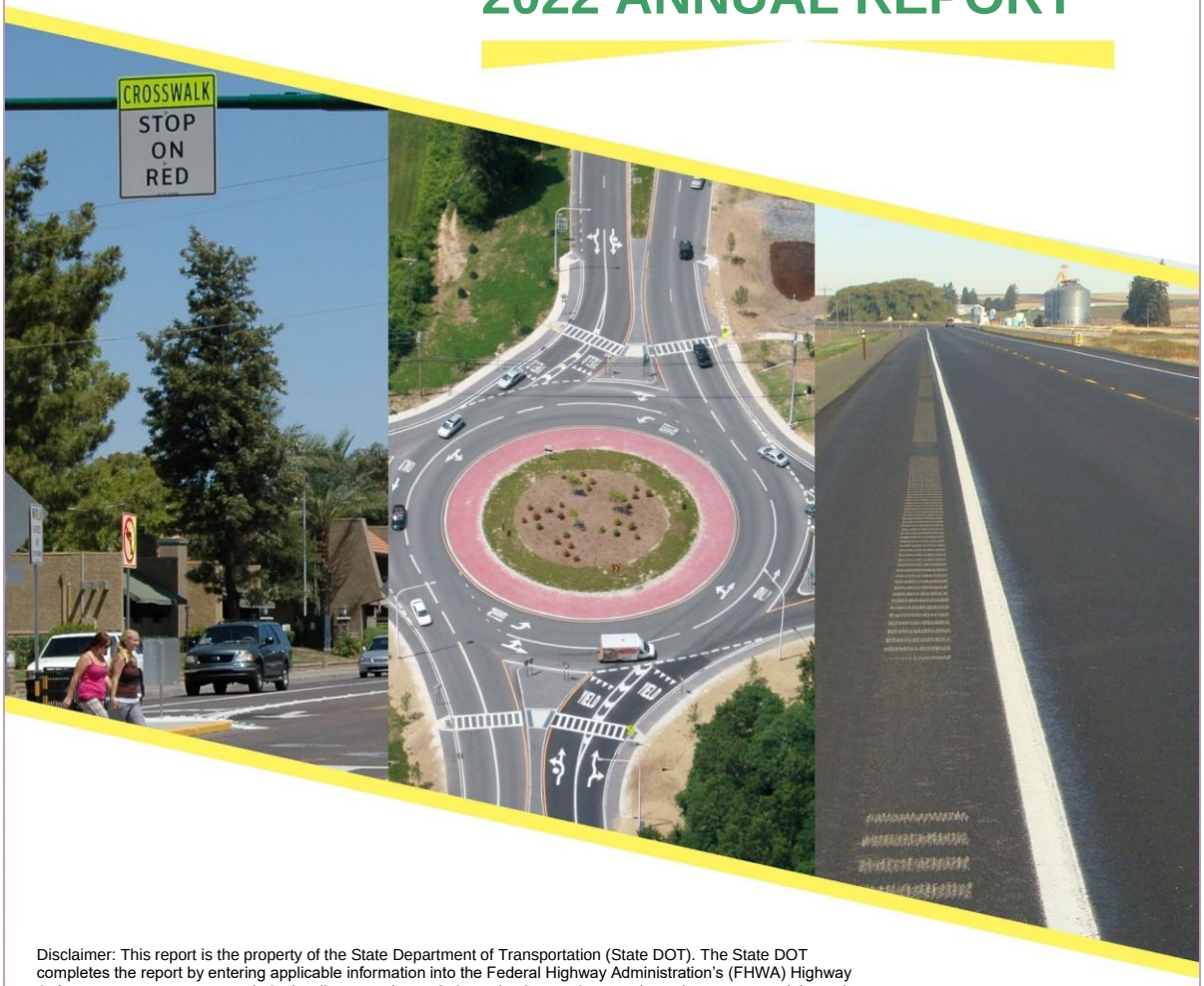
WASHINGTON

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2022 ANNUAL REPORT



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Disclaimer

Protection of Data from Discovery Admission into Evidence

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

23 U.S.C. 407 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

Executive Summary

WSDOT is concerned about increasing crash trends, especially since COVID. Drawing from crash reports speeds are increasing, as are risk taking behaviors, and these are having adverse effects on outcomes. Active Transportation (vulnerable road users) and equity considerations are being incorporated into a number of safety practices and policies. In 2021, WSDOT focused on proactive expenditures, with systemic treatments being the primary approach across the state. Projects identified in 2021 were commonly in rural locations, and were oriented towards the reduction of crash forces at intersections with compact roundabouts, and installation and upgrade of roadside safety hardware along road segments. In the 2022 Legislative session, with WSDOT input, the state transportation budget include requirements for development of complete street projects, using safe system principals. The implication of which has meant significant changes in design and operational practices that will benefit fatal and serious crashes. Programmatic changes to address vulnerable road users/active transportation are ongoing. WSDOT was identified as a vulnerable road user state. WSDOT intends to increase safety knowledge and skills, analytical capabilities and evaluation of safety projects but resources are short to accomplish these goals. Efforts are being made to address challenges. In the upcoming year, WSDOT primary focus will be towards moving forward with advancement of the Safe System Approach, as well as working with the SHSO in partnership to update its Target Zero Plan (SHSP). In addition equity considerations are currently being implemented in the Active Transportation subcategory, where concentration of low income household, concentration of people with a disability and concentration of people of color are used in the ranking process. WSDOT will also consider how Social Health Index, or other equity based data or a combination of both can be used as variable in WSDOT systemic analysis approach beyond active transportation. Further, indicators of social equity are intended to be included in following year updates of the HSIP program so that these factors can be analyzed for Title VI related expenditure considerations. A requirement for these type of consideration is part of Healthy Environment for All (HEAL) act passed by the Washington State Legislature.

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 locations for further analysis and evaluation.

The "Getting to Zero" implementation plan provides structures for both the local and state side of HSIP. Specific information on ranking methods is provided for the State. Once developed 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. Local funds are administered through grants. 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.

HSIP funds are provided to local agencies through grant funding calls for projects. In alternating years, calls go out for county safety projects or city safety projects. Along with their local road safety plans, local agencies submit prioritized project lists for funding. Projects are selected based on the cost-effectiveness of projects proposed.

Where is HSIP staff located within the State DOT?

Other-Transportation Safety and System Analysis

WSDOT does not have staff for HSIP. WSDOT Transportation Safety and System Analysis Division and Local Programs Divisions work to complete the HSIP Annual Report, TSSA completes the Implementation plan, and works to complete target setting.

How are HSIP funds allocated in a State?

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

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 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 with, or submitted alongside, 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. Reported fatal and serious injury crashes over the past five years on non-state DOT responsible roadways identified just 0.22% (1/46th of 1%) occurred on tribally-owned roadways.

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

The Highway Safety Executive Committee and Highway Safety Issue Group forms the structure and mechanism for multiple internal partners participation.

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, active transportation, regions and TSSA. 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, Local Programs, and Active Transportation and works to lead the program and deal with policy issues in a collaborative manner. The State Safety Engineer chairs this group monthly. WSDOT HSIG meets quarterly to discuss technical issues and to carry out policy elements decided by the HSEC.

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
- Other-Private Safety Advocates

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 through the development 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. The SHSP emphasis areas are used as the basis for project selection within the local programs aspect for HSIP.

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
- Other-Speed Management

WSDOT continues to develop Safe System subprograms to address vulnerable road users and speeds. As it deploys Complete Streets.

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

- Fatal and serious injury crashes only

Exposure

Roadway

- 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

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

Program: Other-Speed Management

Date of Program Methodology:6/1/2022

What is the justification for this program?

- Addresses SHSP priority or emphasis area

- Other-Safe System
- Other-Vulnerable Road Users
- Other-Complete Streets

What is the funding approach for this program?

Competes with all projects

What data types were used in the program methodology?

Crashes	Exposure	Roadway
	• Other-Speed • Other-Context • Other-Road User Mix	

What project identification methodology was used for this program?

- Other-Safe System

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?

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

What percentage of HSIP funds address systemic improvements?

75

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-active transportation treatments

- Other-compact roundabouts
- Rumble Strips
- Upgrade Guard Rails

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
- Stakeholder input
- Other-Use of HSM, Statistical analysis

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 and v2x 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.

WSDOT continues to develop a ranking method for active transportation and will work on speed management in 2022.

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)	$85,534,829	$57,424,708	67.14%
HRRR Special Rule (23 U.S.C. 148(g)(1))	$0	$192,547	0%
Penalty Funds (23 U.S.C. 154)	$0	$0	0%
Penalty Funds (23 U.S.C. 164)	$0	$13,574,220	0%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	$0	$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	$0	$12,152,157	0%
State and Local Funds	$0	$0	0%
Totals	$85,534,829	$83,343,632	97.44%

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

70%

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

75%

Percentages are based on question 23 HSIP funds (+HRRR) only.

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

$1,207,693

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

$1,207,693

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

$0

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

0%

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

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.

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
City of Anacortes - 32nd St and M Ave Intersection	Intersection traffic control	Modify control – Modern Roundabout			$1480265		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.
City of Auburn - High Friction Surface Treatment	Roadway	Pavement surface – high friction surface			$794200		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 Bellevue - Rectangular Rapid Flashing Beacon Crosswalks	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$650900		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.
City of Bothell - Meridian Ave S and 240th St SE Roundabout	Intersection traffic control	Modify control – Modern Roundabout			$1616500		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.
City of Cle Elum - Citywide Safety	Lighting	Intersection lighting			$315600		HSIP (23 U.S.C. 148)	Rural	Local Road or Street	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.10 - Install lighting.
City of Covington - Roundabout Flashing Beacons	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$402228		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.
City of Edgewood -	Shoulder treatments	Widen shoulder – paved or other			$1189600		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal	Systemic	Lane Departure	LDX 4.5 - Implement roadway

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
Chrisella Road East		(includes add shoulder)										Highway Agency			design to be consistent with the surrounding context.
City of Everett - Citywide Flashing Yellow Arrows	Intersection traffic control	Modify traffic signal – add flashing yellow arrow			$672560		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Intersections	INT 1.12 - Convert to flashing yellow arrows at signals.
City of Federal Way - Citywide Pedestrian Safety	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$1273600		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.1 - Reduce crash exposure safety at pedestrian and bicyclist crossings.
City of Federal Way - 27th Ave SW at SW 344th St Roundabout	Intersection traffic control	Modify control – Modern Roundabout			$710000		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 Fife - Citywide Flashing Yellow Arrows	Intersection traffic control	Modify traffic signal – add flashing yellow arrow			$295300		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.
Island County - Countywide Speed Limit Evaluation	Speed management	Modify speed limit			$359700		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Speeding	SPE 2.1 - Set speed limits which account for roadway design, traffic, and environment.
City of Kelso - Systemic Safety 2020	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$375200		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.
City of Kenmore - 2018 Citywide	Lighting	Intersection lighting			$34000		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal	Systemic	Intersections	INT 1.10 - Install lighting.

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
Safety - Lighting												Highway Agency			
City of Kennewick - Pedestrian Crossing Safety	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$860910		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.1 - Reduce crash exposure safety at pedestrian and bicyclist crossings.
City of Kennewick - Photometric Study	Miscellaneous	Data collection			$60000		HSIP (23 U.S.C. 148)	Urban	N/A	0		City or Municipal Highway Agency	No Sites	Data	EAD.3.2 Develop and institutionalize data management practices
City of Kent - City Safety Road Diets	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			$735000		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Spot	Pedestrians	INT 1.3 - Convert four-lane roadways to three-lane roadways with center turn lane (road diet).
City of Kent - 108th Ave SE & SE 264th St Roundabout	Intersection traffic control	Modify control – Modern Roundabout			$895000		HSIP (23 U.S.C. 148)	Urban	Minor Collector	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.2 - Install or convert intersections to roundabouts.
City of Kirkland - Downtown Kirkland and NE 124th Street Pedestrian Safety	Pedestrians and bicyclists	Pedestrian hybrid beacon			$1635100		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	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.
City of Longview - Citywide Traffic Data Collection	Miscellaneous	Data collection			$13500		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	No Sites	Data	EAD.3.2 Develop and institutionalize data management practices
City of Longview - Downtown	Pedestrians and bicyclists	Leading pedestrian interval			$769130		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal	Systemic	Pedestrians	INT 1.9 - Modify signal phasing to

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
Traffic Signal Upgrades												Highway Agency			implement a leading pedestrian interval.
City of Longview - Downtown Rectangular Rapid Flashing Beacons	Pedestrians and bicyclists	Rapid Rectangular Flashing Beacons (RRFB)			$1236420		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.
City of Maple Valley - High Reflectivity Roadway Delineation	Roadway delineation	Improve retroreflectivity			$494400		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Systemic	Lane Departure	LDX 3.5 - Install edge lines, especially on curves, where adequate shoulders exist.
Mason County - Clear Zone Improvements	Roadside	Removal of fixed objects (trees, poles, etc.)			$1536500		HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.1 - Increase distance to roadside features on high-speed roadways.
City of Pasco - Sylvester Street Safety	Roadway	Roadway narrowing (road diet, roadway reconfiguration)			$4198700		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Systemic	Pedestrians	INT 1.3 - Convert four-lane roadways to three-lane roadways with center turn lane (road diet).
Pierce County - 92nd Ave East & 224th St East Signalization	Intersection traffic control	Modify control – new traffic signal			$3320000		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		County Highway Agency	Systemic	Intersections	INT.1. Reduce crashes at intersections
City of Port Orchard - Citywide Street Lighting Study	Miscellaneous	Data collection			$55000		HSIP (23 U.S.C. 148)	Urban	N/A	0		City or Municipal Highway Agency	No Sites	Data	EAD.4.1 Establish and use existing data analyst expertise to support data-driven

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
															business decisions and
City of Poulsbo - Systemic Safety Improvements	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$642438		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Systemic	Pedestrians	PAB 2.1 - Reduce crash exposure safety at pedestrian and bicyclist crossings.
San Juan County - Orcas Rd Guardrail	Roadside	Barrier- metal			$49500		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 SeaTac - 34th Avenue South	Pedestrians and bicyclists	Install sidewalk			$2464000		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Spot	Pedestrians	PAB 3.1 - Invest in and construct separated pedestrian facilities.
City of Seattle - Pedestrian Refuge Islands	Pedestrians and bicyclists	Medians and pedestrian refuge areas			$1250000		HSIP (23 U.S.C. 148)	Urban	Minor Arterial	0		City or Municipal Highway Agency	Spot	Pedestrians	PAB 2.1 - Reduce crash exposure safety at pedestrian and bicyclist crossings.
City of Seattle - NE 117th St Intersection and Sidewalk	Intersection traffic control	Modify control – new traffic signal			$950000		HSIP (23 U.S.C. 148)	Urban	N/A	0		City or Municipal Highway Agency	Spot	Intersections	INT.1. Reduce crashes at intersections
Skagit County - Countywide Guardrail & Reflectors	Roadside	Barrier- metal			$710041		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.
Skagit County - Intersection Illumination	Lighting	Intersection lighting			$105676		HRRR Special Rule	Rural	Major Collector	0		County Highway Agency	Systemic	Intersections	INT 1.10 - Install lighting.

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							(23 U.S.C. 148(g)(1))								
Skagit County - Prairie Road Signing & Guideposts	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$100804		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.
City of Spokane - Division Street Pedestrian Hybrid Beacons	Pedestrians and bicyclists	Pedestrian hybrid beacon			$1729510		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.
City of Spokane Valley - Retroreflective Post Panels	Roadway signs and traffic control	Roadway signs (including post) - new or updated			$164070		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		City or Municipal Highway Agency	Systemic	Intersections	INT 3.5 - Increase visibility of signals and signs at intersections.
Stevens County - 2021 Bridge Safety	Roadside	Barrier- metal			$522970		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 Sumner - Maple St/Traffic Ave Ped Signal & Citywide Backplates	Pedestrians and bicyclists	Pedestrian signal			$430700		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Systemic	Pedestrians	NT.3.1 Add retroreflective borders to signal back plates
City of Tacoma - S 21st Street and C Street Signal	Intersection traffic control	Modify control – new traffic signal			$1130324		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Intersections	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
Thurston County - 2024 County Road Safety	Roadside	Increase clear zone – outside of curve			$2583000		HSIP (23 U.S.C. 148)	Urban	Major Collector	0		County Highway Agency	Systemic	Lane Departure	LDX 4.1 - Increase distance to roadside features on high-speed roadways.
City of Vancouver - Fourth Plain & Stapleton Intersection	Intersection traffic control	Modify traffic signal timing – general retiming			$132920		HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other	0		City or Municipal Highway Agency	Spot	Intersections	INT 1.11 - Coordinate arterial signals.
Safety Support I2	Miscellaneous	Data analysis		Data	$359055	$378000	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Data needs	Data	EAD.2.2 Integrate HSM method analysis into criteria for project selection and prioritization
Traffic Operations Assessments	Miscellaneous	Road safety audits		Locations	$143200	$728924	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Data needs	Data	EAD.2.2 Integrate HSM method analysis into criteria for project selection and prioritization
Traffic Operation Assessments - NWR	Miscellaneous	Road safety audits		Locations	$142800	$908508	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Data needs	Data	EAD.2.2 Integrate HSM method analysis into criteria for project selection and prioritization
NCR Traffic Operation Assessments	Miscellaneous	Road safety audits		Locations	$142800	$853694	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Data needs	Data	EAD.2.2 Integrate HSM method analysis into criteria for project selection and prioritization
Traffic Operation Assessments	Miscellaneous	Road safety audits		Locations	$148593	$942308	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Data needs	Data	EAD.2.2 Integrate HSM method analysis into

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
															criteria for project selection and prioritization
SR 6/0.6 Miles E of Clinton Rd to Bunker Creek Rd - RR Crossing	Railroad grade crossings	Crossing warning signs and pavement marking improvements		Numbers	$56155	$518768	HSIP (23 U.S.C. 148)	Rural	Minor Arterial	5,797	55	State Highway Agency	Systemic	Intersections	INT.1. Reduce crashes at intersections.
SR 128 Et Al/SE Washington - Centerline Rumble Strips	Roadway	Rumble strips – center		Miles	$450331	$1018452	Penalty Funds (23 U.S.C. 164)	Rural	Minor Arterial	0		State Highway Agency	Systemic	Lane Departure	LDX.2.1 Install centerline rumble strips
South Central Region - Traffic Operation Assessments	Miscellaneous	Road safety audits		Locations	$142800	$860861	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Data needs	Data	EAD.2.2 Integrate HSM method analysis into criteria for project selection and prioritization
SCR 2021 Region Wide BCT Replacement - Freeway	Roadside	Barrier end treatments (crash cushions, terminals)		Locations	$496381	$499966	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
SR 240 Et Al/Safety Features - Roadside Hardware Preservation	Roadside	Barrier- metal		Miles	$13286	$361630	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
I-82/SR 821 to US 97 Safety Features - Roadside Hardware	Roadside	Barrier- metal		Miles	$236742	$236742	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	33,402	60	State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
I-90/Tinkham Rd Vic to Yellowstone Rd Vic -	Roadside	Barrier- metal		Miles	$407722	$966520	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Interstate	35,948	60	State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing 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
Roadside Safety Improvements															that is damaged or non functional
I-90/Snoqualmie Pass Corridor - Rehab Weathering Steel Guardrail 21-23	Roadside	Barrier- metal		Miles	$250000	$3772564	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Interstate	35,930	60	State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
I-90/North Bend to Hyak Safety Features - Roadside Hardware Preservation	Roadside	Barrier- metal		Miles	$150000	$284010	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Interstate	36,777		State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
I-90/Easton to Ellensburg Safety Features- Roadside Hardware Preservation	Roadside	Barrier- metal		Miles	$91980	$1862565	Penalty Funds (23 U.S.C. 164)	Rural	Principal Arterial-Interstate	31,099	70	State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
SR 125/Plaza Way - Railroad Crossing Improvements	Railroad grade crossings	Crossing warning signs and pavement marking improvements		Intersections	$100000	$1099065	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	14,146	30	State Highway Agency	Systemic	Lane Departure	INT.1. Reduce crashes at intersections.
I-182/Richland to Pasco Safety Features - Roadside Hardware	Roadside	Barrier- metal		Miles	$969949	$1025460	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Interstate	43,985	60	State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
SR 240/I-182 to US 395 Safety Features - Roadside Hardware	Roadside	Barrier- metal		Miles	$36285	$37559	HSIP (23 U.S.C. 148)	Multiple/Varies	Principal Arterial-Other	45,638	60	State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
US 395/10th Ave to I-182 Safety Features -	Roadside	Barrier- metal		Miles	$117246	$117246	HSIP (23 U.S.C. 148)	Urban	Principal Arterial-Other Freeways & Expressways	36,727		State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier

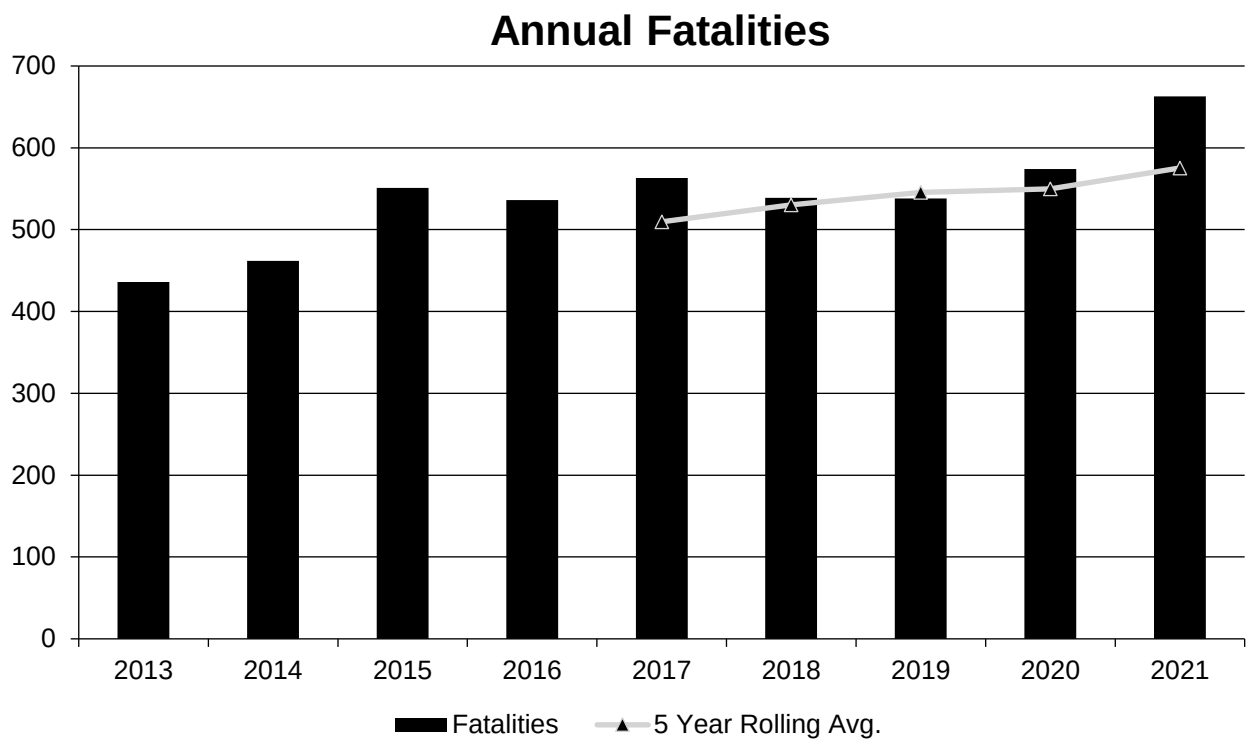
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST($)	TOTAL PROJECT COST($)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
Roadside Hardware															that is damaged or non functional
SR 823/I-82 to Selah Safety Features - Roadside Hardware	Roadside	Barrier- metal		Miles	$14467	$14466	HSIP (23 U.S.C. 148)	Rural	Principal Arterial-Other	19,953		State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional
Eastern Region Traffic Operation Assessment	Miscellaneous	Road safety audits		Locations	$142800	$884039	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0		State Highway Agency	Data needs	Data	EAD.2.2 Integrate HSM method analysis into criteria for project selection and prioritization
ER Breakaway Cable Terminal Replacement - Freeways	Roadside	Barrier end treatments (crash cushions, terminals)		Locations	$50800	$55633	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	8,968	70	State Highway Agency	Systemic	Lane Departure	LDX.4.6 Remove or replace existing barrier that is damaged or non functional

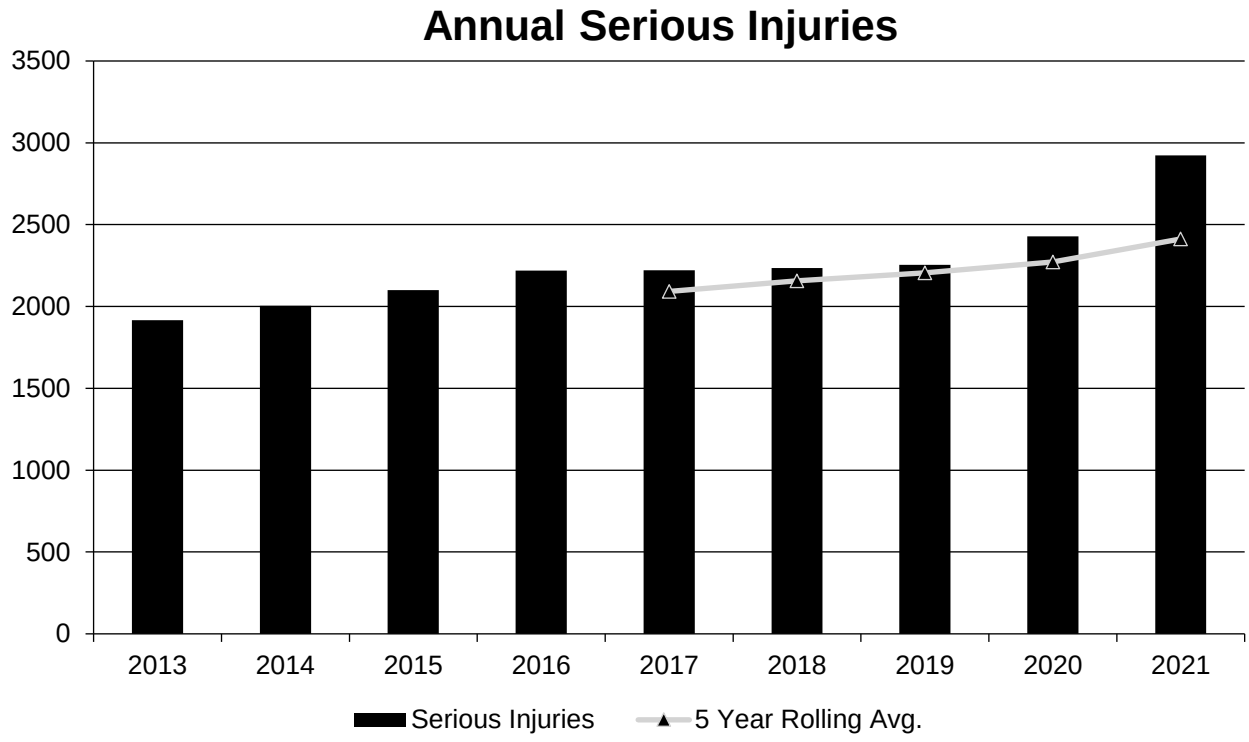
Safety Performance

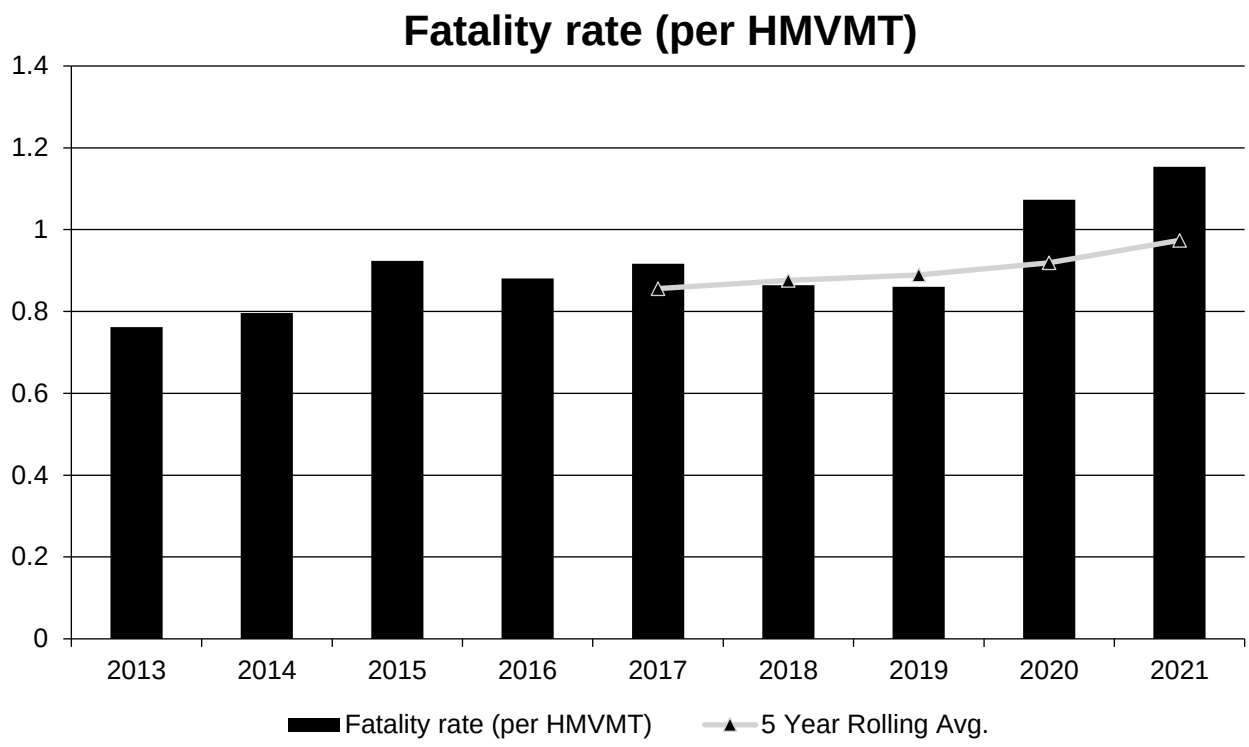
General Highway Safety Trends

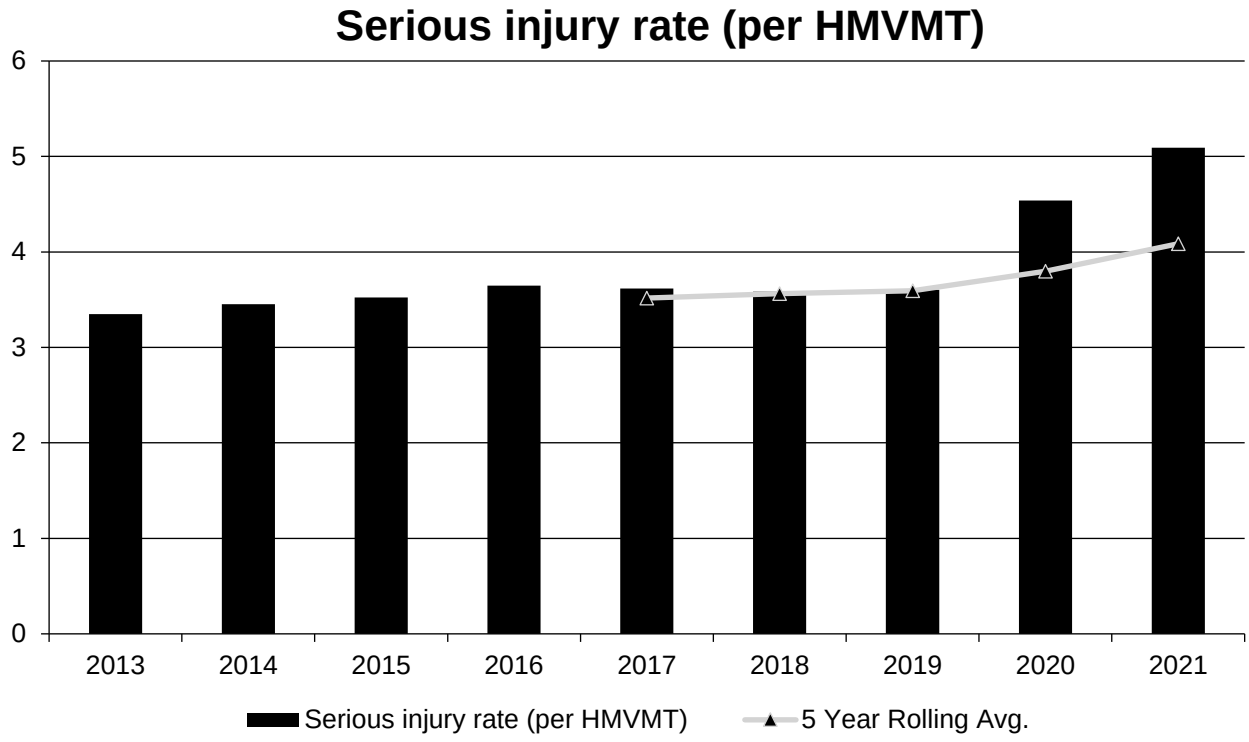
Present data showing the general highway safety trends in the State for the past five years.

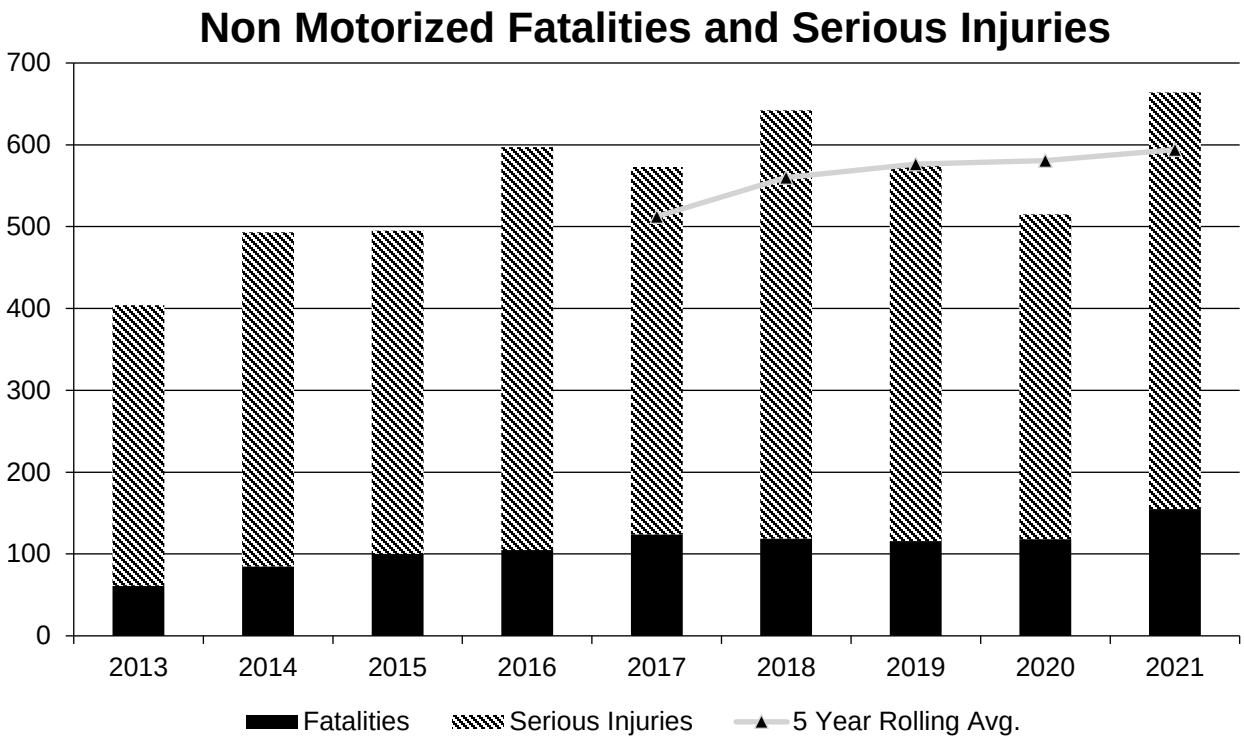
PERFORMANCE MEASURES	2013	2014	2015	2016	2017	2018	2019	2020	2021
Fatalities	436	462	551	536	563	539	538	574	663
Serious Injuries	1,916	2,004	2,101	2,219	2,221	2,236	2,254	2,428	2,924
Fatality rate (per HMVMT)	0.762	0.796	0.924	0.881	0.917	0.864	0.860	1.073	1.154
Serious injury rate (per HMVMT)	3.349	3.452	3.522	3.647	3.616	3.585	3.604	4.537	5.090
Number non-motorized fatalities	61	85	100	105	124	119	116	118	155
Number of non-motorized serious injuries	343	408	395	492	449	523	460	397	509


Annual Fatalities
700
600
500
400
300
200
100
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Fatalities
5 Year Rolling Avg.


Annual Serious Injuries
3500
3000
2500
2000
1500
1000
500
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Serious Injuries
5 Year Rolling Avg.


Fatality rate (per HMVMT)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Fatality rate (per HMVMT)
5 Year Rolling Avg.


Serious injury rate (per HMVMT)
6
5
4
3
2
1
0
2013
2014
2015
2016
2017
2018
2019
2020
2021
Serious injury rate (per HMVMT)
5 Year Rolling Avg.



Describe fatality data source.

FARS

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

Year 2021

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	26	68.2	0.56	1.48
Rural Principal Arterial (RPA) - Other Freeways and Expressways	5.6	55	0.33	3.08
Rural Principal Arterial (RPA) - Other	57.2	102.2	2.44	4.41
Rural Minor Arterial	39.8	91.6	2.38	5.49
Rural Minor Collector	69.6	59.6	8.44	7.25
Rural Major Collector	20.8	0.6	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	23	0	2,277.35	0
Urban Principal Arterial (UPA) - Interstate	50	153.6	0.44	1.37
Urban Principal Arterial (UPA) - Other Freeways and Expressways	10.8	120.2	0.21	2.17
Urban Principal Arterial (UPA) - Other	126.8	269.2	3.56	7.54
Urban Minor Arterial	60.2	70	6.18	7.09
Urban Minor Collector	35.2	7.2	50.24	10.08
Urban Major Collector	0.4	0	0	0
Urban Local Road or Street	42.2	0.6	246.66	0

Year 2021

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	286.8	1,414.6	0.87	4.33
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				
Other Local Agency	288.4	1,414.6	1.16	5.66
Private (Other than Railroad)				
Railroad				
State Toll Authority				
Local Toll Authority				
Other Public Instrumentality (e.g. Airport, School, University)				
Indian Tribe Nation				

That data shown is for State Routes Only. Washington does not code federal functional class for city and county crashes. Roadway ownership assignment in crash data is not sufficient to support reliable reporting quality.

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. WSDOT has been directed by the legislature to incorporate complete streets into projects greater than $500, consistent with the safe system principles. This is a very important advancement in road safety for Washington State.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2023 Targets *

Number of Fatalities:447.5

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

WSDOT sets targets consistent with its intent to reduce fatal and serious crashes to zero by 2030.

Number of Serious Injuries:1876.5

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

WSDOT sets targets consistent with its intent to reduce fatal and serious crashes to zero by 2030.

Fatality Rate:0.757

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

WSDOT sets targets consistent with its intent to reduce fatal and serious crashes to zero by 2030.

Serious Injury Rate:3.178

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

WSDOT sets targets consistent with its intent to reduce fatal and serious crashes to zero by 2030.

Total Number of Non-Motorized Fatalities and Serious Injuries:462.0

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

WSDOT sets targets consistent with its intent to reduce fatal and serious crashes to zero by 2030.

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

WSDOT actively coordinates with the WTSC on a regular basis, and works in a peer relationship to set the methods for target setting. MPOs and RTPOs are coordinated with through technical committees, and the MPO/RPTO coordinating committees. Presentation are provide and each entity provides approval, comments and concerns as appropriate.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State's 2022 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	444.1	575.4
Number of Serious Injuries	1807.0	2412.6
Fatality Rate	0.724	0.974
Serious Injury Rate	2.944	4.086
Non-Motorized Fatalities and Serious Injuries	472.1	594.0

WSDOT is using aspirational targets and recognizes that it is unlikely the Department will meet targets. WSDOT believes that its approach to target setting allows for communication and a culture that recognizes the importance of road safety. In the 2022 legislative session, WSDOT was budget was passed with the stipulation that projects above $500k follow Complete Streets with speed setting consistent with Safe System Principles with speed setting and separation. WSDOT believes that these requirements across its entire capital program will yield significant safety benefits. WSDOT is committing itself to address the needs of all road users with these practices.

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	2015	2016	2017	2018	2019	2020	2021
Number of Older Driver and Pedestrian Fatalities	138	141	137	119	149	125	151
Number of Older Driver and Pedestrian Serious Injuries	168	189	186	190	211	217	240

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Change in fatalities and serious injuries

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

WSDOT

Local safety effectiveness is tracked looking at the overall change in fatalities and serious injuries on local roads due to the majority of funding supporting systemic safety projects (proactive). As such, those crashes are tracked annually to determine trend lines and progress. Unfortunately, as is seen nationally, those trend lines are heading upward in recent years. While county roadways experienced several years of flat trend lines (2013-2018), those trend lines have headed back up again since then. Over the past 10 years, county fatal/serious crashes are up 28%. Those crashes increased 20% from 2020 to 2021. The 5-year rolling average number for fatal/serious crashes on county roads have been increasing since 2017. City streets have been on a slowly increasing trend line since 2013, with an increased trend in 2021. Over the past 10 years, city fatal/serious crashes are also up 28%. Those crashes increased 15% from 2020 to 2021. The 5-year rolling average number for fatal/serious crashes on city streets have been increasing since 2016. While local safety efforts are following (or leading) best practices, the challenge is that the funding levels supporting safety efforts on 80,000+ miles of local roads is simply insufficient to keep up with the many safety challenges facing the system. Evaluation will continue to include examining individual local agency trends to attempt to identify agencies with better trend lines for further analysis. The State is also seeing steep rises in fatal and serious injuries with total fatal and serious crashes increasing 19% between 2020-2021, and the five year rolling average from its low in 2015 of 2540 to the current high in 2021 of 2988. During the 2016-2018 to 2019-2021 timeframe the highest increases in percentage terms in Pedestrians involved, bicyclist involved, and heavy truck involved at 30%, 29% and 30% respectively and with lane departure crashes 37% of the total and intersections 33% of the total.

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
- Other-Complete Streets using Safe System Principles Legislation

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

In 2021 WSDOT continue to evolve its safety subprogram. As part of these efforts, the Department is continuing to implement its active transportation subcategory. To do so, WSDOT has developed a method for assessment of active transportation projects that is a proactive systemic based approach. This program will incorporate crashes, equity and demand providing a level of traffic stress calculation. Route directness is also

being incorporated. Funds were provided by the FHWA Innovations program to develop a GIS based approach. Further, WSDOT collected sidewalk location information outside of the HSIP funding. WSDOT was required to develop an approach to complete streets in its 2022 Budget for projects beginning July 2021 in excess of $500k. This has required a transfer of resources so the ranking methods have been somewhat delayed but are nearly complete. It should be noted that projects within other subcategories continue to address walking and biking needs and related issue of speed and AT are part of discussion within the crash reduction category. The speed management subcategory is progressing through changes in design criteria so that projects outside of HSIP are required to consider AT and speed management more directly. From a transportation operations perspective, discussions related to the 85th percentile and pace car speed setting continue, and WSDOT is working to consider how the injury minimization guidelines it developed might be incorporated. As with the active transportation, the speed management streets is being implemented, but ranking methods are somewhat delayed.

The new budget has allowed for a more direct discussion of how to set target speeds consistent with the safe system across the entire WSDOT network might be implemented resulting in WSDOT modifying decision documents to more effectively address AT and speeds in a more equitable fashion throughout the design and operational processes. WSDOT has numerous team working working to implement complete streets for all projects greater than $500k, and this includes safety projects. The complete streets effort began prior to 2022, but funding and the budget proviso greatly impacted the speed of delivery of this important aspect of safety considerations.

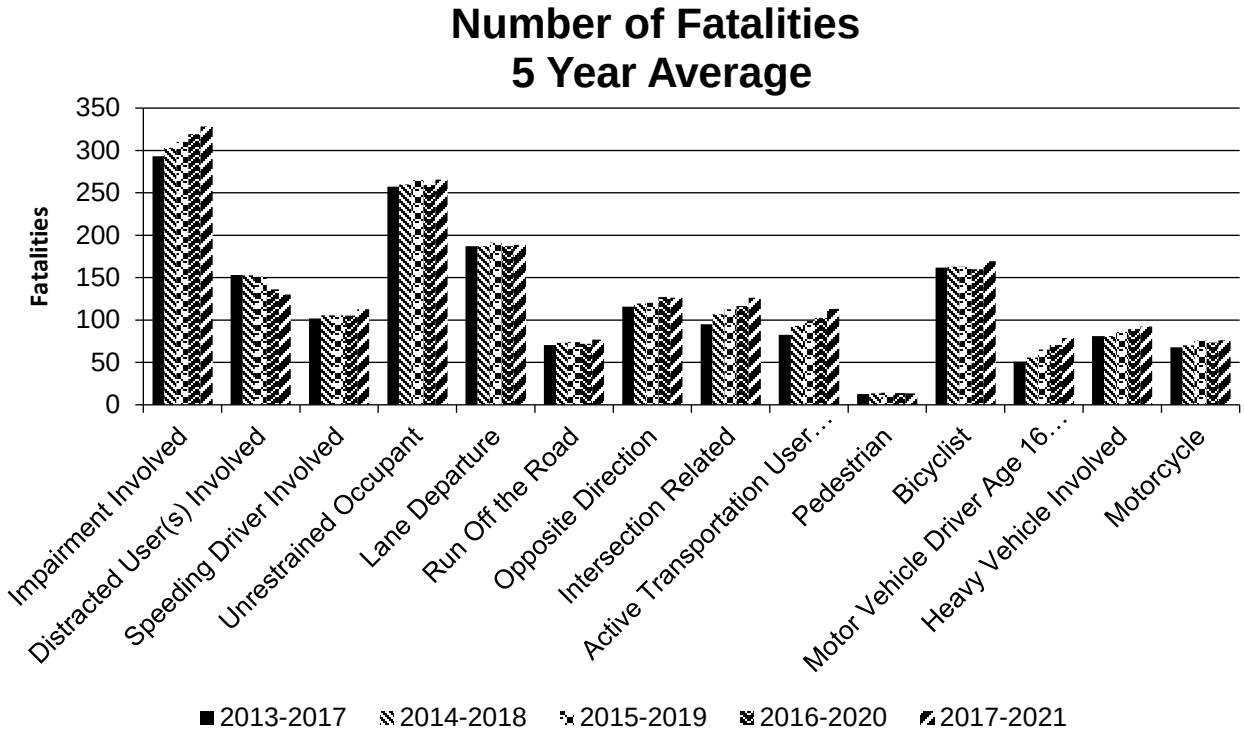
Effectiveness of Groupings or Similar Types of Improvements

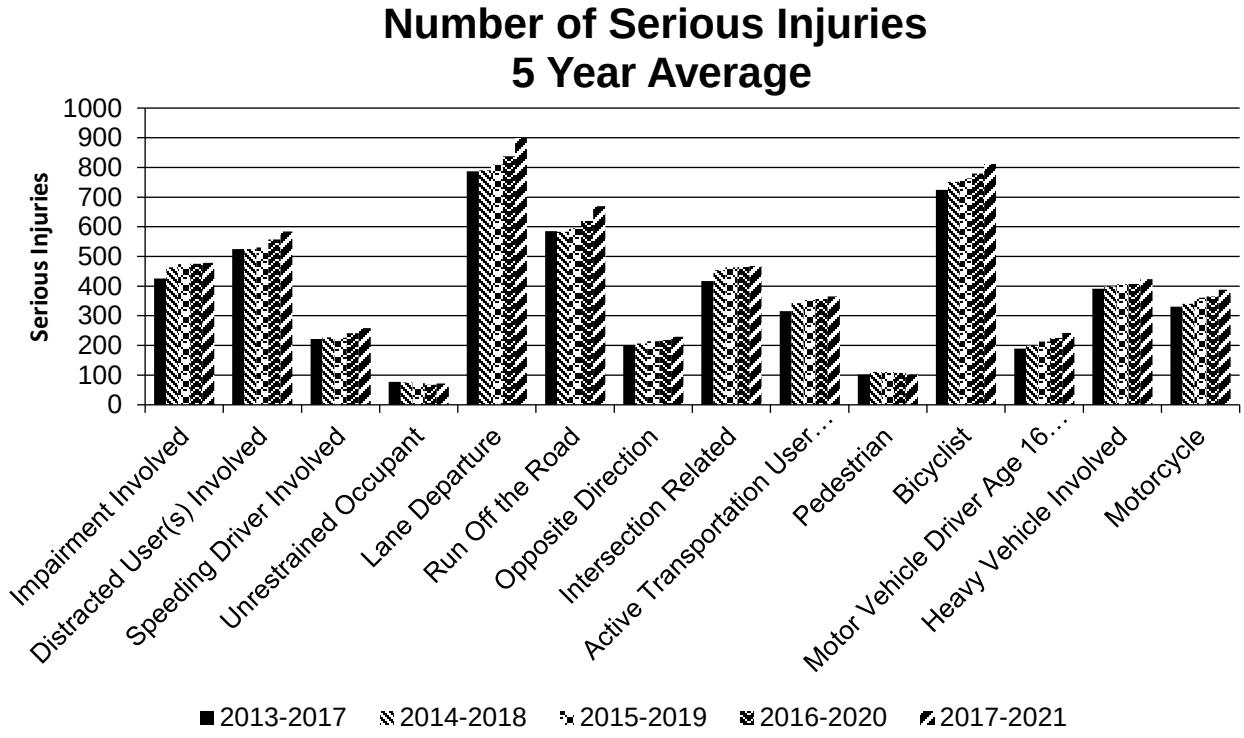
Present and describe trends in SHSP emphasis area performance measures.

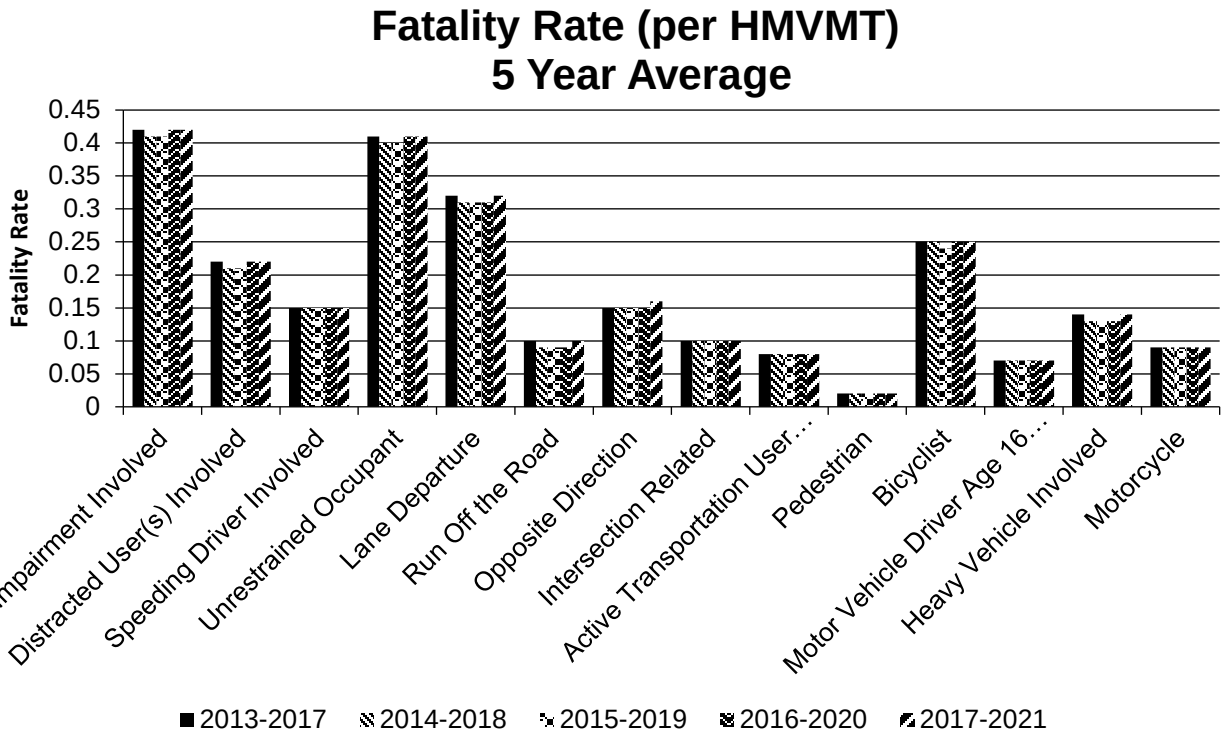
Year 2021

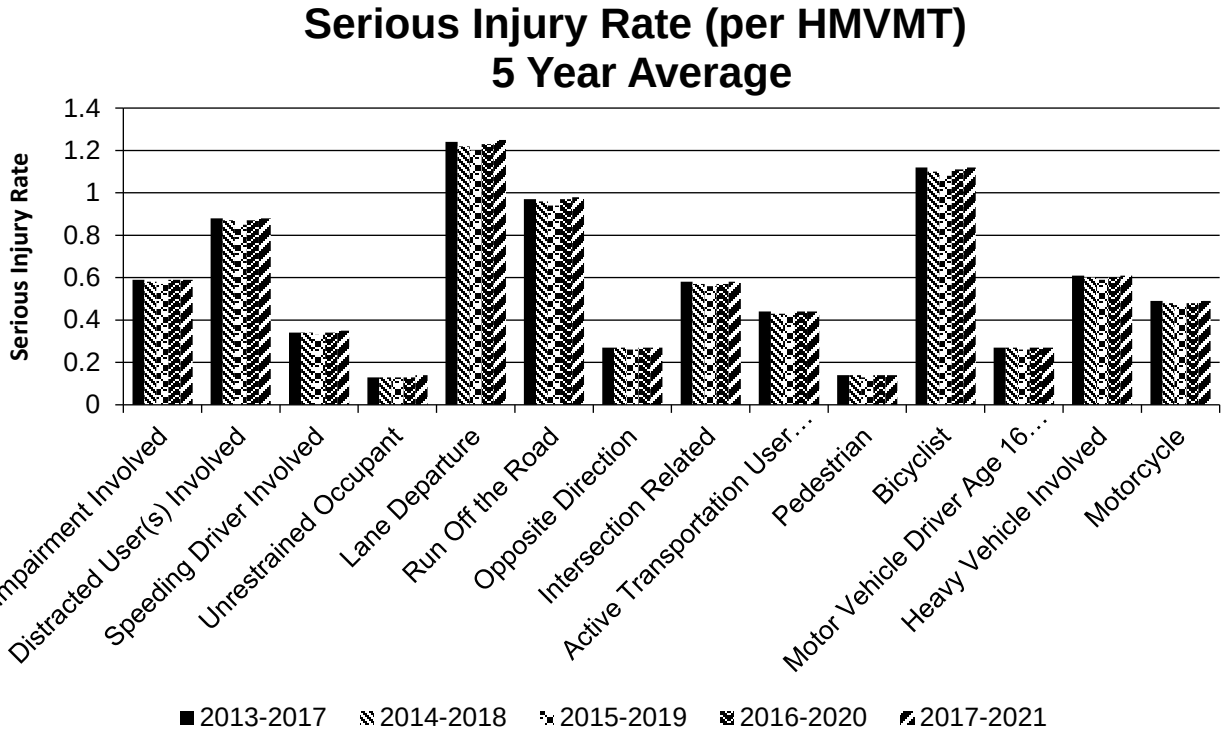
SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Impairment Involved		328.4	478.4	0.42	0.59	0	0	0
Distracted User(s) Involved		130	584.2	0.22	0.88	0	0	0
Speeding Driver Involved		112.8	258.6	0.15	0.35	0	0	0
Unrestrained Occupant		265.6	71.8	0.41	0.14	0	0	0
Lane Departure		188.6	898.8	0.32	1.25	0	0	0
Run Off the Road		77	669.2	0.1	0.98	0	0	0
Opposite Direction		126.2	229.6	0.16	0.27	0	0	0
Intersection Related		126.4	467.6	0.1	0.58	0	0	0
Active Transportation User (Non-Motorist)		113	365.4	0.08	0.44	0	0	0

SHSP Emphasis Area	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Pedestrian		13.4	102.2	0.02	0.14	0	0	0
Bicyclist		169.2	811.2	0.25	1.12	0	0	0
Motor Vehicle Driver Age 16 to 25 Involved		78.8	242.4	0.07	0.27	0	0	0
Heavy Vehicle Involved		92.2	423.2	0.14	0.61	0	0	0
Motorcycle		76	387.6	0.09	0.49	0	0	0


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
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021


Number of Serious Injuries
5 Year Average
Serious Injuries
1000
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
2013-2017
2014-2018
2015-2019
2016-2020
2017-2021





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:	ICWS (Intersection Conflict Warning System) -Various sign messages
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:	2
Number of Installations:	2
Miles Treated:	
Years Before:	3
Years After:	3
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	CMF = 0.462 CI = 0.99 SE = 0.21

File Name: Hyperlink

CounterMeasures:	PTSWF (Prepare To Stop When Flashing) System
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:	21
Number of Installations:	21
Miles Treated:	
Years Before:	3
Years After:	3
Methodology:	Before/after using empirical Bayes or Full Bayes
Results:	CMF = 0.462 CI = 0.99 SE = 0.21

File Name: Hyperlink

Project Effectiveness

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

NA

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?

2024

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
	Median Type (54) [55]	20	20								

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
	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 Beginning of Ramp Terminal (197) [187]					100	100				

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

Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.

WSDOT is in the process of a program LIDAR data collection. Teams are in place to develop process and procedures, and funding has been identified through HSIP.

Optional Attachments

Program Structure:

Project Implementation:

Safety Performance:

Evaluation:

Compliance Assessment:

Glossary

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

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

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

HMVMT: means hundred million vehicle miles traveled.

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

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

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

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

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

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

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

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

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