



OREGON

HIGHWAY SAFETY IMPROVEMENT PROGRAM

2024 ANNUAL REPORT



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Photo source: Federal Highway Administration

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Disclaimer

Protection of Data from Discovery Admission into Evidence

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

23 U.S.C. 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

Improving highway safety has long been a national goal, articulated through all major federal highway legislation. The Highway Safety Improvement Program (HSIP) is a federal program designed to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The primary goal of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-state owned roads and tribal roads. It requires a data-driven and strategic approach to improving highway safety on all public roads that focuses on performance.

The HSIP is a core federal-aid program under the Fixing America's Surface Transportation (FAST) Act that went into effect in December, 2015. The FAST Act, which replaced the Moving Ahead for Progress in the 21st Century Act (MAP-21), largely maintained the program structure of the HSIP with slight increases in funding and a change that disallows HSIP funds to be transferred to and used for educational and enforcement type activities. The HSIP funds are primarily intended for infrastructure improvement projects. Non-infrastructure highway safety improvements such as education and enforcement programs are administered by the ODOT Transportation Safety Office (TSO), and are typically funded through the National Highway Traffic Safety Administration (NHTSA), the Federal Highway Administration (FHWA), or state funds.

The Oregon Department of Transportation (ODOT) administers the federally-funded Highway Safety Improvement Program (HSIP) to implement safety projects. ODOT developed the All Roads Transportation Safety (ARTS) Program to achieve the goals of the HSIP using a data-driven, jurisdictionally-blind process. The majority of the funding for the ARTS Program comes from the Highway Safety Improvement Program (HSIP).

The ARTS Program is a statewide application based competitive process. Projects are ranked or prioritized based on an ODOT-approved prioritization method such as Benefit-Cost Ratio. Through the ARTS program, projects on all public roads in Oregon, regardless of roadway ownership, compete for HSIP funding.

The ARTS program principal guidelines include:

- The program goal is to reduce fatal and serious injury crashes.
- The program must include all public roads.
- The program is data driven and blind to jurisdiction.
- The process will be overseen by ODOT regions.
- Both "hot spot" methodology and systemic methodology will be used.
- Only proven countermeasures from the ODOT Crash Reduction Factor list will be used.

For purposes of programming Highway Safety funds in the Statewide Transportation Improvement Program (STIP), all highway safety infrastructure improvement projects shall follow these guidelines.

FHWA recently completed a comprehensive review to evaluate the policies, procedures, and achievements of Oregon's All Roads Transportation Safety Program, funded by HSIP funds. The review was done in partnership with ODOT and involved a series of structured interviews with ODOT and local agency staff involved with the program. In addition, technical analyses of crash data, safety screening, and countermeasures were included. The team also performed a comprehensive review of legislation, policies and

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procedures, and institutional relationships. In addition, the team assessed how safety issues are identified and countermeasures are developed and chosen. This culminated with a look at how individual and bundled projects were developed and delivered.

The review confirmed that there were key strengths of the program, including a concentration of efforts on fatality and serious injury crashes, a well-documented and historically strong network screening process, strong project development and selection process that aligned with other transportation projects through a statewide delivery process, inclusion of local agencies in the program to ensure fair consideration of safety needs throughout the system, and a flexible organizational structure within ODOT that accounted for differences within the state and with local agencies yet still created a sound structure for the program. In addition, the six key actions below, which are already top priorities for ODOT, were identified to ensure a data driven program that reduces fatalities and serious injuries.

1. Improve processes for collecting and processing crash data so data can be available for analysis in a timelier manner.
2. Strengthen the analyses used for network screening, individual site analysis, and countermeasure selection.
3. Ensure the knowledge and skills evidenced in the ARTS program are fully engaged with transportation safety plans in the state, both those carried out by ODOT and those carried out by other agencies.
4. Streamline the safety project delivery processes to more rapidly deliver effective safety countermeasures.
5. Address funding gaps in the program (both addressing the size of projects and state and non-state projects) to ensure the full span of safety countermeasures with the best benefit-cost ratios can be delivered.
6. Develop comprehensive program and project metrics to monitor the effectiveness of the ARTS program and safety countermeasures.

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 objective of the ARTS Program is to select the best safety projects using a jurisdictionally blind and data-driven approach to significantly reduce the occurrence of fatalities and serious injuries on all roads in the state. A data-driven approach uses crash data, risk factors, or other data supported methods to identify the best possible locations to achieve the greatest benefits. The ARTS Program is intended to address safety needs on all public roads in Oregon. About half of the fatal and serious injury crashes in the state occur on non-state roadways. By working collaboratively with local road jurisdictions (cities, counties, MPOs, and tribes) ODOT can expect to increase awareness of safety on all roads, promote best practices for infrastructure safety, complement behavioral safety efforts, and focus limited resources to reduce fatal and serious injury crashes in the State of Oregon.

ARTS Safety projects are selected using multiple tools. One of the main tools is the Safety Priority Index System (SPIS) that was developed in 1986 by the Oregon Department of Transportation (ODOT) for flagging potential safety problems. SPIS includes all public roads in Oregon (not just state highways) - the system includes both a component that produces Annual SPIS reports for both On-State Roadways (State Highways only) and Off-state Roadways (non-State Highways).

On state highways, project selection and identification is done at the region level using crash data, the Safety Priority Index System (SPIS), and safety implementation plans. At the local agency level, ODOT provides consultant services at no charge to support project selection therefore, projects can be selected based on local priorities or through consultant support using tools such as SPIS and the systemic safety plans. Oregon DOT primarily uses SPIS which is a flagging tool to assist Region Traffic Investigators in identifying high crash locations to investigate and determine if there are appropriate safety countermeasures that can be implemented within a safety project to eliminate or reduce fatal or serious injury crashes.

While many highway projects incorporate design features or elements that relate to highway safety, such as updating guardrail or improving intersection channelization, signing, and pavement markings, the projects are not aimed at correcting or improving hazardous road locations or features and thus could not be qualified for HSIP funds. The appropriate use of HSIP funds is only for locations or corridors where a known problem exists as indicated by location-specific data on fatalities and serious injuries, and/or where it is determined that the specific project can with confidence produce a measurable and significant reduction in such fatalities or serious injuries. To achieve the maximum benefit, the focus of the ARTS Program is on cost-effective use of the funds allocated for safety improvements addressing fatal and serious injury crashes. The general program guidelines are as follows:

- All projects shall address specific safety problems that contribute to fatal and serious injury crashes.

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- All projects shall use only countermeasures from the ODOT approved countermeasure list.
- Only the most recent available five years of ODOT reported crashes shall be used for crash analysis.
- Projects shall be prioritized based on ODOT approved prioritization method such as Benefit-Cost Ratio.
- ODOT Regions will be responsible for developing and delivering projects.

The ARTS Program has two components – a hotspot component and a systemic component. The hotspot approach is the traditional approach used in safety analysis (ODOT users a program called SPIS), in which 'hotspot' locations are identified based on crash history and appropriate countermeasures are implemented to reduce crashes. Hotspot projects typically focus on a particular location (for example, an intersection or a short segment of a roadway) that may have multiple causes to address. For the ARTS Program, a hotspot location is defined as a location that has at least one fatal or serious injury crash within the last five years.

The systemic approach identifies a few proven low-cost countermeasures that can be widely implemented and then applies the countermeasures where there is evidence that they would be most useful. The HSIP places a significant emphasis on the systemic approach, which has been proven to successfully reduce the occurrences of fatal and serious injury crashes. The systemic component of the ARTS Program has been further divided into three emphasis areas – roadway departure, intersection, and pedestrian/bicycle. Based on Oregon data, these three emphasis areas accounted for approximately 85% of the fatal and serious injury crashes in the state.

The systemic approach originally used Section 164 penalty funds allocated to the Safety Program, but under the ARTS Program the systemic approach has been moved into the mainstream safety program equal with the hotspot approach

Where is HSIP staff located within the State DOT?

Other-Traffic-Roadway Engineering Section

Staff supporting the ARTS program (HSIP funded) are also in each of the five regions.

How are HSIP funds allocated in a State?

- SHSP Emphasis Area Data

Within the ARTS program, HSIP funding is allocated to each of the five ODOT regions based on the frequency of fatal and serious injury crashes. Within each region, 50% of funding is allocated to local agency projects and 50% is allocated to state highway projects. The region allocations during the current round of ARTS funding were approximately: Region 1 - 31% Region 2 - 36% Region 3 - 15% Region 4 - 11% Region 5 - 7%

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

The State's annual safety performance targets represent an important step in helping work toward the ultimate goal of eliminating traffic fatalities and serious injuries. About half of the fatal and serious injury crashes in the state occur on local (non-state highway) roadways. By working collaboratively with local road jurisdictions (cities, counties, MPOs, and tribes) ODOT expects to increase awareness of safety on all roads, promote best

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practices for infrastructure safety, complement behavioral safety efforts, and focus limited resources to reduce fatal and serious injury crashes statewide.

In order to deliver the All Roads Transportation Safety (ARTS) program effectively, ODOT provides consultant outreach services to support Local Agency and Tribal project selection. These services are provided to local jurisdictions and tribal partners at no charge which includes:

- Selection of countermeasures to treat identified safety concerns
- Developing cost-effective projects that are competitive for funding
- Preparing planning level cost estimates for selected projects
- All severity crash patterns (predominant crash types, high-crash intersections, high-crash segments, and predominant contributing factors, etc.)
- Conducting cost-effectiveness analyses (benefit-cost ratio or cost effectiveness index)
- Preparing application materials, including narratives, study area mapping, and supporting traffic analysis

In addition to application support, the consultant also helps facilitate outreach meetings in each region to make them aware of ARTS tools, deliverables, and timelines. Consultant and ODOT Region Staff provide information about the ARTS program and upcoming deadlines through email and flyers. Local contacts within each region may also be contacted via phone to encourage participation in the ARTS program. Lastly, the consultant helps prepare local crash data summary reports that include:

Crash data reports, SPIS lists, and safety implementation plans (Roadway Departure, Intersection, and Pedestrian and Bike Implementation Plans) and other sources as necessary are also used to help identify and prepare ARTS applications.

In addition to formal outreach efforts to local agencies, Consultant and Region staff also participate in outreach to broader audiences hoping to garner interest in the ARTS program. These efforts include:

- Presentations to Area Commissions on Transportation (ACTs) in Region 2, including the Mid-Willamette Valley (MWACT), Cascades West (CWACT), and Northwest Oregon (NWACT).
- Oregon APWA Conference presentation including overview of the ARTS program, tips and tricks for identifying viable ARTS projects, and upcoming application deadlines.
- Coordination with the Association of Oregon Counties (AOC) to share information about the ARTS program. The AOC offered to contact a few “high priority” counties and encourage ARTS involvement and solicit feedback about ARTS.

Lastly, in an effort to better understand the challenges and barriers to participating in the ARTS program, ODOT conducts a two-part local agency survey (an online stakeholder survey and one-on-one interviews with local agencies that did not submit an application for funding). Responses help provide recommendations for facilitating improvements in future rounds of the ARTS program as well as evaluating the usefulness of existing methods and tools in the ARTS decision-making process.

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
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety
- Other-Traffic Safety Office (TSO)
- Other-Planning

Describe coordination with internal partners.

While we have not reconvened HSEC, safety information is regularly shared and coordinated across several key groups. These groups serve as an important forum for the exchange of safety-related data, best practices and policy discussions and ensure that safety considerations are integrated into broader decision-making efforts. Teams include:

- Traffic Operations and Standards Team (TOAST) was established to provide statewide policy and procedure leadership for traffic engineering related issues. This team involves a mix of internal partners and often covers safety topics.
- Oregon Traffic Control Devices Committee (OTCDC) acts as an advisory board to the Oregon Department of Transportation (ODOT) regarding statewide traffic management policy. This team involves a mix of internal and external (FHWA, law enforcement, local jurisdictions) partners and often covers safety topics.
- Safety Mobility Policy Advisory Committee (SMPAC) advises ODOT through collaboration amongst diverse stakeholders united to enhance work zone safety and mobility policy. This team involves a mix of internal and external (Freight mobility, law enforcement) partners and often covers safety topics.

Additionally, coordination meetings and conferences provide further opportunities ensuring that safety considerations are also reflected in operational decisions across the agency.

Identify which external partners are involved with HSIP planning.

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

Describe coordination with external partners.

ODOT Region Traffic offices work closely with external partners in determining appropriate safety projects to fund in Oregon to reduce fatal and serious injuries crashes.

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- At the planning level, external partners are involved through the SHSP process as stakeholders in the strategic planning document that defines Oregon's emerging trends & challenges on traffic safety and identify actions to address safety needs.
- At the project selection level, ODOT Traffic Engineering Section (TES) and Region Traffic offices conduct outreach meetings with local agencies interested in submitting proposed ARTS safety projects for funding consideration. In addition, ODOT provides consultant services at no charge to help support local jurisdictions. ODOT TES also works closely with representatives from FHWA and the ODOT Transportation Safety Office (TSO) to assure coordination between HSIP and the SHSP which identifies Oregon's policies and strategies to eliminate fatalities and serious injuries.

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

ARTS program support (<https://www.oregon.gov/odot/Engineering/Pages/ARTS.aspx>), updated documents, tools and guidance includes:

- Pedestrian and Bicycle Cost Effectiveness Tool (CEI)- previously updated to incorporate risk factors associate with pedestrian and bicycle involved crashes. With this tool, analysts can better identify locations and supporting safety treatments, focus funding, and prioritize locations statewide where preemptive treatments can be implemented to enhance pedestrian and bicyclist safety. This tool will be available for use in this (current) round of STIP Safety project selection through our All Roads Transportation Safety (ARTS) program, which dedicates a portion of ODOT's federal safety funding to pedestrian/bicycle focused countermeasures.
- Comprehensive Cost and B/C spreadsheet tool- updated to reflect new comprehensive costs as outlined in insafety.fhwa.dot.gov/hsip/docs/fhwasa17071.pdf
- ARTS application form and guide- incorporates equity and GHG considerations.
- CRF Appendix- revision/updates to CRF's used in the ARTS program.
- Countermeasure Search Tool- updated to reflect revisions to CRF's.

Updates to Manuals (Oregon Department of Transportation : Highway Safety : Engineering : State of Oregon):

- Currently reviewing/updating safety manuals to follow best practices for liability neutral language using NCHRP 20-06 "Guidelines for Drafting Liability Neutral Transportation Engineering Documents and Communications Strategies"

o CRF Appendix- complete and available online [oregon.gov/odot/Engineering/ARTS/CRF-Manual.pdf](https://www.oregon.gov/odot/Engineering/ARTS/CRF-Manual.pdf)

o Safety Investigations Manual (SIM)- complete and available online Oregon Department of Transportation : Safety Investigation Manual : Engineering : State of Oregon

o ARTS/HSIP Manual- updated to incorporate equity and GHG considerations and to reflect new information and guidance.

Safety Improvement Plans (Oregon Department of Transportation: Highway Safety : Engineering : State of Oregon):

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· Intersection Safety Implementation Plan- completed in September of 2023. This update helps analysts identify intersection crash patterns, trends and risk factors, focusing on fatal and suspected serious injury crashes, consistent with Safe Systems Approach ("SSA") principles, as outlined by What Is a Safe System Approach? | US Department of Transportation

SPIS:

Oregon DOT recently updated the SPIS to reflect 2021 crash data:

- State Highway reports: <https://www.oregon.gov/odot/Engineering/Pages/SPIS-Reports-On-State.aspx>
- Local road reports: <https://www.oregon.gov/odot/Engineering/Pages/SPIS-Reports-Off-State.aspx>

Vulnerable Road User Assessment project:

Our assessment is complete, and involves collaboration across various agencies, incorporating comments and input from multiple statewide partners to identify risk factors and strategies. The risk factors will be used to determine High-Risk areas statewide where funding can be focused on strategies, approaches and countermeasures with the greatest potential to reduce fatalities and serious injuries involving vulnerable road users.

Oregon Department of Transportation: Transportation Safety Action Plan : Safety : State of Oregon

Research:

Based on research conducted by Dr. Hurwitz and his team at OSU, Heavy trucks have a longer footprint, larger turning radii, and require greater distances to achieve desired acceleration and deceleration. These factors impact how heavy trucks enter and navigate the circulatory roadway of a roundabout, especially when finding a suitable gap in circulating traffic to safely enter, particularly under congested conditions. The research specifically addresses the capacity of trucks to navigate roundabouts during peak traffic times, an area that previously lacked substantial research. Additionally, new geometric and operational treatments were evaluated, offering engineers at ODOT additional evidence for potential treatments to consider in future design projects.[oregon.gov/odot/Engineering/Docs_TrafficEng/Truck-Access-Roundabouts.pdf](https://www.oregon.gov/odot/Engineering/Docs_TrafficEng/Truck-Access-Roundabouts.pdf)

Research study conducted by Portland State University to study the new methods' outcomes with speed compliance and safety (SPR 854). Starting in May of 2020, Oregon's new Administrative Rules for setting speed limits in urban areas have incorporated new national research (NCHRP report 966). Speed setting now is based on ranges for urban contexts (such as Urban core, suburban commercial, etc.) and considers 50th percentile speeds instead of the old 85th percentile speed method. This should lead to speed limits more in line with multi-modal uses of the streets.

Upcoming Research:

25-29 Evaluation of the relationship between near misses and crash outcomes at intersections in Oregon.<https://www.oregon.gov/odot/Programs/ResearchDocuments/25-29.pdf>

25-35 Benefit-Cost Analysis of Roundabouts to Support Long Range Investment Policy.<https://www.oregon.gov/odot/Programs/ResearchDocuments/25-35.pdf>

25-66 Mobile Illuminance Measurement for Safer Oregon Roadways.
<https://www.oregon.gov/odot/Programs/ResearchDocuments/25-66.pdf>

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25-81 - Advancing pedestrian safety at intersections: Temporal modeling of pedestrian crash frequency and severity and measuring the effectiveness of signal timing strategies for improving safety. <https://www.oregon.gov/odot/Programs/ResearchDocuments/25-81.pdf>

Program Methodology

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

Yes

Yes, ODOT currently has an HSIP Manual available on our website however, this manual is still being updated (anticipated to be completed in December of 2024).

File Name: ODOT Highway Safety Improvement Program (HSIP) Guide

· Oregon DOT Safety: <https://www.oregon.gov/ODOT/Engineering/Pages/Highway-Safety.aspx>

· All Roads Transportation Safety (ARTS) program:
<http://www.oregon.gov/ODOT/Engineering/Pages/ARTS.aspx> .

Select the programs that are administered under the HSIP.

- Intersection
- Roadway Departure
- Vulnerable Road Users

The ARTS program has 4 application types (Hotspot, Systemic Pedestrian/Bicycle, Systemic Intersection, Systemic Roadway Departure) that cover a variety of contributing factors identified in our SHSP. In addition, HSIP funds are shared with our local partners.

	Vulnerable Road Users	Intersection	Roadway Departure
Pedestrian Safety	x		
Bicycle Safety	x		
Left Turn Crash		x	
Red Light Running Prevention		x	
Right Angle Crash		x	
Sign Replacement And Improvement		x	
Horizontal Curve			x
HRRR- Rural State Highways			x
Median Barrier			x
Shoulder Improvement			x
Wrong Way Driving			x
Sign Replacement And Improvement			x

Program: Intersection

Date of Program Methodology:10/2/2023

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Other-All Roads Transportation (ARTS) Program

What data types were used in the program methodology?

Crashes

- Other-Fatal and injury crashes

Exposure

- Volume
- Other-Equity

Roadway

- Horizontal curvature
- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Crash rate
- Other-Crash Severity
- Other-Intersection Safety Implementation Plan
- Other-Risk factors

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

Ranking based on B/C:100

Program: Roadway Departure

Date of Program Methodology:2/1/2017

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Other-All Roads Transportation (ARTS) Program

What data types were used in the program methodology?

Crashes

- Other-Fatal and injury crashes

Exposure

- Volume

Roadway

- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Other-Crash Severity
- Other-Roadway Departure Safety
- Other-Roadway Departure Safety Implementation Plan

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

Cost Effectiveness:100

Program: Vulnerable Road Users

Date of Program Methodology:11/1/2020

What is the justification for this program?

- Addresses SHSP priority or emphasis area

What is the funding approach for this program?

Other-All Roads Transportation (ARTS) Program

What data types were used in the program methodology?

Crashes

- Other-Fatal and injury crashes

Exposure

- Volume
- Other-Equity

Roadway

- Functional classification
- Roadside features

What project identification methodology was used for this program?

- Crash frequency
- Other-Bicycle Safety Implementation Plan
- Other-Cost Effectiveness Index (CEI)
- Other-Risk factors

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

Cost Effectiveness:1

What percentage of HSIP funds address systemic improvements?

50

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

- Add/Upgrade/Modify/Remove Traffic Signal

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- 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
- Pavement/Shoulder Widening
- Rumble Strips
- Safety Edge
- Traffic Control Device Rehabilitation
- Upgrade Guard Rails
- Wrong way driving treatments

HSIP funds can be used to address any of the systemic improvements above. Descriptions and information for these treatments can be found in ODOT's CRF Manual (Microsoft Word - Crash Reduction Factor Manual_McWil_20230823.docx (oregon.gov))

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-Region Traffic Investigator's investigate the top 5% Safety Priority Index System (SPIS) each year and identify potential cost effective countermeasures.

Does the State HSIP consider connected vehicles and ITS technologies?

Yes

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

ODOT's All Roads Transportation Safety (ARTS) program includes several ITS technologies as potential countermeasures, especially curve and intersection warning systems and variable speed signs.

Oregon is in the formative stages of developing connected vehicle technologies.

Intelligent Transportation Systems (ITS) connected vehicles website
<https://www.oregon.gov/odot/Programs/Pages/Connected-Vehicles.aspx>

Automated Vehicles website <https://www.oregon.gov/odot/Programs/Pages/CAV.aspx>

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.

ODOT is implementing HSM methods and approaches to support HSIP efforts.

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- The Safety Priority Index System (SPIS) tool is an example of an HSM sliding window application which is one of the three principal screening methods in the HSM. SPIS calculates a score for qualifying 0.10-mile segments of roadways (statewide) based on the frequency, rate and severity of crashes occurring within each segment over a three-year period.
- In ARTS, for Pedestrian and Bicycle safety project prioritization, ODOT has developed a risk factor-based assessment to calculate cost effectiveness for Systemic Bike/Ped applications. It considers a variety of roadway characteristics, in addition to crash history and equity, to estimate the risk of a pedestrian or bicycle crash occurring. In this tool, the project benefit is measured by the reduction of crash risk (compared to the reduction of crashes in the B/C ratio). The final cost effectiveness measure is the Reduced Risk per \$1,000 spent, or RRC. There is no minimum risk reduction cost (RRC) threshold value at this time, but a minimum may be implemented in future ARTS cycles.
- The HSM v1 predictive spreadsheets have been updated to include Oregon specific calibration factors. While these predictive spreadsheets are not used for systemic analysis, they are used for project analysis where SPF's are available.
- In 2022, ODOT piloted the AASHTOWare Safety software. Some of the features and functions we're interested in learning more about include:
 - o The ability to query multiple years of crash data to identify crash trends by crash type, severity, and geometric features statewide.
 - o Determine whether or not the dashboard is self-guiding/intuitive and how insightful the graphs and data displays are.
 - o Accessibility and functionality for local jurisdictions- how easy is it for local jurisdictions to access the data and develop trends based on boundaries
- Our ODOT Planning unit has incorporated several methodologies and tools into the Analysis Procedures Manual (APM) such as the critical crash rate and the excess proportion of specific crash type calculators.

Oregon Department of Transportation : Technical Tools : Planning & Technical Guidance : State of Oregon

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

The All Roads Transportation Safety Program (ARTS) is a statewide safety program that addresses safety for all public roads in the state of Oregon. The primary objective of the ARTS Program is to use data driven safety methods to select the best projects to reduce fatalities and serious injuries on all public roads in the state. The program is a competitive program with a focus on implementation of cost-effective and proven safety countermeasures. It is supported through federal and state funds based on the federal Highway Safety Improvement Program. HSIP adopts a data-driven approach that uses crash data, risk factors, and other supported methods to identify the best possible locations to achieve the greatest benefits.

The fourth round of the ARTS project selection began in the fall of 2023 and will extend through the winter of 2024. During this period, projects are being selected for the Statewide Transportation Improvement Program (STIP) which will be delivered in years 2027 through 2030.

The ARTS program uses two different methods for selecting projects – traditional 'Hotspot' method and 'Systemic' method. ODOT regions are encouraged to spend at least half of the funding for Systemic projects. These two methods are designed to select the most cost-effective projects among all public roads in Oregon to

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reduce the most fatal and serious injury crashes with available funds. The 2017 – 2021 crash data was used to support applications for this round of ARTS. The following tools and safety plans will also be helpful in safety project identification:

Safety Priority Index System (SPIS): <https://www.oregon.gov/ODOT/Engineering/Pages/Highway-Safety.aspx>

Oregon Adjustable Safety Index System (OASIS): <https://zigzag.odot.state.or.us/oasisapp/OasisTool.aspx>

Systemic Roadway Departure Plan: <https://www.oregon.gov/odot/Engineering/Pages/Roadway-Departures.aspx>

Systemic Intersection Safety Plan: <https://www.oregon.gov/odot/Engineering/Pages/Intersection-Safety.aspx>

Systemic Pedestrian and Bicycle Plan: https://www.oregon.gov/odot/Engineering/Docs_TrafficEng/Bike-Ped-Safety-Implementation-Plan.pdf

Addressing Oregon's Rise in Deaths and Serious Injuries for Senior Drivers and Pedestrians:
<https://www.oregon.gov/odot/Programs/ResearchDocuments/SPR828Final.pdf>

For the STIP period, 2027 through 2030, approximately \$30 million per year of Safety projects will be programmed through the ARTS program. Funds are allocated to each ODOT region based on the proportion of fatalities and serious injuries that occurred within the region during the last five years of available crash data. The region allocations during the last round of ARTS funding was approximately:

Region 1 (31%), Region 2 (36%), Region 3 (15%), Region 4 (11%), Region 5 (7%)-

The ARTS FAQ is available at this link: https://www.oregon.gov/odot/Engineering/Docs_TrafficEng/ARTS_Key-Facts.pdf

Project Implementation

Funds Programmed

Reporting period for HSIP funding.

State Fiscal Year

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

FUNDING CATEGORY	PROGRAMMED	OBLIGATED	% OBLIGATED/PROGRAMMED
HSIP (23 U.S.C. 148)	\$30,545,557	\$30,545,557	100%
HRRR Special Rule (23 U.S.C. 148(g)(1))	\$2,440,120	\$2,440,120	100%
VRU Safety Special Rule (23 U.S.C. 148(g)(3))	\$5,961,267	\$5,961,267	100%
Penalty Funds (23 U.S.C. 154)	\$0	\$0	0%
Penalty Funds (23 U.S.C. 164)	\$14,138,062	\$14,138,062	100%
RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2))	\$0	\$0	0%
Other Federal-aid Funds (i.e. STBG, NHPP)	\$517,411,116	\$517,411,116	100%
State and Local Funds	\$0	\$0	0%
Totals	\$570,496,122	\$570,496,122	100%

During the period of 2027 through 2030, approximately \$30 million per year will be available for the ARTS program. The remaining HSIP funds will be used to support safety through other programs and efforts. Funds are allocated to each ODOT region based on the proportion of fatalities and serious injuries that occurred within the region during the last five years then funds are further split between State highways (49%) and local roads (51%).

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

50%

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

50%

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

\$218,000

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

\$218,000

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.

While Oregon DOT has had much success, we still face challenges with obligating HSIP funds to appropriate safety projects.

- Local jurisdictions' participation in the ARTS program:

§ Local jurisdictions typically submit small projects (~\$500,000); however, these projects are less cost effective because of the project delivery constraints of the federal process. It would be helpful if FHWA reduces requirements for project development and oversight for Safety projects under a certain size (for example, less than \$500,000) in order to facilitate delivery.

§ In general, it would be helpful if FHWA updated the countermeasures and project types that are fully reimbursable to include more countermeasures specific to vulnerable users and to make all local agency projects fully reimbursable.

- Getting safety projects programmed and built in an appropriate time frame:

§ Consider ARTS project delivery improvements (master agreement, uniform data, etc.) to improve delivery of non-State projects such as developing master intergovernmental agreements for ARTS projects or otherwise group projects to deliver under single Intergovernmental Agreement (IGA) .

§ Identify opportunities to program safety projects earlier in the STIP

§ Explore opportunities for Public Interest Finding with FHWA for use of state-forces to construct certain low-cost safety countermeasures.

§ Explore potential peer exchange opportunities of other states that use other methods to fund maintenance forces with the HSIP funds.

§ Examine efforts to use IDIQ (indefinite delivery/indefinite quantity) for contracting and delivering low-cost safety treatments. This approach appears to use federal funds to deliver low-cost safety improvements in a more rapid deployment of measures. This may be a more efficient way to deliver some more traditional STIP fixes.

Describe any other aspects of the State's progress in implementing HSIP projects on which the State would like to elaborate.

Several challenges we've come up against include:

- Several challenges we've come up against include:
 - Small amount of HSIP funds compared to the rising project costs, inflation, and dwindling resources. We have far more need than available funds.
 - Encouraging tribes and local jurisdictions to participate in the ARTS program
 - Programming and constructing projects in a timely fashion, especially local safety projects.
 - Small dollar safety projects (less than \$500k) where the administration costs overrides the project costs. Some Regions have bundled safety projects where practical to reduce administration costs.

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 OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
KN:20190(CN), NW Oregon (Central Portion) curve warning upgrades	Roadway signs and traffic control	Curve-related warning signs and flashers	1	Project	\$1229428	\$1229428	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:20304(RW), City of Portland safety project	Intersection traffic control	Intersection traffic control - other	1	Project	\$121000	\$121000	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:21489(CN), US20: 3rd St - 15th St (Greenwood, Bend)	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Project	\$977151	\$977151	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:21564(CN), OR99W: Theona Dr (Eugene)	Intersection geometry	Intersection geometry - other	1	Project	\$282408	\$282408	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0	0	Other	Spot	Intersections	
KN:21565(RW), Silverton Road at Desart Road (Marion County)	Alignment	Alignment - other	1	Project	\$202976	\$202976	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0	0	Other	Spot	Intersections	
KN:21572(CN), OR99EB: Market St - Union St	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Project	\$1742500	\$1742500	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:21573(CN), City of Eugene Signal Improvements (2024)	Intersection traffic control	Intersection traffic control - other	1	Project	\$683295	\$683295	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:21574(CN), Rumble Strips (Unit 1 NW Oregon) (2024)	Roadway	Rumble strips – other	1	Project	\$5719700	\$5719700	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:21577(CN), Curve warning upgrades (NW Oregon)	Roadway signs and traffic control	Curve-related warning signs and flashers	1	Project	\$1535218	\$1535218	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:21587(CN), Sign replacements (NW Oregon) (21-24)	Roadway signs and traffic control	Roadway signs and traffic control - other	1	Project	\$122286	\$122286	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:21608(RW), OR8 at Armco Ave, Main St and A&B Row	Pedestrians and bicyclists	Install sidewalk	1	Project	\$122286	\$122286	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:21613(CN), US30: Sandy River - OR35	Intersection traffic control	Intersection traffic control - other	1	Project	\$587400	\$587400	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:21616(CN), OR99W: Ross Island Br-SW Wills Ln & US30B: Kerby-165th Ave	Intersection geometry	Intersection geometry - other	1	Project	\$1476913	\$1476913	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:21629(PE), SE Division St: 148th Ave - 174th Ave (Portland)	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Project	\$482415	\$482415	VRU Safety Special Rule (23 U.S.C. 148(g)(3))	Urban	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:21637(CN), OR281, OR282 and OR35 signs, signals and lighting	Lighting	Intersection lighting	1	Project	\$811876	\$811876	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Spot	Intersections	

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PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
KN:21643(CN), US30: (10th St) /Hughes Street upgrades (Baker City)	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Project	\$738910	\$738910	VRU Safety Special Rule (23 U.S.C. 148(g)(3))	Urban	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:21655(CN), All Roads Transportation Safety Intersection Upgrades	Intersection traffic control	Intersection traffic control - other	1	Project	\$923060	\$923060	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:21655(OT), All Roads Transportation Safety Intersection Upgrades	Intersection traffic control	Intersection traffic control - other	1	Project	\$50000	\$50000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:21717(CN), Rogue Valley Rural Intersection Improvements	Roadway signs and traffic control	Roadway signs and traffic control - other	1	Project	\$1073752	\$1073752	HSIP (23 U.S.C. 148)	Rural	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:21728(PE), Crater Lake Ave Signal Improvements (Medford)	Roadway signs and traffic control	Roadway signs and traffic control - other	1	Project	\$585000	\$585000	VRU Safety Special Rule (23 U.S.C. 148(g)(3))	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:21878(CN), I-84: La Grande-Baker City sign upgrades	Advanced technology and ITS	Advanced technology and ITS - other	1	Project	\$3131440	\$3131440	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Speed Management	
KN:21894(CN), Malheur and Harney county traffic signal safety improvements	Intersection traffic control	Intersection signing –other	1	Project	\$689630	\$689630	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:21894(OT), Malheur and Harney county traffic signal safety improvements	Intersection traffic control	Intersection signing –other	1	Project	\$600000	\$600000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:22383(CN), OR86: Guardrail Upgrades Final Phase	Roadside	Barrier - other	1	Project	\$5073500	\$5073500	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:22383(RW), OR86: Guardrail Upgrades Final Phase	Roadside	Barrier - other	1	Project	\$7500	\$7500	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:22513(RW), OR211: Meridian Rd MP 3.78	Intersection traffic control	Intersection flashers –sign-mounted or overhead	1	Project	\$67000	\$67000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Spot	Intersections	
KN:22705(PE), Yergen/McKay/Ehlen Rd: OR219 to Bents Rd NE (Marion County)	Speed management	Dynamic Speed Feedback Signs	1	Project	\$170882	\$170882	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Speed Management	
KN:22707(PE), OR18: SE Lafayette Highway to SE Ash Rd	Intersection traffic control	Modify control – Modern Roundabout	1	Project	\$1962820	\$1962820	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Spot	Intersections	
KN:22725(PE), Ehlen Rd NE at Butteville Rd NE (Marion County)	Intersection traffic control	Modify control – Modern Roundabout	1	Project	\$0	\$0	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Spot	Intersections	

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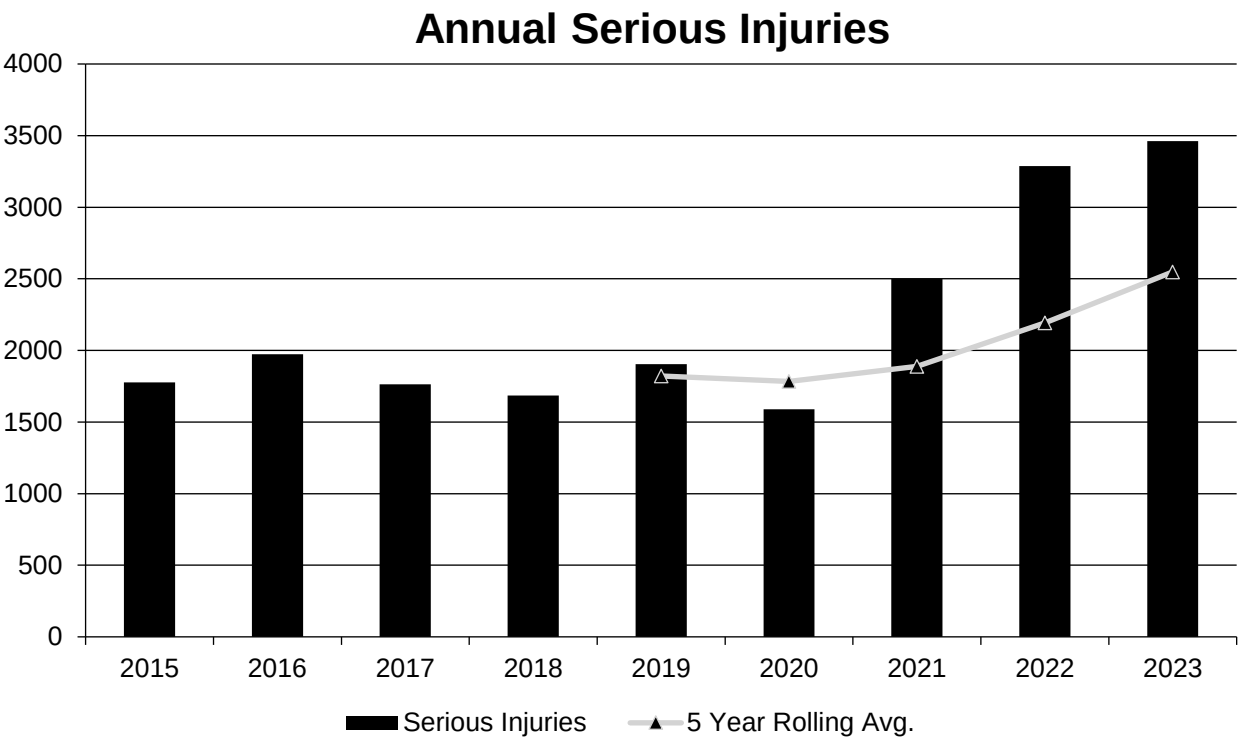
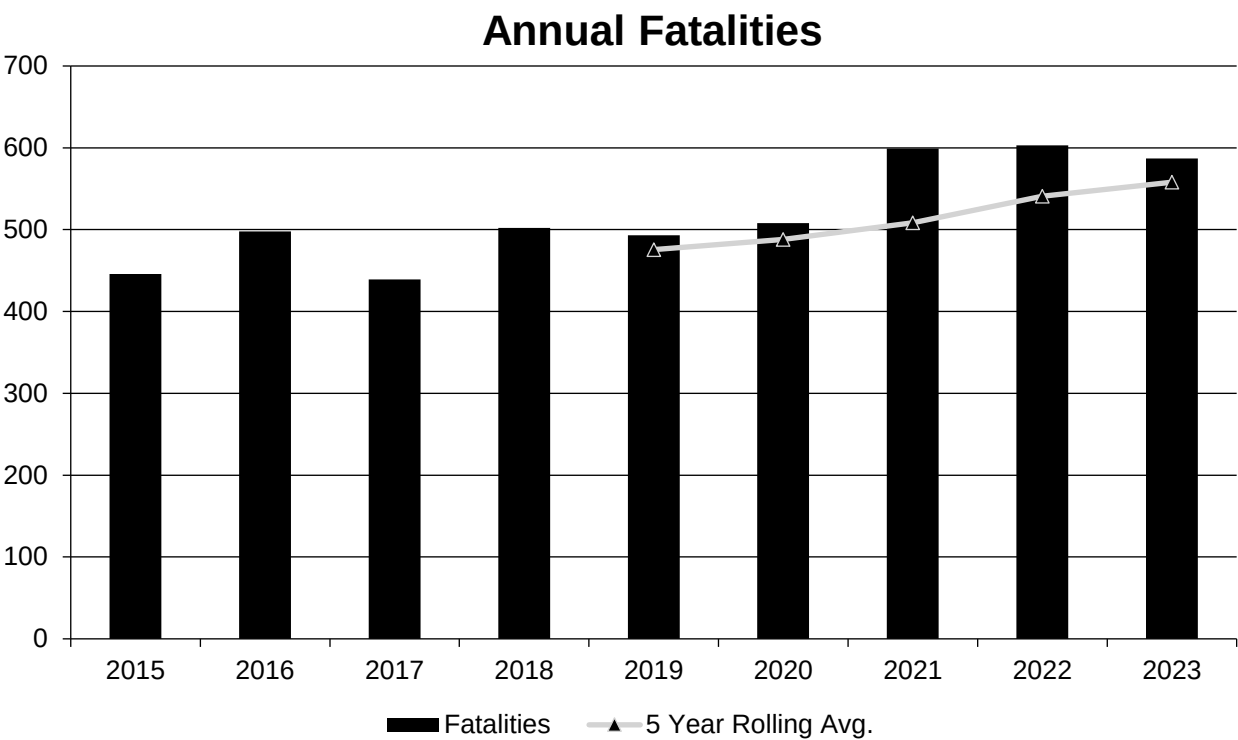
PROJECT NAME	IMPROVEMENT CATEGORY	SUBCATEGORY	OUTPUTS	OUTPUT TYPE	HSIP PROJECT COST(\$)	TOTAL PROJECT COST(\$)	FUNDING CATEGORY	LAND USE/AREA TYPE	FUNCTIONAL CLASSIFICATION	AADT	SPEED OR SPEED RANGE	OWNERSHIP	METHOD FOR SITE SELECTION	SHSP EMPHASIS AREA	SHSP STRATEGY
KN:22728(PE), Northwest Oregon curve warning upgrades (2027)	Roadway signs and traffic control	Curve-related warning signs and flashers	1	Project	\$1351310	\$1351310	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:22767(PE), Driver Feedback Signs (Deschutes County)	Speed management	Dynamic Speed Feedback Signs	1	Project	\$241613	\$241613	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Speed Management	
KN:22776(CN), US97: Redmond-Bend Phase 2	Access management	Raised island - install new	1	Project	\$1691565	\$1691565	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Access management	
KN:22777(PE), US97 at O'Neil Hwy	Access management	Access management - other	1	Project	\$501283	\$501283	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Access management	
KN:22832(PE), Gresham Pedestrian Improvements	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Project	\$946607	\$946607	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:22937(PE), OR42 at Brockway Road Roundabout	Intersection traffic control	Modify control – Modern Roundabout	1	Project	\$500000	\$500000	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Multiple/Varies	0	0	Other	Spot	Intersections	
KN:22994(PE), I-84: Roadway Illumination project	Lighting	Lighting - other	1	Project	\$130500	\$130500	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Lighting	
KN:23094(PE), OR66/OR273: Barrier Upgrades	Roadside	Barrier - other	1	Project	\$717373	\$717373	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:23225(OT), Umatilla County Signal Safety Improvements	Advanced technology and ITS	Advanced technology and ITS - other	1	Project	\$680000	\$680000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Intersections	
KN:23635(PE), US97: Yew Ave (Redmond) to Quarry Ave	Access management	Access management - other	1	Project	\$400000	\$400000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Access management	
KN:23635(RW), US97: Yew Ave (Redmond) to Quarry Ave	Access management	Access management - other	1	Project	\$9000	\$9000	HSIP (23 U.S.C. 148)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Access management	
KN:23053(PE), Southwest Oregon Rural Intersection Safety Improvements	Roadway signs and traffic control	Roadway signs (including post) - new or updated	1	Project	\$433308	\$5931	HRRR Special Rule (23 U.S.C. 148(g)(1))	Rural	Multiple/Varies	0	0	Other	Systemic	Roadway Departure	
KN:21552(RW), US20/OR34/OR99W: Harrison Blvd (Corvallis)	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Project	\$179089	\$179089	VRU Safety Special Rule (23 U.S.C. 148(g)(3))	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:21552(RW), US20/OR34/OR99W: Harrison Blvd (Corvallis)	Pedestrians and bicyclists	Pedestrians and bicyclists – other	1	Project	\$3341117	\$3341117	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0	0	Other	Systemic	Pedestrians and bicyclists	
KN:21676(CN),OR99/OR238/OR62: Big X Intersection (Medford)	Intersection geometry	Intersection realignment	1	Project	\$427219	\$15260736	Penalty Funds (23 U.S.C. 164)	Multiple/Varies	Multiple/Varies	0	0	Other	Spot	Intersections	

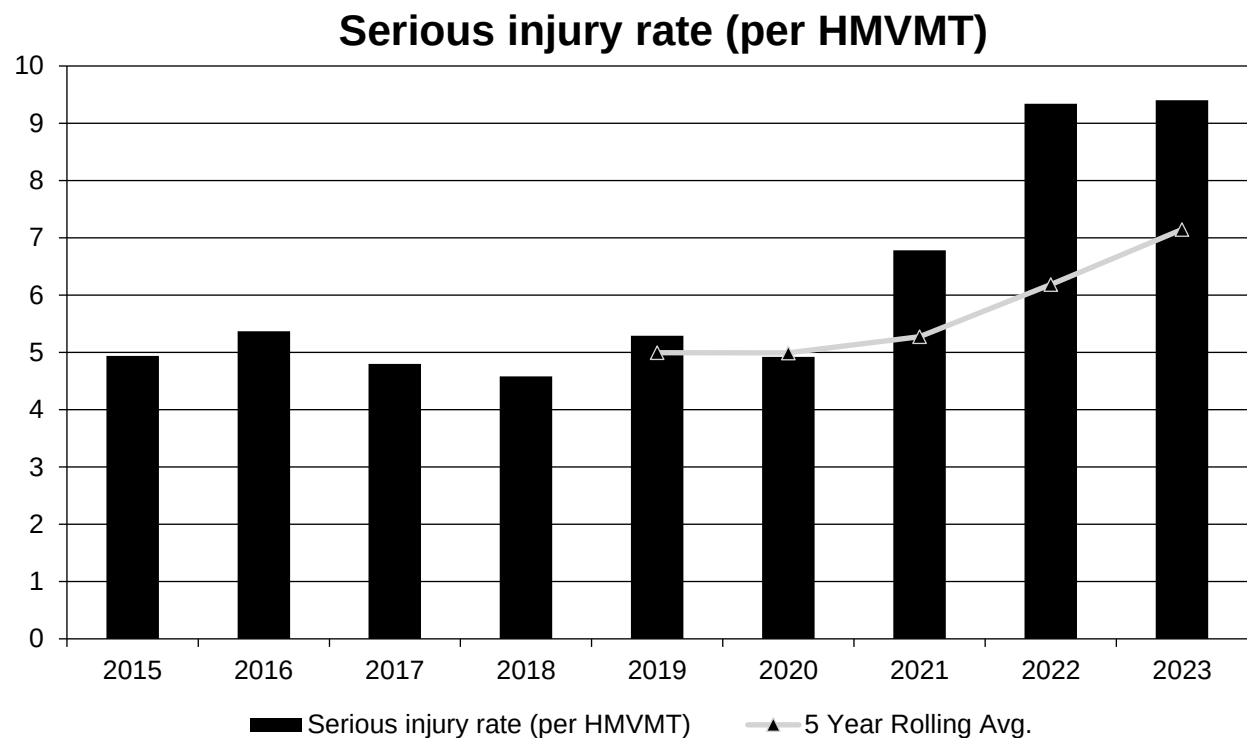
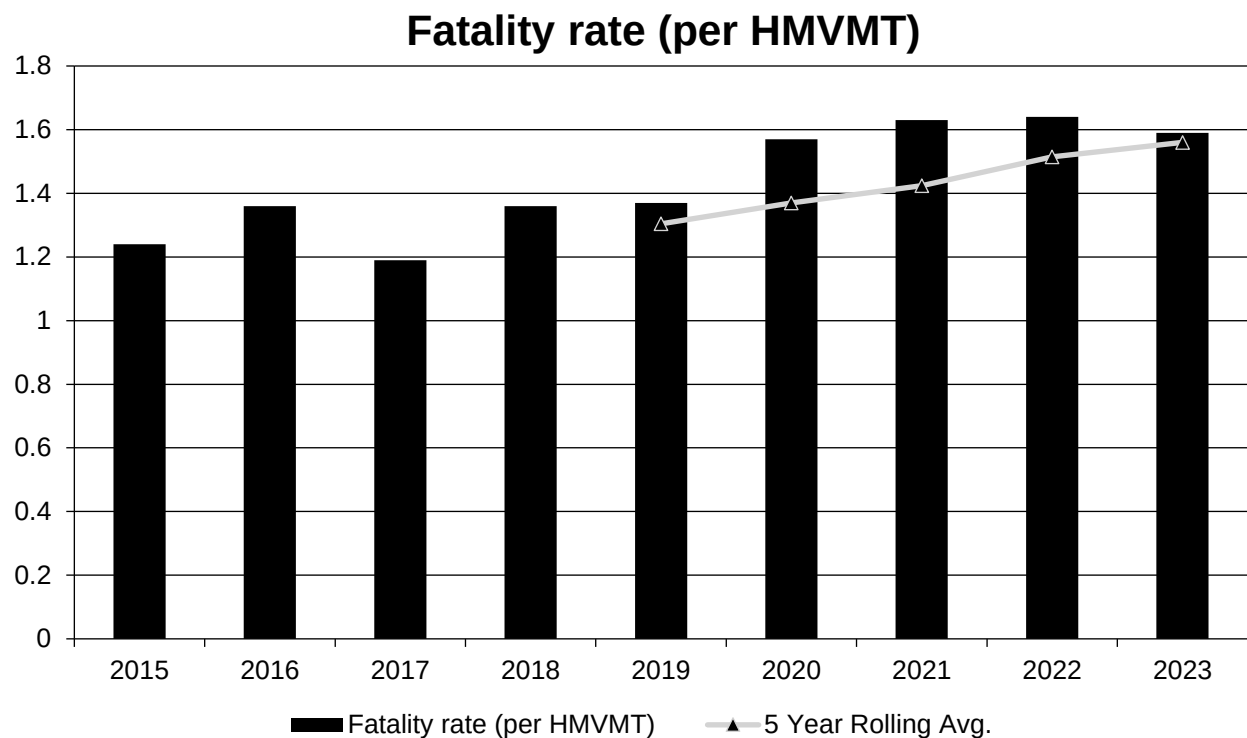
Safety Performance

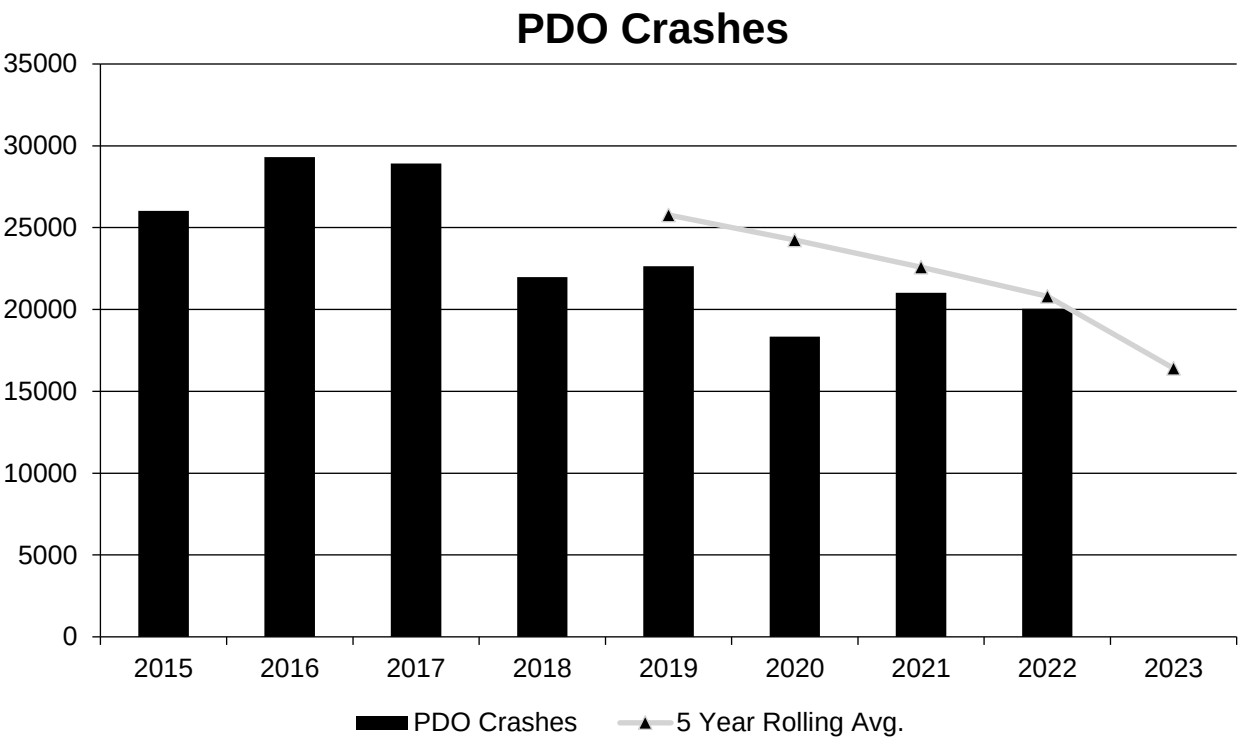
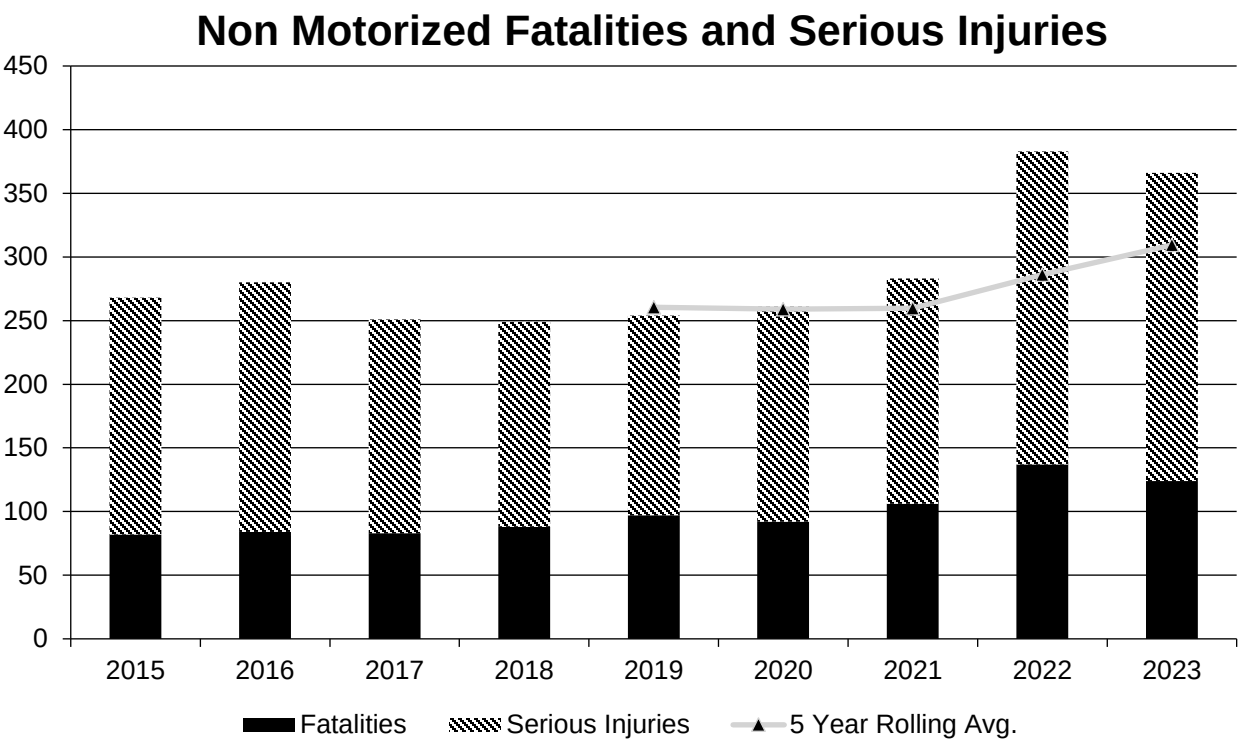
General Highway Safety Trends

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

PERFORMANCE MEASURES	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fatalities	446	498	439	502	493	508	599	603	587
Serious Injuries	1,777	1,973	1,764	1,686	1,904	1,590	2,499	3,288	3,461
Fatality rate (per HMVMT)	1.240	1.360	1.190	1.360	1.370	1.570	1.630	1.640	1.590
Serious injury rate (per HMVMT)	4.940	5.370	4.800	4.580	5.290	4.920	6.780	9.340	9.400
Number non-motorized fatalities	82	84	83	88	97	92	106	137	124
Number of non-motorized serious injuries	186	196	168	161	157	169	177	246	242
PDO Crashes	26,025	29,317	28,926	21,977	22,640	18,338	21,014	20,043	0







Preliminary data was only available for 2023 fatal and serious injury crashes, PDO crashes for 2023 will not be finalized and available for analysis until the Spring of 2025.

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Describe fatality data source.

State Motor Vehicle Crash Database

A preliminary 2023 dataset was provided by ODOT's Crash Analysis Reporting (CAR) unit in August (2024). Because this data is preliminary, it is subject to change.

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

Year 2023

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	21.6	67.6	0.06	0.19
Rural Principal Arterial (RPA) - Other Freeways and Expressways	0	0	0	0
Rural Principal Arterial (RPA) - Other	117.2	340	0.33	0.95
Rural Minor Arterial	60.6	208.2	0.17	0.58
Rural Minor Collector	16.2	68.2	0.05	0.19
Rural Major Collector	66.4	249.8	0.19	0.7
Rural Local Road or Street	25.2	72.4	0.07	0.2
Urban Principal Arterial (UPA) - Interstate	24	129	0.07	0.36
Urban Principal Arterial (UPA) - Other Freeways and Expressways	4.8	48.8	0.01	0.14
Urban Principal Arterial (UPA) - Other	111.4	612.6	0.31	1.71
Urban Minor Arterial	62	422.6	0.17	1.18
Urban Minor Collector	3	20	0.01	0.06
Urban Major Collector	36.6	226.6	0.1	0.63
Urban Local Road or Street	9	82.6	0.03	0.23

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Year 2023

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	315	1,249.8	0.88	3.5
County Highway Agency	140	541	0.39	1.52
Town or Township Highway Agency	103	757.6	0.29	2.12
City or Municipal Highway Agency	0	0	0	0
State Park, Forest, or Reservation Agency	1	0	0	0
Local Park, Forest or Reservation Agency	0	0	0	0
Other State Agency	0	0	0	0
Other Local Agency	0	0	0	0
Private (Other than Railroad)	0	0	0	0
Railroad	0	0	0	0
State Toll Authority	0	0	0	0
Local Toll Authority	0	0	0	0
Other Public Instrumentality (e.g. Airport, School, University)	0	0	0	0
Indian Tribe Nation	0	0	0	0

Provide additional discussion related to general highway safety trends.

For Oregon, 2023 represents a slight decrease from the 2022 total fatalities which was a 33-year high in traffic fatalities (603 total) but an increase in serious injuries over 2022 which was a 25-year high (2498 total). According to initial fatal crash notifications, we anticipate these trends continued through 2023 and into 2024.

While vehicle technology and infrastructure continues to improve, user behaviors have changed substantially. We know that factors such as speed, distracted driving, and impairment (especially polysubstance where alcohol AND drugs are present) continue to increase while enforcement for traffic infractions such as these, remains low.

Oregon's crash data includes multiple contributing factors for each crash. Key findings for contributing factors in the 2022 fatal and serious injury crash data are as follows:

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- ALL contributing factors have increasing trends over the 2017-2021 average (see chart below).
- Crashes on state highways decreased slightly to 47% from previous years (49% from 2017-2021).
- Those occurring at or related to intersections (39%) and Roadway Departure (37%) make up the biggest portion of fatal and serious injury crashes. In past years, roadway departure has typically been the biggest portion however, in 2022, those occurring at or near an intersection is the largest portion.
- Crashes on rural roads has decreased to 38% (this is down from 42% from 2017-2021 average) and crashes on urban roads has increased to 62% (this is up from 58% from 2017-2021 average).
- Almost one-quarter (24%) were flagged as speed related, while this value is high, it only represents those crashes where speed was documented as a contributing factor.
- Almost one-quarter (22%) involve impaired users (alcohol and/or other drugs). Oregon's recent drug-related policies have likely affected impaired driving numbers.
- Thirteen percent involved distracted drivers. While this percentage is lower than other contributing factors, this represents a ten percent increase over the 2017-2021 average.
- Although motorcycles make up a small portion (3.5%) of the registered vehicles in Oregon, 16% of the fatal and serious injury crashes involved a motorcycle. While this percentage is lower than other contributing factors, this represents a 42% increase over the 2017-2021 average.

ODOT continues to employ a multi-pronged approach to reduce fatal and serious injury crashes. Reducing the number of traffic crashes is the primary strategy to reduce fatalities and serious traffic injuries. However, when a crash does occur, reducing the injury severity becomes the secondary strategy which is influenced in three ways: infrastructure work implementing design practices to mitigate structural safety risks; providing education and outreach programs utilized statewide, and specifically in identified problem locations; and through timely emergency medical services at the scene and in transport to trauma centers.

Safety Performance Targets

Safety Performance Targets

Calendar Year 2025 Targets *

Number of Fatalities:488.0

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

The OTC adopted the 2021 SHSP (TSAP) in September 2021, as recommended by the OTSC. The 2024-2026 HSIP performance target for fatalities matches what is published in the Oregon Triennial Highway Safety Plan (Oregon_Triennial_HSP_FY_2024-2026.pdf). This target was established using the procedure outlined in the TSAP and was collectively agreed upon by a diverse working group. While the preferred strategy was to establish a target that showcases enhanced performance, the continuing upward trend in fatalities led to the decision that the 2025 target would maintain consistent performance, aligning with the 2023 target. Annual targets were documented and approved through by the OTSC.

Number of Serious Injuries:1783.0

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

The OTC adopted the 2021 SHSP (TSAP) in September 2021, as recommended by the OTSC. The 2024-2026 HSIP performance target for serious injuries matches what is published in the Oregon Triennial Highway Safety Plan (Oregon_Triennial_HSP_FY_2024-2026.pdf). This target was established using the procedure outlined in the TSAP and was collectively agreed upon by a diverse working group. This goal is grounded in crash data from 2017 to 2021. While the preferred strategy was to establish a target that showcases enhanced performance, the continuing upward trend in fatalities led to the decision that the 2025 target would maintain consistent performance, aligning with the 2023 target. Annual targets were documented and approved through by the OTSC.

Fatality Rate:1.370

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

The OTC adopted the 2021 SHSP (TSAP) in September 2021, as recommended by the OTSC. The 2024-2026 HSIP performance target for the fatality rate matches what is published in the Oregon Triennial Highway Safety Plan (Oregon_Triennial_HSP_FY_2024-2026.pdf). This target was established using the procedure outlined in the TSAP and was collectively agreed upon by a diverse working group. While the preferred strategy was to establish a target that showcases enhanced performance, the continuing upward trend in fatalities led to the decision that the 2025 target would maintain consistent performance, aligning with the 2023 target. Annual targets were documented and approved through by the OTSC.

Serious Injury Rate:4.990

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

The OTC adopted the 2021 SHSP (TSAP) in September 2021, as recommended by the OTSC. The 2024-2026 HSIP performance target for the serious injury rate is not a target published in the Oregon Triennial Highway Safety Plan (Oregon_Triennial_HSP_FY_2024-2026.pdf). However, this target was established using the procedure outlined in the TSAP and was collectively agreed upon by a diverse working group. While

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the preferred strategy was to establish a target that showcases enhanced performance, the continuing upward trend in fatalities led to the decision that the 2025 target would maintain consistent performance, aligning with the 2023 target. Annual targets were documented and approved through by the OTSC.

Total Number of Non-Motorized Fatalities and Serious Injuries:259.0

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

The OTC adopted the 2021 SHSP (TSAP) in September 2021, as recommended by the OTSC. The 2024-2026 HSIP performance target for the serious injury rate is not a target published in the Oregon Triennial Highway Safety Plan (Oregon_Triennial_HSP_FY_2024-2026.pdf). However, this target was established using the procedure outlined in the TSAP and was collectively agreed upon by a diverse working group. While the preferred strategy was to establish a target that showcases enhanced performance, the continuing upward trend in fatalities led to the decision that the 2025 target would maintain consistent performance, aligning with the 2023 target. Annual targets were documented and approved through by the OTSC.

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

During the 2021 TSAP update, ODOT and other safety stakeholders decided that instead of a single 5-year update of the Safety Performance Measures' targets, Oregon would adopt an annual update process to review the federal requirements to determine the state's safety performance targets. Because of the continuing upward trend in fatalities and serious injuries, a decision was made that the 2025 target would maintain consistent performance, aligning with the 2023 target. The 2023 annual targets were documented and approved through by the OTSC.

ODOT Traffic Engineering Section coordinated with the ODOT Traffic Safety Office and stakeholders from MPO's, City and County agencies early in 2023 to establish the targets for all five performance measures. The safety performance targets were calculated with four different methods: straight line to zero by 2035, three percent reduction per year, S-curve, and 2016 TSAP tend. The values calculated with the S-curve method were selected as the safety performance targets for year 2025.

Collectively these stakeholders have the opportunity to improve Oregon's transportation system and save lives by integrating safety into all aspects of planning, programming, project development, operations, and maintenance. Not only is the system improved with responsive investments targeting specific safety issues, the transportation system also is improved by investing in projects, programs, and policies that proactively save lives and prevent injuries. The annual HSIP performance targets were developed and agreed upon by a multidisciplinary working group (including a representative of an MPO). While the COVID-19 pandemic response limited the ability for in-person public outreach, the public was engaged at key points on the project.

Does the State want to report additional optional targets?

No

Describe progress toward meeting the State’s 2023 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	488.0	558.0
Number of Serious Injuries	1783.0	2548.4
Fatality Rate	1.370	1.560
Serious Injury Rate	4.990	7.146
Non-Motorized Fatalities and Serious Injuries	259.0	309.4

Oregon recognizes that eliminating traffic deaths and serious injuries will require time and significant effort by multiple disciplines and we face several challenges regarding why the State's 2023, 2024 and 2025 Safety Performance Targets are not being met. While Oregon’s Performance Targets were adopted before our current rising crash trends began, we continue to strive towards those goals of reducing Fatal and Serious crashes. We are confident that were we not applying proven countermeasures as consistently as we are, our current crash trends would be even higher (project level evaluations have shown that the projects implemented under HSIP funding have improved the locations where invested). In addition, increases in VMT, distracted driving issues, an increased in speed related crashes, a limited presence of law enforcement officers due to budget cuts and an increase in people moving to Oregon have also contributed to increasing fatal and serious injury crashes.

Applicability of Special Rules

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

Yes

Yes

Oregon was flagged for the High Risk Rural Roads (HRRR) Special Rule and obligated, in FY 2024, an amount equal to at least 200 percent of its FY 2009 high-risk rural roads set-aside in the amount of \$2,440,120.

Does the VRU Safety Special Rule apply to the State for this reporting period?

Yes

Yes

Oregon was flagged for the VRU Safety Special Rule Special Rule and obligated, in FY 2024, an amount equal to at least 15% of our apportionment to address the safety of vulnerable road users.

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	2017	2018	2019	2020	2021	2022	2023
Number of Older Driver and Pedestrian Fatalities	67	101	100	88	110	110	113
Number of Older Driver and Pedestrian Serious Injuries	219	206	256	197	318	416	435

2023 data is preliminary for reporting at this time

*Older Driver and Pedestrian Fatalities data source: Fatality Analysis Reporting System (FARS)

**Older Driver and Pedestrian Serious Injuries data source: ODOT Statewide Crash Data System (CDS)

Evaluation

Program Effectiveness

How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio
- Change in fatalities and serious injuries
- Other-Fatal free days

In Oregon, the HSIP program is the biggest contributor of funds to the All Roads Transportation Safety (ARTS) program, an application-based program funding to address safety concerns on all public roadways within the State of Oregon. The ARTS Program is designed to address safety needs on all public roads in Oregon by collaborating with local road jurisdictions. With the ARTS program, the Oregon Department of Transportation can expect to:

- Increase awareness of safety on all roads;
- Promote best practices for infrastructure safety;
- Compliment behavioral safety efforts; and
- Focus limited resources to reduce fatal and serious injury crashes in the state of Oregon by selecting projects with the highest benefit/cost ratio.

The ARTS program is data-driven to achieve the greatest benefits in crash reduction and should be blind to jurisdiction. Detailed information for ARTS program can be found at this link:
<https://www.oregon.gov/odot/Engineering/Pages/ARTS.aspx>

The ARTS program includes hotspot projects as well as systemic projects for roadway departure, intersection, and pedestrian and bicycle crashes. Hotspot, systemic roadway departure and systemic intersection projects are evaluated based on a benefit-cost ratio, while systemic pedestrian and bicycle projects are evaluated based on a cost effectiveness index (CEI). Project level evaluations has shown that the projects implemented under HSIP funding have improved the locations where invested.

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

Historically Oregon's fatalities and serious injuries were trending downwards until 2013. However, since 2013, Oregon has been experiencing an upward trend which has also been experienced across the country. Project level evaluations has shown that the projects implemented under HSIP funding have improved the locations where safety funds have been invested.

Below is a link to the 2021 ODOT ARTS Program Summary Report:

<https://www.oregon.gov/odot/Engineering/ARTS/2021-ARTS-Summary-Report.pdf>

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

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

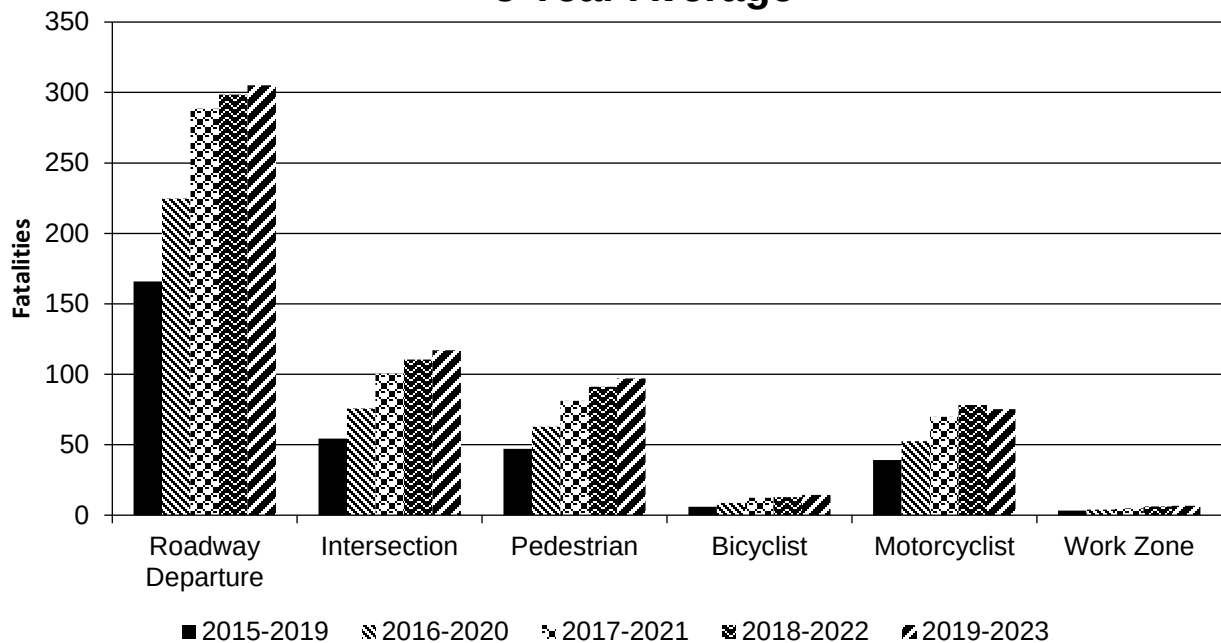
Effectiveness of Groupings or Similar Types of Improvements

Present and describe trends in SHSP emphasis area performance measures.

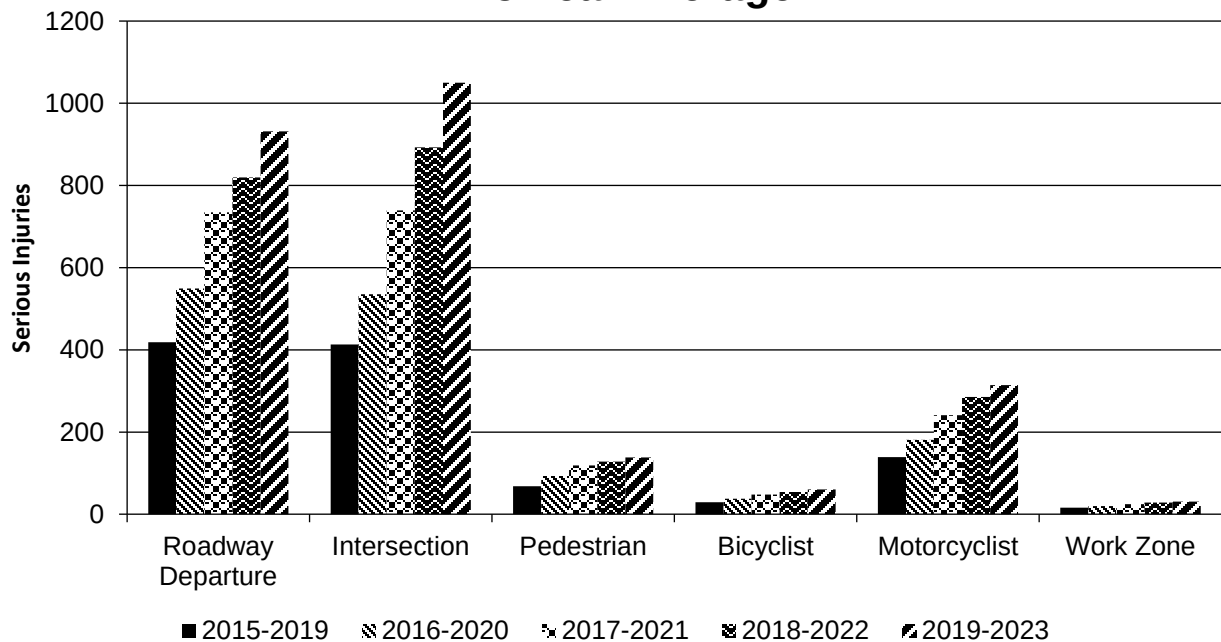
Year 2023

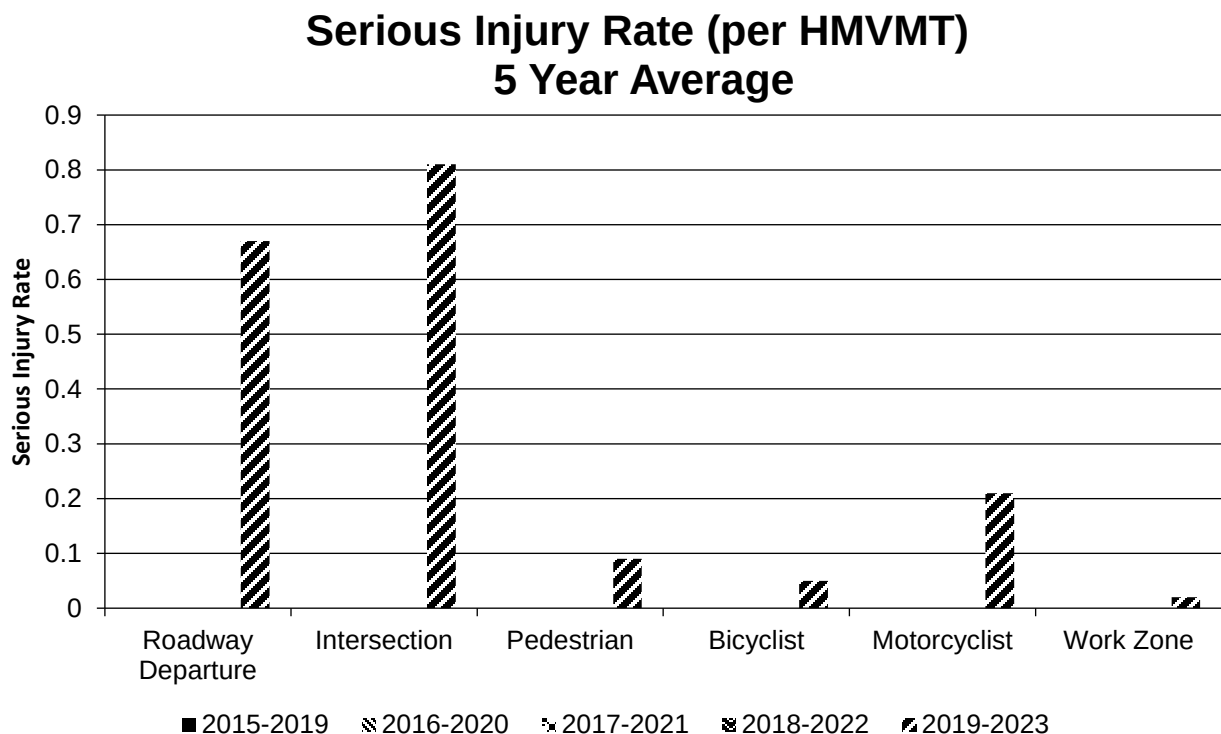
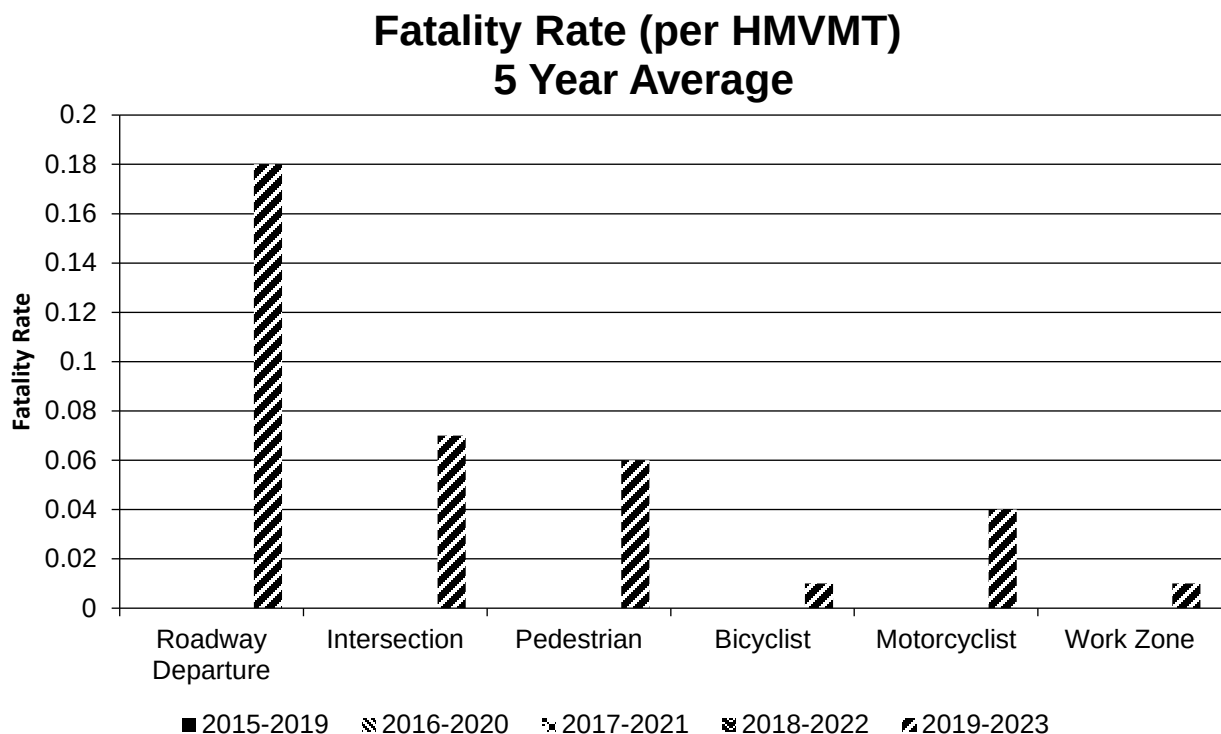
SHSP Area	Emphasis	Targeted Crash Type	Number of Fatalities (5-yr avg)	Number of Serious Injuries (5-yr avg)	Fatality Rate (per HMVMT) (5-yr avg)	Serious Injury Rate (per HMVMT) (5-yr avg)	Other 1	Other 2	Other 3
Roadway Departure			305.2	931.6	0.18	0.67	0	0	0
Intersection			117	1,050.2	0.07	0.81	0	0	0
Pedestrian			97	137.8	0.06	0.09	0	0	0
Bicyclist			14.4	60.4	0.01	0.05	0	0	0
Motorcyclist			75.2	313.8	0.04	0.21	0	0	0
Work Zone			6.6	31	0.01	0.02	0	0	0

Number of Fatalities 5 Year Average



Number of Serious Injuries 5 Year Average





*Sources:

Fatalities: Fatality Analysis Reporting System (FARS), Oregon Satellite Office.

For 2020: A fatal crash was deleted from both FARS and CDS. It was a non-traffic crash per the death certificate, which was received late.

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For 2021: FARS excluded 2 eBike-only crashes that are included in the State file.
Serious Injuries: Oregon DOT, Crash Data System (CDS)

**ODOT revised its Roadway Departure query in February 2020 to align more closely with FHWA's 2009 safety field criteria and ODOT's TSAP definition. Roadway Departure figures in this table were updated to reflect this change, as of the submittal of the 2019 report.

*** For the 2020 submittal that occurred calendar year 2021, ODOT's "Intersections" query was revised to align with ODOT's TSAP definition, which includes "Intersection-Related" crashes. Figures for all years in this table were updated to reflect that change.

† This annual report may include updates to a prior year's data, due to official source documents received after that year's HSIP reporting deadline. Updated figures are in red.)

Project Effectiveness

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

LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
KN18994- I-84, NE OR snow zone safety improvements	Rural Principal Arterial (RPA) - Other Freeways and Expressways	Advanced technology and ITS	Dynamic message signs	155.00	132.00	4.00	2.00	7.00	7.00	85.00	63.00	251.00	204.00	
KN19621- OR39: Crest Street - Madison Street	Urban Principal Arterial (UPA) - Other	Pedestrians and bicyclists	Pedestrians and bicyclists – other	61.00	49.00	2.00	3.00	4.00	6.00	100.00	48.00	167.00	106.00	
KN19683- OR153, Bellevue-Hopewell Hwy rail xing	Varies	Railroad grade crossings	Railroad grade crossings - other											
KN19690- US26 (Powell Blvd): SE 122nd Ave - SE 136th Ave	Urban Principal Arterial (UPA) - Other	Pedestrians and bicyclists	Pedestrians and bicyclists – other	90.00	31.00			7.00	4.00	135.00	53.00	232.00	88.00	
KN19785- I-84: Median barrier safety improvement project	Rural Principal Arterial (RPA) - Other Freeways and Expressways	Roadside	Barrier - other	241.00	206.00	10.00	6.00	23.00	14.00	171.00	125.00	445.00	351.00	
KN19812- I-84: Region 1 Rural Intersections and Curve Warning Signs	Varies	Roadway signs and traffic control	Roadway signs and traffic control - other	137.00	78.00	5.00		11.00	11.00	151.00	66.00	304.00	155.00	
KN19960- Grants Pass Signal & Pedestrian Upgrades	Rural Principal Arterial (RPA) - Other	Pedestrians and bicyclists	Pedestrians and bicyclists – other	24.00	20.00			1.00		34.00	10.00	59.00	30.00	
KN20192- OR140: Atlantic Ave. intersection improvements	Varies	Intersection traffic control	Modify control – Modern Roundabout	3.00	8.00	3.00		1.00		5.00	10.00	12.00	18.00	

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LOCATION	FUNCTIONAL CLASS	IMPROVEMENT CATEGORY	IMPROVEMENT TYPE	PDO BEFORE	PDO AFTER	FATALITY BEFORE	FATALITY AFTER	SERIOUS INJURY BEFORE	SERIOUS INJURY AFTER	ALL OTHER INJURY BEFORE	ALL OTHER INJURY AFTER	TOTAL BEFORE	TOTAL AFTER	EVALUATION RESULTS (BENEFIT/COST RATIO)
KN20196-OR234: Gold Hill-Sams Valley Intersection	Varies	Roadway signs and traffic control	Roadway signs and traffic control - other	3.00	6.00		1.00	3.00	1.00	6.00	7.00	12.00	15.00	
KN20269-Prineville rails to trails	Varies	Pedestrians and bicyclists	Pedestrians and bicyclists – other	13.00	6.00				3.00	8.00	8.00	21.00	17.00	
KN20340-Rumble Strips and Bike/Ped Conflict Markings (Portland)	Urban Principal Arterial (UPA) - Other	Pedestrians and bicyclists	Pedestrians and bicyclists – other	62.00	20.00	5.00	4.00	12.00	5.00	70.00	38.00	149.00	67.00	
KN21169-OR82: Minam curve & bank stabilization	Varies	Roadway	Roadway - other	3.00	1.00	1.00				1.00		5.00	1.00	
KN21190-OR214: Jefferson St (Silverton)	Urban Principal Arterial (UPA) - Other	Intersection geometry	Intersection geometry - other	1.00				1.00		5.00	2.00	7.00	2.00	
KN21289-US26: Timberline Hwy - OR35 Sherwood Campground	Varies	Intersection geometry	Intersection geometry - other	23.00	15.00	1.00		2.00	3.00	23.00	22.00	49.00	40.00	
KN21446- NW Buchanan Ave, NW 11th Street (Corvallis)	Urban Principal Arterial (UPA) - Other	Intersection traffic control	Intersection traffic control - other						3.00	4.00		4.00	3.00	

Compliance Assessment

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

09/01/2021

What are the years being covered by the current SHSP?

From: 2021 To: 2026

When does the State anticipate completing its next SHSP update?

2026

The 2026 TSAP is anticipated to kick off late in 2024. The vision, goals and policy framework established by the 2021 TSAP will be updated as part of this work. In addition, it will refresh data, identify emerging safety trends and challenges since the adoption of the 2021 TSAP. It will also evaluate the progress towards achieving the elimination of fatalities and serious injuries on Oregon’s transportation system and identify solutions to address system needs.

Furthermore, the 2026 TSAP is intended to implement the 2023 OTP. The OTP contains key safety policies that focus on a Safe Systems approach and Key Performance Targets (“KPT”) to eliminate fatalities and serious injuries. The OTP also requires safety as a key lens for making transportation decisions.

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]	100	100					100	100		
	Begin Point Segment Descriptor (10) [10]	100	100					100	75	100	75
	End Point Segment Descriptor (11) [11]	100	100					100	75	100	75
	Segment Length (13) [13]	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
	Direction of Inventory (18) [18]	100	100								
	Functional Class (19) [19]	100	100					100	100	100	100
	Median Type (54) [55]	100	100								
	Access Control (22) [23]	100	100								
	One/Two Way Operations (91) [93]	100	100								
	Number of Through Lanes (31) [32]	100	100					100			
	Average Annual Daily Traffic (79) [81]	100	100					100			
	AADT Year (80) [82]	100	100								
INTERSECTION	Type of Governmental Ownership (4) [4]	100	100					100	100	100	90
	Unique Junction Identifier (120) [110]										
	Location Identifier for Road 1 Crossing Point (122) [112]										
	Location Identifier for Road 2 Crossing Point (123) [113]										
	Intersection/Junction Geometry (126) [116]										
	Intersection/Junction Traffic Control (131) [131]										
	AADT for Each Intersecting Road (79) [81]										
	AADT Year (80) [82]										
	Unique Approach Identifier (139) [129]										

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
INTERCHANGE/RAMP	Unique Interchange Identifier (178) [168]										
	Location Identifier for Roadway at Beginning of Ramp Terminal (197) [187]					100	100				
	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]					90	60				
	Roadway Type at End Ramp Terminal (199) [189]					90	60				
	Interchange Type (182) [172]										
	Ramp AADT (191) [181]					100	90				
	Year of Ramp AADT (192) [182]					100	90				
	Functional Class (19) [19]					100	100				
	Type of Governmental Ownership (4) [4]					100	100				
Totals (Average Percent Complete):		100.00	100.00	0.00	0.00	80.00	72.73	100.00	72.22	100.00	88.00

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

We are still working on establishing an intersection ID and recently received assistance from FHWA to kick off the ODOT MIRE DATA Surface model which will help us in collecting the MIRE fundamental data elements for all roads by September 30, 2026. A summary of our current timeline and progress is outlined below:

- Spring 2022 Begin Phase 5, FDE data collection for signalized intersections on local roads
- Winter 2023 Estimated completion of Phase 5 collection of FDE
- Spring 2024 Begin Phase 6, FDE data collection for state-owned highway segments between signalized intersections state-wide

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- Winter 2024 Estimated completion of Phase 6 collection of FDE and work incorporate the results of the ODOT MIRE DATA Surface model.
- Spring 2025 Begin Phase 7, FDE data collection for local road segments between signalized intersections state-wide
- Winter 2026 Estimated completion of Phase 7 collection of FDE
- Spring 2027 Data maintenance cycle begins

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.

ODOT has established a MIRE Steering Committee to oversee the MIRE data collection effort. We are still working on establishing an intersection ID and recently received assistance from FHWA to kick off the ODOT MIRE DATA Surface model which will help us in collecting the MIRE fundamental data elements for all roads by September 30, 2026. A summary of our current timeline and progress is outlined below:

Activity or Milestone	Timeframe
Project initiation – complete charter and identify resources.	Through December 2023
Analysis – Identify gaps between existing data sets and needed data sets.	October 2023 – February 2024
Analysis – Prepare data quality plan.	October 2023 – February 2024
Procurement (alternate) – Pursue partnership with university, hire interns or contract with outside agency to fill technology or data gaps.	October 2023 – March 2024
Development – Identify internal communication needs.	April – May 2024
Development – Identify external communication needs (cities and counties).	April – May 2024
Development – Design and code data model for missing data.	April – September 2024
Development – Design and code technology solution.	April – September 2024
Development – Test and finalize data collection process – internal.	October – December 2024
Development – Test and finalize data collection process – external.	October – December 2024
Development – Test data quality processes.	October – December 2024
Development – Establish process for data updates, including anticipated timeframe.	October – December 2024
Milestone – Deploy technology and data model components – internal.	January 2025
Milestone – Deploy technology and data model components – external.	January 2025
Implementation – Collect internal data.	January 2025 – May 2026
Implementation – Collect external data.	January 2025 – May 2026
Support – Run data quality checks (per quality plan) and baseline performance measures.	June – August, 2026
Milestone – MIRE FDE Deadline – Complete collection of the MIRE FDE elements for all public roads.	September 30, 2026
Support – Implement process for data updates.	TBD

Optional Attachments

Program Structure:

OregonDOT_Safety_HSIP-Guide.pdf

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.