

Oregon Transportation Commission

Office of the Director, MS 11 355 Capitol St NE Salem, OR 97301-3871

DATE: August 26, 2021

TO: Oregon Transportation Commission

with W. Sten

FROM: Kristopher W. Strickler

Director

SUBJECT: Agenda G –2021 Transportation Safety Action Plan Update

Requested Action:

Adoption of the 2021 Transportation Safety Action Plan and adoption of the accompanying findings supporting the 2021 Transportation Safety Action Plan.

Background:

The Transportation Safety Action Plan (TSAP) provides long-term goals, policies, strategies, and near-term actions to eliminate deaths and life-changing injuries on Oregon's transportation system. The TSAP serves as the unifying framework for transportation safety planning in Oregon; identifying key safety needs and guiding safety investments in infrastructure and behavior programs to meet those needs.

The Federal Highway Administration requires every state to have a Strategic Highway Safety Plan. The TSAP serves as the Oregon Strategic Highway Safety Plan and must be updated no later than five years from the date of the previously approved plan. The updated TSAP is due to the Federal Highway Administration by October 2021 and will replace the five-year plan adopted in 2016.

The TSAP also serves as Oregon's long-range safety topic plan, an element of the Oregon Transportation Plan, and works parallel with other mode and topic plans like the Oregon Bicycle and Pedestrian Plan and the Oregon Freight Plan. This TSAP is timely in informing the Oregon Transportation Plan update of key transportation safety related considerations.

Key Elements of the 2021 TSAP:

The 2021 TSAP reflects a focused and limited update that:

- integrates updated crash data and identifies emerging safety trends and challenges since the adoption of the 2016 TSAP;
- evaluates progress towards achieving the elimination of fatalities and serious injuries on Oregon's transportation system;
- identifies solutions to address system needs for all modes, travelers, and roadway users through a comprehensive update of the near-term actions;

Oregon Transportation Commission August 26, 2021 Page 2

- establishes a process for improving accountability and transparency in target setting;
- advances the ODOT/OTC Strategic Action Plan; and
- fulfills the intent of federal regulations (23 U.S.C. 148, 23 CFR 924.9 and 23 CFR 924.13)

The 2021 TSAP was available for public review May 24 – July 9th, 2021 and an online Public Hearing was held on June 9th, 2021 hosted by the Oregon Transportation Safety Committee. All TSAP deliverables, including a recording of the Public Hearing, are available on the project website: https://www.oregon.gov/odot/Safety/Pages/TSAP.aspx

Attachments:

- Attachment 1 Draft 2021 Transportation Safety Action Plan
- Attachment 2 Findings Supporting the 2021 Transportation Safety Action Plan
- Attachment 3 Record of Outreach
- Attachment 4 Summary of Written Comments Received
- Attachment 5 All Written Comments Received
- Attachment 6 Summary of Public Testimony Received

DRAFT



JULY 2021

Oregon Transportation Safety Action Plan





THANK YOU TO SAFETY PARTNERS

Developing the 2021 Oregon Transportation Safety Action Plan (TSAP) would not have been possible without the significant efforts of committed safety practitioners throughout the state. The many years of leadership provided by the Oregon Transportation Commission (OTC) and the Oregon Transportation Safety Committee (OTSC) make it possible for this plan to continue to become a stronger multidisciplinary plan focused on saving lives and eliminating serious injuries for all travelers on Oregon's transportation system. In addition, partner agencies and public and private stakeholders from many different organizations and interests provided input at workshops and via on-line interactive tools. The 2021 TSAP benefited greatly from the many hours of hard work spent by the Oregon Department of Transportation (ODOT) TSAP Project Management Team (PMT) to develop, review, and refine the document.

Contents

E	Executive Summary	, 1	5	Vision, Goals, Policies, Strategies	57
1	Call To Action	10	6	Emphasis Areas	74
2	Introduction	13	7	Performance Measures & Targets	104
3	Transportation Safety Trends	29	8	Implementation and Evaluation	114
4	Safety Challenges & Opportunities	46	A	Appendices	120

List of Figures

FIGURE ES.1	OREGON TRANSPORTATION FATALITIES (2000-2018)	2
FIGURE ES.2	OREGON HISTORIC TRANSPORTATION FATALITIES PER CAPITA AND VMT	3
FIGURE 1	RELATIONSHIP OF THE TSAP TO OTHER OREGON AND MPO PLANS	22
FIGURE 2	OREGON TRANSPORTATION FATALITIES (2000-2018)	31
FIGURE 3	OREGON HISTORIC TRANSPORTATION FATALITIES PER CAPITA AND PER VMT	31
FIGURE 5	PROPORTION OF FATALITIES AND SERIOUS INJURIES BY URBAN/RURAL AREA (2014-2018)	32
FIGURE 4	FATALITIES AND SERIOUS INJURIES (2014-2018)	32
FIGURE 6	PROPORTION OF FATALITIES AND SERIOUS INJURIES BY ROADWAY OWNERSHIP (2014-2018)	32
FIGURE 7	PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY FUNCTIONAL CLASSIFICATION	33
FIGURE 8	PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY ROAD USER (2014-2018)	35
FIGURE 9	PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY BEHAVIORAL ISSUE (2014-2018)	36
FIGURE 10	PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY LOCATION TYPE (2014-2018)	37
FIGURE 11	FATAL AND SERIOUS INJURY CRASHES BY MOST COMMON ATTRIBUTES (2014-2018)	38
FIGURE 12	OREGON DOT REGIONS	39
FIGURE 12 FIGURE 13	OREGON DOT REGIONS REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)	39 40
FIGURE 13	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)	40
FIGURE 13	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)	40 41
FIGURE 13 FIGURE 14 FIGURE 15	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)	40 41 42
FIGURE 13 FIGURE 14 FIGURE 15 FIGURE 16	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 4 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)	40 41 42 43
FIGURE 13 FIGURE 14 FIGURE 15 FIGURE 16 FIGURE 17	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 4 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 5 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)	40 41 42 43 44
FIGURE 13 FIGURE 14 FIGURE 15 FIGURE 16 FIGURE 17 FIGURE 18	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 4 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 5 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY FUNCTIONAL CLASSIFICATION	40 41 42 43 44 49
FIGURE 13 FIGURE 14 FIGURE 15 FIGURE 16 FIGURE 17 FIGURE 18 FIGURE 19	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 4 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 5 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY FUNCTIONAL CLASSIFICATION CRASH TYPES RANKED BY CRASH FREQUENCY AND SEVERITY (2014-2018)	40 41 42 43 44 49
FIGURE 13 FIGURE 14 FIGURE 15 FIGURE 16 FIGURE 17 FIGURE 18 FIGURE 19 FIGURE 20	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 4 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 5 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY FUNCTIONAL CLASSIFICATION CRASH TYPES RANKED BY CRASH FREQUENCY AND SEVERITY (2014-2018) MOTOR VEHICLE OCCUPANT MORTALITY RATE BY RACE AND ETHNICITY IN OREGON IMPAIRED DRIVING FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	40 41 42 43 44 49 77 78
FIGURE 13 FIGURE 14 FIGURE 15 FIGURE 16 FIGURE 17 FIGURE 18 FIGURE 20 FIGURE 21 FIGURE 21	REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 4 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) REGION 5 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018) PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY FUNCTIONAL CLASSIFICATION CRASH TYPES RANKED BY CRASH FREQUENCY AND SEVERITY (2014-2018) MOTOR VEHICLE OCCUPANT MORTALITY RATE BY RACE AND ETHNICITY IN OREGON IMPAIRED DRIVING FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	40 41 42 43 44 49 77 78

List of Figures

FIGURE 25	SPEED-RELATED FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	84
FIGURE 26	SPEEDING AS A CONTRIBUTING FACTOR FOR CRASHES	85
FIGURE 27	INTERSECTION-RELATED FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	87
FIGURE 28	INTERSECTION-RELATED CRASHES AS A PERCENTAGE OF CRASHES	88
FIGURE 29	ROADWAY DEPARTURE FATALITIES AND SERIOUS INJURIES BY YEAR	89
FIGURE 30	ROADWAY DEPARTURE AS A PERCENTAGE OF CRASHES	90
FIGURE 31	PEDESTRIAN FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	91
FIGURE 32	PEDESTRIAN INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES	92
FIGURE 33	PEDESTRIAN FATAL AND SEVERE INJURY RATE BY LOW INCOME & BIPOC POPULATIONS	93
FIGURE 34	BICYCLIST FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	94
FIGURE 35	BICYCLIST INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES	95
FIGURE 36	MOTORCYCLE DRIVER AND PASSENGER INVOLVED FATALITIES AND SERIOUS INJURIES	96
FIGURE 37	MOTORCYCLE INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES	97
FIGURE 38	AGING DRIVER (65+) INVOLVED FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	98
FIGURE 39	AGING DRIVER (65+) INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES	99
FIGURE 40	AGING PEDESTRIAN FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)	99
FIGURE 41	FATALITY TARGETS	110
FIGURE 42	FATALITY RATE TARGETS	111
FIGURE 43	SERIOUS INJURY TARGETS	111
FIGURE 44	SERIOUS INJURY RATE TARGETS	112
FIGURE 45	NONMOTORIZED FATALITIES AND SERIOUS INJURIES TARGETS	112

List of Tables

TABLE ES.1	TSAP SAFETY STAKEHOLDER INTERVIEWS	4
TABLE ES.2	ODOT OUTREACH ACTIVITIES	5
TABLE ES.3	TSAP PERFORMANCE TARGETS (FIVE-YEAR AVERAGES)	9
TABLE 1	FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014 TO 2018)	34
TABLE 2	OREGON COMPREHENSIVE ECONOMIC VALUE PER CRASH (2019 VALUES)	48
TABLE 3	EXAMPLES OF SIGNIFICANT PAST TECHNOLOGICAL INNOVATIONS FOR IMPROVED SAFETY	52
TABLE 4	TSAP PERFORMANCE MEASURES	108
TABLE 5	TSAP PERFORMANCE TARGETS (FIVE-YEAR AVERAGE)	109
TABLE 6	EXAMPLE ACTIVITIES AND ROLES	116

Executive Summary

The Oregon Transportation Safety Action Plan (TSAP) demonstrates the State's commitment to the safety of all road users. It is a data-driven, statewide, multi-year, comprehensive plan that provides long-term goals, policies, strategies, and near-term actions to eliminate deaths and life-changing injuries on Oregon's transportation system by 2035.

Executive Summary

Transportation crashes and resulting injuries have historically been considered by many as an inevitable consequence of mobility. However, more recently this idea has been challenged as countries, states, and cities across the world seek to change safety culture and eliminate traffic fatalities and life-changing injuries entirely. The idea may be difficult to grasp initially, but when people are asked how many traffic fatalities are acceptable for their friends and family, the universal response is: 'zero'.

Why Is the TSAP Needed?

Since 2013, traffic fatalities have generally increased in Oregon, most recently to a 15-year high of 502 in 2018. Over the most recent 5 years of available crash data (2014-2018), nearly every type of fatal and serious injury has increased, and crashes have gone up in every region of Oregon (Figure ES.1).

Vision.

Oregon envisions **no deaths or life-changing injuries** on Oregon's
transportation system
by 2035



FIGURE ES.1 OREGON TRANSPORTATION FATALITIES (2000-2018)

The number of transportation fatalities normalized by population and vehicular miles traveled shows similar trends. While fatality rates have decreased since the mid-1990s, in recent years, the number of fatalities per capita and per miles traveled has remained relatively consistent (Figure ES.2).

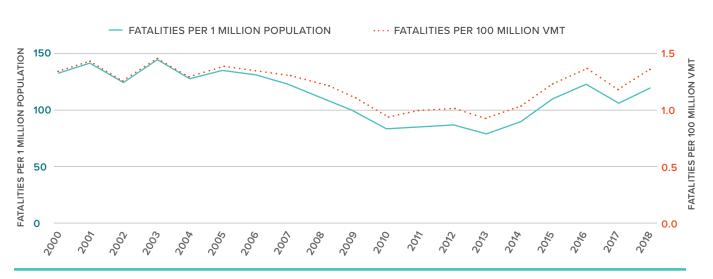


FIGURE ES.2 OREGON HISTORIC TRANSPORTATION FATALITIES PER CAPITA AND PER VEHICLE MILES TRAVELED (2000-2018)

The Federal Highway Administration (FHWA) requires every state to have a Strategic Highway Safety Plan (SHSP). The SHSP is a data-driven multi-year statewide coordinated safety plan that provides a comprehensive framework for reducing fatalities and serious injuries. The SHSP identifies key safety needs and guides safety investments in infrastructure and safety behavior programs. The TSAP serves as the Oregon SHSP.

The TSAP provides the long-term vision of zero deaths and life-changing injuries and provides goals, policies, and strategies to work toward this vision. The long-term elements of the Plan provide guidance to policy-makers, planners, and designers about how to proactively develop

a transportation system with fewer fatalities and serious injuries. The TSAP also includes a near-term component in the form of Emphasis Areas (EA) and actions. The EAs provide a framework for organizing and implementing near-term actions that will maximize the safety benefits of transportation investments (safety specific and otherwise).

The TSAP addresses all modes of transportation on all public roads in Oregon. This Plan was developed under the leadership of ODOT, but it will be implemented by ODOT and all residents, stakeholders, cities, counties, metropolitan planning organizations (MPOs), tribal governments, and affected State agencies in Oregon.

TABLE ES.1 TSAP SAFETY STAKEHOLDER INTERVIEWS

FOCUS AREAS	INTERVIEWEES		
Active Transportation	Jessica Horning, ODOT Active Transportation Section Susan Peithman, ODOT Active Transportation Section		
Large Trucks, Freight	Amy Ramsdell, ODOT Commerce & Compliance Division Jess Brown, ODOT Commerce & Compliance Division		
Data Collection & Analysis	Robin Ness, ODOT Crash Analysis and Reporting Unit Chris Wright, ODOT Transportation Data Section		
Metropolitan Planning Organization	Tyler Deke, Bend MPO		
Law Enforcement	Scott Rector, Oregon State Police		
Local Public Works	Jocelyn Blake, Association of Oregon Counties Brian Worley, Association of Oregon Counties		
Motorcycles Driving Under the Influence	Chris Henry, GAC Motorcycle Safety Committee Chuck Hayes, GAC DUII Committee		
Traffic Operations, Maintenance, & Project Delivery	Doug Bish, ODOT Traffic Services Lucinda Moore, ODOT Maintenance Gary Farnsworth, ODOT Region 4 Craig Sipp, ODOT Region 5		
Public Health	Dana Selover, Oregon Health Authority		
Social Equity	Nikotris Perkins, ODOT Office of Social Equity		

TABLE ES.2 ODOT OUTREACH ACTIVITIES

GROUPS

- TRAFFIC OPERATIONS AND STANDARDS TEAM
- PLANNING AND POLICY DISCIPLINE TEAM
- AREA MANAGERS MEETING
- COMMERCE AND COMPLIANCE DIVISION MANAGEMENT TEAM
- QUARTERLY ODOT, METROPOLITAN PLANNING ORGANIZATION AND TRANSIT DISTRICT
- OREGON BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE
- OREGON FREIGHT ADVISORY COMMITTEE
- OREGON TRANSPORTATION SAFETY COMMITTEE
- OPERATIONS MANAGEMENT TEAM
- GOVERNOR'S ADVISORY COMMITTEE ON MOTORCYCLE SAFETY

- DELIVERY AND OPERATIONS LEADERSHIP TEAM
- DEPARTMENT OF MOTOR VEHICLES –
 DRIVER PROGRAMS TEAM
- PUBLIC TRANSPORTATION ADVISORY COMMITTEE
- GOVERNOR'S ADVISORY COMMITTEE ON DUIL
- MOTOR CARRIER TRANSPORTATION ADVISORY COMMITTEE
- CENTRAL LANE MPO TRANSPORTATION PLANNING COMMITTEE
- CENTRAL LANE MPO METROPOLITAN POLICY COMMITTEE
- ROGUE VALLEY AREA COMMISSION ON TRANSPORTATION
- SOUTHWEST AREA COMMISSION ON TRANSPORTATION

The public was engaged several times on the project. The COVID-19 pandemic response limited the ability for in-person public outreach, but ODOT provided a safety-specific e-mail to receive feedback, and a stakeholder survey that was completed by 434 respondents.

ODOT also provided information on the TSAP website on a regular basis throughout development, including the following documentation: ¹

- Project Overview and Engagement Opportunities Fact Sheet
- Crash Trend Analysis and Stakeholder Feedback Fact Sheet
- Stakeholder Interview Summary
- Stakeholder Survey Summary

- · Crash Trend Analysis Report
- Performance Target Analysis Report
- · Technical Memos
 - » Pedestrian Safety and Social Equity
 - » Safety Needs Analysis and Recommendations
 - » TSAP Implementation
 - » Local Agency Safety Planning Support

Appendix A lists members of the Oregon
Transportation Safety Committee (OTSC) and
the Oregon Transportation Commission (OTC),
leadership teams and advisory committees which
the TSAP development team engaged, and
stakeholders who participated in the Stakeholder
Workshops and Performance Target Analysis
Meetings. The 2021 TSAP was adopted by the OTC
at the recommendation of the OTSC on xxxx, 2021.

¹ https://www.oregon.gov/odot/Safety/Pages/TSAP.aspx

Transportation Safety Equity

Oregon's safety leadership understands that old ways of addressing transportation problems are not serving everyone equitably. Agencies and partners across the State recognize the need to operate the entire transportation system in a fair and unbiased way that improves the quality of life of every Oregonian. All Oregonian's deserve safe and accessible transportation, especially those that have been historically-underserved.

In order to develop and maintain a transportation system that works for everyone, programs must involve the people most impacted.

In order to develop and maintain a transportation

system that works for everyone, programs must involve the people most impacted – so as to align safety investments with the unique needs of Oregonians. Agencies and partners work to improve the quality of life and transportation connected to how communities live, work, and play; ensuring age, gender, ability, ethnicity, race, language, income, and geography are not barriers.

The 2021 TSAP update focuses on revisions to emphasis area actions (Chapter 6), and transportation safety equity served as a key consideration in the revision of the short term actions. Saving lives in Oregon requires a focus on equitable and unbiased solutions for all transportation system users and all modes of travel so that the burdens and benefits of movement do not disproportionally impact one community over another.

TSAP Long-Term Goals

The goals, policies, and strategies in the TSAP are focused on changing safety culture and proactively planning, designing, operating and maintaining a transportation system that eliminates fatalities and serious injuries. Transportation Safety is a shared responsibility among transportation system owners and users. Only when residents and visitors adopt safe traveling behaviors and decision-makers invest in safety programs, policies, and infrastructure

projects will we meaningfully reduce the number of fatalities and serious injury crashes in Oregon. Recognizing that decision-makers and stakeholders must balance competing demands for insufficient resources, the Plan was developed with a safety first perspective to envision the safest transportation system possible.

Over the long term, the goals of the TSAP are:

SAFETY CULTURE

Transform public attitudes to recognize all transportation system users have responsibility for other people's safety in addition to their own safety while using the transportation system. Transform organizational transportation safety culture among employees and agency partners (e.g., state agencies, MPOs, Tribes, counties, cities, Oregon Health Authority, stakeholders and public and private employers) to integrate safety considerations into all responsibilities.

INFRASTRUCTURE

Develop and improve infrastructure to eliminate fatalities and serious injuries for users of all modes.

HEALTHY, LIVABLE COMMUNITIES

Plan, design, and implement safe systems. Support enforcement and emergency medical services to improve the safety and livability of communities, including improved health outcomes.

TECHNOLOGY

Plan, prepare for, and implement technologies (existing and new) that can affect transportation safety for all users, including pilot testing innovative technologies as appropriate.

COLLABORATE AND COMMUNICATE

Create and support a collaborative environment for transportation system providers and public and private stakeholders to work together to eliminate fatalities and serious injury crashes.

STRATEGIC INVESTMENTS

Target safety funding for effective engineering, emergency response, law enforcement, and education priorities.

Near-Term Emphasis Areas

Emphasis areas (EA) provide a strategic framework for developing and implementing the near-term component of the TSAP. Emphasis areas are near-term implementation focus areas directly related to the TSAP's long-term goals, policies, and strategies. The EAs were developed using the results of crash data analysis and input from committees, stakeholders, and the public. From this, four broad emphasis areas were chosen:

RISKY BEHAVIORS. Reductions in fatalities and serious injuries can be accomplished by deterring unsafe or risky behaviors made by drivers and other transportation users. For this emphasis area, actions are identified to minimize impaired driving, unbelted, speeding and distracted driving crashes.

INFRASTRUCTURE. Multimodal transportation assets in Oregon can be constructed or retrofitted to reduce fatal and serious injury crashes. Opportunities to do this include implementing safety treatments at intersections and along and across roadways. For this emphasis area, actions are identified to minimize intersection and roadway departure crashes.

vulnerable users. Vulnerable road users can be characterized by the amount of protection they have when using the transportation system – pedestrians, bicyclists, and motorcyclists are more exposed than people in vehicles, making them more susceptible to injury in the event of a crash. Aging drivers and pedestrians can also be more vulnerable to severe injuries in the event of a crash. Oregon neighborhoods with low-income populations

or people or color experience a higher rate of pedestrian fatalities and serious injuries per capita.¹ Causes of these disparate pedestrian injury outcomes include disproportionate use of walking and transit in these communities as well as a built environment less conducive to safe walking and transit activity. For this emphasis area, actions are identified to minimize pedestrian, bicycle, motorcycle, and aging road user crashes with a focus on low-income communities and communities that have been historically excluded based on race and ethnicity.

IMPROVED SYSTEMS. Crash and other types of safety data can be advanced to better understand the causes and locations of crashes, leading to effective solutions. One framework is the USDOT's data quality attributes: timeliness, accuracy, completeness, uniformity, integration, and accessibility. Training is used to educate planners, engineers, designers, and construction staff about the importance of safety and how to incorporate it into their everyday job responsibilities. Fully funded, staffed, and trained law enforcement and emergency response agencies can direct their efforts toward keeping users safe and, when crashes do occur, can ensure traffic incident management and emergency medical services personnel are available to respond. Commercial vehicle safety relies on licensing, training, and vehicle safety to decrease the frequency and severity of crashes. For this emphasis area, actions have been identified to continually improve data, train and educate transportation and safety staff, support law enforcement and emergency responders, and minimize commercial vehicle crashes.

¹ Roll, J., Analysis of Pedestrian Injury, Built Environment, Travel Activity, and Social Equity, Oregon Department of Transportation Research Section, 2020.

Moving Forward

The success of this plan will be measured by monitoring the number and rate of fatalities and serious injuries and the combined number of non-motorized fatalities and serious injuries.¹ FHWA requires annual targets be established, monitored, and reported – and there are ramifications for not achieving the targets. Annual targets will be documented and approved through an annual target setting process with the OTSC.

TABLE ES.3 TSAP PERFORMANCE TARGETS (FIVE-YEAR AVERAGES)

BASE PERIOD	FATALITIES	FATALITY RATE (PER 100M VMT)	SERIOUS INJURY	SERIOUS INJURY RATE (PER 100M VMT)	NON-MOTORIZED FATALITIES AND SERIOUS INJURIES
2021 BASELINE (2014-2018 DATA)	448	1.48	1,739	5.03	257
2022 TARGET (2015-2019 DATA)	444	1.46	1,722	4.98	254

The TSAP is the framework for engaging residents, stakeholders, employers, planners, engineers, enforcement agencies, emergency medical service providers, and others across the state to improve transportation safety in Oregon. Over time, and with focus, the vision of zero fatalities and life-changing injuries on Oregon roadways by 2035 can be achieved. The partnerships developed in creating this plan provide an understanding of the roles everyone can play to address safety and build trust in and ownership of the TSAP. The result will be a coordinated, multidisciplinary approach to implementing transportation safety improvements that reduce injuries and save lives.

¹ Non-motorized is defined as travel by means other than a motor vehicle or motorcycle.

Call To Action

Hundreds of thousands of Oregonians travel safely to and from work, recreation, and excursions on a daily basis. Even so, more than 500 people died on Oregon's transportation system in 2018. The Oregon Transportation Safety Action Plan (TSAP) aims to eliminate this tragedy.

Call To Action

The TSAP is a strategic safety plan for all users, all roadways, and all transportation agencies in Oregon. The plan outlines the vision, goals, policies, and strategies for long-term safety and actions to achieve near-term opportunities for transportation safety in Oregon.

The broad reach of the plan is matched by the broad array of partners that will need to commit to

Oregon envisions no deaths or life-changing injuries on Oregon's transportation system by 2035

implementing plans, policies, and programs to save lives and prevent injuries. These partners include state, regional, tribal, county, and city agencies, and the private and non-profit sectors, including, but not limited to:

- TRANSPORTATION PLANNING AND **ENGINEERING ORGANIZATIONS**
- ENFORCEMENT AGENCIES
- EMERGENCY MEDICAL SERVICE PROVIDERS
- EDUCATION PROVIDERS

- PUBLIC HEALTH AGENCIES
- SAFETY ADVOCACY GROUPS
- PRIVATE EMPLOYERS
- THE TRAVELING PUBLIC

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.

This plan provides background on the TSAP's history and programs in Chapter 2. It summarizes existing transportation safety conditions in Chapters 3 and 4. Long-term vision, goals, policies, and strategies to eliminate fatalities and life-changing injuries on the Oregon transportation network are presented in Chapter 5. Detailed actions for stakeholders to begin implementing are documented in Chapters 6 and 8. Chapter 7 outlines how the state will measure and report progress towards achieving the safety vision.

TO ACHIEVE THE PLAN VISION, ALL STAKEHOLDERS WILL NEED TO: SUPPORT THE ONGOING TSAP PLANNING PROCESS AND FIND OPPORTUNITIES TO IMPLEMENT RECOMMENDED SAFETY STRATEGIES AND ACTION STEPS IN ALL PLANNING, PROJECT DEVELOPMENT, PROGRAMMING, OPERATIONS AND MAINTENANCE ACTIVITIES COMMUNICATE AND IMPLEMENT THE TSAP VISION, GOALS, POLICIES, AND EMPHASIS AREAS TO AGENCY STAFF AND PARTNER INTEGRATE SAFETY PLANNING, PROGRAMMING, AND POLICIES INTO CURRENT WORK **RESPONSIBILITIES AND AUTHORITIES** CHAMPION THE CAUSE OF SAFETY BY EDUCATING THE PUBLIC ON THE CRITICAL ROLE INDIVIDUALS PLAY IN PREVENTING TRANSPORTATION FATALITIES AND SERIOUS INJURIES ADDRESS TRANSPORTATION SAFETY EQUITABLY AND UNBIASED COMMIT TO ADOPT AND INSTITUTIONALIZE CONTINUING CHANGE IN OREGON'S SAFETY CULTURE ENGAGE IN UPDATING THE TSAP IN THE FUTURE Leadership, collaboration, and communication will lead to a transportation safety culture focused on getting everyone in Oregon home safe.

2 Introduction

A Strategic Highway Safety Plan (SHSP) is a statewide, data-driven, coordinated safety plan that provides a comprehensive framework for reducing fatalities and serious injuries on all public roads. It is a federally required document and is the primary planning tool to address transportation safety planning issues and needs in every state.

Introduction

The SHSP identifies safety priorities, also called emphasis areas, and guides safety program and project investments using strategies and actions as a framework. The document identifies both behavioral and infrastructure-related approaches to address safety based on input from multiple disciplines, including, but not limited to, the 4 Es (engineering, emergency response, law enforcement, and education). The SHSP must meet administrative and process requirements to be approved by the Federal Highway Administration. The TSAP is the Oregon SHSP and fulfills all the federal requirements. This chapter provides background on the TSAP, describes the current planning effort to update and utilize the Plan, and the process by which it meets legislative requirements.

What Is the TSAP?

THE TSAP IS A STRATEGIC DOCUMENT THAT:

- **DEFINES OREGON'S TRAFFIC SAFETY** TRENDS AND CHALLENGES
- **IDENTIFIES A VISION, GOALS, POLICIES.** STRATEGIES, AND ACTIONS TO ELIMINATE **FATALITIES AND SERIOUS INJURIES**

The TSAP also serves as Oregon's long-range safety topic plan, an element of the Oregon Transportation Plan (OTP), and parallel to other mode and topic plans like the Oregon Bicycle and Pedestrian Plan and Oregon Freight Plan.

The motivation for developing the TSAP is clear – everyone who uses Oregon's transportation system should arrive safely at their destination. While significant investments in transportation safety have been made in the

last decade, 502 people were killed in motor vehicle crashes in 2018, the highest annual total in the past 15 years. Also in 2018, 1,686 people suffered serious injuries from traffic crashes.

There is a need and intention to eliminate these fatalities and serious injuries for all modes of travel in Oregon. Traffic crashes are a significant problem for Oregon's residents and visitors. There is an opportunity to save lives and reduce injuries through implementation of strategic actions in the areas of engineering, emergency response, law enforcement, and education; and to monitor what's working and what's not through evaluation of projects, programs, and policies. To make significant progress, coordination and collaboration across agencies and the public will be required. This is particularly true for crashes resulting from behavioral factors, such as speeding and impaired driving. The TSAP establishes the framework for addressing Oregon's most significant transportation safety challenges. While this plan addresses safety globally across modes, other statewide plans under the OTP may touch upon more specific safety strategies for each mode or topic.

502 1686

PEOPLE KILLED
IN MOTOR
VEHICLE
CRASHES

PEOPLE SUFFERING
SERIOUS INJURIES
FROM TRAFFIC
CRASHES

The transportation community recognizes that there

are multiple programs and approaches to achieving safety around the world. In the development of the TSAP, Oregon leaders have blended the best ideas in transportation safety from around the country and the world into this statewide plan. Informed by Sweden's Nulvisionen, Australia's Safe Systems approach, and the World Health Organization's Decade of Action for Road Safety, we anticipate Oregon will be informed by these concepts, and others to come in the future. New approaches to safety help inform and refine each version of the TSAP over time.

Brief History of TSAPs in Oregon

Oregon's first TSAP was adopted in 1995. The original plan was effective in focusing efforts to reduce death and injury and was held up nationally as a model for reducing crash rates and crash severity. Oregon's safety stakeholders updated the TSAP in 2004, 2006, 2011, and 2016. The 2016 TSAP recognized that Oregon's population is growing, aging, and changing, and that transportation needs are changing with them. Driver distraction was at an all-time high with heavy smartphone use in vehicles, and the current level of Oregon's pedestrian and bicyclist facilities do not fully accommodate safe and comfortable travel for the needs of all users.

In preparation of the 2021 TSAP, Oregon safety leaders identified several emerging needs in transportation that must be addressed to save lives on our system. For example, the population of aging

citizens in Oregon continues to grow, and data indicate the number of aging driver-involved crashes is increasing at a similar rate.

The COVID-19 worldwide pandemic and response will have impacts for years to come, many of which are still unknown. 2020 also brought long-overdue discussions of equity to the table, including topics of transportation, unbiased law enforcement, and roadway safety. Government agency stakeholders are incorporating discussions of systemic bias regarding safety investments.

The 2021 TSAP was adopted by the OTC at the recommendation of the OTSC on xxxx and encompasses safety efforts to be undertaken by the Department of Transportation and safety partners throughout the state.

How This TSAP Update Was Developed

The 2021 TSAP update process began in July 2020 with fact finding and scoping. A Project Management Team (PMT) was formed to guide the project, and an Agency Project Manager (APM) and consultant were added to conduct update activities.

The 2021 TSAP update is designed to be a limited and focused revision to the 2016 plan. The overall TSAP vision, goals, policies, and Emphasis Areas stayed the same. Identification of emerging safety needs (via stakeholder feedback and safety data analysis) resulted in edits throughout the TSAP and modifications to the Emphasis Area actions planned for the next 5 years.

TSAP UPDATE: OUTREACH APPROACH

- ODOT STAFF OUTREACH MEETINGS WITH A VARIETY OF LEADERSHIP TEAMS AND TRANSPORTATION ADVISORY COMMITTEES
- ONLINE SURVEY TO LEARN
 ABOUT PUBLIC PERCEPTIONS
 OF SAFETY ISSUES
- INTERVIEWS WITH OREGON SAFETY
 STAKEHOLDERS ACROSS THE 4 ES TO
 SOLICIT FEEDBACK ON THE 2016 TSAP
 AND IMPLEMENTATION PROGRESS
- ONLINE STAKEHOLDER
 WORKSHOPS EACH WITH
 APPROXIMATELY 40 PARTICIPANTS
- FACT SHEETS (ENGLISH/SPANISH) TO
 INTRODUCE THE 2021 TSAP UPDATE AND
 PROVIDE MID-PROJECT PROGRESS REPORT
- ONLINE STAKEHOLDER
 PERFORMANCE MEASURE
 MEETINGS, EACH WITH
 APPROXIMATELY 20 PARTICIPANTS

ODOT and the Consultant team conducted outreach to public and private stakeholders. Several key activities contributed to the development of the Plan. These include:

- TSAP UPDATE WEBSITE. Hosted by ODOT at https://www.oregon.gov/odot/Safety/Pages/TSAP. aspx, the TSAP website provided all interested parties information about the plan update, including fact sheets introducing the effort and giving a midproject status report. Fact sheets were produced in English and Spanish to improve availability.
- **PUBLIC SURVEY.** ODOT hosted a public online survey from October 1 to November 20, 2020, to identify key safety issues and opportunities. More than 400 individuals completed the survey; of that group, more than 200 responded that it was their first time providing this type of feedback.
- **DATA ANALYSIS.** Analysis of crash data from 2014 through 2018 to identify trends and problematic crash types and behaviors. The analysis helped the PMT understand the "who, why, where, and what" of crashes, fatalities, and serious injuries in Oregon.
- **LEADERSHIP MEETING AND ADVISORY COMMITTEE PRESENTATIONS. ODOT Planning** and Safety staff presented and discussed the TSAP update effort in 27 meetings from October 2020 through May 2021. Discussions identified issues and opportunities to inform the TSAP update.
- **STAKEHOLDER INTERVIEWS.** The consultant conducted 10 interviews with safety stakeholders and subject matter experts, ranging among the disciplines of roadway safety and geographically across the state. The purpose of the interviews was to help identify key issues to address in the update, including elements of the previous plan that need

- to be reconsidered, and new items that should be added.
- **EMPHASIS AREA ACTION REVIEW.** Oregon safety leaders and the consultant conducted a critical review of Emphasis Area actions from the 2016 TSAP. The team eliminated the previous tiered system, identified the most appropriate recommended actions, and then facilitated a workshop with safety stakeholders to review the new proposed actions. Upon receiving input from safety subject matter experts during this workshop, and following subsequent reviews of the draft TSAP, the team finalized the current list of actions shown in Chapter 6.
- **STAKEHOLDER WORKSHOPS.** Two stakeholder workshops were held to present the results of data analysis and other activities, and gather feedback on the Emphasis Area actions and discuss implementation opportunities and barriers.
- PERFORMANCE MEASUREMENT MEETINGS.
- Oregon safety leaders and stakeholders participated in two online meetings to review Oregon's Safety Performance Measure Targets methodology, analyze current status of meeting those targets, and evaluate the need for changes to maintain consistency with current federal requirements.
- **DRAFT TSAP PUBLIC REVIEW.** In May 2021, Oregon published the Draft 2021 TSAP for public review and comment, allowing a 45-day public review period.
- DRAFT TSAP PUBLIC HEARING. In June 2021, a Public Hearing was conducted to solicit input from stakeholders and the general public on the Draft 2021 TSAP.

How This TSAP Will Be Used

Roles and Responsibilities

Improving and sustaining transportation safety necessitates work from multiple agencies and multiple disciplines. Most transportation safety activities include a mix of federal, state, and local policy and funding and implementation actions. A brief overview of how these responsibilities are coordinated and carried out follows:

DECISION-MAKING

The **Oregon Transportation Commission**

(OTC) includes five commissioners, appointed by the Governor, confirmed by the Senate, and representing the different geographic regions of the state. The OTC establishes state transportation policy. The commission holds recurring meetings to oversee Department of Transportation activities relating to highways, public transportation, rail, transportation safety, motor carrier transportation, and driver and motor vehicles. The OTC formally adopts the TSAP as a topic plan that is an element of the Oregon Transportation Plan.

The Oregon Transportation Safety Committee (OTSC) is charged as the hub for transportation safety activities in Oregon. The OTSC is a five member, Governor-appointed committee that oversees the administration of federally funded safety programs and advises the Oregon Transportation Commission on the safety implications of transportation policy. The TSAP is approved by OTSC as a plan for the whole state. They also advise the Transportation Safety Division and perform other functions related to transportation safety as delegated by the OTC.

Two other Governor's Advisory Committees focus on specific areas of concern in transportation safety and advise the OTSC: Driving Under the Influence of Intoxicants (DUII) and Motorcycle Safety.

OREGON DEPARTMENT OF TRANSPORTATION

ODOT Values: Of the values that guide ODOT decision-making, safety is number one.

Safety: We protect the safety of the traveling public, our employees, and the workers who build, operate and maintain our transportation system.

TRANSPORTATION SAFETY DIVISION (TSD)

TSD plans, organizes, and conducts the statewide behavioral transportation safety program by coordinating activities and programs with other state agencies, local agencies, nonprofit groups, and the private sector. It serves as a clearinghouse for transportation safety materials and information, and cooperates and encourages research and special studies to support legislative initiatives and new programs.

The Transportation Safety Division provides information, direct services, grants, and contracts to the public and to partner agencies and organizations. More than half the funding comes from federal funds earmarked for safety programs (the National Highway Traffic Safety Administration (NHTSA), Federal Highway Administration (FHWA), and similar federal traffic safety grant programs). The Division administers hundreds of grants and contracts each year to deliver safety programs to Oregon citizens.

DELIVERY AND OPERATIONS DIVISION

The Delivery and Operations Division's **Traffic** Roadway Section addresses the federal safety requirements, including the state Safety Management System (SMS). As defined by the FHWA, an SMS is "a systematic process which increases the likelihood of reaching safety goals by ensuring that all opportunities to improve highway safety are identified, considered, implemented as appropriate, and evaluated in all phases of highway planning, design, construction, maintenance, and operations." The All Roads Transportation Safety (ARTS) Program is the name of Oregon DOT's Highway Safety Improvement Program (HSIP) administration effort. ARTS addresses safety needs on all public roads in Oregon. Traffic Roadway authors the annual HSIP Report submitted to the FHWA. This section also establishes guidelines for speed zones and traffic control devices on state and local roads.

Operations and Maintenance Districts maintain traffic control devices and Intelligent Transportation System (ITS) equipment, including those installed as safety improvements. They respond to weather and other incidents that can cause dangerous conditions, including landslides/rockfall, down trees, and drainage problems. Routine maintenance also reduces hazards such as clearing loose gravel from shoulders and bike lanes. The Travel Information Council manages the state's roadside rest areas, giving tired or stressed drivers a safe place to relax and renew before returning to the highway.

ODOT Traffic Incident Management works with the FHWA to coordinate training and support cooperation among the many emergency service providers involved in crash response and maintains operations while managing crash scenes.

DRIVER AND MOTOR VEHICLE SERVICES DIVISION (DMV)

The Driver and Motor Vehicle Services Division is charged with licensing drivers and vehicles. DMV safety activities include the At-Risk Driver Program which evaluates drivers when there is a concern about their ability to safely operate a motor vehicle, based on whether a driver has physical, cognitive, or medical limitations that affect their ability to drive a vehicle. DMV also provides driver manuals, new driver testing and licensing, insurance standards, and crash reporting.

COMMERCE AND COMPLIANCE DIVISION

The Commerce and Compliance Division develops and implements a Commercial Vehicle Safety Plan, a Summary of Oregon Truck Safety and Guide, and an annual Safety Action Plan to Reduce Truck-at-Fault Crashes.

The Commerce and Compliance Division has nine Safety Offices statewide and a Truck Safety hotline to take reports of truck safety problems. The division provides information and education to help drivers understand how to drive around trucks safely and farm truck safety. The Division conducts truck and bus safety inspections. Truck Safety Corridors focus enforcement on traffic along Oregon's major freight routes where truck-at-fault crashes happen. The Rail Crossing Safety Section is also part of the Commerce and Compliance Division, this section performs a variety of duties related to the safety and regulation of railroad crossings in Oregon.

POLICY, DATA AND ANALYSIS DIVISION

The Policy, Data and Analysis Division includes the crash data collection and analysis and long-range planning functions for ODOT.

Crash Analysis and Reporting Unit provides motor vehicle crash data through database creation, maintenance and quality assurance, information and reports, and limited database access. Approximately 10 years of crash data are maintained at all times. Vehicle crashes include those coded for city streets. county roads, and state highways.

Planning Section develops and maintains the Oregon Transportation Plan and the mode and topic plans that are parts of the OTP and that add further detail around major transportation issues. The TSAP is one of the topic plans. The Transportation Planning and Analysis Unit, within the Planning Section, implements the Highway Safety Manual that provides tools for considering safety in planning and project development processes.

Freight Section is a stakeholder in the TSAP as it supports safety initiatives relevant to the interaction and the movement of freight throughout the transportation system.

Research Section: Completed and ongoing research projects include safety and technology topics to improve engineering and planning practice and keep up with technological advancements.

PUBLIC TRANSPORTATION DIVISION

The Public Transportation Division is a stakeholder in the TSAP as it supports safety initiatives relevant to rail, multimodal, and active transportation. This division includes the Bicycle and Pedestrian

Program that has established goals that set forth to reduce crashes involving people walking and biking, eliminate crashes that result in injuries and deaths, and promote walking and biking to improve health and safety. The Program works towards these goals by supporting implementation of the Oregon Bicycle and Pedestrian Plan and the TSAP, developing walking and bicycling safety and education materials, funding projects that improve conditions for walking and biking, and providing planning and design guidance for pedestrian and bicycle projects.

OTHER STATE AGENCIES

OREGON HEALTH AUTHORITY

The Oregon Health Authority is at the forefront of improving quality and increasing access to health care in order to improve the lifelong health of Oregonians, including programs for injury prevention and maintaining vital statistics.

Emergency Medical Services and Trauma Systems Program. Develops and regulates systems for quality emergency medical care in Oregon, ensuring that EMS Providers are fully trained, emergency medical vehicles are properly equipped, and emergency medical systems are functioning efficiently and effectively.

EMS Section. Licenses Emergency Medical Responders (EMR), Emergency Medical Technicians (EMT), Advanced EMT (AEMT), EMT-Intermediate (EMT-I), and Paramedics in the State of Oregon. Oregon Emergency Medical Responder education must meet or exceed the National Emergency Medical Services Education Standards published by the National Highway Traffic Safety Administration, January 2009.

OREGON STATE POLICE

The Oregon State Police maintain transportation safety as part of their agency mission. Department of State Police programs and services that contribute to transportation safety include major crime investigations; state emergency response coordination; statewide Law Enforcement Data System; coordination of federal grants for public safety issues; crime lab; patrol services and medical examiner services.

OREGON LIQUOR CONTROL COMMISSION (OLCC)

Oregon Liquor Control Commission staff members make group presentations to businesses selling alcohol to reduce driving under the influence of alcohol. Topics cover liquor laws, enforcement, false ID, under-age access, cannabis, and server responsibility. Commission has information on server education courses offered by private providers.

LOCAL, REGIONAL, AND TRIBAL ENTITIES

Cities, counties, MPOs, and tribes can take several approaches to improving transportation safety. By adopting a Safe Communities Program, a community can take a big picture approach to injury prevention. Oregon Safe Communities are collaborations of the NHTSA, ODOT, local communities, and many other partners. Many communities appoint Traffic Safety Committees to focus energy on solving local safety problems. For example, a community may implement an automated enforcement program to reduce red light running or speeding. A list of current Traffic Safety Committees is available here: https:// oregonimpact.org/Traffic_Safety_Committees.

Several local agencies and Tribal governments have developed Local Road Safety Plans (LRSPs) and Tribal Road Safety Plans (TRSPs). A local or Tribal plan is designed to focus the most relevant aspects of the Oregon TSAP to local safety needs.

Another popular safety program is Safe Routes to School, a local initiative that may be supported by grant funding, and that identifies opportunities to encourage walking and biking to schools such as education, coordinating "walking buses" (one or more adults accompany children walking to school), mapping safe routes, bike-to-school events, infrastructure improvements, or other creative solutions to improve safety while encouraging exercise.

THE GENERAL PUBLIC

In the end, every Oregon resident and visitor is a safety stakeholder and will benefit from implementation of the TSAP. Each road user's behavior affects others on the road, and the design and operation of the transportation system affects everyone directly or indirectly. Even those who rarely travel outside their neighborhood are impacted by their local experience, and also by the safety and operations of deliveries to their home and to businesses they frequent.

How the TSAP Links to Other Plans

The TSAP serves as the unifying framework for transportation safety planning in Oregon. Safety efforts that are led by ODOT, are informed by the Strategic Action Plan (SAP) that establishes priorities and goals to inform ODOT work, guide decision-making, and are objectives against which ODOT will be held accountable. Various other plans, policies, and processes in the state have safety components that may be addressed through other programs and resources. The TSAP

looks at transportation safety for all modes and focuses on a data- driven approach to identify goals, policies, strategies, and actions focused on safety. Other state modal and topic plans and regional and local plans also must be considered. Consistency between plans reinforces the transportation safety message while maximizing resources available to implement solutions. Figure 1 illustrates the relationship of the TSAP to other Oregon and MPO plans.

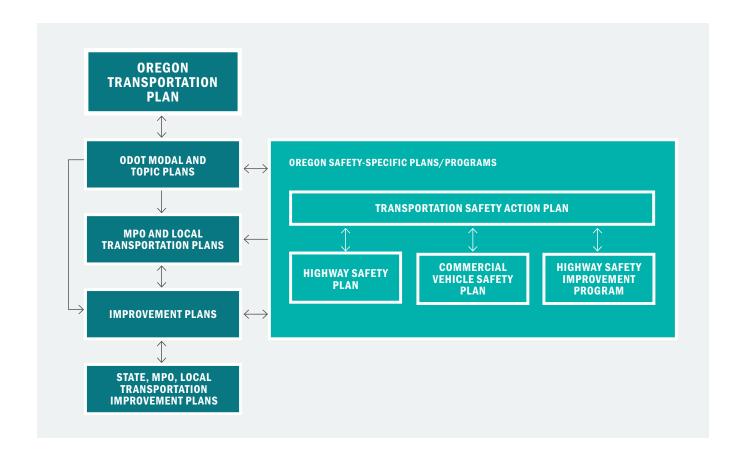


FIGURE 1 RELATIONSHIP OF THE TSAP TO OTHER OREGON AND MPO PLANS

As part of the TSAP update process, a review of existing state plans was conducted, with a specific emphasis on safety. The purpose of this review was to identify policies and strategies that should be considered in the TSAP to ensure consistency across plans.

As a Topic Plan that is part of the Oregon Transportation Plan, the TSAP implements the OTP

safety goals and will inform the development of safety goals for new and updated plans. Also, the TSAP is an important resource for transportation safety direction as state, regional, tribal, county, and city plans are updated or new plans are developed. These plans should be consistent with the TSAP with respect to safety to effectively link to TSD and other resources for safety planning and improvements.

State and Federal Requirements

State Planning Requirements and Relationships to State Laws OREGON TRANSPORTATION COMMISSION (OTC) ROLE - DUTIES AND RESPONSIBILITIES

ORS 184.618(1) states:

As its primary duty, the Oregon Transportation Commission shall develop and maintain a state transportation policy and a comprehensive, long-range plan for a safe, multimodal transportation system for the State, which encompasses economic efficiency, orderly economic development, and environmental quality. The plan shall include, but not be limited to, aviation, highways, mass transit, pipelines, ports, rails, and waterways. The plan shall be used by all agencies and officers to guide and coordinate transportation activities and to ensure transportation planning utilizes the potential of all existing and developing modes of transportation.

Oregon has designated the Oregon Transportation Plan, the adopted mode and topic plans (Aviation, Bicycle and Pedestrian, Freight, Highway, Public Transportation, Rail, Transportation Options, and Transportation Safety Action), and facility plans as the state transportation policy and comprehensive long-range plan. Thus, the Oregon Transportation Plan (OTP) and each of the mode, topic, and facility plans have legal authority.

The OTP and its modal and topic elements achieve the statutory planning requirement for the Oregon Transportation Commission and ODOT. The OTP is the umbrella document, which may be further detailed in the mode and topic plans. Oregon Revised Statute (ORS) 184.618(1) requires state agencies to use the OTP to "guide and coordinate transportation activities" but it does not authorize the OTC

to impose OTP goals, policies, and performance measures on other state agencies. The OTP operates within the legal context of the State Agency Coordination Program and the Land Conservation and Development Commission's Transportation Planning Rule (TPR) (discussed further below), which impose additional requirements related to the public decision process and consistency among plans in all affected jurisdictions. The OTP, and its elements, must also comply with federal legislation.

TSAP RELATIONSHIP TO STATE LAND USE PLANNING GOALS AND ADMINISTRATIVE RULES

STATE AGENCY COORDINATION PROGRAM (OAR 731-15-0045)

The Oregon Transportation Commission adopted rules to implement ODOT's State Agency Coordination (SAC) Program in September 1990.

The adoption of transportation policy falls under the requirements of those State Agency Coordination Program rules (Oregon Administrative Rule [OAR] 731-15). The rules require ODOT to involve interested parties and affected jurisdictions when developing plans or adopting major amendments to plans. The Department has found that the Plan is in compliance with all applicable statewide planning goals (see Appendix C).

TRANSPORTATION PLANNING RULE (OAR 660-012)

Oregon's statewide planning goals established state policies in 19 different areas. The TPR implements the Land Conservation and Development Commission's Planning Goal 12 (Transportation) which requires ODOT to prepare a Transportation System Plan (TSP) to identify transportation facilities and services to meet state needs. The Oregon Transportation Plan and adopted multimodal, mode, topic, and facility plans serve as the state TSP.

The TPR requires metropolitan planning organizations and certain counties to prepare regional TSPs consistent with the adopted state TSP. Cities and counties must prepare local TSPs that are consistent with the state TSP and applicable regional TSPs. The Oregon Transportation Plan and its mode, topic, and facility plans, comprise the adopted state transportation systems plan, so regional and local TSPs must be consistent with the OTP, including the Transportation Safety Action Plan.

SAFETY-SPECIFIC REGULATION

- ORS 802.300. Transportation Safety Committee. Creates the Oregon Transportation Safety Committee to advise the OTC and the Director regarding the safety programs and funds identified in 802.310.
- ORS 802.310. Transportation safety programs administrator. The Administrator for Transportation Safety is named as the Governor's Highway Safety Representative for purposes of meeting the Federal Highway Safety Act of 1966. Further, the Director is charged with organizing, planning, and conducting a statewide safety program. The program is to coordinate with partners inside and outside the Department to promote safety, serving as the clearinghouse for safety information. The Director and OTC are charged with making safety recommendations based on the advice of the OTSC. Finally, the Department is charged with working with local governments on plans and activities for safety.
- ORS 802.315. Department authority to apply for and receive federal highway safety program grants and other funds. Department authority to apply for and receive federal highway safety program grants and other funds, and to provide funding for local government program participation. The Department, with advice from the OTSC is to plan and conduct highway safety programs carried out under the Federal Highway Safety Act.
- ORS 802.320. Motorcycle safety program. The Department, with advice from the OTSC, is to plan for and conduct training for motorcycle safety. The Department does this in

- consultation with local groups. (The Governor's Advisory Committee on Motorcycle Safety provides a conduit for local consultation).
- ORS 802.325. Bicycle safety program. The Department is charged with planning for and delivering bicycle safety programs in consultation with local groups. This program is allowed to raise funds to provide programs.
- ORS 802.329. City and county highway safety program participation authorized. Cities and counties are explicitly allowed to participate in highway safety programs.
- **ORS 184.741.** Safe routes to schools program; rules. This law provides for the planning of, and conducting of, local and state safe route to school programming.

Appendix C provides the findings of compliance with Oregon Transportation Safety, Land Use, and Transportation Planning Requirements

Federal Requirements

The 2015 Fixing America's Surface Transportation (FAST) Act continued a previous requirement for states to have a Strategic Highway Safety Plan (SHSP). Moreover, several specific process-oriented requirements must be met as states develop their SHSPs. The SHSP must incorporate input from a range of partners from diverse disciplines, address all roadway users on all public roads, be data driven, include measurable objectives, and identify how progress will be evaluated. The SHSP must be developed through a cooperative process involving local, state, federal, tribal, and private-sector safety stakeholders. In particular, the following stakeholders must be consulted in the SHSP update process:

- GOVERNORS HIGHWAY SAFETY REPRESENTATIVE
- METROPOLITAN PLANNING ORGANIZATIONS
- REPRESENTATIVES OF MAJOR MODES **OF TRANSPORTATION**
- STATE AND LOCAL TRAFFIC **ENFORCEMENT OFFICIALS**
- HIGHWAY-RAIL GRADE-CROSSING **SAFETY REPRESENTATIVE**

- MOTOR CARRIER SAFETY PROGRAM
- MOTOR VEHICLE ADMINISTRATION AGENCIES
- COUNTY TRANSPORTATION OFFICIALS
- STATE REPRESENTATIVE OF **NONMOTORIZED USERS**
- FEDERAL, STATE, TRIBAL, AND LOCAL **SAFETY STAKEHOLDERS**

The FAST Act continued the High-Risk Rural Roads (HRRR) special rule under 23 USC 148(g), which requires a state to obligate a certain amount of funds on HRRRs if the fatality rate has increased during the past two years. In particular, it states that: "If the fatality rate on rural roads (collectors and local roads) in a state increases over the most recent two-year period for which data are available, that state shall be required to obligate in the next fiscal year for projects on high-risk rural roads an amount equal to at least 200 percent of the amount of funds the state received for fiscal year 2009 for high-risk rural roads." As of 2018 available data, Oregon meets the criteria for the HRRR special rule.

The FAST Act also includes a special rule (23 U.S.C. 148(g)(2)) related to drivers and pedestrians over 65: If statewide traffic fatalities and serious injuries per capita for these groups increases during the most recent two-year period for which data are available, the state must include strategies in its SHSP to address those issues. This plan recognizes this requirement and establishes a baseline for monitoring fatalities and serious injuries involving aging drivers and pedestrians. As of 2018 available data, Oregon meets the criteria for this special rule, and the TSAP includes specific actions to address aging road users.

Meeting Federal TSAP Requirements

The TSAP fulfills Oregon's requirement to have an updated SHSP. A checklist detailing how Oregon has met federal requirements is provided in Appendix B, and a few key highlights are listed here:

- CONSULTATION. The TSAP update process included extensive stakeholder and public involvement. Consultation with the required groups occurred throughout the process. Stakeholders and safety experts were provided with several opportunities to review the document and to offer suggestions. Additionally, the draft final plan was distributed for public comment in May 2021.
- DATA. A thorough analysis of crash data was conducted to identify trends and areas of concern, and to support the update of near-term emphasis area actions in the TSAP.
- **PERFORMANCE MANAGEMENT.** Oregon has set the five required safety performance measure • targets (fatalities, fatality rate, serious injuries, serious injury rate, and nonmotorized fatalities and serious injuries) via the TSAP update process. HSIP and HSP staff were involved in establishing the annual target-setting process.
- **MULTIDISCIPLINARY APPROACH.** Technical staff from ODOT were consulted in the development of the plan, including pedestrian and bicycle, motor carrier, freight, traffic operations, traffic engineering, construction, and maintenance experts. ODOT, local agencies, law enforcement, public health, and regional planning organizations were also consulted to address the 4 Es (engineering, emergency response, law enforcement, and education) and provide input on Emphasis Area actions in two stakeholder workshops.

The TSAP meets federal requirements for a SHSP, but is unique in its linkage to long-term goals, policies, and strategies that influence transportation policy, planning, programming, and projects.

- **COORDINATION.** A thorough review of existing plans and policies was conducted to inform the development of the TSAP, and relevant elements were incorporated into this update. For example, the TSAP takes into account the new ODOT Blueprint for Urban Design (BUD) related to designing for an urban context with safety as a focus.
- **EVALUATION.** The TSAP includes a chapter on evaluating progress, including monitoring the MAP-21 required performance measures and reviewing Emphasis Area actions conducted to support the 2016 TSAP to determine what should be continued, what could be removed, and what actions need refining. The results of these evaluations informed updates to Chapter 6 and Chapter 7.

- HIGH-RISK RURAL ROADS (HRRR) SPECIAL RULE. Twice since 2018, Oregon has been flagged for an increase in HRRR fatal crash rates. Strategies to address the increase in fatal crashes on rural roadways are included in the TSAP.
- **OLDER DRIVERS AND PEDESTRIANS** SPECIAL RULE. A review of the per capita older drivers and pedestrians fatal and serious injury rate indicates that this rule does apply to the update process. Strategies to address the increase in fatalities and serious injuries among the older population are included in the TSAP.

Conclusion

The TSAP is Oregon's federally required SHSP. It meets the federal requirements for an updated SHSP and goes well beyond those requirements. The TSAP is integrated into the Oregon transportation policy framework and includes long-term planning goals and policies. As a result, it serves as both a shortterm (five-year) and long-term policy document to guide Oregon toward no fatalities and serious injuries on its transportation system. It also creates an opportunity for a wide range of stakeholders to become involved in statewide safety planning and programming.

3

Transportation Safety Trends

Safety professionals study statewide crash data and regional details to understand the history of crashes and use that information to improve roadway safety. Though the locations, types, and attributes¹ of past crashes are not perfect predictors of the future, they provide important clues to help safety professionals identify needs, select appropriate treatments, and evaluate strategy effectiveness.

Transportation Safety Trends

The TSAP was developed using the best available safety data to identify critical transportation safety issues and safety improvement opportunities for all public roads in Oregon. The contents of the TSAP are primarily derived from an analysis of 2014-2018 Oregon crash data, which describes trends related to crash types, crash severity, crash demographics, and contributing factors at the statewide and ODOT regional level. The results of this analysis are described in this chapter.

Understanding Data Limitations

While the results of this crash analysis are important indicators of transportation safety opportunities, it is important to recognize data limitations. For example, Oregon is a self-reporting state, which means that only those crashes where law enforcement conducts an investigation are required to receive a law enforcement officer-completed crash report. Therefore, there are a relatively small number of property damage only (PDO) crashes in the Oregon state crash database. The problem of underreported crashes can skew the results of crash data analysis.

Oregon is a self-reporting state, which can lead to underreported crashes and skew crash data analysis results.

While crash data serves as the primary data source for the development of the TSAP, input from leadership groups, advisory committees, stakeholders, and the public also were considered during the planning process.

^{1 &}quot;Attributes" as used in this Plan means characteristics of a crash that may be useful for analysis. In some cases they may contribute to a crash occurring or its severity, but that is not required for them to be considered.

Crash History and Trends

Figure 2 shows the number of transportation fatalities in Oregon from 2000 through 2018. To account for fluctuations in crashes, the chart also shows the five-year average number of crashes from 2000 through 2018. There was an overall downward trend in fatalities from 2005 to 2013; however there has been an increase since that time.



FIGURE 2 OREGON TRANSPORTATION FATALITIES (2000-2018)

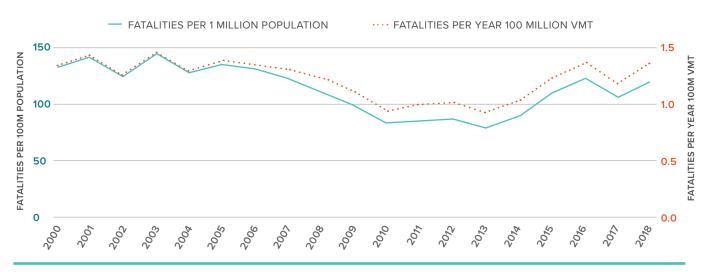


FIGURE 3 OREGON HISTORIC TRANSPORTATION FATALITIES PER CAPITA AND PER 100 MILLION VEHICLE MILES TRAVELED (2000-2018)

Statewide Crash History and Trends

Figure 4 illustrates the recent trend of traffic fatalities and serious injuries in Oregon. In the most recent year of the study period, 2018, there were 502 people killed and 1,686 seriously injured. Serious injuries are considered "life-altering" for the victim and their loved ones; examples include loss of limbs, paralysis, and disfigurement. In many cases these injuries make it difficult to work, care for family members, or pursue other typical daily activities.

Roadway crashes and resulting outcomes are not limited to either urban or rural areas of Oregon. As illustrated in Figure 5, fatalities and serious injuries occur somewhat more often on urban roadways.

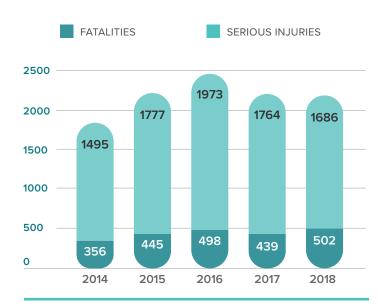
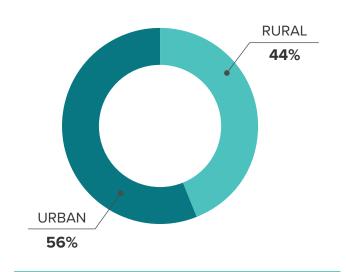
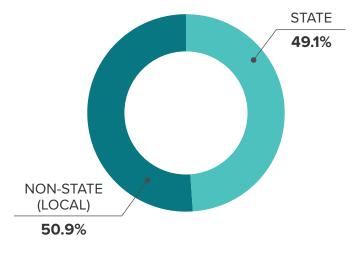


FIGURE 4 FATALITIES AND SERIOUS INJURIES (2014-2018)

Figure 6 below shows the distribution of fatalities and serious injuries on State-owned and non-State-owned roadways in Oregon.





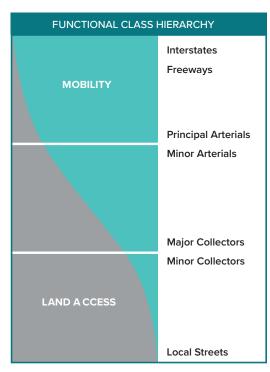


PROPORTION OF FATALITIES AND SERIOUS INJURIES BY ROADWAY OWNERSHIP (STATE AND NON-STATE) (2014-2018)

FIGURE 6

Functional Classification. Fatal and serious injury crashes also occur on all types of roadways. Roads are classified as follows:

- Interstate. Highest classification of arterials, designed and constructed with mobility and long-distance travel in mind.
 Directional lanes, separated by barrier, and ramp-only access.
- Freeway/Expressway. Directional travel lanes that are usually separated by a physical barrier, and access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections.
- Principal Arterial. Provides a high degree of mobility through urban and rural areas, and abutting land uses can be served directly.
- Minor Arterial. Provides moderate-length trips and offers connectivity to the higher arterial system, providing intracommunity continuity.



- Collector. Gathers traffic from local roads and connects to the arterial network.
- Local. Provides direct access to abutting land and are not intended for long-distance travel. Often designed to discourage through traffic.¹

As shown in Figure 7, the distribution of fatal and serious injury crashes by roadway functional classification is not equal. Crashes that result in fatal or serious injuries are most common on Principal Arterials and Minor Arterials, as well as Rural Collector roads. For example, of all fatal and serious injury crashes in Oregon, 23 percent occur on Urban Principal Arterials, and 61 percent occur on some type of Arterial.

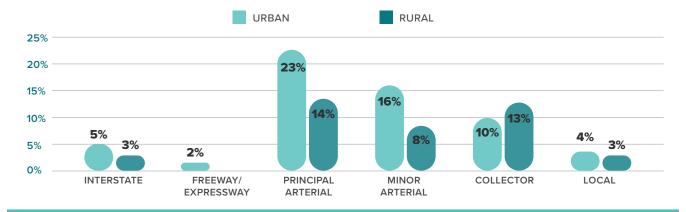


FIGURE 7 PROPORTION OF FATAL & SERIOUS INJURY CRASHES BY ROADWAY FUNCTIONAL CLASSIFICATION (2014-2018)

¹ Highway Functional Classification Concepts, Criteria and Procedures, Federal Highway Administration, Washington, D.C., 2013. https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/section00.cfm.

Statewide Crash Attributes

One way to study fatal and serious injury crashes is to categorize them by attribute (e.g., age of driver, alcohol involvement, roadway departure). With an understanding of these attributes it is possible to develop plans, policies, and programs to reduce crash frequency and severity.

Table 1 shows a number of attributes related to fatal and serious injury crashes in Oregon. In some cases the attribute may contribute directly to the crash occurring or to its severity. However, due to limitations of crash data elements (because in most cases the reporting officer was not at the scene when the crash occurred), this analysis only concludes that the category correlates to the crash, not that it was necessarily the cause. The crash attributes shown in this table can also be organized into three categories: Road Users, Behavioral Issues, and Roadway Locations. Analysis of these categories follows Table 1.

FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014 TO 2018) TABLE 1

	FATAL AND SERIOUS INJURY CRASHES	
ATTRIBUTES	2014-2018 TOTAL	PROPORTION OF TOTAL FATAL AND SERIOUS INJURY CRASHES
Roadway Departure Crashes	3,888	41.0%
Intersection Crashes	3,413	36.0%
Speed-Related Crashes	2,251	23.7%
Alcohol and/or Other Drugs Involved	2,121	22.4%
Alcohol Involved (No Drugs)	1,335	17.4%
Crashes Involving Unrestrained Occupant(s)	900	9.5%
Young Driver(s) (15-20) Involved	1,350	14.2%
Aging Driver(s) (65+) Involved	2,082	21.9%
Crashes Involving Pedestrian(s) Injured or Killed	926	9.8%
Crashes Involving Unlicensed Driver(s)	1,015	10.7%
Crashes Involving Distracted Driver(s)	806	8.5%
Crashes Involving Bicyclists(s) Injured or Killed	333	3.5%
Commercial Motor Vehicle Involved	527	5.6%
Motorcycle Involved	1,364	14.4%
Work Zone Involved	121	1.3%
School Bus or School Zone Involved	68	0.7%

When reviewing the "Proportion of the Total" column, note that the attributes listed in Table 1 are not mutually exclusive, so they cannot be summed to calculate a total number. For example, in many cases roadway departure crashes are also speed related; that crash event will show up in both numbers.

Road Users

Road users are illustrated in Figure 8, and they range from motor vehicle drivers to non-motorized road users and those operating special vehicles (e.g., school buses, commercial motor vehicles). Aging drivers (age 65+) are involved in the highest proportion of fatal and serious injury crashes, followed by young drivers (age 15-20) and motorcyclists.¹

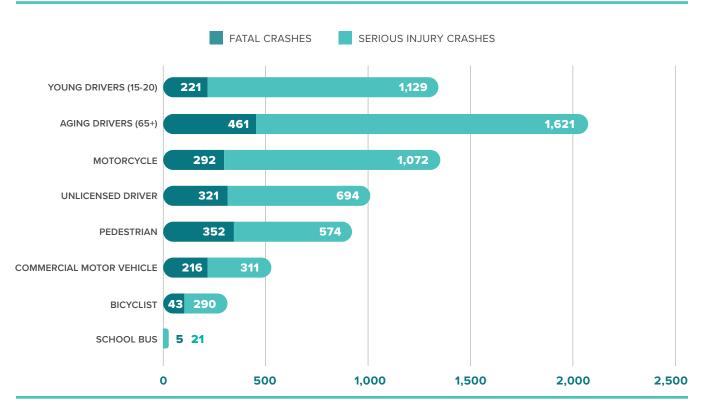


FIGURE 8 PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY INVOLVED ROAD USER (2014-2018)

¹ Note that some road user attributes are not mutually exclusive. For example, some motorcycle riders are also young drivers.

Behavioral Issues

Behavioral issues (e.g., speeding, impaired driving, and distracted driving) have a significant effect on the frequency and severity of roadway crashes. In fact, more than 90 percent of all crashes involve human error. Some of these crash attributes are choices a motorist makes before getting behind the wheel (e.g., drinking alcohol). Others are actions taken during a trip that affect the road users and others (e.g., speeding, not wearing a safety belt). As shown in Figure 9, speeding is the most common behavioral issue associated with fatal and serious injury crashes in Oregon, followed by crashes involving alcohol and/or other drugs. Note that some attributes not showing up as a higher number in this figure could have a higher actual occurrence. For example, it can be difficult for law enforcement officers to accurately identify inattention or drug involvement.

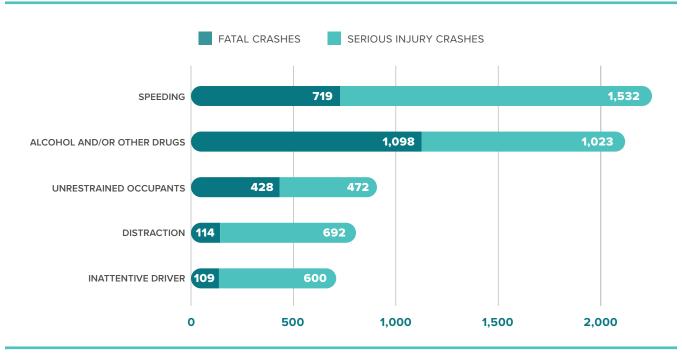


FIGURE 9 PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY BEHAVIORAL ISSUE (2014-2018)

¹ K. Rumar. "The Role of Perceptual and Cognitive Filters in Observed Behavior," Human Behavior in Traffic Safety, eds. L. Evans and R. Schwing, Plenum Press, 1985.

Roadway Locations

Roadway locations are important because they can point safety engineers to specific locations experiencing crashes and to roadway elements that may contribute to crashes. The roadway (or off-roadway) locations of fatal or serious injury crashes include roadway or lane departure locations, intersections, work zones, and school zones. Figure 10 shows that more than half of fatal and serious injury crashes in Oregon occur as a result of a vehicle departing its proper lane. Crashes at intersections also account for a large number of fatalities and serious injuries. Just over a third of fatal and serious injury crashes from 2014 to 2018 occurred at an intersection.



FIGURE 10 PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY LOCATION TYPE (2014-2018)

Most Common Statewide Crash Attributes

The crash attributes also were considered on a statewide basis. Figure 11 illustrates the number of fatal and serious injury crashes that include each attribute, and also the percentage of all reported Oregon crashes (i.e., all severities) by attribute that resulted in a fatality or serious injury. For example, motorcycles were involved in 1,364 fatal and serious injury crashes during the study period, while 27 percent of all reported motorcycle-involved crashes included at least one fatality or serious injury.

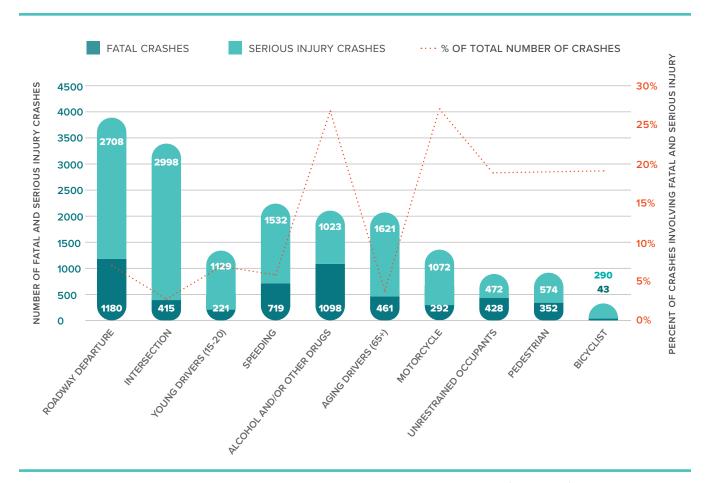


FIGURE 11 FATAL AND SERIOUS INJURY CRASHES BY MOST COMMON ATTRIBUTES (2014-2018)

Note that these categories are not mutually exclusive, as a single crash can include more than one attribute. For example, a number of alcohol-involved crashes also include unrestrained occupants, so a single crash may show up in both bars in Figure 3.9. This also provides an opportunity to reduce crash attributes that present together (e.g., behavioral risk factors, speeding and roadway departure).

Regional Crash Attributes

ODOT DIVIDES THE STATE INTO FIVE REGIONS (FIGURE 12):

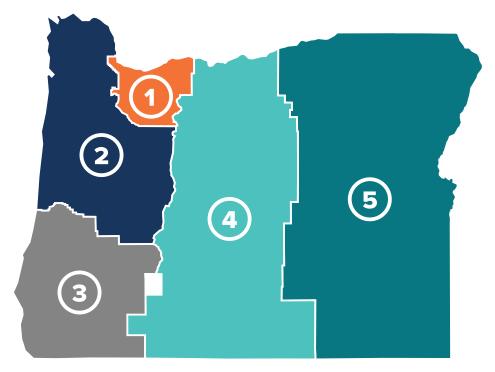


FIGURE 12 OREGON DOT REGIONS

REGION



PORTLAND METRO

CLACKAMAS, HOOD RIVER, MULTNOMAH AND WASHINGTON COUNTIES

2

WILLAMETTE VALLEY, NORTH, AND MID-COAST

CLATSOP, COLUMBIA, TILLAMOOK, YAMHILL, POLK, MARION, LINCOLN, LINN, BENTON, AND LANE COUNTIES

(3)

SOUTHERN OREGON AND SOUTH COAST

DOUGLAS, CURRY, COOS, JOSEPHINE, AND JACKSON COUNTIES

4

CENTRAL OREGON

WASCO, SHERMAN, GILLIAM, JEFFERSON, WHEELER, CROOK, DESCHUTES, LAKE, AND KLAMATH COUNTIES

(5)

EASTERN OREGON

MORROW, UMATILLA, UNION, WALLOWA, BAKER, GRANT, HARNEY, AND MALHEUR COUNTIES

Each of ODOT's five regions has a slightly different distribution of its most common crash attributes as compared to the statewide numbers. Figures 13 through Figure 17 show each region's fatal and serious injury crash attributes compared to Oregon overall.

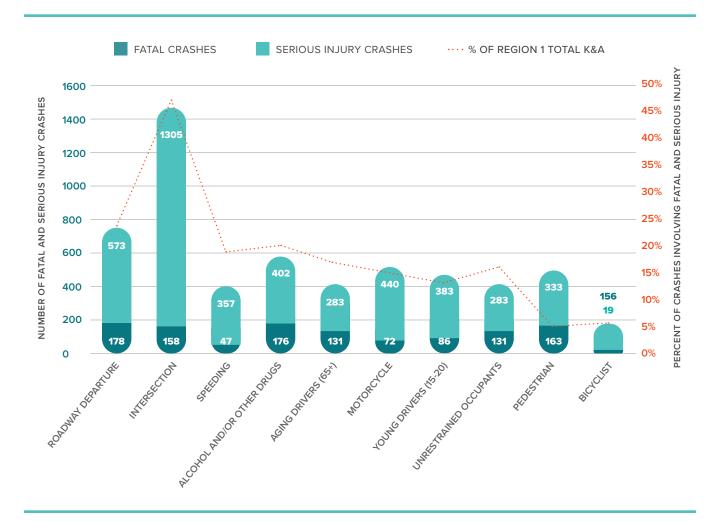


FIGURE 13 **REGION 1 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)**

Region 1 (Figure 13) does not match the statewide distribution of serious crash attributes. Differences include additional fatal and serious injury crashes at intersections and a higher proportion involving bicyclists. Region 1 also experienced fewer fatalities and serious injuries related to roadway departure, speed, and aging drivers, than the statewide average.

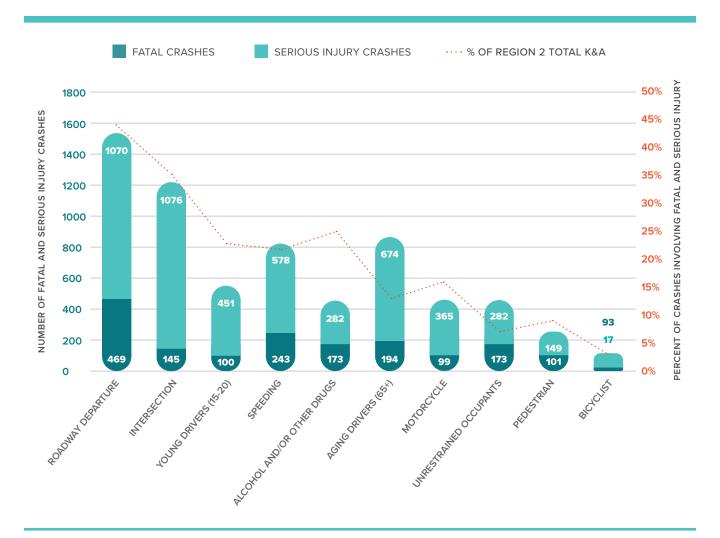


FIGURE 14 REGION 2 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)

Region 2 (Figure 14) is a close match to the statewide proportions and distribution of the top attribute. The region has a mix of urban and rural transportation needs, similar to the State of Oregon.

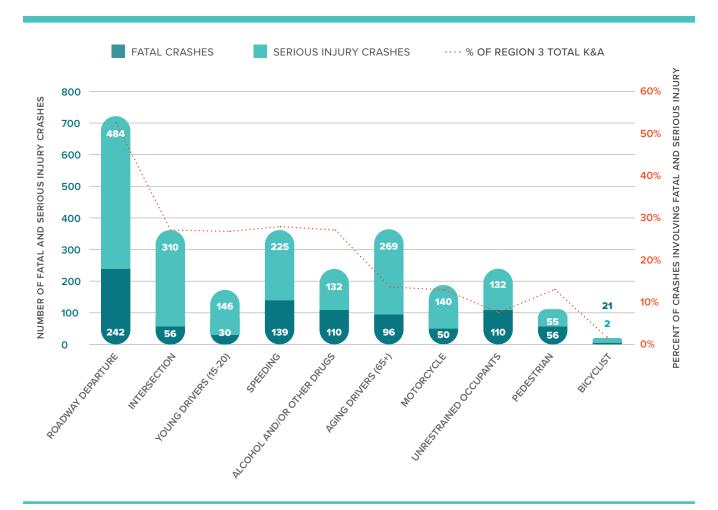


FIGURE 15 **REGION 3 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)**

Region 3 (Figure 15) has a higher frequency of roadway or lane departure fatal and serious injury crashes compared to the statewide average. It also experienced a lower proportion of intersectionrelated fatal and serious injury crashes than the rest of the state.

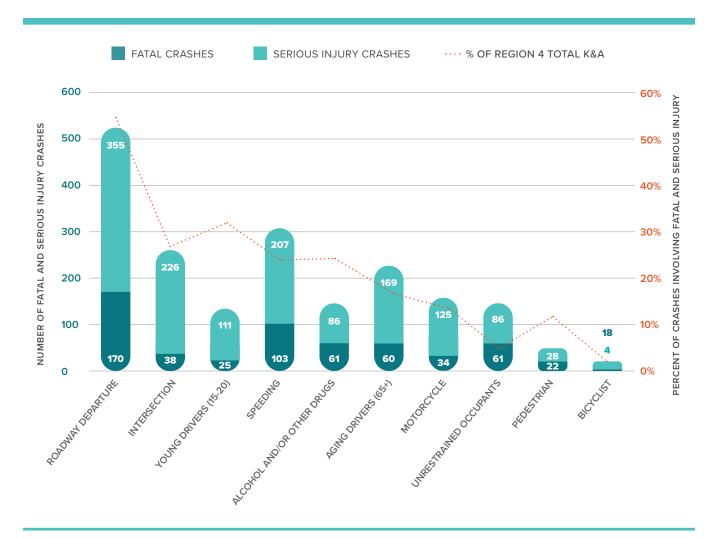


FIGURE 16 REGION 4 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)

Region 4 (Figure 16) has a higher frequency of roadway or lane departure and speed-related fatal and serious injury crashes compared to the statewide average, partially because of its high number of rural road miles. It also has a higher proportion of unrestrained occupants than the state overall.

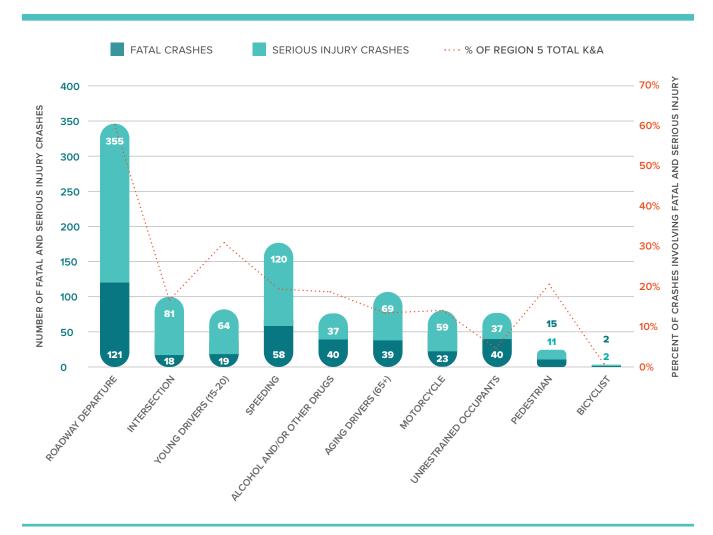


FIGURE 17 REGION 5 FATAL AND SERIOUS INJURY CRASHES BY ATTRIBUTE (2014-2018)

Region 5 (Figure 17) also is quite rural, which contributes to its higher frequency of roadway or lane departure and speed-related fatal and serious injury crashes compared to the statewide average. It also experienced a lower proportion of intersection-related and pedestrian-involved fatal and serious injury crashes than the rest of the state. However, pedestrian-involved fatal and serious injury crashes are higher, by proportion, than the statewide average, which is a recent change.

Conclusion

From a broad perspective, the 2014-2018 Oregon crash trend analysis shows different types, severities, and attributes for crashes in the different ODOT Regions of the state.

It is important to address both infrastructure and human behavior safety issues to meet Oregon's longterm vision. Oregon's crash data provides an important starting point toward deciding the distribution of limited resources by region, attribute, and potential countermeasures to address a diversity of safety programs and projects. The data also is critical to inform the selection of emphasis areas, strategies, and actions which provide the framework for lowering fatalities and serious injuries in Oregon that are presented in later chapters.

4

Safety Challenges and Opportunities

An important aspect of making a case for strategic safety investments in the transportation system is understanding the costs of not making those investments. The case for safety is in some regards intuitive, but when deciding how to make the best use of limited resources, it also is helpful to have a sense of the real costs of transportation-related fatalities and serious injuries.

Safety Challenges and Opportunities

The case for safety is in some regards intuitive – no one wants to lose a loved one to a crash, so investing in safety is easily accepted as a good use of resources, particularly by those directly affected by personal loss from a crash. But when deciding how to make the best use of limited resources, it also is helpful to have a sense of the real costs of transportation-related fatalities and serious injuries. Those costs are at once personal, societal, and economic.

Every crash in Oregon has an impact on families, communities and the economy. This chapter describes those impacts in detail, and also looks broadly at the challenges and opportunities for reducing them.

The Human Impact of Crashes

The loss of a family member or friend to a sudden and unexpected crash is devastating. Over 30,000 motor vehicle crash victims and their families experience this every year in the United States, including over 500 in Oregon in 2018.

The impacts of a motor vehicle fatality are far reaching. Not only is the crash victim's life cut short, but spouses, Everyone is responsible for ensuring their own safety, and responsible to protect the lives of others through responsible decision-making.

children, parents, extended families, friends, and coworkers are each impacted in ways that are difficult to measure: the loss of a child is an unimaginable burden for most parents that they will carry for the remainder of their lives; the premature death of a parent leaves a permanent void in a child's life; a spouse or friend lost in a crash can never be replaced. These experiences can fundamentally change the quality of a person's life.

Fortunately, Oregon has made great progress in reducing crash fatalities and associated impacts over the past 10 years; however, too many individuals and families are still being significantly impacted by debilitating injuries. In 2018, more than 1,600 people suffered incapacitating injuries in motor vehicle crashes in Oregon. Outcomes from these crashes can range from a short-term inconvenience (e.g., broken arm, concussion) to a life-altering injury (e.g., paralysis, loss of a limb). Crashes and resulting injuries have historically been considered by many as an inevitable consequence of mobility. However, currently this

idea is being challenged as countries, states, and cities across the world seek to change culture and eliminate traffic fatalities entirely. The idea may be difficult to grasp initially, but when people are asked how many traffic fatalities are acceptable for their friends and family, the universal response is: 'zero'.

As long as transportation users engage in risky behaviors such as driving under the influence of alcohol or drugs, speeding, not wearing seat belts, or texting while driving, fatalities and injuries will continue to occur on our transportation network. Furthermore, unless we build our transportation system for all users, including designing roads for the speeds that are appropriate within the land use and geographic contexts, crashes will also continue as before. A multidisciplinary approach is required, with dedicated and sustained effort from government agencies representing the 4 Es of Safety (engineering, emergency response, law enforcement, and education) as well as the general public.

The Economic Cost of Crashes

While it is difficult to quantify the emotional costs of crashes, it is possible to estimate the purely financial impacts of lost lives, injuries, and property damage attributable to crashes involving motor vehicles.

Economists often use two approaches to quantify the costs of crashes: economic costs and comprehensive costs. Economic costs can generally be described as those costs which are measurable, while comprehensive costs include the economic costs as well as lost quality of life.

Oregon reports human capital and comprehensive crash costs by crash type and severity are based on two methodologies: Highway Safety Manual (HSM) Appendix 4A and FHWA's Crash Cost Estimates by Maximum Policy-Reported Injury Severity Within Selected Crash Geometrics. Table 2 shows Oregon's comprehensive economic value for crashes based on highway type, urban/rural location, and severity outcome.

OREGON COMPREHENSIVE ECONOMIC VALUE TABLE 2 PER CRASH (2019 VALUES)

HIGHWAY TYPE	URBAN	RURAL	
PROPERTY DAMAGE ONLY CRASH			
All Facilities	\$21,800	\$21,800	
MODERATE (B) INJURY AND MINOR (C) INJURY CRASH			
Interstate	\$77,800	\$89,200	
Other State Highway	\$80,800	\$91,900	
Off System	\$81,300	\$93,200	
FATAL AND SERIOUS (A) INJURY CRASH			
Interstate	\$1,530,000	\$2,260,000	
Other State Highway	\$1,490,000	\$2,140,000	
Off System	\$1,110,000	\$1,940,000	

Crash severities are combined (Fatal and Serious (A) Injury; Moderate (B) Injury and Minor (C) Injury) to account for two issues inherent in crash outcomes. First, the difference between a fatality and a serious injury is often related to factors outside the control of safety professionals, including age of the driver or make and model of vehicle. Second, moderate injury and minor injury is a difficult determination for law enforcement officers to make in the field, so combining these severities accounts for that subjectivity.

The economic cost of crashes in Oregon from 2014 to 2018 averaged \$5.81 billion annually or more than \$15 Billion in total. Figure 18 provides a breakdown of economic crash costs by severity level, showing that while fatal and serious injury crashes represent less than four percent of all crashes in the state, they comprise over 50 percent of the comprehensive societal costs.

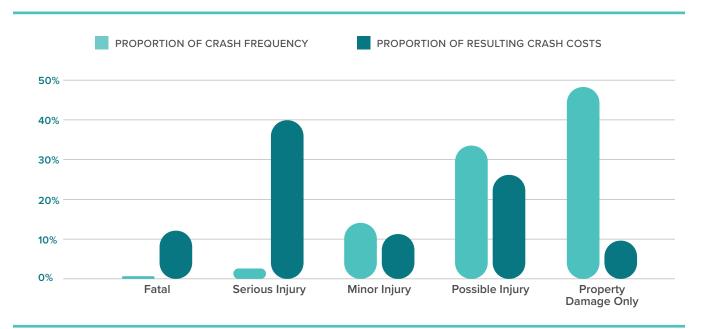


FIGURE 18 PROPORTION OF FATAL & SERIOUS INJURY CRASHES BY ROADWAY FUNCTIONAL CLASSIFICATION (2014-2018)

Beyond the most important aspect of transportation safety – saving lives and preventing serious injuries of real people – reducing the number of fatal and serious injury crashes on Oregon roadways will also bring the state substantial economic benefits.

Transportation Safety Challenges and Opportunities

Given the significant impact of crashes on Oregon's families, communities, and economy, it is important to look broadly at the challenges and opportunities for reducing these impacts. respects than younger and middle age drivers, they have lower survival rates when involved in crashes, which could contribute to an increase in motor vehicle fatalities.

Challenges

GEOGRAPHIC AND DEMOGRAPHIC SHIFTS

Changing Travel Demographics

- More people.
- More older drivers.
- More travel and commercial activity – especially in urban areas.

Oregon's population has grown to over 4.2 million people in 2020, which was faster than the U.S. overall. This growth translates into higher levels of travel and commercial activity, especially in metropolitan areas where most of the growth has occurred.¹

Oregon also is experiencing an increase in the aging driver population as baby boomers move into and through the retirement years. The portion of the Oregon population 65 years or older increased from 13.9 percent in 2010 to 18.2 percent in 2019.² Although aging drivers are safer in many

COMPETING PRIORITIES IN URBAN AREAS

In urban areas there is a high mix of modes of travel, speed of travel and trip purpose. Trucks move freight and vehicles, bicycles and transit move people to work, recreation, and shopping. There is inherent conflict and risk in this mix of modes, trip purposes, and speed of travel. Implementing a range of transportation solutions in urban areas is necessary to meet transportation goals, such as safety, mobility, reliability, or improved air quality. Planners and engineers need to draw on the best available evidence to implement a data-driven approach to funding projects which reduce the frequency and severity of crashes.

Competing Priorities

- High mix of modes in urban areas.
- Balancing safety, mobility, reliability, air quality, access.
- Equity.
- Transit availability.

¹ Portland State University Population Research Center. Oregon Population Estimate Reports, 2020. https://www.pdx.edu/population-research/population-estimate-reports.

² U.S. Census Bureau.https://data.census.gov/cedsci/

EQUITY

Historically-underserved communities experience inequitable treatment in transportation needs identification and project delivery, exacerbating safety problems in those communities. Research shows that pedestrian crashes are more common in low-income neighborhoods and communities of color. In these areas it is critical to consider transportation safety as a primary criterion for project prioritization.¹

TECHNOLOGY CONCERNS

Technology has made and continues to make significant contributions to transportation safety, but it is not always beneficial. For example, the proliferation of smartphones and other handheld devices has given rise to an increasingly distracted population. Unfortunately, reliable statistics on the use of cell phones while driving and as a contributor to crashes and injuries are difficult to obtain, but available data and anecdotal evidence point to distraction as a significant traffic safety concern. A survey conducted by Southern Oregon University in 2016 found that three out of four drivers surveyed engage in distracted driving. Furthermore, 83 percent of respondents felt that distracted driving is an important safety concern on Oregon's roads.² Research into the impact of various types of distraction on cognitive abilities confirms the risks associated with the use of technology while driving.3

Advantages and Disadvantages of Technology

- Technologies for blindspot detection, lane departure warning, forward collision avoidance, speed management, and rollover control.
- In-vehicle distractions cell phones, dashboard computers.
- Expense of implementing technology solutions.
- Equity of implementing technology solutions.

Technological innovation can be expensive to implement and the benefits do not always outweigh the costs. For example, rigorous commercial vehicle driver training may in some cases be less expensive than implementing technology requirements that are potentially less effective. Equity is another concern stemming from the cost of technology. Advancements in technology are slower to reach lower income residents and those in rural areas, where a significant portion of fatalities and serious injuries occur.

¹ Roll, J., Analysis of Pedestrian Injury, Built Environment, Travel Activity, and Social Equity, Oregon Department of Transportation Research Section, 2020.

² Angela Durant et al. Distracted Driving: an Epidemic, A Study of Distracted Driving Attitudes, Behaviors, and Barriers Preventing Change. Southern Oregon University, prepared for Oregon Department of Transportation. 2016.

³ AAA Foundation for Traffic Safety. Measuring Cognitive Distraction in the Automobile. 2013. https://www.aaafoundation.org/sites/default/files/MeasuringCognitiveDistractions.pdf.

Opportunities

MOBILITY AND SYSTEM EFFICIENCY BENEFITS OF REDUCING CRASHES AND INJURIES

While mobility and safety are often thought of as competing goals, this is not always the case. Crashes are part of a broader category of congestion referred to as 'nonrecurring congestion,' which also includes congestion resulting from disabled vehicles, work zones, adverse weather, and special events.¹ Crashes impose costs on society through increased travel time, wasted fuel, and increased emissions. The vast majority of these costs are experienced on urban interstates and expressways. A single crash typically affects travel conditions from around 25 minutes to an hour and a half, depending on pre-crash traffic density, whether travel lanes are closed, and the severity of the crash.² Generally more severe crashes impose higher congestion costs. According to NHTSA, crashes resulted in \$28 billion in congestion-related costs to the U.S. economy in 2010. Reducing crashes therefore is a significant opportunity to improve the economy through not only the reduction of injury costs, but also through reduced congestion costs.

THE ROLE OF TECHNOLOGY

While technology can be a challenge in transportation safety, there is also opportunity in embracing these innovations. A few notable examples of the benefits of technology innovation are shown in Table 3.

TABLE 3 EXAMPLES OF SIGNIFICANT PAST TECHNOLOGICAL INNOVATIONS FOR IMPROVED SAFETY

APPLICATION AREA	TECHNOLOGICAL INNOVATION	
VEHICLE SAFETY	 Reduced likelihood of getting in a crash (e.g., anti-lock brakes, traction control, anti-roll bars) 	
	 Reduced crash injury outcomes (e.g., seat belts, air bags, child passenger seats, crumple zones) 	
INFRASTRUCTURE	 Improved pavement technology to increase traction More conspicuous signs and pavement markings Cable median barriers and guardrails Roundabouts Pedestrian and bicyclist facilities and crossings 	
LAW ENFORCEMENT	Breathalyzers and other devices to detect impaired drivers Ignition interlock devices to reduce repeat DUII offenses Speed and red-light-running automated enforcement systems	

¹ FHWA. Office of Operations. Reducing Non-Recurring Congestion. 2015. http://ops.fhwa.dot.gov/program_areas/ reduce-non-cong.htm.

² National Highway Traffic Safety Administration. The Economic and Societal Impact of Motor Vehicle Crashes. 2010. http://www-nrd.nhtsa.dot.gov/pubs/812013.pdf.

EMERGENCY RESPONSE

- · Improved communications to reduce response time
- · Advanced equipment to sustain life following a serious crash

PROBLEM IDENTIFICATION AND RESEARCH

- Sophisticated methods and data to identify intersections and corridors with the greatest safety concern
- Advanced research into crash causes and countermeasures
- Integration of datasets across agencies and disciplines to better understand and address traffic safety issues

CONNECTED AND AUTOMATED VEHICLES

Technology continues to evolve and influence traffic safety. Perhaps the most significant safety-related technological change on the horizon is the introduction of connected vehicles for both private travel and the movement of freight to the road network. Connected and automated vehicles (CAV) have the potential to reduce the likelihood of crashes through the use of communication and automation technologies.

Example applications currently available and upcoming include the following:

- · Adaptive cruise control
- Forward collision warning and automatic braking
- Blind spot / lane change warning
- Lane departure warning
- Connectivity to traffic control devices, including traffic signals

SAE International is a leader in connecting and educating mobility professionals to enable safe, clean, and accessible mobility solutions. SAE has defined terms related to driving automation systems for onroad motor vehicles. It describes motor vehicle driving automation systems that perform part or all of the dynamic driving task (DDT) on a sustained basis. It provides a taxonomy with detailed definitions for six levels of driving automation, ranging from no driving automation (level 0) to full driving automation (level 5), as described in the figure on the following page.¹

Connected and Automated Vehicles Are Expected To:

- Reduce likelihood of crashes.
- Take time before all vehicles have the technologies.
- Require public investment, policies, and programs in urban and rural areas.
- Initially benefit higher income residents.

¹ Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, J3016_201806, SAE International. https://www.sae.org/standards/content/j3016_201806/



SAE **J3016**™ LEVELS OF DRIVING AUTOMATION™

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SAE LEVEL O"

SAE **LEVEL**

SAE LEVEL 2™

SAE LEVEL 3TM

SAE LEVEL 4

You are not driving when these automated driving features are engaged – even if you are seated in

"the driver's seat"

These are automated driving features

SAE **LEVEL 5**

What does the human in the driver's seat have to do?

What do these

features do?

You are driving whenever these driver support features are engaged – even if your feet are off the pedals and you are not steering

You must constantly supervise these support features; you must steer, brake or accelerate as needed to

When the feature requests, you must drive

These automated driving features will not require you to take over driving

maintain safety

These are driver support features

These features are limited to providing warnings and momentary assistance

These features provide steering OR brake/ acceleration support to the driver

These features provide steering AND brake/ acceleration support to the driver

 traffic jam chauffeur

These features can drive the vehicle under limited conditions and will not operate unless all required conditions are met

This feature can drive the vehicle under all conditions

Example **Features**

- automatic emergency braking
- blind spot warning
- lane departure warning
- lane centering OR
- adaptive cruise control
- lane centering AND
- adaptive cruise control at the <u>same t</u>ime

- local driverless taxi
- pedals/ steering wheel may or may not be installed
- same as level 4, but feature can drive everywhere in all conditions

SAFETY ANALYTICS

The use of analytical tools and processes offers a more immediate application of technology to transportation safety. The increasing quality and quantity of safety-related data (e.g., crash, roadway inventory, and volume) is enabling new insights into the causes of crashes and possible measures to reduce their occurrence or severity. Methods for collecting safety data specific to other modes such as bicycles and pedestrians are emerging and will expand capability to assess opportunities and risks and identify solutions for non-auto modes. Advances in statistical modeling

Safety Analytics

- The timeliness and quality of data can save lives.
- Better data and analytical tools will mean the right solutions at the right time.
- Staff will need training and resources to take full advantage of safety analytics.

have enabled more reliable problem identification and application of safety countermeasures, taking advantage of available data. Some agencies have begun to use prior crash history to forecast the likely occurrence of crashes and to proactively deploy law enforcement and emergency response resources accordingly.1

ODOT and local agencies have also used innovative technologies and data sets, including video analytics and intersections and connected vehicle data outputs, to identify safety needs. These data sets and proactive approaches will allow communities to better plan for the safety of the transportation system in their long-range work.

URBAN DEMOGRAPHICS

Like most states, Oregon's population has become increasingly focused in urban and suburban areas over the past few decades. The share of the population living in metropolitan areas increased from 77 percent in 2000 to 83 percent in 2014. Since 2014, the demographics have remained relatively constant, with 84 percent of Oregonians living in metropolitan areas in 2019.²

Along with the overall trend toward living in urbanized areas, urban centers also are becoming denser. Increased density is being driven by a number of factors, including the preference among empty nesters and millennials for urban lifestyles, where a variety of amenities are within close proximity.

Shifting Transportation and Lifestyles

- More people are choosing urban lifestyles.
- Urban areas are becoming more dense.
- More people are choosing non-auto travel.
- Transit is one of the safest modes of travel.
- Managed speeds can significantly reduce the severity of crashes.

Transportation and land use patterns in urban areas tend to support the use of transit, bicycling, and walking, as well as relatively newer transportation forms. Car sharing and Transportation Network Companies (TNC) such as Uber and Lyft are changing the relationship between the public and their vehicles. In particular, these innovations make it easier for people to live car-free, potentially resulting in fewer serious crashes on our roadways. TNCs also may have a positive impact on some risky behaviors such as impaired driving.3 However, the increase of TNC use could have negative safety impacts as well, including speeding to meet demand, driver

¹ http://www.timesfreepress.com/news/local/story/2014/aug/01/new-software-predicts-when-and/263323/

^{2 2019} Annual Population Report Tables. Portland State University, Population Research Center. 2020. https://archives.pdx.edu/ ds/psu/34271

³ Greenwood, B., and S. Wattal. Show Me the Way to Go Home: An Empirical Investigation of Ride Sharing and Alcohol Related Motor Vehicle Homicide. Fox School of Business Research Paper No. 15-054. 2015. http://papers.ssrn.com/sol3/papers. cfm?abstract_id=2557612&download=yes

distraction using the required smartphone apps, and increased vehicle miles traveled.

All of these trends associated with greater urbanization have an impact on safety outcomes. Crashes in urban areas tend to have less severe outcomes due to lower speeds and access to medical services.

The use of transit in urban areas likely contributes to improved safety, in part due to the extent it reduces traffic volumes and conflicts. And transit is one of the safest modes of transportation.¹ It provides an alternative to driving for many commuters who would otherwise drive or who should not be operating a vehicle for health or other reasons. The role of transit in improving safety outcomes has not been fully explored in the literature, but research has demonstrated that cities with higher per capita transit use also have lower per capita fatality rates.²

Less is known about the relationship of the level of walking and bicycling to safety outcomes for these modes or for the broader public. A 'safety in numbers' theory has been proposed, suggesting that higher levels of walking and bicycling result in lower crash rates involving these modes.

While data consistent with this theory has been presented from several countries, a consensus on this question has not been reached. It is possible that one or both of these factors played a role in reducing the crash rate, but it cannot be determined without a more rigorous study. Nonetheless, the evidence suggests that at the very least, higher levels of bicycling and walking do not result in a dramatic increase in crashes.

Conclusion

To take advantage of the opportunities and address the challenges, ODOT Divisions, partner agencies, and stakeholders have collaborated to inform the development of safety goals, policies, and strategies. This information will be used as a guide to incorporate safety into daily job functions and as part of everyone's personal responsibility to safety. The following chapter describes the policy and strategy outcomes associated with the challenges and opportunities.

¹ Bureau of Transportation Statistics. Distribution of Transportation Fatalities by Mode. http://www.rita.dot.gov/bts/sites/ rita.dot. gov.bts/files/publications/national_transportation_statistics/html/table_02_04.html.

² Litman, T. A New Transit Safety Narrative. Journal of Public Transportation, Vol. 17, No. 4, 2014. http://www.nctr.usf.edu/wp-content/uploads/2014/12/JPT17.4_Litman.pdf.

5

Vision, Goals, Policies, and Strategies

Every day, people arrive safely at their destinations in Oregon, but tragically, fatalities and serious injuries still occur on the Oregon transportation system. Any fatality or life-changing injury is a significant loss. Our safety leaders must work to implement state-of-the-art programs, policies, and projects to reduce transportation fatalities and life changing injuries.

Vision, Goals, **Policies, and Strategies**

Oregon's safety leadership understands that policy, program, and process changes are needed to work toward equitably serving the population of Oregon. To develop and maintain a transportation system that works for everyone, programs must involve the people most negatively impacted. Historicallyunderserved communities experience inequitable treatment in transportation needs identification and project delivery, exacerbating safety problems in those communities. The TSAP lays the foundation to consider and prioritize safety for all modes and users of our transportation system to eliminate all deaths and life-changing injuries on the transportation system.

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Achieving this vision by 2035 requires commitment and engagement from a variety of Oregon's agencies and stakeholders. Engineers, planners, emergency medical service providers, law enforcement and educators traditionally play a strong role in advocating for, planning, designing, and implementing transportation safety plans and will continue to do so. However, this plan also

Vision.

Oregon envisions no deaths or life-changing injuries on Oregon's transportation system by 2035.

includes goals, policies, strategies, and actions relevant to public health professionals, the media, private stakeholders, the individual transportation system user, and others. All these organizations and individuals will be tasked with planning and implementing safe travel options, and traveling responsibly, with the safety of all users in mind.

Goals

Decision-makers are always faced with tradeoffs in developing a comprehensive transportation system. There are a large variety of system needs (e.g., mobility, access, reliability, environmental impacts, health impacts, equity, modal options, and safety) that need to be balanced and prioritized for a wide variety of contexts. The goals, policies, and strategies in the TSAP present a "safety-first" perspective.

This portion of the TSAP outlines a strategic framework, including a vision, goals, policies, and strategies, to define what Oregonians want There are always tradeoffs. The goals, policies, and strategies in this plan are developed and presented from a "safety-first" perspective.

to achieve in the future for transportation safety. The vision outlines the aspirational objective of eliminating fatalities and serious injuries by 2035. To make advancements towards the vision, six goal areas provide specificity for ODOT, stakeholder agencies, and the public to focus efforts and resources. Within each goal area, a diverse list of policies and strategies convey the mid- and long-term opportunities, programs, and activities that have the best chance of improving transportation safety for all modal users. Incorporation of the goals, policies, and strategies into all ODOT and stakeholder plans will help Oregon achieve its vision.

GOAL AREAS

- 1 IMPROVING SAFETY CULTURE
- USING BEST
 AVAILABLE TECHNOLOGIES
- 2 IMPROVING INFRASTRUCTURE
- 5 COMMUNICATING AND COLLABORATING
- FACILITATING HEALTHY AND LIVABLE COMMUNITIES
- 6 INVESTING STRATEGICALLY

IMPROVING SAFETY CULTURE

Background

Developing and sustaining a strong safety culture, where transportation safety (defined as reducing the number and severity of crashes) is integrated into everyday decisionmaking, is key to reducing unnecessary deaths and serious injuries related to transportation. Cultural change is not a simple thing. It involves educating those who design and operate the system along with all road users. Each has a basic responsibility to consider the safety of themselves and others as part of their job functions and daily activities.

For those who address transportation and/ or safety in their jobs, including the state legislature, ODOT, metropolitan planning organizations, local jurisdictions, emergency responders, law enforcement, health services providers, rail and transit providers, nonprofit organizations, industries, and other organizations, cultural shifts will be seen when safety is prioritized as a core value. A strong safety culture means that agency leadership and employees, at all levels, are encouraged, and rewarded for prioritizing safety, and identifying safety issues and solutions while carrying out their agency's missions and their individual job responsibilities.

Inspiring a strong safety culture among the public (individual drivers, passengers, motorcyclists, bicyclists, and pedestrians) can be implemented in a number of ways. Good public information and education

on the rules of the road and changes in regulations; broadly available and up-todate automobile driver and motorcycle rider training; clear communication of the benefits of transportation law enforcement in changing social norms to expect slower speeds; respect and responsibility for other users; and community engagement in transportation safety plans and programs; can all contribute to higher awareness of how individual choices influence the safety of all system users.

Opportunities to address safety culture are different based on the types of decisions being made and on who is making those decisions, but Oregon will achieve shifts on all fronts to elevate awareness of safety issues and identify safety solutions.

The plan is prepared to purposely refrain from endorsing a single approach for Oregon in favor of selecting those strategies and actions that Oregonians think will impact our safety challenges. This allows room for new strategies, and also allows existing strategies to shine when a community or agency chooses to implement their version of Oregon's planned safety efforts.

Goal

Transform public attitudes to recognize that all transportation system users have responsibility for other people's safety in addition to their own safety while using the transportation system. Transform

organizational transportation safety culture among employees and agency partners (e.g., state agencies, regional planning entities, local agencies (Tribes, counties, cities), other safety stakeholders, employers, and the general public) to integrate safety considerations into all responsibilities.

Policies and Strategies

Policy 1.1. Communicate proactively with system users about safety culture.

- Strategy 1.1.1 Promote safe travel behavior through educational initiatives, focusing on how system user behavior can contribute to a safer transportation system for all.
- Strategy 1.1.2 Tailor safety culture
 marketing and media tools to specific user
 groups with specific needs (e.g., youth,
 aging travelers, walkers, motorcyclists,
 bicyclists, under-invested groups, and
 different income groups).
- Strategy 1.1.3 Evaluate the effectiveness
 of policies, programs, and projects
 implemented to improve public
 understanding of safety culture and changes
 in positive transportation safety behaviors.

Policy 1.2. Promote safety culture within agencies, stakeholder organizations, and employers.

 Strategy 1.2.1 – Provide transportation and safety leaders and staff with training, information, and education on proven

- methods to integrate safety into all aspects of the planning, programming, project development, construction, operations, and maintenance processes.
- Strategy 1.2.2 Implement best practices for ongoing enhancement of safety culture training, information, and tools within ODOT and across agencies and stakeholders.
- Strategy 1.2.3 Coordinate and collaborate with public and private employers to implement work- related transportation safety programs.

Policy 1.3. Implement regulatory changes, including legislative concepts and administrative rule changes, to provide incentives or remove impediments to developing a multimodal transportation safety culture.

 Strategy 1.3.1 – Collaborate with state, regional, tribal, county and city transportation and safety agencies, and other stakeholders, to identify unsafe walking, biking, or driving behaviors that could be addressed through legislation. Identify and pursue legislation to modify these behaviors.

2

IMPROVING INFRASTRUCTURE

Background

Transportation infrastructure should be planned, designed, built, operated, and maintained to reduce the potential severity of a crash in the event a crash occurs. When safety is considered during all these stages and proven treatments are applied, user mistakes may not result in serious injuries.

Oregon's transportation infrastructure includes state and local public facilities (streets, freeways, paths, sidewalks, transit, bicycle facilities, signs, lights, traffic signals, interchanges, barrier rail, guard rail, etc.) and other transportation assets, including technology resources that support transportation operations, planning, and decision-making. The design of these facilities influences how people interact with and use the transportation system. People driving, riding, walking, and bicycling navigate the transportation system using visual cues, signage, regulations, and their personal expectations about how other people will use the transportation system. Infrastructure for all travelers needs to be planned, designed, constructed, operated, and maintained to clearly convey travel speed and behavior consistent with the surrounding land uses and anticipated users, and to carefully manage interactions and expectations across modes.

Inevitably, crashes will occur, but the transportation system can be planned and

designed to limit the severity of crashes.

This is achieved by creating a transportation system that minimizes potential conflicts within and across modes; planning and designing facilities consistent with the desired context and use of the facilities (e.g., context-sensitive posted speed limits); and implementing countermeasures with known or high potential to minimize crash severity and frequency.

Goal

Develop and improve infrastructure to eliminate fatalities and serious injuries for users of all modes.

Policies and Strategies

Policy 2.1. Continually improve safety data collection, management, and distribution for data-driven decision-making for infrastructure planning, development, and operations activities, across all divisions at ODOT, and with partner agencies and stakeholders.

- Strategy 2.1.1 Enhance crash data quality using a coordinated effort with ODOT and partner agencies and stakeholders.¹
- Strategy 2.1.2 Identify and implement new methods for crash, roadway, and exposure (e.g., vehicle, pedestrian and bicycle volume) data collection, sharing, and storage.

¹ The 2016 TSAP version of this strategy was completed, resulting in this revision.

- Strategy 2.1.3 Support national safety research and lead state and local research to identify opportunities to enhance data analysis techniques and test countermeasures to eliminate fatalities and serious injuries.
- Strategy 2.1.4 Review state crash report forms to ensure appropriate data is collected and extraneous data is eliminated. Provide training and education to state and local enforcement agencies on resulting form(s).

Policy 2.2. Continually improve and implement design and analysis techniques for safety-related decision-making in transportation planning, programming, design, construction, operations, and maintenance for all modes.

- Strategy 2.2.1 Update ODOT manuals, guides, processes, and procedures, etc., to include quantitative safety analysis in planning, project development and design, programs and maintenance activities and prioritization.
- Strategy 2.2.2 Implement reactive, systemic, and predictive safety analysis and tools into all stages of the project development process including maintenance and operations.

- Strategy 2.2.3 Incorporate quantitative and/or risk-based safety benefits and disbenefits into project prioritization processes.
- Strategy 2.2.4 Develop and monitor planning, program, and project-level performance measures and/or indicators to assess transportation safety outcomes for all modes.

Policy 2.3. Plan, design, construct or improve, operate, and maintain the transportation system to achieve healthy, livable, and equitable communities and eliminate fatalities and serious injuries for all Oregon travelers.

- Strategy 2.3.1 Implement Practical
 Design¹ and/or other proven and innovative approaches to address transportation safety issues for all system users.
- Strategy 2.3.2 Plan, design and construct or retrofit facilities for desired operating speed.
- Strategy 2.3.4 Support, coordinate, and collaborate with local jurisdictions to identify community safety concerns and establish solutions.
- Strategy 2.3.5 Educate transportation planning and design professionals on how to incorporate safer context-sensitive designs into community projects.

¹ Practical Design is "a systematic approach to deliver the broadest benefit to the transportation system, within existing resources, by establishing appropriate project scopes to deliver specific results." http://www.oregon.gov/odot/hwy/ techserv/pages/practical_design.aspx.

- **Strategy 2.3.6** Implement best practices to eliminate work zone-related fatalities and serious injuries.
- Strategy 2.3.7 Continue to identify and implement best practices related to traffic incident management services to reduce secondary crashes and improve system operations and reliability.
- Strategy 2.3.8 Implement access management practices that improve system safety for all modes consistent with state statutes and rules.
- Strategy 2.3.9 Continue to plan, design, and implement best practices for rail safety program and systems management, particularly rail crossings.
- Strategy 2.3.10 Support, encourage, and evaluate safety countermeasures for pilot projects and large-scale implementation as appropriate.
- Strategy 2.3.11 Coordinate with freight interests to plan, design, and construct infrastructure that safely accommodates commercial motor vehicles and enhances economic interests.
- Strategy 2.3.12 Collaborate with **ODOT Public Transportation Division,** transit service providers, MPOs, and researchers to evaluate infrastructure techniques to improve safety for transit riders. Update codes and policies to support best practices.

Policy 2.4. Support regulatory changes. including legislative concepts, administrative rule changes, and updates to design standards, as needed, to enable and/or remove impediments to new approaches to safety engineering.

- **Strategy 2.4.1** Work with state, regional, tribal, county, and city agencies to implement best practices in setting design speeds and speed limits.
- **Strategy 2.4.2** Work with school districts, state, regional, tribal, county, and city governments and local education interest groups to evaluate and implement best practices for safety in school zones.

FACILITATING HEALTHY AND LIVABLE COMMUNITIES

Background

Cities and counties plan their transportation systems in relation to planned land uses. Increased interest in livability and providing access to transportation options is leading communities to develop walkable neighborhoods and think more about how infrastructure can be safe, equitable, convenient, and contribute to positive health outcomes. The TSAP provides safety strategies and actions to integrate into local planning and programming activities.

Crashes causing deaths or life-changing injuries are a major public health issue in communities. Effective traffic law enforcement is an important tool for reducing risky behavior and reinforcing safety culture. In addition, timely response by law enforcement and emergency medical responders can lead to decreases in transportation-related fatalities and serious injuries. With appropriate resources, more emergency medical responders can be trained and made available to respond to crashes in a timely manner and law enforcement can target dangerous behaviors such as speed and impaired driving and implement proven approaches and programs for protecting public safety.

Goal

Plan, design, and implement safe systems; support equitable enforcement and emergency medical services to improve the safety and livability of communities, including health outcomes.

Policies and Strategies

Policy 3.1. Advance coordination and collaboration between law enforcement and state, regional, and tribal, county and city transportation agencies, public health agencies, mental and physical health care providers, and private stakeholders to make communities safer places.

- Strategy 3.1.1 Support a data-driven approach to law enforcement, using data analysis to efficiently deploy enforcement resources to locations or corridors.
- **Strategy 3.1.2** Support a high-visibility enforcement program increasing traffic, bicycle and pedestrian law enforcement capabilities (priority and funding).
- Strategy 3.1.3 Implement Traffic Incident Management best practices on traffic investigations to reduce traffic delays and secondary crashes.
- **Strategy 3.1.4** Engage law enforcement in community safety activities such as teaching education classes on safer behaviors.
- **Strategy 3.1.5** Conduct education and outreach to law enforcement to increase understanding and enforcement of traffic, commercial vehicle, pedestrian, and bicycle laws.

Policy 3.2. Support traffic enforcement funding to provide sufficient resources for officers to respond to incidents, increase levels of ongoing traffic enforcement, conduct focused enforcement, and participate in activities such as emphasis patrols.

 Strategy 3.2.1 – Identify community needs for funding and training to enhance traffic safety programs and enforcement.

Policy 3.3. Support emergency medical service (EMS) funding to provide sufficient resources to train first responders and to respond to transportation-related crashes and other medical emergencies fully equipped and in a timely manner.

 Strategy 3.3.1 – Identify community needs for funding and training to enhance EMS systems and improve response times and services. Recognize and address the differing needs of paid and volunteer providers.

Policy 3.4. Invest in transportation system enhancements that improve safety and perceptions of security for people while traveling in Oregon.

 Strategy 3.4.1 – Enhance perceptions of bicycling, walking, and transit safety and security by identifying and implementing appropriate facility design, lighting, and other changes to the built environment to improve personal security and safety for pedestrians, bicyclists, and transit riders.

 Strategy 3.4.2 – Identify opportunities to improve transportation system redundancy and otherwise safeguard critical infrastructure against natural and manmade disasters.

Policy 3.5. Provide all regions and localities in Oregon with resources and tools to offer programs and education based on local needs and issues, considering issues of equity.

- Strategy 3.5.1 Explore methods to distribute and implement safety programs and funding between urban and rural communities to eliminate fatalities and serious injury crashes.
- Strategy 3.5.2 Provide transportation safety educational opportunities for people of all ages, ethnicities, and income levels.
- Strategy 3.5.3 Support adequate funding for EMS particularly in rural and remote areas, to the extent that this is the most efficient use of resources to eliminate fatalities and serious injuries.
- Strategy 3.5.4 Encourage implementation of Safe Communities statewide.¹

¹ The Safe Communities model is a long-standing approach to reducing injuries and deaths. It works through engaging local partners who care about safety, using data to identify leading causes of injury, making a plan to address the issues using proven methods and measuring success. There is a Safe Communities America® accreditation program through the National Safety Council. (http://www.nsc.org, accessed March 18, 2016).

USING BEST AVAILABLE TECHNOLOGIES

Background

As recently as just a few years ago, safety improvements were focused on changes to transportation design and human behavior. Today, those issues remain critical to address, but incremental changes to infrastructure and automobile technology are shifting the conversation about safety. For example, vehicle fleets are now coming with standard safety features, such as automatic lights, forward collision avoidance systems, backup cameras, blind spot monitoring, lane departure warnings, and other custom features.

Transportation infrastructure also is becoming "smarter," - signalized intersections and corridors can be synchronized to better address roadway incidents, overhead signs can alert drivers of a crash or provide speed guidance as a function of traffic or weather conditions, and signals can let transit users know when a train or bus is approaching.

Successful, low-cost practices in Oregon include the implementation of intelligent transportation solutions (ITS). ODOT and other transportation agencies, such as MPOs have utilized Closed Circuit Television (CCTV) cameras to quickly and efficiently detect, verify, and plan responses for highway incidents, including crashes. Speed Warning Systems are used to provide information to motorists who are traveling at unsafe speeds and Over-Length Warning Systems use detectors to determine whether approaching

vehicles (typically commercial trucks) are too long to safely maneuver a challenging roadway geometry. With the technology in place to implement ITS solutions throughout Oregon, such solutions are increasingly feasible for more regional, tribal, county, and city transportation agencies to expand their use of lower cost technologies. ODOT currently is exploring how and where to deploy ITS solutions more widely in both urban and rural environments.

A number of other technologies, with proven safety benefits, are also being used or explored by ODOT, MPOs, and tribal, county, and city transportation agencies. Some of those initiatives include variable speed signs, traffic operations centers, pedestrian countdown signals, mobile applications that prevent unsafe behaviors such as texting and driving, and others. The intent is to share information and implementation ideas about these technologies to increase their successful deployment throughout urban and rural parts of the state.

Autonomous and connected vehicles would enable on-road communications between vehicles, between vehicles and pedestrians/ bicyclists, and between vehicles and infrastructure. This has tremendous safety implications as the technology would allow for automatic control of signal timing, speed management, and the operation of transit and commercial vehicles, among other safety features. ODOT continues to stay at

the forefront of this national dialogue and inform transportation and safety stakeholders of new developments.

Existing and emerging technologies have positive and negative safety effects which need to be considered during the transportation decision-making process. Decision-makers also will have to consider not only the potential for "high-tech" solutions, but also "low-tech" solutions which may have similar safety benefits yet require less investments.

Goal

Plan, prepare for, and implement technologies (existing and new) that improve transportation safety for all users, including pilot testing innovative technologies as appropriate.

Policies and Strategies

Policy 4.1. Actively monitor technological advances and plan, design, maintain, and operate the system in a way that takes full advantage of opportunities to use technology to eliminate fatalities and serious injuries.

- Strategy 4.1.1 Explore and integrate technology to eliminate crash frequency and severity, prioritizing implementation of technologies that address the TSAP safety areas.
- **Strategy 4.1.2** Research and test safety technology for deployment in Oregon.
- **Strategy 4.1.3** Continue to research

connected and autonomous vehicles to leverage the potential safety benefits associated with these technologies.

Strategy 4.1.4 – Bring public- and private-sector stakeholders together to develop opportunities for applying technology solutions and addressing barriers to implement new technologies. Consider potential economic, business, environmental, and privacy impacts of deploying technologies.

Policy 4.2. Apply technological improvements in data management systems to enhance collaboration across agencies and provide tools for data collection and analysis to partner agencies and stakeholders.

- Strategy 4.2.1 Provide leadership and staff support to statewide efforts for improving data timeliness, availability, quality, and consistency across agencies.
- **Strategy 4.2.2** Support data strategic planning efforts through the Traffic Records Coordinating Committee (TRCC) to ensure safety data needs are considered and integrated.
- Strategy 4.2.3 Develop tools to facilitate data sharing and analysis across agencies.

Policy 4.3. Leverage technology tools and best practices across divisions and agencies to deploy useful technologies across the state and the transportation system.

- Strategy 4.3.1 Develop statewide resources to share best practices, tools, and training for statewide and systemwide deployment of appropriate safety technology.
- Strategy 4.3.2 Implement technology advances equitably in urban and rural areas.
- Strategy 4.3.3 Identify and implement methods to extend safety technology to underserved system users and the transportation disadvantaged.

Policy 4.4 – Identify legislative concepts enabling the implementation of innovative technologies.

- Strategy 4.4.1 Support legislation to enable innovations in enforcement technology (i.e., innovations in fieldtesting for alcohol and drug impairment in automated enforcement).
- Strategy 4.4.2 Review regulations that may impact the adoption of innovative technology and support appropriate new laws and/or amend administrative rules or standards that may constrain implementation of advanced technology.

COMMUNICATING AND COLLABORATING

Background

Safety and transportation go hand in hand, however different roles and job responsibilities between transportation and safety practitioners; funding silos; competing priorities; and other issues are common challenges that could lead to a lack of coordination on transportation and safety issues. Awareness of the co-benefits and the opportunities to work together to develop a safer transportation system will build momentum toward eliminating fatalities and serious injuries. Collaboration and communication within and across agencies presents opportunities to plan, program and prioritize policies or projects to enhance safety of the system. Achieving zero deaths or serious injuries is only possible if overall intentions are coordinated across partners.

This goal area focuses on: 1) facilitating communication between transportation planners and safety specialists; 2) leveraging this communication to share information and collaborate on problem identification, analysis, funding, resources, and tools to advance transportation safety in Oregon; and 3) ensuring this planning effort is coordinated with other transportation and safety planning efforts throughout the state. With coordination and communication focused on transportation safety it is anticipated that state, regional, tribal, county, and city partners will:

 Gain access to and better understand available safety data;

- Form relationships and connect with other transportation safety stakeholders; and
- Understand the safety emphasis areas and proven strategies, which could be subsequently integrated with other stakeholder planning and programming activities.

Increased awareness and buy-in will create opportunities for integrating TSAP goals, policies, and strategies in all planning and project development processes; behavioral programming and emergency services improvements. Further, it will create opportunities for regional and tribal, county, and city governments, and stakeholders to integrate transportation safety policies, projects, and programs into their day-to-day activities.

Goal

Create and support a collaborative environment for transportation system providers and public and private stakeholders, to work together to eliminate fatalities and serious injury crashes.

Policies and Strategies

Policy 5.1. Increase transportation system providers and public and private stakeholder awareness of the TSAP and other safety policies to eliminate fatality and serious injury crashes.

Strategy 5.1.1 – Develop an internal (among partners and agencies) communication protocol for transportation safety topics including best safety engineering practices.

Strategy 5.1.2 – Engage ODOT Regions and Divisions, MPOs, ACTs, Tribes, cities, counties, the health and medical community, transit providers, transportation services, enforcement and emergency medical service, and traffic incident management providers in safety planning and implementation.

Strategy 5.1.3 – Evaluate agency awareness and implementation of safety activities through periodic statewide surveys.

Policy 5.2. Ensure ongoing communication and coordination among transportation system providers and public and private stakeholders on the implementation of the TSAP's policies and strategies and throughout program development and project selection.

- Strategy 5.2.1 Identify joint legislative safety priorities amongst agencies and provide information to state legislators.
- Strategy 5.2.2 Enhance enforcement and emergency medical service communications systems as feasible to improve response time and services for all travelers in Oregon.
- Strategy 5.2.3 Facilitate
 communication and coordination between
 transportation agencies, EMS, and law
 enforcement on evacuation planning and
 emergency preparedness.

- Strategy 5.2.4 Promote sharing and leveraging of resources across programs, communities, and agencies.
- Strategy 5.2.5 Participate in Federal rulemaking and guidance development programs to maximize opportunities to achieve the TSAP Vision.

Policy 5.3. Enhance public awareness of the importance of transportation safety and the individual's role in eliminating fatalities and serious injury crashes.

Strategy 5.3.1 – Collaborate with the media and agency public information offices to develop information which improves public awareness of safety programs, laws, roles, responsibilities, and expectations. Ensure campaigns take into account Oregon demographics.

Strategy 5.3.2 – Work with educators in the state's public school system (including community colleges and other locations where transportation disadvantaged groups such as recent immigrants, newly licensed adult drivers, English as Second Language populations, etc., are likely to receive education) to improve awareness and understanding of transportation laws, roles, and responsibilities through programs such as Safe Routes to School.

INVESTING STRATEGICALLY

Background

Oregon is committed to zero transportationrelated fatalities and serious injuries. To make progress and improve traffic safety, stakeholders and partners are tasked with coordinating priorities, leveraging joint resources where possible, and using quantitative data-driven tools (e.g., benefitcost analysis). Funds are limited, therefore projects, programs, and policies will need to be prioritized to focus on those treatments which will have the greatest benefit toward achieving the vision of zero fatalities and serious injuries.

Two of the most common ways to fund safety projects are through the Highway Safety Improvement Program (HSIP) and Section 402 State and Community Highway Safety Grant Program. These dollars can be used to implement the strategies and actions identified for the emphasis areas. Another opportunity for funding transportation safety improvements is to make safety a consideration for all transportation projects, regardless of funding source or project type. All transportation jurisdictions develop some type of transportation improvement program identifying near-term projects for funding. Agencies use a qualitative and/or quantitative prioritization process to consider and select projects that best meet the goals, outlined in their planning documents. When safety needs are considered as decision criteria in this prioritization process, the opportunity exists

to transform the transportation system into a progressively safer system, reducing loss of life and the impact of serious injuries.

The policies, strategies, and actions in the TSAP can support policy, program and project selection processes, helping decision-makers remain focused on implementing projects that maximize the safety return on investment. Projects, programs, or policies, selected for implementation should be known to be effective, or known to be innovative with an evaluation component included. It also will be necessary to recognize that activities will change with funding levels.

Goal

Target safety funding for effective education, enforcement, engineering, and emergency medical services priorities.

Policies and Strategies

Policy 6.1. Allocate infrastructure safety funds strategically, considering all modes, to maximize total safety benefits.

- **Strategy 6.1.1** Implement a quantitative, predictive, benefit-cost analysis or riskbased, data-driven decision framework to identify and prioritize potential projects.
- Strategy 6.1.2 Implement a comprehensive program of systemic and spot safety improvements for all public roads.

- Strategy 6.1.3 Apply proven countermeasures to address the contributing factors and reduce severity.
- **Strategy 6.1.4** Use benefit-cost analysis (or similar) to select measures and projects with the greatest potential to reduce fatalities and serious injuries.
- Strategy 6.1.5 Develop and implement programs to monitor safety effectiveness of infrastructure investments.

Policy 6.2. Allocate funding of behavioral, emergency medical services, and health safety efforts strategically across programs to maximize total safety benefits.

- Strategy 6.2.1 Collaborate with mental and physical health care providers to leverage funding for behavioral-related safety programs.
- Strategy 6.2.2 Develop a data-driven decision framework to integrate quantitative safety performance into behavioral programming prioritization decisions.
- Strategy 6.2.3 Identify funding needs to optimize emergency medical services and enforcement to minimize injuries post-crash.
- Strategy 6.2.4 Evaluate effectiveness of behavioral safety programs to maximize benefits of safety investments.

Policy 6.3. Identify and pursue opportunities to increase funding for strategic safety-related infrastructure, behavior, and emergency medical service enhancements.

- **Strategy 6.3.1** Identify new sources of potential funding that can be dedicated to strategic investments that return greatest safety benefits.
- **Strategy 6.3.2** While complying with Federal safety funding requirements and limitations, promote opportunities to leverage funding sources in order to maximize safety benefits and outcomes.

Conclusion

The six transportation safety goal areas and supporting policies and strategies identify mid- to long-term initiatives to drive down fatalities and serious injuries. The policies and strategies are intended to address a broad range of transportation safety approaches, which can be adopted during any ODOT or stakeholder agency planning process. The subsequent chapter, Emphasis Areas, identifies specific safety priorities and actions to be implemented over the near term.

Emphasis Areas

Emphasis Areas (EA) provide a strategic framework for developing and implementing the Transportation Safety Action Plan (TSAP). Emphasis Areas are near-term implementation focus areas directly related to the TSAP's long-term goals, policies, and strategies.

Emphasis Areas

Emphasis Areas provide a framework for the Oregon Department of Transportation to meet Federal requirements for project and program prioritization. Emphasis areas are flexible and adaptive to new safety challenges and opportunities that may arise during implementation of the TSAP.

Emphasis Areas focus near-term safety projects, programs, and policies on actions that will maximize the benefits of safety investment.

Emphasis Area Development

The EAs were developed using the results of crash data analysis and input from committees, stakeholders, and the public. From this, four broad emphasis areas were chosen: **Infrastructure**, **Risky Behaviors**, **Vulnerable Users**, **and Improved Systems**. Each of these includes a number of subcategories to better define the EA.

Risky Behavior Subareas

- Impaired driving.
- Unbelted occupants.
- Speeding.
- Distracted driving.

Infrastructure Subareas

- Intersection.
- Roadway departure.

RISKY BEHAVIORS. Reductions in fatalities and serious injuries can be accomplished by deterring unsafe or risky behaviors made by drivers and other transportation users. For this emphasis area, actions have been identified to minimize impaired, unrestrained, speeding, and distracted driving crashes.

INFRASTRUCTURE. Road assets in Oregon can be constructed or retrofitted to reduce fatal and serious injury crashes. Opportunities to do this include implementing safety treatments at intersections and along and across roadways. For this emphasis area, actions have been identified to minimize intersection and roadway departure crashes.

vulnerable users. Vulnerable road users can be characterized by the amount of protection they have when using the transportation system – pedestrians, bicyclists, and motorcyclists of all abilities are more exposed than the drivers operating motor vehicles, making them more susceptible to injury in the event of an incident. Aging drivers and other aging system users can also be vulnerable to injury due to decreasing visual acuity, perception-reaction time to events, and health conditions

Vulnerable Users Subareas

- Pedestrians
- Bicyclists
- Motorcyclists
- Aging road users

that may come with aging. Oregon neighborhoods with low-income populations or people of color experience a higher number of pedestrian fatalities and serious injuries.

For this emphasis area, actions have been identified to minimize pedestrian, bicycle, motorcycle, and older road user crashes with a focus on underserved, low-income, and BIPOC communities.¹

IMPROVED SYSTEMS. Opportunities to address and improve transportation safety come in several forms. The quality, timeliness, and integration of crash and other safety-related data (e.g., roadway geometrics, transportation assets inventory, and traffic volumes) can be advanced to better understand the causes and locations of crashes. Training and education are used to educate planners, engineers, designers, and construction staff about the importance of safety and how to incorporate it into their everyday job responsibilities. Fully staffed and

Improved System Subareas

- Improved data.
- Training and education.
- Enforcement.
- Emergency medical services.
- · Commercial vehicles.

funded law enforcement agencies can direct their efforts towards keeping users safe and when crashes do occur, making sure emergency medical services are available to respond to and transport victims is essential. Commercial vehicle safety relies on licensing, training, and vehicle safety to decrease the frequency and severity of crashes. For this emphasis area, actions have been identified to continually improve data, train transportation and safety staff, support law enforcement and emergency responders, and minimize commercial vehicle crashes.

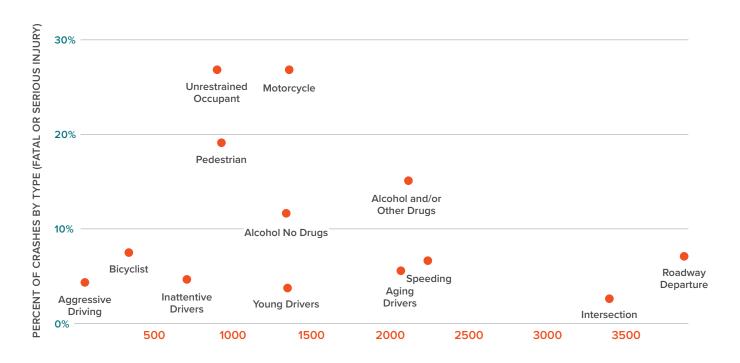
This chapter describes each of the EA subcategories, the data used to support the identification of EA priorities, and near-term actions that can be implemented to lower fatalities and serious injuries for each emphasis area.

¹ BIPOC refers to communities that have been historically excluded based on race and ethnicity as one group that includes, Black, Indigenous, Latino/a/x, Asian, Pacific Islander, Tribal, and People of Color.

Emphasis Area Considerations

EAs were initially selected based on an assessment of 2009-2013 crash history. For the 2021 TSAP, the team reviewed the most recent available data (2014-2018) and replicated the figure below. Figure 19 shows the relationship of the frequency of fatal and serious injury crashes (X-axis) compared to the likelihood of a single crash of that type resulting in a fatal or serious injury (Y-axis). For example, fatal and serious injury crashes involving pedestrians are not as common as other types, but when a pedestrian is involved, the potential for serious injury or death is relatively high.

- Roadway departure
 results in the most
 frequent fatal and serious
 injury crashes, followed
 by intersection crashes.
- Motorcyclist-involved crashes are less frequent, but 27% of these result in a fatality or serious injury.

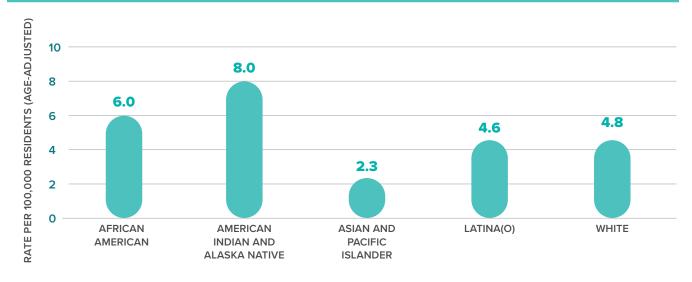


NUMBER OF FATAL AND SERIOUS INJURY CRASHES

FIGURE 19 CRASH TYPES RANKED BY CRASH FREQUENCY AND SEVERITY (2014-2018)

Equity

Oregon's safety leadership understands that old ways of addressing transportation problems are not serving everyone equitably. To develop and maintain a transportation system that works for everyone, programs must involve the people most impacted. Historically-underserved communities experience inequitable treatment in the identification of transportation needs and project delivery, exacerbating safety problems in those communities. For example, Black, American Indian, and Alaskan Native people are more likely than Whites to be killed in motor vehicle crashes (see Figure 20).¹



Source: Oregon Death Certificate Data, 2012-2016 (average)

FIGURE 20 MOTOR VEHICLE OCCUPANT MORTALITY RATE BY RACE AND ETHNICITY IN OREGON (2012-2016)

¹ Oregon's State Health Assessment, Oregon Health Authority, Public Health Division, 2018. https://www.oregon.gov/oha/PH/ABOUT/Documents/sha/state-health-assessment-full-report.pdf

Emphasis Areas and Actions

This section describes each EA subcategory and the accompanying actions. Actions are specific programs, policies, projects, and potential future legal policy changes for implementing the EAs over the next five years. The actions listed are achievable and, where possible, proven effective. The actions are categorized by the primary EA they address, but many have the potential to contribute to fatality and serious injury reductions across multiple EAs. While this section focuses on the implementation of safety solutions over the next five years, each EA and action also will contribute to the success of the long-term goals, policies, and strategies outlined in Chapter 5.

Risky Behaviors



IMPAIRED DRIVING
UNBELTED OCCUPANTS
SPEEDING
DISTRACTED DRIVING

Infrastructure



INTERSECTION
ROADWAY DEPARTURE

Vulnerable Users



PEDESTRIANS
BICYCLISTS
MOTORCYCLISTS
AGING ROAD USERS

Improved Systems



IMPROVED DATA
TRAINING AND EDUCATION
ENFORCEMENT
EMERGENCY MEDICAL SERVICES
COMMERCIAL VEHICLES

IMPAIRED DRIVING
UNBELTED OCCUPANTS

SPEEDING
DISTRACTED DRIVING

Impaired Driving

Alcohol impairment is measured as blood alcohol concentration (BAC) reading of 0.08 percent or higher for drivers and 0.04 percent for commercial motor vehicle drivers. In Oregon, as in most states, the penalties are severe for drinking and driving and could result in jail time, a suspended or revoked license, substance abuse treatment requirements, and/or fines. While the risks of driving under the influence of alcohol are well known, thresholds for impairment and testing for drugged driving are less well established. Drivers may not fully understand how DUII standards apply when driving on prescription or recreational drugs. In addition, law enforcement agencies are still refining detection processes. Drugged driving is impaired driving and research in testing methods are ongoing in this area. In Oregon, impaired driving crashes are defined as crashes in which the reporting officer indicates alcohol or other drugs contributed to the crash. These crashes could include alcohol only, cannabis, other drugs (recreational or prescription), or a combination of drugs and alcohol.

Problem Identification

Between 2014 and 2018, impaired driving crashes (alcohol and/or drugs) accounted for 22 percent of all the fatal and serious injury crashes in Oregon and contributed to 1,098 fatalities and 1,023 serious injuries. About 60 percent of impaired driving crashes involved roadway departures and 37 percent were speed related.



FIGURE 21 IMPAIRED DRIVING FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)

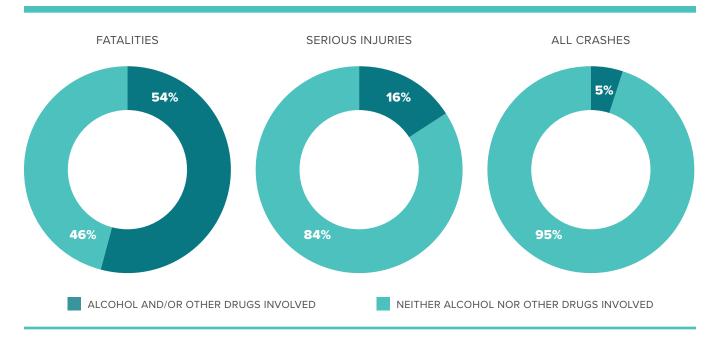


FIGURE 22 IMPAIRED DRIVING AS A CONTRIBUTING FACTOR FOR FATALITIES, SERIOUS INJURIES, AND ALL CRASHES

Impaired Driving Actions

- 1. Provide education and outreach about the effects of and types of impaired driving, including alcohol-involved, other-druginvolved (prescription, legal, and/or illegal), and combinations.
- 2. Identify data needs related to impaired driving and implement measures to address gaps in coordination with public health.
- 3. Provide training and education on drug (e.g., cannabis, methamphetamine) impairment detection for law enforcement.
- 4. Promote policies to reduce alcohol overconsumption, including sales tax, limited service hours/days, and accountability for overserving. Increase support of related mental health and addiction services.

- 5. Adopt National Transportation Safety Board recommendation to reduce Blood Alcohol Concentration limit to 0.05.
- 6. Revise DUII statutes and related statutes for other impairing substances.
- 7. Strengthen laws aimed at reducing repeat DUII offenders.
- 8. Streamline the DUII arrest and adjudication processes.
- 9. Conduct unbiased enforcement to reduce impaired driving crashes.

Occupant Protection

In 2019, the national average for observed seatbelt use in passenger cars was 90.7 percent. In Oregon, the average observed seatbelt usage in passenger cars was 95.7 percent. Approximately 5,000 seat belt citations are issued in Oregon each year.² Residents now recognize that the use of restraints and child car seats reduces the severity of a crash.3 Enforcement of occupant protection laws and education about proper use of restraints for adults and children will continue to have a positive impact on reducing crash injuries and fatalities.

Problem Identification

Between 2014 and 2018, 900 fatal and serious injury crashes involved occupants not properly using restraints. In Oregon, 21 percent of fatal crashes involved an unrestrained occupant. Approximately 65 percent of these crashes occurred in a rural environment. The majority of unrestrained fatal and serious injury crashes (71 percent) result from lane departure crashes. Approximately 46 percent of all unrestrained fatal and serious injury crashes were speed related.

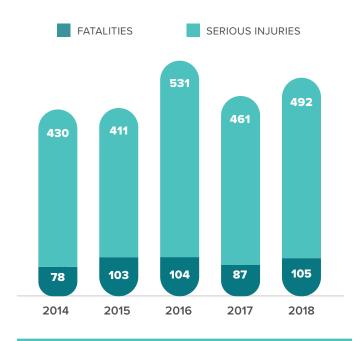


FIGURE 23 **UNRESTRAINED OCCUPANT FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)**

¹ https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812947

² Oregon 2021 Traffic Safety Performance Plan. https://www.oregon.gov/odot/Safety/Documents/2021PerformancePlan.pdf

³ https://www.oregon.gov/ODOT/TS/docs/+2016%20Federal%20Version%20Final.pdf.

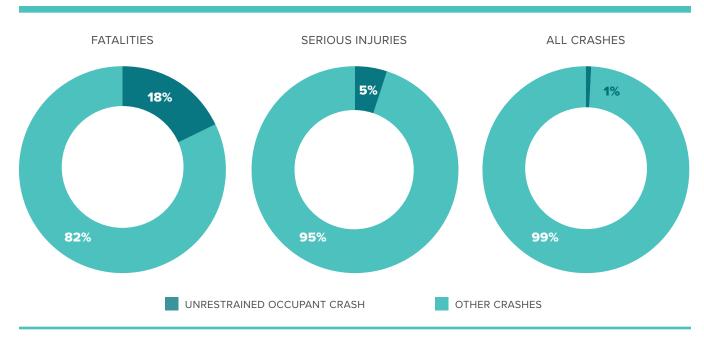


FIGURE 24 UNRESTRAINED OCCUPANTS FOR FATALITIES, SERIOUS INJURIES AND ALL CRASHES

Occupant Protection Actions

- 1. Conduct enforcement of occupant protection laws.
- 2. Conduct focused education that encourages increased use of seat belts and child safety seats, particularly in rural areas.
- 3. Provide youth safety equipment (e.g., child safety seats, bicycle helmets) and education to address identified safety concerns.
- 4. Recruit and train certified child passenger safety (CPS) technicians as needed.

Speeding

In Oregon, speeding crashes are defined as a driver traveling too fast for conditions, or traveling above the posted or statutory speed limit. Speed-related fatalities and serious injuries have been trending downward from 2016 to 2018. In 2019, law enforcement issued more than 11,000 speeding citations during grant-funded enforcement efforts to deter this unsafe driving behavior.1

An Oregon statewide public opinion survey from March 2018 reported that 46 percent of drivers say they rarely exceed the speed limit on a local road with a posted speed of 30 miles per hour and

¹ Oregon 2021 Traffic Safety Performance Plan. https://www.oregon.gov/odot/Safety/Documents/2021PerformancePlan.pdf

65 percent say they rarely or never exceed it on a road with a speed limit of 65 miles per hour.1 A substantial portion of Oregon drivers do sometimes or regularly exceed posted speeds, which is consistent with a Federal estimate that at least 56 to 68 percent of drivers travel above the posted speed limit, depending on type of facility.² The outcome of speeding crashes is often severe. Focused enforcement, including traffic patrols and effective automated enforcement, will continue to be implemented throughout Oregon. In addition, roadway design and speed limits will be considered in tandem to achieve safe operating speeds.

Problem Identification

Between 2014 and 2018, speed-related crashes accounted for 24 percent of all the fatal and serious injury crashes in Oregon and contributed to 805 fatalities and 1,934 serious injuries. Approximately 68 percent of all speedrelated fatal and serious injury crashes result from lane departure crashes. Alcohol involvement (31 percent) and unrestrained occupants (18 percent) also are strongly correlated to speeding crashes. It is important for all stakeholders (e.g., residents, business owners, local, regional, and state agencies) are engaged in the process of identifying the appropriate speed for a roadway. The roadway can then be appropriately designed and built or retrofitted to achieve the desired travel speed.



FIGURE 25 SPEED-RELATED FATALITIES AND SERIOUS **INJURIES BY YEAR (2014-2018)**

¹ https://www.oregon.gov/ODOT/TS/docs/+2016%20Federal%20Version%20Final.pdf.

² National Traffic Speeds Survey III: 2015, NHTSA. https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812485_nationaltraffic-speeds-survey-iii-2015.pdf

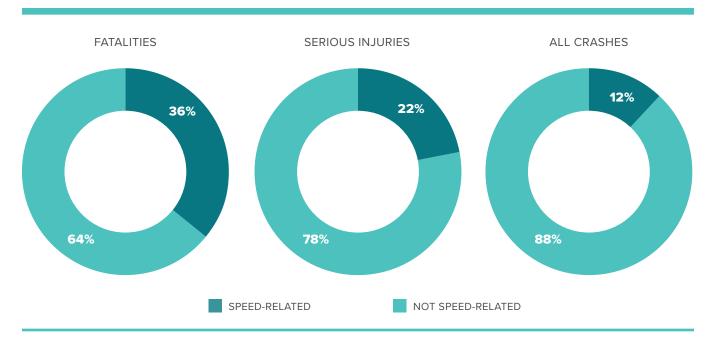


FIGURE 26 SPEEDING AS A CONTRIBUTING FACTOR FOR FATALITIES, SERIOUS INJURIES AND ALL CRASHES

Speeding Actions

- 1. Provide education and outreach about the safety risks of speeding.
- 2. Continue speed management efforts among ODOT, cities, and counties to consider and revise regulations and programs for establishing speed limits to achieve safety goals, improve balance among multimodal interests, and support community objectives.
- 3. Modify or extend laws to continue automated enforcement of traffic violations, including exceeding the speed limit. Implementation must incorporate equity concerns.
- 4. Track and assess changes to operating speeds, crash rates, fatalities, and serious injuries on roads where posted speed limits were changed.

- 5. Establish target speeds consistent with facility design, safety goals, context, users, and land use. Apply the Blueprint for Urban Design in urban contexts.
- 6. Conduct unbiased enforcement to reduce speeding-related crashes.

Distracted Driving

Distracted driving is operating a motor vehicle while doing another activity that takes your attention away from safely driving. The proliferation of cell phones and other mobile electronic devices has resulted in increasing distractions while driving. Available data and anecdotal evidence point to distraction as a significant traffic safety concern. A survey conducted by Southern Oregon University found that three out of four drivers surveyed engage in distracted driving.

ORS 811.507 Operating motor vehicle while using a mobile electronic device legislation was updated in 2018 to prohibit the use of handheld mobile electronic devices. Drivers under 18 years old are prohibited from all cell phone use, handheld, or hands free.

Distracted Driving Actions

- Increase statewide media campaigns, high visibility enforcement, awareness presentations, and court-required courses on distracted driving awareness.
- 2. Work with other states on research and data development to identify the scope and scale of distracted driving and possible solutions.
- 3. Conduct enforcement of the mobile electronic device laws.

¹ https://www.oregon.gov/ODOT/DMV/Pages/road_rules.aspx (accessed 3/16/16)

Intersections

An intersection is a point at which two or more roads intersect. Most intersections are primarily designed for passenger vehicles, freight, and buses, and at a secondary level for pedestrians and bicyclists. An inherent concern at intersections is that they create conflict points among multiple road users, which can be exacerbated by differences in vehicle size and travel speed as well as the complexity of the intersection design. Intersection crashes in Oregon are defined as incidents that occur at a signalized or unsignalized intersection in an urban or rural environment.

FATALITIES **SERIOUS INJURIES** 783 699 656 639 605 93 94 95 80 78 2014 2015 2016 2017 2018

INTERSECTION-RELATED FATALITIES AND FIGURE 27 **SERIOUS INJURIES BY YEAR (2014-2018)**

Problem Identification

Between 2014 and 2018, intersectionrelated crashes accounted for 36 percent of all the fatal and serious injury crashes in Oregon and contributed to 440 fatalities and 3,382 serious injuries. About 81 percent of these crashes occurred in an urban environment; and both aging drivers and younger drivers were disproportionately more involved in intersection crashes.

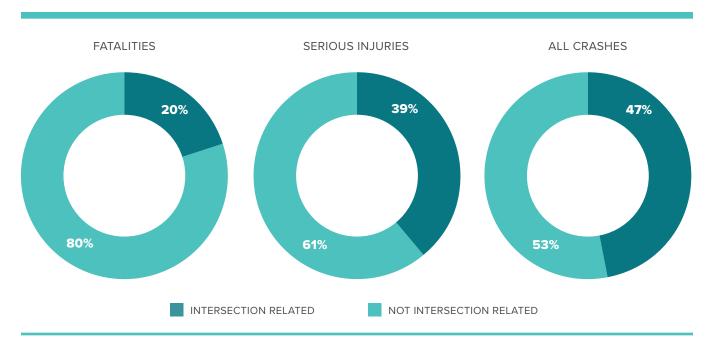


FIGURE 28 INTERSECTION-RELATED CRASHES AS A PERCENTAGE OF FATALITIES, SERIOUS INJURIES, AND ALL CRASHES

Intersection Actions

- 1. Update the Oregon Intersection Safety Implementation Plan to reassess statewide intersection safety needs on state and local roads.
- 2. Implement hot spot and systemic intersection safety improvements consistent with the updated Intersection Safety Implementation Plan.
- 3. Implement intersection design treatments to reduce conflicts between all users, increase awareness, and improve compliance.

- 4. Implement access management on high-volume roads and/or around intersections to reduce the number and severity of crashes.
- 5. Improve the visibility of vehicles and pedestrians and bicycles along corridors and at intersections with lighting and unobstructed sightlines.

Roadway Departure

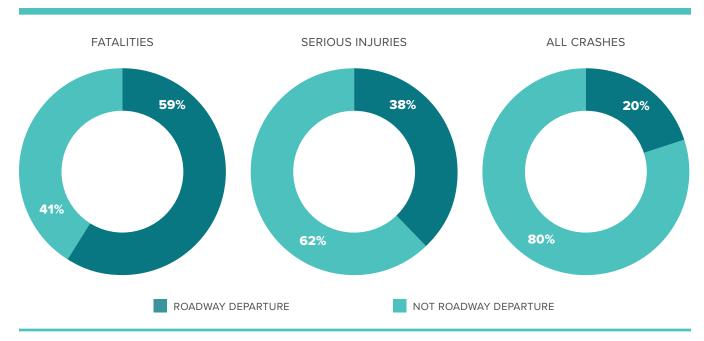
When operating a vehicle, an event may require the driver to swerve suddenly to avoid another car or object, or an unsafe speed could affect control of the car. These situations impact a driver's ability to stay on the road, possibly resulting in a crash. Roadway departure crashes are defined as non-intersection crashes which occur after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way.

Problem Identification

Between 2014 and 2018 approximately 41 percent of all fatal and serious injury crashes in Oregon included a roadway departure, contributing to 1,330 fatalities and 3,366 serious injuries. About 68 percent of these crashes were in a rural environment. Many risky behavior-related crashes involve the vehicle leaving the lane or entire roadway. For example, road and lane departure accounts for 68 percent of speed-related fatal and serious injury crashes and 60 percent of impaired driving fatal and serious injury crashes.



FIGURE 29 **ROADWAY DEPARTURE FATALITIES AND SERIOUS INJURIES BY YEAR**



ROADWAY DEPARTURE AS A PERCENTAGE OF FATALITIES, SERIOUS INJURIES AND ALL CRASHES FIGURE 30

Roadway Departure Actions

- 1. Design and implement cost-effective hotspot and systemic roadway departure improvements addressing risk factors associated with lane departure (e.g., head-on) and run-off-road crashes on state and local facilities.
- 2. Improve road delineation to improve the visibility of road edges in rural areas, including at horizontal curves.



Pedestrians

In Oregon, a pedestrian is anyone who walks or rolls using a scooter, skateboard, or other conveyance. Pedestrian crashes are defined as crashes where one or more pedestrians were involved in the crash. Pedestrian fatalities and serious injuries can be influenced by many factors like light conditions, presence of pedestrian facilities, exposure to high-speed vehicle traffic, vehicle size, and road user behaviors such as inattention, failure to yield right of way, speeding, disregarding traffic signals, and roadway departure. Regardless of who is at fault, crashes involving a pedestrian tend to be more serious because pedestrians are completely exposed when using the transportation system. Transportation infrastructure projects focused on pedestrian needs, including sidewalks and mid-block crossings, are being implemented to encourage residents to safely walk to work, run errands, access transit, or walk or run for recreation. However, some communities do not yet have adequate infrastructure in place to accommodate pedestrians to travel safely. Further, much of the transportation system is not adequate for travelers with disabilities (e.g., mobility challenges, sight impairment).

Problem Identification

Between 2014 and 2018, 9.8% of all fatal and serious injury crashes involved a pedestrian seriously injured or killed. These crashes resulted in 353 pedestrian fatalities and 580 pedestrian serious injuries. Nearly 90 percent of these crashes occurred in an urban environment, where there are more pedestrians but also more pedestrian infrastructure such as sidewalks and enhanced crossings.



FIGURE 31 PEDESTRIAN FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)

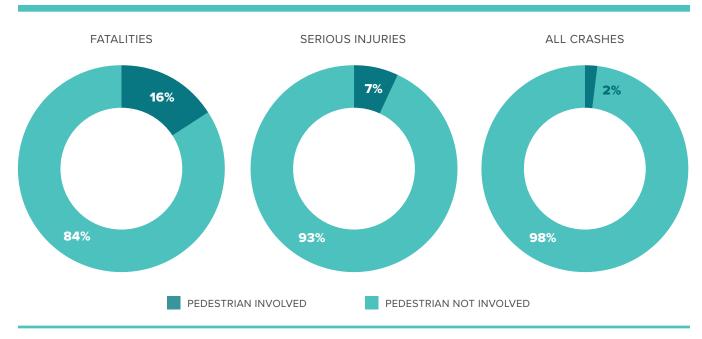


FIGURE 32 PEDESTRIAN INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES

Pedestrian Safety and Social Equity

A growing number of studies have identified a correlation between low-income communities and BIPOC communities and higher pedestrian crash rates. The reasons are numerous and complex, and include the following:

- People who are low income and/or BIPOC are more likely to walk and take transit, increasing their miles traveled as vulnerable road users.
- Research from other states has demonstrated that pedestrian facilities like sidewalks and crossings are more likely to be missing or incomplete in neighborhoods with higher

concentrations of low-income households and BIPOC populations. A lack of sidewalk completeness, safe pedestrian crossings, and street lighting are factors that increase pedestrian safety risk.

Additional Oregon-specific research associated socioeconomic status – measured by proportion of households in poverty – with a higher frequency of pedestrian crashes. Figure 33 shows the combined pedestrian fatality rate and pedestrian serious injury rate by low-income and BIPOC population level in Oregon.

Pedestrian Actions

- Identify high-risk pedestrian safety locations on state and local networks using a data-driven systemic approach described in the NCHRP 20-44(13) Oregon DOT Statewide Pedestrian and Bicycle Plan (2020).¹
- 2. Evaluate pedestrian-involved high crash locations and risk factors through analysis of existing data and development of new data sources.
- Continue to identify effective pedestrian safety countermeasures by testing new treatments, conducting before and after evaluations, and supporting research to refine crash modification factors. Replicate the most effective treatments at additional locations.
- 4. Apply proven, cost-effective systemic and hotspot pedestrian safety countermeasures for all abilities in project design (e.g., lighting, striping).
- Prioritize safety investments on identified high crash and high-risk pedestrian locations per NCHRP 20-44(13) methodology, including transit corridors, school areas, multilane roads, urban state highways and other high-risk areas.
- Design for appropriate road capacity to reduce crosswalk length and crosswalk conflicts and utilize proven safety countermeasures such as road reconfigurations (4-lane to 3-lane conversions) where appropriate.
- Design and construct corridors and facilities for pedestrians of all abilities, consistent with the Blueprint for Urban Design, based on land use and provide appropriate, safe pedestrian

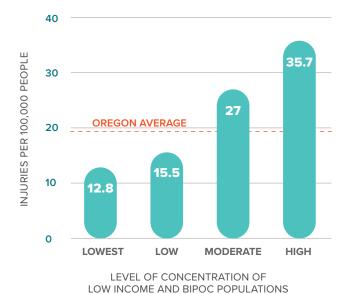


FIGURE 33 PEDESTRIAN FATAL & SEVERE INJURY
RATE BY LOW INCOME & BIPOC
POPULATIONS CONCENTRATION LEVEL IN
OREGON (2014-2018)

crossings along corridors to accommodate pedestrian needs (e.g., crossing type, placement, and lighting).

- Pursue additional funding, partnerships, and innovative strategies for the maintenance of existing pedestrian facilities, including crossings at signalized intersections.
- Prioritize multimodal safety investments in areas with a high concentration of historicallyunderserved communities, such as low income and BIPOC communities.

 $^{1 \}quad http://online pubs.trb.org/online pubs/nchrp/docs/NCHRP20-44-13 Final Report.pdf$

Bicyclists

In Oregon, bicycle crashes are defined as crashes where one or more bicyclists (or other pedalcyclists) was/were involved in the crash. Similar to pedestrians, people who ride bicycles are vulnerable road users because they face special safety challenges of unprotected exposure when commuting on multimodal roadways of travel. This includes a higher risk of fatality or serious injury in Motor Vehicle Crashes (MVCs). Bicyclist fatalities and serious injuries can be caused by many factors like time of day, lighting, incomplete bicycle facilities, inadequate infrastructure, exposure to high volume and high speed vehicle traffic, and unsafe behaviors and errors by all road users such as inattention, distraction, failure to yield right of way, blind spots, speeding, disregarding traffic signals and lane departures. Nationally, as well as in Oregon, urban areas are developing transportation systems and land use policies to promote healthy communities and lifestyles. Multimodal transportation infrastructure, including bicycle lanes, bicyclespecific traffic signals, and bicycle racks, are being implemented to encourage residents to bicycle to work, run errands, or for recreation. In the City of Portland, 7.2 percent of commuters travel by bicycle, which is the highest percentage of commuters for any large American city.1

Problem Identification

Between 2014 and 2018, crashes involving bicyclists (pedalcyclists) accounted for 3.5 percent of all the fatal and serious injury crashes in Oregon. About 88 percent of these crashes occurred in an urban environment, where there are more bicyclists and bicycle infrastructure, more drivers, and cars on the road and in higher concentrated spaces. While some improvements have been made to increase safety for people who ride bicycles, there are many communities where there is a lack of safe bicycle infrastructure.



FIGURE 34 **BICYCLIST FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)**

¹ https://www.portlandoregon.gov/transportation/article/407660

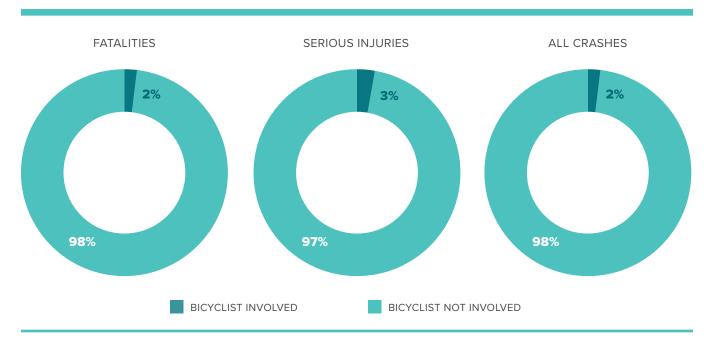


FIGURE 35 BICYCLIST INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES

Bicyclist Actions

- 1. Identify high-risk bicycle safety locations using a data-driven systemic approach as outlined in the NCHRP 20-44(13) Oregon DOT Statewide Pedestrian and Bicycle Plan (2020).
- 2. Evaluate bicyclist-involved high crash locations and risk factors through analysis of existing data and development of new data sources.
- 3. Continue to identify effective bicycle safety countermeasures by testing new treatments, conducting before and after evaluations, and supporting research to refine crash modification factors. Replicate the most effective treatments at additional locations.
- 4. Apply proven, cost-effective systemic and hotspot bicycle safety countermeasures in project design (e.g., lighting, striping).

- 5. Prioritize safety investments on identified high crash and high-risk bicycle locations per NCHRP 20-44(13) methodology, including transit corridors, school areas, multilane roads, urban and state highways, and other high-risk areas.
- 6. Design and construct corridors and facilities for bicyclists consistent with the Blueprint for Urban Design, based on land use along corridors to accommodate bicycle needs (e.g., placement, lighting).
- 7. Adopt and implement maintenance practices that reduce hazards for people riding bicycles.
- 8. Implement and promote increased funding for the bicycle safety training in the Safe Routes to School program.

Motorcycles

Motorcycle drivers and passengers are vulnerable because of their level of exposure when traveling on Oregon's roads. When a motorcycle runs off the road or interacts with another vehicle, the lack of protection for the motorcycle driver (and passenger if present) can increase the severity of the crash. A motorcycle crash is defined as a crash that involves a motorcycle but does not necessarily mean the motorcycle driver is the cause of the crash.

Problem Identification

Between 2014 and 2018, motorcycleinvolved crashes accounted for 14 percent of all the fatal and serious injury crashes in Oregon and contributed to 300 motorcyclist fatalities and 1,112 serious injuries. A high number of motorcycle fatal and serious injury crashes (61 percent) result from lane departure crashes. Crashes at intersections (46 percent) and aggressive driving (42 percent) also are strongly correlated to motorcycle crashes.



FIGURE 36 MOTORCYCLE DRIVER AND PASSENGER **INVOLVED FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)**

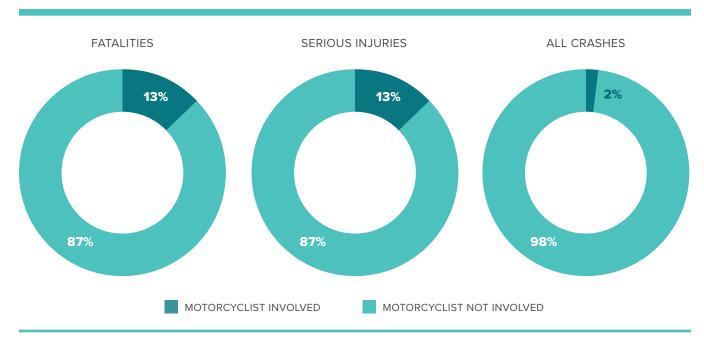


FIGURE 37 MOTORCYCLE INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES

Motorcyclist Actions

- 1. Provide information to increase awareness among motorcycle drivers that most motorcyclist-involved crashes involve speed, impairment, and roadway departure.
- 2. Provide education and enforcement focused on impaired motorcycle riding and its impact on all road users.
- 3. Increase awareness of motorcycles among the general public through education and outreach.
- 4. Train engineers, planners, and maintenance personnel to adopt and implement road surface maintenance practices across jurisdictions that reduce hazards for people operating motorcycles.
- 5. Modify Oregon's helmet definition to match federal regulations.

Aging Road Users

While aging drivers are a concern now in Oregon, crash numbers could increase dramatically over the next decade as the U.S. population ages. Operating a vehicle requires drivers to react quickly, see and hear clearly, judge distances and speeds, and be aware of other drivers and road users. As people age, it can lead to a decline in some of these abilities. When aging drivers do crash, it also tends to be more severe as they can get hurt more seriously and face longer recovery times than younger drivers. In Oregon, aging driver crashes are defined as crashes with at least one driver 65 or older involved (Figure 38).

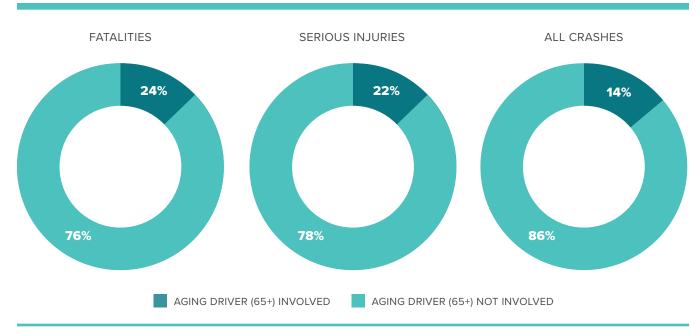
Separate from aging driver involved crashes, aging pedestrian fatalities and serious injuries also are a concern for many of the same reasons listed above – reaction time to oncoming vehicles may be slower, they may not be able to see crosswalks or automobiles as well, they may misjudge the amount of time required to cross a street or otherwise be less aware of their surroundings (Figure 40). In addition, when aging pedestrians are struck by a vehicle, their injuries tend to be more severe.

Problem Identification

Between 2014 and 2018, aging driver involved crashes accounted for 21.9 percent of all the fatal and serious injury crashes in Oregon. Both the number and proportion of aging driver crashes continue to rise as the population of Oregon ages.



AGING DRIVER (65+) INVOLVED FATALITIES FIGURE 38 **AND SERIOUS INJURIES BY YEAR (2014-2018)**



AGING DRIVER (65+) INVOLVEMENT IN FATALITIES, SERIOUS INJURIES AND ALL CRASHES FIGURE 39

Aging Road Users Actions

- 1. Identify risk factors for aging road users (all travel modes) and implement near-term treatments.
- 2. Develop and implement an Oregon Aging Road Users Implementation Plan based on the Addressing Oregon's Rise in Deaths and Serious Injuries for Senior Drivers and Pedestrians research report.1



AGING PEDESTRIAN FATALITIES AND FIGURE 40 **SERIOUS INJURIES BY YEAR (2014-2018)**

¹ https://www.oregon.gov/odot/Programs/ResearchDocuments/SPR828Final.pdf



IMPROVED DATA
TRAINING AND EDUCATION
ENFORCEMENT

EMERGENCY
MEDICAL SERVICES
COMMERCIAL VEHICLES

Five additional subareas were identified as vital components to achieving the zero fatalities and serious injuries vision. To positively influence crash outcomes in Oregon, it is necessary to invest in data improvements to better identify crash locations and understand contributing factors; provide training to transportation and safety stakeholders to expand implementation of safety efforts; coordinate with law enforcement and emergency responders on opportunities to reduce the severity of crash outcomes; and address the consequences of commercial vehicle crashes.

Commercial Vehicles

Between 2014 and 2018, commercial motor vehicle-involved crashes accounted for 5.6 percent of all the fatal and serious injury crashes in Oregon, increasing from 5.2 percent during the 2009-2013 study period.

The Motor Carrier Safety Division at ODOT develops an annual Commercial Vehicle Safety Plan. The mission of the Motor Carrier Transportation Division is to promote a safe, responsible, and efficient commercial transportation industry in Oregon.¹ Similar to the TSAP, the plan outlines critical state commercial vehicle issues, potential solutions and performance measures. There also are federal guidelines documented in the plan.

Commercial Vehicle Actions

- Coordinate TSAP activities with the annual ODOT Commerce and Compliance Division Safety Action Plan.
- Increase training and education for passenger vehicle drivers about how to interact with larger commercial vehicles.

¹ Summary of Oregon Truck Safety and Guide to the 2015 Commercial Vehicle Safety Plan. https://www.oregon.gov/ z/MCT/docs/CVSPlan2015.pdf.

Enforcement

Law enforcement officials prevent crashes through traffic details, special mobilization campaigns such as Click It or Ticket, saturation patrols, and checkpoints. These different approaches enable officers to prosecute safety offenses, such as impaired, distracted, and reckless driving, while keeping all road users safe. They also respond to crashes to collect information for crash reports, which detail the specifics of the crash, person(s), and vehicle(s) involved in the incident. This information later helps transportation and safety stakeholders make informed decisions about safety solutions. Fully staffed and funded law enforcement agencies can direct their efforts towards strategic enforcement and data collection.

The Governors Highway Safety Association (GHSA) states that, "The law enforcement community is not exempt from the bias, prejudice and racism that have a long history in our nation. The persistence of these behaviors negatively impacts all Americans, including the honorable and professional law enforcement officers in our communities." It is important to support the proven role of traffic enforcement to prevent crashes, and to continuously strive to do so equitably.

Enforcement Actions

- 1. Increase training on unbiased law enforcement and prosecution of traffic safety offenses.
- 2. Increase funding for traffic patrols to conduct unbiased enforcement of traffic laws.
- 3. Evaluate resource deployment including the use of automated enforcement.

Emergency Medical Services

Emergency medical service providers are the people responding to victims at crash scenes. Having a prompt and effective EMS system can increase the survival rates for crash victims, especially in rural areas where longer travel distances can make the difference between life and death. The primary responsibilities for EMS staff are to triage, treat, and transport crash victims, but they also may coordinate evacuation with other agencies, provide advanced emergency medical care, and determine the cause of injuries for the trauma center. Fully staffed, funded, and trained emergency response teams can provide services that save lives and/or reduce the impact of injuries.

EMS Actions

- Recruit, train, and retain EMS responders in rural and frontier areas (per current funding availability).
- 2. Promote Traffic Incident Management (TIM) Responder Training for EMS officials.
- Address EMS equipment shortfalls through increased funding in rural and frontier areas.

¹ GHSA Recommends Steps to Fight Racism in Traffic Enforcement, News Release, September 2020. https://www.ghsa.org/resources/news-releases/Equity-In-Traffic-Enforcement20

Data

Crash, roadway, vehicle, driver, citation/ adjudication, injury surveillance and traffic volume (motor vehicle, pedestrian, and bicycle) data is essential to understanding crash trends, identifying critical issues, developing emphasis areas and actions, and evaluating the effectiveness of solutions and equity of safety countermeasures. Data should be timely, accurate, complete, uniform, integrated, and accessible. The improvement of data is addressed by the Oregon Traffic Records Coordinating Committee and other interested stakeholders. Moving forward, a priority of this group will be to develop and implement a revised Traffic Records Strategic Plan to ensure that the best available data is used for safety planning and investment decisions.

Data Actions

- 1. Analyze existing safety-related data and collect and analyze new data sources to evaluate pedestrian and bicycle safety risk factors on all public roads.
- 2. Improve the timeliness of crash data. For example, implement relevant actions from the CAR Unit 5-year Strategic Business Plan.
- 3. Develop and implement an electronic reporting system to improve crash report timeliness, uniformity, accuracy, completeness, accessibility, and integration with related data sets (e.g., roadway inventory, traffic, public health, etc.).
- 4. Revise and implement a new Traffic Records Strategic Plan based on the most recent Traffic Records Assessment recommendations
- 5. Evaluate type and extent of crash underreporting. Implement necessary actions to address the issue.
- 6. Collect data that helps safety data analysts and policy makers evaluate transportation safety equity.
- 7. Develop and implement a Safety Dashboard to improve data sharing, accessibility, and reporting, including annual updates to data-related content in the TSAP.
- 8. Provide transportation safety data analytical support to local agencies and Tribal governments.

Training and Education

Oregon is committed to educating engineers, educators, enforcement, emergency service providers, and the general public about new safety information and offering training opportunities to maintain and upgrade skills. Continued driver education and training, for young and experienced drivers including motorcycle drivers, will contribute to crash reductions. Specific education and training opportunities would contribute to a better understanding of traffic laws, new transportation infrastructure, work zone awareness, and motorcycle safety.

Training and Education Actions

- 1. Implement education, training, or examinations to ensure all licensed drivers understand current traffic laws.
- 2. Conduct training on traffic safety laws for law enforcement officers, attorneys, and judges to improve consistent and unbiased enforcement and adjudication processes.
- 3. Continuously improve the education system for new automobile drivers and motorcycle riders, including Driver's Education cost and access barriers. Evaluate requiring driver training for new operators.
- 4. Provide education and other countermeasures to improve work zone safety for workers and the traveling public.
- 5. Develop training for local agency and consultant engineers and planners in transportation safety basics (e.g., safety investigations, road safety assessments, speed zoning, data analysis).

Conclusion

EAs represent the key factors contributing to crashes. In Oregon, the results of data analysis and public input identified Infrastructure, Risky Behaviors, Vulnerable Users, and Improved Systems as the priority areas to focus staff time and resources to achieve reductions in transportation-related fatalities and serious injuries. To effectively direct resources over the next five years, project, programmatic, and potential future legal policy changes have been identified to be implemented by a variety of Oregon's agencies and stakeholders.

Performance Measures and Targets

To understand the value of TSAP efforts over time, performance must be measured. Establishing performance measures provides the information needed to evaluate safety implementation and identify the need for changes to the TSAP in the future.

Performance Measures and Targets

To better understand whether the policies, strategies, emphasis areas, and actions identified in the previous chapters are contributing to fatality and serious injury reductions, the TSAP establishes performance measures that align with FHWA requirements under the MAP-21 rule, FAST Act, and NHTSA. To evaluate progress towards the TSAP vision, performance targets also have been identified to meet Federal requirements. This chapter outlines the recommended TSAP performance measures and targets.

Defining Performance Measures

In transportation, performance measures are defined as "data about the use, condition, and impact of the transportation system...reported for illustrative purposes to demonstrate progress made toward established targets."1

Performance measures are defined as "data about the use, condition, and impact of the transportation system."

The National Performance Review definition of performance measure is as follows:

"A process of assessing progress toward achieving predetermined goals, including information on the efficiency with which resources are transformed into goods and services (outputs), the quality of those outputs (how well they are delivered to clients and the extent to which clients are satisfied) and outcomes (the results of a program activity compared to its intended purpose), and the effectiveness of government operations in terms of their specific contributions to program objectives."²

¹ MAP-21, Performance Measures, and Performance-Based Funding, http://www.cmap.illinois.gov/about/updates/-/asset publisher/UIMfSLnFfMB6/content/map-21-performance-measures-and-performance-based-funding.

² Performance Measure Fundamentals, FHWA Office of Operations, Washington, D.C., 2015. http://www.ops.fhwa.dot.gov/perf_ measurement/fundamentals/.

Types of Performance Measures

Measurements are categorized into two distinct types: **efficiency** and **effectiveness**.

EFFICIENCY PERFORMANCE MEASURES:

- TRACK THE EFFORT AND OUTPUT OF A PROGRAM.
- TRACK HOW MANY ACTIVITIES WERE CONDUCTED, OR MILES OF TREATMENT.

Efficiency measures are focused on effort and outputs. They track the goings-on of a program, and in traffic safety examples include the following:

- Miles of rumble strips installed;
- Seat belt violation citations written;
- Labor hours of overtime enforcement conducted; and
- Schools visited last year to promote traffic safety.

The value of efficiency measures is that they are often easy to quantify through real-time tracking or year- end data collection. The limitation, however, is that efficiency measures do not measure the end result directly. For example, installing rumble strips does not guarantee a reduction in crashes, and writing additional seat belt citations does not necessarily improve seat belt use or reduce unbelted crashes. When choosing efficiency measurements, it is important to make a connection from the effort to its ultimate goal.

Effectiveness measures, in contrast, measure the results of a program activity. These measures tie

more directly to the ultimate goals of reducing fatalities and serious injuries. Examples include the following:

- Number of traffic fatalities in a given jurisdiction over the past year
- Seat belt use rate
- Number of unbelted fatalities
- Number of alcohol-involved fatalities and serious injuries
- Number of fatal crashes involving motorcycle riders

EFFECTIVENESS PERFORMANCE MEASURES:

TRACK THE RESULTS OF A PROGRAM OR ACTIVITY.

TRACK HOW MANY FATALITIES OR
INJURIES OCCURRED, OR NUMBER OF
UNBELTED FATALITIES.

Effectiveness measures are typically of higher value due to their focus on the desired result.

However, it is often difficult to acquire information for effectiveness measures in a timely manner.

For example, obtaining the number of unbelted occupant-related traffic crashes can take months or years for collection, quality assurance, and archiving. Additionally, it is not always clear if the change in the effectiveness measure was directly connected to outputs. For example, it is not prudent to assume a crash reduction was caused by traffic safety efforts; other factors, including statistical randomness, play a part.

TSAP Performance Measures

Federal Highway Administration Performance Measures

The recent 2016 FHWA Final Rule on National Performance Management Measures established five safety performance measures for federal aid highway programs¹:

- NUMBER OF ROADWAY FATALITIES
- NUMBER OF ROADWAY SERIOUS FATALITIES
- ROADWAY FATALITIES PER VEHICLE MILES TRAVELED (I.E., FATALITY RATE)
- ROADWAY SERIOUS INJURIES PER VEHICLE MILES TRAVELED (I.E., SERIOUS INJURY RATE)
- COMBINED NONMOTORIZED FATALITIES AND NONMOTORIZED SERIOUS INJURIES

Along with these five primary measures, the federal government requires states to track the performance of two categories under these Special Rules:

• RURAL ROAD SAFETY. MAP-21 added the High-Risk Rural Roads (HRRR) Special Rule. First, MAP-21 defined an HRRR as "any roadway functionally classified as a rural major or minor collector or a rural local road with significant safety risks, as defined by a state in accordance with an updated state strategic highway safety plan." Second, it establishes a special rule that states, "If the

fatality rate on rural roads in a state increases over the most recent two-year period for which data are available, that state shall be required to obligate funds in the next fiscal year for projects on high-risk rural roads in an amount equal to at least 200 percent of the amount of funds the state received for fiscal year 2009 for high-risk rural roads." For the State of Oregon, this equates to approximately \$2.4 million required to be obligated to HRRR safety efforts. As of the 2014-2018 data analyzed, the Special Rule applies.

• OLDER DRIVERS AND PEDESTRIANS

SAFETY. The legislation defines Older Drivers and Pedestrians as "drivers and pedestrians 65" year of age and older." The Older Drivers and Pedestrians Special Rule applies if the rate of traffic fatalities and serious injuries for these road users increases during the most recent two-year period for which data are available. If it does apply, a state "shall be required to include strategies to address the increase in those rates." Additional details for calculating this combined crash rate and determining applicability are available in FHWA guidance. The Older Drivers and Pedestrians special rule was found to apply because the five-year average number of fatalities and serious injuries for aging drivers and pedestrians increased on a per-capita basis. As a result, the TSAP update includes strategies to reduce fatalities and serious injuries among drivers and pedestrians 65 years or older.

¹ Federal Register, National Performance Management Measures: Highway Safety Improvement Program Final Rule. 2016. https://www.Federalregister.gov/articles/2016/03/15/2016-05202/national-performance-management-measures-highway-safety-improvement-program.

Oregon Traffic Safety Performance Plan and NHTSA Performance Measures¹

The Oregon Traffic Safety Performance Plan identifies the following performance measures, which satisfy the NHTSA performance measure requirements.¹

- Traffic Fatalities
- Serious Traffic Injuries
- Fatalities/100M VMT
 - » Rural Road Fatalities/100M VMT
 - » Urban Road Fatalities/100M VMT
- Unrestrained Passenger Vehicle Occupant Fatalities, All Seat Positions
- Alcohol Impaired Driving Fatalities Involving a Driver or Motorcycle Operator with a BAC of 0.08 and Above
- · Speeding-related Fatalities
- Motorcyclist Fatalities
- Unhelmeted Motorcyclist Fatalities
- Drivers Age 20 or Younger Involved in Fatal Crashes
- · Pedestrian Fatalities
- · Bicyclist and Other Cyclist Fatalities
- Statewide Observed Seat Belt Use, Passenger Vehicles, Front Seat Outboard Occupants

TSAP Performance Measures

The Oregon TSAP performance measures (consistent with NHTSA and FHWA requirements) are shown in Table 4.

TABLE 4 TSAP PERFORMANCE MEASURES

	PERFORMANCE I	PERFORMANCE MEASURE REQUIRED BY NHTSA ^A	REQUIRED BY FHWA IN PERFORMANCE MEASURES FINAL RULE
1	FATALITIES	•	•
2	FATALITIES/ 100M VMT	•	•
3	SERIOUS INJURIES	•	•
4	SERIOUS INJURIES/ 100M VMT		•
5	NONMOTORIZED FATALITIES + SERIOUS INJURIES	;	•
	SPECIAL RULES		
	RURAL ROAD SAFETY		•
	OLDER DRIVER + PEDESTRIAN SAFE	тү	•

A "Traffic Safety Performance Measures for State and Federal Agencies," National Highway Traffic Safety Administration, DOT HS 811 025, Washington, D.C., 2008. Available at http://www. nhtsa.gov/DOT/NHTSA/ Traffic%20Injury%20 Control/Articles/Associated%20Files/811025.pdf.

¹ Oregon Traffic Safety Performance Plan, Fiscal Year 2016, Federal Version Report, Page 11.

Performance Targets Requirements

TSAP PERFORMANCE TARGETS (FIVE-YEAR AVERAGE) **TABLE 5**

BASE PERIOD	FATALITIES	FATALITY RATE PER 100 MILLION VMT	SERIOUS INJURY	SERIOUS INJURY RATE PER 100 MILLION VMT	NON-MOTORIZED FATALITIES AND SERIOUS INJURIES
2021 BASELINE REPORTED CRASHES (2014-2018)	448	1.48	1,739	5.03	257
2022 FIRST YEAR TARGET REPORTED CRASHES (2015-2019)	444	1.46	1,722	4.98	254

Each of the five FHWA safety performance measures is required to have an annual target. The targets are based on a five-year rolling average and are applicable to all roads regardless of ownership or functional classification.

The number of fatalities, rate of fatalities, and number of serious injuries also are performance measures in the Oregon Traffic Safety Performance Plan (OTSPP) meeting NHTSA requirements. The federal rules require that these performance measures (#1, #2, and #3 above) have identical targets in the State SHSP and Highway Safety Plan. Further, it identifies the Strategic Highway Safety Plan (the TSAP in Oregon) as the venue for coordination of these common measures. Reporting of results for these various performance measures is accomplished in the HSIP annual report for FHWA and the OTSPP and Annual Report for NHTSA.

Once established, states will have to demonstrate progress toward meeting the targets in the appropriate annual reports. For safety, progress is made when four of five targets are met or performance is better than the prior year.

If targets are not met or progress is not made, states will be required to spend all of the HSIP funds only for highway safety improvement projects and submit an HSIP implementation plan.

The federal rule also requires MPOs to establish performance targets. MPOs can use the stateestablished targets or establish targets specifically for the planning area. Similar to the state target, the targets are applicable to all public roads in the MPO. States and MPO will coordinate their targets.

Oregon has selected an "S-Curve" forecast that assumes the five-year average number of crashes may be relatively flat in the near future; start to decline in a few years in recognition of different programs of the plan being implemented and potential benefits of connected and/or automated vehicles; and flatten out again in the future as it becomes more difficult to address the remaining fatalities.

Table 5 shows the resulting first-year target (2015-2019 data) as compared to the baseline (2014-2018 data).

Figure 41 through Figure 46 show recent fatality and injury data and a forecast of how Oregon will achieve the vision of zero fatalities and life-changing injuries by 2035 using the five performance measures. As shown in each figure, it is forecast that initial reductions will be relatively slow as the goals, policies and strategies in this plan begin to be implemented. Over time, as the goals, policies, and strategies gain a foothold in Oregon, fatalities and serious injuries will decline more rapidly. Finally, it is forecast the trend will flatten out in the later years of the plan because it

will be more and more difficult to address the final safety issues in the state.

As described in Chapter 4, in addition to the goals policies and strategies in this plan, there are many factors that will influence the number and severity of crashes. These factors include age of the population, mode of travel, number of miles of travel, how fast people drive, where people live, or connected and automated vehicles. These external factors will be important considerations in future updates to the TSAP.

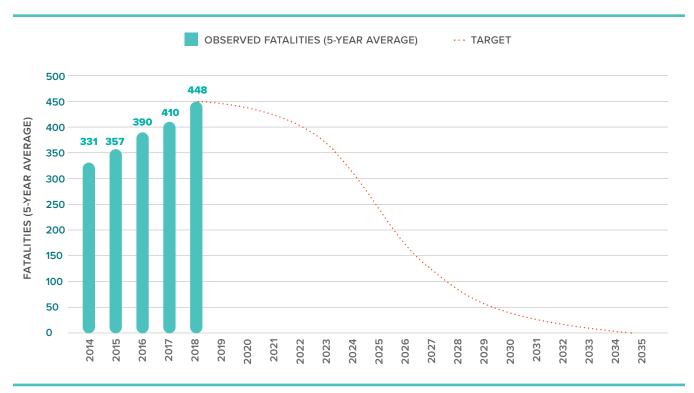
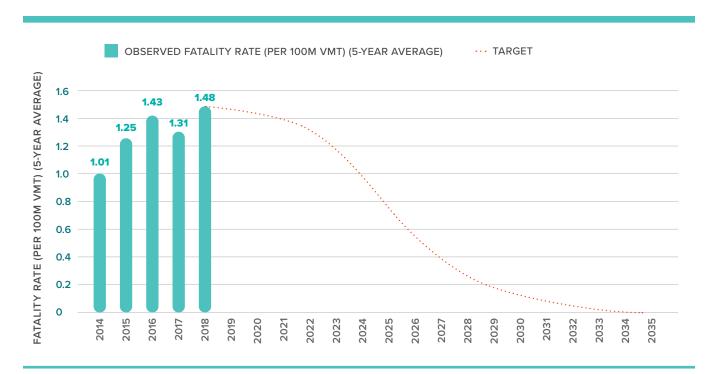
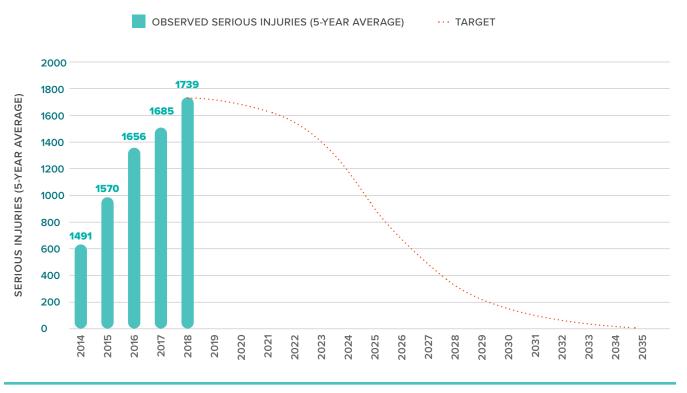


FIGURE 41 FATALITY TARGETS



FATALITY RATE TARGETS FIGURE 42



SERIOUS INJURY TARGETS FIGURE 43



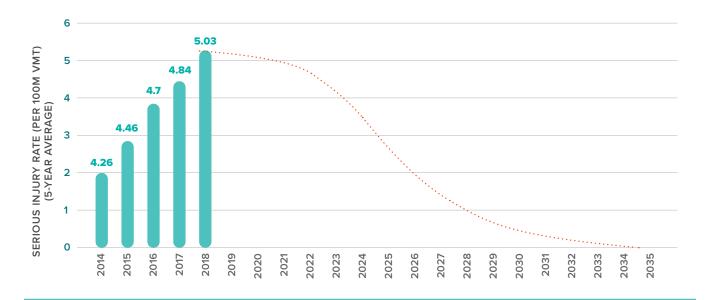


FIGURE 44 SERIOUS INJURY RATE TARGETS



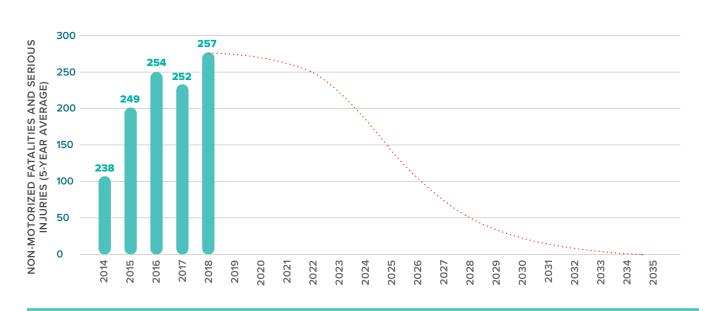


FIGURE 45 NONMOTORIZED FATALITIES AND SERIOUS INJURIES TARGETS

Annual Performance Measure Target Review

ODOT and its safety partners will convene annually to review the most recent crash data, assess progress achieved, and confirm the target setting approach and new targets for the next year. This effort will be integrated with the annual Highway Safety Plan (HSP) revision, which involves ODOT Traffic Safety Division and the OTSC. The new targets will also be integrated into the annual Highway Safety Improvement Program (HSIP) report.

MPOs will be invited to participate in the annual target setting exercise, per the federal Safety Performance Measure requirements.

Conclusion

The TSAP performance measures and targets will provide ODOT divisions and partner and stakeholder agencies with data-driven information on the successes and challenges associated with the policies, strategies, emphasis areas, and actions identified to eliminate fatalities and

serious injuries. This data can be used to make adjustments to the TSAP over time. The following chapter, Implementation and Evaluation, describes how measures and targets will be established and monitored to continually improve transportation safety in Oregon.

8

Implementation and Evaluation

One of the TSAP goals is to create a document that is applicable to and usable by all ODOT divisions and partner and stakeholder agencies. To achieve this, the policies and strategies in the Vision, Goals, Policies, and Strategies chapter, broadly relate safety to long-term transportation issues, and can be integrated into the development of any transportation plan.

Implementation and Evaluation

The emphasis areas and actions in the Emphasis Areas chapter present short-term safety needs and solutions that can be utilized by any safety or transportation professional. The result is a TSAP that relates to the personal and/or professional responsibilities for all Oregonians, making it easier to implement. Ongoing coordination and collaboration will enhance implementation efforts and also set the stage to evaluate progress on policies, programs, and projects. This chapter discusses TSAP implementation and evaluation opportunities.

How the TSAP Fits into Practice

The TSAP is the framework for engaging residents, stakeholders, employers, planners, engineers, enforcement agencies, and emergency medical service providers across the state in improving transportation safety in Oregon. Over time, and with focus, the vision of zero fatalities and lifechanging injuries on Oregon roadways by 2035 can be achieved.

The TSAP serves as the foundation for the integration of behavioral and engineering safety practices into all aspects of planning, programming, and policy activities in the state. While safety-specific plans and programs are critical to achieving the vision for safety in Oregon, it also is important that traditional transportation planning, design, operations and maintenance, and programs and policies proactively integrate safety into their decision-making processes. The TSAP provides long-term, overarching safety vision, goals, policies, and strategies that can be implemented at the state, regional, tribal, county, and city government level.

Using the goals, policies, and strategies in the TSAP, planners, and engineers can track and plan for safety on the transportation system by:

- Reviewing past, current, and predicted safety trends – How many fatal and serious injuries are occurring? Where might these crashes occur in the future?
- Developing safety goals, objectives, measures, and targets – What are we trying to achieve and are we making progress towards zero fatal and serious injury crashes?
- Identifying transportation programs and projects to achieve results – What activities are needed to achieve the vision and goals?
- Monitoring and evaluating system
 performance What is the performance of the
 system over time?

This approach to transportation safety fits within the context of the traditional transportation planning process, which agencies already use to analyze trends, set goals and objectives, identify programs and projects, and evaluate progress towards transportation priorities. The TSAP provides a framework for state, MPO, tribal, county, and city planners, engineers, and stakeholders to create a safer culture and transportation system for Oregonians.

The TSAP also provides near-term actions for reducing fatalities and life-changing injuries in the form of Emphasis Area Actions. These can be used to inform project, program, and policy concepts, evaluation, and decision-making at the

state, regional, tribal, county, and city level. The Emphasis Area Actions in the TSAP will directly influence planning and programming activities for the Oregon Traffic Safety Performance Plan and the ODOT Highway Safety Improvement Program, along with other partners' safety plans.

Example long-term and near-term coordination, implementation or outreach roles, or activities for agencies and stakeholders in Oregon are summarized in Table 6. This table is not exhaustive but meant to highlight several of the key agency's activities and roles.

TABLE 6 EXAMPLE ACTIVITIES AND ROLES

AGENCY	EXAMPLE ACTIVITIES AND ROLES
	 Lead state in vision, culture, direction, and best safety practices inside and outside of the agency to advance safety planning, programming, and policies.
	 Lead and integrate the vision of no fatalities or life-changing injuries in all DOT activities from system and project planning through construction, operations, and maintenance.
ОДОТ	 Develop and implement policies, processes, and procedures to integrate quantitative safety planning and engineering through all business units.
	 Serve as a collaborator and communicator with agencies and stakeholders throughout Oregon to improve safety on all roads.
	• Lead public education to change safety culture for all users of the transportation system.
	Monitor performance of Plan.
	Conduct and facilitate outreach to support implementation of Plan.
OREGON HEALTH AUTHORITY	Continue collaboration with ODOT to integrate health and transportation.
	 Include transportation safety education in public health education programs.
	 Continue collaboration with ODOT to integrate crash data and transportation-related prehospitalization, trauma, and hospitalization data to improve Oregon crash data and analysis.

Elevate multimodal transportation safety planning in long-range planning processes. Collaborate with partner state and local agencies and stakeholders to identify and prioritize solutions for near-term safety issues (spot-specific and systemic treatments). **METROPOLITAN** Advance safety culture education and programs. **PLANNING** Integrate transportation safety programs into ongoing activities. **ORGANIZATIONS** Collaborate with enforcement agencies and emergency service providers to improve services for residents. · Develop regional safety action plans to support long-range plans in the region. · Evaluate local spot-specific and systemic safety needs; develop plans and programs to address needs. · Collaborate with the state, MPO, and stakeholder partners to educate the public about tribal, county and city transportation safety-related behavioral issues. TRIBAL, COUNTY, **AND CITY** • Integrate safety programming, planning, and policy into local planning. **AGENCIES** Develop coalitions with enforcement and EMS providers to target and improve specific community needs. Use the TSAP as a resource for local goals, policies, strategies, and actions. Refer to TSAP to identify education and marketing topics for employees and stakeholders. Collaborate with regional, tribal, county and city partners to elevate safety issues and **PRIVATE ENTITIES** AND NONPROFIT integrate safety into local planning and policy documents. **ORGANIZATIONS** · Collaborate with enforcement and EMS to identify strategic education and marketing campaigns. Collaborate with tribal, county, city, MPO, and state partners to advance safety culture within organizations and with the public. Collaborate with tribal, county, city, MPO, and state partners to develop strategic enforcement or education campaigns to address critical behaviors identified in the TSAP. **ENFORCEMENT** · Educate the public and tribal, county, city, state, and MPO partners about critical and emerging **AGENCIES** issues which could be addressed through the planning and programming processes. · Identify and deploy best practices related to impaired, careless, reckless, and distracted driving education and enforcement. Identify and deploy best practices related to crash data collection, compilation, and transfer. **EMERGENCY** Apply concepts from the TSAP to advocate for best practices in funding, training, and **MEDICAL** deployment of EMS services. **SERVICES**

Monitoring Progress

ODOT continually monitors progress on the performance of transportation programs and measures with annual reporting on both the TSAP and the Highway Safety Improvement Program. The Oregon Traffic Safety Performance Plan identifies performance goals annually and evaluation of progress is reported in the Performance Plan Annual Evaluation, consistent with National Traffic Highway Safety Administration requirements. The Highway Safety Improvement Plan: Annual Evaluation Report is prepared to satisfy Federal reporting requirements and provide documentation for the related Federal grant year for Federal Highway Administration funding programs.

Oregon Traffic Safety Performance Plan

Transportation Safety Division's core monitoring activity is the yearly effort wherein each program manager uses the most up to date data to set their performance goals for the upcoming year. The purpose of the performance plan is to show the impact funds, staff time, and programs will have on the safety of the traveling public. Performance measures incorporate elements of the Oregon Benchmarks, Oregon Transportation Safety Action Plan, the Safety Management System, and nationally recognized measures. Both longrange and short-range measures are utilized and updated annually.

Oregon uses a minimum of 3-, 5-, or 8-year history average, then a change rate of 3 percent, plus

or minus, to establish performance measures. This level of change has proven to be effective in prior Highway Safety Plans. This level of change is generally representative of one standard deviation, meaning that the actions taken had an influence on the result outside of just pure chance. The Oregon highway safety community has also embraced this formula and has supported the use of 3 percent.

Performance Plan Annual Report

The annual report explains what funds were spent and how TSD fared on annual performance measures. It reports on the accomplishments and challenges experienced during the fiscal year, considering all the funds controlled by the Transportation Safety Division. This is TSD's most comprehensive and established procedure for monitoring progress. In addition, program managers do some independent investigations throughout the year when questions come up, when new data is available, or as issues arise.

Highway Safety Improvement Plan (HSIP): Annual Evaluation Report

ODOT is required to submit an annual HSIP report to the FHWA Division Administrator by August 31st of each year, pursuant to 23 CFR 924.15. This report describes the progress being made to implement safety projects, assesses the effectiveness of these projects, and describes the extent to which the improvements have contributed to reducing fatalities and serious

injuries. Traffic-Roadway Section is responsible for generating this report and submitting it to the FHWA.

The annual evaluation reports on the progress of the Highway Safety Improvement Program. For the purposes of this report, HSIP projects are classified into these general categories: Intersection Improvements, Signing and Delineation, Roadway / Structure Improvements, Roadside Improvements, Safety Appurtenances (guardrail, medians, etc.), and traffic calming projects.

ODOT is responsible to report on project effectiveness by looking at the cost of projects, before and after crash data, and other information, using benefit-cost analysis or other approved methodology to show whether the project achieved its purpose.

Crash Data Reporting

ODOT's Crash Analysis and Reporting program publishes annual reports on crash data that are instrumental in program planning and assessing performance for both TSD and the Highway Division. These include Traffic Crash Summary Reports (all roads), State Highway Crash Rate Tables (state highways), and Motor Carrier Crash Rate Tables.

Conclusion

Four fundamental elements support all SHSP implementation practices: leadership, collaboration, communication, and data collection and analysis. The same is true for successful evaluation.

Implementing and evaluating the TSAP will require a great deal of leadership from ODOT and communication with and amongst regional, county, and local planners and engineers, stakeholder agencies, and advocates as well as employers and private citizens. The partnerships developed in creating this plan provide an understanding of the roles everyone can play to address safety and build ownership of the TSAP. The result will be a coordinated, multidisciplinary approach to implementing and evaluating transportation safety improvements that reduce injuries and save lives.

¹ Federal Highway Administration. Strategic Highway Safety Plan Implementation Process Model. June 2010.

Appendices

Appendix A:

Who Developed This Plan

Appendix B:

TSAP Update Process and Federal Requirements

Appendix C:

Findings of Compliance with Applicable State Law and Administrative Rules

Appendix D:

Glossary

Appendix A. Who Developed This Plan

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Oregon Transportation Safety Committee

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Nick Fortey, Federal Highway Administration

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Hau Hagedorn, Oregon Bicycle and Pedestrian Advisory Committee

Erik Havig, ODOT

Chuck Hayes, Governor's Advisory Committee on DUII

Jeff Hazen, Sunset Empire Transportation District

Chris Henry, City of Eugene/Governor's Advisory Committee on Motorcycle Safety

Jessica Horning, ODOT

Stephanie Ingraham, Oregon State Police

Mike Jaffe, Salem-Keizer Area Transportation Study MPO

Janis Jarvis, Oregon Trucking Association

Angela Kargel, ODOT

Philip Kase, ODOT

Scott Kocher, Oregon Walks

Kristopher Kyes, ODOT

Heidi Manlove, ODOT

Joe Marek, Clackamas County

Kelly Mason, ODOT

Joel McCarroll, ODOT

Christina McDaniel-Wilson, ODOT

Lake McTighe, Metro

Lucinda Moore, ODOT

Billie-Jo Nickens, ODOT

Colleen O'Hogan, ODOT

Susan Peithman, ODOT

Nikotris Perkins, ODOT

Robin Ness, ODOT

Karen Odenthal, Salem-Keizer Area Transportation Study MPO

Amy Ramsdell, ODOT

Jody Raska, ODOT

Scott Rector, Oregon State Police

Vanessa Robinson, ODOT

Hector Rodriguez-Ruiz, ODOT

Josh Roll, ODOT

Amanda Salyer, ODOT

Peter Schuytema, ODOT

Dana Selover, Oregon Health Authority

Rosalee Senger, ODOT

Craig Sipp, ODOT

Becky Taylor, Lane County

Tiana Tozer, ODOT

Kristin Twenge, ODOT

Bill Warner, ODOT

Jonathan Wilson, Federal Motor Carrier Safety Administration

Catherine Wisniewski, Good Shepherd Health Care System

Brian Worley, Association of Oregon Counties

Chris Wright, ODO

Appendix B. TSAP Update Process and Federal Requirements

The TSAP is required to provide a detailed description of the SHSP update process to meet Federal requirements outlined in MAP-21. Table B.1 highlights the required elements of the update process and summarizes how they were achieved. The text following describes the update process in greater detail.

Table B.1 Meeting Federal Requirements for the TSAP Update

Requirement	Description of Requirement	Summary of ODOT Activities
Consultative Process	The state has conferred with a required list of stakeholders early in the SHSP update process, considered their input prior to decision-making, and routinely informed them about actions taken regarding SHSP development.	 Ten interviews with stakeholders representing a diverse set of safety-related needs. Outreach meetings with more than 20 groups (e.g., ODOT staff, leadership groups, advisory committees) – including multiple engagements with some – to receive feedback on 2016 TSAP implementation and comments for the 2021 TSAP. Online survey to solicit public feedback on the previous TSAP and statewide safety efforts. Stakeholder workshops to obtain stakeholder input on the emphasis areas, strategies, and actions; and safety performance measures.
Coordination	The SHSP is aligned with other transportation plans in the state.	 All relevant transportation and safety plans were reviewed and applicable strategies included in the TSAP. Agencies, responsible for developing other transportation and safety plans in Oregon, were active participants in the TSAP update.
Data-Driven Analysis	The state has used the best available safety data to identify emphasis areas that address safety concerns on all public roads.	 Using crash data from 2014-2018, an analysis was completed for all public roads in Oregon. Based on these results, the 2016 TSAP emphasis areas were maintained. Crash data analysis informed the revision of some 2016 emphasis area action items and the addition of several new action items.
Performance- Based Planning	The SHSP includes goals and measurable objectives to enable the state to track and monitor the status of SHSP implementation efforts and monitor progress.	The TSAP sets goals and measurable objectives for the five MAP-21 required performance measures.
Strategy Selection	Effective emphasis area strategies were selected and the 4 Es of safety were addressed as key factors in strategy selection.	 Strategies and actions include behavioral and infrastructure solutions developed based on crash data analysis, input from the PMT, public feedback, stakeholder workshops, and assessment of effective countermeasures.
Schedule to Evaluate and Update SHSP	State's plans and schedule to evaluate and update the SHSP.	 Performance measures and targets have been identified to evaluate progress on an annual basis towards the TSAP vision. The TSAP will be updated within a five-year time period from the adoption of this Plan.

Special Rules	States	must includ	e a definitior

for "high-risk rural roads" if fatality rates have increased. States must include strategies to address pedestrians and older drivers if there have been increases in fatality and serious injury rates.

 The special rules for high-risk rural roads older drivers and pedestrians does apply in Oregon. The TSAP includes strategies to address these issue areas.

Consultative Process

Considerable outreach was conducted with the required stakeholders (23 U.S.C. 148(a)(11)(A)) and others through stakeholder meetings, interviews, surveys, presentations, and the project website.

Committees

Project Management Team. Provided technical input to major milestones, including vision, goals, emphasis areas, strategies, and actions. The Project Management Team met bi-monthly over the course of the project and included staff from ODOT Planning Unit and ODOT Transportation Safety Division.

Project Delivery Team. ODOT and consultant staff met bi-weekly to discuss current project tasks. This teaming arrangement enhanced coordination between the different transportation modal plans and safety plans.

Interviews and Surveys

To understand how the previous TSAP impacted transportation and safety plans, programs, projects, and institutional awareness throughout the state, 10 interviews were conducted with representatives from several ODOT Divisions and other stakeholders. Representatives included stakeholders from Oregon State Police, Bend MPO, Association of Oregon Counties, the Oregon Health Authority, and two Governor's Advisory Committees: Driving Under the Influence of Intoxicants (DUII) and Motorcycle Safety.

Staff-led Outreach Meetings

ODOT staff conducted outreach meetings with more than 20 transportation groups in Oregon to receive feedback on the 2016 TSAP implementation efforts, share the project team's activities regarding the 2021 TSAP update, and solicit their recommendations for TSAP content. Groups consulted included the following.

- Traffic Operations and Standards Team
- Planning and Policy Discipline Team
- Area Managers Meeting
- Commerce and Compliance Division Management Team
- Quarterly ODOT, Metropolitan Planning Organization, and Transit District
- Oregon Bicycle and Pedestrian Advisory Committee
- Oregon Freight Advisory Committee
- Oregon Transportation Safety Committee
- Operations Management Team
- Governor's Advisory Committee on Motorcycle Safety

- Delivery and Operations Leadership Team
- Department of Motor Vehicles Driver Programs Team
- Public Transportation Advisory Committee
- Governor's Advisory Committee on DUII
- Motor Carrier Transportation Advisory Committee

Public Survey

ODOT conducted an online survey between October 1 and November 20, 2020 to identify key issues and opportunities to address with the 2021 TSAP. A total of 434 people participated in the survey, and of those, over half said that this was their first-time providing feedback on the TSAP update.

Coordination

The TSAP serves as the unifying framework for transportation safety planning in Oregon. As part of the TSAP update process, a review of existing State, local, regional, and Tribal plans was conducted, with a specific emphasis on safety. The purpose of this review was to identify policies and strategies that should be considered in the TSAP to ensure consistency across plans. This alignment of plans reinforces the transportation safety message while maximizing resources available to implement solutions.

As a Topic Plan that is part of the Oregon Transportation Plan (OTP), The TSAP Implements the OTP safety goals and informs safety goals of new and updated plans. Going forward, the TSAP will be an important resource for transportation safety direction as state, regional, Tribal, county, and city plans are updated or new plans are developed. These plans should be consistent with the TSAP with respect to safety.

Lastly, the TSAP was developed in coordination with the stakeholders responsible for reviewing and updating other transportation and safety plans in the state. For example, the ODOT Safety Division, responsible for the Highway Safety Plan, participated on the Project Management Team. This collaboration ensured that safety plans and safety elements in transportation plans had a higher degree of coordination.

Data-Driven Analysis

For the TSAP update, recent and historic Oregon crash data was analyzed to document trends related to crash types, crash severity, crash demographics, and contributing factors. The information was used by ODOT and other safety stakeholders to:

- Inform the existing conditions section of the TSAP;
- Support the data-driven approach to the TSAP required by MAP-21 legislation; and
- Support identification and confirmation of the most appropriate emphasis areas for the TSAP.

The time period covered in the data analysis was from 2014-2018 and included crashes on all public roads in Oregon, regardless of roadway ownership and maintenance.

A key part of the analysis was an assessment of crash categories to identify those contributing to Oregon's fatal and serious injury crashes. More than 20 crash categories were identified for further analysis, and the following categories stood out as the most common:

- Roadway Departure
- Intersections
- Speed-related
- 4. Alcohol Involved
- 5. Motorcycle Involved
- 6. Young Drivers (15-20) Involved
- 7. Unrestrained Occupants
- Pedestrian(s) Involved
- 9. Aging Drivers (65+) Involved

To encapsulate these needs and combined where appropriate, the following emphasis areas were confirmed for the 2021 TSAP: Risky Behaviors, Infrastructure, Vulnerable Users, and Improved Systems.

In addition to the crash data analysis, emphasis areas also were selected based other quantitative and qualitative indicators, including:

- **Effectiveness Data.** Are there proven countermeasures available for use in Oregon? If not, is there an ability and commitment to evaluate effectiveness of programs and projects?
- **Institutional Capacity.** Are there agencies or individuals who are able to commit ongoing staff resources to address this safety problem?
- **Emphasis Area Overlap.** Does the potential emphasis area significantly overlap with other potential emphasis areas and, if so, can they both be addressed simultaneously?
- Consistency with Existing Plans and Policies. Is the potential emphasis area consistent with other state plans and policies and does it address a significant policy goal? If not, does the potential emphasis area push the state in an appropriate policy direction?
- Public Input. Are there issues the public perceives as critical to driving down fatalities and serious injuries? Can these issues be addressed within the framework of the TSAP?

Performance-Based Planning

The TSAP includes goals and measurable objectives to enable Oregon to track and monitor the status of SHSP implementation efforts and monitor progress for required Safety Performance Measures:

- Number of roadway fatalities
- Number of roadway serious injuries
- Roadway fatalities per vehicle miles traveled (i.e., fatality rate)
- Roadway serious injuries per vehicle miles traveled (i.e., serious injury rate)
- Combined nonmotorized fatalities and nonmotorized serious injuries

Each of the five safety performance measures has an annual target, which are based on a five-year rolling average, and are applicable to all roads regardless of ownership or functional classification. The number of fatalities, rate of fatalities, and number of serious injuries have identical annual targets in the TSAP and Highway Safety Plan and the reporting of these results will occur in the HSIP annual report for FHWA and the Highway Safety Plan Annual Report for NHTSA.

Along with these five primary measures, a performance analysis was completed for high-risk rural roads and older pedestrians and drivers to meet the Special Rules requirements.

Strategy Selection

The TSAP identifies strategies for each of the overarching safety goals and actions within each emphasis area to achieve those strategies to reduce or eliminate safety hazards. The range of emphasis area actions correlates with the magnitude of the problem – crashes occur under a wide variety of conditions and contributing factors, so multiple actions are necessary to fully address the problem. Over time, strategies and actions will be assessed based on achievements in meeting performance measures and targets.

The diversity of stakeholders has contributed to a list of strategies and actions that are representative of engineering, enforcement, emergency response, and engineering solutions. The speed emphasis area provides an example of actions that span across multiple disciplines, describing activities from education of road users on speeding hazards to facility design considerations and operating speeds.

Schedule to Evaluate and Update SHSP

To evaluate whether the policies, strategies, emphasis areas, and actions are contributing to fatality and serious injury reductions, the TSAP establishes performance measures that align with FHWA requirements under the MAP-21 rule and NHTSA. On an annual basis, ODOT will conduct the following activities:

- Analyze crash data to evaluate progress toward the five overarching safety targets.
- Coordinate with the ODOT Traffic Safety Division to evaluate progress on the FHWA required overlapping safety targets and NHTSA required performance measures and targets.
- Set annual safety performance targets based on the most recent data and coordination with safety stakeholders
- Review fatalities on high-risk rural roads and fatalities and serious injuries per capita among aging drivers and pedestrians to assess if action is needed to comply with MAP-21.
- Publish the annual crash report to monitor and evaluate safety performance.
- Encourage transportation and safety partners to integrate the TSAP strategies and actions into other transportation and safety planning documents and evaluate the results.
- Review progress on the actions established for each emphasis area
- Update TSAP no later than five years from the previous approved version in compliance with MAP-21.

Special Rules

Special rules under MAP-21 related to fatality rates on high-risk rural roads and fatality and serious injury rates for pedestrians and older drivers. Based on a review of the analysis, the following was determined:

- High-Risk Rural Roads (HRRR) Special Rule. A review of the fatal crash rate on Oregon's rural roads
 indicates that the HRRR Special Rule currently applies to Oregon. Strategies to address the increase in
 fatalities and serious injuries on rural roadways are included in the TSAP.
- Older Drivers and Pedestrians Special Rule. A review of the per capita older drivers and pedestrians
 fatal and serious injury rate indicates that this rule does apply to the update process. Strategies to
 address the increase in fatalities and serious injuries among the older population are included in the
 TSAP.

Appendix C

Appendix C will be updated for the final TSAP.

Appendix D. Glossary

23USC: Title 23 of the U.S. Code regarding transportation funding

3 Es: Engineering, Education, Enforcement

4 Es: Education, Engineering, Enforcement, and Emergency Medical Services

5-Point Child Restraint (CR) Harness: A child restraint harness with five attachment points, two at the shoulder, two at the hips, one between the legs.

AASHTO: American Association of State Highway and Transportation Officials

ABS: Anti-Lock Brake System

ACT: Area Commission on Transportation

Aggressive Driving: An individual commits a combination of moving traffic offenses so as to endanger other persons or property (FHWA). For purposes of this plan those offenses are driving too fast for conditions, following too closely, and/or driving in excess of posted speed.

Aggressive Driving-Related Crash: One of more of driving too fast for conditions, following too closely, and/or driving in excess of posted speed was an attribute of the crash. As used in this plan, note that duplicate crashes are not counted more than once.

Arterial: A functional classification for surface streets. AASHTO defines arterials from the motor vehicle perspective as providing a high degree of mobility for the longer trip lengths and high volumes of traffic, ideally providing a high operating speed and level of service and avoiding penetrating identifiable neighborhoods.

Attributes: As used in this plan means characteristics of a crash that may be useful for analysis. Note that some road user attributes are not mutually exclusive. For example, some motorcycle riders are also young drivers. In some cases they may contribute to a crash occurring or its severity, but that is not required for them to be considered attributes.

AV: Autonomous vehicle

BAC: Blood Alcohol Concentration

Best Practices: For purposes of this plan, the term "best practices" is used as a general term of preferred practices accepted and supported by experience of the applicable professional discipline. It is not prescriptive to a particular set of standards or a particular discipline.

Booster Seats: Are intended to be used as a transition to lap and shoulder belts by older children who have outgrown convertible seats (over 40 pounds). They are available in high backs, for use in vehicles with low seat backs or no head restraints, and no-back; booster bases only.

BPSST: Board on Public Safety Standards and Training

Car Seat: Common term for a specially designed device that secures a child in a motor vehicle, meets Federal safety standards, and increases child safety in a crash.

CAV: Connected Autonomous Vehicle

Child Safety Seat/Child Restraint: A crash tested device that is specially designed to provide infant/child crash protection. A general term for all sorts of devices including those that are vests or car beds rather than seats.

CFAA: Criminal Fine and Assessment Account

Countermeasure: An activity or initiative to prevent, neutralize, or correct a specific problem.

County/Local Traffic Safety Group: An advisory or decision body recognized by one or more local governments and tasked with addressing traffic safety within the geographic area including one or more cities.

Collector: A functional classification for surface streets. AASHTO defines collectors as providing both land access and traffic circulation within neighborhoods and commercial and industrial areas. The role of the collector system, from the motor vehicle perspective, is to distribute traffic to and from the arterial system.

CTSP: Community Traffic Safety Program

CRF: Crash Reduction Factor

CVIS: Commercial Vehicle Information System **DHR:** Oregon Department of Human Resources **DHS:** Oregon Department of Human Services

Distracted Driving: Engagement in any activity that could divert a person's attention away from the primary task of driving: the practice of driving a motor vehicle while engaged in another activity. Typical distractions include eating, dealing with passengers or pets, changing settings on vehicle devices, and, increasingly, using a cellular phone or other electronic device.

DMV: Driver and Motor Vehicle Services, Oregon Department of Transportation

DPSST: Department of Public Safety Standards and Training

DOE: Oregon Department of Education

DRE: Drug Recognition Expert

DUI: Driving Under the Influence

DUII: Driving Under the Influence of Intoxicants, sometimes DUI is used

Emphasis Areas (EA): Topics identified to provide a strategic framework for developing and implementing a Strategic Highway Safety Plan. Emphasis areas are near-term focus areas to be implemented through agreed upon Actions, as articulated in this plan in Chapter 6.

EMS: Emergency Medical Services

Equity: Equity refers to fair treatment or equal access to transportation services and options. In the context of safety, transportation equity relates to improving the travel choices, the safety of travel and not unfairly impacting one group or mode of transportation. More specifically it means improved safety for all transportation options and lessening the risks or hazards associated with different choices of transportation.

Expressway: In Oregon, a route designated to prioritize through traffic with a long-term management focus on managing direct access to the roadway to minimize conflicts.

F & I: Fatal and injury crashes

FARS: Fatal Analysis Reporting System, U.S. Department of Transportation

FAST Act: The **Fixing America's Surface Transportation (FAST) Act** is a funding and authorization bill to govern United States Federal surface transportation spending, signed by President Obama on December 4, 2015. It is subsequent to MAP-21, but does not replace all of the applicable requirements of that earlier law, so both must be referenced.

Fatality Rate: The number of traffic fatalities per number of vehicle miles traveled in a given year. The rate is usually expressed in terms of fatalities per one hundred million miles traveled. Sometimes also expressed as a rate of fatalities per population or licensed drivers

FHWA: Federal Highway Administration

FMCSA: Federal Motor Carrier Safety Administration

FRA: Federal Rail Administration

Freeway: Directional travel lanes usually separated by a physical barrier, and access and egress points are limited to on- and off-ramp locations or a very limited number of at-grade intersections.

GAC-DUII: Governor's Advisory Committee on DUII

GAC: Motorcycle Governor's Advisory Committee on Motorcycle Safety

GDL: Graduated Driver Licensing

GHSA: Governors Highway Safety Association

GLS: Graduated Licensing System

GR: Governor's Representative

Hazard index formula: Any safety or crash prediction formula used for determining the relative likelihood of hazardous conditions at railway-highway grade crossings, taking into consideration weighted factors, and severity of crashes. (23 CFR § 924.3)

HEP: Hazard Elimination Program (earlier Federal program, replaced by HSIP)

High Crash Location: Highway or road segments that are susceptible to an inordinate number of crashes. Identification of high crash locations is part of the problem identification process.

High Risk Rural Road: The term "high risk rural road" means any roadway functionally classified as a rural major or minor collector or a rural local road with significant safety risks, as defined by a state in accordance with an updated state strategic highway safety plan. (23 USC section 148)

High Visibility Enforcement (HVE): Law enforcement efforts that are highly visible and well publicized through paid and earned media support. (NHTSA)

Highway Safety Improvement Program: The term "highway safety improvement program" means projects, activities, plans, and reports carried out under this section. (23 USC section 148)

Highway Safety Improvement Project: (23 USC section 148) In general, the term "highway safety improvement project" means strategies, activities, and projects on a public road that are consistent with a state strategic highway safety plan and correct or improve a hazardous road location or feature; or address a highway safety problem.

HR3: High Risk Rural Road

HSEC: ODOT Highway Safety Engineering Committee HSIP: Federal Highway Safety Improvement

Program **HSIS**: Highway Safety Information System

HSM: Highway Safety Manual

HSP: Highway Safety Plan, the grant application submitted for Federal section 402 and similar funds. Funds are provided by the National Highway Traffic Safety Administration and the Federal Highway Administration.

IACP: International Association of Chiefs of Police

ICS: Incident Command System

IHSDM: Interactive Highway Safety Design Model

IID: Ignition Interlock Device

IIHS: Insurance Institute for Highway Safety

Impaired Driving: Driving a vehicle while the driver's reflexes have suffered from alcohol or other drugs to a point that is generally considered unsafe to operate a vehicle. Impairment is usually viewed less severely than intoxication. (NHTSA)

Inattentional Blindness: A term used in driver attention and other cognitive research trying to explain what happens when a driver is apparently not distracted from the task of driving, but fails to notice a fully visible, but unexpected object because attention was engaged on another event or object.

Examples:

- 1. While turning onto a side road from the main road, the driver, while watching for other cars, failed to notice the (unexpected) motorcycle, which was in full view, and turned in front of the motorcycle.
- 2. While approaching a light, drivers notice pedestrians in the walkway when the light is red. When the light is green, pedestrians, even in full view, may not be noticed in the walkway because pedestrians in the walkway are unexpected when the light is green.

"Injury A" and "Incapacitating injury" are used interchangeably. Incapacitating injuries typically are injuries that the victim is not able to walk away from. They are synonymous with the term "Severe injury"

"Injury B" and "Moderate injury" are used interchangeably. "Injury C" and "Minor injury" are used interchangeably. "Injury K" and "Fatality" are used interchangeably

IRIS: Integrated Road Information System

ITS: Intelligent Transportation Systems

Lane Departure: See "Roadway Departure"

LCDC: Land Conservation and Development Commission

Local Street: A functional classification for surface streets that includes all public surface streets not defined as arterial or collector. Local streets are typically low-speed streets with low traffic volumes in residential areas, but also include similar streets in commercial and industrial areas.

LTSG: Local Traffic Safety Group: An advisory or decision body recognized by a local government and tasked with addressing traffic safety. Limited to one geographic area, and may not include cities or other governmental areas within the boundaries.

MADD: Mothers against Drunk Driving

MAP-21: Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), reauthorization of Federal highway funding, signed into law by President Obama on July 6, 2012. Subsequent adoption of the FAST Act does not replace MAP-21 in all areas regulation of transportation safety planning and funding, so both must be referenced.

MCTD: Motor Carrier Transportation Division

Minor Arterial: Provides moderate-length trips and offers connectivity to the higher arterial system, providing intracommunity continuity.

MIRE: Model Inventory of Roadway Elements: The listing and standardized coding by the Federal Highway Administration of roadway and traffic data elements critical to safety management, analysis, and decision-making (23 USC section 148)

Monitoring: Management and oversight of the day-to-day operations of grant and sub-grant supported activities to assure compliance with applicable Federal and state requirements and that performance goals are being achieved.

Motorcycle: A motor vehicle with motive power having a seat or saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground. The NHTSA defines "motorcycle" to include mopeds, two or three-wheeled motorcycles, off-road motorcycles, scooters, mini bikes and pocket bikes.

Motorcycle Crash: A crash involving one or more motorcycles

Motorcycle Driver: The operator of a motorcycle

Motorcycle Occupant: Describes either a motorcycle driver or passenger of a motorcycle not in motion.

Motorcycle Occupant, Unknown; Used in crash data to indicate a person involved in a motorcycle related crash when it is unknown whether the person was the driver or a passenger.

Motorcycle Passenger: A person riding on a motorcycle who is not the operator

Motorcyclist: As used in this plan, refers to either an operator or a passenger of a motorcycle.

MPO: Metropolitan Planning Organization. MPOs are designated by the governor to coordinate transportation planning in an urbanized area of the state.

MUTCD: Manual on Uniform Traffic Control Devices **NHTSA**: National Highway Traffic Safety Administration **NTSB**: National Transportation Safety Board

OACP: Oregon Association Chiefs of Police

OBM: Oregon Benchmark

Occupant Protection: Any device(s) installed in a vehicle designed to prevent an occupant from crashing into the vehicle's interior or to reduce the severity of injuries for that occupant. Safety belts, child safety seats, air bags, padded interiors, and side door beams are all occupant protection devices.

ODAA: Oregon District Attorneys Association **ODE:** Oregon Department of Education **ODOT:** Oregon Department of Transportation

ODOT Regions: ODOT'S service territory is divided into five geographic Regions:

Region 1: Portland Metro (Clackamas, Hood River, Multnomah and Washington Counties)

Region 2: Willamette Valley, North, and Mid-Coast (Clatsop, Columbia, Tillamook, Yamhill, Polk, Marion, Lincoln, Linn, Benton, and Lane Counties)

Region 3: Southern Oregon and South Coast (Douglas, Curry, Coos, Josephine, and Jackson Counties)

Region 4: Central Oregon (Wasco, Sherman, Gilliam, Jefferson, Wheeler, Crook, Deschutes, Lake, and Klamath Counties)

Region 5: Eastern Oregon (Morrow, Umatilla, Union, Wallowa, Baker, Grant, Harney, and Malheur Counties)

OHA: Oregon Health Authority

OJD: Oregon Judicial Department

OJIN: Oregon Judicial Information Network

OLCC: Oregon Liquor Control Commission

Older Drivers and Pedestrians: Drivers and pedestrians 65 year of age and older.

OMHAS: Office of Mental Health and Addiction Services

OSP: Oregon State Police

OSSA: Oregon State Sheriffs' Association **OTC**: Oregon Transportation Commission **OTP**: Oregon Transportation Plan

OTSAP: Oregon Transportation Safety Action Plan **OTSC:** Oregon Transportation Safety Committee **PAC:** Policy Advisory Committee

Per capita is used to describe crash rate per population. Except where otherwise noted, crash rates are per million residents.

Per VMT is used to describe crash rate per motorized vehicle miles. Except where otherwise noted, crash rates are per 100 million motorized vehicle miles traveled.

Performance Measure: "A process of assessing progress toward achieving predetermined goals, including information on the efficiency with which resources are transformed into goods and services (outputs), the quality of those outputs (how well they are delivered to clients and the extent to which clients are satisfied) and outcomes (the results of a program activity compared to its intended purpose), and the effectiveness of government operations in terms of their specific contributions to program objectives." (FHWA)

Performance Plan: The document, accompanied by the HSP that states submit to NHTSA annually for approval. The performance plan contains: 1) a list of annual quantifiable and measurable highway safety performance targets that is data driven, consistent with the Uniform Guidelines for Highway Safety Program, and based on highway safety problems identified by the state during the planning process conducted; and 2) performance measures developed by DOT in collaboration with the Governor's Highway Safety Association and others, beginning with the MAP-21 directed "Traffic Safety Performance Measures for States and Federal Agencies" (DOT HS 811025), which are used as a minimum in developing the performance targets.

PI&E: Public Information and Education

PMT: Project Management Team

Practical Design: "A systematic approach to deliver the broadest benefit to the transportation system, within existing resources, by establishing appropriate project scopes to deliver specific results" as defined by ODOT Technical Services

Problem Identification: A process of analyzing general data to isolate specific causes or locations of traffic crashes.

Project to Maintain Minimum Levels of Retroreflectivity: A project that is designed to maintain a highway sign or pavement marking retroreflectivity at or above the minimum levels prescribed in Federal or state regulations. (23 USC section 148)

Public Grade Crossing: A railway-highway grade crossing where the roadway (including associated sidewalks, pathways and shared use paths) is under the jurisdiction of and maintained by a public authority and open to public travel, including non-motorized users. All roadway approaches must be under the jurisdiction of a public roadway authority, and no roadway approach may be on private property. (23 CFR § 924.3)

Public Road: Any highway, road, or street under the jurisdiction of and maintained by a public authority and open to public travel, including non-state-owned public roads and roads on tribal land. (23 CFR § 924.3)

PUC: Oregon Public Utility Commission

Road Safety Audit: A formal safety performance examination of an existing or future road or intersection by an independent multidisciplinary audit team. (23 CFR § 924.3)

Road users: A motorist, passenger, public transportation operator or user, truck driver, bicyclist, motorcyclist, or pedestrian, including a person with disabilities. (23 USC section 148)

Roadway Departure: Leaving one's lane unintentionally, typically due to distraction or impairment, including leaving the roadway entirely, moving into an adjacent lane or across a center lane or median into oncoming traffic.

Roadway Departure Crash: Crash where roadway departure is an attribute. As used in this plan, note that the roadway or lane departure definition excludes intersections, pedestrian-related, and bicycle-related crashes.

RTP: Regional Transportation Plan for a Metropolitan Planning Organization

Safe Communities Group: A coalition of private and/or public sector entities who use a data driven approach to community safety issues.

Safe Communities Model: A long-standing approach to reducing injuries and deaths that works through engaging local partners who care about safety, using data to identify leading causes of injury, making a plan to address the issues using proven methods and measuring success.

Safety data includes, but is not limited to, crash, roadway, and traffic data on all public roads. For railway-highway grade crossings, safety data also includes the characteristics of highway and train traffic, licensing, and vehicle data. (23 CFR § 924.3)

Safety stakeholder: (23 CFR § 924.3) includes, but is not limited to,

A highway safety representative of the Governor of the state:

Regional transportation planning organizations and metropolitan planning organizations, if any;

Representatives of major modes of transportation;

State and local traffic enforcement officials;

A highway-rail grade crossing safety representative of the Governor of the State;

Representatives conducting a motor carrier safety program under Section 31102, 31106, or 31309 of Title 49;

Motor vehicle administration agencies;

County transportation officials;

State representatives of non-motorized users; and

Other Federal, state, tribal and local safety stakeholders.

Serious Injury: An incapacitating injury or any injury, other than a fatal injury, which prevents the injured person from walking, driving, or normally continuing the activities the person was capable of performing before the injury occurred.

Severity: A measurement of the degree of seriousness concerning both vehicle impact (damage) and bodily injuries sustained by vehicle occupant.

SFST: Standard Field Sobriety Testing

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

Side Impact Air Bags: Provide additional chest protection to adults in many side crashes. Children who are seated in close proximity to a side air bag may be at risk of serious or fatal injury if the air bag deploys. Check with the vehicle dealer or vehicle owner's manual for information about danger to children.

SIP: Safety Investment Program (used for ranking safety projects prior to 2012; no longer used)

SMS: Safety Management System or Highway Safety Management System

SPIS: Safety Priority Indexing System

Speed, types: A strong statistical relationship exists between operating speed and posted speed. The relationship between design speed and operating or posted is less well known and is the subject of many studies.

Design Speed: Speed for which roadway elements such as curves are designed.

Operating Speed: The measured speed, either average or fixed percentile speed (i.e., 85th percentile).

Posted Speed: The speeds indicated on signs along the roadway.

Statutory speeds are posted as defined in statute (i.e., 25 mph on a neighborhood street) and any road authority may post applicable statutory speeds within their jurisdiction.

Designated speeds which differ from statutory speeds (i.e., 35 mph on city arterial) must be established by a defined speed zoning process and investigation. Designated speeds typically have to be administered by the Oregon Department of Transportation.

Posted Speed Violations: In Oregon, posted speeds set the maximum speed that can be traveled, violations can be either speed limit or basic rule;

Basic Rule Speed – A speed that is reasonable and prudent considering the conditions at the time. Speeds in excess of the posted speed are evidence of the violation. Basic rule violations can apply on any roadway.

Speed Limit – Speed limits are limited to specific roadways such as interstates, roadways within city limits, and school speed zones. In addition, speed limits apply to certain types of vehicles on any roadway – large trucks, school buses and vehicles transporting children or workers.

Oregon Revised Statutes establish and define Speed Limits, and the Basic Rule within the State of Oregon; the definitions presented here paraphrases those laws, and should not be relied upon in lieu of ORS.

Speeding: Driving too fast for conditions and/or driving in excess of posted speed

Speed-Related Crashes: Attributes of crash include driving too fast for conditions and/or driving in excess of posted speed (note that duplicate crashes are not counted more than once).

Spot Safety Improvement: An improvement or set of improvements that is implemented at a specific location on the basis of location-specific crash experience or other data-driven means.

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

State Highway Safety Improvement Program: The term "State highway safety improvement program" means a program of highway safety improvement projects, activities, plans and reports carried out as part of the Statewide transportation improvement program under section 135(g). (23 USC section 148)

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

STIP: Statewide Transportation Improvement Program

Systemic Safety Improvement: An improvement or set of improvements that is widely implemented based on high-risk roadway features that are correlated with particular severe crash types.

TAC: Technical Advisory Committee

Toward Zero Deaths: A term of art for transportation safety program analogous to Vision Zero

TRCC: Traffic Records Coordinating Committee

TRS: ODOT Traffic-Roadway Section

TSAP: Oregon's Transportation Safety Action Plan

TSD: Transportation Safety Division, Oregon Department of Transportation

TSRP: Traffic Safety Resource Prosecutor

U.S. DOT: United States Department of Transportation

Vision Zero: A system and approach to public policy developed by the Swedish government which stresses safe interaction between road, vehicle, and users. Highlighted elements include a moral imperative to preserve life, and that the system conditions and vehicle be adapted to match the capabilities of the people that use them.

VMT: Vehicle miles traveled; a measure used as a means of determining exposure in calculating fatality rates.

Work Zone: A segment of road along which road construction or maintenance work is being done.

Young Drivers: As used in this plan, "Young Drivers" includes two age groups: age 15-20 and 21-25. Where appropriate, the groups were considered as one to simplify presentation. However, it is acknowledged that there may be different countermeasures to address the two different age groups.

Findings Supporting the 2021 Transportation Safety Action Plan

A. Transportation Safety Programs Administrator	1
B. Findings of Compliance with State Agency Coordination Agreement	3
C. State Land Use Planning Goals	
D. Transportation Planning Rule	10
E. Consistency with Oregon Modal and Topic Plans	13

A. Transportation Safety Programs Administrator

To implement federal and state requirements relating to transportation and safety programs and traffic safety education, the legislature enacted ORS 802.300 through 802.340, creating a Transportation Safety Committee within the Department of Transportation ("ODOT"), designating as the Governor's representative for highway safety an Administrator for transportation safety ("Governor's Representative") and creating functions and duties for the Transportation Safety Committee, ODOT, the Oregon Transportation Commission and the Administrator. The following are findings made by Oregon Transportation Commission as to fulfilment of these requirements.

ORS 802.310: Transportation Safety Programs; Administrator:

- 1. The Department of Transportation, in consultation with the Transportation Safety Committee, shall do the following:
 - a. Organize, plan and conduct a statewide transportation safety program.

Findings: The Department of Transportation through the appointed Governor's Representative for Highway Safety is strategically involved in the development of a 20-year Strategic Highway Safety Program and annual work plan to guide counter measures to address identified highway safety problems. These duties are performed in consultation with the Transportation Safety Committee and are in compliance with and supportive of this requirement.

b. Coordinate general activities and programs of the several departments, divisions, or agencies of the state engaged in promoting transportation safety.

Findings: The Department of Transportation through the appointed Governor's Representative for Highway Safety is strategically involved in the coordination of the development and implementation of the annual Highway Safety Plan. These duties are performed in coordination with ODOT

departments, divisions and other agencies engaged in promoting transportation safety and are conducted in compliance with and supportive of this requirement.

c. Provide transportation safety information and develop other measures of public information.

Findings: The Department of Transportation through the appointed Governor's Representative for Highway Safety provides oversight of the development and implementation of the annual Highway Safety Plan which includes media and outreach in partnership with other stakeholders. The duties performed by the Governor's Representative for Highway Safety are in compliance with and supportive of this requirement.

d. Cooperate fully with all national, local, public and private agencies and organizations interested in the promotion of transportation safety.

Findings: The Department of Transportation through the appointed Governor's Representative for Highway Safety collaborates with Oregon safety groups and advocacy organizations such as Mothers Against Drunk Driving, Oregon Truckers Association, American Automobile Association (AAA), Association of Oregon Counties, League of Oregon Cities; and participates in national groups such as Governor's Highway Safety Associations, the American Association or State Highway and Transportation Officials, the National Cooperative Highway Research Program in addition to other national and international safety-related groups. The collaboration and partnerships actively engaged in are in compliance with and supportive of this requirement.

e. Serve as a clearinghouse for all transportation safety materials and information used throughout the state.

Findings: The Department of Transportation maintains a website summarizing available safety educational materials, as well as, provides a resource for partners to order safety educational and outreach materials; these activities are in compliance with and supportive of this requirement.

f. Cooperate in promoting research, special studies, and analysis of problems concerning transportation safety.

Findings: The Department of Transportation actively coordinates in local, regional and national studies in partnership with the ODOT Research Unit, Portland State University, Oregon State University, and the National Cooperative Highway Research Program. ODOT also partners with the Criminal Justice Commission on maintaining traffic stop racial profiling database and research study. These activities performed by the Department of Transportation are in compliance with and supportive of this requirement.

g. Make studies and suitable recommendations to the legislature concerning safety regulations and laws.

Findings: The Department of Transportation is engaged in providing recommendations to the legislature based on the most current data and trends, and results in the implementation of statewide programs such as the ignition interlock device, driver education, vehicle equipment safety (i.e. Oregon law regarding window tinting, towing requirements, safe tire maintenance, etc.). These

activities performed by Department of Transportation are in compliance with and supportive of this requirement.

2. The department shall review plans and applications for participation by counties and cities in the federal government highway safety programs conducted under the Federal Highway Safety Act of 1966 and any amendments thereto. The committee shall make recommendations to the department regarding the approval of plans and applications under ORS 802.315 (Department authority to apply for and receive federal highway safety program grants and other funds). [1983 c.338 §873; 1991 c.453 §7; 1993 c.741 §78; 2005 c.70 §4]

Findings: The Department of Transportation through the appointed Governor's Representative for Highway Safety reviews plans and applications for transportation safety and awards grant applications statewide based on crash and other data to address highway safety problems. This work is conducted in consultation with, and upon approval by, the Oregon Transportation Safety Committee. These activities performed by the Governor's Representative for Highway Safety are in compliance with and supportive of this requirement.

B. Findings of Compliance with State Agency Coordination Agreement

The Oregon Department of Transportation's State Agency Coordination Agreement requires that the Oregon Transportation Commission adopt findings of fact when adopting final modal system plans (OAR 731-015-0055). Pursuant to these requirements, the following findings and supporting information supplement the Oregon Transportation Commission adoption of the updated Transportation Safety Action Plan.

Coordination Procedures for Adopting Final Topic Plans (OAR 731-015-0055)

1. Except in the case of minor amendments, the Department shall involve the Department of Land Conservation and Development, metropolitan planning organizations, and interested cities, counties, state and federal agencies, special districts and other parties in the development or amendment of a modal systems plan. This involvement may take the form of mailings, meeting, or other means that the Department determines are appropriate for the circumstances. The Department shall hold at least one public meeting on the plan prior to adoption.

Findings: The development of the proposed updated Transportation Safety Action Plan was subject to an open and ongoing public and agency involvement process which included the Department of Land Conservation and Development, metropolitan planning organizations, Area Commissions on

The Oregon Transportation Commission interprets the term "modal systems plans" as used in OAR 731-015-0055 to include "topic plans" as identified by Oregon Transportation Commission and the Department in its programs affecting land use. A topic plan is a form of a modal system plan in the context of the Departments land use programs and has the same the relationship to the Oregon Transportation Plan as a model system plan.

Transportation, cities, counties, state and federal agencies, tribes, numerous topic and stakeholder interest groups, and input from interested citizens.

Staff released the draft Transportation Safety Action Plan for public review and input on May 24, 2021.² Broad notification of the availability of the draft Transportation Safety Action Plan was distributed as described in the attached Record of Outreach. Written notification was sent to Department of Land Conservation and Development staff on May 24, 2021. Agency and stakeholder notification included the updated Transportation Safety Action Plan, and methods to provide comments.

A public hearing was held at the June 9, 2021, Oregon Transportation Safety Committee meeting to provide an additional opportunity for submitting public comments and the opportunity to testify directly to the Oregon Transportation Safety Committee. Public comments were accepted through July 9, 2021. A complete overview of agency and stakeholder engagement is provided under Goal 1: Citizen Involvement below.

Outreach for the Draft Transportation Safety Action Plan was also conducted in compliance with Oregon Transportation Commission Policy 11 – Public Involvement, which establishes public involvement objectives for the development and update of statewide plans, including topic plans, such as the Oregon Transportation Safety Action Plan.

Development of the Transportation Safety Action Plan is in compliance with and supports Coordination Procedures for Adopting Final Topic Plans.

- 2. The Department shall evaluate and write draft findings of compliance with all applicable statewide planning goals.
- 3. Findings: Development of these findings that accompany the Transportation Safety Action Plan evaluate compliance with all applicable statewide planning goals and are in compliance with the Coordination Procedures for Adopting Final Topic Plans. If the draft plan identifies new facilities which would affect identifiable geographic areas, the Department shall meet with the planning representatives of affected cities, counties, and metropolitan planning organization to identify compatibility issues and the means of resolving them. These may include:
 - a. Changing the draft plan to eliminate the conflicts;
 - b. Working with the affected local governments to amend their comprehensive plans to eliminate the conflicts; or
 - c. Identifying the new facilities as proposals which are contingent on the resolution of the conflicts prior to the completion of the transportation-planning program for the proposed new facilities.

Findings: The Transportation Safety Action Plan is a topic plan that is part of the Oregon Transportation Plan and does not propose specific new transportation facilities. The Transportation Safety Action Plan is in compliance with the Coordination Procedures for Adopting Final Topic Plans.

² The Oregon Transportation Commission updated the delegation of authority on May 2020, to enable ODOT staff to release a statewide transportation plan for public review.

4. The Department shall present to the Transportation Commission the draft plan, findings of compatibility for new facilities affecting identifiable geographic areas, and findings of compliance with all applicable statewide planning goals.

Findings: The Transportation Safety Action Plan adoption phase is unique because there are two groups of decision makers who have to agree to its adoption. The Oregon Transportation Safety Committee is appointed by the Governor to oversee transportation safety programs for the whole state including all state agencies that participate in transportation safety activities. Oregon Transportation Safety Committee approval of the plan and referral of the plan to the Oregon Transportation Commission for adoption is an important step in the adoption process.

The August 11, 2021 Oregon Transportation Safety Committee meeting packet included the following attachments and information for Oregon Transportation Safety Committee action to consider approval of the TSAP and recommend approval by the Oregon Transportation Commission:

- Revised Transportation Safety Action Plan based on response to comments received during public review;
- Summary of Comments on Transportation Safety Action Plan Public Review Draft and Proposed Actions:
- Record of Outreach conducted for the Public Review process; and
- Public Review Period Comments summary and copies of comments received.

The September 2, 2021 Oregon Transportation Commission meeting packet included all the attachments and information provided to the Oregon Transportation Safety Committee, as well as:

Draft Findings Supporting the Transportation Safety Action Plan.

The presentation of the draft Transportation Safety Action Plan and Findings Supporting the Transportation Safety Action Plan are in compliance with and supports the Coordination Procedures for Adopting Final Topic Plans. The Transportation Safety Action Plan does not propose specific new transportation facilities, therefore this requirement is not relevant.

5. The Transportation Commission, when it adopts a final modal systems plan, shall adopt findings of compatibility for new facilities affecting identifiable geographic areas and findings of compliance with all statewide planning goals.

Findings: These findings address the relevant statewide planning goals, see Section C for each individual goal area below; and upon adoption will satisfy this requirement. The Transportation Safety Action Plan does not propose specific new transportation facilities, therefore this portion of the requirement is not relevant.

6. The Department shall provide copies of the adopted final modal systems plan and findings to Department of Land Conservation and Development, the metropolitan planning organizations, and others who request to receive a copy.

Findings: Per the State Agency Coordination agreement, and customary ODOT practice, the adopted Transportation Safety Action Plan and the Findings Supporting the Transportation Safety Action Plan are

to be distributed as an electronic document to Department of Land Conservation and Development, Metropolitan Planning Organizations, and interested parties from throughout the policy revision process, and others who request a copy following adoption. The final documents will be also be available on the project webpage: https://www.oregon.gov/odot/Safety/Pages/TSAP.aspx

C. State Land Use Planning Goals³

The State of Oregon has established 19 statewide planning goals to guide state, regional, and local land use planning. The goals express the state's policies on land use and related topics. The findings below are based on applicability and content of the Plan, only the following goals are relevant to the Transportation Safety Action Plan.

Goal 1. Citizen Involvement – The purpose of Goal 1 (660-015-0000(1)) is "To develop a citizen involvement program that ensures the opportunity for citizens to be involved in all phases of the planning process."

Findings: Outreach for the Draft Transportation Safety Action Plan was conducted in compliance with OTC Policy 11 – Public Involvement, which establishes public involvement objectives for the development and update of statewide plans, including topic plans, such as the Oregon Transportation Safety Action Plan.

The Transportation Safety Action Plan was built upon continuous engagement with a broad spectrum of stakeholder groups and individuals across Oregon.

The voices and perspectives captured in the Plan include those of representatives from Area Commissions on Transportation, Metropolitan Planning Organizations, city, county, regional and tribal governments, and public interest groups representing mode-specific interests (bicyclists and pedestrians, transit providers and users, commercial trucking, motorcyclists), ODOT and other State agencies. State advisory bodies with direct charges related to transportation safety were engaged such as the Oregon Bicycle and Pedestrian Advisory Committee, the Oregon Public Transit Advisory Committee, the Governor's Advisory Committee on Motorcycle Safety, the Governor's Advisory Committee on Driving Under the Influence of Intoxicants, Oregon Freight Advisory Committee, and others.

Outreach activities were also conducted in compliance with relevant policies in the Oregon Transportation Plan including Oregon Transportation Plan Goal 7, Coordination, Communication, and Cooperation.

Throughout the planning process there were several methods of outreach. Highlights include:

In October and November 2020, a consultant hired to support the Transportation Safety Action Plan
revision conducted 10 interviews among ODOT Divisions and other related stakeholders to assess
perceptions about the current 2016 Transportation Safety Action Plan and to seek suggestions for the
development of the next iteration of the plan. The interviews included the Traffic Operations,
Maintenance, and Project Delivery Branch; Transportation Data Section; Active Transportation

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³ https://www.oregon.gov/lcd/op/pages/goals.aspx

Section; Office of Social Equity; Oregon State Police; and the Commerce & Compliance Division; as well as representatives from ODOT's Region offices.

- Also in October and November 2020, ODOT staff from the Planning Section and the Transportation Safety Division conducted outreach activities with several ODOT teams and committees including Traffic Operations and Standards Team; Planning and Policy Discipline Team; Freight Advisory Committee; Governor's Advisory Committee on Motorcycle Safety; Public Transportation Advisory Committee; and others.
- From October 1 to November 20, 2020, ODOT conducted an online survey to identify key issues and
 opportunities to address with the 2021 Transportation Safety Action Plan update. A total of 434
 people participate in the survey, over half of whom had not previously provided feedback on a
 Transportation Safety Action Plan. Seventy percent of respondents self-identified as an interested
 citizen.
- ODOT and consultant support staff led virtual stakeholder workshops in December 2020 and March 2021. Each include more than 40 participants from federal, state, and local government; modal experts and advocates; and other interested safety stakeholders. Topics included review of the current state of safety in Oregon, the 2016 Transportation Safety Action Plan, and recommendations for the 2021 Transportation Safety Action Plan updates.
- Email notices provided updates at key project milestones including interim draft reports, and opportunities to provide input including an on-line survey, the formal public comment period and public hearing.
- Notification of public review was sent to Area Commissions on Transportation, Metropolitan Planning
 Organizations, city, county, regional and tribal governments, and public interest groups representing
 mode-specific interests (bicyclists and pedestrians, transit providers and users, commercial trucking,
 motorcyclists), interested advisory committees, Department of Land Conservation and Development,
 groups required to be notified by Federal Highway Administration for Strategic Highway Safety Plans,
 and groups required to be notified by the state for plan affecting land use.
- A public review comment period of 47 days started on May 24, 2021 and ended July 9, 2021.

Development of the Transportation Safety Action Plan is in compliance with and supports Statewide Planning Goal 1, Citizen Involvement.

Goal 2. Land Use Planning - The purpose of Goal 2 (OAR 660-015-0000(2)) is "To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions."

Findings: It is understood that implementation of Transportation Safety Action Plan Goal 2: Infrastructure and some other implementation measures will require individual project decisions that may affect land use. However, the Transportation Safety Action Plan itself is permissive rather than prescriptive in its long-range Policies and Strategies and short-term Actions, which allows for wide variation in specific measures for implementation based on variations in geographic, demographic, and geometric conditions, etc. There is no policy in the Transportation Safety Action Plan that requires agencies to make amendments to land use plans. It is up to each land use authority to evaluate land use

plans and how they might better align or promote transportation safety. The plan supports a focus on transportation safety when individual location- or jurisdiction- specific decisions are made.

Development of the Transportation Safety Action Plan is in compliance with and supports Statewide Planning Goal 2, Land Use Planning.

Goal 8. Recreational Needs - The purpose of Goal 8 (OAR 660-015-0000(8)) is "To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts."

Findings: The Transportation Safety Action Plan does not directly address transportation safety in the context of recreational lands, but effective safety programs help create conditions for an area to be more likely to appeal to and attract return visits from recreational users. Recreation issues that were discussed during the plan development process included concerns that bike-touring maps did not appear to consider bicycle safety on some of their remote routes, and that poor delineation of roadways after sanding and plowing reduced safety for winter visitors as well as locals in snowy regions. Tourists and recreationists also benefit from effective enforcement, education about seasonal safety conditions, road maintenance, and emergency services.

The Transportation Safety Action Plan is in compliance with and supports Statewide Planning Goal 8, Recreational Needs.

Goal 9. Economic Development - The purpose of Goal 9 (OAR 660-015-0000(9)) is "To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens."

Findings: The Transportation Safety Action Plan supports economic development by promoting a safe, reliable transportation system. A safe transportation system can provide employees safe and reliable access to jobs, and help attract and retain skilled workers. Safe transportation also supports tourism.

The Transportation Safety Action Plan is in general compliance with and supports Statewide Planning Goal 9, Economic Development.

Goal 11. Public Facilities and Services - The purpose of Goal 11 (OAR 660-015-0000(11)) is "To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development."

Findings: The Goal does not address transportation safety, but improving safety improves the efficiency of the transportation system by reducing incident-related congestion and by supporting the notion that everyone using the transportation system should arrive safely at their destination.

The Transportation Safety Action Plan is in compliance with and supports Statewide Planning Goal 11, Public Facilities, and Services.

Goal 12. Transportation - The purpose of Goal 12 (OAR 660-015-0000(12)) is "To provide and encourage a safe, convenient, and economic transportation system."

Findings: The purpose of the Transportation Safety Action Plan is to further encourage safety for all transportation system users. The Transportation Safety Action Plan serves as Oregon's long-range safety topic plan, an element of the Oregon Transportation Plan, and works parallel to other mode and topic plans. The Oregon Transportation Plan includes a section specific to transportation safety, and the Transportation Safety Action Plan further refines this policy framework. The Transportation Safety Action Plan is in compliance with and supports Statewide Planning Goal 12, Transportation.

Goal 13. Energy Conservation - The purpose of Goal 13 (OAR 660-015-0000(13)) is "To conserve energy."

Goal 13 states that "land and uses developed on the land shall be managed and controlled so as to maximize the conservation of all forms of energy, based upon sound economic principles."

Findings: The Transportation Safety Action Plan does not create land uses or affect energy conservation in any direct way. Improving the safety of non-auto transportation facilities encourages the use of modes other than private vehicles, and so can reduce transportation energy consumption. More directly, when crashes occur, reducing the time it takes to manage, investigate, and clear crashes on busy roadways can reduce idling and stop-and-start speeds for traffic that backs up around crash sites and so results in a relative reduction of energy use and carbon and other emissions.

The Transportation Safety Action Plan is in compliance with and supports Statewide Planning Goal 13, Energy Conservation.

Goal 14. Urbanization - The purpose of Goal 14 (OAR 660-015-0000(14)) is "To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities."

Findings: Goal 3 of the TSAP is "Healthy, Livable Communities" which is focused on using transportation safety tools to support safety and thus reinforce health options and livability in communities. The plan does not directly assume a role in creating healthy, livable communities, but recognizes that engaging a variety of safety stakeholders in improving safety in urban and other developed communities contributes to improving a sense of security, availability of healthy transportation options and a reduction of the long-term impacts of crashes that do occur.

The Transportation Safety Action Plan is in compliance with and supports Statewide Planning Goal 14, Urbanization.

The following State Land Use Planning Goals do not apply to the Transportation Safety Action Plan:

- Goal 3: Agricultural Lands
- Goal 4: Forest Lands
- Goal 5: Natural Resources, Scenic and Historic Areas, and Open Spaces
- Goal 6: Air, Water and Land Resources
- Goal 7: Areas Subject to Natural Hazards
- Goal 10: Housing
- Goal 15: Willamette River Greenway

- Goal 16: Estuarine Resources
- Goal 17: Coastal Shorelands
- Goal 18: Beaches and Dunes
- Goal 19: Ocean Resources

D. Transportation Planning Rule

Findings for how the Transportation Safety Action Plan complies with the Transportation Planning Rule are addressed in detail below. This section addresses the requirements in OAR 660-012 that apply to long-range planning and transportation planning by the state, other elements of the Transportation Planning Rule are not included based on relevancy.

OAR 660-012-0000, Transportation Planning Rule Purpose

- 1. This division implements Statewide Planning Goal 12 (Transportation) to provide and encourage a safe, convenient, and economic transportation system. This division also implements provisions of other statewide planning goals related to transportation planning in order to plan and develop transportation facilities and services in close coordination with urban and rural development. The Transportation Safety Action Plan supports the purposes stated in OAR 60-012-0000 in the following ways:
 - a. Promote the development of transportation systems adequate to serve statewide, regional and local transportation needs and the mobility needs of the transportation disadvantaged;

Findings: The Transportation Safety Action Plan promotes the safety of all modes of transportation and all system users. The 2021 update includes new language focused on transportation social equity; these elements are in compliance with and supportive of the Transportation Planning Rule.

b. Encourage and support the availability of a variety of transportation choices for moving people that balance vehicular use with other transportation modes, including walking, bicycling and transit in order to avoid principal reliance upon any one mode of transportation;

Findings: The Transportation Safety Action Plan improves safety for all modes supporting system user choices and perceptions of safety; these elements are in compliance with and supportive of the Transportation Planning Rule.

c. Provide for safe and convenient vehicular, transit, pedestrian, and bicycle access and circulation;

Findings: The Transportation Safety Action Plan addresses safe aspects of vehicular, transit, pedestrian, and bicycle access and circulation; "convenience" is improved where system users have safer access to their chosen mode; these elements are in compliance with and supportive of the Transportation Planning Rule.

Facilitate the safe, efficient and economic flow of freight and other goods and services within
regions and throughout the state through a variety of modes including road, air, rail and marine
transportation;

Findings: The Transportation Safety Action Plan addresses the safety of freight routes which encourages and facilitates the safe, efficient, and economic flow of freight and other goods and services. The Transportation Safety Action Plan included an analysis of freight-related data and inclusion of freight perspectives during stakeholder engagement, these elements are in compliance with and supportive of the Transportation Planning Rule.

e. Protect existing and planned transportation facilities, corridors and sites for their identified functions;

Findings: The Transportation Safety Action Plan reinforces classifications established in the Oregon Highway Plan and Oregon Transportation Plan, the Transportation Safety Action Plan therefore does not change facility functions or purposes and is in compliance with and supportive of the Transportation Planning Rule.

f. Provide for the construction and implementation of transportation facilities, improvements and services necessary to support acknowledged comprehensive plans;

Findings: The Transportation Safety Action Plan encourages identifying opportunities for construction of appropriate safety measures on either a systemic or site specific basis, but does not itself identify specific projects for construction; these elements are in compliance with and supportive of the Transportation Planning Rule.

g. Identify how transportation facilities are provided on rural lands consistent with the goals;

Findings: The Transportation Safety Action Plan identifies that approximately 50 percent of fatal and serious injury crashes occur on rural roads. Factors that apply to crashes in all areas include impaired, distracted, and aggressive driving: roadway departure crashes occur at higher rates in rural areas. The Transportation Safety Action Plan recognizes the importance of addressing safety risks that impact rural areas and is in compliance with and supportive of the Transportation Planning Rule.

h. Ensure coordination among affected local governments and transportation service providers and consistency between state, regional and local transportation plans; and

Findings: Transportation safety is a complex area of transportation planning that includes all Oregonians and visitors to the state as stakeholders. The Transportation Safety Action Plan Goal 5: Collaborate and Communicate, makes it clear that coordination among all jurisdictions and other stakeholders is key to a successful transportation safety program; these elements are in compliance with and supportive of the Transportation Planning Rule.

i. Ensure that changes to comprehensive plans are supported by adequate planned transportation facilities.

Findings: The Transportation Safety Action Plan encourages identifying opportunities for construction of appropriate safety measures on either a systemic or site specific basis, but does not itself identify changes that must be incorporated into a local comprehensive plan; these elements are in compliance with and supportive of the Transportation Planning Rule.

OAR 660-012-0015: Preparation and Coordination of Transportation System Plans⁴

- ODOT shall prepare, adopt, and amend a state Transportation System Plan in accordance with ORS 184.618, its program for state agency coordination certified under ORS 197.180, and OAR 660-012-0030, 660-012-0035, 660-012-0050, 660-012-0065 and 660-012-0070. The state TSP shall identify a system of transportation facilities and services adequate to meet identified state transportation needs:
 - a. The state TSP shall include the state transportation policy plan, modal systems plans and transportation facility plans as set forth in OAR chapter 731, division 15;

Findings: The Transportation Safety Action Plan is a topic plan (for purposes of this rule that is analogous to a "modal" plan) that is an element of the Oregon Transportation Plan. As noted above, the state policy plan and modal/topic plans, collectively make up the state Transportation System Plan. With the Oregon Transportation Commission adoption the Transportation Safety Action Plan is made part of the state Transportation System Plan as required by the Transportation Planning Rule.

b. State transportation project plans shall be compatible with acknowledged comprehensive plans as provided for in OAR chapter 731, division 15. Disagreements between ODOT and affected local governments shall be resolved in the manner established in that division.

Findings: This Transportation Planning Rule requirement does not apply to the Transportation Safety Action Plan.

OAR 660-012-0030: Determination of Transportation Needs⁵

Section 30 of the Transportation Planning Rule requires that Transportation System Plans identify transportation needs relevant to the planning area and the scale of the transportation network being planned including state, regional, and local transportation needs.

Findings: Statewide transportation safety needs were identified through data analysis using state system crash data and extensive public engagement including interviews, a survey, stakeholder virtual workshops, and public review of the draft Transportation Safety Action Plan. These processes helped to identify issues and challenges related to transportation both statewide and locally. By federal law, transportation safety needs must be based on relevant data with the opportunity to also consider existing policies and plans, and recognizing priorities and trends identifiable in public discourse. Both policies and actions identified in the plan are directly related to the most recent available crash data at the time of analysis and the input of more than 400 individuals who participated in the various public outreach opportunities.

The process used to identify system safety needs complies with this section of the Transportation Planning Rule.

⁴ Land Conservation and Development Department. Oregon Administrative Rules. Preparation and Coordination of Transportation System Plans OAR 660.012-0015.

⁵ Land Conservation Development Department. Oregon Administrative Rules. Determination of Transportation Needs <u>OAR 660-012-0030</u>.

OAR 660-012-0040: Transportation Financing Program⁶

1. For areas within an urban growth boundary containing a population greater than 2,500 persons, the Transportation System Plan shall include a transportation-financing program.

Findings: The Transportation Safety Action Plan does not include a financing program, but is closely associated with and drives two safety finance plans: the annual safety Performance Plan and the Highway Safety Improvement Plan. The state Transportation System Plan, the Oregon Transportation Plan, is implemented through the Statewide Transportation Improvement Program—safety projects involving construction projects are also funded through the Statewide Transportation Improvement Program.

As part of the state Transportation System Plan, and as supported by both the Statewide Transportation Improvement Program and Transportation Safety Action Plan periodic funding plans, the Transportation Safety Action Plan further supports statewide Transportation System Plan compliance with this section of the Transportation Planning Rule.

E. Consistency with Oregon Modal and Topic Plans

The Oregon Transportation Plan includes Modal Plans for Highways, Rail, Public Transportation, Bicycles and Pedestrians, and Aviation. It also includes Topic Plans for Freight, Transportation Options, and Safety; as well as, incorporates the Statewide Transportation Strategy for greenhouse gas reduction by reference. Each of these plans addresses safety in general terms, and, increasingly, modal and topic plans include specific strategies or actions for improving safety conditions.

The Transportation Safety Action Plan is the "big tent" for transportation safety activities and needs be broad enough to acknowledge the full range of safety concerns and planned actions that arise in the other plans. All of the plans are required to be consistent with the others. The best case is that the Transportation Safety Action Plan supports the safety agendas of the other plans but, at a minimum, it should not create conflicts with any safety provisions of those adopted plans. In future amendments to the other plans, any new or changed safety provisions will be required to be consistent with the Transportation Safety Action Plan.

Findings: The other modal and topic plans currently in effect were reviewed for their content related to transportation safety. The 2021 Transportation Safety Action Plan was coordinated with staff working on other statewide transportation plans. No inconsistencies or direct conflicts were identified, and no discreet issues in the other plans were identified that had not been raised in some form in the Transportation Safety Action Plan process. The 2021 Transportation Safety Action Plan is consistent with the Oregon Transportation Plan and other related modal and topic transportation plans that are currently in effect.

13

⁶ Land Conservation and Development Department. Oregon Administrative Rules. Transportation Financing Program <u>OAR 660-012-0040</u>.

Attachment 3: Record of Outreach

2021 OREGON TRANSPORTATION SAFETY ACTION PLAN UPDATE

Public Review Period: May 24 to July 9, 2021

Stakeholder input is integral to the development of Oregon statewide transportation plans. Stakeholders are engaged early and throughout the plan development process. The following is a record of stakeholder outreach to date.

Stakeholder Group Presentations		
Agency/Committee/Interest Group	Date	
Oregon Transportation Safety Committee	10/14/2020, 4/14/2021	
Operations Management Team	10/21/2020, 3/31/2021	
Governor's Advisory Committee-DUII	11/6/2020, 4/2/2021	
Governor's Advisory Committee-Motorcycle Safety	10/15/2020, 4/15/2021	
Oregon Bicycle and Pedestrian Advisory Committee	10/14/2020	
Oregon Bicycle and Pedestrian Advisory Committee -	3/18/2021	
Subcommittee		
Public Transportation Advisory Committee	11/2/2020, 5/3/2021	
Oregon Freight Advisory Committee	10/14/2020	
Motor Carrier Transportation Advisory Committee	11/12/2020	
Planning and Policy Discipline Team	10/1/2020, 3/4/2021	
Delivery and Operations Leadership Team	10/21/2020	
Area Managers Meeting	10/6/2020, 4/6/2021	
DMV Drivers Program Team	10/22/2020	
Traffic Operations and Standards Team	10/1/2020, 4/1/2021	
Commerce and Compliance Division Management	10/7/2020	
Team		
ODOT, MPO and Transit Provider Quarterly Meeting	10/9/2020, 4/9/2021	
Central Lane MPO Transportation Planning	3/17/2021	
Committee		
Central Lane MPO Metropolitan Policy Committee	4/1/2021	
Rogue Valley Area Commission on Transportation	5/5/2021	
Southwest Area Commission on Transportation	5/14/2021	
Stakeholder Workshop	12/10/2020, 3/9/2021	
Stakeholder Performance Measure and Target Setting	11/17/2020, 1/19/2021	
Workshop		

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
Statewide News Release	Email Announcement	Survey Notification: 10/2/2020
		Crash Trend Analysis: 1/19/2021
		Public Review Period and Public Hearing: 5/24/2021
ODOT News Brief	Email Announcement	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/25/2021
TSAP GovDelivery	Email Announcement	Survey Notification:
 ADA Stakeholders 		10/2/2020
 Bicycle and Pedestrian Programs Intermodal Civil Rights Area Commissions on Transportation 		Crash Trend Analysis: 1/19/2021
•		Public Review Period and
 Metropolitan Planning Organizations Statewide Oregon Bicycle/Pedestrian Advisory Committee Oregon Freight Advisory Committee Rail Advisory Committee Public Transportation Advisory Committee Safe Routes to School Program Statewide News Release Transportation and Growth management News and Info Transportation Safety Newsletter Work Zone Safety Transportation and Growth Management	Email Announcement in	Public Hearing: 5/24/2021 Survey Notification:
g	Newsletter	9/20/2020 Public Review Period and
		Public Hearing: 5/25/2021
Association of Oregon Counties	Email Announcement in Newsletter	Survey Notification: 9/30/2020
		Crash Trend Analysis: 1/29/2021

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
League of Oregon Cities	Email Announcement in	Public Review Period and Public Hearing: 5/28/2021 Survey Notification:
	Newsletter	10/9/2020 Crash Trend Analysis: 1/22/2021 Public Review Period and Public Hearing: 5/28/2021
Transportation Safety Division	Email Announcement in Newsletter	Survey Notification: 10/1/2020 Crash Trend Analysis: 1/29/2021 Public Review Period and Public Hearing: 6/1/2021
Oregon Impact	Email Announcement in Newsletter	Survey Notification: 10/13/2020 Crash Trend Analysis: 1/28/2021 Public Review Period and Public Hearing: 5/24/2021
 Oregon Tribal Governments Burns Paiute Tribe Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians Coquille Indian Tribe Cow Creek Band of Umpqua Tribe of Indians Confederated Tribes of the Grand Ronde Community of Oregon Klamath Tribes Confederated Tribes of the Siletz Indians Confederated Tribes of the Umatilla Indian Reservation 	Mailed Letter, Email with Letter Attached	Consultation Plan Development/Survey Notification: 9/1/2020 – 10/5/2020 Public Review Period and Public Hearing: 5/24/2021

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
Confederated Tribes of Warm Springs		
 Non-Oregon Tribal Governments Confederated Tribes and Bands of the Yakama Nation Confederated Tribes of the Colville Reservation Cowlitz Indian Tribe Fort McDermitt Paiute and Shoshone Tribe Ft. Bidwell Indian Community of the Ft. Bidwell Reservation of California Nez Perce Tribe Tolowa Dee-ni' Nation (Smith River Rancheria) 	Mailed Letter, Email with Letter Attached	Public Review Period and Public Hearing: 5/24/2021
 Metropolitan Planning Organizations Central Lane MPO Albany Area MPO Bend MPO Corvallis Area MPO Portland Metro MPO Rogue Valley MPO Middle Rogue MPO Salem-Keizer Area Transportation Study MPO Longview/Kelso/Rainier MPO Walla Walla Valley MPO 	Email	Public Review Period and Public Hearing: 5/24/2021
 Oregon Safe Communities Programs John Day/Grant County Safe Community Program Union County Safe Community Program Columbia County Safe Community Program Harney County Safe Community Program Clackamas County Safe Community Program Malheur County Safe Community Program 	Email	Public Review Period and Public Hearing: 5/24/2021

	Notifications	
Agency/Committee/Interest Group	Outreach Tool	Notification Date
Morrow County Safe		
Community Program		
Umatilla County Safe		
Community Program	<u> </u>	
Oregon Office of Diversity, Equity and	Email	Survey Notification:
Inclusion		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
GettingThereTogether	Email	Survey Notification:
8 1 1 8 1		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Unite Oregon	Email	Survey Notification:
		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Coalition for Communities of Color	Email	Survey Notification:
Countries for Communities of Color		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Oregon Environmental Justice Task	Email	Survey Notification:
Force		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Oregon Commission on Hispanic	Email	Survey Notification:
Affairs	Ziiidii	10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Latino Network (Metro Area)	Email	Survey Notification:
		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Centro Cultural (Washington County)	Email	Survey Notification:
(10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
Centro Latino Americano (Eugene/Springfield)	Email	Survey Notification: 10/2/2020 Public Review Period and
Hispanic Metropolitan Chamber of Commerce	Email	Public Hearing: 5/24/2021 Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
Urban League	Email	Public Hearing: 5/24/2021 Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
Oregon Commission on Black Affairs	Email	Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
National Society of Black Engineers	Email	Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
Africa House	Email	Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
Asian Family Center	Email	Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
Ontario Office	Email	Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
Asian Pacific American Network of Oregon	Email	Survey Notification: 10/2/2020

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
		Public Review Period and
		Public Hearing: 5/24/2021
Oregon Commission on Asian and	Email	Survey Notification:
Pacific Islander Affairs		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Chinese American Citizen's Alliance	Email	Survey Notification:
Chinese American Citizen's Amarice	Lillali	10/2/2020
		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Chinese Consolidated Benevolent	Email	Survey Notification:
Association		10/2/2020
		Public Review Period and
I	E	Public Hearing: 5/24/2021
Japanese American Citizen's League	Email	Survey Notification: 10/2/2020
		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Japan-America Society of Oregon	Email	Survey Notification:
		10/2/2020
		Public Review Period and
Korean American Coalition	Email	Public Hearing: 5/24/2021
Korean American Coantion	Elliali	Survey Notification: 10/2/2020
		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
Oregon Native American Chamber	Email	Survey Notification:
(ONAC)		10/2/2020
		Public Review Period and
NAVA	Email	Public Hearing: 5/24/2021
NAYA	Email	Survey Notification: 10/2/2020
		10/2/2020
		Public Review Period and
		Public Hearing: 5/24/2021
AARP	Email	Survey Notification:
		10/2/2020

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
		Public Review Period and Public Hearing: 5/24/2021
Oregon Commission for the Blind	Email	Survey Notification: 10/2/2020
	F 1	Public Review Period and Public Hearing: 5/24/2021
Oregon Association of the Deaf	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Disability Rights of Oregon	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Aging and Disability Resource Connections	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Oregon Department of Human Services Seniors and People with Disabilities	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Oregon Disability Commission	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Rural Organizing Project	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Oregon Commission for Women	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021

	Notifications	
Agency/Committee/Interest Group	Outreach Tool	Notification Date
Oregon Walks	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Oregon Impact	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
The Street Trust	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
ToGo Group of Oregon	Email	Survey Notification: 10/2/2020
		Public Review Period and Public Hearing: 5/24/2021
Oregon Environmental Council	Email	Survey Notification: 10/2/2020 Public Review Period and Public Hearing: 5/24/2021
Federal Agencies		1 done Hearing. 3/24/2021
National Highway Traffic Safety	Email Announcement	Public Review Period and
Administration	with Letter Attached	Public Hearing: 5/24/2021
Federal Motor Carrier Safety	Email Announcement	Public Review Period and
Administration	with Letter Attached	Public Hearing: 5/24/2021
Federal Highway Administration	Email Announcement with Letter Attached	Public Review Period and Public Hearing: 5/24/2021
Federal Transit Administration	Email Announcement with Letter Attached	Public Review Period and Public Hearing: 5/24/2021
National Oceanic and Atmospheric Administration	Email Announcement with Letter Attached	Public Review Period and Public Hearing: 5/24/2021
US Army Corp of Engineers	Email Announcement with Letter Attached	Public Review Period and Public Hearing: 5/24/2021
US Environmental Protection Agency	Email Announcement with Letter Attached	Public Review Period and Public Hearing: 5/24/2021
Bureau of Land Management OR/WA State Office	Email Announcement with Letter Attached	Public Review Period and Public Hearing: 5/24/2021
US Fish and Wildlife	Email Announcement with Letter Attached	Public Review Period and Public Hearing: 5/24/2021

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
State Agencies		
Oregon Health Authority	Email Announcement	Public Review Period and
,	with Letter Attached	Public Hearing: 5/24/2021
Business Oregon	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Travel Oregon	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Human Services	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Agriculture	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Aviation	Email Announcement	Public Review Period and
_	with Letter Attached	Public Hearing: 5/24/2021
Department of Energy	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Environmental Quality	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Fish and Wildlife	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Forestry	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Land Conservation and	Email Announcement	Public Review Period and
Development	with Letter Attached	Public Hearing: 5/24/2021
Department of State Lands	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Parks and Recreation	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Oregon Watershed Enhancement Board	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Department of Water Resources	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Governor's Transportation Policy	Email Announcement	Public Review Period and
Advisor	with Letter Attached	Public Hearing: 5/24/2021
Oregon Disabilities Commission	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021
Governor's Commission on Senior	Email Announcement	Public Review Period and
Services	with Letter Attached	Public Hearing: 5/24/2021
Veterans' Administration:	Email Announcement	Public Review Period and
Transportation	with Letter Attached	Public Hearing: 5/24/2021
Department of Public Safety Standards	Email Announcement	Public Review Period and
and Training	with Letter Attached	Public Hearing: 5/24/2021
Oregon State Police	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021

Notifications		
Agency/Committee/Interest Group	Outreach Tool	Notification Date
Washington Traffic Safety Commission	Email Announcement	Public Review Period and
	with Letter Attached	Public Hearing: 5/24/2021

Public Hearing	
Public Hearing via MS Teams (virtual meeting tool); conference	6/9/2021
call	

A public hearing was held via MS Teams, a web application which provides video conferencing and screen sharing functionality. Attendees were able to attend through a web link or by phone.

Approximately 9 participants connected to the web tool during the hearing. 8 spoke on the record. Those who spoke on the record commended the overall process and the plan development process itself and were supportive of the TSAP update in general.

Specific comments addressed diverse considerations of transportation safety related to, but not limited to:

- disproportionate impacts of fatal and serious injury crashes on historically underserved communities,
- legislative and policy changes that impact transportation safety,
- safety through design and infrastructure of our roadways,
- aggressive target setting given the rise of fatal and serious injury crashes; and
- unbiased enforcement of traffic safety.

The complete recording of the Public Hearing is available on the TSAP project webpage: https://www.oregon.gov/odot/Safety/Pages/TSAP.aspx

The following participants made comments on the record:

- Richard Sheperd
- Michael Holloran
- Nick Fortey
- Lake McTighe
- Dick Dolgonas
- Hau Hagedorn
- Clay Veka
- Paula Leslie

Attachment 4 – Summary of Written Comments Received and Changes Made

(Transportation Safety Action Plan 2021 Update Public Comment Record) Public Comment Period: May 24, 2021 - July 9, 2021

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
1	5/24/2021	Chris Bauman	Written comment	Please stop expanding highways. People need safety improvements in cities. Children and other vulnerable users traveling by more active modes other than personal vehicles need better conditions and safer routes. People who walk or use other wheeled devices to travel need to receive safer infrastructure improvements beyond what you have proposed. Incomplete roadways are never left how they are, so please do the same for bike routes and sidewalks in urban areas where people and vehicles mix too often. Urban areas should be built with the most vulnerable and exposed users in mind while reducing the violence that can be caused by people who are operating vehicles in safely or travel at too high speed	Prioritize bike and pedestrian safety over highway expansion.	Bicyclists and pedestrians (Vulnerable Users) are one of 4 primary emphasis areas in the 2021 TSAP. Bicyclist and pedestrian safety issues are addressed with the most Emphasis Area Actions of any category. While the detailed designs are not in the TSAP, ODOT's Blueprint for Urban Design addresses multimodal design that is context sensitive. The BLUEPRINT FOR URBAN DESIGN is referred in the Introduction and 3 separate Emphasis Area actions.	n	
2	5/25/2021	Mark Wigg	Written comment	The state needs to require that autonomous vehicles have a higher priority for avoiding hitting pedestrians or cyclists that preserving the vehicle. If a child dashes into the street, the car should crash into other cars, walls, etc. to avoid hitting the child. A child will not survive an automobile hitting them. The occupants of the car will survive almost all crashes. The warning beeper for backing up in my car sounds if a car is behind me but not if a person is behind me. This is bad design.	Autonomous vehicles safety.	Automated vehicle safety will be addressed primarily at the vehicle manufacturer and federal legislation level. Oregon safety professionals will monitor progress and develop statespecific policy accordingly.	n	
3	5/25/2021	Mark Wigg	Written comment	Are pedestrian and bicycle accidents counted in the total for traffic accidents? If they are included, ODOT is not suitably measuring these accidents because it lumps them with vehicles. Fatalities per 100million miles travels does not capture the death rate for peds and cyclists. We don't have 100million miles of travel by foot or bike in a year but we have multiple	Question about how bike and pedestrian crash data is included in traffic accident data.	The current data set does not include statewide miles traveled by foot or bicycle. The TSAP uses the best information available, which right now is vehicle miles traveled.	n	

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				deaths. ODOT's focus on safety is very distorted by combining vehicle and bike-ped accidents.		Bicyclists and pedestrians (Vulnerable Users) are one of 4 primary emphasis areas in the 2021 TSAP. Bicyclist and pedestrian safety issues are addressed with the most Emphasis Area Actions of any category.	<i>,</i> , , ,	pugo
4	6/1/2021	Susan Bechert	Written comment	I live in a community on Fetters Loop in Eugene that is home to many retired people. At the time I moved here, I chose it because it provided bike access downtown (which I then used) and had bus service every 15 minutes. I was close to retirement, and wanted affordable and accessible transportation in the future. Over time, service has been repeatedly reduced. Now, there is no bus service at all. Only abandoned bus stops. We are told to walk a distance to stops on 18th (steep incline and difficult for those of us with disabilities) or 11th. While I am the first to promote exercise, the truth is some of us are using walkers, or have breathing challenges which makes navigating this added distance difficult. I settled here because there was bus service a block from my dwelling. Now I must travel many blocks, over uneven sidewalks. When I fell and broke my leg, traveling by foot 3-4 blocks was out of the question, but my "disability" was considered temporary, so I could not access the alternative transportation offered to persons with difficulty reaching the bus routes. In other words, I was stuck. Now, many other residents are likewise potentially stuck, because the infirmities of age do not qualify them for special transportation services, but the time and agility necessary to navigate uphill or 4 blocks poses too much of a risk. Many low income and senior people along Oak Patch were dependent upon this bus line to get to work, medical appointments, and to access basic necessities. Students used it to get to school. As you know, many downtown employers discourage the use of cars as there is no parking available, and those of us who settled in a spot with bus transportation now find our transportation withheld.	Bike and pedestrian safety. Concern about reduced transit access.	ODOT shared this concern regarding transit access with Lane Transit District on June 7 th , 2021.	n	

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				When will the bus service at Fetters Loop/15th Street and Oak Patch resume? We were told the discontinuation was due to the pandemic. Or have we lost our transportation altogether? If the latter, please reconsider.				
5	6/4/20121	Jay Higgins, City of Gresham	Written	It's good to see ODOT doing proactive safety planning to make our roads safer and leading with a Zero Deaths approach. Page 36, "As shown in Figure 9, speeding is the most common behavioral issue associated with fatal and serious injury crashes in Oregon, followed by alcohol-involved drivers." But that's not what the figure shows isn't alcohol/drugs the most common because it has the largest % of both, 68%? Maybe the labels are mixed up? Page 81, Figure 22 - the labels are the same.	General text edits.	Pg 36 and Figure 9: The text content is largely accurate. A change will be added in the TSAP to include alcohol and/or drug involvement. The draft Figure 9 information included an error and is updated with accurate data. Figure 22. The right-most caption has been changed to "Neither Alcohol Nor Other Drugs Involved"	У	36, 81
6	6/5/2021	Sara Wright, Oregon Environmental Council	Written comment	Thank you for the opportunity to comment on the Transportation Safety Action Plan. This document lays out the problem - people are dying and being injured on Oregon's roads - and the "vision" - nobody will die or be injured on Oregon's roads starting in 2035. It fails, however, to lay out any actions that will get us from the current state of affairs to the vision. Everything in this document is incremental and completely insufficient to make any meaningful change. The priority actions are primarily about education. This accepts the status quo of the system, and assumes that individual behavior change will make the difference, which it never has and never will. For example, we know that speed is associated with injury and death, and while this document addresses the relationship between driving over the speed limit and crashes, it ignores the relationship between actual speed and both crash incidence and severity. Reducing speed limits, automating enforcement, and changing the way roads are engineered would not only reduce traffic violence but also climate pollution and air toxics.	 Redirect investments and prioritize the safe and convenient movement of people. Plan is not sufficient to make meaningful change. Engineering and design over personal responsibility. Prioritize Right of Way for bike and pedestrian safety over cars. 	Chapter 6 Emphasis Area (EA) Actions move in the direction of achieving the Vision of zero deaths by 2025. Engineering and design are highlighted in the Infrastructure EA and several EA Actions within the Vulnerable Users area. The TSAP addresses the relationship between speed and crash incidence and severity through the implementation of the Blueprint for Urban Design, referenced in Action #7. The Blueprint for Urban Design is heavily influenced by new research regarding speed and safety.	n	

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				This document should also address the way that right-of-way is allocated. Our right-of-ways should be designed around people, not vehicles. Provide safe, convenient space in the right-of-way for people walking, biking, and riding transit, and we will be able to dramatically increase safety while reducing other harmful outcomes of driving. This "Action Plan" fails to point the way to actual change. In order to achieve that, ODOT will need to significantly redirect investments and prioritize the safe and convenient movement of people, not vehicles. Without that shift, we will never reach the "vision" identified in this document.		Bicyclists and pedestrians (Vulnerable Users) are one of 4 primary emphasis areas in the 2021 TSAP. Bicyclist and pedestrian safety issues are addressed with the most Emphasis Area Actions of any category.	<i>y</i>	
7	6/8/2011	Michael Holloran, Oregon State Police	Written comment	As a State Trooper and a member of The Dalles Traffic Safety Commission it saddens me that reduced police presence during COVID 19 saw fatalities rise dramatically in 2020 and Oregon was no exception with fatalities well over 500. Already in 2021 the number of driving complaints is on the rise; most are cell phone and speed related. I have written more cell phone citations in 2021 than ever before and I have also set a record for the number of CMV citations to trucks going over 80 mph and the year is only half over. Unfortunately I see the future of Oregon's Fatalities going up not down. The number of mentally ill people, most of which are drug induced is sky-rocketing with Oregon essentially legalizing drugs. My patrol shift has become re-active rather than pro-active. Just last week I had one subject driving over 100 mph recklessly (under the influence) cutting in and out of traffic, whose horrific crash shut the freeway down for hours on a holiday weekend. We had three motorcycle fatalities in our area in the last two weeks and just a few days ago I had a 19 year old kid high on drugs dancing naked in the freeway playing a guitar while playing chicken with a log truck. He lost. Also this last week I contacted a man parked on the side of the road, tying up a baggie of methamphetamine. He was alone and not yet impaired, so I wrote him \$100 citation which if he takes an assessment he doesn't have to pay.	 Lack of traffic safety enforcement and funding. Increased unsafe driving behavior and drug use. Poor legislation. Insufficient traffic safety education. 	Emphasis Area Risky Behaviors focuses on actions to address the concerns raised. The TSAP includes some elements regarding legislation, but the TSAP as a planning tool does not have legal authority nor is it a lobbying document.	n	

#	Received	Representation	Contact /Source	Comment Summary Ke	ey Themes	TSAP Team Response	Text Edit y/n	
				Currently our legislators are trying to pass laws that make it nearly impossible for Law Enforcement to stop equipment violations. It is as if no one has bothered to look at the number of DUII and DUI-CS arrests that come from equipment violation traffic stops.			<i>37.</i> 2	P.S.
				To make matters worse, our courts are not yet sending safety belt violators to our local classes. On line courses have little to no impact, participants are not even required to pay attention; they could be playing games or completely away from the computer. The number of people not wearing safety belts is up, but the number of people in class is down.				
8	6/10/2021	Clay Veka, Portland Bureau of Transportation	Written comment	 Is highway traffic safety really a priority? I noticed a couple of technical errors in the draft plan that I meant to point out. P. 36. The text and the graphic mix percentages for Speeding and Alcohol/Drugs. The text says, "As shown in Figure 9, speeding is the most common behavioral issue associated with fatal and serious injury crashes in Oregon, followed by alcohol-involved drivers." But the graphic shows Alcohol/Drugs as #1 and Speeding as #2. P. 81 – Figure 22. The light teal description needs to be corrected. It says, "alcohol and/or other drug involved" but it's supposed to be "NOT alcohol and/or other drug involved." P. 82 – Figure 23. These are the wrong numbers for fatalities and serious injuries. These are the exact same numbers from the DUII #s in Figure 21 above. And are much too high for unrestrained fatalities and serious injuries (fortunately) 	General text edits	Pg 36 and Figure 9: The text content is largely accurate. A change will be added in the TSAP to include alcohol and/or drug involvement. The draft Figure 9 information included an error and is updated with accurate data. Figure 22. The right-most caption has been changed to "Neither Alcohol Nor Other Drugs Involved" Figure 23. Updated unrestrained to the correct values.	у	36, 81, 82
9	6/12/2011	Rob Zako, Better Eugene- Springfield Transportation	Written comment	I have a question about the draft <u>Transportation Safety Action Plan</u> . On page 48: The Economic Cost of Crashes While it is difficult to quantify the emotional costs of crashes, it is possible to estimate the purely financial impacts of lost lives, injuries, and property damage attributable to crashes involving motor vehicles.	Question about calculation methodologies.	The USDOT's value of \$11.6 million is a national value based on a fatality. To tie the TSAP directly to Safety implementation in Oregon, ODOT takes a different approach to economic cost of crashes.	n	

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				Economists often use two approaches to quantify the costs of crashes: economic costs and comprehensive costs. Economic costs can generally be described as those costs which are measurable, while comprehensive costs include the economic costs as well as lost quality of life. Oregon reports human capital and comprehensive crash costs by crash type and severity are based on two methodologies: Highway Safety Manual (HSM) Appendix 4A and FHWA's Crash Cost Estimates by Maximum Policy-Reported Injury Severity Within Selected Crash Geometrics. Table 2 shows Oregon's comprehensive economic value for crashes based on highway type, urban/rural location, and severity outcome. How do these two methodologies align with USDOT's Departmental Guidance on Valuation of a Statistical Life in Economic Analysis, which estimates the value of a life at \$11.6 million in 2020?		For safety needs identification and project selection in the Oregon All Roads Transportation Safety (ARTS) program that distributed federal Highway Safety Improvement Program (HSIP) funds, ODOT uses a weighted average value of fatal and serious injury crashes so that a single fatal crash event is not overrepresented in project prioritization. This is why the \$1-2M values are used instead of the USDOT's \$11M. These values will be updated again during the next round of ARTS.		
10	6/17/2021	Kiel Johnson, Go By Bike	Written comment	Hello, my name is Kiel Johnson, I am the owner and founder of Go By Bike which provides bike valet services and consultation. For the past 9 years we have operated the bike valet under the aerial tram where we have parked over 500,000 bicycles. I applaud your efforts to eliminate traffic deaths in Oregon. To date 2.759 people in Oregon have died from Covid while on Oregon roads (most managed by ODOT) between 2009 and 2018 3,569 Oregonians have been killed. I was discouraged that the TSAP still places the highest priority for blame on those deaths on the users instead of the designers of the roads. Placing "Safety Culture" as the number one goal and "risky behavior" will not help us get to a zero traffic death future. These issues should be prioritized below infrastructure. Following the success of places like Utrecht in the Netherlands the TSAP should copy what they have done and call for the shrinking of all highway and arterial roads to three lanes or less. By reducing the number of lanes we make space for pedestrians and bikes and are able to slow down traffic to a none lethal speed.	 Value engineering and design over personal responsibility. Consider road diets to prioritize bike/ped improvements and increase safety. Reducing car speeds by innovating road design. Regulate car size for safety. 	The Emphasis Areas are not provided in a priority order. Both Risky Behavior and Infrastructure are important aspects of roadway safety. Lane reconfiguration/reduction is an approved safety countermeasure. ODOT's Blueprint for Urban Design addresses many of the concerns by the commentor regarding arterials. While the detailed designs are not in the TSAP, the Blueprint for Urban Design is referred in the Introduction and 3 separate Emphasis Area actions. Vehicle details (such as size) tend to be handled at the federal level and outside the TSAP purvue. The TSAP will include the addition of vehicle size as a	Y	91

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	
				The report needs to focus more on reducing car speeds and allowing for innovative road designs (like curving roads) and smaller road space. ODOT needs to reevaluate it's criteria for lane widths. For example when PBOT		contributing factor to pedestrian collisions in Chapter 6.		
				installed a bicycle lane on N Rosa Parks ODOT made the city shrink the bike lane to allow for a wider car lane.		Vehicle speed is identified more than 70 times in the TSAP, including an entire section in Chapter 6 (p. 83-85)		
				The report also need to call for new law regulating the size of cars allowed to be purchased in Oregon. https://www.iihs.org/news/detail/new-study-suggests-todays-suvs-are-more-lethal-to-pedestrians-than-cars		I va ve		
11	6/17/2021	Drew Williamson	Written comment	I am writing today in response to the TSAP and solicitation of comments. I firmly believe that if ODOT wants to realize these goals (which I, and many in the community strongly support), then we need to get serious about reducing automobile throughput. There are many many studies that show how road design and excessive widths are the leading cause of high speeds, a top killer of both drivers, cyclists, and pedestrians alike. They contribute to an enduring hegemony of vehicle driving as the only legitimate way to get around. ODOT has thus far shown an unwillingness to reduce automobile throughput, even when faced with a once and a lifetime opportunity to rebuild a very dangerous street, Barbur Blvd, through a reduction in car lanes in conjunction with the SW Corridor project. Traffic counts be damned on Barbur, it could instead become a safe, welcoming and vibrant urban corridor. As a SW Portland resident, I wish this notion would be taken more seriously. There are other examples, of course we are all cognizant about what has happened on 82 nd Avenue in Portland these last couple months. Deaths are the only thing that register, but there is no telling how many close calls have been missed in the tally. 82 nd , among other roads, needs urgent safety upgrades and we ought to more seriously consider road diets. Traffic apocalypse is always predicted, though such results rarely materialize to any meaningful extent—the demand and travel patterns simply change around the new configuration and all users have a safer space for getting around. Until we make appropriately drastic changes to the way we think about the public right of way and how to allocate this space, we will not achieve Vision Zero.	 Consider road diets to prioritize bike and pedestrian improvements and increase safety. Reduce auto throughput on the widest non-interstate roads. 	Multimodal transportation, in particular active modes, is a focus of the TSAP, and Road Diets are on the list of recommended countermeasures. For example, ODOT's Blueprint for Urban Design addresses many of the concerns by the commentor regarding arterials. While the detailed designs are not in the TSAP, the Blueprint for Urban Design is referred in the Introduction and 3 separate Emphasis Area actions. ODOT does recognize the safety implications of speed. It is is addressed in the Blueprint for Urban Design. Other statewide mode and topic plans also specifically consider multimodal investments and safety implications related to speed. The TSAP includes actions that address speed management (Speed Action 2), as well as facility design to address safety issues related to speed (Speed Action 5).	n	

	# Receive	ed Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				I fully believe that in this vein, ODOT should formally adopt a stance that focuses on intentionally reducing auto throughput on the widest non-interstate roads across our state. Thank you for reading these comments.		ODOT is collecting a list of considerations for future updates and implementation, and we will add this item to the parking lot	S	
11	2 7/7/202	Paula Leslie, Oregon BikePAC	Written comment	TSAP BikePAC revisions As stakeholders in the TSAP, BikePAC has taken the opportunity to offer suggestions and edits to minimize bias in this document. We feel strongly that that there is potential for more equality among road users, in regard to the unique needs of motorcycle riders, as our stakeholders work to reduce serious injuries and fatalities on Oregon's roads and highways. Here are our focus areas. • Motorcycle crash scene management • Increase reckless, careless, and distracted driver accountability • improving public safety training and data sharing for motorcycle crash scene management • Awareness of the unique safety needs of power two wheel vehicles, in regard to traction and visibility. • The need for more Autonomous vehicle safety data, before the infiltration onto Oregon's roads. P. 14 The TSAP also serves as Oregon's long-range safety topic plan, an element of the Oregon Transportation Plan (OTP), and parallel to other mode and topic plans like the Oregon Motorcycle Safety plan, Bicycle and Pedestrian Plan and Oregon Freight Plan. P. 20 PUBLIC TRANSPORTATION DIVISION The Public Transportation Division is a stakeholder in the TSAP as it supports safety initiatives relevant to rail, multimodal, and active transportation. This division includes the Motorcycle safety program, Bicycle and Pedestrian Program that has established goals that set forth to reduce crashes involving people walking, Power Two wheel vehicle riding, PTWV, and biking, eliminate crashes that result in injuries and deaths, and promote PTWV, bicycle riding, walking and to improve	 Motorcycle crash scene management. Motorcycle safety related to vehicles. Improving public safety training and data sharing for motorcycle crash scene management. Motorcycle unique traction and visibility needs. The need for more Autonomous Vehicle safety data. Text edits related to motorcyles. 	While the Motorcycle Safety Plan should be considered, it is not a statewide mode or topic plan as it is not officially part of the OTP. Mode and topic plans refine and apply OTP policy to specific modes or topics and guide state, regional, and local investment decisions for the parts of the transportation system that they address. https://www.oregon.gov/odot/planning/pages/plans.aspx Motorcyclist representatives were involved in our stakeholder workshops and the Governor's Advisory Committee on Motorcycle Safety received TSAP updates and opportunity to provide input. Pg 60: Added the recommended inclusion of motorcyclists in this section. Chapter 5 (Strategy) Recommendations: The 2021 TSAP focused update was not scoped to update this chapter except under very specific circumstances. The next TSAP update anticipated for 2026 will include a review of all the TSAP chapters.	у	60, 101, 103, 117

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				health and safety. The Program works towards these goals by supporting		p. 88 and 89. This definition of vehicle	7,72	puge
				implementation of the Oregon motorcycle, Bicycle, and Pedestrian Plan		includes all. To single out passenger		
				and the TSAP, developing walking, Motorcycle, PTWV riding and		vehicles and motorcycles would require		
				bicycling safety and education materials, funding projects that improve		also adding trucks, buses, and other		
				conditions for Riding PTWVs, walking and biking, and providing		types separately.		
				planning and design guidance for PTWV, pedestrian and bicycle		07 This statement along the society of		
				projects. OTHER STATE AGENCIES		p. 97 This statement already exists as Enforcement Emphasis Action Action		
				Page 25 ORS 802.320. Motorcycle safety program. The Department,		2.		
				with advice from the OTSC, is to plan for and conduct training for		2.		
				motorcycle safety. The Department does this in consultation with local		p. 101 Added reference to reckless and		
				groups. (The Governor's Advisory Committee on Motorcycle Safety		distracted driving language to the		
				provides a conduit for local consultation). This program is allowed to		Enforcement paragraph.		
				raise funds to provide programs???				
						p.102 TSAP will not add to this list, as		
				P27 MULTIDISCIPLINARY APPROACH. Technical staff from		these are "such as" clause, not a full		
				ODOT were consulted in the development of the plan, including		list.		
				Motorcycle, pedestrian and bicycle, motor carrier, freight, traffic				
				operations, traffic engineering, construction, and maintenance experts.		Data Action 1. The intent of this one is		
				ODOT, local agencies, law enforcement, public health, and regional planning organizations were also consulted to address the 4 Es		specifically for bicyclists and pedestrians only.		
				(engineering, emergency response, law enforcement, and education) and		pedestrians only.		
				provide input on Emphasis Area actions in two stakeholder workshops.		Training and Education Action 3.		
				provide input on Emphasis ruled decions in two stakeholder workshops.		Added motorcyclists to this item.		
				COMPETING PRIORITIES IN URBAN AREAS In urban areas there is				
				a high mix of modes of travel, speed of travel and trip purpose. Trucks		p. 117. Added "reckless, careless" to		
				move freight 4,3, 2 wheel vehicles, bicycles and transit move people to		this item.		
				work, recreation, and shopping. There is inherent conflict and risk in this				
				mix of modes, trip purposes, and speed of travel. Implementing a range				
				of transportation solutions in urban areas is necessary to meet				
				transportation goals, such as safety, mobility, reliability, or improved air				
				quality. Planners and engineers need to draw on the best available				
				evidence to implement a data-driven approach to funding projects which reduce the frequency and severity of crashes.				
				reduce the frequency and severity of crashes.				
				p 28				
				Oregon has designated the Oregon Transportation Plan, the adopted				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				mode and topic plans (Aviation, Motorcycle, Bicycle and Pedestrian P 53 Connected and Automated Vehicles Are Expected To: Reduce likelihood of crashes. Take time before all vehicles have the technologies. Require public investment, policies, and programs in urban and rural areas. Initially benefit higher income residents. PROVIDE MORE SAFETY DATA			<i>y</i> ,	puse
				P54 SAFETY ANALYTICS The use of analytical tools and processes offers a more immediate application of technology to transportation safety. The increasing quality and quantity of safety-related data (e.g., crash, roadway inventory, and volume) is enabling new insights into the causes of crashes and possible measures to reduce their occurrence or severity. Methods for collecting safety data specific to other modes such as Motorcycles, MOPEDS, bicycles and pedestrians are emerging and will expand capability to assess opportunities and risks and identify solutions for Vulerable road users. Advances in statistical modeling				
				P 55 Shifting Transportation and Lifestyles • More people are choosing urban lifestyles. • Urban areas are becoming more dense. • More people are choosing non-auto travel • More people are riding motorcycles and mopeds (PTWVs) • Transit is one of the safest modes of travel. • Managed speeds can significantly reduce the severity of crashes				
				P56 Less is known about the relationship of the level of MOTORCYCLING walking and bicycling to safety outcomes for these modes or for the broader public. A 'safety in numbers' theory has been proposed, suggesting that higher levels of MOTORCYCLING, walking, and bicycling result in lower				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				crash rates involving these modes. While data consistent with this theory has been presented from several countries, a consensus on this question has not been reached. It is possible that one or both of these factors played a role in reducing the crash rate, but it cannot be determined without a more rigorous study. Nonetheless, the evidence suggests that at the very least, higher levels of MOTORCYCLING? bicycling and walking do not result in a dramatic increase in crashes			,	
				Inspiring a strong safety culture among the public (individual drivers, passengers, MOTORCYCLISTS, bicyclists and pedestrians) can be implemented in a number of ways. Good public information and education on the rules of the road and changes in regulations; broadly available and upto-date AUTOMOBILE AND MOTORCYCLE training; clear communication of the benefits of transportation law enforcement in changing social norms to expect slower speeds; respect and responsibility for other users; and community engagement in transportation safety plans and programs; can all contribute to higher awareness of how individual choices influence the safety of all system users.				
				p 61 Strategy 1.3.1 – Collaborate with state, regional, tribal, county and city transportation and safety agencies, and other stakeholders, to identify unsafe walking, biking, motorcycling, or driving behaviors that could be addressed through legislation. Identify and pursue legislation to modify these behaviors p 62 Strategy 2.1.2 – Identify and implement new methods for crash, roadway, and exposure (e.g., 4, 3, and 2 wheel Power Vehicles, PTWV, pedestrian, and bicycle volume) data collection, sharing, and storage. Strategy 2.1.4 – Review state crash report forms to ensure appropriate data is collected and extraneous data is eliminated. Provide training and education to state and local enforcement agencies on crash scene management, related law changes, and resulting form(s).				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				p. 65 Strategy 3.1.2 – Support a high-visibility enforcement program increasing traffic, VULNERABLE ROAD USERS, INCLUDING MOTORCYCLE, bicycle, and pedestrian law enforcement capabilities (priority and funding). Strategy 3.1.5 – Conduct education and outreach to law enforcement to increase understanding and enforcement of traffic, commercial vehicle, MOTORCYCLE, pedestrian, and bicycle laws			,	
				P 66 Strategy 3.4.1 – Enhance perceptions of MOTORCYCLING, bicycling, walking, and transit safety and security by identifying and implementing appropriate facility design, lighting, and				
				P 87 Intersections An intersection is a point at which two or more roads intersect. Most intersections are primarily designed for passenger vehicles, freight, and buses, and at a secondary level for pedestrians and bicyclists, while motorcycles have historically been left out of these considerations. An inherent concern at intersections is that they create conflict points among multiple road users, which can be exacerbated by surface and visiblity issues, differences in vehicle size and travel speed as well as the complexity of the intersection design. Intersection crashes in Oregon are defined as incidents that occur at a signalized or unsignalized intersection in an urban or rural environment.				
				P. 88 5. Improve the visibility of passenger vehicles, motorcycles, pedestrians and bicycles along corridors and at intersections with lighting and unobstructed sightlines.				
				p. 89 Roadway Departure When operating a passenger vehicle or motorcycle, an event may require the driver or rider to swerve suddenly to avoid another car or object, or an unsafe speed could affect control of the car, and especially a motorcycle. These situations impact a driver's or rider's ability to stay on the road, possibly resulting in a crash. These concerns are escalated for PTWVs. Roadway departure crashes are defined as non-intersection crashes which				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text edit page
				occur after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. Figure 29 ROADWAY DEPARTURE FATALITIES AND SERIOUS INJURIES BY YEAR 0 2014 2015 2016 2017 2018 144 138 207 170 146 344 414 358 373 445 F			
				p. 89 Let's put some motorcycle road departure stats in here? Problem Identification Between 2014 and 2018 approximately 41 percent of all fatal and serious injury crashes in Oregon included a roadway departure, contributing to 1,330 fatalities and 3,336 serious injuries. About 68 percent of these crashes were in a rural environment. Many risky behavior-related crashes involve the vehicle leaving the lane or entire roadway. For example, road and lane departure accounts for 68 percent of speed-related fatal and serious injury crashes and 60 percent of impaired driving fatal and serious injury crashes.			
				p. 97 Motorcyclist Actions 1. Provide information to increase awareness among motorcycle drivers that most motorcyclist-involved crashes involve speed, impairment, and roadway departure. 2. Provide education and enforcement focused on impaired motorcycle riding and its impact on all road users. 3. Increase awareness of motorcycles among the general public through education and outreach. 4. Adopt and implement road surface maintenance practices across jurisdictions that reduce hazards for people operating motorcycles. 5. Modify Oregon's helmet definition to match federal regulations. 6. Provide education and enforcement focused on driver accountability for distracted, reckless, and careles driving.			
				p. 98 Enforcement Law enforcement officials prevent crashes through traffic details, special mobilization campaigns such as Click It or Ticket, saturation patrols, and checkpoints. These different approaches enable officers to prosecute safety offenses, such as impaired driving, distracted driving, careless, and reckless driving, but also keep all road users safe at the same time. They also respond to crashes to collect information for crash reports, which detail the specifics of the crash, person(s), and vehicle(s) involved in the incident. This information later helps transportation and safety			

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				stakeholders make informed decisions about safety solutions. Fully staffed and funded law enforcement agencies can direct their efforts towards strategic enforcement and data collection.				
				P.102 Enforcement Law enforcement officials prevent crashes through traffic details, special mobilization campaigns such as Click It or Ticket, saturation patrols, and checkpoints. These different approaches enable officers to prosecute safety offenses, such as impaired, careless, reckless, and distracted driving, but also keep all road users safe at the same time. They also respond to crashes to collect information for crash reports, which detail the specifics of the crash, person(s), and vehicle(s) involved in the incident. This information later helps transportation and safety stakeholders make informed decisions about safety solutions. Fully staffed and funded law enforcement agencies can direct their efforts towards strategic enforcement and data collection.				
				Data Actions 1. Analyze existing safety-related data and collect and analyze new data sources to evaluate motorcycle, pedestrian and bicycle safety risk factors on all public roads.				
				Training and Education Actions 1. Implement education, training, or examinations to ensure all licensed drivers understand current traffic laws. 2. Conduct training on traffic safety laws for law enforcement officers, attorneys, and judges to improve consistent and unbiased enforcement and adjudication processes. 3. Continuously improve the education system for new motorcycle riders and drivers, including Driver's and Motorcycle rider's Education cost and access barriers. Evaluate requiring driver and Rider training for new operators. 4. Provide education and other countermeasures to improve work zone safety for workers and the traveling public. 5. Develop training for local agency and consultant engineers and planners in transportation safety basics (e.g., safety investigations, road safety assessments, speed zoning, data analysis).				
				p.117 ment and EMS to identify strategic education and marketing campaigns. ENFORCEMENT AGENCIES • Collaborate with tribal, county, city, MPO,				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit	Text edit
				and state partners to advance safety culture within organizations and with the public. • Collaborate with tribal, county, city, MPO, and state partners to develop strategic enforcement or education campaigns to address critical behaviors identified in the TSAP. • Educate the public and tribal, county, city, state, and MPO partners about critical and emerging issues which could be addressed through the planning and programming processes. • Identify and deploy best practices related to reckless, careless, impaired, and distracted driving education and enforcement. • Identify and deploy best practices related to crash data collection, compilation, and transfer.			y/n	page
13	7/7/2021	Doug Parrow	Written comment	After having reviewed the draft plan, I have to say that I am disappointed. Rather than offering an effective path toward Vision Zero, the draft appears to be little more than a rehashing of the same tired old Goals, Policies, and Strategies that have utterly failed to stem the increasing casualties of our transportation system, particularly among pedestrians and bicyclists. Under the current plan, Oregon has failed to meet the safety targets that were established. We need action now. Not 146 more pages of platitudes and measures that have proven to be ineffective. We desperately need the implementation of new measures to increase safety on our transportation systems. I suggest that the OTSC incorporate the following measures into the plan: 1. Revise traffic engineering protocols to design all urban streets in a manner that will ensure that traffic speeds are lowered to no more than 35 mph through the use of the range of proven traffic calming devices. Historically, ODOT has done just the opposite by widening lanes and increasing sight distances in the name of safety. 2. Eliminate all slip lanes. While slip lanes are remarkable effective in allowing motor vehicles to navigate intersections without slowing down, they are extremely hazardous for pedestrians and are challenging for bicyclists to cross. 3. Construct more signalized crosswalks that are placed closer together. (ODOT always seems to have plenty of money to add lanes to roads that are	 Priotize traffic calming measures in design and protocols. Eliminate slip lanes for increase bike and pedestrian safety. Prioritize pedestrian facilities and increase clustered crosswalks. Create legislation that shifts legal responsibility from bikes and pedestrians to drivers. Prioritze bike and pedestrian needs over vehicles. Consider "Dangerous by Design" by the National Complete Streets Coalition and Smart Growth America. 	oDOT's Blueprint for Urban Design addresses many of the concerns by the commentor regarding design and a new approach to setting context-sensitive speed limits using the latest research. While the Blueprint for Urban Design elements are not detailed the TSAP, the Blueprint for Urban Design is referred in the Introduction and 3 separate Emphasis Area actions. New designs and retrofits are considered in the Blueprint for Urban Design. 3. Pedestrian actions are addressed in the TSAP, and signalized crossings are in the toolbox. 4. Raised crosswalks are an available treatment in some areas. 5. At-fault laws are out of the scope of the TSAP document.	n	

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				marginally congested. It is past time to redirect that money to real, effective safety measures.)		6. The Blueprint for Urban Design addresses this issue and begins to provide alternatives.		l'me.
				 4. Initiate programs to raise crosswalks to curb level. (Given that pedestrians have the right-of-way in crosswalks, why do they have to step down onto the street, rather than having the motor vehicles drive up to the level of the sidewalk.) In addition, incorporate other traffic calming devices into all street designs. 5. Shift the legal responsibilities for crashes from pedestrians and bicyclists to motorists by establishing an assumption that crashes are the fault of the motorist, unless they show otherwise. This is the case in many European countries, but here motorists who kill pedestrians and bicyclists are rarely prosecuted. 		7. The TSAP editors are familiar with Dangerous by Design. Agree that the 2021 TSAP is an incremental step, and that more should be done in the future to continue evolving the plan and implementation actions to improve safety.		
				6. Develop road planning protocols that consider the extent to which motor vehicle traffic will obstruct and hinder pedestrian and bicyclist traffic, rather than the other way around. Currently, road planners design roads to accommodate motor vehicles traveling at speeds well in excess of the speed limit and then figure out how to cheaply shoehorn pedestrians and bicyclists into the plan with little regard to their convenience or safety.				
				I urge you to carefully review "Dangerous by Design" by the National Complete Streets Coalition and Smart Growth America and to overhaul the draft Traffic Safety Plan to ensure that the numbers of fatalities and injuries on our streets and road actually start to go down and to create a realistic possibility that the OTSC will, in the future, no longer need to begin each meeting with a moment of silence in memory of those who have lost their lives on our roads.				
14	7/7/2021	Central Lane Metropolitan Planning Organization Policy Board	Written	Oregon Department of Transportation Safety Office: The Metropolitan Planning Committee (MPC) serves as the Central Lane Metropolitan Organization Policy Board. The Central Lane MPO works in cooperation with MPC, local government, state and federal agencies and the public to improve transportation in the Central Lane County region.	 Report out on 2016 TSAP performance targets. Highlight differences in 2016 and 2021 TSAP. 	A review of the 2016 TSAP would be useful to evaluate implementation and results; however, the project team determined to not add it to the 2021 TSAP. Determining what "worked	n	

# Received	<u> </u>	Contact /Source	Comment Summary	Key	y Themes	TSAP Team Response	Text Edit y/n	Text edit page
			As the Oregon Department of Transportation (ODOT) asks for the public to review and comment on the Draft 2021 Transportation Safety Action Plan, MPC would like ODOT to consider the following regional recommendations: • Identify and provide lessons learned from 2016 TSAP o Which strategies and actions from the 2016 TSAP worked effectively and should be further prioritized and invested in? Provide an overview of successfully implemented actions from the previous plan. o Which strategies and actions were not effective and should be dropped? • Provide an explanation of the 2016 TSAP results to address why the safety outcomes are not improving. • Highlight differences between the Draft 2021 TSAP and the 2016 TSAP o Provide an appendix that highlights the differences from the 2016 TSAP and how the new changes will address the increase in fatal and severe injuries in Oregon. • Address funding concerns • To meet stated safety goals, ODOT should include a funding and implementation assessment in the TSAP to illustrate the overall needs and potential sources of funding. • Given that many safety programs are funded through Federal programs that have limited flexibility, ODOT should direct more state funds to programs that would impact the issues uniquely facing Oregon. • Recommend major overhaul for the 2026 TSAP • ODOT recognizes all the trends are going in the wrong directions but continues to use a similar safety action plan. • More emphasis on equity consideration • The plan identifies equity in transportation safety as a key area of focus, however the reliance and emphasis on enforcement is more notable throughout the plan. Consider further adjustments and possible integration of engagement to reach ODOT equity goals.	•	Recommend major overhaul for the 2026 TSAP. Prioritize racial equity over enforcement. Add impacts from COVID-19 restrictions. Automated enforcement.	effectively" is complex and confounded by a high number of factors. The Introduction provides a summary of TSAP history, and a review of the 2016 TSAP compared to 2021 could reveal the differences. Do not concur with one-to-one comparison as added value to this TSAP update. Funding: TSAP is not an ODOT plan, it is a statewide plan, and investments decisions are made beyond the scope of this planning-level document. It is anticipated the the 2026 TSAP will include substantial changes. The project team coordinated with ODOT's new Office of Social Equity to identify the most important places to address this in the 2021 TSAP. Implementation, starting this fall, will continue those efforts. Further, Law Enforcement continues to be a proven safety counteremeasure, though we concur with the commenter that racial inequity in law enforcement must be addressed as part of the work. COVID-19 is mentioned in the Introduction as a contributor, but the reality is we are still in the middle of pandemic response, so the effects of COVID will not be known by the time of 2021 TSAP publication.		

# Received Representation Contact Comment Summary K /Source	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
 Impact of COVID-19 o Include a section on the anticipated/observed impacts of Covid-19 on transportation safety in Oregon. Automated enforcement o Recommend that ODOT take the lead in expansion of automated enforcement statewide. 		Expanded use of automated enforcement provides value and is included it in the TSAP Introduction and as an Emphasis Area action.		
7/8/2021 Daniel Peterson Written comment • Why are there not proposed or existing agency performance measures for the assets that have the most positive influence over safety performance measures: signals, striping, signing and	measures for existing assets. Need for an implementation plan. Need for a transportation safety and engineering representative at the agency leadership table. Prioritize Safety Engineering as a valued and individual engineering discipline. Prioritize transportation/traffic safety in each of the existing STIP or statewide maintance programs.	Th project team will consider incorporating these suggestions into the upcoming TSAP Implementation Plan activities beginning Fall 2021. Operations and maintenance of safety assets is an ongoing need that is not federally-funded. The project team is scoping an initial TSAP Implementation Plan White Paper to guide ODOT and other safety stakeholders toward implementing the actions in the TSAP. TSAP is not an ODOT plan, but will share this comment with ODOT leadership. OTSC Role and Influence: TSAP is not an ODOT plan, but will share this comment with ODOT leadership. STIP: TSAP is not an ODOT plan, but will share this comment with ODOT leadership. This is another item to consider for the Implementation Plan.	n	

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				 No standalone traffic safety engineering positions in the Regions (the person who does it wears multiple traffic engineering hats) No traffic safety engineering representation on the agency leadership team Traffic safety engineering isn't listed as an engineering discipline in the Statewide Project Delivery Branch guidance/resources OTSC doesn't consistently have a representative/expert for each and every one of the 4 E's (including traffic safety engineering) 	license for revenue opportunity.	Maintenance: TSAP is not an ODOT plan, but we will share this comment with ODOT leadership. 7. Driver Education: Continued driver education and training is included in the TSAP, include discussion and actions on p. 103.		
				• Why doesn't the OTSC have the same level of influence over projects and project development as the Mobility Advisory Committee or OTC? For example, if the MAC can influence and prevent the installation of a roundabout, an FHWA proven safety engineering countermeasure, so why doesn't OTSC have equal influence over ODOT projects? I also think it's interesting that the evaluation period for the not met safety performance measures includes the period of time when the MAC had instigated a roundabout moratorium at ODOT.				
				• Contrary to popular belief and statements given at previous OTC meetings, transportation/traffic safety is not ingrained in each of the existing STIP programs. The only program outside of the Highway Safety Improvement Program that considers crash history, risk and inclusion of proven safety countermeasures in the entirety of their program project prioritization and development is the new Pedestrian-Bike Strategic Program. Especially if a STIP program has their own, non-safety, performance measures they are trying to meet within a limited amount of funding. If we aren't reevaluating or reforming individual program performance measures to match the anticipated available program funding or holding those programs partially responsible for our Federal safety performance measures, those programs do not have any incentive to add additional, non-required,				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				 proven safety elements to their projects. And the included proven safety elements are at a bare minimum and what is only federally required. Transportation/traffic safety is also not ingrained into the larger statewide Maintenance program. For example, they do not have traffic safety performance measures (this does not include employee safety) and are not held at all responsible for the existing traffic safety performance measures which they do have influence over even if it's not known or acknowledged. Statewide Maintenance also does not have tools available to help Regions consistently (within the Region and between Regions) prioritize their workload for the features that are proven to affect traffic safety the most if not properly maintained (for example, striping/legends/signing over mowing). We should require drivers training courses to receive a driver's license in Oregon like east coast states already do. It is a potential source of revenue in addition to building up safer drivers and improving driving behaviors on all Oregon roads. 				
16	7/8/2021	Tyler Deke, Bend Metropolitan Planning Organization	Written comment	Thank you for providing an opportunity to comment on the draft 2021 Transportation Safety Action Plan. Below are my comments. Does the ODOT TSAP link to local TSAP documents? If so, that relationship should be discussed (pp 21-22). The statewide crash trends (p 32) continue to show a disproportionately large percentage of fatal and serious injuries in rural areas. A combination of action items from multiple emphasis areas will be necessary to reduce crashes in rural areas. We encourage you to look for opportunities to identify opportunities for synergy among the actions to help reduce rural crashes. The proportion of serious and fatal crashes is almost evenly split between ODOT and local roads (pp 32-33). If available, it would be helpful to include total VMT by road ownership category. This information could further help identify how and where to address crash issues.	 Clarify how the state TSAP relates to local TSAPs Proritize preventing fatal and serious injury crashes in rural areas. Include total VMT by road ownership category in crash data. Prioritize providing safe transportation options in low income neighborhoods 	There is not an official direct link between the State TSAP and local TSAP-type documents, though many local TSAPs use the structure of the State TSAP as their starting point. Rural safety is an issue and there is an opportunity to combine actions to address crashes in these areas. The TSAP balances providing data analysis details, while maintaining readability for a wide audience. Additional information is available by contacting ODOT directly, and the 'ODOT 2020 Statewide Congestion	у	95

#	Received	Representation	Contact /Source	Comment Summary	Ko	ey Themes	TSAP Team Response	Text Edit y/n	Text edit page
				Table 1 (p 34) identifies unlicensed drivers involved in a significant		during project	Overview" includes information about		
				proportion of fatal and serious injury crashes. Was any consideration given		funding.	VMT.		
				to identifying specific actions to address this issue?	•	Increase law			
						enforcement to keep	Unlicensed Drivers is a difficult issue		
				I applaud the inclusion of equity (p 51) in the plan. As noted in the plan,		up with population	to address with specific actions. The		
				pedestrian crashes are more common in low-income neighborhoods.		growth.	upcoming TSAP Implementation Plan		
				Providing safe transportation options in low income neighborhoods and for low income populations should be emphasized during project funding.	•	Explicit	may include this topic in more detail.		
				low income populations should be emphasized during project funding.		consideration of	Pedestrian safety is an issuein low		
				The discussion on safety analytics (p 54) is appreciated. As noted in the		planning and designing for	income neighborhoods and is addressed		
				plan, better data and analytics will help us deliver better solutions.		technology changes.	in Vulnerable Users Pedestrian		
				I strongly support the goal of Improving Safety Culture (pp 60-61). A large		Develop local	Actions.		
				percentage of crashes are behavior related and cannot be easily addressed		transportation plans.			
				through infrastructure changes. Improving safety culture will require	•	Address road	Increased funding for law enforcement		
				involvement from everyone engaged in transportation safety.		departure crashes.	is mentioned on p. 101 as an Emphasis		
					•	Bicycle funding	Area action.		
				Law enforcement is included in goal 3 (pp 65-66). I believe the total number		question.			
				of state police officers has remained nearly constant over the past 20-30	•	Specific text	Concur with the commentor's		
				years. Since the year 2000, Oregon's population has increased by nearly		questions.	sentiment, the		
				24% and VMT has increased significantly on some of our rural highways.			TI TOAD '1 1' 1' 1		
				Was there any consideration to request increased state policing levels? Inadequate state police levels impact response times to crashes, especially in			The TSAP provides a light touch on this topic, and there is potential for the		
				rural areas. This also impacts enforcement of speeding and aggressive			2026 TSAP to include more		
				driving.			information about new technologies,		
				diving.			including connected and automated		
				Under Policy 4.1, I would like to see a more explicit consideration of			vehicles.		
				planning and designing for technology changes. While there may be					
				additional upfront costs to include infrastructure (e.g. conduit), those costs			The Implementation Plan will include		
				are far cheaper than retrofitting infrastructure in the future.			further discussion of local TSAP		
							development; agree that these are		
				In the goals section, I would like to see a strategy of funding development of			useful to local agencies. The Oregon		
				local transportation safety action plans. The benefits of local safety plans are			Roadway Departure Safety Plan was		
				many and can help inform local funding decisions and applications for state			updated in 2017 and being used to		
				funding.			identify treatment locations.		
				The Oregon Road Departure Safety Implementation Plan is over 10 years old. Is there a need to update that plan? If so, it should be identified as an			There are saveral energific infrastructure		
				action under the Roadway Departure Actions section (p 90).			There are several specific infrastructure treatments for roadway departure that		
	1			action under the Roadway Departure Actions section (p 90).	1		nearments for roadway departure that		

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response		Text edit page
				Road departure crashes account for the largest share of fatal and serious injury crashes. Are there additional action items (p 90) that could help address these types of crashes? Bicyclist Action number 8 (p 95) is to fund a youth bicycle safety program. This type of training already occurs to some extent through the Safe Routes to Schools (SRTS) program. Should this action be modified to reference the SRTS work already underway and to recommend additional funding through		can be addressed and implemented through ARTS and other programs. Bike Action 8. Updated thr action to include "Implement and promote increased funding for the bicycle safety training in the Safe Routes to School program."	<i>,,,,</i>	pugo
17	7/8/2021	Safe Lane Transportation Coalition	Written comment	that program? Executive Summary: Moving Forward Section — What are the ramifications referenced for not achieving the safety targets? How do these compare to failing with state of good repair pavement condition performance measures? How is the state prioritizing lives vs. pavement conditions? The 2022 targets (2015-2019 crash years) are unambitious, but it also doesn't make sense to adjust them since that data is already in the past and we can't take action to change what has already occurred. This is another reason to emphasize the data system improvement needs. Introduction: Title page "A Strategic Highway Safety Plan (SHSP) is a statewide, data-driven, coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads." — Remove "highway." Should be oriented towards the entire transportation system, not just highways or even just all public roads. We don't want passenger rail derailing, we don't want fatalities and injuries on multi-use paths, etc. Local, Regional, and Tribal Entities (pg 21) — Safe Communities Programs referenced — It would be helpful to have a list of Safe Communities Programs across the state as a resource to those wanting to collaborate with other programs or start their own if one does not exist in their community. This could also be a	 Emphasize data system improveme needs. De-emphasize "highways" when discussing the SHSP. Include list of Safe Communities Programs. We are failing as a state with regards to safety. Support and encourage transities ridership. Use "cannabis" instead of "marijuana" throughout document. Specific recommendations for Driving Impaired Actions. 	general the ramifications related to funding flexibility and reporting requirements. 2022 Targets: As inferred, the timeliness of the current Oregon crash data system results in some complications with target-setting. The team made a decision with the	у	13, 81, 83, 85

#	Received	Representation	Contact /Source	Comment Summary	K	ey Themes	TSAP Team Response	Text Edit y/n	Text edit page
				resource on the website instead that gets updated more frequently than the plan updates and could include contact info? Maybe integrate into the statewide safety data portal?	•	Consider reallocating Occupant Protection Actions funds.	Impaired Driving pg 81: Replaced "marijuana" with "cannabis" throughout.		
				Transportaion Safety Trends: We are failing as a state. We need to change our approach because it is not working.	•	Specific recommendations, questions and edits to Speeding Actions,	Impaired Actions 1-8 Comments: The TSAP will address these detailed comments in the Implementation Plan process and with the Impaired Driving		
				Safety Challenges and Opportunities: Shifting Transportation and Lifestyles (pg 55) – Transit is one of the safest modes of travel – Include something about the importance of supporting and encouraging		Distracted Driving Actions, Intersection Actions section, Roadway	Emphasis Area team. Recommended Action pg 81: Added a new Impaired Driving enforcement-		
				transit ridership, especially emerging from Covid-19? Interplay with public health concerns and misperceptions of Covid exposure on public transit could drastically impact safety, climate, and equity goals.		Departure Actions, Aging Road Users Actions, Improved Systems Actions,	related action to match the Speeding action. 9. Conduct unbiased enforcement to reduce impaired driving crashes.		
				Impaired Driving Actions: Introduction — Define what impaired driving is in the first sentence — move the last sentence to the beginning. Substitute the word "cannabis" in for "marijuana" throughout the document.		Performance Measures and Targets, Implementation and Evaluation sections.	TSAP project team will bring the other recommendation regarding low-cost transportation to the Emphasis Area team during implementation for consideration.		
				Impaired Driving Action 1 — A barrier is sustainable funding for education - usually short term funding instead of long term. How much would it cost to fund different levels of programming to address this at a statewide level?	•	Emphasize roundabouts.	Occupant Protection: It's been stated that maintaining high seat belt use is important and requires investment.		
				Impaired Driving Action 3 – Instead of the term marijuana, use the term cannabis. Have more diverse locations for DRE trainings - a mobile training that travels throughout the State. Having to travel for trainings is a time constraint.			Speeding pg 83: Updated the description from "vehicle traveling too fast" to "driver traveling too fast"		
				Impaired Driving Action 4 — The overtime model is a huge burden and inaccessible to police departments that have 0-3 traffic officers. Recommend re-visiting with a focus on the enforcement effort and include considerations for racial profiling and implicit bias training.			Pg 83 Clarified language in paragraph 1, which now reads: "trending downward from 2016 to 2018. In 2019, law enforcement issued"		

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				Impaired Driving Action 5 – Recommend 0.00 - if you are under the influence, you should not be the one		The TSAP is only using State-provided crash data through 2018.	<i>y</i> , n	page
				driving. Impaired Driving Action 7 — This could be more specific — reference what laws/programs/increasing community outreach for substance abuse and repeat offenders and what strengthens means. Should DUII diversion programs be required all across the State? How much would it cost to fund such a program? Impaired Driving Action 8 — Streamline? Same as #7. Too open ended and needs to be more specific. Recommended Impaired Driving Action — Add an action specifically for bias or equity like the Speeding Actions. Recommended Impaired Driving Action — State financial support for providing free and reduced priced transportation options on key holidays. State financial restrictions on fees imposed during periods with increased risk of DUII violations. Occupant Protection Actions: Should some of these resources be reallocated to other areas we're doing worse? Oregon seems to do quite well in this area. Speeding Actions: Speeding Introduction — This intro makes it sound like speeding is not a problem. Change language to people-focused, specifically, "defined as a vehicle traveling too fast" -> the driver was driving too fast. Second paragraph — for self-reporting surveys, people may downplay how fast they actually drive. How much weight is given to this public opinion survey?		Figure 26: Concur with commentor about likely underrepresentation, but without data to back up the assumption do not concur with adding that to the TSAP. Speed Actions pg 85 1: Updated to match DUII language 3: Will share with implementation team, but this word affirms current efforts. 4: Revised to include "Track and assess changes to operating speed, crash rates, fatalities, and serious injuries on roads where posted speed limits were changed." 5: ODOT is quite flexible and addresses much of this need. 6: The addition of Equity-related language was carefully chosen with input from ODOT Office of Equity. Additional modifications may occur during implementation and in the next update. Distracted Actions: The Transportation Safety Division provides guidance on the details of campaigns, which change		
				Lane County data shows that drivers speed. Should report on the number of people killed and injured from speed related crashes. Need to be more clear about the data they are pulling from – it begins in 2016, but when does it		over time to address current needs.		

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit v/n	Text edit page
				end? Need to include data to 2020 or be more clear that this is just 2014-		Intersection Actions: It was decided to	<i>J</i> / 22	bg.
				2018/19. Need to be consistent with the		focus on getting the projects in the		
				data – what is the value of the "In Federal FY19" sentence? Overall, this		ground for this emphasis area.		
				narrative is not true for Lane County. Like the DUII sheet, this introduction				
				should be consistent and call out, "speeding crashes are defined if speeding		Roundabouts: Concur they are a proven		
				is marked on the crash report or not"		safety countermeasure, and are		
						included in the Intersection Safety		
				Figure 26 – This graph just shows if local police department flagged		Implementation Plan. Generaly		
				speeding as a contributing factor. It feels broad. This may also be under		speaking, specific treatments are not		
				reported. Include acknowledgement that this data under represents the		discussed in the TSAP but left to the		
				contributing factors.		specific implementation efforts.		
				Speeding Action 1 – People focused language - reference the 1st action in		Roadway Departure: Similarly,		
				DUII document. Should be more detailed like this one.		Oregon's Roadway Departure		
						Implementation Plan dives into the		
				Speeding Action 3 – Change "continue" to "increase". Last sentence is		detailed treatments.		
				phrased weird -> "Implementation must address equity concerns". Include				
				automated enforcement removes the human bias.		Aging Road Users: The topic of re-		
						testing and removal of licenses has		
				Speeding Action 4 – Include locations for where speed limits are going to be		been deemed generally unacceptable		
				lowered. Include pre and post speed measurements to show what the impact is.		socially/politically.		
						Improved Systems: Plans are in place		
				Speeding Action 5 – To implement Action 5, ODOT needs to pave the way		to make improvements. Implications		
				by adding, "Identify and eliminate regulations that prevent implementation		will include making safety-related		
				of safe speeds." For example, "the right to experiment" bypasses MUTCD		decisions based on more recent crash		
				and allows flexibility to test new speed reduction tools.		data.		
				Speeding Action 6 – Rephrase to "implement programs and trainings to		Performance Measures/Targets:		
				reduce bias in enforcement." Make it sound like improving/reducing bias.		Evaluation of projects and treatments is		
						specifically called out in the Emphasis		
				Distracted Driving Actions:		Area Vulnerable Users Pedestrian		
				Impaired Driving Action 5 - Expand and add specific campaigns instead of		Action 3 and Bicyclist Action 3.		
				the generic "don't drive distracted" campaigns. Focus on the cognitive or				
				manual piece in a specific area. Emphasize that driving is a privilege.		Legislation: Several laws are being		
						addressed by safety stakeholders, but		

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				Recommended Distracted Driving Action – What about partnering with private sector (cell phone software companies, such as the phones now requiring users to say "I'm not driving" to use phone while in motion)? Other more direct strategies like this?		the TSAP is not, itself, a legislation-focused document.		
				Intersection Actions: Recommended Intersection Action - Bring back previous action "Implement education and training related to new types of infrastructure (e.g., signal heads, safety edge, crosswalks, bike lanes, or roundabouts) and related"				
				Infrastructure Actions: Infrastructure Introduction – It seems as if roundabouts should be emphasized more, given the percentage of fatal and severe injury crashes occurring at intersections. The word "roundabout" only appears in the plan once. They are a proven, effective tool to address fatal and severe injury crashes at intersections, plus have emission reduction benefits.				
				Recommended Infrastructure Action - Roundabouts and their safety benefits to all users should be included. What about addressing challenges with being able to fund roundabouts through ARTS program? Establish a roundabout first policy?				
				Roadway Departure Actions: Roadway Departure Introduction - What impact, if any, has the implementation of more cable barriers, rumble strips, and safety edges had so far? How effective is this and is it a strategy we should be doubling down on?				
				Aging Road Users Actions: Recommended Aging Road User Action - Add action to increase frequency of renewing driver's license, including in-car driving portion of test?				
				Improved Systems Actions: Improved System Introduction - Glad to see this section call for shorter data timelines since that has been a big challenge for years. What will this actually look like? What can we expect for new timelines and by when will the improvements be in place?				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				Performance Measures and Targets: What do we know about what has worked and not worked from previous safety investments over the last 5-10 years? How has this informed this TSAP update and recommendations? Implementation and Evaluation: What actions should be recommended that would need legislative changes? For instance, what would it take to change the driver's license requirements related to age, # of passengers allowed in car with young drivers (could've saved lives in Eugene within the last couple of years), etc.?			y	
18	7/9/2021	Michael O-Casey, Oregon Action Team on Unregulated Migration	Written comment	Thank you for your consideration of the following recommendations developed by the Oregon Action Team on Ungulate Migration (OAT). These comments and recommendations are meant to provide local stakeholder input to help guide ODOT as they finalize updates to the Oregon Transportation Safety Action Plan (TSAP). OAT is a coalition focused on "improving ungulate habitat connectivity, ecosystem structure and function, and human/wildlife safety, including addressing barriers to migration and advancing measures to restore degraded and fragmented habitat." The Team engages in education and outreach, advocacy for policy and plan development and revisions, identification and coordination for project implementation, and support in identification and leverage of funding sources. Reducing wildlife-vehicle collisions on Oregon's highways is a core focus of our group. We believe reducing barriers to ungulates through creative solutions, such as building wildlife crossings, will ensure our big game populations, so vital to our economy and way of life, continue to thrive. As stated in the draft TSAP, the goal of the document is to 'eliminate deaths and life changing injuries by 2035'. This is an excellent goal that will improve the safety of all Oregonians. However, we are concerned that this goal cannot be met without addressing the need to improve the safety of our highways related to wildlife-vehicle collisions (WVCs). As members of OAT read through the draft TSAP report, we were disappointed to see that	Address the need to improve the safety of our highways related to wildlifevehicle collisions in the TSAP.	The TSAP is primarily focused on those crash types that, when addressed, will have a significant impact on the frequency of fatalities and serious injuries statewide. Like wildlife-vehicle collisions, several other crash types – while important – are not an emphasis in the TSAP. Examples include collisions occurring in work zones and at rail-highway grade crossings.	n	

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				there was no mention of WVCs anywhere within the report and we recommend that ODOT staff update the report to acknowledge the safety hazards ungulates pose to Oregonians on our highways and to incorporate some opportunities for action and solutions into the report. As one example of a location to incorporate opportunities to reduce WVC's on our highways, we recommend that Wildlife Crossings be included under the 'improving infrastructure' section of the report.				
				According to ODOT, an average of 7,000 WVCs occurs annually on Oregon's ODOT maintained roads. These collisions cause 2 fatalities and over 700 injuries on average each year and result in \$44 million in damaged property costs. A safety report that does not address the hazards from wildlife vehicle collisions will not be able to achieve the goal of 0 fatalities by 2035.				
				Thank you for your work on the next revision to the TSAP and for your consideration of our above recommendations. OAT greatly appreciates our working relationship with ODOT, and we look forward to our continued engagement with the agency to reduce barriers to migration within the state. Please do not hesitate to contact us with any questions and/or with ways in which we can help.				
19	7/9/2021	John Mercier, The Confederated Tribes of the Grand Ronde	Written comment	Thank you for contacting the Confederated Tribes of Grand Ronde and inviting the Tribe to review and comment on the Oregon Transportation Safety Action Plan (TSAP). The letter sent from ODOT to the Tribe is attached. My name is John Mercier, and I work for Tribe's Public Works and Tribal Transportation Program. I reviewed the TSAP. Unfortunately, I was not able to thoroughly review the plan, and I will do my best to provide thoughtful comments.	 The TSAP adequately meets objectives. The plan lacks GIS data and how it relates to local communities. 	The TSAP is purposely an overview of safety issues without specifics regarding location. However, intent is to implement the TSAP locally by using the information in this plan to support safety work in each community, including Grand Ronde.	n	
				Overall, the plan is well-written and has valuable information. I especially liked Chapter 4, Safety Challenges and Opportunities. The plan does a good job covering technology which is an ever evolving and growing contributor to safety opportunities, but at the same time creating challenges with handheld devices. Especially, thank you for covering connected and automated vehicles. The reader will learn important information from the plan about those technologies.				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit	Text edit
			7204100					page
				The only criticism, and it is only minor, that I could offer about the plan, is that it lacks GIS data. In Chapter 3, Transportation Safety Trends, the plan does well with providing information that Principal Arterials see the most crashes. A map accompanying the information that show Oregon, with highways that designate their functional classifications would be helpful. In a general sense, any reader of a product in the planning realm, will always want to know how the plan relates to the reader's community. Of course, any level of detail for an individual community would not be practical in the TSAP, but some GIS presentation could still be help to the readers, as they interpret the extensive data provided in the plan.				
				In conclusion, as I look at the objectives contained in the attached letter: Integrated updated crash data; Identified emerging safety trends and challenges since the adoption of the 2016 TSAP; Evaluated the progress towards achieving the elimination of fatalities and serious injuries on Oregon's transportation system; Identified solutions and actions to address system needs for all modes, travelers and roadway users.				
				The May 2021 version Oregon Transportation Safety Action Plan accomplishes those objectives.				
				This is a very limited review and comment about the Oregon Transportation Safety Action Plan. Please be aware that I will keep the plan close by, and continue my review. I also want to use the plan to see how we can work together to improve transportation safety in Grand Ronde, and in the state of Oregon.				
20	7/9/2021	Rebecca Sanders	Written comment	Great job on the TSAP it is well-written and sets important goals and strategies for ODOT's and Oregon's future. I have one question/comment for your consideration. I see that you have developed high-level targets for system performance, and	Plan is not sufficient to make meaningful change – bolder action is needed, particularly with	Target Setting: Concur with the commentor's sentiment, and the stakeholder team had detailed discussions that match these thoughts. In the end, safety leadership decided on	n	
				I understand the selection of performance targets based on an s-curve, but I	-	the current S-curve approach for the		

#	Received	Representation	Contact /Source	Comment Summary	Key	Themes	TSAP Team Response	Text Edit y/n	Text edit page
				am concerned about the relatively minor movement of the needle that shooting for a handful of fewer fatalities (out of hundreds) will get us. If our goal is a system of zero fatalities, we are banking on major fatality reductions down the line that absolutely depend on bold action today. Realistically, those bold actions should yield results faster than the s-curve suggests, but I understand being conservative. However, because the targets are up for annual review that could allow adjustment of future targets based on recent performance, I'm concerned that there will not be enough accountability with relatively small goals in the near term (DOT history in the U.S. unfortunately does not indicate a trend toward bold, life-saving action, particularly for vulnerable users). What metrics exist to allow ODOT and the public to monitor ODOT's progress toward achieving the more specific goals upon which the ultimate targets depend? Each strategy should ultimately have some metric to measure its effectiveness. This may be particularly important for strategies dealing with education and culture change, the efficacy of which have been historically harder to measure accurately, but the more specific metrics are also important for other areas. I see that there is a section on reporting in, e.g., the HSIP, but it is not clear to me how specific that performance evaluation will be. It would be great to see more specific metrics for each strategy and action. Additionally, a way to monitor those metrics, such as a public-facing dashboard, would be ideal. I appreciate that that is a lot of work and I hope Oregonians' lives will be considered worthwhile to provide that kind of public legibility and more specific accountability.	•	respect to vulnerable users. Need for accountability and performance metrics that are monitorable by the public.	2021 TSAP, and in allowing annual updates opened the door for additional discussion in 2022 and beyond regarding more aggressive targets. Measuring Effectiveness. An Implementation Plan will be developed upon completion of the TSAP to measure the Chapter 6 Emphasis Area actions, identify a responsible champion, and establish reporting requirements. A public-facing dashboard has been discussed as a possibility.		
21	7/9/2021	Jon Henrichsen, Multnomah County	Written comment	Thank you for the opportunity to provide comments on the ODOT TSAP. The Multnomah County transportation division and health department care deeply about the health and safety of people using the public right of way. The ability to travel safety throughout the county, the state, and the region is something that we all agree is critical. The TSAP provides many goals toward that end. Below are some suggestions we have to make the document more valuable as well as specific actions that we think ODOT should take. Culture Change We agree with the aspiration of culture change. But rather than focusing on an effort to "transform public attitudes", the most important piece of culture	•	Proritize changing the culture within ODOT and other agencies rather than individual actions. Prioritize safe systems design. Cross reference data to mitigate skewed analysis.	Culture Change. Culture change in public agencies transportation agencies is vital. This is stated on p. 7: "Transform organizational transportation safety culture among employees and agency partners" Target Setting: A group of safety stakeholders was convened for two workshops during the TSAP to discuss several target setting options, and that	у	35, 36, 37, 81, 89

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				change should be within ODOT and other transportation agencies. Emphasizing the protection of the most vulnerable users in design decisions should be paramount, as is consistent with a safe systems approach. The TSAP is intended to apply universally to all public roads in Oreon, but it falls short of the culture of safety already established in agencies in the Metro Region. While achieving "zero traffic fatalities by 2035" is mentioned in several parts of the document, it is not fully engaged as a goal given that the fatal injury target has gone up since the last TSAP was published. Increasing the target for fatal injuries creates an off paradox within the TSAP, wherein the long term goal is to decrease deaths but the near term target is for ncreased deaths. This increase in the target is extremely concerning and is out of sync with local goals. We recognize that local jurisdictions such as Multnomah County have a role to plan in changing culture and reducing traffic fatalities. Funding Multonomah County's safe routes to school program is one way that ODOT directly supports this culture change. Continuing to provide this type of funding to local jurisdictions is one what that ODOT can continue to promote this culture change. Data presentation may skew results, may influence the mitigation strategies The data shows that roadway departures are the most common attribute of serious and fatal injuries. It would be helpful to see the data for roadway departure cross referenced with speeding and impaired driving (alcohol and other drugs, alcohol only) because the mitigation might be different for these causes. Additional it would be valuable to see the data cross referenced with pedestrian and bicyclist and urban vs rural areas. The reason for this is that roadway departure in urban areas will have different features and consequences in urban or rural areas. For instance a recent roadway departure in east Multnomah County resulted in a child pedestrian fatality. Mitigation for roadway departures in urban areas may	Prioritize racial equity. Set targets that reflect a commitment to vision zero. Text edits.	group decided on this approach to use the most recent information to set future targets. The approach also includes annual updates, which will allow for additional discussion in 2022 and beyond regarding more aggressive targets. Data Presentation: We have balanced providing data analysis details with also making the TSAP readable and approachable to a wide audience. This does sometimes result in an incomplete picture of complex collision types like roadway departure. Concur with the reader that studying this crash type in more detail could lead to different recommended solutions in urban vs rural areas. We encourage the County to work with their ODOT partners for safety data analysis support. Equity: The team coordinated with ODOT's new Office of Equity to identify the most important places to address this in the 2021 TSAP. Implementation, starting this fall, will continue those efforts. Target Setting: During the TSAP update a group of safety stakeholders was convened for two workshops to discuss several target setting options, and that group decided on this approach to use the most recent information to set future targets. The approach also includes annual updates, which will		

# Rece	eived Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
# Rece	Representation		Equity The TSAP notes that the problem of increasing traffic deaths is disproportionately impacting BIPOC populations and lower income neighborhoods. The Multnomah County Health Department confirmed this in the 2021 report, finding that the death rate from traffic crashes among the County's Black population is nearly twice the rate experienced by non-Hispanic white residents. As research from ODOT and Oregon Walks demonstrates, this is especially true of pedestrian deaths. Among the causes cited in TSAP are disproportionare use of walking and transit, and inadequacies in the built environment. We share the concern about these proximate causes, but also acknowledge that white supremacy is the underlying cause. Generations of systemic racism have constrained opportunity for BIPOC Oregonians across the state, resulting in education, jobs, and housing options that disproportionately expose these groups to a range of health hazards including traffic crash risk. The TSAP sets a goal of implementing "unbiased" solutions, which implies the unacceptably low standard of not actively harming one group over another. As a state we should hold 32xclusive to a higher standard of correcting historica wrongs, implementing safety interventions that create a ust transportation system in the context of a legacy of underinvestment in BIPOC communities. Multnomah County's value of leading with race is applicable to the TSAP; if we resolve dispairities be race and ethnicity, it is highly likely that we will also resolve inequities based on income, age, ability, and other markers of marginalization. Set targets that reflect a commitment to vision zero The plan clearly indicates that zero traffic deaths is a desired outcome. The "vision of zero deaths by 2035" is stated several times in various parts of the document. However it doesn't set ambitious targets that will force the culture shift toward this goal. The targets set in the plan that ODOT is willing to accept more traffic fatalities per year than they were willing to accept i	Key Themes	allow for additional discussion in 2022 and beyond regarding more aggressive targets. Figure 8 pg 35, Figure 9 pg 36, and Figure 10 pg 37: Errors - mixing totals and proportions have been corrected. Pg 35 Additionally, Aging drivers (65+) have surpassed young drivers, so we will also update that content. Figure 22 pg 81. Error in the legel color coding has been corrected. The light color is NEITHER alcohol nor drugs identified by the officer. Figure 29 pg 89: Corrected the Roadway Departure figure, it was inadvertently representing the Speed-involved Figure 25		
			A few other housekeeping items of note: 1. Figure 8 page 35 of the action plan is unclear. It references proportion but lists as percent. It says that the highest proportion of serious and fatal are Young drivers but the table looks like it shows				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
22	7/12/2021	Ryan Webb, The Confederated Tribes of the Grand Ronde	Written comment	older drivers. Also the categories are nota ll mutually 33xclusive so it's not clearly indicating how crashes compare by age or mode. Is 15% the percent of fatal crashes vs non fatal for that age group? Or for all crashes? 2. Figure 22 on page 81 is unclear. Both colors on the pie chart are labeled the same. 3. Figure 25 and Figure 29 show the same number of serious and fatal crashes in the same year categories. Is this correct? Is the data conveying the exact same info (as in – all roadway departures are speed related?) Or is it a coincidence? Or an error? Again, we appreciate ODOT's efforts to improve safety on all public roads in Oregon. ODOT's focus on safety in project funding and pograms like All Roads Transportation Safety (ARTS) and Safe Roues to School (SRTS) have benefited Multnomah County and its residents. 1. Page 9, Table ES.3 – Would be good to see what the baseline, target and actual statistics were for the 2016 TSAP, see how ODOT did against those figures. 2. Page 31, Figure 3 – Can this data also be spilt up to show fatalities per VMT for both urban and rural areas? 3. Page 38, Figure 11 – Can this data also be spilt up to show fatalities and crashes for both urban and rural areas? 4. Page 53 – How will the advancement of CAV help reduce crashes in the future? Is there any reporting mechanism to report near misses instead of crashes as a result of CAV technology. 5. This is no recap of 2016 TSAP, how did the visions, goals, policies and strategies in that plan measure up? What were the actual results against the targets in the 2016 TSAP? There is not recap of prior plans and how they fared, need that data to make sure the measures in this plan can work.	 Data clarification. Text edits. 	In general the TSAP update team chose not to provide historical information like this. However, it is available from FHWA here: https://www.fhwa.dot.gov/tpm/reporting/state/safety.cfm?state=Oregon We have balanced providing data analysis details with also making the TSAP readable and approachable to a wide audience. Crash rate by VMT split by urban and rural is a particular detail we'd chosen not to add, but ODOT could work with you to discuss crash rates in your area. Similar answer as #2, though this is information we could consider in the future.	n n	page

#	Received	Representation	Contact /Source	Comment Summary	Ke	y Themes	TSAP Team Response	Text Edit y/n	Text edit page
							There are a few answers to this. CAV will have technology to prevent collisions by reacting faster and better than human drivers; this occurs now. And yes, CAV will theoretically be able to report individual "near miss events" to help safety analysts identify "high-conflict" collision locations and typs to support proactive safety risk identification. Implementation results from 2016 are important to justify future investments, but the data from these efforts is inconsistent. For the 2021 TSAP we are developing an Implementation Plan and tracking mechanisms to measure activities and progress toward output measures.		
23	7/14/2021	Patrick Allen, Oregon Health Authority	Written Comment	Oregon Transportation Safety Committee: On behalf of the Oregon Health Authority (OHA), I thank the Oregon Transportation Safety Committee (OTSC) and the Oregon Department of Transportation (ODOT) for the opportunity to respond to the 2021 draft of the Transportation Safety Action Plan (TSAP).	•	Social Equity Impaired Driving (alcohol)	Equity: The TSAP is careful to state "unbiased enforcement" as a stated goal throughout, including in Emphasis Area actions.	у	81
				OHA's 10-year goal is to eliminate health inequities by 2030. OHA uses the following definition of health equity: Oregon will have established a health system that creates health equity when all people can reach their full health potential and well-being and are not disadvantaged by their race, ethnicity, language, disability, age, gender, gender identity, sexual orientation, social class, intersections among these			Impaired Driving pg 81: TSAP will add a policy-focused action regarding alcohol sales and distribution, with the OHA recommendations as examples.		
				communities or identities, or other socially determined circumstances. Achieving health equity requires the ongoing collaboration of all regions and sectors of the state, including tribal governments to address:			"Promote policies to reduce alcohol over-consumption, including sales tax, limited service hours/days, accountability for overserving. Increase		

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit	Text edit
#	Received	Representation		 The equitable distribution or redistributing of resources and power; and Recognizing, reconciling and rectifying historical and contemporary injustices. OHA's work includes injury prevention, behavioral health services and chronic disease prevention. Therefore, OHA has an interest in seeing that ODOT and the OTSC are successful in their goals, particularly regarding reducing road fatalities related to alcohol and substance use. OHA applauds the TSAP for demonstrating the threat of impaired driving with such clear and complete data. As pointed out in Table 1, alcohol is a major contributor to fatal and serious crashes on our roads and highways. Data demonstrate that alcohol, even in comparison to other drugs, represents the majority contributor to health consequences across a host of aliments, including injuries. OHA appreciates you for centering equity in the TSAP. Both of our agencies have dedicated ourselves to this cause and, as reflected in Goal Area 5, we have much to gain by working together, especially 	Key Themes	support of related mental health and addiction services."		
				for communities of color and Tribal communities. In the spirit of that collaboration, OHA offers a few suggestions for areas we feel are underrepresented in the current draft of the TSAP. As a result of OHA's own strategic planning efforts, we have found enforcement and education activities alone are insufficient to affect the large social outcome of reducing alcohol misuse and its consequences, such as road fatalities. Efforts to inform the public and enforcement actions will be ineffective if at the same time alcohol becomes easier to get, at more places, more times of the day, in more ways, for less money. Oregon hasn't raised the tax on alcohol since 1980, meaning when adjusted for inflation, alcohol is cheaper year over year. There are now more alcohol retail outlets in the state than 10 years ago and the three-tier model of alcohol regulation has been more limited over time.				

#	Received	Representation	Contact /Source	Comment Summary	Key Themes	TSAP Team Response	Text Edit y/n	Text edit page
				OHA also has concerns that an enforcement-heavy strategy to combat alcohol and drug- related crashes will contribute to disproportionate confrontations between communities of color and law enforcement. Furthermore, the volume of individual-level enforcement needed to counter the shifting policy landscape may not be practical in the current Blueprint for Urban Designget or political environment. With these dynamics in mind, OHA suggests the following modifications to the TSAP:				
				 Add an alcohol tax to the policy priorities for reducing alcohol-related road fatalities; Add a policy strategy directed at changing or maintaining strong alcohol retail laws, such as limiting hours and days of service, reducing alcohol outlet density, and making it easier to hold businesses accountable for their role in overserving patrons; Broaden the individual-focused communication campaigns beyond drinking and driving campaigns to include community messages to reduce overall binge drinking; Shift enforcement to businesses that over-serve patrons; and Call out strategies to strengthen community access and diversion programs to increase the use of mental health and addiction services. 				
				OHA stands ready to partner with ODOT and OTSC in pursuing our joint mission of Oregon's roadways and improve the lives of the people in Oregon.				

From: <u>Chris Bauman</u>

To: <u>Transportation Safety Division</u>
Subject: Transportation safety action plan
Date: Monday, May 24, 2021 3:26:31 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Please stop expanding highways. People need safety improvements in cities. Children and other vulnerable users traveling by more active modes other than personal vehicles need better conditions and safer routes. People who walk or use other wheeled devices to travel need to receive safer infrastructure improvements beyond what you have proposed.

Incomplete roadways are never left how they are, so please do the same for bike routes and sidewalks in urban areas where people and vehicles mix too often. Urban areas should be built with the most vulnerable and exposed users in mind while reducing the violence that can be caused by people who are operating vehicles in safely or travel at too high speed

From: Mark wigg

To:Transportation Safety DivisionSubject:autonomous vehicle safetyDate:Tuesday, May 25, 2021 2:06:49 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

The state needs to require that autonomous vehicles have a higher priority for avoiding hitting pedestrians or cyclists that preserving the vehicle. If a child dashes into the street, the car should crash into other cars, walls, etc. to avoid hitting the child. A child will not survive an automobile hitting them. The occupants of the car will survive almost all crashes. The warning beeper for backing up in my car sounds if a car is behind me but not if a person is behind me. This is bad design.

Mark Wigg

From: Mark wigg

To: <u>Transportation Safety Division</u>
Subject: Fw: ped and bicycle accidents
Date: Tuesday, May 25, 2021 2:31:51 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

From: Mark wigg <mark_wigg@hotmail.com>

Sent: Tuesday, May 25, 2021 2:30 PM

To: safety@state.odot.or.us <safety@state.odot.or.us>

Subject: ped and bicycle accidents

Are pedestrian and bicycle accidents counted in the total for traffic accidents? If they are included, ODOT is not suitably measuring these accidents because it lumps them with vehicles. Fatalities per 100million miles travels does not capture the death rate for peds and cyclists. We don't have 100million miles of travel by foot or bike in a year but we have multiple deaths. ODOT's focus on safety is very distorted by combining vehicle and bike-ped accidents.

Mark Wigg

From: Susan Buchert

To:Transportation Safety DivisionSubject:Bus Service Deficits in Lane CountyDate:Tuesday, June 1, 2021 3:00:39 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

I live in a community on Fetters Loop in Eugene that is home to many retired people. At the time I moved here, I chose it because it provided bike access downtown (which I then used) and had bus service every 15 minutes. I was close to retirement, and wanted affordable and accessible transportation in the future.

Over time, service has been repeatedly reduced. Now, there is no bus service at all. Only abandoned bus stops.

We are told to walk a distance to stops on 18th (steep incline and difficult for those of us with disabilities) or 11th. While I am the first to promote exercise, the truth is some of us are using walkers, or have breathing challenges which makes navigating this added distance difficult. I settled here because there was bus service a block from my dwelling. Now I must travel many blocks, over uneven sidewalks.

When I fell and broke my leg, traveling by foot 3-4 blocks was out of the question, but my "disability" was considered temporary, so I could not access the alternative transportation offered to persons with difficulty reaching the bus routes. In other words, I was stuck. Now, many other residents are likewise potentially stuck, because the infirmities of age do not qualify them for

special transportation services, but the time and agility necessary to navigate uphill or 4 blocks poses too much of a risk.

Many low income and senior people along Oak Patch were dependent upon this bus line to get to work, medical appointments, and to access basic necessities. Students used it to get to school. As you know, many downtown employers discourage the use of cars as there is no parking available, and those of us who settled in a spot with bus transportation now find our transportation withheld.

When will the bus service at Fetters Loop/15th Street and Oak Patch resume? We were told the discontinuation was due to the pandemic. Or have we lost our transportation altogether? If the latter, please reconsider.

-Susan Buchert 1542 Fetters Loop Eugene, OR 97402 From: <u>Jay Higgins</u>

Transportation Safety Division

Subject: Transportation Safety Action Plan - comments

Date: Friday, June 4, 2021 2:26:28 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Hi,

It's good to see ODOT doing proactive safety planning to make our roads safer and leading with a Zero Deaths approach.

Page 36, "As shown in Figure 9, speeding is the most common behavioral issue associated with fatal and serious injury crashes in Oregon, followed by alcohol-involved drivers." But that's not what the figure shows... isn't alcohol/drugs the most common because it has the largest % of both, 68%? Maybe the labels are mixed up?

Page 81, Figure 22 - the labels are the same.

Best,

Jay Higgins

Associate Transportation Planner | Urban Design & Planning Department City of Gresham | 1333 N.W. Eastman Parkway | Gresham, OR 97030-3813 Jay.Higgins@GreshamOregon.gov | GreshamOregon.gov | 503-618-2215 From: Sara Wright

Transportation Safety Division

Subject: Comment on Oregon Transportation Safety Action Plan

Date: Saturday, June 5, 2021 7:47:29 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Thank you for the opportunity to comment on the Transportation Safety Action Plan. This document lays out the problem - people are dying and being injured on Oregon's roads - and the "vision" - nobody will die or be injured on Oregon's roads starting in 2035. It fails, however, to lay out any actions that will get us from the current state of affairs to the vision. Everything in this document is incremental and completely insufficient to make any meaningful change. The priority actions are primarily about education. This accepts the status quo of the system, and assumes that individual behavior change will make the difference, which it never has and never will.

For example, we know that speed is associated with injury and death, and while this document addresses the relationship between driving over the speed limit and crashes, it ignores the relationship between actual speed and both crash incidence and severity. Reducing speed limits, automating enforcement, and changing the way roads are engineered would not only reduce traffic violence but also climate pollution and air toxics.

This document should also address the way that right-of-way is allocated. Our right-of-ways should be designed around people, not vehicles. Provide safe, convenient space in the right-of-way for people walking, biking, and riding transit, and we will be able to dramatically increase safety while reducing other harmful outcomes of driving.

This "Action Plan" fails to point the way to actual change. In order to achieve that, ODOT will need to significantly redirect investments and prioritize the safe and convenient movement of people, not vehicles. Without that shift, we will never reach the "vision" identified in this document.

Sara Wright (she, her) Program Director, Transportation Oregon Environmental Council 222 NW Davis Street, Suite 309 Portland, OR 97209-3900



? ? ?

Take a stand for clean water, air and land. Become a member today

From: Holloran, Michael J

To: <u>Transportation Safety Division</u>

Cc: Cynthia Keever; Jeannette@OregonImpact.org

Subject: FW: Interested in transportation safety? Comment on the draft Safety Action Plan

Date: Tuesday, June 8, 2021 12:05:36 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

As a State Trooper and a member of The Dalles Traffic Safety Commission it saddens me that reduced police presence during COVID 19 saw fatalities rise dramatically in 2020 and Oregon was no exception with fatalities well over 500.

Already in 2021 the number of driving complaints is on the rise; most are cell phone and speed related. I have written more cell phone citations in 2021 than ever before and I have also set a record for the number of CMV citations to trucks going over 80 mph and the year is only half over.

Unfortunately I see the future of Oregon's Fatalities going up not down. The number of mentally ill people, most of which are drug induced is sky-rocketing with Oregon essentially legalizing drugs. My patrol shift has become re-active rather than pro-active.

Just last week I had one subject driving over 100 mph recklessly (under the influence) cutting in and out of traffic, whose horrific crash shut the freeway down for hours on a holiday weekend. We had three motorcycle fatalities in our area in the last two weeks and just a few days ago I had a 19 year old kid high on drugs dancing naked in the freeway playing a guitar while playing chicken with a log truck. He lost. Also this last week I contacted a man parked on the side of the road, tying up a baggie of methamphetamine. He was alone and not yet impaired, so I wrote him \$100 citation which if he takes an assessment he doesn't have to pay.

Currently our legislators are trying to pass laws that make it nearly impossible for Law Enforcement to stop equipment violations. It is as if no one has bothered to look at the number of DUII and DUI-CS arrests that come from equipment violation traffic stops.

To make matters worse, our courts are not yet sending safety belt violators to our local classes. On line courses have little to no impact, participants are not even required to pay attention; they could be playing games or completely away from the computer. The number of people not wearing safety belts is up, but the number of people in class is down.

Is highway traffic safety really a priority?



From: Cynthia Keever <ckeever@ci.the-dalles.or.us>

Sent: Tuesday, June 8, 2021 9:16 AM

To: 'Frank Pyles' <fjpyles@skylf.net>; Fred Davis (fredvickidavis@gmail.com)

<fredvickidavis@gmail.com>; Russ Brown <rbrown@skyride.net>; 'sandystitch@hotmail.com'
<sandystitch@hotmail.com>; larryfairclo@gmail.com; Mike Kilkenny <mkilkenny@gorge.net>;
michael.holloran@state.or.us

Subject: FW: Interested in transportation safety? Comment on the draft Safety Action Plan

CAUTION: This email originated from outside of OSP. Do not click links or open attachments unless you know the content is safe.

Hi All - Thought this might be of interest for our TSC members.

Cindy

From: Jeannette Robart [mailto:Jeannette@OregonImpact.org]

Sent: Monday, June 7, 2021 5:17 PM

Subject: Interested in transportation safety? Comment on the draft Safety Action Plan

News Release

Updated plan reflects safety trends, keeps vision at zero fatalities, serious injuries

May 24, 2021

For more information: <u>Shelley M. Snow</u>, Communications, 503-881-5362

SALEM – A draft plan that will help Oregon improve transportation safety across all modes of travel – people walking, rolling, riding and driving – is open for public review and comment, now through July 9. The <u>draft 2021 Transportation Safety Action Plan</u> outlines strategies and actions to address safety needs in the various modes and across the state.

The 2021 Transportation Safety Action Plan, also known as TSAP, is a focused update of the 2016 TSAP. The updated plan looks at the latest crash data, transportation trends and other influential information and makes recommendations to help the state achieve the goal, stated in the 2016 plan, of zero fatalities and serious injuries on Oregon's transportation system by 2035. The draft plan evaluates our progress, identifies emerging safety trends and needs, provides guidance for policies and investments, and more. It also reflects the agency's commitment to the priorities established in the <u>Strategic Action Plan</u>: equity, a modern transportation system and sufficient and reliable funding.

How to get involved

Anyone interested is invited to <u>review the full plan on the website</u> and provide feedback in either or both of the following ways:

1. Provide comment via email by July 9 to safety@odot.state.or.us.

- Join a virtual public hearing at 1 p.m. on June 9 (this is occurring during the regular Oregon Transportation Safety Advisory Committee meeting). You must register to join this hearing by entering your contact information in this online form. The meeting will use Microsoft Teams, and instructions on using this tool will be provided to all who register. REGISTRATION TO ATTEND CLOSES AT 5 P.M. ON JUNE 8.
- 3. Anyone interested is invited to participate. Accommodations, such as material in alternate formats, are available. Please call 503-986-4188 or statewide relay at 711 to make your request.

Background

The <u>Oregon Transportation Safety Action Plan</u> provides long-term goals, policies and strategies and near-term actions to eliminate deaths and life-changing injuries on Oregon's transportation system. The TSAP serves as the unifying framework for transportation safety planning in Oregon. It identifies key safety needs and guides safety investments in infrastructure and behavior programs to meet those needs. The TSAP also serves as the state of Oregon's Strategic Highway Safety Plan, a document required by federal law.

##ODOT##

Learn how we're evolving to build a modern transportation system based on sufficient funding and equity.

www.oregon.gov/odot/Pages/SAP

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Oregon Department of Transportation

355 Capitol Street NE, MS 11 Salem, OR, 97301-3871 USA

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From: MCGOWAN Mary M

To: <u>Transportation Safety Division</u>

Subject: FW: TSAP Public Hearing Update for June 9th

Date: Monday, June 14, 2021 1:46:29 PM

Attachments: image001.png

Forwarding to document as public comment

Mary McGowan

Senior Transportation Planner/SAP Implementation Project Manager Statewide Transportation Planning Unit Oregon Department of Transportation 555 13th Street NE Salem, Oregon 97301

Phone: 503-986-7140

Email: Mary.M.McGowan@odot.state.or.us

From: ANDERSON-GILLOCK Brandy <Brandy.ANDERSON-GILLOCK@odot.state.or.us>

Sent: Monday, June 14, 2021 1:34 PM

To: MCGOWAN Mary M < Mary.M.MCGOWAN@odot.state.or.us>; WILLIAMS Brandon

<Brandon.WILLIAMS@odot.state.or.us>

Subject: FW: TSAP Public Hearing Update for June 9th

Hi, Mary and Brandon.

See email below. I thanked her for the observations and let her know I would forward this to you. She also sent me the written version of her public comments, which I will forward to the email address listed in the presentation materials.

Brandy Anderson Gillock | Executive Support Specialist
Oregon Department of Transportation - Transportation Safety Division

■ Desk Line: 503.986.4188 | ■ Cell Phone: 971.283.6947

From: Veka, Clay <<u>Clay.Veka@portlandoregon.gov</u>>

Sent: Thursday, June 10, 2021 5:46 PM

To: ANDERSON-GILLOCK Brandy < Brandy.ANDERSON-GILLOCK@odot.state.or.us>

Subject: RE: TSAP Public Hearing Update for June 9th

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Brandy,

In addition (but not included in my testimony), I noticed a couple of technical errors in the draft plan that I meant to point out.

• P. 36. The text and the graphic mix percentages for Speeding and Alcohol/Drugs. The text says, "As shown in Figure 9, speeding is the most common behavioral issue associated with fatal and serious injury crashes in Oregon, followed by alcohol-involved drivers." But the

graphic shows Alcohol/Drugs as #1 and Speeding as #2.

- P. 81 Figure 22. The light teal description needs to be corrected. It says, "alcohol and/or other drug involved" but it's supposed to be "**NOT** alcohol and/or other drug involved."
- P. 82 Figure 23. These are the wrong numbers for fatalities and serious injuries. These are the exact same numbers from the DUII #s in Figure 21 above. And are much too high for unrestrained fatalities and serious injuries (fortunately)

Let me know if you have any questions. My best, Clay

Clay Veka (she/her)

Vision Zero program coordinator Active Transportation and Safety Why do I list my pronouns?

Portland Bureau of Transportation

1120 SW Fifth Ave, Suite 1331
Portland, OR 97204
503-823-4998 (Office)
clay.veka@portlandoregon.gov
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Письмовий і усний переклад | Traducere și interpretariat | Chiaku me Awewen Kapas
Translation and Interpretation: 503-823-5185

From: Veka, Clay

Sent: Thursday, June 10, 2021 5:16 PM

To: ANDERSON-GILLOCK Brandy <Brandy.ANDERSON-GILLOCK@odot.state.or.us>

Subject: RE: TSAP Public Hearing Update for June 9th

Hi Brandy,

Yesterday, you all asked for our testimony in written form. I can't remember the email that we were asked to send it to. My testimony is attached but I'm happy to send it to another email if that is preferable and you can provide it to me.

Thanks so much, Clay

Clay Veka (she/her)

Vision Zero program coordinator Active Transportation and Safety Why do I list my pronouns?

Portland Bureau of Transportation

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Translation and Interpretation: 503-823-5185

From: ANDERSON-GILLOCK Brandy Brandy.ANDERSON-GILLOCK@odot.state.or.us

Sent: Tuesday, June 8, 2021 6:37 PM

Subject: TSAP Public Hearing Update for June 9th

Thank you for signing up to share your feedback on the <u>TSAP</u>. Now that you have had time to review the document, please let us know if you have specific questions/concerns that can be addressed tomorrow (if you didn't indicate them when you signed up).

Details for tomorrow:

- Speakers have pre-registered to provide public testimony. We will proceed one at a time through the list of participants. For example: "Tom Smith is speaking now; John Thompson will be next."
- Please limit your comments to five minutes or less and speak as clearly as possible. There is a running clock that will be shared on the screen to inform you of how much time you have remaining.
- State your name for the record, and who you represent.
- For the purpose of managing time, please refrain from repeating comments provided by earlier testimony or anything that you submitted in writing (as oral and written comments carry the same weight) simply state that you support a previous testifier's comments.
- There will not be an opportunity for a question and answer period; the purpose of the hearing is to document comments for the record.
- Please remember to call from the same number you signed up with, as this is how we will identify speakers.
- The Teams link be established at 12:30 for people to have the opportunity to troubleshoot/test audio connections. You are welcome to have your camera on if you would like to, but it is not required.

Thank you again for your cooperation and participation. Look for the Outlook invitation to come shortly.

Brandy Anderson Gillock | Executive Support to:
Troy Costales, Interim Operations Manager, ODOT TSD
Traci Pearl, ODOT Highway Safety Section Manager
Oregon Department of Transportation - Transportation Safety Division

■ Desk Line: 503.986.4188 | ■ Cell Phone: 971.283.6947 | □ brandy.anderson-gillock@odot.state.or.us
4040 Fairview Industrial Drive SE - MS #3 | Salem, Oregon 97302

From: MCGOWAN Mary M

To: Rob Zako

Cc: MCDANIEL-WILSON Christina A

Subject: RE: The Economic Cost of Crashes in draft TSAP?

Date: Monday, June 14, 2021 10:24:00 AM

Attachments: <u>image001.png</u>

Morning Rob, yes I used to work at LTD several years back! I have been with ODOT now for a little over 5 years. Christina (CC'd) was helpful in clarifying a response to your question. Let us know if you have additional questions.

The USDOT's value of \$11.2 million is a national value based on a fatality, we use Oregon data and estimates and a weighted average for fatal and serious injury (combined into one category). We update the values in the table with every ARTS cycle using Oregon data and we estimate the human capital crash costs and comprehensive crash costs by crash type and severity based on the methodology in Appendix 4A of the Highway Safety Manual (HSM) and FHWA's "Crash Cost Estimates by Maximum Police-Reported Injury Severity Within Selected Crash Geometries (October 2005)" publication. We estimate the annualized costs by severity using a 2-step process which includes the use of the Consumer Price Index (CPI) and Employment Cost Index (ECI).

Comprehensive Economic Value per Crash ^{2,3}			
Highway Type	Urban	Rural	
PDO			
All facilities	\$21,800	\$21,800	
Moderate (Injury B) and Minor (Injury C) Injury			
Interstate	\$77,800	\$89,200	
Other State Highway	\$80,800	\$91,900	
Off System	\$81,300	\$93,200	
Fatal and Serious (Injury A) Injury			
Interstate	\$1,530,000	\$2,260,000	
Other State Highway	\$1,490,000	\$2,140,000	
Off System	\$1,110,000	\$1,940,000	

Mary McGowan

Senior Transportation Planner/SAP Implementation Project Manager Statewide Transportation Planning Unit Oregon Department of Transportation 555 13th Street NE Salem, Oregon 97301

Phone: 503-986-7140

Email: Mary.M.McGowan@odot.state.or.us

From: Rob Zako <rob@best-oregon.org>
Sent: Saturday, June 12, 2021 3:32 PM

To: MCGOWAN Mary M < Mary.M.MCGOWAN@odot.state.or.us>

Subject: The Economic Cost of Crashes in draft TSAP?

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Dear Mary,

Are you the Mary I know from Lane Transit District many years ago?!?

In any case, I have a question about the draft <u>Transportation Safety Action Plan</u>. On page 48:

The Economic Cost of Crashes

While it is difficult to quantify the emotional costs of crashes, it is possible to estimate the purely financial impacts of lost lives, injuries, and property damage attributable to crashes involving motor vehicles.

Economists often use two approaches to quantify the costs of crashes: economic costs and comprehensive costs. Economic costs can generally be described as those costs which are measurable, while comprehensive costs include the economic costs as well as lost quality of life.

Oregon reports human capital and comprehensive crash costs by crash type and severity are based on two methodologies: Highway Safety Manual (HSM) Appendix 4A and FHWA's Crash Cost Estimates by Maximum Policy-Reported Injury Severity Within Selected Crash Geometrics. Table 2 shows Oregon's comprehensive economic value for crashes based on highway type, urban/rural location, and severity outcome.

How do these two methodologies align with USDOT's <u>Departmental Guidance on Valuation</u> of a Statistical Life in Economic Analysis, which estimates the value of a life at \$11.6 million in 2020?

Thank you.

Rob

--

Rob Zako (he/him/his)
Executive Director
Better Eugene-Springfield Transportation (BEST)
PO Box 773, Eugene, OR 97440
541-343-5201 (home office)
541-606-0931 (mobile)
rob@best-oregon.org
www.best-oregon.org
facebook.com/BetterEugeneSpringfieldTransportation

BEST is building a successful community by bringing people together to promote transportation options, safe streets, and walkable neighborhoods.



From: <u>Kiel Johnson</u>

To: <u>Transportation Safety Division</u>
Subject: Comments on ODOT TSAP
Date: Tuesday, June 15, 2021 1:36:49 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Hello, my name is Kiel Johnson, I am the owner and founder of Go By Bike which provides bike valet services and consultation. For the past 9 years we have operated the bike valet under the aerial tram where we have parked over 500,000 bicycles. I applaud your efforts to eliminate traffic deaths in Oregon. To date 2.759 people in Oregon have died from Covid while on Oregon roads (most managed by ODOT) between 2009 and 2018 3,569 Oregonians have been killed.

I was discouraged that the TSAP still places the highest priority for blame on those deaths on the users instead of the designers of the roads. Placing "Safety Culture" as the number one goal and "risky behavior" will not help us get to a zero traffic death future. These issues should be prioritized below infrastructure.

Following the success of places like Utrecht in the Netherlands the TSAP should copy what they have done and call for the shrinking of all highway and arterial roads to three lanes or less. By reducing the number of lanes we make space for pedestrians and bikes and are able to slow down traffic to a none lethal speed.

The report needs to focus more on reducing car speeds and allowing for innovative road designs (like curving roads) and smaller road space. ODOT needs to reevaluate it's criteria for lane widths. For example when PBOT installed a bicycle lane on N Rosa Parks ODOT made the city shrink the bike lane to allow for a wider car lane.

The report also need to call for new law regulating the size of cars allowed to be purchased in Oregon. https://www.iihs.org/news/detail/new-study-suggests-todays-suvs-are-more-lethal-to-pedestrians-than-cars

thank you for you consideration,

-Kiel

From: <u>Drew Williamson</u>

To: <u>Transportation Safety Division</u>
Subject: Comments on TSAP update

Date: Wednesday, June 16, 2021 9:48:30 AM

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Hello,

I am writing today in response to the TSAP and solicitation of comments. I firmly believe that if ODOT wants to realize these goals (which I, and many in the community strongly support), then we need to get serious about **reducing** automobile throughput. There are many many studies that show how road design and excessive widths are the leading cause of high speeds, a top killer of both drivers, cyclists, and pedestrians alike. They contribute to an enduring hegemony of vehicle driving as the only legitimate way to get around. ODOT has thus far shown an unwillingness to reduce automobile throughput, even when faced with a once and a lifetime opportunity to rebuild a very dangerous street, Barbur Blvd, through a reduction in car lanes in conjunction with the SW Corridor project. Traffic counts be damned on Barbur, it could instead become a safe, welcoming and vibrant urban corridor. As a SW Portland resident, I wish this notion would be taken more seriously.

There are other examples, of course we are all cognizant about what has happened on 82nd Avenue in Portland these last couple months. Deaths are the only thing that register, but there is no telling how many close calls have been missed in the tally. 82nd, among other roads, needs urgent safety upgrades and we ought to more seriously consider road diets. Traffic apocalypse is always predicted, though such results rarely materialize to any meaningful extent—the demand and travel patterns simply change around the new configuration and all users have a safer space for getting around. Until we make appropriately drastic changes to the way we think about the public right of way and how to allocate this space, we will not achieve Vision Zero.

I fully believe that in this vein, ODOT should formally adopt a stance that focuses on intentionally reducing auto throughput on the widest non-interstate roads across our state. Thank you for reading these comments.

Cheers,

Drew Williamson

Resident, SW Portland

TSAP BikePAC revisions

As stakeholders in the TSAP, BikePAC has taken the opportunity to offer suggestions and edits to minimize bias in this document.

We feel strongly that that there is potential for more equality among road users, in regard to the unique needs of motorcycle riders, as our stakeholders work to reduce serious injuries and fatalities on Oregon's roads and highways. Here are our focus areas.

- Motorcycle crash scene management
- Increase reckless, careless, and distracted driver accountability
- improving public safety training and data sharing for motorcycle crash scene management
- Awareness of the unique safety needs of power two wheel vehicles, in regard to traction and visibility.
- The need for more Autonomous vehicle safety data, before the infiltration onto Oregon's roads.

P. 14

The TSAP also serves as Oregon's long-range safety topic plan, an element of the Oregon Transportation Plan (OTP), and parallel to other mode and topic plans like the Oregon **Motorcycle Safety plan**, Bicycle and Pedestrian Plan and Oregon Freight Plan.

P. 20

PUBLIC TRANSPORTATION DIVISION

The Public Transportation Division is a stakeholder in the TSAP as it supports safety initiatives relevant to rail, multimodal, and active transportation. This division includes the Motorcycle safety program, Bicycle and Pedestrian Program that has established goals that set forth to reduce crashes involving people walking, Power Two wheel vehicle riding, PTWV, and biking, eliminate crashes that result in injuries and deaths, and promote PTWV, bicycle riding, walking and to improve health and safety. The

Program works towards these goals by supporting implementation of the Oregon motorcycle, Bicycle, and Pedestrian Plan and the TSAP, developing walking,

Motorcycle, PTWV riding and bicycling safety and education materials, funding projects that improve conditions for Riding PTWVs, walking and biking, and providing planning and design guidance for PTWV, pedestrian and bicycle projects. OTHER STATE AGENCIES

Page 25 ORS 802.320. Motorcycle safety program. The Department, with advice from the OTSC, is to plan for and conduct training for motorcycle safety. The Department does this in consultation with local groups. (The Governor's Advisory Committee on Motorcycle Safety provides a conduit for local consultation). **This program is allowed to raise funds to provide programs???**

P27 MULTIDISCIPLINARY APPROACH. Technical staff from ODOT were consulted in the development of the plan, including **Motorcycle**, pedestrian and bicycle, motor carrier, freight, traffic operations, traffic engineering, construction, and maintenance experts. ODOT, local agencies, law enforcement, public health, and regional planning organizations were also consulted to address the 4 Es (engineering, emergency response, law enforcement, and education) and provide input on Emphasis Area actions in two stakeholder workshops.

COMPETING PRIORITIES IN URBAN AREAS In urban areas there is a high mix of modes of travel, speed of travel and trip purpose. Trucks move freight 4,3, 2 wheel vehicles, bicycles and transit move people to work, recreation, and shopping. There is inherent conflict and risk in this mix of modes, trip purposes, and speed of travel. Implementing a range of transportation solutions in urban areas is necessary to meet transportation goals, such as safety, mobility, reliability, or improved air quality. Planners and engineers need to draw on the best available evidence to implement a data-driven approach to funding projects which reduce the frequency and severity of crashes.

p 28

Oregon has designated the Oregon Transportation Plan, the adopted mode and topic plans (Aviation, **Motorcycle**, Bicycle and Pedestrian P 53

Connected and Automated Vehicles Are Expected To:

- Reduce likelihood of crashes.
- Take time before all vehicles have the technologies.
- Require public investment, policies, and programs in urban and rural areas.
- Initially benefit higher income residents.
- PROVIDE MORE SAFETY DATA

P54

SAFETY ANALYTICS The use of analytical tools and processes offers a more immediate application of technology to transportation safety. The increasing quality and quantity of safety-related data (e.g., crash, roadway inventory, and volume) is enabling new insights into the causes of crashes and possible measures to reduce their occurrence or severity. Methods for collecting safety data specific to other modes such as **Motorcycles, MOPEDS,** bicycles and pedestrians are emerging and will expand capability to assess opportunities and risks and identify solutions for **Vulerable road users** . Advances in statistical modeling

P 55

Shifting Transportation and Lifestyles

- More people are choosing urban lifestyles.
 - Urban areas are becoming more dense.
 - More people are choosing non-auto travel
 - More people are riding motorcycles and mopeds (PTWVs)
 - Transit is one of the safest modes of travel.
 - Managed speeds can significantly reduce the severity of crashes

P56

Less is known about the relationship of the level of **MOTORCYCLING** walking and bicycling to safety outcomes for these modes or for the broader public. A 'safety in numbers' theory has been proposed, suggesting that higher levels of **MOTORCYCLING**, walking, and bicycling result in

lower crash rates involving these modes.

While data consistent with this theory has been presented from several countries, a consensus on this question has not been reached. It is possible that one or both of these factors played a role in reducing the crash rate, but it cannot be determined without a more rigorous study. Nonetheless, the evidence suggests that at the very least, higher levels of **MOTORCYCLING?** bicycling and walking do not result in a dramatic increase in crashes

p 60

Inspiring a strong safety culture among the public (individual drivers, passengers,

MOTORCYCLISTS, bicyclists and pedestrians) can be implemented in a number of ways. Good public information and education on the rules of the road and changes in regulations; broadly available and up-to-date **AUTOMOBILE AND MOTORCYCLE** training; clear communication of the benefits of transportation law enforcement in changing social norms to expect slower speeds; respect and responsibility for other users; and community engagement in transportation safety plans and programs; can all contribute to higher awareness of how individual choices influence the safety of all system users.

p 61

Strategy 1.3.1 – Collaborate with state, regional, tribal, county and city transportation and safety agencies, and other stakeholders, to identify unsafe walking, biking, **motorcycling**, or driving behaviors that could be addressed through legislation. Identify and pursue legislation to modify these behaviors

p 62

Strategy 2.1.2 – Identify and implement new methods for crash, roadway, and exposure (e.g., 4, 3, and 2 wheel Power Vehicles, PTWV, pedestrian, and bicycle volume) data collection, sharing, and storage.

Strategy 2.1.4 – Review state crash report forms to ensure appropriate data is collected and extraneous data is eliminated. Provide training and education to state and local enforcement agencies **on crash scene management, related law changes, and** resulting form(s).

p. 65 Strategy 3.1.2 – Support a high-visibility enforcement program increasing traffic, **VULNERABLE ROAD USERS, INCLUDING MOTORCYCLE**, bicycle, and pedestrian law enforcement capabilities (priority and funding).

Strategy 3.1.5 – Conduct education and outreach to law enforcement to increase understanding and enforcement of traffic, commercial vehicle, **MOTORCYCLE**, pedestrian, and bicycle laws

Strategy 3.4.1 – Enhance perceptions of **MOTORCYCLING**, bicycling, walking, and transit safety and security by identifying and implementing appropriate facility design, lighting, and

P 87

Intersections An intersection is a point at which two or more roads intersect. Most intersections are primarily designed for passenger vehicles, freight, and buses, and at a secondary level for pedestrians and bicyclists, **while motorcycles have historically been left out of these considerations.** An inherent concern at intersections is that they create conflict points among multiple road users, which can be exacerbated by surface and visiblity issues, differences in vehicle size and travel speed as well as the complexity of the intersection design. Intersection crashes in Oregon are defined as incidents that occur at a signalized or unsignalized intersection in an urban or rural environment.

P. 88

5. Improve the visibility of **passenger** vehicles, **motorcycles**, pedestrians and bicycles along corridors and at intersections with lighting and unobstructed sightlines.

p. 89

Roadway Departure When operating a **passenger** vehicle **or motorcycle**, an event may require the driver or **rider** to swerve suddenly to avoid another car or object, or an unsafe speed could affect control of the car, and **especially a motorcycle**. These situations impact a driver's or rider's ability to stay on the road, possibly resulting in a crash. **These concerns are escalated for PTWVs.**

Roadway departure crashes are defined as non-intersection crashes which occur after a vehicle crosses an edge line or a center line, or otherwise leaves the traveled way. Figure 29 ROADWAY DEPARTURE FATALITIES AND SERIOUS INJURIES BY YEAR 0 2014 2015 2016 2017 2018 144 138 207 170 146 344 414 358 373 445 F

p. 89

Let's put some motorcycle road departure stats in here?

Problem Identification Between 2014 and 2018 approximately 41 percent of all fatal and serious injury crashes in Oregon included a roadway departure, contributing to 1,330 fatalities and 3,336 serious injuries. About 68 percent of these crashes were in a rural environment. Many risky behavior-related crashes involve the vehicle leaving the lane or entire roadway. For example, road and lane departure accounts for 68 percent of speed-related fatal and serious injury crashes and 60 percent of impaired driving fatal and serious injury crashes.

Motorcyclist Actions 1. Provide information to increase awareness among motorcycle drivers that most motorcyclist-involved crashes involve speed, impairment, and roadway departure. 2. Provide education and enforcement focused on impaired motorcycle riding and its impact on all road users. 3. Increase awareness of motorcycles among the general public through education and outreach. 4. Adopt and implement road surface maintenance practices across jurisdictions that reduce hazards for people operating motorcycles. 5. Modify Oregon's helmet definition to match federal regulations. 6. Provide education and enforcement focused on driver accountability for distracted, reckless, and careles driving.

p. 98

Enforcement Law enforcement officials prevent crashes through traffic details, special mobilization campaigns such as Click It or Ticket, saturation patrols, and checkpoints. These different approaches enable officers to prosecute safety offenses, such as impaired driving, **distracted driving**, **careless, and reckless driving**, but also keep all road users safe at the same time. They also respond to crashes to collect information for crash reports, which detail the specifics of the crash, person(s), and vehicle(s) involved in the incident. This information later helps transportation and safety stakeholders make informed decisions about safety solutions. Fully staffed and funded law enforcement agencies can direct their efforts towards strategic enforcement and data collection.

P.102

Enforcement Law enforcement officials prevent crashes through traffic details, special mobilization campaigns such as Click It or Ticket, saturation patrols, and checkpoints. These different approaches enable officers to prosecute safety offenses, such as impaired, **careless**, **reckless**, and distracted driving, but also keep all road users safe at the same time. They also respond to crashes to collect information for crash reports, which detail the specifics of the crash, person(s), and vehicle(s) involved in the incident. This information later helps transportation and safety stakeholders make informed decisions about safety solutions. Fully staffed and funded law enforcement agencies can direct their efforts towards strategic enforcement and data collection.

Data Actions 1. Analyze existing safety-related data and collect and analyze new data sources to evaluate **motorcycle**, pedestrian and bicycle safety risk factors on all public roads.

Training and Education Actions 1. Implement education, training, or examinations to ensure all licensed drivers understand current traffic laws. 2. Conduct training on traffic safety laws for law enforcement officers, attorneys, and judges to improve consistent and unbiased enforcement and adjudication processes. 3. Continuously improve the education system for new **motorcycle riders** and drivers, including Driver's **and Motorcycle rider's** Education cost and access

barriers. Evaluate requiring driver **and Rider** training for new operators. 4. Provide education and other countermeasures to improve work zone safety for workers and the traveling public. 5. Develop training for local agency and consultant engineers and planners in transportation safety basics (e.g., safety investigations, road safety assessments, speed zoning, data analysis).

p.117

ment and EMS to identify strategic education and marketing campaigns. ENFORCEMENT AGENCIES • Collaborate with tribal, county, city, MPO, and state partners to advance safety culture within organizations and with the public. • Collaborate with tribal, county, city, MPO, and state partners to develop strategic enforcement or education campaigns to address critical behaviors identified in the TSAP. • Educate the public and tribal, county, city, state, and MPO partners about critical and emerging issues which could be addressed through the planning and programming processes. • Identify and deploy best practices related to **reckless, careless**, impaired, and distracted driving education and enforcement. • Identify and deploy best practices related to crash data collection, compilation, and transfer.

Safety Stakeholders Special thank you to all the safety partners that participated in the TSAP update. David Amiton ODOT Eric Bergstrom, American Bar Association Jocelyn Blake, Association of Oregon Counties Doug Bish, ODOT Jess Brown, ODOT Nicole Charlson, ODOT Theresa Conley, ODOT Nathan Crater, City of Astoria Geoff Crook, ODOT Tyler Deke, Bend Metropolitan Planning Organization Dana Dickman, Portland Bureau of Transportation Marie Dodds, American Automobile Association Chris Doty, Deschutes County Tegan Enloe, City of Tigard Andrew Eno, Federal Motor Carrier Safety Administration Dan Estes, ODOT Gary Farnsworth, ODOT Nick Fortey, Federal Highway Administration Greg Frederickson, National Highway Traffic Safety Administration Peter Geissert, Oregon Health Authority Jeff Greiner, ODOT Hau Hagedorn, Oregon Bicycle and Pedestrian Advisory Committee Erik Havig, ODOT Chuck Hayes, Governor's Advisory Committee on DUII Jeff Hazen, Sunset Empire Transportation District Chris Henry, City of Eugene/Governor's Advisory Committee on Motorcycle Safety Jessica Horning, ODOT Stephanie Ingraham, Oregon State Police Mike Jaffe, Salem-Keizer Area Transportation Study MPO Janis Jarvis, Oregon Trucking Association Angela Kargel, ODOT Philip Kase, ODOT Scott Kocher, Oregon Walks Kristopher Kyes, ODOT Heidi Manlove, ODOT Joe Marek, Clackamas County Kelly Mason, ODOT Joel McCarroll, ODOT Christina McDaniel-Wilson, ODOT Lake McTighe, Metro Lucinda Moore, ODOT Billie-Jo Nickens, ODOT Colleen O'Hogan, ODOT Susan Peithman, ODOT Nikotris Perkins, ODOT, Paula Leslie BikePAC of Oregon, Inc., Don Mason, BikePAC of Oregon, Inc.

From: <u>Doug Parrow</u>

To: <u>Transportation Safety Division</u>
Subject: Draft Traffic Safety Plan

Date: Wednesday, July 7, 2021 4:17:04 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Hello.

After having reviewed the draft plan, I have to say that I am disappointed. Rather than offering an effective path toward Vision Zero, the draft appears to be little more than a rehashing of the same tired old Goals, Policies, and Strategies that have utterly failed to stem the increasing casualties of our transportation system, particularly among pedestrians and bicyclists. Under the current plan, Oregon has failed to meet the safety targets that were established. We need action now. Not 146 more pages of platitudes and measures that have proven to be ineffective.

We desperately need the implementation of new measures to increase safety on our transportation systems. I suggest that the OTSC incorporate the following measures into the plan:

- 1. Revise traffic engineering protocols to design all urban streets in a manner that will ensure that traffic speeds are lowered to no more than 35 mph through the use of the range of proven traffic calming devices. Historically, ODOT has done just the opposite by widening lanes and increasing sight distances in the name of safety.
- 2. Eliminate all slip lanes. While slip lanes are remarkable effective in allowing motor vehicles to navigate intersections without slowing down, they are extremely hazardous for pedestrians and are challenging for bicyclists to cross.
- 3. Construct more signalized crosswalks that are placed closer together. (ODOT always seems to have plenty of money to add lanes to roads that are marginally congested. It is past time to redirect that money to real, effective safety measures.)
- 4. Initiate programs to raise crosswalks to curb level. (Given that pedestrians have the right-of-way in crosswalks, why do they have to step down onto the street, rather than having the motor vehicles drive up to the level of the sidewalk.) In addition, incorporate other traffic calming devices into all street designs.
- 5. Shift the legal responsibilities for crashes from pedestrians and bicyclists to motorists by establishing an assumption that crashes are the fault of the motorist, unless they show otherwise. This is the case in many European countries, but here motorists who kill pedestrians and bicyclists are rarely prosecuted.
- 6. Develop road planning protocols that consider the extent to which motor vehicle traffic will obstruct and hinder pedestrian and bicyclist traffic, rather than the other way around. Currently, road planners design roads to accommodate motor vehicles traveling at speeds well in excess of the speed limit and then figure out how to cheaply shoehorn pedestrians and bicyclists into the plan with little regard to their convenience or safety.

I urge you to carefully review "Dangerous by Design" by the National Complete Streets Coalition and Smart Growth America and to overhaul the draft Traffic Safety Plan to ensure that the numbers of fatalities and injuries on our streets and road actually start to go down and to create a realistic possibility that the OTSC will, in the future, no longer need to begin each meeting with a moment of silence in memory of those who have lost their lives on our roads.

Thank you, Doug Parrow 6782 Amy Ln NE Keizer, OR. 97303 503-931-0588



July 07, 2021

Oregon Department of Transportation

Re: 2021 Draft Transportation Safety Action Plan Comments

Oregon Department of Transportation Safety Office:

The Metropolitan Planning Committee (MPC) serves as the Central Lane Metropolitan Organization Policy Board. The Central Lane MPO works in cooperation with MPC, local government, state and federal agencies and the public to improve transportation in the Central Lane County region.

As the Oregon Department of Transportation (ODOT) asks for the public to review and comment on the Draft 2021 Transportation Safety Action Plan, MPC would like ODOT to consider the following regional recommendations:

- Identify and provide lessons learned from 2016 TSAP
 - Which strategies and actions from the 2016 TSAP worked effectively and should be further prioritized and invested in? Provide an overview of successfully implemented actions from the previous plan.
 - Which strategies and actions were not effective and should be dropped?
 - Provide an explanation of the 2016 TSAP results to address why the safety outcomes are not improving.
- Highlight differences between the Draft 2021 TSAP and the 2016 TSAP
 - Provide an appendix that highlights the differences from the 2016 TSAP and how the new changes will address the increase in fatal and severe injuries in Oregon.
- Address funding concerns
 - To meet stated safety goals, ODOT should include a funding and implementation assessment in the TSAP to illustrate the overall needs and potential sources of funding.

- Given that many safety programs are funded through Federal programs that have limited flexibility, ODOT should direct more state funds to programs that would impact the issues uniquely facing Oregon.
- Recommend major overhaul for 2026 TSAP
 - o ODOT recognizes all the trends are going in the wrong directions but continues to use a similar safety action plan.
- More emphasis on equity consideration
 - The plan identifies equity in transportation safety as a key area of focus, however the reliance and emphasis on enforcement is more notable throughout the plan. Consider further adjustments and possible integration of engagement to reach ODOT equity goals.
- Impact of Covid-19
 - Include a section on the anticipated/observed impacts of Covid-19 on transportation safety in Oregon.
- Automated enforcement
 - Recommend that ODOT take the lead in expansion of automated enforcement statewide.

We appreciate your consideration.

Metropolitan Planning Committee - MPC

From: <u>Daniel Peterson</u>

Transportation Safety Division

Subject: Oregon Transportation Safety Action Plan Draft: Comment Submittal

Date: Thursday, July 8, 2021 11:14:16 AM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Thank you for the opportunity to provide public comments on the proposed Oregon Transportation Safety Action Plan. See my comments below.

- Why are there not proposed or existing agency performance measures for the assets that have the most positive influence over safety performance measures: signals, striping, signing and illumination/lighting? Replacing assets/maintenance doesn't in and of itself qualify for HSIP funding.
- Is there an implementation plan of the Transportation Safety Action Plan anticipated/in the works to help Oregon/ODOT implement the recommendations in the draft? It seems likely that nothing will change without developing an implementation plan with assigned tasks and responsibilities.
- ODOT has known since 2019 that Oregon has not been meeting our Federal Safety performance measures yet no changes at the DOT have been made to provide more transportation safety, safety engineering or local technical assistance program (LTAP) positions to support ODOT regions and local agencies to try and meet these goals again. However, Climate and Equity offices were created in the meantime with new positions for **new** Agency performance measures? At the very least, wouldn't adding four E experts/representatives to the LTAP help meet the Agency's Equity performance measures AND Federal Safety performance measures? If this action by ODOT is not proof enough of a need for a transportation safety and engineering representative at the agency leadership table, I don't know what is.
- ODOT does not appear to recognize Safety Engineering as a valued and individual engineering discipline like other DOT's have/do:
 - No standalone traffic safety engineering positions in the Regions (the person who
 does it wears multiple traffic engineering hats)
 - No traffic safety engineering representation on the agency leadership team
 - Traffic safety engineering isn't listed as an engineering discipline in the Statewide Project Delivery Branch guidance/resources
 - OTSC doesn't consistently have a representative/expert for each and every one of the 4 E's (including traffic safety engineering)
- Why doesn't the OTSC have the same level of influence over projects and project development as the Mobility Advisory Committee or OTC? For example, if the MAC can influence and prevent the installation of a roundabout, an FHWA proven safety

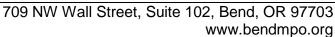
engineering countermeasure, so why doesn't OTSC have equal influence over ODOT projects? I also think it's interesting that the evaluation period for the **not met** safety performance measures includes the period of time when the MAC had instigated a roundabout moratorium at ODOT.

- Contrary to popular belief and statements given at previous OTC meetings, transportation/traffic safety is not ingrained in each of the existing STIP programs. The only program outside of the Highway Safety Improvement Program that considers crash history, risk and inclusion of proven safety countermeasures in the entirety of their program project prioritization and development is the new Pedestrian-Bike Strategic Program. Especially if a STIP program has their own, non-safety, performance measures they are trying to meet within a limited amount of funding. If we aren't reevaluating or reforming individual program performance measures to match the anticipated available program funding or holding those programs partially responsible for our Federal safety performance measures, those programs do not have any incentive to add additional, non-required, proven safety elements to their projects. And the included proven safety elements are at a bare minimum and what is only federally required.
- Transportation/traffic safety is also not ingrained into the larger statewide Maintenance program. For example, they do not have traffic safety performance measures (this does not include employee safety) and are not held at all responsible for the existing traffic safety performance measures which they do have influence over even if it's not known or acknowledged. Statewide Maintenance also does not have tools available to help Regions consistently (within the Region and between Regions) prioritize their workload for the features that are proven to affect traffic safety the most if not properly maintained (for example, striping/legends/signing over mowing).
- We should require drivers training courses to receive a driver's license in Oregon like east coast states already do. It is a potential source of revenue in addition to building up safer drivers and improving driving behaviors on all Oregon roads.

Thank you for considering my opinions.

https://www.fhwa.dot.gov/tpm/reporting/state/safety.cfm?state=Oregon

BEND METROPOLITAN PLANNING ORGANIZATION





July 8, 2021

BARB CAMPBELL, CHAIR City of Bend Council Mary McGowan, Transportation Planner, Project Manager ODOT Transportation Planning

MEGAN PERKINS, VICE-CHAIR

City of Bend Council

Walt McAllister, Safe Communities Program Manager ODOT Transportation Safety

PHIL CHANG Deschutes County Commission

RE: Draft 2021 Transportation Safety Action Plan

RITA SCHENKELBRERG City of Bend Council

Dear Ms. McGowan and Mr. McAllister,

ROBERT TOWNSEND ODOT Region 4

Thank you for providing an opportunity to comment on the draft 2021 Transportation Safety Action Plan. Below are my comments.

TYLER DEKE, AICP Manager Does the ODOT TSAP link to local TSAP documents? If so, that relationship should be discussed (pp 21-22).

JOVI ANDERSON Program Coordinator

ANDREA NAPOLI, AICP

Senior Planner

The statewide crash trends (p 32) continue to show a disproportionately large percentage of fatal and serious injuries in rural areas. A combination of action items from multiple emphasis areas will be necessary to reduce crashes in rural areas. We encourage you to look for opportunities to identify opportunities for synergy among the actions to help reduce rural crashes.

The proportion of serious and fatal crashes is almost evenly split between ODOT and local roads (pp 32-33). If available, it would be helpful to include total VMT by road ownership category. This information could further help identify how and where to address crash issues.

Table 1 (p 34) identifies unlicensed drivers involved in a significant proportion of fatal and serious injury crashes. Was any consideration given to identifying specific actions to address this issue?

I applaud the inclusion of equity (p 51) in the plan. As noted in the plan, pedestrian crashes are more common in low-income neighborhoods. Providing safe transportation options in low income neighborhoods and for low income populations should be emphasized during project funding.

The discussion on safety analytics (p 54) is appreciated. As noted in the plan, better data and analytics will help us deliver better solutions.

I strongly support the goal of Improving Safety Culture (pp 60-61). A large percentage of crashes are behavior related and cannot be easily addressed

through infrastructure changes. Improving safety culture will require involvement from everyone engaged in transportation safety.

Law enforcement is included in goal 3 (pp 65-66). I believe the total number of state police officers has remained nearly constant over the past 20-30 years. Since the year 2000, Oregon's population has increased by nearly 24% and VMT has increased significantly on some of our rural highways. Was there any consideration to request increased state policing levels? Inadequate state police levels impact response times to crashes, especially in rural areas. This also impacts enforcement of speeding and aggressive driving.

Under Policy 4.1, I would like to see a more explicit consideration of planning and designing for technology changes. While there may be additional upfront costs to include infrastructure (e.g. conduit), those costs are far cheaper than retrofitting infrastructure in the future.

In the goals section, I would like to see a strategy of funding development of local transportation safety action plans. The benefits of local safety plans are many and can help inform local funding decisions and applications for state funding.

The Oregon Road Departure Safety Implementation Plan is over 10 years old. Is there a need to update that plan? If so, it should be identified as an action under the Roadway Departure Actions section (p 90).

Road departure crashes account for the largest share of fatal and serious injury crashes. Are there additional action items (p 90) that could help address these types of crashes?

Bicyclist Action number 8 (p 95) is to fund a youth bicycle safety program. This type of training already occurs to some extent through the Safe Routes to Schools (SRTS) program. Should this action be modified to reference the SRTS work already underway and to recommend additional funding through that program?

Thank you again for providing an opportunity to provide comment on this important plan update. Please contact me if you have any questions.

Sincerely,

Tyler Deke

c: BMPO Policy Board

Safe Lane Transportation Coalition's Draft 2021 TSAP Comments

Action	Comment			
Executive Summary				
Moving Forward Section	What are the ramifications referenced for not achieving the safety targets? How do these compare to failing with state of good repair pavement condition performance measures? How is the state prioritizing lives vs. pavement conditions?			
Moving Forward Section	The 2022 targets (2015-2019 crash years) are unambitious, but it also doesn't make sense to adjust them since that data is already in the past and we can't take action to change what has already occurred. This is another reason to emphasize the data system improvement needs.			
Intro	oduction			
Title page "A Strategic Highway Safety Plan (SHSP) is a statewide, data-driven, coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads."	Remove "highway." Should be oriented towards the entire transportation system, not just highways or even just all public roads. We don't want passenger rail derailing, we don't want fatalities and injuries on multi-use paths, etc.			
Local, Regional, and Tribal Entities (pg 21) – Safe Communities Programs referenced	It would be helpful to have a list of Safe Communities Programs across the state as a resource to those wanting to collaborate with other programs or start their own if one does not exist in their community. This could also be a resource on the website instead that gets updated more frequently than the plan updates and could include contact info? Maybe integrate into the statewide safety data portal?			
Transportation	on Safety Trends			
	We are failing as a state. We need to change our approach because it is not working.			
Safety Challenge	s and Opportunities			
Shifting Transportation and Lifestyles (pg 55) – Transit is one of the safest modes of travel	Include something about the importance of supporting and encouraging transit ridership, especially emerging from Covid-19? Interplay with public health concerns and misperceptions of Covid exposure on public transit could drastically impact safety, climate, and equity goals.			
•	Emphasis Areas			
Introduction	Define Actions Define what impaired driving is in the first sentence — move the last sentence to the beginning. Substitute the word "cannabis" in for "marijuana" throughout the document.			
Impaired Driving Action 1 Provide education and outreach about the effects of and types of impaired driving, including alcoholinvolved, other-drug-involved (prescription, legal, and/or illegal), and combinations.	A barrier is sustainable funding for education - usually short term funding instead of long term. How much would it cost to fund different levels of programming to address this at a statewide level?			

	1
Impaired Driving Action 3	Instead of the term marijuana, use the term cannabis. Have
Provide training and education on drug (e.g.,	more diverse locations for DRE trainings - a mobile training that travels throughout the State. Having to travel for trainings is a
marijuana, methamphetamine) impairment detection	time constraint.
for law enforcement.	
Impaired Driving Action 4	The overtime model is a huge burden and inaccessible to police
Conduct substance-involved driving enforcement.	departments that have 0-3 traffic officers. Recommend revisiting with a focus on the enforcement effort and include
	considerations for racial profiling and implicit bias training.
Impaired Driving Action 5	Recommend 0.00 - if you are under the influence, you should
Adopt National Transportation Safety Board	not be the one driving.
recommendation to reduce Blood Alcohol Concentration	
limit to 0.05.	
Impaired Driving Action 7	This could be more specific – reference what
Strengthen laws aimed at reducing repeat	laws/programs/increasing community outreach for
DUII offenders.	substance abuse and repeat offenders and what
Don Offenders.	strengthens means.
	strengthens means.
	Should DUII diversion programs be required all across the
	State? How much would it cost to fund such a program?
	State: How much would it cost to fund such a program:
Impaired Driving Action 8	Streamline? Same as #7. Too open ended and needs to be
Streamline the DUII arrest and	more specific.
adjudication processes.	more specific.
dujudication processes.	Add an action specifically for bias or equity like the
Recommended Impaired Driving Action	Speeding Actions.
Recommended impaired briving Action	Speeding Actions.
	State financial support for providing free and reduced
Recommended Impaired Driving Action	priced transportation options on key holidays. State
, , , , , , , , , , , , , , , , , , ,	financial restrictions on fees imposed during periods with
	increased risk of DUII violations.
Emph	asis Areas
•	t Protection
	Should some of these resources be reallocated to other
	areas we're doing worse? Oregon seems to do quite well
	in this area.
Fmph	asis Areas
•	ng Actions
	This intro makes it sound like speeding is not a problem.
	Change language to people-focused, specifically, "defined
	as a <i>vehicle traveling too fast"</i> -> the driver was driving
Speeding Introduction	too fast. Second paragraph – for self-reporting surveys,
Speculing introduction	people may downplay how fast they actually drive. How
	much weight is given to this public opinion survey? Lane
	County data shows that drivers speed. Should report on
	the number of people killed and injured from speed
	related crashes. Need to be more clear about the data
	they are pulling from – it begins in 2016, but when does it
	end? Need to include data to 2020 or be more clear that
	this is just 2014-2018/19. Need to be consistent with the
	and it just but I but of the track to be consistent with the

	data – what is the value of the "In Federal FY19"			
	sentence? Overall, this narrative is not true for Lane			
	County. Like the DUII sheet, this introduction should be			
	consistent and call out, "speeding crashes are defined if			
	speeding is marked on the crash report or not"			
	This graph just shows if local police department flagged			
Figure 26	speeding as a contributing factor. It feels broad. This may			
rigure 20	also be under reported. Include acknowledgement that			
Constitution Astronomy	this data under represents the contributing factors.			
Speeding Action 1	People focused language - reference the 1st action in DUII			
Educate all transportation system users about the	document. Should be more detailed like this one.			
safety risks of speeding.				
Speeding Action 3	Change "continue" to "increase". Last sentence is phrased			
Modify or extend laws to continue automated	weird -> "Implementation must address equity concerns".			
enforcement of traffic violations, including exceeding	Include automated enforcement removes the human bias.			
the speed limit. Implementation must incorporate				
equity concerns.				
Speeding Action 4	Include locations for where speed limits are going to be			
Track and assess changes to crash rates,	lowered. Include pre and post speed measurements to			
fatalities, and serious injuries on roads approved	show what the impact is.			
	Show what the impact is.			
for higher posted speed limits.	To be described in F. ODOT and be according to the			
Speeding Action 5	To implement Action 5, ODOT needs to pave the way by			
Establish target speeds consistent with facility	adding, "Identify and eliminate regulations that prevent			
design, safety goals, context, users, and land	implementation of safe speeds." For example, "the right to			
use. Apply the Blueprint for Urban Design in	experiment" bypasses MUTCD and allows flexibility to test			
urban contexts.	new speed reduction tools.			
Speeding Action 6	Rephrase to "implement programs and trainings to reduce			
Conduct unbiased enforcement to reduce	bias in enforcement." Make it sound like			
speeding-related crashes.	improving/reducing bias.			
Emphasis Areas Distracted Driving Actions				
Impaired Driving Action 5	Expand and add specific campaigns instead of the generic "don't drive distracted" campaigns. Focus on the cognitive			
Increase statewide media campaigns, high visibility	, ,			
enforcement, awareness presentations, and court-	or manual piece in a specific area. Emphasize that driving			
required courses on distracted driving awareness.	is a privilege.			
Recommended Distracted Driving Action	What about partnering with private sector (cell phone			
Recommended Distracted Driving Action	software companies, such as the phones now requiring			
	, , , , , , , , , , , , , , , , , , , ,			
	users to say "I'm not driving" to use phone while in			
	motion)? Other more direct strategies like this?			
·	Emphasis Areas			
Intersec	tion Actions			
	Bring back previous action "Implement education and			
Recommended Intersection Action	training related to new types of infrastructure (e.g., signal			
	heads, safety edge, crosswalks, bike lanes, or			
	roundabouts) and related"			
Emph	asis Areas			
•	structure			

Infrastructure Introduction Recommended Infrastructure Action	It seems as if roundabouts should be emphasized more, given the percentage of fatal and severe injury crashes occurring at intersections. The word "roundabout" only appears in the plan once. They are a proven, effective tool to address fatal and severe injury crashes at intersections, plus have emission reduction benefits. Roundabouts and their safety benefits to all users should be included. What about addressing challenges with being	
	able to fund roundabouts through ARTS program? Establish a roundabout first policy?	
•	asis Areas	
Roadwa	y Departure	
Roadway Departure Introduction	What impact, if any, has the implementation of more cable barriers, rumble strips, and safety edges had so far? How effective is this and is it a strategy we should be doubling down on?	
	asis Areas	
Aging	Road Users	
Recommended Aging Road Action	Add action to increase frequency of renewing driver's license, including in-car driving portion of test?	
•	asis Areas	
Improv	ed Systems	
La constato de la con	Glad to see this section call for shorter data timelines since	
Improved Systems Introduction	that has been a big challenge for years. What will this	
	actually look like? What can we expect for new timelines and by when will the improvements be in place?	
Performance M	easures and Targets	
T C.TOTHIGHEE IVI	What do we know about what has worked and not worked	
	from previous safety investments over the last 5-10 years?	
	How has this informed this TSAP update and	
	recommendations?	
Implementation and Evaluation		
	What actions should be recommended that would need	
	legislative changes? For instance, what would it take to	
	change the driver's license requirements related to age, #	
	of passengers allowed in car with young drivers (could've	
	saved lives in Eugene within the last couple of years), etc.?	

Mary McGowan Transportation Planner, Project Manager Oregon Department of Transportation 355 Capitol Street NE, MS 11 Salem , OR 97301

Dear Mrs. McGowan,

Thank you for your consideration of the following recommendations developed by the Oregon Action Team on Ungulate Migration (OAT). These comments and recommendations are meant to provide local stakeholder input to help guide ODOT as they finalize updates to the Oregon Transportation Safety Action Plan (TSAP).

OAT is a coalition focused on "improving ungulate habitat connectivity, ecosystem structure and function, and human/wildlife safety, including addressing barriers to migration and advancing measures to restore degraded and fragmented habitat." The Team engages in education and outreach, advocacy for policy and plan development and revisions, identification and coordination for project implementation, and support in identification and leverage of funding sources.

Reducing wildlife-vehicle collisions on Oregon's highways is a core focus of our group. We believe reducing barriers to ungulates through creative solutions, such as building wildlife crossings, will ensure our big game populations, so vital to our economy and way of life, continue to thrive. As stated in the draft TSAP, the goal of the document is to 'eliminate deaths and life changing injuries by 2035'. This is an excellent goal that will improve the safety of all Oregonians. However, we are concerned that this goal cannot be met without addressing the need to improve the safety of our highways related to wildlife-vehicle collisions (WVCs). As members of OAT read through the draft TSAP report, we were disappointed to see that there was no mention of WVCs anywhere within the report and we recommend that ODOT staff update the report to acknowledge the safety hazards ungulates pose to Oregonians on our highways and to incorporate some opportunities for action and solutions into the report. As one example of a location to incorporate opportunities to reduce WVC's on our highways, we recommend that Wildlife Crossings be included under the 'improving infrastructure' section of the report.

According to ODOT, an average of 7,000 WVCs occurs annually on Oregon's ODOT maintained roads. These collisions cause 2 fatalities and over 700 injuries on average each year and result in \$44 million in damaged property costs. A safety report that does not address the hazards from wildlife vehicle collisions will not be able to achieve the goal of 0 fatalities by 2035.

Thank you for your work on the next revision to the TSAP and for your consideration of our above recommendations. OAT greatly appreciates our working relationship with ODOT, and we look forward to our continued engagement with the agency to reduce barriers to migration within the state. Please do not hesitate to contact us with any questions and/or with ways in which we can help.

Sincerely,

The Oregon Action Team on Ungulate Migration

From: <u>John Mercier</u>

Transportation Safety Division

Cc: Ryan Webb

Subject: Confederated Tribes of Grand Ronde Review and Comment of Transportation Safety Action Plan

Date: Friday, July 9, 2021 10:14:05 AM

Attachments: TSAP tribal notice Confederated Tribes of the Grand.pdf

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Good Day ODOT Safety,

Thank you for contacting the Confederated Tribes of Grand Ronde and inviting the Tribe to review and comment on the Oregon Transportation Safety Action Plan (TSAP). The letter sent from ODOT to the Tribe is attached. My name is John Mercier, and I work for Tribe's Public Works and Tribal Transportation Program. I reviewed the TSAP. Unfortunately, I was not able to thoroughly review the plan, and I will do my best to provide thoughtful comments.

Overall, the plan is well-written and has valuable information. I especially liked Chapter 4, Safety Challenges and Opportunities. The plan does a good job covering technology which is an ever evolving and growing contributor to safety opportunities, but at the same time creating challenges with hand-held devices. Especially, thank you for covering connected and automated vehicles. The reader will learn important information from the plan about those technologies.

The only criticism, and it is only minor, that I could offer about the plan, is that it lacks GIS data. In Chapter 3, Transportation Safety Trends, the plan does well with providing information that Principal Arterials see the most crashes. A map accompanying the information that show Oregon, with highways that designate their functional classifications would be helpful. In a general sense, any reader of a product in the planning realm, will always want to know how the plan relates to the reader's community. Of course, any level of detail for an individual community would not be practical in the TSAP, but some GIS presentation could still be help to the readers, as they interpret the extensive data provided in the plan.

In conclusion, as I look at the objectives contained in the attached letter:

- Integrated updated crash data;
- Identified emerging safety trends and challenges since the adoption of the 2016 TSAP;
- Evaluated the progress towards achieving the elimination of fatalities and serious injuries on Oregon's transportation system;
- Identified solutions and actions to address system needs for all modes, travelers and roadway users.

The May 2021 version Oregon Transportation Safety Action Plan accomplishes those objectives.

This is a very limited review and comment about the Oregon Transportation Safety Action Plan. Please be aware that I will keep the plan close by, and continue my review. I also want to use the plan to see how we can work together to improve transportation safety in Grand Ronde, and in the state of Oregon.

Please contact me if anyone has any questions.

Sincerely,

John Mercier
The Confederated Tribes of Grand Ronde
Public Works Department/Tribal Transportation Program Manager
9615 Grand Ronde Road
Grand Ronde OR 97347

Phone: 503-879-2400 Cell: 503-428-1441

Email: john.mercier@grandronde.org

 From:
 Rebecca Sanders

 To:
 Transportation Safety Division

 Subject:
 Feedback on TSAP

 Date:
 Friday, July 9, 2021 1:15:20 PM

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Hi folks,

Great job on the TSAP -- it is well-written and sets important goals and strategies for ODOT's and Oregon's future. I have one question/comment for your consideration.

I see that you have developed high-level targets for system performance, and I understand the selection of performance targets based on an s-curve, but I am concerned about the relatively minor movement of the needle that shooting for a handful of fewer fatalities (out of hundreds) will get us. If our goal is a system of zero fatalities, we are banking on major fatality reductions down the line that absolutely depend on bold action today. Realistically, those bold actions should yield results faster than the s-curve suggests, but I understand being conservative. However, because the targets are up for annual review that could allow adjustment of future targets based on recent performance, I'm concerned that there will not be enough accountability with relatively small goals in the near term (DOT history in the U.S. unfortunately does not indicate a trend toward bold, life-saving action, particularly for vulnerable users).

What metrics exist to allow ODOT and the public to monitor ODOT's progress toward achieving the more specific goals upon which the ultimate targets depend? Each strategy should ultimately have some metric to measure its effectiveness. This may be particularly important for strategies dealing with education and culture change, the efficacy of which have been historically harder to measure accurately, but the more specific metrics are also important for other areas. I see that there is a section on reporting in, e.g., the HSIP, but it is not clear to me how specific that performance evaluation will be. It would be great to see more specific metrics for each strategy and action. Additionally, a way to monitor those metrics, such as a public-facing dashboard, would be ideal. I appreciate that that is a lot of work -- and I hope Oregonians' lives will be considered worthwhile to provide that kind of public legibility and more specific accountability.

Best, Rebecca

Rebecca L. Sanders, PhD

(she/her)
Owner & Principal Investigator, Safe Streets Research & Consulting, LLC

TRB Bike Committee (ACH20) Chair, 2021-2023

?

510.316.5940

See our recent articles on pedestrian fatality hotspots and barriers to and benefits of e-scooter use and our recent NCHRP report on improving intersection safety for pedestrians and bicyclists.

Safe Streets Research & Consulting, LLC is a certified DBE in Oregon and California. We respectfully and gratefully acknowledge that we are located on the traditional lands of the Clackamas, Stl'pulmsh (Cowlitz), and the Confederated Tribes of Grand Ronde in Oregon.

Department of Community Services



Transportation Division

July 9, 2021

Oregon Department of Transportation 355 Capitol Street NE, MS 11 Salem, OR, 97301-3871 USA

To Whom it may concern,

Thank you for the opportunity to provide comments on the ODOT TSAP. The Multnomah County transportation division and health department care deeply about the health and safety of people using the public right of way. The ability to travel safely throughout the county, the state, and the region is something that we all agree is critical. The TSAP provides many goals toward that end. Below are some suggestions we have to make the document more valuable as well as specific actions that we think ODOT should take.

Culture Change

We agree with the aspiration of culture change. But rather than focusing on an effort to "transform public attitudes", the most important piece of culture change should be within ODOT and other transportation agencies. Emphasizing the protection of the most vulnerable users in all design decisions should be paramount, as is consistent with a safe systems approach. The TSAP is intended to apply universally to all public roads in Oregon, but it falls short of the culture of safety already established in agencies in the Metro Region. While achieving "zero traffic fatalities by 2035" is mentioned in several parts of the document, it is not fully engaged as a goal given that the fatal injury target has gone up since the last TSAP was published. Increasing the target for fatal injuries creates an odd paradox within the TSAP, wherein the long term goal is to decrease deaths but the near term target is for increased deaths. This increase in the target is extremely concerning and is out of sync with local goals.

We recognize that local jurisdictions such as Multnomah County have a role to play in changing culture and reducing traffic fatalities. Funding Multnomah County's safe routes to school program is one way that ODOT directly supports this culture change. Continuing to provide this type of funding to local jurisdictions is one way that ODOT can continue to promote this culture change.

Data presentation may skew results, may influence the mitigation strategies

The data shows that roadway departures are the most common attribute of serious and fatal injuries. It would be helpful to see the data for roadway departures cross referenced with speeding and impaired

Department of Community Services



Transportation Division

driving (alcohol and other drugs, alcohol only) because the mitigation might be different for these causes. Additionally it would be valuable to see the data cross referenced with pedestrian and bicyclist and urban vs. rural areas. The reason for this is that roadway departures in urban areas will have different features and consequences in urban or rural areas. For instance a recent roadway departure in east Multnomah County resulted in a child pedestrian fatality. Mitigation for roadway departures in urban areas may include slowing speeds, increasing visual friction and barriers. Whereas mitigation in rural areas may not include all of these. It appears

that ODOT has this data and could use it to conduct more detailed analysis of crash causes. This type of analysis could provide ODOT and local jurisdictions with greater opportunity to find the right solutions to reduce crashes.

Equity

The TSAP notes that the problem of increasing traffic deaths is disproportionately impacting BIPOC populations and lower income neighborhoods. The Multnomah County Health Department confirmed this in a 2021 report, finding that the death rate from traffic crashes among the County's Black population is nearly twice the rate experienced by non-Hispanic white residents. As research from ODOT and Oregon Walks demonstrates, this is especially true of pedestrian deaths. Among the causes cited in TSAP are disproportionate use of walking and transit, and inadequacies in the built environment. We share the concern about these proximate causes, but also acknowledge that white supremacy is the underlying cause. Generations of systemic racism have constrained opportunity for BIPOC Oregonians across the state, resulting in education, jobs, and housing options that disproportionately expose these groups to a range of health hazards including traffic crash risk. The TSAP sets a goal of implementing "unbiased" solutions, which implies the unacceptably low standard of not actively harming one group over another. As a state we should hold ourselves to a higher standard of correcting historic wrongs, implementing safety interventions that create a just transportation system in the context of a legacy of underinvestment in BIPOC communities. Multnomah County's value of leading with race is applicable to the TSAP; if we resolve disparities by race and ethnicity, it is highly likely that we will also resolve inequities based on income, age, ability, and other markers of marginalization.

Set targets that reflect a commitment to vision zero

The plan clearly indicates that zero traffic deaths is a desired outcome. The "vision of zero deaths by 2035" is stated several times in various parts of the document. However it doesn't set ambitious targets that will force the culture to shift toward this goal. The targets set in the plan indicated that ODOT is willing to accept more traffic fatalities per year than they were willing to accept in 2016.



Transportation Division

A few other housekeeping items of note:

1. Figure 8 page 35 of the action plan is unclear. it references proportion but lists as percent. It says that the highest proportion of serious and fatal are young drivers but the table looks like it shows older drivers. Also the categories are not all mutually exclusive so it's not clearly indicating how crashes compare by age or mode. Is 15% the percent of fatal crashes vs. non fatal for that age group? Or for all crashes?

Road Users

Road users are illustrated in Figure 8, and they range from motor vehicle drivers to non-motorized road users and those operating special vehicles (e.g., school buses, commercial motor vehicles). Young drivers (age 15-20) are involved in the highest proportion of fatal and serious injury crashes, followed by aging drivers (age 65+) and motorcyclists. Regarding age groups, young drivers and older drivers are a consideration because they are typically overrepresented in traffic crashes compared to middle-age motorists (age 21 to 64).

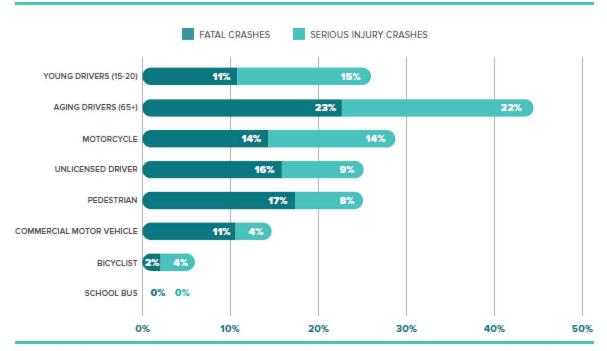


FIGURE 8 PROPORTION OF FATAL AND SERIOUS INJURY CRASHES BY INVOLVED ROAD USER (2014-2018)

2. Figure 22 on page 81 is unclear. Both colors on the pie chart are labeled the same.



Transportation Division

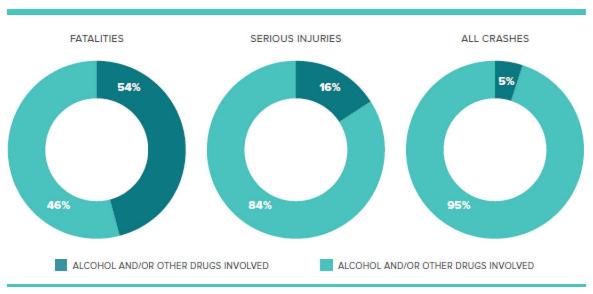


FIGURE 22 IMPAIRED DRIVING AS A CONTRIBUTING FACTOR FOR FATALITIES, SERIOUS INJURIES AND ALL CRASHES

3. Figure 25 and Figure 29 show the same number of serious and fatal crashes in the same year categories. Is this correct? Is the data conveying the exact same info (as in - all roadway departures are speed related?) Or is it a coincidence? Or an error?



FIGURE 29 ROADWAY DEPARTURE FATALITIES AND SERIOUS INJURIES BY YEAR

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Transportation Division



FIGURE 25 SPEED-RELATED FATALITIES AND SERIOUS INJURIES BY YEAR (2014-2018)

Again, we appreciate ODOT's efforts to improve safety on all public roads in Oregon. ODOT's focus on safety in project funding and programs like All Roads Transportation Safety (ARTS) and Safe Routes to School (SRTS) have benefited Multnomah County and its residents.

Sincerely,

Jon Henrichsen

Dietaly signed by Jon Henrichsen

DN GEUS, Egin ap honichesen@rullco.us,

OHMahnamb County, OLi-Transportation

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Dietaly County, OLi-Transportation

Reason I am the author of this document

Detail 2012 070 91 60.454-0700'

Jon Henrichsen, PE Transportation Division Director/County Engineer Multnomah County Transportation Division From: Ryan Webb
To: John Mercier

Subject: RE: Public Works & Engineering Check In Date: Monday, July 12, 2021 6:54:25 AM

John,

Sorry for not sending my comment's over on Friday the day got away from me. Here are my comments.

- 1. Page 9, Table ES.3 Would be good to see what the baseline, target and actual statistics were for the 2016 TSAP, see how ODOT did against those figures.
- 2. Page 31, Figure 3 Can this data also be spilt up to show fatalities per VMT for both urban and rural areas?
- 3. Page 38, Figure 11 Can this data also be spilt up to show fatalities and crashes for both urban and rural areas?
- 4. Page 53 How will the advancement of CAV help reduce crashes in the future? Is there any reporting mechanism to report near misses instead of crashes as a result of CAV technology.
- 5. This is no recap of 2016 TSAP, how did the visions, goals, policies and strategies in that plan measure up? What were the actual results against the targets in the 2016 TSAP? There is not recap of prior plans and how they fared, need that data to make sure the measures in this plan can work.

Thanks,

Ryan Webb, P.E.

Engineering and Planning Manager

The Confederated Tribes of Grand Ronde

Direct: (503) 879-2404 Cell: (503) 437-4544

Email: Ryan.Webb@grandronde.org
Website: www.grandronde.org

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From: John Mercier < John. Mercier@grandronde.org>

Sent: Friday, July 9, 2021 8:47 AM

To: Ryan Webb < Ryan. Webb@grandronde.org>

Subject: RE: Public Works & Engineering Check In

Hi Ryan,

Thank you. Do you have a few comments to share regarding the ODOT Safety Plan?

Have a good weekend.

John

From: Ryan Webb < Ryan.Webb@grandronde.org>

Sent: Thursday, July 8, 2021 8:15 PM

To: John Mercier < John. Mercier@grandronde.org >

Cc: Dave Fullerton < <u>Dave.Fullerton@grandronde.org</u>>; Stacia Martin

<<u>Stacia.Martin@grandronde.org</u>>

Subject: Public Works & Engineering Check In

John,

Here are the meeting minutes for last two weeks, I apologize for delay in sending last week's minutes to you.

Thanks,

Ryan Webb, P.E.

Engineering and Planning Manager

The Confederated Tribes of Grand Ronde

Direct: (503) 879-2404 Cell: (503) 437-4544

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Website: www.grandronde.org

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500 Summer St NE E-20 Salem, OR 97301 Voice: 503-947-2340 Fax: 503-947-2341

www.oregon.gov/oha

July 8, 2021

Oregon Transportation Safety Committee:

On behalf of the Oregon Health Authority (OHA), I thank the Oregon Transportation Safety Committee (OTSC) and the Oregon Department of Transportation (ODOT) for the opportunity to respond to the 2021 draft of the Transportation Safety Action Plan (TSAP).

OHA's 10-year goal is to eliminate health inequities by 2030. OHA uses the following definition of health equity: Oregon will have established a health system that creates health equity when all people can reach their full health potential and well-being and are not disadvantaged by their race, ethnicity, language, disability, age, gender, gender identity, sexual orientation, social class, intersections among these communities or identities, or other socially determined circumstances.

Achieving health equity requires the ongoing collaboration of all regions and sectors of the state, including tribal governments to address:

- The equitable distribution or redistributing of resources and power; and
- Recognizing, reconciling and rectifying historical and contemporary injustices.

OHA's work includes injury prevention, behavioral health services and chronic disease prevention. Therefore, OHA has an interest in seeing that ODOT and the OTSC are successful in their goals, particularly regarding reducing road fatalities related to alcohol and substance use.

OHA applauds the TSAP for demonstrating the threat of impaired driving with such clear and complete data. As pointed out in Table 1, alcohol is a major contributor to fatal and serious crashes on our roads and highways. Data demonstrate that alcohol, even in comparison to other drugs, represents the majority contributor to health consequences across a host of aliments, including injuries. OHA appreciates you for centering equity in the TSAP. Both of our agencies have dedicated ourselves to this cause and, as reflected in Goal Area 5, we have much to gain by working together, especially for communities of color and Tribal communities.

In the spirit of that collaboration, OHA offers a few suggestions for areas we feel are underrepresented in the current draft of the TSAP.

As a result of OHA's <u>own strategic planning</u> efforts, we have found enforcement and education activities alone are insufficient to affect the large social outcome of reducing alcohol misuse and its consequences, such as road fatalities. Efforts to inform the public and enforcement actions will be ineffective if at the same time <u>alcohol becomes easier to get, at more places, more times of the day, in more ways, for less money</u>. Oregon hasn't

raised the tax on alcohol since 1980, meaning when adjusted for inflation, alcohol is cheaper year over year. There are now more <u>alcohol retail outlets</u> in the state than 10 years ago and the three-tier model of alcohol regulation has been more limited over time.

OHA also has concerns that an enforcement-heavy strategy to combat alcohol and drugrelated crashes will contribute to disproportionate confrontations between communities of color and law enforcement. Furthermore, the volume of individual-level enforcement needed to counter the shifting policy landscape may not be practical in the current budget or political environment.

With these dynamics in mind, OHA suggests the following modifications to the TSAP:

- Add an alcohol tax to the policy priorities for reducing alcohol-related road fatalities;
- Add a policy strategy directed at changing or maintaining strong alcohol retail laws, such as limiting hours and days of service, reducing alcohol outlet density, and making it easier to hold businesses accountable for their role in overserving patrons;
- Broaden the individual-focused communication campaigns beyond drinking and driving campaigns to include community messages to reduce overall binge drinking;
- Shift enforcement to businesses that over-serve patrons; and
- Call out strategies to strengthen community access and diversion programs to increase the use of mental health and addiction services.

OHA stands ready to partner with ODOT and OTSC in pursuing our joint mission of improving the safety of Oregon's roadways and improve the lives of the people in Oregon.

Thank you,

Patrick M. Allen

Director

Attachment 6: Summary of Public Testimony Received and Changes Made

Public Hearing: June 9, 2021

#	Received	Representation	Contact /Source	Testimony Summary	Key Themes	TSAP Team Response	Text Edit (y/n)	Text edit page
	6/9/2021	Michael Holloran, Oregon State Police	Public Hearing	Good afternoon, my name is Michael Holloran. I have been directly involved in Traffic Safety and Occupant Protection for over 22 years. I am a certified child passenger safety seat technician and a member of The Dalles Traffic Safety Commission. Engineering, Education and Enforcement – have always been the three E's of taffic safety, but in 2020 when COVID put a significant damper on Enforcement the number of people driving over 100 mph went through the roof. Fatalities in Oregon were well over 500. Already in 2021 the number of driving complaints is on the rise; most are cell phone and speed related. I have written more cell phone citations in 2021 than ever before and have checked more Commercial Trucks going over 80 mph than all my other years combined and the year is not even half over. Unfortunately I see the future of Oregon's Fatalities going up not down. The number of mentally ill people, most of which are drug induced is sky-rocketing with Oregon essentially legalizing drugs. My patrol shift has become re-active rather than pro-active. This morning my supervisor arrested a drug impaired driver on highway 197 at 99 mph. On the Friday of Memorial Day Weekend, I had a man driving recklessly at over 100 mph, cutting in and out of traffic, while under the influence of multiple substance whose horrific traffic crash shut the freeway down for hours. We have had three motorcycle fatalities in our area in the last two weeks and just a few days ago I had a 19 year old high on drugs dancing naked in the freeway playing a guitar while playing chicken with a log truck. He lost. Last week I contacted a man parked on the side of the road, tying up a baggie of methamphetamine. He was alone and not yet impaired, so I wrote him \$100 citation which if he takes an assessment he doesn't have to pay. Yesterday I	 Lack of traffic safety enforcement and funding. Increased unsafe driving behavior and drug use. Poor legislation. Insufficient traffic safety education. 	The Emphasis Area Risky Behaviors focuses on the items mentioned by the commentor such as road user behavior. The Emphasis Area Improved Systems focuses on the items mentioned by the commentor such as training and education. The TSAP includes some elements regarding legislation, but the TSAP as a planning tool does not have legal authority nor is it a lobbying document.	n n	page

# Received	Representation	Contact /Source	Testimony Summary	Key Themes	TSAP Team Response	Text Edit (v/n)	Text edit page
			stopped a grandfather allowing his 15 yr old grandson to smoke marijuana while driving down the freeway. Currently our legislators are trying to pass new laws that make it nearly impossible for Law Enforcement to stop equipment violations. It is as if no one has bothered to look at the number of DUI arrests that come from equipment violation traffic stops. Just in case you think I am only speaking of Enforcement, you should know that I have been teaching safety belt diversion classes for over 20 years and have seen our local use rates jump from 77% of drivers to 96% of drivers. However, currently our courts are not yet sending safety belt violators to our local classes. On line courses have little to no impact, participants are not even required to pay attention; they could be playing video games or completely away from the computer screen. The number of people not wearing safety belts is up, but the number of people in class is drastically down. Please let our legislators and courts know that Oregon desperately needs to take the handcuffs off our Traffic Enforcement Officers and let them get back to proactively preventing crashes.				
2 6/9/2021	Richard Sheperd	Public Hearing	Thank you all for the opportunity to comment on the proposed TSAP. My name is RJ Sheperd, and I serve as Co-Chair of Bike Loud PDX, and I live in North Portland. Today I am testifying on my own behalf. I want to start by thanking the team for putting together this report. I want to specifically thank the team for working to analyze how race, ethnicity, and income are related to higher incidence of fatal crashes and serious injuries. Our community members who live alongside these dangerous roads have seen historical disinvestment, and we must work to prioritize these neglected facilities. There are five major changes I would like to see addressed in the TSAP: First, I would ask the TSAP be amended to remove the statement that "90% of crashes are due to human error." This has been thoroughly debunked by more	 Prioritize safe systems design. Address safety on arterials. Create complete streets. Address traffic violence perpetuated by vehicle size. Autonomous vehicles safety. Explore automated enforcement. 	The 90% of crashes involving human error is a well-established statistic cited in the AASHTO Highway Safety Manual. Other factors, primarily roadway design, are also important factors and, as such, are addressed in the TSAP. The phrase "90% of crashes are due to human error." will not be removed from the document, but care will be taken to ensure system design and vehicle elements are also considered.	У	87, 91

Contact /Source	Testimony Summary	Key Themes	TSAP Team Response	Text Edit (v/n)	Text edit page
	recent studies, and the TSAP's own admission that minor/major arterials, also known as "stroads", are where the majority of fatal and serious crashes occur further proves this. The TSAP recognizes that stroads are designed with conflict between multiple road users, access, distribution, and speeds. As by others, a "Safe Systems" approach would accept that minor mistakes should not result in deadly crashes. Second, we have the technology to address these deadly stroads, but that seems to have been left out of this report. The first part is recognizing that a stroad is failing at it's two missions: acting as both a street and a road. A street is for local access to schools, businesses, and homes, while a road is meant to offer higher throughput and to connect two places. I ask that the commission strike minor and major arterials from the plan, and instead work toward identifying strategies for how these failing stroads can be transformed to safe, calm, and slower-speed streets or "complete streets" with places for transit, protected bike lanes, sidewalks, and closely spaced signalized crossings. Stroads that are slated to become roads should also minimize driveways by relocating them to adjacent side streets, limit turning movements to signals and roundabouts, and add center medians. Third, we must recognize the impact that the size of vehicles is playing in this epidemic of traffic violence, particularly with regards to pedestrian crashes. I was alarmed that we did not see as much as a mention that pedestrians are 30% more likely to be killed in a crash with an SUV compared to a passenger vehicle. As	Key Themes	ODOT's new Blueprint for Urban Design addresses many of the concerns by the commentor regarding "stroads"/arterials. While the details are not in the TSAP, the Blueprint for Urban Design is referred in the Introduction and 3 separate Emphasis Area actions as a key tool for implementation. Vehicle size was added as a contributing factor to pedestrian collisions in Chapter 6. In general, vehicle details are handled at the federal level and outside the TSAP purvue Connected and Autonomous Vehicles and/Advanced Driving Support Systems are touched on very lightly in the TSAP since 2021 was a focused update to the 2016 document. These topics will likely be addressed in more detail in the 2026 TSAP revision as the technologies, policies, and regulations mature.		edit
	you may already know, the National Highway Traffic Safety Administration (NHTSA) does not perform pedestrian crash testing with any vehicle sold in the U.S. I ask that the TSAP include language recognizing that by not requiring pedestrian testing of all vehicles registered in the state of Oregon, we are blatantly disregarding anyone who walks or rolls on our streets. Fourth, while there were glowing remarks about autonomous vehicles and advanced driver assistance systems, there was not a single mention about the lack of testing of these systems. In 2019, AAA tested 5 different ADAS systems, and none were able to recognize a pedestrian while time traveling at 30 MPH. Numerous Tesla vehicles have crashed into static objects while in "auto-pilot" mode, which have been fatal to their passengers. There was zero mention of how		Automated enforcement is included in the TSAP Introduction and as an Emphasis Area action. The TSAP as a high-level planning document does not identify individual treatment locations.		
	AV's may not recognize people of different races, or those who might be in a				

#	Received	Representation	Contact /Source	Testimony Summary	Ke	y Themes	TSAP Team Response	Text Edit (v/n)	Text edit page
3	6/9/2021	Paula Leslie, Bike PAC of Oregon	Public Hearing	wheelchair or on a bicycle. We must recognize that without adequate testing of ADAS systems and AV's, we are placing Oregonians as the human test subjects instead. Lastly, while there is some mention of automated enforcement, I would ask that the Commission put forward language that specifically targets Highways (State and Local) for expanded automated speed enforcement. Automated speed enforcement technology has been around since the 1980's, and has been shown to dramatically reduce speeders within weeks of being applied. As Oregon wants to pursue equity, automated speed enforcement will significantly reduce the potentially deadly police interactions between our BIPOC community members, while still being effective at ensuring compliance with safe speeds. I'm commenting on the Transportation Action Plan that goes into detail about (pg 25) offering motorcycle safety in the state realm when it comes to infrastructure planning and discussions, however at the local level, motorcycles are not mentioned or discussed in infrastructure planning, engineering, road grade construction and repair. I've reached out to my local county with bikes and pedestrians and with the city and they've been really welcoming and surprised at the differences in needs of motocycles when it comes to traction and visibility issues that are a little different than other road users even though they are talking multimodal and reaching out to different communities. I would like to see motorcycles needs (traction aand visibility) at the local levels, either with the bicycle and pedestrian committee, or with city planning and engineering, and I'm one person and I would go around to all the cities and counties and let them know that the motorcycle needs are different however, I would like to see that written into the TSAP at more of a local level including more motocycles in their planning in order to address roadside departures and things like that.	•	Motorcycle safety. Bike and pedestrian safety.	The TSAP will include a modification to Motorcyclist Action # 4 to include an emphasis on improving motorcyclist safety awareness among practicioners (e.g. engineers and planners). Motorcyclist Action #4 will be updated to read: "Train engineers, planners, and maintenance personnel to adopt and implement road surface maintenance practices across jurisdictions that reduce hazards for people operating motorcycles."	у	97
4	6/9/2021	Clay Veka, Portland Bureau of Transportation	Public Hearing	Thank you for the opportunity to testify on the draft 2021 TSAP. Appreciate that we share the goal to eliminate deadly and serious injury crashes, and the tremendous effort that has gone into developing the plan. I will be making seven main points. 1. Safe systems – the draft TSAP should be built on a safe systems approach to safety. The principles underpinning knowledge that people	•	Prioritize safe systems design. Identify unsafe locations in the plan. Transparency in past ODOT expenditures and progress.	1. Concur that road owners have extra responsibility. Alongside that, the TSAP also chooses to include road user responsibility / risky behaviors as an area of interest. ODOT's new Blueprint for Urban Design addresses many of the concerns by the commentor regarding	n	

#	Received Representation	Contact /Source	Testimony Summary	Key Themes	TSAP Team Response	Text Text Edit edit (y/n) page
			make mistakes which can lead to crashes however no one should die or be seriously injured as a result of these mistakes. We, as roadway designers and operators have extra responsibility to design streets to keep people safe. Throughout the draft TSAP strategies and actions lead with personal responsibility, however personal responsibility should be minimized in favor of design factors that elicit safe behavior. 2. Infrastructure – infrastructure modifications are within direct control of ODOT and can significantly improve traffic safety outcomes. Yet infrastructure is lightly touched upon in the draft TSAP. There should be a dedicated section that discusses the types of interventions known to reduce crashes such as: speed limits, lighting, road diets, more crossings, protected bikes lanes, etc. There should also be specific commitments to investing in safe infrastructure modifications. 3. High crash roads with limited dollars – identifying top locations for safety investments is critical. This draft plan should include analysis of the top high crash roads either in the state or within the regions for fatal and serious crashes. This would help provide important guidance to all jurisdictions figuring out where to invest with data driven safety infrastructure. 4. Investments – the draft plan states that of the values that guide ODOT decision making, safety is number one, which is commendable. To support this statement there should be information that highlights ODOT's past expenditures on safety, including how safety funds were spent and the percent of the total budget dedicated to safety. And looking forward, a commitment that included in the TSAP spending on safety as well as spending on low income, underserved, and BIPOC communities of color. 5. Equity – I appreciate the focus on low income, underserved, and BIPOC communities highlighted in the draft plan, and it is critical to the work that any public body is undertaking. To support this focus, there should be a commitment to extra investments in safety in	 Ensure investments in high safety corridors in vulnerable communities. Identify actionable investments to improve safety in the plan. 	design. While the Blueprint for Urban Design elements are not detailed the TSAP, the Blueprint for Urban Design is referred in the Introduction and three separate Emphasis Area actions as a key implementation tool. 2. The TSAP includes an Emphasis Area with specific subsections focused on infrastructure, including short-term actions to address intersections, roadway departure, and bicycle infrastructure needs. 3. The five-year TSAP is not a location-specific document. ODOT's All Roads Transportation Safety (ARTS) program, among others, identifies safety needs and prioritizes projects. 4. Regarding funding, the TSAP is not an ODOT-only or infrastructure-only document, so providing that subset of spending would be incomplete. Future investment commitments are provided by ODOT in the Statewide Transportation Improvement Program, not TSAP. 5. The team coordinated with ODOT's new Office of Social Equity to identify the most important places to address this in the 2021 TSAP. Implementation will include the detailed elements listed by the commenter. 6. The TSAP update was a limited-scope update with the primary purpose of	

# Received	Representation	Contact /Source	Testimony Summary	Key Themes	TSAP Team Response	Text Edit (y/n)	Text edit page
			6. Effective actions – the draft highlights the clear goal of eliminating traffic deaths and serious injuries by 2035. To give us a shot at achieving this goal, the plan needs a list of specific measurable actions and associated timelines that ODOT commits to. This list should also identify specific strategies that partner agencies and organizations like PBOT should lead. I'll defer the rest of my time, but I wanted to just mention that targets shouldn't be moving targets, but should fixed in time to hold ourselves accountable. Thank you and I hope to see adjustments in the plan reflected from the testimony today.		updating the crash data and the short-term actions. Additional implementation details will be provided in the upcoming Implementation White Paper and ensuing efforts. 7. During the TSAP update a group of safety stakeholders were convened for two workshops to discuss several target setting options, and that stakeholder group decided on the current approach documented in the TSAP.		
5 6/9/2021	Hau Hagadorn, Oregon Bike and Pedestrian Committee	Public Hearing	We'd like to acknowledge that updating the TSAP is much needed and a good step in the right direction to achieve sero deaths. We appreciate the update identifies the need to address transportation safety and recognizes vulnerable road users including people who walk and bike. We appreciate the improving safety requires the collective efforts of a myriad of stakeholders from transportation agencies, medical services, public health agencies, advocates, and the travelling public. The plan also recognizes the need to address safety comprehensively through actions like infrastructure improvements, policy, legislation, and education. It also starts to address the disproportionate impacts felt by underserved communities, in particular black and indigenous communities. However, as the plan suggests, we're concerned that this incremental change is not going to be good enough, evidenced by continuing increases in transportation traffic fatalities. We are failing as a state to reverse our fatal and severe injury crash trends, and many of the actions identified in the TSAP lack specifics that are needed to be effective. While it is comprehensive given limited funding, the plan lacks prioritization of the top set of actions that can have the biggest impact on saving lives. That if funding is only available to do, for example, three things, or if the legislature can	 Explicit plan for addressing issues that protect vulnerable users. Address issues on arterials. Create cohesive plan for funding and legislative action. Prioritize racial equity safety improvements. 	Vulnerable Users and Arterials: ODOT's new Blueprint for Urban Design addresses many of the concerns by the commentor regarding design. While the Blueprint for Urban Design elements are not detailed the TSAP, the Blueprint for Urban Design is referred in the Introduction and three separate Emphasis Area actions as a key implementation tool. Further, bicyclists and pedestrians each have sections and a list of specific actions in Chapter 6, Emphasis Areas. Funding and Legislation: The TSAP is an overarching Safety document, but it does not have legislative or funding authority. A focus on equity was added to the 2021 TSAP with support from the ODOT Office of Social Equity, and it will continue to improve through implementation and future updates.	n	

#	Received Rep	Contact /Source	Testimony Summary	Key Themes	TSAP Team Response	Text Edit (y/n)	
			only make three changes, what should be at the top of that list that will have the biggest impact.		Enforcement continues to be a proven safety counteremeasure, though it is		
			 What is the plan recommending that ODOT do differently than in the past 20 years that will provide positive outcome and make our entire transportation safer? Especially for vulnerable users and those in low income and communities that have high percentages of Black and Indigenous or people of color. How does this plan differ from previous plans? If ODOT understands that causes, will the actions be bold enough to reverse the trend of increasing traffic fatalities and serious injuries? In 2020 Portland saw the highest number of traffic fatalities in the past 24 years. If this is consistent with the numbers across the state, the performance targets for 2021 and 2022 are far too optimistic, and the fact that ODOT's 10 year crash report already indicates that the total number of traffic fatalities for 2019 has only been marginally less than the previous year. If data are critical to decision making does the TSAP address how ODOT will resolve the issue of data timeliness and timing of crash data which is imperitive to the data driven decision making. The data also consistently show that arterials are the most dangerous roads with a significant portion of traffic fatalities and serious injuries. How does the TSAP address specific actions to remediate the issues that make arterials so dangerous to all users of the transportation system? Especially for those that walk. The plan lack direction – what changes need to be made to funding allocations, and what legislative changes need to be made to achieve the various safety goals? While the plan attempts to address racial equity and disparities, enforcement is mentioned 103 times in the document. If racial equity is a priority, there should be a focus on unbiased solutions rather than increased law enforcement actions that require the intervention of police officers. Safety is of utmost importance to unpack and the safety goals are in our workplan. 		recognized that racial inequity in law enforcement must be addressed as part of the work. An acknowledgement of this critical issue is provided on page 101. Additionally, Enforcement Actions 1, 2, and 3 address the need for unbiased enforcement.		

#	Received	Representation	Contact /Source	Testimony Summary	Ke	y Themes	TSAP Team Response	Text Edit (y/n)	Text edit page
				We would like to collaborate more with ODOT and other committees to help achieve Vision Zero. Thank you for your time and the consideration of our comments today.					
6	6/9/2021	Dick Dolgonas	Public Hearing	I like the document, it's very good. It needs to be highlighted throughout the state. There are a number of areas that need to be addressed: Speed Drunken/drugged driving Inadequte driver training Particularly concerned with bike and pedestrian safety Just seems like a lot of the actions that need to be taken, while there are changing attitudes, I think some of it needs to be addressed legislatively. For example: as much as drugged and drunken driving is important, there are few alternatives to a lot of people driving and I don't want to just rely on penalties to make our community safer. We need to have different ways to prohibit people from driving if they have problems and we need to make sure there are alternatives in Roseburg. If someone shouldn't be driving, they don't have much of an alternative. Some of the alternatives, biking and walking, are not safe. I don't know many people who would bike next to 30-40-50 mph traffic to get to work/school/medical appointment, I just think that we need to take money that has been allocated to repairing and expanding our roadways and dedicate it to safety and making improvements for those alternative modes. Glad to see we have about a month to add our additional comments.	•	Speed concerns. Influenced driving concerns. Improve driver training and education. Bike and pedestrian safety.	Speeding, Pedestrian, and Bicyclist Safety are primary concerns and topics in the TSAP, complete with Emphasis Area actions for each of these categories. Continued driver education and training is included in the TSAP. The TSAP includes discussion and actions related to these issues on p. 103. Impared driving is an area of emphasis in the TSAP. The document does not have legislative or funding authority, but safety advocates can provide information to elected officials to help support legislative decisions. ODOT's new Blueprint for Urban Design addresses many of the concerns by the commentor regarding design for bicyclists and pedestrians. While the Blueprint for Urban Design elements are not detailed the TSAP, the Blueprint for Urban Design is referred in the Introduction and three separate Emphasis Area actions as a key implementation tool.	n	
7	6/9/2021	Lake McTigh, Metro	Public Hearing	Thank you for the opportunity to provide testimony on the draft TSAP. Metro appreciates the efforts of all those involved in working towards safer roadways for all people travelling and walking.	•	Elevate and address racial equity in each of the plan's goals. Prioritize safe system design.	1. A focus on equity was added to the 2021 TSAP with support from the ODOT Office of Social Equity, and it will continue to improve through implementation and future updates.	n	

#	Received	Representation	Contact	Testimony Summary	Key	Themes	TSAP Team Response	Text	Text
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				On average, more than one person is killed a day by traffic crash in Oregon, and over 75 people are injured. It is imperitive that we have effective strategic plans and policies in place to address the alarming trend in rising traffic deaths and life changing injuries in Oregon, and to address the disproportionate impact on Black Oregonians and other people of color and of low income communities. A few main comments on the draft today: • Elevate racial equity even more in the plan. Metro appreciates that equity has been integrated into areas of the plan already, however racial equity should be further elevated. Incorporate additional racial equity data into the analysis of the plan and include ODOT's analysis of pedestrian deaths and equity earlier in the plan. Address racial equity in each of the plan's goals. Currently racial equity is only mentioned in Goal 3. Include actions that further focus on systemic change and increasing and prioritizing state roadway investments in historically underserved communities throughout the state. • Fully adopt the safe roadway system into the plan. The safe system approach is a proven strategy to eliminate fatal and life changing injuries for all road users through a holistic view of the road system that first anticipate human mistakes and second keep impact on the human body at tolerable levels primarily through slower speeds. While TSAP alludes to some elements of the safe system approach it puts too much emphasis on changing the attitudes and behaviors of individuals and not enough emphasis on creating a safe system through design and technology changes. The TSAP should adopt the safe system framework as the state safety framework. • Report out on the 2016 TSAP performance targets in the plan. Reporting on targets is a helpful way to understand if the adopted policy, strategies and actions are getting the desired results. Targets set in the 2016 TSAP were not met, yet 2021 TSAP does not report this. In the 2016 TSAP the targets set for the annual number of traffic de		Report out on 2016 TSAP performance targets. Eliminate moving targets. Additional crash data analysis.	 The Safe Systems approach is valuable and elements of it are presented throughout the TSAP; however this TSAP update was purposely designed to also include an emphasis on influencing risky behaviors. The 2021 TSAP shows crash data available from ODOT's system through 2018 based on the limitations of that system. During the TSAP update a group of safety stakeholders was convened for two workshops to discuss several target setting options, and that group decided on this approach to use the most recent information to set future targets. The TSAP must balance data analysis details with readability and approachability. Additional information, interpretation, and analysis are available by contacting ODOT directly. 	(y/n)	page

#	Received I	Representation	Contact /Source	Testimony Summary	Key Themes	TSAP Team Response		Text edit page
				investments and policy changes have or have not made in order to accurately assess if current practices are resulting in desired outcomes. • Eliminate moving targets in the plan. Performance targets in the TSAP are changed using a 3% change rate based on the most recent 3-8 years crash history. With this method, if traffic deaths and serious injury go up, then less emphasis the targets are set. For instance, in the 2016 plan the target for traffic deaths in 2019 deaths was set 343 people killed. In the 2021 plan the target for 2019 (the same year) is set 444 traffic deaths. A target for 100 more people killed in crashes. Changing the annual death for traffic crashes each time the plan is updated is not consistent with the plan's stated vision of zero deaths and life changing injuries. The 2021 TSAP should stick with the targets set in the 2016 TSAP and report on progress made each time the TSAP is updated. • Include additional data anlysis in the plan and link the analysis to additional actions. Metro appreciates ODOT's role in providing crash data and data analysis across the state, for instance the recent data on pedestrian injury and equity, and it illuminates the disproportionate impact of crashes on Black people and people of color and lower income communities. It's invaluable to providing a data driven approach to reducing serious crashes. Additional and more in depth analysis in the TSAP is needed to better understand where serious crashes are occurring, who is involved, and the factors that led to the crashes. Identification of the highest injury and highest risk corridors in the state is also a missing element. Without additional analysis the plan is left with blindspots about what the best			(y/n)	page
				strategies and actions are to reverse the upward trend of traffic death. What is working and what is not working. Thank you and Metro will submit a formal comment letter by the July 9 th				
8	I V	Nick Fortey, FHWA Washington Division Office	Public Hearing	deadline. Thank you for the opportunity to provide testimony today and the review-driven draft of the TSAP. The FHWA requires states to develop a strategic highway safety plan and FHWA	 Prioritize safety targets. Use thematic data analysis for fatal and high injury crashes. 	1. During the TSAP update a group of safety stakeholders was convened for two workshops to discuss several target setting options, and that group decided on	n	

#	Received	Representation	Contact	Testimony Summary	Key Themes	TSAP Team Response	Text	Text
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#	Received	Representation	Contact /Source	want to be clear there are comments here on the content are not as required elements, but as a part of our ongoing engagement to proactively work to reduce the toll of traffic crashes, especially in reducing fatalities and serious injuries. I'd like to focus on three themes: • Importance of safety targets – the use of targets is important to draw attention to the overall goal to reduce fatalities and serious injuries. While those global target are important, it is equally important to consider program-fucsed safety targets that would mesh well with the long term target setting efforts – already evidenced through and included in the highway safety plan. Hese more focused targets provide needed clarity to more effectively drive results. While the target numbers are important, the process used for setting targets whether globally or more program forcused, are just as important and are arguably moreso. We would encourage the broad inclusion of statewide experts and interested parties into the target setting exercise. • We would encourage the inclusion of data analysis that divide the data more thematically in terms of contributing factors, thus more factors, and geographically. Especially in terms of off-state highway system where there is a significant fatality and serious injury toll. This would better evidence the scope of the problem and help to provide solutions. • Urge a more robust assessment of policies using a five P formulation. • Policy – what is the framework that supports the programs and practices	Utilize the "Five P" assement tool.	this approach to use the most recent information to set future targets. 2. The TSAP must balance data analysis details with readability and approachability. Additional data analysis and information will be used for implementation of the TSAP through the ARTS program and other programs. 3. The TSAP Implementation White Paper will be started this fall and will consider the "Five P" assessment tool to help inform TSAP implementation.	Text Edit (y/n)	edit
				 Urge a more robust assessment of policies using a five P formulation. Policy – what is the framework that supports the programs and 				
				 Promise – what is the potential that the programs and practices could achieve in reducing fatalities and serious injuries Perils – what are the impediments to reaching those goals and how have those impacted achievement and how has the policy been, or will be, adjusted. Thank you for considering these comments.				