	Speeding	SPE 2.2 - Implement traffic calming strategies.
City of Battle Ground - Country Terrace Subdivision Safety Upgrades	Speed management	Traffic calming feature			$136880		HSIP (23 U.S.C. 148)	Urban	Local Road or Street	0		City or Municipal Highway Agency	Systemic	Speeding	SPE 2.2 - Implement traffic calming strategies.
City of Bellevue - SE Eastgate Way Illumination	Lighting	Continuous roadway lighting			$542000		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Systemic	Lane Departure	LDX 3.4 - Install lighting.
Benton County - Guidepost and Guardrail Installation	Roadside	Barrier- metal			$605500		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail,

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
															cable barrier, or concrete barrier.
Chelan County - Countywide Signing - 2021	Roadway signs and traffic control	Curve-related warning signs and flashers			$379500		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
Chelan County - Countywide Barrier Terminals - 2021	Roadside	Barrier end treatments (crash cushions, terminals)			$393700		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Clallam County - Sequim-Dungeness Way and Woodcock Roundabout	Intersection traffic control	Modify control – Modern Roundabout			$833206		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		County Highway Agency	Systemic	Intersections	INT 1.2 - Install or convert intersections to roundabouts.
Clark County - NE 119th Street / NE 152nd Avenue Intersection	Intersection traffic control	Modify control – Modern Roundabout			$3000000		HRRR Special Rule (23 U.S.C. 148(g)(1))	Urban	Major Collector	0		County Highway Agency	Systemic	Intersections	INT 1.2 - Install or convert intersections to roundabouts.
City of Cle Elum - Citywide Safety	Intersection traffic control	Intersection signing – add enhanced regulatory sign (double-up and/or oversize)			$147400		HSIP (23 U.S.C. 148)	Rural	Local Road or Street	0		City or Municipal Highway Agency	Spot	Intersections	INT 3.5 - Increase visibility of signals and signs at intersections.
Columbia County - Columbia Co. 2017 Safety - Signing	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$246750		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing

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															beacons in curves.
City of Covington - Roundabout Flashing Beacons	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$300000		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.2 - Invest in and increase the use of RRFBs and PHBs where these crosswalk enhancements are needed.
Cowlitz County - Clear Zone Inventory	Miscellaneous	Data collection			$175000		HSIP (23 U.S.C. 148)	N/A	N/A	0		County Highway Agency	No Sites	Data	LDX 1.2 - Inventory horizontal curves and gather data to support development of programs and projects.
Cowlitz County - Countywide Roadside Delineation	Roadway delineation	Delineators post-mounted or on barrier			$185000		HSIP (23 U.S.C. 148)	Urban	Local Road or Street	0		County Highway Agency	Systemic	Lane Departure	LDX 3.5 - Install edge lines, especially on curves, where adequate shoulders exist.
Cowlitz County - Countywide Guardrail	Roadside	Barrier- metal			$537200		HSIP (23 U.S.C. 148)	Urban	Local Road or Street	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Douglas County - 2017 County Guardrail	Roadside	Barrier- metal			$550881		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.

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City of Federal Way - Horizontal Curve Warning Signs	Roadway signs and traffic control	Curve-related warning signs and flashers			$519700		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
Ferry County - Countywide Guardrail - Section 1	Roadside	Barrier- metal			$797400		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Ferry County - Curve Signing Upgrade	Roadway signs and traffic control	Curve-related warning signs and flashers			$313200		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
City of Fife - Citywide Safety Improvements	Intersection traffic control	Modify traffic signal – add flashing yellow arrow			$378040		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Systemic	Intersections	INT 1.12 - Convert to flashing yellow arrows at signals.
City of Fife - N. Levee & Frank Albert Road I/S	Lighting	Intersection lighting			$357300		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.10 - Install lighting.
Franklin County - Countywide Guardrail & Curve Improvements	Roadside	Slope Flattening			$240881		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.2 - Flatten side slopes to reduce the potential for rollover crashes.
Franklin County - LED Signs,	Advanced technology and ITS	Intersection Conflict Warning System (ICWS)			$310900		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Intersections	INT 1.6 - Install intersection

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Dynamic Signals, & Reflector Posts															conflict warning systems (real time warning) at rural intersections.
Franklin County - Eltopia West Railroad Crossing	Railroad grade crossings	Crossing approach improvements			$72900		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Vehicle-Train	
Garfield County - Bell Plain Road Guardrail	Roadside	Barrier- metal			$596500		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Grant County - Flashing LED Stop Signs - Phases 1 & 2	Intersection traffic control	Intersection signing – add enhanced regulatory sign (double-up and/or oversize)			$549600		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Intersections	INT 3.5 - Increase visibility of signals and signs at intersections.
Island County - Island Co. 2017 Safety - Flexible Guideposts	Roadway delineation	Delineators post-mounted or on barrier			$44500		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.5 - Install edge lines, especially on curves, where adequate shoulders exist.
Island County - Whidbey Island Guardrail Replacement	Roadside	Barrier- metal			$598000		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
City of Kenmore - 2018 Citywide Safety - Signing	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$346000		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.2 - Invest in and increase the use of RRFBs

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															and PHBs where these crosswalk enhancements are needed.
King County - 2020 High Friction Surface Treatments	Roadway	Pavement surface – high friction surface			$3258063		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Improve pavement friction using high friction surface treatments.
King County - 16th Ave SW Pedestrian Improvements	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			$862200		HRRR Special Rule (23 U.S.C. 148(g)(1))	Urban	Principal Arterial-Other	0		County Highway Agency	Systemic	Pedestrians	INT 1.3 - Convert four-lane roadways to three-lane roadways with center turn lane (road diet).
City of Kirkland - Lake St. & Kirkland Ave.	Pedestrians and bicyclists	Pedestrians and bicyclists – other			$500000		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Pedestrians	PAB 2.1 - Reduce crash exposure safety at pedestrian and bicyclist crossings.
City of Kirkland - NE 124th St. & 113th Ave. E Signal Improvements	Intersection traffic control	Modify traffic signal timing – left-turn phasing			$670000		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.4 - Convert permitted left turns to protected left turns at signals.
Kitsap County - 2019 Guardrail Replacement	Roadside	Barrier- metal			$600000		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Kittitas County - Clear Zone Inventory	Miscellaneous	Data collection			$78777		HSIP (23 U.S.C. 148)	N/A	N/A	0		County Highway Agency	No Sites	Data	LDX 1.2 - Inventory horizontal

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															curves and gather data to support development of programs and projects.
Kittitas County - Vantage Highway Corridor	Roadside	Barrier- metal			$1292356		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Klickitat County - Countywide Guide Posts & Signing	Roadway signs and traffic control	Curve-related warning signs and flashers			$613500		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
Klickitat County - Countywide Edge Lines	Roadway delineation	Longitudinal pavement markings – new			$175300		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.5 - Install edge lines, especially on curves, where adequate shoulders exist.
Lewis County - 2019 County Safety - Phase 2	Roadside	Slope Flattening			$991248		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.2 - Flatten side slopes to reduce the potential for rollover crashes.
Lewis County - 2019 County Safety - Phase 1	Roadway delineation	Delineators post-mounted or on barrier			$225585		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.5 - Install edge lines, especially on curves, where adequate shoulders exist.

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Lincoln County - 2017 Countywide Guardrail Installation	Roadside	Barrier- metal			$630500		HSIP (23 U.S.C. 148)	Rural	Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
City of Marysville - Marysville Citywide Safety	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$651220		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Spot	Pedestrians	PAB 2.2 - Invest in and increase the use of RRFBs and PHBs where these crosswalk enhancements are needed.
City of Marysville - State Ave. - 3rd St. to 80th St. NE	Intersection traffic control	Modify traffic signal timing – signal coordination			$1752248		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.11 - Coordinate arterial signals.
Mason County - Bear Creek Dewatto Rd	Roadside	Slope Flattening			$524983		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.2 - Flatten side slopes to reduce the potential for rollover crashes.
Okanogan County - Countywide Speed Limit & Striping	Speed management	Modify speed limit			$185700		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Speeding	SPE 2.1 - Set speed limits which account for roadway design, traffic, and environment.
Okanogan County - Countywide Guardrail	Roadside	Barrier- metal			$433200		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
City of Othello - Main St. Safety	Pedestrians and bicyclists	Pedestrian hybrid beacon			$1062593		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Spot	Pedestrians	PAB 2.2 - Invest in and increase the use of RRFBs and PHBs where these crosswalk enhancements are needed.
Pacific County - Camp One Rd/Heckard Rd Intersection Realignment	Intersection geometry	Intersection realignment			$159000		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Intersections	INT 3.4 - Increase sight distance (visibility) of intersections on approaches.
Pacific County - High Intensity Safety Signing	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$1383000		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
Pacific County - Countywide Guardrail	Roadside	Barrier- metal			$307600		HSIP (23 U.S.C. 148)	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Pierce County - Countywide Edge & Centerline Rumble Strips	Roadway	Rumble strips – center			$1410000		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.3 - Install center and/or bicycle-friendly edge line rumble strips.
Pierce County - Countywide Guardrail	Roadside	Barrier- metal			$1388800		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail,

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
															cable barrier, or concrete barrier.
City of Renton - Renton Elementary and Middle School Crossings	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$728905		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.1 - Reduce crash exposure safety at pedestrian and bicyclist crossings.
City of Richland - Van Giesen & Thayer Roundabout	Intersection traffic control	Modify control – Modern Roundabout			$831276		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.2 - Install or convert intersections to roundabouts.
San Juan County - Collision Risk Field Survey	Miscellaneous	Data collection			$100000		HSIP (23 U.S.C. 148)	N/A	N/A	0		County Highway Agency	No Sites	Data	LDX 1.2 - Inventory horizontal curves and gather data to support development of programs and projects.
San Juan County - Roche Harbor Rd Guardrail	Roadside	Barrier- metal			$44300		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
City of Seattle - Vision Zero Leading Pedestrian Intervals	Pedestrians and bicyclists	Leading pedestrian interval			$1287000		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Pedestrians	INT 1.9 - Modify signal phasing to implement a leading pedestrian interval.
City of Shoreline - Midblock Crossing and Citywide Flashing Beacons	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$1377500		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.2 - Invest in and increase the use of RRFBs and PHBs

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
and Radar Speed Signs															where these crosswalk enhancements are needed.
City of Shoreline - Meridian Ave. N Safety Improvements	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			$1139000		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.3 - Convert four-lane roadways to three-lane roadways with center turn lane (road diet).
Skamania County - Countywide Guardrail & Signage	Roadway signs and traffic control	Curve-related warning signs and flashers			$465240		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
Snohomish County - Countywide Curve Improvements	Roadway	Pavement surface – high friction surface			$1381058		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.2 - Improve pavement friction using high friction surface treatments.
Snohomish County - 84th St NE & 163rd St NE Roundabout	Intersection traffic control	Modify control – Modern Roundabout			$1812200		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		County Highway Agency	Systemic	Intersections	INT 1.2 - Install or convert intersections to roundabouts.
Snohomish County - Marsh Road Spot Safety	Roadside	Barrier- metal			$361111		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Minor Arterial	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Spokane County - 2019 Curve Signing Safety	Roadway signs and traffic control	Curve-related warning signs and flashers			$238891		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve

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															warning signs, and/or sequential flashing beacons in curves.
Spokane County - 2019 Guardrail Safety	Roadside	Barrier- metal			$1269810		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.3 - Install roadside safety hardware such as guardrail, cable barrier, or concrete barrier.
Spokane County - 2019 Stop Sign Safety	Intersection traffic control	Intersection signing – add enhanced regulatory sign (double-up and/or oversize)			$413970		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		County Highway Agency	Systemic	Intersections	INT 3.5 - Increase visibility of signals and signs at intersections.
City of Spokane Valley - Citywide Reflective Sign Post Panels	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$77300		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
City of Tacoma - McKinley Ave. Crosswalk Improvements at E. 36th St. and E. 37th St.	Lighting	Intersection lighting			$358500		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Intersections	INT 1.10 - Install lighting.
City of Tacoma - East Portland Avenue Safety Improvements	Intersection traffic control	Modify traffic signal – modernization/replacement			$2379703		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.11 - Coordinate arterial signals.
City of Tacoma - Pacific Ave. (SR 7) Corridor - Intersection Signal Improvements	Intersection traffic control	Modify traffic signal – modernization/replacement			$945166		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.11 - Coordinate arterial signals.

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City of Tacoma - S 19th St. Signal and Crosswalk Improvements	Intersection traffic control	Modify traffic signal timing – left-turn phasing			$602161		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.4 - Convert permitted left turns to protected left turns at signals.
Thurston County - 2018 Highway Safety Improvements	Roadway	Rumble strips – center			$1287000		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 2.1 - Install centerline rumble strips.
Thurston County - Pacific Ave Safety	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$320400		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		County Highway Agency	Systemic	Pedestrians	PAB 2.1 - Reduce crash exposure safety at pedestrian and bicyclist crossings.
City of Vancouver - Fourth Plain Blvd. Road Diet - F Street to Fort Vancouver Way	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			$796620		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Systemic	Intersections	INT 1.3 - Convert four-lane roadways to three-lane roadways with center turn lane (road diet).
City of Walla Walla - Citywide Pedestrian Safety	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$745824		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.2 - Invest in and increase the use of RRFBs and PHBs where these crosswalk enhancements are needed.
Walla Walla County - Countywide Signing & Guideposts	Roadway signs and traffic control	Curve-related warning signs and flashers			$155000		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
Walla Walla County - Middle	Alignment	Horizontal and vertical alignment			$2503500		HSIP (23 U.S.C. 148)	Rural	Minor Collector	0		County Highway Agency	Systemic	Lane Departure	

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Waitsburg Rd - MP 6.10 to MP 7.92															
City of Wenatchee - Methow Street Improvements	Intersection traffic control	Modify control – Compact/Mini-roundabout			$786600		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.2 - Install or convert intersections to roundabouts.
City of Wenatchee - S. Miller St./Montana St. Pedestrian Crossing	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$248203		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Pedestrians	PAB 2.2 - Invest in and increase the use of RRFBs and PHBs where these crosswalk enhancements are needed.
Whatcom County - Curve Advisory Speed Review	Roadway signs and traffic control	Curve-related warning signs and flashers			$110800		HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		County Highway Agency	Systemic	Lane Departure	LDX 3.1 - Install chevron signs, curve warning signs, and/or sequential flashing beacons in curves.
City of Yakima - Fruitvale Blvd at River Rd & River Rd at N 34th Ave Roundabouts	Intersection traffic control	Modify control – Modern Roundabout			$1023184		HSIP (23 U.S.C. 148)	Urban	Multiple/Varies	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.2 - Install or convert intersections to roundabouts.
NORTHWEST REGION CURVE WARNING SIGNS (15-17)	Roadway signs and traffic control	Curve-related warning signs and flashers			$0	$73829.32	State and Local Funds	Multiple/Varies	Principal Arterial-Other	0		State Highway Agency	Systemic	Lane Departure	LDX.3.1
SR 9 & SR 92/Lake Stevens Vic - Rumble Strip Installation	Roadway	Rumble strips – edge or shoulder			$115000	$125350	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.2.1
NWR Breakaway Cable Terminal Replacement 17-19	Roadside	Barrier – cable			$503424	$503424	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Principal Arterial-Interstate	0		State Highway Agency	Systemic	Roadway Departure	LDX.2.2

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NWR Breakaway Cable Terminal Replacement 17-19	Roadside	Barrier – cable			$862636	$862636	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Principal Arterial-Other Freeways & Expressways	0		State Highway Agency	Systemic	Roadway Departure	LDX.2.2
US 2/Bickford Ave to SR 9 Vicinity - Median Barrier (Phase 2)	Roadside	Barrier – concrete			$2382630	$2382630	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	21,904	60	State Highway Agency	Systemic	Roadway Departure	LDX.2.2
US 2 / FERN BLUFF RD VIC TO 10TH ST VIC - PAVING	Intersection traffic control	Pavement markings			$0	$-1217.94	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	18,509	35	State Highway Agency	Systemic	Roadway Departure	LDX.3.5
I-5/ NB MARTIN LUTHER KING JR WY TO NE RAVENNA BR - PAVEMENT REPAIR AND MORE	Roadside	Barrier – concrete			$15000	$15000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	163,152	60	State Highway Agency	Systemic	Roadway Departure	LDX.2.2
I-5/ NB MARTIN LUTHER KING JR WY TO NE RAVENNA BR - PAVEMENT REPAIR AND MORE	Intersection traffic control	Pavement markings			$0	$5000	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Interstate	152,401	60	State Highway Agency	Spot	Intersections	INT.1.5
I-5/ NB MARTIN LUTHER KING JR WY TO NE RAVENNA BR - PAVEMENT REPAIR AND MORE	Intersection traffic control	Pavement markings			$0	$5000	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Interstate	164,219	60	State Highway Agency	Spot	Intersections	INT.1.5
I-5/NB SR 531 VIC TO PORTAGE CREEK BRIDGE VIC - PAVING	Pedestrians and bicyclists	ADA curb ramps			$0	$27883.91	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Interstate	66,132	70	State Highway Agency	Systemic	Intersections	PAB.2.1
NWR Cable Barrier Upgrade	Roadside	Barrier – cable			$84000	$84000	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Interstate	52,911	70	State Highway Agency	Systemic	Roadway Departure	LDX.2.2
SR9/108th St NE & SR92/147th Ave NE to Quarry Rd -	Intersection traffic control	Modify control – Modern Roundabout			$550000	$550000	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	13,114	55	State Highway Agency	Systemic	Intersections	INT.1.2

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I/S Improvements & Paving															
NWR Cable Barrier Upgrade	Roadside	Barrier – cable			$0	$37211	State and Local Funds	Urban	Principal Arterial-Other	32,103	60	State Highway Agency	Systemic	Roadway Departure	LDX.2.2
SR 20/Campbell Lake Road - Intersection Improvements (Local-WSDOT Lead)	Interchange design	Convert at-grade intersection to interchange			$0	$570900	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Other	16,545	50	State Highway Agency	Spot	Intersections	INT.1
SR 20/Swinomish Channel to Sedro-Woolley-Predesign Corridor Improvements	Intersection traffic control	Modify control – Modern Roundabout			$40000	$43000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	15,624	50	State Highway Agency	Systemic	Lane Departure	INT.1.2
SR 524/LOCUST & LARCH WAY - INTERSECTION IMPROVEMENTS	Intersection traffic control	Modify control – Modern Roundabout			$163519	$163519	Penalty Funds (23 U.S.C. 164)	Urban	Minor Arterial	18,377	35	State Highway Agency	Systemic	Intersections	INT.1.2
SR 548/KICKERVILLE RD - Intersection Improvements	Railroad grade crossings	Active grade crossing equipment installation/upgrade			$0.01	$186048.19	State and Local Funds	Rural	Principal Arterial-Other	4,376	50	State Highway Agency	Systemic	Roadway Departure	LDX.4.1
NCR Seal 2020	Roadway	Rumble strips – center			$0	$1322.5	Other Federal-aid Funds (i.e. STBG, NHPP)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Lane Departure	LDX.2.1
NCR Centerline Rumble Strips - Section C	Roadway	Rumble strips – center			$0	$1456.84	State and Local Funds	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.2.1
NCR 17-19 Regionwide Curve Warning Sign Update	Roadway signs and traffic control	Curve-related warning signs and flashers			$639682.81	$652476.47	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.3.1
NCR Guardrail Update 19-21	Roadside	Barrier- metal			$90458	$90458	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.4.3
NCR Pavement Rehab 2018	Roadway	Rumble strips – edge or shoulder			$0	$1.83	State and Local Funds	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.2.1

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NCR Pavement Rehab 2018	Roadway	Rumble strips – edge or shoulder			$0	$16.66	State and Local Funds	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Intersections	LDX.2.1
SR 17/Grape Dr - Intersection Safety Improvement	Intersection traffic control	Modify control – Modern Roundabout			$305139	$326498	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	17,716	50	State Highway Agency	Systemic	Intersections	INT.1.2
SR 17/Cunningham Rd - Intersection Safety Improvement	Intersection traffic control	Modify control – Modern Roundabout			$376117	$402445	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	6,858	60	State Highway Agency	Systemic	Intersections	INT.1.2
SR 17/Prior Farms - Left Turn Lane	Intersection geometry	Add/modify auxiliary lanes			$0	$3529.58	State and Local Funds	Rural	Principal Arterial-Other	7,196	60	State Highway Agency	Spot	Intersections	INT.1
NCR Pavement Rehab 2018	Intersection geometry	Add/modify auxiliary lanes			$0	$27100	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Multiple/Varies	8,763	60	State Highway Agency	Spot	Pedestrians	INT.1.5
SR 24/ Bench Rd Intersection Improvements	Intersection geometry	Add/modify auxiliary lanes			$87648	$107798	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Major Collector	6,230	50	State Highway Agency	Spot	Intersections	INT.1.5
SR 28/White Trail Rd - Roundabout	Intersection traffic control	Modify control – Modern Roundabout			$340200	$378000	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	8,800	60	State Highway Agency	Systemic	Intersections	INT.1.2
SR 28/5th Street Intersection Improvements	Intersection geometry	Add/modify auxiliary lanes			$1911.57	$1911.57	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	18,409	40	State Highway Agency	Spot	Intersections	INT.1.5
I-90/Silica Rd to Adams Co Line - Cable Barrier Upgrades	Roadside	Barrier – cable			$0	$3758963.38	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Interstate	13,100	70	State Highway Agency	Systemic	Roadway Departure	LDX.2.2
SR 285 Wenatchee Area - Paving	Roadway	Rumble strips – edge or shoulder			$0	$124205	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Multiple/Varies	22,426		State Highway Agency	Systemic	Roadway Departure	INT.1
19-21 OR Region Wide Basic Safety - Guardrail	Roadside	Barrier- metal			$125000	$130000	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.4.3

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US 101/Morse Creek Vicinity - Safety Improvements	Roadside	Barrier- metal			$297473.19	$297473.19	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.4.3
Olympic Region - Guardrail Installations	Roadside	Barrier- metal			$50000	$50000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.4.3
SR 7/Pedestrian Crossing - Safety Improvement	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$45191.55	$47236.02	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	28,429	35	State Highway Agency	Systemic	Pedestrians	PAB.2.1
US 12 / Anderson Rd to Moon Rd - Safety Improvement	Intersection traffic control	Modify control – Modern Roundabout			$1901540	$1973042.58	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Other	7,681	55	State Highway Agency	Systemic	Intersections	INT.1.2
US 101/Morse Creek Vicinity - Safety Improvements	Intersection geometry	Intersection geometry - other			$1873690.03	$1873690.03	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	22,458	45	State Highway Agency	Spot	Intersections	INT.1.5
SR 304/E of Jct to SR 310 to SR 303 - Paving	Roadside	Barrier – concrete			$0	$1583.54	State and Local Funds	Urban	Principal Arterial-Other	17,512	25	State Highway Agency	Spot	Roadway Departure	LDX.2.2
SR 410/E of Main Ave to W of 166th Ave E - Install Cable Barrier	Roadside	Barrier – cable			$611385.72	$611385.72	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	47,653	55	State Highway Agency	Systemic	Roadway Departure	LDX.2.2
SWR Regionwide Basic Safety - Signing 2017-2019	Roadway signs and traffic control	Sign sheeting - upgrade or replacement			$945.8	$3871.42	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Lane Departure	LDX.3.1
I-5/SB Interstate Br to NE 99th St Vic - Active Traffic	Interchange design	Interchange design - other			$90000	$500000	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Interstate	86,300	60	State Highway Agency	Systemic	TSMO	INT.1
SW Region/Regionwide Shoulder Rumble Strip Installation 2019-2021	Roadway	Rumble strips – edge or shoulder			$240357.07	$240357.07	Penalty Funds (23 U.S.C. 164)	Rural	Multiple/Varies	1,357	65	State Highway Agency	Systemic	Roadway Departure	LDX.2.1
SR 500/Burnt Bridge Creek to 4th Plain Rd - Paving	Roadside	Barrier – concrete			$0	$14376.71	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Other	50,421	55	State Highway Agency	Systemic	Roadway Departure	LDX.2.2

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SR 500/NE 42nd and 54th Ave - Intersection	Intersection geometry	Intersection geometry - other			$0	$100000	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Other	49,081	55	State Highway Agency	Systemic	Intersections	INT.1.5
SR 503/NE 154th St to SR 502 - Median Barrier	Roadside	Barrier – concrete			$263000	$263000	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	22,404	55	State Highway Agency	Spot	Roadway Departure	LDX.2.2
SCR 17-19 Region Wide - Rumble Strips	Roadway	Rumble strips – edge or shoulder			$178669.44	$178669.44	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.2.1
SCR 17-19 Region Wide BCT Replacement and Guardrail Upgrade	Roadside	Barrier end treatments (crash cushions, terminals)			$0	$16226.01	State and Local Funds	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.4.3
SCR 17-19 Region Wide - Rumble Strips	Roadway	Rumble strips – edge or shoulder			$178669.44	$178669.44	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Roadway Departure	LDX.2.1
US 12/Whetstone Creek Bridge - Replace Bridge	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$0	$739980	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Other	1,849	60	State Highway Agency	Systemic	Roadway Departure	LDX.3.1
SCR 17-19 Region Wide - Rumble Strips	Roadway	Rumble strips – edge or shoulder			$8639.59	$8639.59	HSIP (23 U.S.C. 148)	Multiple/Varies	Minor Arterial	5,464	60	State Highway Agency	Systemic	Roadway Departure	LDX.2.1
I-90/Ryegrass to Vantage WB - Paving	Intersection traffic control	Modify control – Modern Roundabout			$12178.12	$12178.12	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Other	14,573	70	State Highway Agency	Systemic	Roadway Departure	INT.1.2
US 97/ LATERAL A INTERSECTION - INTERSECTION IMPROVEMENTS	Intersection traffic control	Modify control – Modern Roundabout			$100000	$100000	Penalty Funds (23 U.S.C. 164)	Urban	Principal Arterial-Other	21,058	55	State Highway Agency	Systemic	Intersections	INT.1.2
US 97/MCDONALD RD AND BECKER RD - INTERSECTION IMPROVEMENTS	Intersection traffic control	Modify control – Modern Roundabout			$471444	$522173	HSIP (23 U.S.C. 148)	Urban	Minor Arterial	11,127	55	State Highway Agency	Systemic	Intersections	INT.1.2
US 97/Jones Rd - Intersection Improvements	Intersection traffic control	Modify control – Modern Roundabout			$752041	$782122	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	13,545	55	State Highway Agency	Spot	Intersections	INT.1.2

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
US 97 / SR 22 Vic to 2nd Ave Vic - Paving & Roadside and I/S Improvements	Roadway	Rumble strips – edge or shoulder			$38856.03	$38856.03	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	15,311	55	State Highway Agency	Spot	Roadway Departure	LDX.2.1
SR 240/Columbia Center Blvd - Pedestrian Facility Improvement	Pedestrians and bicyclists	Pedestrian bridge			$0	$1494280	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Interstate	0	0	State Highway Agency	Systemic	Pedestrians	PAB.2.1
SR 241/Forsell Rd/Green Valley Rd - Intersection Improvements	Intersection traffic control	Intersection signing – add enhanced advance warning (double-up and/or oversize)			$9250	$9250	Penalty Funds (23 U.S.C. 164)	Rural	Major Collector	4,503	55	State Highway Agency	Spot	Intersections	INT.3.5
US 195/Install Rumble Strips	Roadway	Rumble strips – edge or shoulder			$35000	$663539.28	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Other	5,162	60	State Highway Agency	Systemic	Roadway Departure	LDX.2.1
2019-21 ER Regionwide Basic Safety - Signing	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$7174.20	$7174.20	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Lane Departure	LDX.3.1
2020 Eastern Region Chip Seal	Shoulder treatments	Shoulder grading			$383529.16	$383529.16	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Spot	Roadway Departure	LDX.4.2
I-90/Salnave Rd to BNSF RR Bridge - Paving	Intersection traffic control	Modify control – Modern Roundabout			$95000	$1120344.90	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Interstate	17,605	70	State Highway Agency	Systemic	Intersections	INT.1.2
I-90/Salnave Rd to BNSF RR Bridge - Paving	Roadside	Roadside - other			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Interstate	18,698	70	State Highway Agency	Spot	railroad crossing	INT.1
US 195/Thorpe Rd - Intersection Improvements	Intersection geometry	Innovative Intersection (e.g. MUT, RCUT, QR)			$25000	$25000	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	17,502	55	State Highway Agency	Spot	Intersections	INT.1
SR 516 / 102ND PL SE VIC TO 132ND AVE SE - PAVING & ADA COMPLIANCE	Pedestrians and bicyclists	ADA curb ramps			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Other	18,698	70	State Highway Agency	Spot	Pedestrians	INT.1
NCR Sign Update 19-21	Roadway signs and traffic control	Sign sheeting - upgrade or replacement			$95000	$1756453.02	Other Federal-aid Funds (i.e.	Multiple/Varies	Multiple/Varies	18,698	70	State Highway Agency	Spot	Lane Departure	INT.1

PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
							STBG, NHPP)								
US 2/Leavenworth Vicinity - Paving and ADA upgrade	Pedestrians and bicyclists	ADA curb ramps			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Principal Arterial-Other	18,698	70	State Highway Agency	Spot	Pedestrians	INT.1
SR 161/SR 7 to N of W Clear Lake Rd E - Chip Seal and ADA	Pedestrians and bicyclists	ADA curb ramps			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Minor Arterial	18,698	70	State Highway Agency	Spot	Pedestrians	INT.1
SR 162/E of 96th St E to W of Orville Rd E - Paving and ADA Compliance	Pedestrians and bicyclists	ADA curb ramps			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Minor Arterial	18,698	70	State Highway Agency	Spot	Pedestrians	INT.1
Kitsap Area Paving & ADA Compliance - 2019	Pedestrians and bicyclists	ADA curb ramps			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Minor Arterial	18,698	70	State Highway Agency	Spot	Pedestrians	INT.1
SR 300/Belfair State Park to SR 3 - Paving and ADA Compliance	Pedestrians and bicyclists	ADA curb ramps			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Rural	Major Collector	18,698	70	State Highway Agency	Spot	Pedestrians	INT.1
GARVEE - SR 520 BRIDGE REPLACEMENT AND HOV PROGRAM (BOND SALE 1)	Roadway	Roadway - other			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Other Freeways & Expressways	18,698	70	State Highway Agency	Spot		INT.1
GARVEE - SR 520 BRIDGE REPLACEMENT AND HOV PROGRAM (BOND SALE 2)	Roadway	Roadway - other			$95000	$1756453.02	Other Federal-aid Funds (i.e. STBG, NHPP)	Urban	Principal Arterial-Other Freeways & Expressways	18,698	70	State Highway Agency	Spot		INT.1

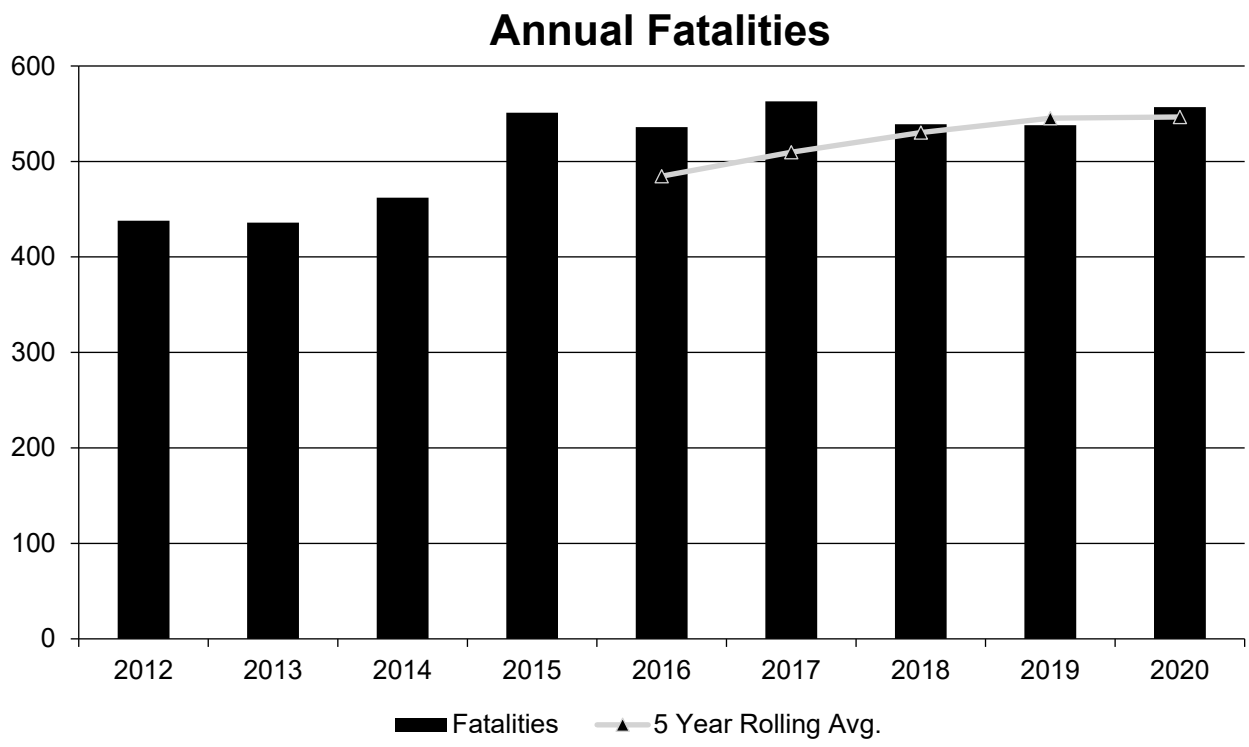
This project list includes safety projects in addition to HSIP Sec 148 funded projects, as well as other safety project funded with other federal fund sources without HSIP. An additional excel is provided for additional information showing deobligation during the calendar reporting year.

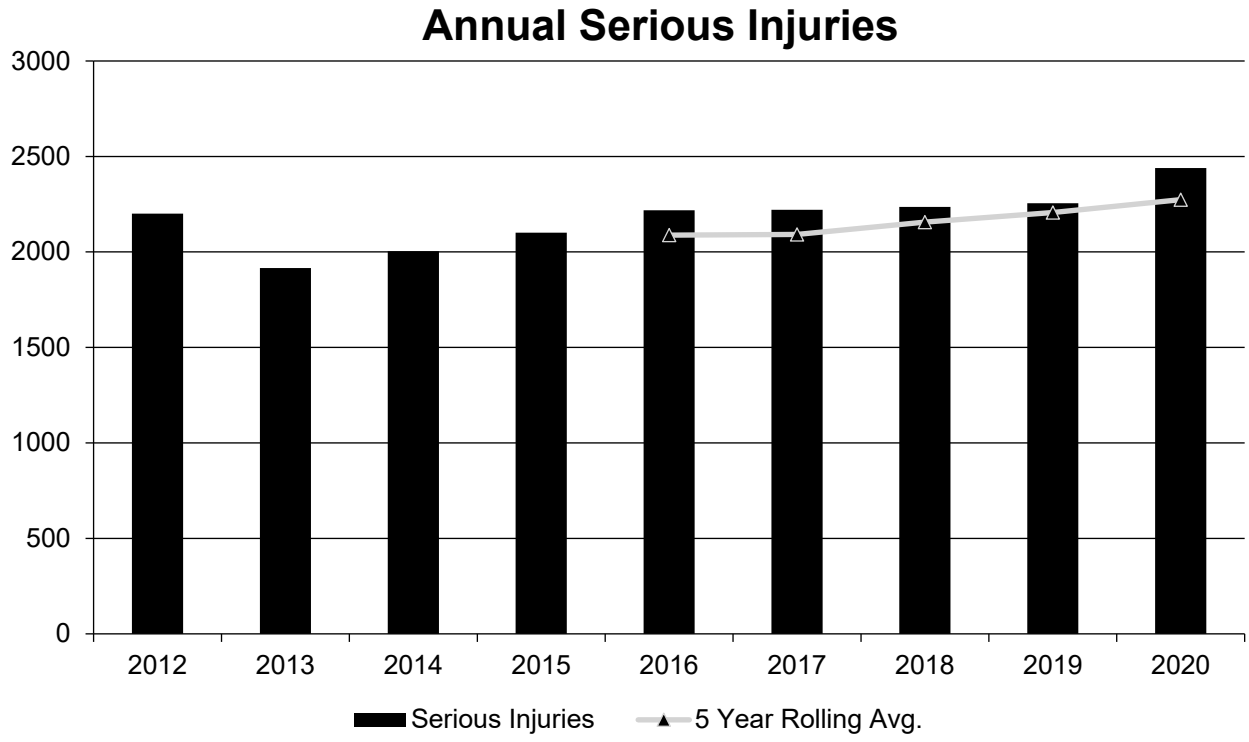
Safety Performance

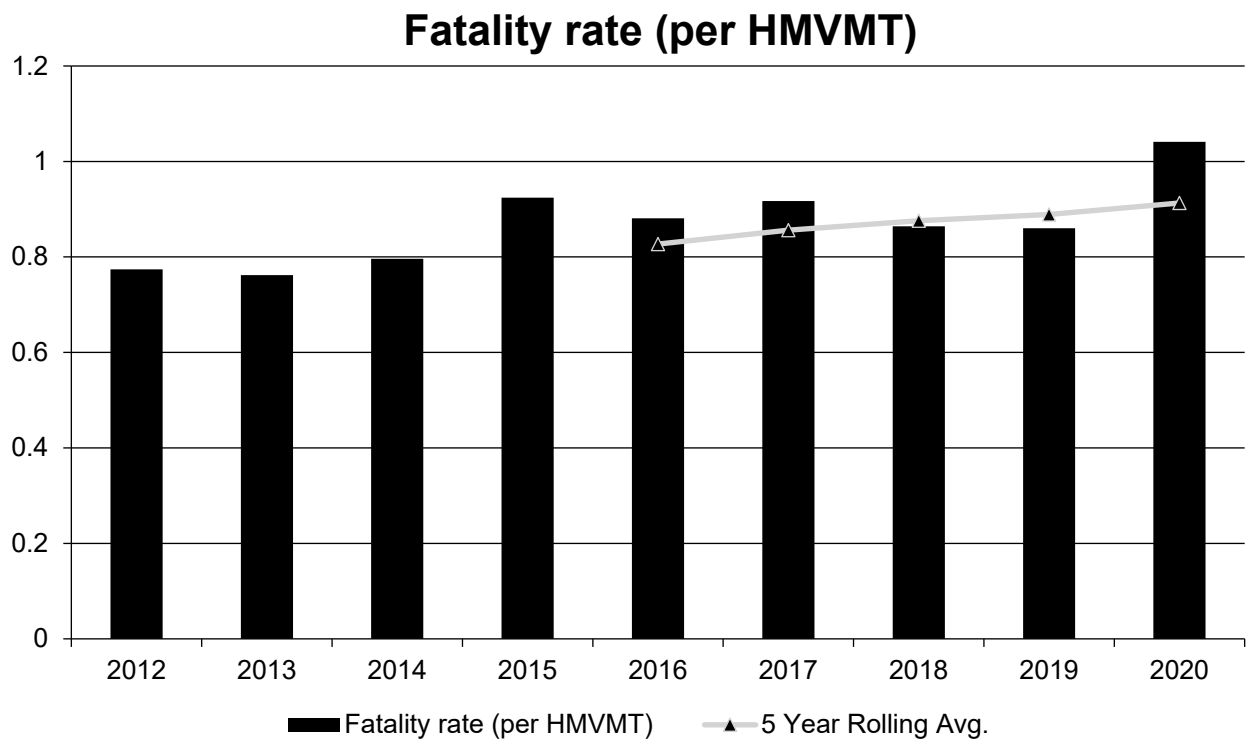
General Highway Safety Trends

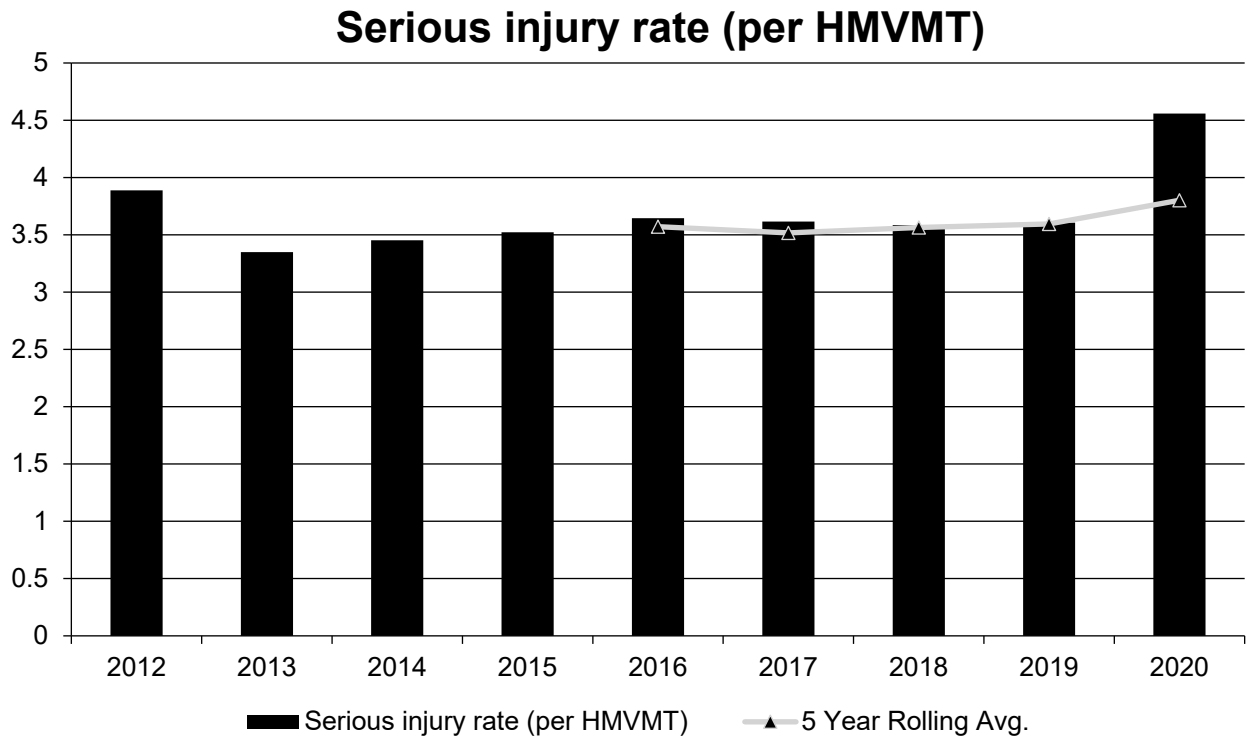
Present data showing the general highway safety trends in the State for the past five years.

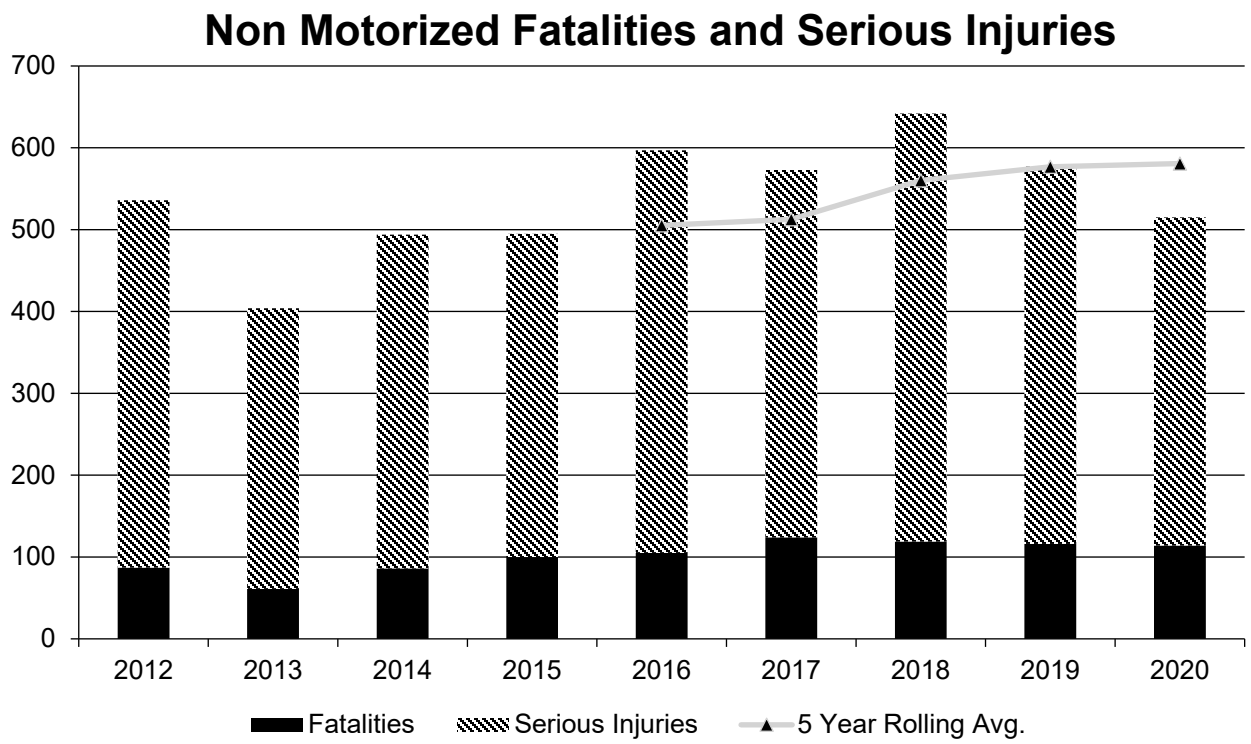
PERFORMANCE MEASURES	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatalities	438	436	462	551	536	563	539	538	557
Serious Injuries	2,201	1,916	2,004	2,101	2,218	2,221	2,236	2,255	2,439
Fatality rate (per HMVMT)	0.774	0.762	0.796	0.924	0.881	0.917	0.864	0.860	1.041
Serious injury rate (per HMVMT)	3.888	3.349	3.452	3.522	3.645	3.616	3.585	3.606	4.558
Number non-motorized fatalities	87	61	86	100	105	124	119	116	114
Number of non-motorized serious injuries	449	343	408	395	492	449	523	461	401


Annual Fatalities
600
500
400
300
200
100
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
3000
2500
2000
1500
1000
500
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.2
1
0.8
0.6
0.4
0.2
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
2012
2013
2014
2015
2016
2017
2018
2019
2020
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Describe fatality data source.

FARS

WSDOT uses FARS for reporting fatality data.

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

Year 2020

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Principal Arterial (RPA) - Interstate	25.8	61.2	0.54	1.29
Rural Principal Arterial (RPA) - Other Freeways and Expressways	7.6	51.6	0.44	2.84
Rural Principal Arterial (RPA) - Other	51.2	95.6	2.15	4.06
Rural Minor Arterial	31	94.8	1.82	5.61
Rural Minor Collector	0	0.6	0	0.07
Rural Major Collector	14.8	52.8	0	0

Functional Classification	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Rural Local Road or Street	0.6	0	94.89	0
Urban Principal Arterial (UPA) - Interstate	44	134.2	0.37	1.15
Urban Principal Arterial (UPA) - Other Freeways and Expressways	11.2	110.4	0.21	1.92
Urban Principal Arterial (UPA) - Other	67.8	244.8	1.82	6.64
Urban Minor Arterial	12.2	71	1.21	7.05
Urban Minor Collector		0	0	0
Urban Major Collector	1	7.4	0	0
Urban Local Road or Street	0.2	0.2	0	0

Year 2019

Roadways	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
State Highway Agency	263.2	873.2	25.03	83.08
County Highway Agency				
Town or Township Highway Agency				
City or Municipal Highway Agency				
State Park, Forest, or Reservation Agency				
Local Park, Forest or Reservation Agency				
Other State Agency	63.2	329.4	0.26	1.28
Other Local Agency				
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

Provide additional discussion related to general highway safety trends.

WSDOT is working with the WTSC to develop action plans for all the Es. WSDOT is communication with the Legislature on additional funding for the Safety program.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2022 Targets *

Number of Fatalities:437.3

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

WSDOT set targets based on a 2030 goal of zero fatal and serious crashes. WSDOT recognizes the aspirational aspects of this method of target setting. In setting this target, WSDOT feels that it can communicate the need to address crash reduction throughout the state and has had success in discussion with the Legislator and traffic safety commissioners. A more realistic target setting method would be to set increasing fatal and serious crashes but questions the message this sends to the public on road safety.

Number of Serious Injuries:1819.5

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

WSDOT set targets based on a 2030 goal of zero fatal and serious crashes. WSDOT recognizes the aspirational aspects of this method of target setting. In setting this target, WSDOT feels that it can communicate the need to address crash reduction throughout the state and has had success in discussion with the Legislator and traffic safety commissioners. A more realistic target setting method would be to set increasing fatal and serious crashes but questions the message this sends to the public on road safety.

Fatality Rate:0.730

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

WSDOT set targets based on a 2030 goal of zero fatal and serious crashes. WSDOT recognizes the aspirational aspects of this method of target setting. In setting this target, WSDOT feels that it can communicate the need to address crash reduction throughout the state and has had success in discussion with the Legislator and traffic safety commissioners. A more realistic target setting method would be to set increasing fatal and serious crashes but questions the message this sends to the public on road safety.

Serious Injury Rate:3.043

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

WSDOT set targets based on a 2030 goal of zero fatal and serious crashes. WSDOT recognizes the aspirational aspects of this method of target setting. In setting this target, WSDOT feels that it can communicate the need to address crash reduction throughout the state and has had success in discussion with the Legislator and traffic safety commissioners. A more realistic target setting method would be to set increasing fatal and serious crashes but questions the message this sends to the public on road safety.

Total Number of Non-Motorized Fatalities and Serious Injuries:464.6

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

WSDOT set targets based on a 2030 goal of zero fatal and serious crashes. WSDOT recognizes the aspirational aspects of this method of target setting. In setting this target, WSDOT feels that it can communicate the need to address crash reduction throughout the state and has had success in discussion with the Legislator and traffic safety commissioners. A more realistic target setting method would be to set increasing fatal and serious crashes but questions the message this sends to the public on road safety.

WSDOT set targets based on a 2030 goal of zero fatal and serious crashes. WSDOT recognizes the aspirational aspects of this method of target setting. In setting this target, WSDOT feels that it can communicate the need to address crash reduction throughout the state and has had success in discussion with the Legislator and traffic safety commissioners. A more realistic target setting method would be to set increasing fatal and serious crashes but questions the message this sends to the public on road safety. The target rate for fatalities input by NHTSA does not appear to be correct. It has been verified by WTSC and NHTSA to be 0.730 based on on an amended submittal by WTSC in August 2021.

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

WSDOT actively coordinates with internal and external partners and stakeholders. In establishing Targets, WSDOT works directly with the SHSO to determine the method and approach to target setting. This is typically a one on one meetings to address concerns that might arise. A meeting is then held with the Safety Commissioners of Washington State to get agreement to proceed. The Department next step is to coordinate with the MPOs through a collaborative process in which the methods are discussed with the MPO technical coordinating council. Once data is available a second meeting is held with the MPOs to inform of the likely target values for the year. WSDOT makes itself avaible to present to MPO executive boards as requested.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2020 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.

PERFORMANCE MEASURES	TARGETS	ACTUALS
Number of Fatalities	443.2	546.6
Number of Serious Injuries	1795.5	2273.8
Fatality Rate	0.732	0.913
Serious Injury Rate	2.968	3.802
Non-Motorized Fatalities and Serious Injuries	466.5	580.8

WSDOT is seeing crashes increase in Washington State as extreme speeding and DUI drug/alcohol increased during COVID (2020). WSDOT is working with the legislature on the importance of road safety and reducing crash outcomes.

Applicability of Special Rules

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

No

Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.

PERFORMANCE MEASURES	2014	2015	2016	2017	2018	2019	2020
Number of Older Driver and Pedestrian Fatalities	81	90	85	90	70	98	75
Number of Older Driver and Pedestrian Serious Injuries	160	168	189	186	190	212	222

WSDOT uses different definitions and age in Target Zero for Older Driver crashes. Target Zero looks at older driver Involved, and for ages 70 and greater.

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio
- Change in fatalities and serious injuries

Projects are prioritized based on benefit cost, and overall the change in fatal and serious crashes are used to assess countermeasure.

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

The department has been seeing a trend of increasing fatal serious crashes in all emphasis areas of its SHSP. The increases are likely attributable to increased population trends. This unfortunate rise has led to changes towards a more proactive program with a shift towards 70% being systemic. The Department has also faced significant financial challenges across all program areas, with the notable exception of mobility type projects being line item programmed by the Legislature. WSDOT is seeing a leveling off of fatalities and serious injuries. The Department executives are engaged with the Legislature in making Safety a top priority for increased state funding. WSDOT also uses networking screening methods for all subcategories within the Safety Subprogram. Prioritization is based on B/C analysis.

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

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

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

WSDOT continues to transition its program towards a proactive systemic and Safe System approach, and has refined prioritization approaches as outlined in its implementation plan. Increased focus is occurring for active transportation.

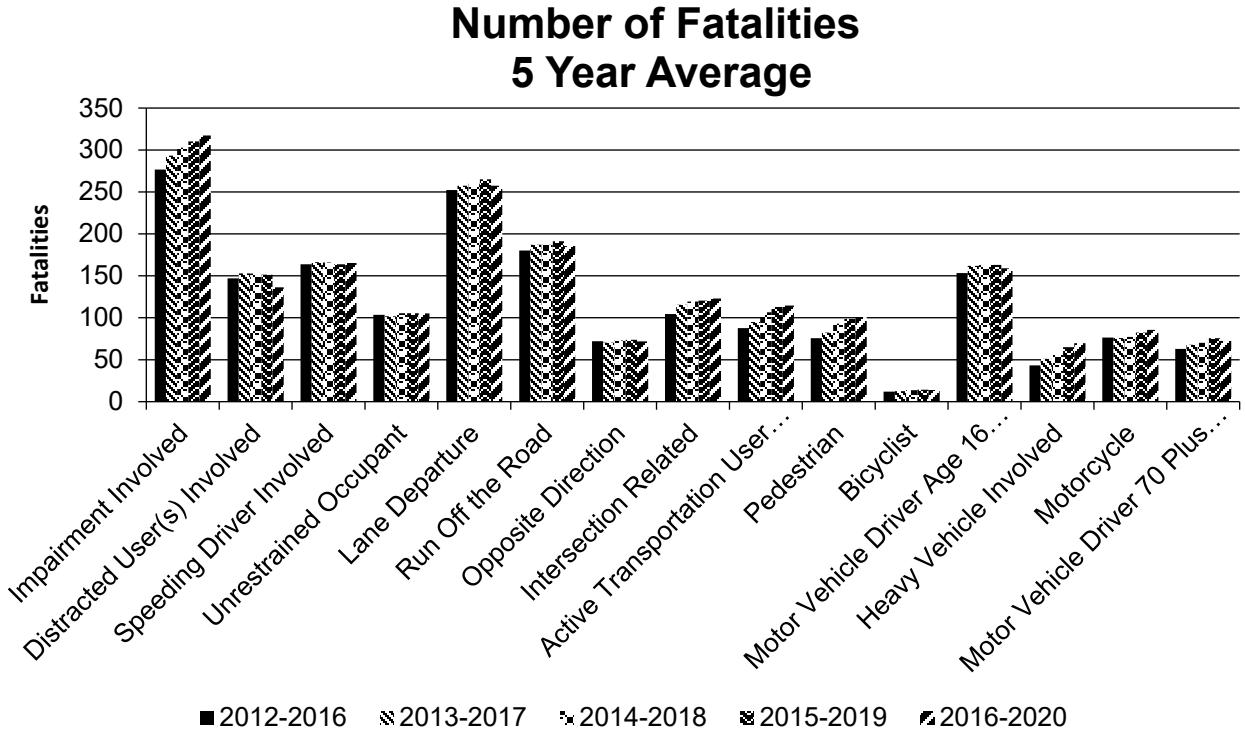
Effectiveness of Groupings or Similar Types of Improvements

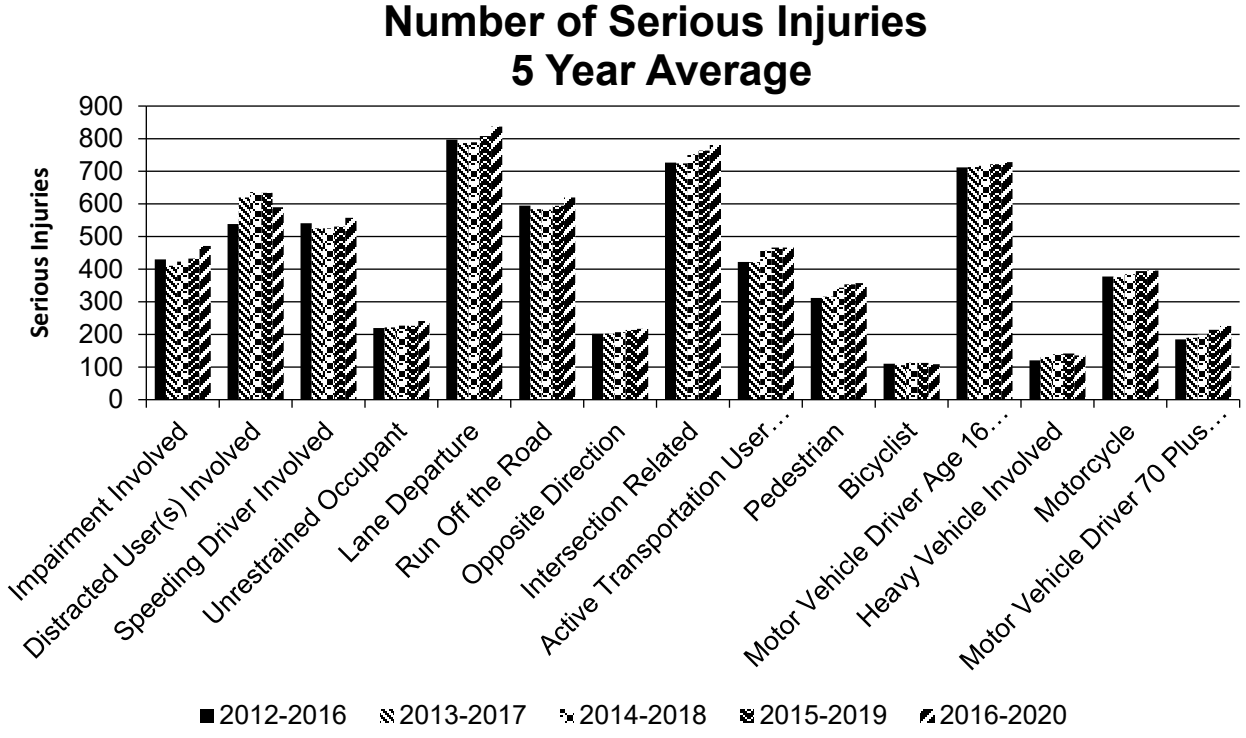
Present and describe trends in SHSP emphasis area performance measures.

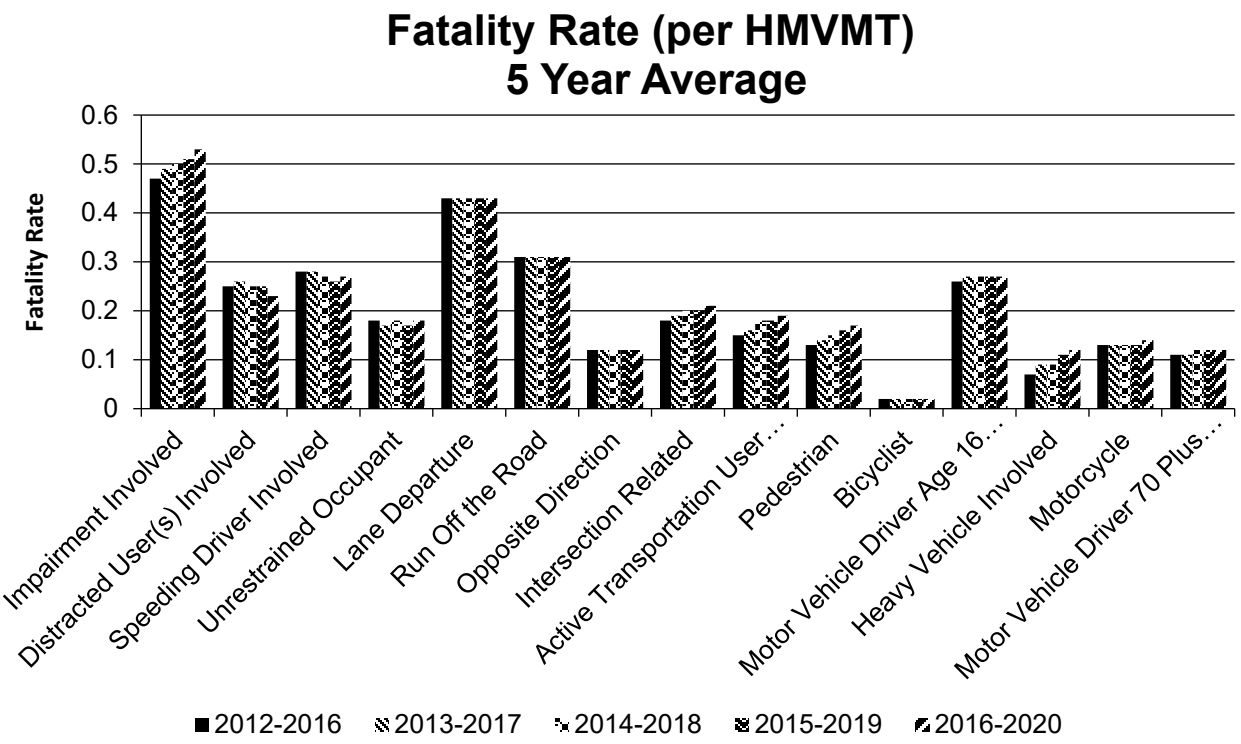
Year 2020

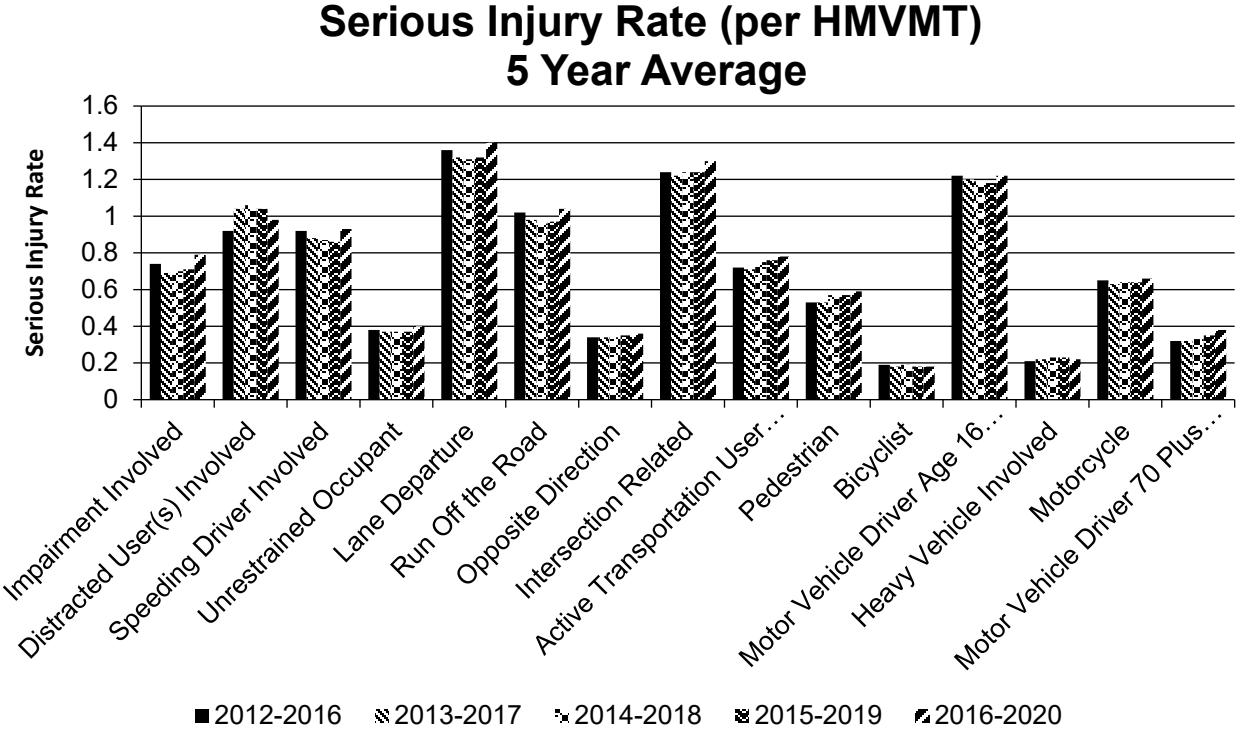
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)
Impairment Involved		317.4	471	0.53	0.79

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)
Distracted User(s) Involved		136.4	590	0.23	0.98
Speeding Driver Involved		165.4	557.4	0.27	0.93
Unrestrained Occupant		105.2	241	0.18	0.4
Lane Departure		257.4	837.2	0.43	1.4
Run Off the Road		185.6	620	0.31	1.04
Opposite Direction		71.8	217.2	0.12	0.36
Intersection Related		123	780.8	0.21	1.3
Active Transportation User (Non-Motorist)		114.6	466.4	0.19	0.78
Pedestrian		100.8	357.4	0.17	0.59
Bicyclist		13.8	109	0.02	0.18
Motor Vehicle Driver Age 16 to 25 Involved		159	728.2	0.27	1.22
Heavy Vehicle Involved		69.8	135.8	0.12	0.22
Motorcycle		85.6	395.8	0.14	0.66
Motor Vehicle Driver 70 Plus Involved		72.4	226	0.12	0.38


Number of Fatalities
5 Year Average
Fatalities
350
300
250
200
150
100
50
0
Impairment Involved
Distracted User(s) Involved
Speeding Driver Involved
Unrestrained Occupant
Lane Departure
Run Off the Road
Opposite Direction
Intersection Related
Active Transportation User…
Pedestrian
Bicyclist
Motor Vehicle Driver Age 16…
Heavy Vehicle Involved
Motorcycle
Motor Vehicle Driver 70 Plus…
2012-2016
2013-2017
2014-2018
2015-2019
2016-2020


Number of Serious Injuries
5 Year Average
Serious Injuries
900
800
700
600
500
400
300
200
100
0
Impairment Involved
Distracted User(s) Involved
Speeding Driver Involved
Unrestrained Occupant
Lane Departure
Run Off the Road
Opposite Direction
Intersection Related
Active Transportation User…
Pedestrian
Bicyclist
Motor Vehicle Driver Age 16…
Heavy Vehicle Involved
Motorcycle
Motor Vehicle Driver 70 Plus…
2012-2016
2013-2017
2014-2018
2015-2019
2016-2020





Please note that numbers are five year rolling averages, and use Target Zero Definitions. These definitions may differ from Federal definitions of similar sounding performance measures.

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

Yes

Please provide the following summary information for each countermeasure effectiveness evaluation.

CounterMeasures:	LED Stop Sign
Description:	Installed a LED Stop Sign
Target Crash Type:	Angle
Number of Installations:	8
Number of Installations:	8
Miles Treated:	
Years Before:	3
Years After:	3
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	CMF = .339, CI = 99%, SE = 0.252

File Name: Hyperlink

CounterMeasures:	High Friction Surface Treatment
Description:	High Friction Surface Treatment at Urban Freeway On-Ramp, severity = FI & PDO, Crash Type = All
Target Crash Type:	Wet road
Number of Installations:	2
Number of Installations:	2
Miles Treated:	
Years Before:	3
Years After:	3
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	CMFFI = 0.074, CMFPDO = 0.063, CI = 99%, SE of CMF FI = 0.054 SE of CMF PDO = 0.026

File Name: Hyperlink

CounterMeasures:	Curve Signage
Description:	Site Type: Rural 2 Lane 2 way Highways, Crash Type: All Countermeasure Relevant Crashes, Crash Severity: All
Target Crash Type:	Run-off-road
Number of Installations:	7
Number of Installations:	7
Miles Treated:	
Years Before:	3
Years After:	3
Methodology:	Before/after using empirical Bayes or Full Bayes

Results:	CMF = .462, CI = 99%, SE = 0.21

File Name: Hyperlink

CounterMeasures:	24 hour 7 day Flashing Beacon Elk Crossing sign with next X miles plaque
Description:	Site Type: Rural 2 Lane 2 way Highways, Speed Limit: 55 mph, Crash Type: Vehicle/Elk & Vehicle/All animal crashes, Crash Severity: All
Target Crash Type:	Vehicle/animal
Number of Installations:	1
Number of Installations:	1
Miles Treated:	
Years Before:	5
Years After:	5
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	CMFall animal = 1.14 and CMFelk only = 0.97, CI = to or less than 90%, SE(CMFall animal) = 0.20 and SE(CMFelk only) = 0.19

File Name: Hyperlink

CounterMeasures:	Alternating 24/7 flashing beacons w/ rev. curve sign & large arrow
Description:	Site Type = Rural 2 Lane 2 way Highways, Speed Limit = 50 mph, Crash Type: All Curve Related Crashes (All Lane Departure & Vehicle Overturned Crashes), Crash Severity = All
Target Crash Type:	Run-off-road
Number of Installations:	2
Number of Installations:	2
Miles Treated:	
Years Before:	5
Years After:	5
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	CMF = 0.737, CI = less than 50%, SE = 0.388

File Name: Hyperlink

CounterMeasures:	ICWS (Intersection Control Warning System) = Various sign messages
Description:	Site Type = Rural 2 Lane 2 Way Highway, with speed limit between 35 and 60 mph, Crash Type = All Intersection Crashes, Crash Severity = All
Target Crash Type:	Intersections
Number of Installations:	15
Number of Installations:	15
Miles Treated:	
Years Before:	5

Years After:	5
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	years after varies up to 5 years. CMFTotal Intersection Crashes = 1.12, CMFRearend Crashes = 1.34,CMFEntering At Angle Crashes = 0.86, CMFEntering At Angle Crashes, NWR = 0.55, 50%, CI = 80%, 50%, 99%, SE = 0.12, 0.21, 0.18, 0.16.

File Name: Hyperlink

CounterMeasures:	PTSWF (Prepare To Stop When Flashing) System
Description:	Site Type = Rural 2 Lane & 4 Lane Highways, with speed limit between 45 and 60 mph, Crash Type = All Mainline Intersection Crashes & Rear-End Crashes, Crash Severity: All
Target Crash Type:	Intersections
Number of Installations:	21
Number of Installations:	21
Miles Treated:	
Years Before:	3
Years After:	3
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	Following 2019 Guidance (9), CMFtotalintersection = 0.75, CMFre = 0.75; all sites (21), CMFtotalintersection = 1.01, CMFrearend = 1.07, CI = 99%, 95%, less than 50%, 50%; SE = 0.09, 0.11, 0.07, 0.09

File Name: Hyperlink

Project Effectiveness

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

Compliance Assessment

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

02/04/2020

What are the years being covered by the current SHSP?

From: 2015 To: 2017

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

2022

WSDOT is discussing how best to update the plan to specifically incorporate the safe system approach. It is likely that the update may be delayed a year to have agencies develop implementation plans.

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

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
ROADWAY SEGMENT	Segment Identifier (12) [12]	100	100					100	100	100	100
	Route Number (8) [8]	100	100								
	Route/Street Name (9) [9]	100	100								
	Federal Aid/Route Type (21) [21]	100	100								
	Rural/Urban Designation (20) [20]	100	100					100	100		
	Surface Type (23) [24]	30	30					30	30		
	Begin Point Segment Descriptor (10) [10]	100	100					100	100	100	100
	End Point Segment Descriptor (11) [11]	100	100					100	100	100	100
	Segment Length (13) [13]	100	100								
	Direction of Inventory (18) [18]	100	100								
	Functional Class (19) [19]	100	100					100	100	100	100

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Median Type (54) [55]	20	20								
	Access Control (22) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100	100		
	Average Annual Daily Traffic (79) [81]	100	100					100	100		
	AADT Year (80) [82]	100	100								
	Type of Governmental Ownership (4) [4]	63	63					63	63	63	63
INTERSECTION	Unique Junction Identifier (120) [110]			100	100						
	Location Identifier for Road 1 Crossing Point (122) [112]			100	100						
	Location Identifier for Road 2 Crossing Point (123) [113]			100	100						
	Intersection/Junction Geometry (126) [116]			55	55						
	Intersection/Junction Traffic Control (131) [131]			40	40						
	AADT for Each Intersecting Road (79) [81]			100	100						
	AADT Year (80) [82]			100	100						
	Unique Approach Identifier (139) [129]			100	100						
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]					100	100				
	Location Identifier for Roadway at					100	100				

ROAD TYPE	*MIRE NAME (MIRE NO.)	NON LOCAL PAVED ROADS - SEGMENT		NON LOCAL PAVED ROADS - INTERSECTION		NON LOCAL PAVED ROADS - RAMPS		LOCAL PAVED ROADS		UNPAVED ROADS	
		STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE	STATE	NON-STATE
	Beginning of Ramp Terminal (197) [187]										
	Location Identifier for Roadway at Ending Ramp Terminal (201) [191]					100	100				
	Ramp Length (187) [177]					100	100				
	Roadway Type at Beginning of Ramp Terminal (195) [185]					40	40				
	Roadway Type at End Ramp Terminal (199) [189]					40	40				
	Interchange Type (182) [172]										
	Ramp AADT (191) [181]					100	100				
	Year of Ramp AADT (192) [182]					100	100				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		**89.61**	**89.61**	**86.88**	**86.88**	**80.00**	**80.00**	**88.11**	**88.11**	**92.60**	**92.60**

*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

Several items are scored less complete than in the past several years. These new scores reflect and mostly align with the MIRE FDE readiness evaluation scores done by FHWA's Safety Office earlier this year. The primary clarifications this readiness evaluation provided are 1) that we need to carry MIRE code values in our data dictionary regardless of appropriateness (e.g. government owner = Tennessee Valley Authority) and 2) that we need to break our several of our codes out into more granular detail (e.g. our surface type of Portland Concrete Cement is broken out to six MIRE types of concrete). The latter will involve significant work, which we are starting to plan, but not able to show in this update.

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.

Several items are scored less complete that in the past several years. These new scores reflect and mostly align with the MIRE FDE readiness evaluation scores done by FHWA's Safety Office earlier this year. The primary clarifications this readiness evaluation provided are 1) that we need to carry MIRE code values in our data dictionary (e.g. government owner = Tennessee Valley Authority) and 2) that we need to break our several of our codes out into more granular detail (e.g. our surface type of Portland Concrete Cement is broken out to six MIRE types of concrete). The latter will involve real work, which we are starting to plan.

The on-going significant gap is interchange types. We are working on a new technical approach to maintaining our interchange drawing diagrams and hope to include a solution for interchange type in this effort.

WSDOT is also meeting regularly on the issues of LIDAR, and HSIP MIRE FDE implementation is an important part of justification for the use of this technology. WSDOT is intending to use LIDAR to collect the necessary MIRE FDE data for Washington. As mentioned previously WSDOT is planning how best to address MIRE FDE concerns expressed by FHWA through planning next steps.

Optional Attachments

Program Structure:

Project Implementation:

Question 29 CY 2020 HSIP REVISED.xlsx
Safety Performance:

Evaluation:

Compliance Assessment:

Glossary

5 year rolling average: means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).

Emphasis area: means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.

Highway safety improvement project: means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.

HMVMT: means hundred million vehicle miles traveled.

Non-infrastructure projects: are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.

Older driver special rule: applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.

Performance measure: means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.

Programmed funds: mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.

Roadway Functional Classification: means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

Strategic Highway Safety Plan (SHSP): means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.

Systematic: refers to an approach where an agency deploys countermeasures at all locations across a system.

Systemic safety improvement: means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.

Transfer: means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.