

STATE OF THE SYSTEM

2016 REPORT ON OREGON'S TRANSPORTATION SYSTEM



OREGON DEPARTMENT OF TRANSPORTATION

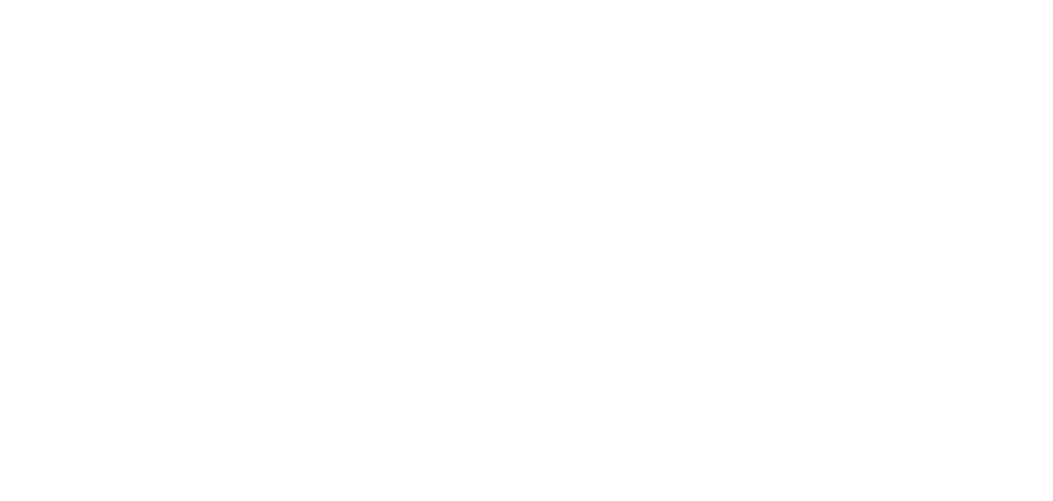


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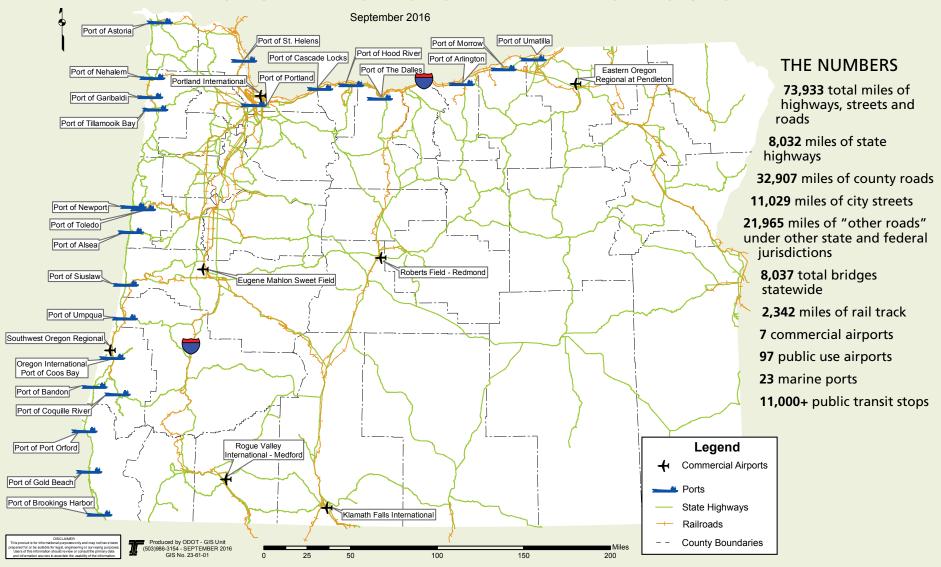
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STATE OF OREGON

TRANSPORTATION SYSTEM INFRASTRUCTURE



INTRODUCTION

AN OVERVIEW OF OREGON'S TRANSPORTATION SYSTEM AND WHY IT'S IMPORTANT FOR OREGON

regon's transportation system is a complex, expensive collection of public and private assets that facilitates the safe and efficient movement of people and goods into, out of and around the state. The system includes airports, freight and passenger rail, public transportation, marine ports, state highways, county roads, local streets, bridges, pedestrian walkways, bicycle paths, other facilities, and supporting infrastructure and services. The transportation system serves important functions for all Oregon residents, businesses and visitors alike; employees commuting to work, children going to and from school, farmers shipping crops to market, businesses receiving materials for use in manufacturing, high-tech manufacturers sending their products across the globe, consumers buying groceries at the local market. An efficient and effective transportation system is critical for maintaining and enhancing Oregon's economy and quality of life.

PURPOSE OF THE STATE OF THE SYSTEM REPORT

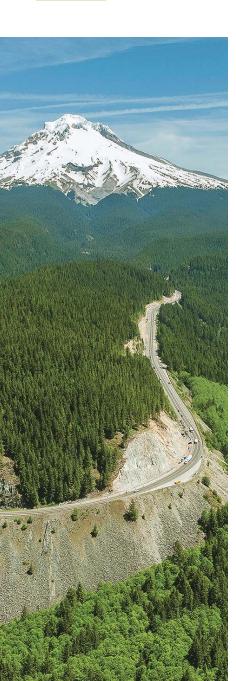
Every two years the State of the System report provides key information about how Oregon's transportation system is performing in relation to the seven goals of the Oregon Transportation Plan (OTP). The report increases awareness of the state's transportation assets, and the trends and challenges affecting these assets. The report provides a

statewide high level look with emphasis on the portion of the system managed by the Oregon Department of Transportation (ODOT).

THE OREGON DEPARTMENT OF TRANSPORTATION AND ITS ROLE IN THE SYSTEM

ODOT, known until 1969 as the State Highway Department, began in 1913. In 1919, Oregon became the first state to enact a tax on fuel to fund road building, so the agency could "Get Oregon out of the mud." Today the agency is organized to better provide an integrated intermodal system, balancing the needs of all users. ODOT's mission is "to provide a safe, efficient transportation system that supports economic opportunity and livable communities for Oregonians." That mission encompasses transportation planning, developing, managing and maintaining the state highway system, transportation safety, rail safety, licensing and regulation of drivers, motor vehicles and motor carriers, assistance to public transportation providers, passenger rail, active transportation and more.

Local governments and other public and private transportation providers have an equally important role in Oregon's transportation system through the development and management of county roads and city streets, bicycle and pedestrian facilities, public transportation facilities and services, airports, rail and port infrastructure, forest service roads and other services.



TRENDS AFFECTING OREGON AND ITS TRANSPORTATION SYSTEM

A number of major trends and issues are impacting state agencies, counties, cities and other transportation providers across Oregon. Some of these are long-term trends introduced in earlier editions of the State of the System report, while others are new conditions that pose significant impact to transportation in Oregon.

→ Economic Trends

Oregon's economy relies on technology-based businesses, service-related industries, forest products, agriculture, manufacturing and other sectors, all of which require a range of transportation services for workers, products, and services. In addition to providing a framework to support economic activity, transportation investments support job creation and retention through construction and infrastructure projects. While recent Oregon Office of Economic Analysis data indicates some U.S. states are showing signs of a slowing economy, Oregon's economic activity continues to grow post-recession. Oregon is outpacing the typical state by a considerable margin today for both job and income gains. This continued growth results from the state's underlying fundamentals like its industrial history and strong in-migration flows. The Oregon Office of Economic Analysis has indicated that job gains have begun to slow in recent months, however these gains remain enough to keep pace with current population growth. The result is a return to what can be considered normal labor market dynamics for the state.

→ Aging Infrastructure

Oregon's transportation infrastructure is getting older and more expensive to maintain, preserve and expand. Many critical pieces of infrastructure such as bridges, interchanges, locks and jetties are between 50 and 80 years old. Increased maintenance and preservation investments are necessary just to keep these older facilities safe and operational. Because there are so many structures, Oregon needs to invest a significant portion of resources in maintenance and preservation of facilities to avoid more costly reconstruction later on.

→ Aging Population

By 2035, nearly one-quarter of Oregon residents will be over the age of 65. As the Baby Boomer cohort continues to retire, there will be expanding need for transportation options for older adults. While many Baby Boomers will continue to drive, research suggests that many will rely on new and diverse opportunities to travel without having to drive alone, such as public transit, walking and bicycling, car sharing, and other transportation options. The U.S. Census Bureau American Community Survey shows that individuals aged 65 and older represent a larger share of population in rural areas (over 21 percent) than in urban areas (under 14 percent).

→ Increasing Population

Oregon's population growth is starting to recover from its recessionary slump. Much of the upswing in population growth comes from in-migration. Net in-migration is expected to account for most of Oregon's population increase over the coming decades. By 2040, the state's population is forecast to increase by 35 percent, resulting in a population of more than 5.2 million, creating new challenges and issues for the transportation system. Most of this growth will be concentrated in the Willamette Valley, Bend area, Medford area, and Columbia, Umatilla and Morrow Counties. Since 1990 the population of Oregon's urban areas has outpaced growth in rural areas by over 40 percent.

→ Changes in Vehicle Miles Traveled

The number of vehicle miles traveled (VMT) is one measure of demand on the highway system. VMT has been growing steadily since 2013 as Oregon recovered from the most recent recession; however recent data indicates a slowing of the growth starting in 2016. Despite this reduction in the growth rate, VMT in Oregon is forecasted to increase through 2018, growing at a rate similar to population growth.

→ Active Transportation and Public Health

The phrase "active transportation" refers to multimodal transportation solutions that connect people to where they need to go, such as work, school and essential services, using "active" modes such as walking and bicycling and connecting to public transportation. Increasingly, communities are interested in providing active transportation options to support healthy lifestyles and community livability. ODOT and the Oregon Health Authority (OHA) have been collaborating to support communication and planning for safe active transportation solutions and to better understand the interactions of transportation and health.

→ Sustainability and the Environment

Oregonians are committed to preserving and enhancing the natural environment of the state. ODOT enacts this commitment through its work, including wildlife crossings and fish passage, climate adaptation, recycling programs and using clean fuel options in construction equipment when possible. ODOT and the Department of Land Conservation and Development (DLCD) have also been helping metropolitan areas conduct analysis which explores various strategies for reducing transportation-related emissions and other negative transportation impacts. Beyond reducing greenhouse gas (GHG) emissions, these strategies appear

to provide other benefits such as improved public health, cleaner air, improved transportation safety, increased active transportation, and a more efficient transportation system. Oregonians are also concerned about other impacts on the environment. These include protecting wetlands, waterways and air quality and inhibiting invasive species. Transportation projects have to address all of these considerations on an ongoing basis.

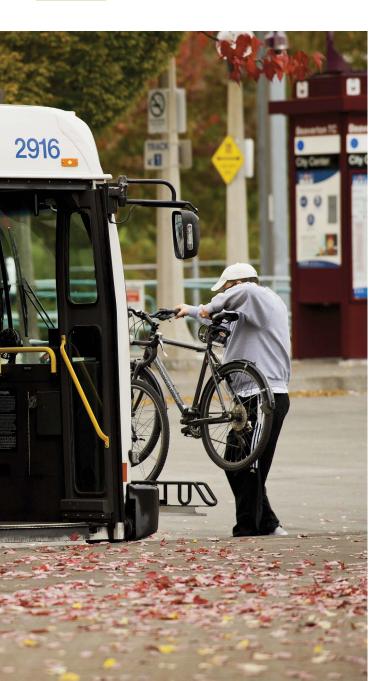
→ Increasing Safety and Security

Transportation safety and security practices allow individuals to travel on the transportation system in a safe manner, and serve to keep the transportation system secure and operational. Oregon continually works to reduce deaths, injuries, crashes and incidents on the transportation system for all users and modes. Because the transportation system is critical to the movement of people, goods and emergency services, adequate protections need to be in place to ensure that the system will function given potential natural or manmade hazards. Oregon must be able to respond to emerging safety and security issues, and be prepared for sudden events so that safety and mobility are managed effectively.

THE OREGON TRANSPORTATION PLAN AND ITS IMPLEMENTATION

The Oregon Transportation Plan (OTP) is the state's long-range multimodal transportation plan. The OTP considers all modes and jurisdictions of Oregon's transportation system as one integrated system and addresses the needs of transportation in Oregon through 2030. The seven goals of the OTP (with associated policies and strategies) are aimed at guiding the actions, investments and other key decisions of state and local agencies, regional and local governments





and transportation providers. In addition to the OTP, the mode and topic plans address specific aspects of the transportation system.

→ Mode and Topic Plans

The mode and topic plans are statewide policy plans which cover goals and policies for specific transportation modes and topics. These plans serve as elements of the Oregon Transportation Plan and help to achieve the OTP goals. The plans address policy areas and issues to support decision-making, strategic investments and project prioritization that help deliver an interconnected, robust, efficient and safe transportation system for Oregon. The plan guides the state through efforts such as prioritizing projects,



developing design guidance, collecting important data and other activities that support a complete multimodal transportation system. The mode and topic plans include:

- Oregon Aviation System Plan
- Oregon Bicycle and Pedestrian Plan
- Oregon Highway Plan
- Oregon Public Transportation Plan
- Oregon Rail Plan
- Oregon Transportation Options Plan
- Oregon Transportation Safety Action Plan

The Oregon Transportation Commission has adopted updates to a number of these plans, including; The Oregon Transportation Options plan in 2015, the Oregon Bicycle and Pedestrian Plan in 2016, the Oregon Transportation Safety Action Plan in 2016. The update of the Oregon Public Transportation Plan is currently in progress and expected to be complete in 2018. ODOT will continue to update these plans as needed to stay current with transportation trends affecting the system to provide the best transportation system possible for Oregon.

THE SEVEN OTP GOALS

Goal 1 – Mobility and Accessibility: Providing an integrated multimodal transportation system that ensures the ability to move into, out of and throughout the state with connections between modes of transportation.

Goal 2 – Management of the System: Managing transportation infrastructure and its operation efficiently.

Goal 3 – Economic Vitality: Promoting Oregon's economy through an efficient and effective transportation system.

Goal 4 – Sustainability: Providing a transportation system that balances environmental, economic and community objectives now and in the future.

Goal 5 – Safety and Security: Protecting Oregonians and the system from natural and manmade hazards.

Goal 6 – Funding the Transportation System: Striving toward a flexible funding structure that meets needs.

Goal 7 – Coordination, Communication and Cooperation: Working effectively with all parties.

In this report, the core section headings match the seven OTP goals. Each section begins with the summarized OTP goal. To find the complete goal language as well as the supporting policies and strategies, please refer to the OTP website: https://www.oregon.gov/ODOT/Planning/Pages/Plans.aspx

GOAL

MOBILITY AND ACCESSIBILITY

Provide a balanced, efficient and integrated transportation system that ensures interconnected access to all areas of the state, the nation and the world. Promote transportation choices that are reliable, accessible and cost-effective.

n effective transportation system provides for the safe and reliable movement of people, goods and services to all areas inside and outside of the state in a balanced, cost-effective manner. An integrated multimodal transportation system enhances quality of life and economic vitality through ensuring appropriate access to all areas of the system with connectivity between different modes and places. This section primarily addresses the movement of people in Oregon; freight movement is discussed in greater detail in Goal 3, "Economic Vitality."

Mobility is the ability of all transportation users to travel between destinations with relative ease of movement. Accessibility is the opportunity for people to connect to important destinations such as jobs, housing, education, services and social and recreational opportunities using a variety of transportation modes. Accessibility is impacted by the presence or absence of a mode and the connections to use that mode to reach key locations via the transportation network. Mobility and accessibility are more than the ability to operate a private vehicle on the roadway; they also include the ability to use a variety of transportation modes. Mobility and accessibility issues include public transportation by bus or rail, alternatives for longer distance travel between cities, special transportation services for senior citizens and people with disabilities, and facilities to support travel by walking, bicycle, wheelchair, scooter, or other means of travel.

An integrated transportation system with diverse options and seamless transfers between modes is important for Oregon's future – both to facilitate travel choices and economic activity in the good times and to foster economic recovery in the bad times. Oregon's current transportation infrastructure has inadequate capacity and the system often lacks the transportation options that Oregonians need today. As Oregon's population continues to increase, the demands on the system will only increase.

CHALLENGES TO MOBILITY AND ACCESSIBILITY

- Highway congestion throughout the state continues to increase and last for longer periods of time.
- Population growth due to in-migration will continue as Oregon's economy and quality of life attract new residents. This will increase congestion and place additional constraints on the transportation system.
- Funds for expansion and maintenance of roadways have been decreasing relative to real dollars.
- Oregon's goal of a seamless network of walking and bicycling routes within urban areas remains incomplete; currently almost 40 percent of state highways in urban areas lack basic walking and biking facilities.
- Travelers between cities often lack options beyond a private automobile. This limits mobility for Oregonians. Choices are improving but continued investment in connectivity and travel choices is needed.
- Local communities and transit districts that provide public transportation services have difficulty securing adequate funding for operations.
- Access to commercial air service remains a challenge in many of Oregon's rural areas.

Responses to these trends and conditions require innovative decisions that maximize the impact of limited investment dollars. These decisions must prepare Oregon for the future, balancing the use of limited funds on multimodal solutions for the urban, rural and freight mobility needs of Oregon.

HIGHWAY CONGESTION

Improvements to Oregon's highway infrastructure are expensive, and given limited resources it is necessary to be strategic in all investment decisions. There are alternatives to consider that address highway congestion, especially in urban areas. These include Intelligent Transportation Systems, safety programs, improvements to public transportation services, bicycle and pedestrian facilities, as well as increased rates of ridesharing, carpooling, vanpooling, teleworking and telecommuting. Measures that reduce single occupancy auto trips are often less expensive and can be as effective at reducing congestion as roadway expansions, but these approaches also have limitations.

FREIGHT MOBILITY HUBS

Freight mobility hubs are part of a strong multimodal freight transportation system as they allow bulk goods and containers to be transferred between modes, for instance from truck to rail, spurring financial and energy efficiency. These intermodal facilities support a variety of industries moving goods into, within, and out of Oregon, helping Oregon's economy thrive. One example is the Prineville Freight Depot, which converted an abandoned sawmill into a modern transload, reload, warehouse and managed distribution facility for truck and rail shipments in central and eastern Oregon.



Columbia Gorge Express

ODOT launched its new Columbia Gorge Express bus service on May 27, 2016 with round-trip service linking the Gateway Transit Center in Portland with Rooster Rock State Park and Multnomah Falls. More than 4,600 bus trips to the public were provided over the four-day opening weekend, reflecting the demand for service. The two-year pilot service, which operates Friday through Sunday from May through September, provides transportation options that help relieve traffic congestion and improve safety along I-84 at Multnomah Falls, one of the most popular attractions in Oregon. Funding beyond the two-year pilot service is uncertain.

TRANSPORTATION OPTIONS

Transportation Options strategies and programs increase traveler opportunities to choose to bike, walk, take transit, share rides and telecommute. In 2015, the Oregon Transportation Commission adopted the Oregon Transportation Options Plan, which promotes an efficient, reliable and affordable transportation system to support Oregon's growing population and economy.

Transportation Options can help make more efficient use of the existing transportation infrastructure and support the economy by reducing congestion, thereby improving the movement of freight locally and across the state. It can also help support community health goals through increased opportunities for physical activity, decreased emissions, and reducing the amount of money households spend on transportation costs such as fuel. Transportation Options are also critical to Oregon's growing elderly population who may depend on alternatives to driving.

WALKING AND BICYCLING

Oregon is often listed as one of the most bicycle and walking friendly states in the nation. In 2015, Oregon ranked 6th in the nation on the League of American Bicyclists Bike Friendly State rankings with nine cities, 42 businesses and four universities named as bicycle friendly. The US Census 2011 American Community Survey reports that Oregon has among the highest mode share of bicycle commuters in the nation, with 2.3 percent of commuters traveling primarily by bicycle and 3.9 percent of commuters traveling primarily by walking.

In 2016, the Oregon Transportation Commission adopted the Oregon Bicycle and Pedestrian Plan which provides a vision and a policy framework for investment strategies and decision making within the context of the transportation system as a whole. Key initiatives in the plan include defining the bikeway and walkway networks, improved data collection methods and program level performance measures.



PUBLIC TRANSPORTATION

Oregon's transit system is a diverse mix of over 175 transit services delivering a wide variety of service types, ranging from regularly scheduled service on fixed routes to dialaride service that operates similar to a taxi service. Much of the system is publicly supported. In 2016, fixed route transit providers in Oregon provided over 46 million miles and 2.6 million hours of transit service to over 11,000 transit stops. Approximately half of Oregon's population lives within one quarter of a mile of a transit stop. A fleet of more than 2,000 publicly owned transit vehicles serve Oregon: about 800 in the Portland Metro area, 400 in other urban areas and 800 in rural communities around the state. ODOT resources helped purchase about half of these vehicles.

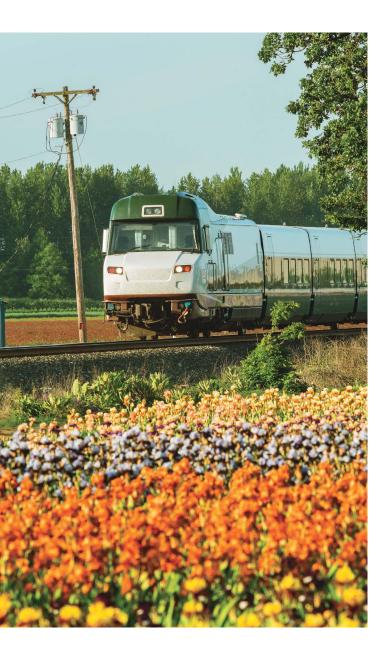
→ The Statewide Transit Network

The statewide transit network refers to all Oregon transit service; ODOT has been making steady progress in targeting investments in the statewide transit network. In 2016, ODOT identified 33 "key transit hubs" in Oregon. Key transit hubs are located in each of ODOT's five geographic regions and in 16 Oregon counties. These hubs are an important component of the overall connected transit network. Each key transit hub is served by three or more fixed route transit services. Improved understanding of the transit network comes from investments in creating and maintaining standardized transit scheduling data (General Transit Feed Specification or GTFS data) and data analysis tools.



Active Transportation Needs Inventories

ODOT is working to create more walk and bike friendly networks in communities across the state. The Active Transportation Needs Inventory (ATNI) was developed to identify and evaluate pedestrian and bicycle facility gaps in the existing transportation system. The ATNI provides an inventory of existing pedestrian and bicycle facilities and an evaluation tool to assist with strategically identifying future projects that provide the greatest benefits for various users. The evaluation tool was developed with extensive input from a Technical Advisory Committee, Stakeholder Advisory Committee, and members of the public. The ATNI has been completed in ODOT Region 1, where the work identified needs in over 16 major corridors throughout the region. The ATNI is underway in ODOT Regions 4 and 5 to identify pedestrian and bicycle facility gaps.



REGIONAL AND INTERCITY SERVICES

Regional and intercity public transportation services are important links between communities and benefit Oregonians that travel long distances. In many parts of the state these services provide essential connections for those with limited mobility, older and younger individuals, and individuals who cannot or choose not to drive. These connections serve individuals traveling long distances for employment, housing or services, as well as older adults traveling long distance for medical or other needs. Public transportation links between cities and between population clusters in rural areas are an important component of the transportation system.

→ POINT Service

ODOT invests in improving long distance connections around the state, providing grants to local and regional transit agencies and investing in the intercity POINT bus service. ODOT has been managing the POINT bus service since 2009 with the objective of providing new or additional public transit services in areas that previously had limited travel options. The five POINT routes, named after the regions in which they operate, help connect urban and rural communities to each other and to important transportation hubs around the state. Visit the POINT (www.Oregon-POINT.com) website for more information on services, individual routes, schedules, ticket pricing and more.

→ Passenger Rail

The Amtrak Cascades is an important element of Oregon's intermodal transportation system. Intercity bus service and local transit integrated with the Amtrak Cascades service expands transportation options for people throughout Oregon and beyond. Flexible intercity and rural bus operations complement fixed intercity rail by increasing the number of communities that can access rail stations, especially small towns and rural areas with limited intercity connectivity.

Passenger rail service in the Pacific Northwest is supported by cooperative efforts of Oregon and Washington.

Passenger rail provides another transportation option and it is the only fixed route high capacity transit option connecting major metropolitan areas and regional attractions in the Willamette Valley. Passenger rail is an important part of the state's intermodal system, providing a valuable option for residents and visitors traveling the congested I-5 corridor and facilitating connections throughout Oregon and the Pacific Northwest.

The Amtrak Cascades intercity passenger rail service operates between Eugene, Oregon and Vancouver, British Columbia. ODOT is a key partner in managing the Amtrak Cascades service. In Oregon, Amtrak Cascades serves the Willamette Valley with two daily roundtrips, stopping in Eugene, Albany, Salem, Oregon City and Portland. ODOT and Amtrak partnered with ZipCar, the national car sharing network, to launch the "Zip and Ride" partnership to locate ZipCars within walking distance of the train stations in Eugene, Salem and Portland.

AVIATION

Founded in 1921 as the first government aviation agency in the United States, the Oregon Department of Aviation (ODA) is chartered to promote, develop, and improve Oregon's aviation system. ODA works to preserve and enhance aviation for Oregon's communities, and serves the state of Oregon through its three-fold focus of advocating for the economic growth, infrastructure improvement, and safe operation of aviation in Oregon.

The aviation transportation system in Oregon consists of 97 public use airports ranging in size from Portland International to small backcountry airports that serve medevac and firefighting uses, such as Prospect State Airport in southern Oregon. The airport system sustains a corporate business, cargo, utility and recreational aviation community that adds value to the transportation system of the state. Only seven communities in Oregon support commercial air service with small air service providers. They are Portland, Eugene, Medford, Klamath Falls, North Bend, Redmond and Pendleton.



GOAL

MANAGEMENT OF THE SYSTEM

Improve the efficiency of the transportation system by optimizing operations and management. Manage transportation assets to extend their life and reduce maintenance costs.

Stewards of Oregon's transportation system continually look for ways to improve effective management of the system. Preservation of existing infrastructure is the highest funding priority in order to protect the significant investments that built Oregon's transportation network. Regular treatments and maintenance schedules extend the life of transportation facilities. Efficient operations help get the most out of the existing transportation infrastructure. These include operational efficiencies that help traffic move more smoothly, and asset management to support decision making that prolongs the life of the infrastructure.

OPERATIONAL EFFICIENCIES

Highway system operations encompass many different activities that inform the traveler, improve traffic flow and provide information regarding travel alternatives. Tools used on Oregon highways such as ramp metering, traffic signal coordination, variable speed limits, the Green Light truck preclearance program, incident management programs and traveler information services, among many others, make the existing system safer and more efficient for users. These tools also help reduce congestion, improve travel times, reduce emissions and fuel use, as well as provide other system and traveler benefits. These types of tools are increasingly important aspects of managing the transportation system, and they provide methods to improve roadway performance when roadway expansion is not feasible.

ODOT REALTIME

Analysis of data both before and after installation of the Oregon 217 RealTime signs shows a significant reduction in crashes and crash severity as well as improvements in travel time reliability. Prior to RealTime sign installation, Oregon

217 experienced heavy traffic congestion during peak commute periods due to high traffic density and crashes. To address these issues ODOT installed RealTime travel information signs in 2014 as part of a program that uses information technology to reduce incidents and keep traffic moving safely.

Throughout the project area, total crashes were reduced by 21 percent, severe crashes were reduced by 60 percent, and rearend collisions were reduced by 18 percent, while travel times remained the same or slightly improved. These improvements are even more notable given the overall increase in vehicle travel in the corridor during the same period.

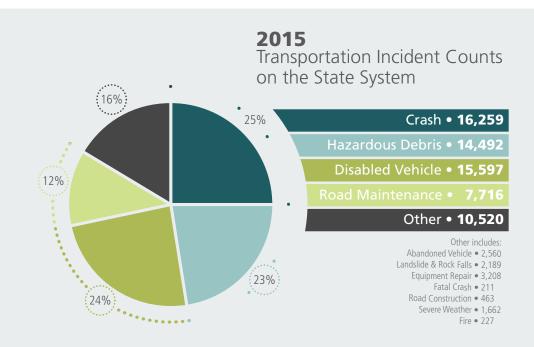
The program will build on the successful implementation of the Oregon 217 RealTime project with targeted deployments on other major corridors including I-5, I-84, I-205 and U.S. 26. Portions of the proposed systems on I-84 and U.S. 26 have been funded and programmed for construction through a federal Transportation Investment Generating Economic Recovery grant.

TRAVEL INFORMATION SYSTEMS

TripCheck, Oregon's award-winning travel information system, delivers critical information to travelers. Individuals can use *TripCheck.com* to select safer routes and avoid adverse weather and road conditions, find out about other travel options, and much more. Similar information is available via the 511 phone system and Cable TV systems in various locations across the state. Variable message signs and Highway Advisory Radio announcements also provide valuable information to travelers.

The TripCheck website provides comprehensive information about public transportation options and travel services. Today people can plan trips with TripCheck across

more than 40 public transportation services using their internet connected device. ODOT's TripCheck system had over 32 million visits in 2015, an average of 2.6 million visits a month. TripCheck now includes crowd sourced traffic reports and delay information and also has been reformatted to support smart phones and tablets. TripCheck places the most current transportation system information in travelers' hands so they can "know before they go" and make more informed travel choices.



Tracking events and responses is an important aspect of managing system operations when you consider that such non-recurring events cause about 50 percent of total traffic delay. With the exception of "Road Construction" all events shown are responded to by ODOT Maintenance personnel, including but not limited to, Incident Response staff.

Green Light Preclearance

In July 2016, Oregon precleared its 22 millionth truck, saving more than 1.9 million hours of travel time and nearly \$215 million in truck operating cost.

Green Light preclearance emissions reductions:

- 14,619 pounds less particulate matter
- 29,217 pounds less hydrocarbons
- 70,138 pounds less carbon monoxide
- 233,800 pounds less nitrogen oxides
- 41,885,376 pounds less carbon dioxide

Currently Oregon serves over 5,000 trucking companies with nearly 50,000 trucks equipped with transponders.

GREEN LIGHT PRECLEARANCE

The Green Light truck preclearance system uses a combination of high speed weigh-in-motion scales, automated vehicle identification devices (transponders) and computer systems to weigh trucks at highway speeds. A computer takes in the information, verifies the truck size and weight, checks the carrier's registration and safety records and sends a green light back to the vehicle if the truck is good to go past the weigh station. The Green Light weigh-in motion system preclears an average of 143,000 trucks each month and keeps commerce moving.

ASSET MANAGEMENT, SYSTEM PRESERVATION AND MAINTENANCE

Agencies charged with stewardship of Oregon's transportation system make timely maintenance, preservation and replacement a priority for the publicly owned assets that comprise this system. However, current funding levels will continue to be insufficient to maintain major elements of the highway system in their current states of good repair. Transportation staff has been successful in recent years using data to aggressively manage assets to keep them from slipping to poor condition. Bonding from the Oregon Transportation Investment Acts and the Jobs and Transportation Act provided funds to address weight restrictions on freight routes and to preserve bridges on other routes, but bond payback reduces funding available to address current bridge needs.

The number of bridges in poor condition has been declining over the past decade. However, one area where current transportation funding falls short is in preventing bridges in good condition from declining to fair condition. As a result, a growing number of bridges are classified as fair or worse. Other assets on the state transportation system, including pavement and culverts, face similar deterioration trends. Deferred maintenance of transportation assets drastically increases the cost of maintaining the system over time. By contrast, timely preventative maintenance and rehabilitation stretches limited transportations dollars and ensures a long-lasting transportation system.

Inventory and condition data has been essential for proactive management of these critical assets. Data has enabled optimal strategic spending on the most significant components of the state highway system; pavements, bridges, culverts, as well as other transportation features.

Building on current proactive measures and good data, ODOT is in the process of developing a risk-based Transportation Asset Management Plan, scheduled for completion in early 2019. This plan:

- Assesses the condition and future performance of Oregon's highway and bridge assets.
- Advances management strategies including lifecycle cost analysis and risk analysis aimed at more efficient use of limited transportation revenue.
- Identifies future actions that can improve ongoing asset management efforts.

Oregon's local jurisdictions and ODOT must navigate the increasing needs of the aging infrastructure while meeting the increasing demands brought on by population changes. Transit fleets and private rail tracks suffer from similar strains of aging infrastructure and also use asset management data to maximize the benefit of their investments.

PAVEMENT

Regular treatments and maintenance schedules reduce life cycle costs, but when available funds do not meet needs, treatment must be deferred. This results in higher costs for repairs when pavement conditions decline beyond acceptable levels. The typical cost of reconstruction for a single lane mile can be as much as \$1.5 million, while earlier intervention with preservation techniques is around \$200,000 for the same lane mile. The gap between pavement needs and what can presently be funded means that increasing miles of pavement will slip from good condition to fair or poor condition, resulting in higher costs per lane mile to rehabilitate or reconstruct the pavement in the future. As this pattern is expected to continue for the foreseeable future, ODOT is making strategic choices about where to invest in pavement and other infrastructure using all available data.

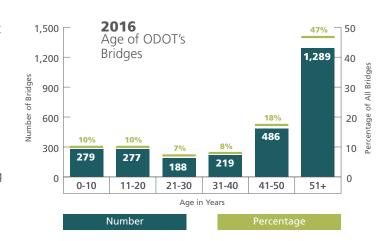
The recently adopted federal FAST Act will require states to maintain the condition of their interstates at 95 percent fair or better. One year after falling below that level a state would be subject to a required commitment of funding to improve the interstate pavement condition. Oregon's current pavement condition of the interstate is 98 percent fair or better. However, at current funding levels the risk of falling below the 95 percent threshold greatly increases after 2021.

BRIDGES

As Oregon's bridge inventory continues to age, a significant number of bridges will require major rehabilitation and replacement within the coming decades. With limited funding for repair and replacement available, some bridges will face weight restrictions or temporary lane closures. These conditions can negatively affect Oregon's economy, restrict

freight movements, and inconvenience highway users. Oregon has benefitted from increased investments in critical repairs and improvements to aging transportation infrastructure funded through bonding approved by the Oregon Legislature, but those programs have now ended and bonds must be repaid. In the last decade, the repayment has reduced the funding available for bridge replacement and repairs.

Recent allocations from new Fix-It funding and federal FAST Act funding bring the annual Bridge Program budget back to pre-Oregon Transportation Investment Act (OTIA) levels. This funding will allow critical bridge repairs and a small number of replacements to be completed across the state, but the backlog of needed bridge work will continue to increase over time. The recently adopted FAST Act creates a penalty based on the percentage of National Highway System bridge deck areas that are structurally deficient. Given the improvements in bridge conditions resulting from OTIA investments, expectations are that Oregon would not be subject to any bridge penalty until after 2025.



Bicycle and Pedestrian Asset Inventory

Status of sidewalks and bike facilities along state highways in urban areas of Oregon, 2016:

Sidewalk	Existing	Sidewalks
Need	Sidewalks	Complete
1,084 miles	680 miles	

Sidewalks are considered necessary along state highways with roadside development and not necessary on rural highways.

Bike	Existing	Bike
Facility	Bike	Facilities
Need	Facilities	Complete
1,621 miles	1,001 miles	62%

Bike facilities include bike lanes, multi-use paths and, under certain conditions, shoulders and shared travel lanes.

Source: ODOT Bicycle and Pedestrian Program



Speed Increases

The 2015 Oregon Legislature adopted speed limit increases for select state highways, effective March 1, 2016. ODOT engineers got to work immediately recalibrating things like passing lanes, striping and signage requirements and more. There were 11 different sections of highways affected by the change, ranging from I-84 in eastern Oregon to U.S. 97 from The Dalles to the California state line.

Reaction from the traveling public was mixed; many enjoyed the higher limits on the interstate, where there are two or three lanes in which to travel and pass, as well as far-reaching unobstructed views. In other areas, with fewer travel lanes or reduced visibility, the higher speed limits required longer stopping distances and other changes to driver behavior. Several severe crashes occurred on these types of roadways where the speed limit had been increased. In those cases ODOT returned the speed to its original limit and will continue to study the areas where the speed limits were raised to see if further adjustments are warranted.

HIGHWAY MAINTENANCE

Maintenance includes a variety of important activities that enable safe travel and extend the useful life of transportation system assets. Examples of typical maintenance activities and programs include installing or repairing guardrails, maintaining bridges and pavements, improving drainage, managing roadside vegetation, maintaining traffic signals, providing snow removal, sanding roads, providing traffic incident management, and responding to emergencies such as floods and landslides. When proactive asset management and preservation activities cannot happen under ideal timing, maintenance activities provide a temporary stop gap and serve to manage the decline of infrastructure. However, funding for maintenance activities is also constrained and impacts levels of service. The ODOT Maintenance program is continually looking for innovative ways to extend the resources provided to them; examples include pilot programs to test improved maintenance chemicals for winter and using equipment-sharing software to expand the use of existing specialty equipment across the state.

RAILROADS

There are 2,342 miles of rail track in Oregon, of which about 1,167 miles are "main line" tracks while the other 1,175 miles are "short line." Main line tracks are operated and maintained by the Class I carriers such as BNSF Railway and Union Pacific Railroad and carry the majority of the freight traffic, as well as passenger trains. These higher volumes help Class 1 carriers to cover of the cost of maintaining the tracks at higher standards set by the Federal Railroad Administration. The network of short line railroads faces challenges brought on by aging infrastructure and constrained resources.

AIRPORTS

The Oregon Department of Aviation administers a fund known as the Airport Pavement Maintenance Program (PMP). Funds for PMP are derived from aviation gas and jet fuel fees and are dedicated to the evaluation, preservation and maintenance of airfield pavements on public-use airports. Based on a three-year cycle for three geographic regions, the department administers all aspects of pavement maintenance work at participating airports. In addition to savings realized from reduced mobilization costs, PMP also saves costs by extending pavement life, thus, extending the time intervals between airport pavement rehabilitations.



GOAL

ECONOMIC VITALITY

Expand and diversify Oregon's economy by transporting people, goods, services and information in safe, energy-efficient and environmentally sound ways. Provide Oregon with a competitive advantage by promoting an integrated freight system.

regon's economy is diverse, relying on forest products, agriculture, manufacturing and technology-based industries, and the state continues to see economic growth following the recession. Service sector jobs have led recent growth, including professional and business services, health services and leisure and hospitality industries. Oregon is currently outpacing the typical U.S. state by a considerable margin for both job growth and relative income gains. This growth largely results from the state's industrial history, support of new industries and technologies, and strong inmigration flows. Transportation investments help create and maintain a competitive economic environment for all types of industries and jobs by providing an efficient and reliable system necessary for long term productivity and access to labor and customers.

While Oregon has added an average of nearly 5,000 jobs per month since 2014, this economic growth will not sustain itself without continued investment and support. This underscores the importance of maintaining and improving transportation facilities and services to help Oregon businesses reach markets and conduct business nationally and internationally in a competitive manner.



AN INTEGRATED AND EFFICIENT FREIGHT SYSTEM

The movement of freight is crucial for the economic growth of Oregon and the rest of the nation. In 2013, roughly 370 million tons of freight worth approximately \$320 billion traveled somewhere on Oregon's transportation system.

Freight movement relies on an integrated system that takes advantage of the efficiencies provided by different modes. The choice of mode depends on availability, reliability, cost, value and weight of the product, as well as other factors. Oregon's high-value industries typically have long distance supply chains that require materials from all over the world, and in turn these industries tend to sell their products globally. They depend on smooth functioning marine, air, highway, and rail to export their products and materials. Resource dependent industries, including agriculture, wood and paper manufacturers, and mining rely heavily on trucks, rail and marine transportation and, for perishable goods, on air transport.

Trucking currently handles the majority of the freight moved to, from, and within Oregon, and the volume of freight transported by truck will continue to grow. The practice of "just-in-time" delivery methods require that few goods be stored on site, and shippers need reliable and predictable travel time to deliver goods in a cost effective manner. Enhanced freight transportation alternatives that increase the ability of businesses throughout the state to move commodities is key to maintaining and expanding Oregon's economic competitiveness. An efficient transportation system provides shippers with the ability to transfer freight seamlessly between different modes of transportation, as well as across long distances. Constraints that limit

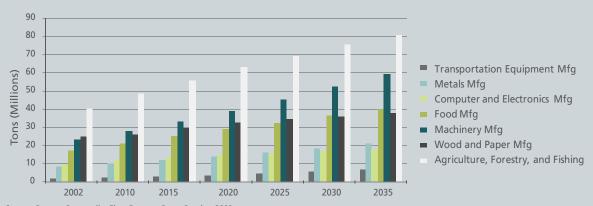
the movement of one mode or facility result in additional pressures on the other parts of the system.

The Oregon Freight Plan addresses issues affecting all modes of freight transportation and proposes strategies to maximize the efficiency of the system. ODOT is currently implementing various elements of the Oregon Freight Plan including development of freight performance measures, prioritization of freight delay locations and intermodal connectors, review of oversize load permit projects, and development of an investment strategy which will position Oregon to leverage federal funding dedicated to improving the multimodal freight transportation system.

Key Oregon Freight-Dependent Industries – Projected Growth of Related Commodity Tonnage with Oregon Origin^{1, 2} 2002 to 2035.

This information is still relevant and the most recent available.

Please refer to the Freight Plan at: https://www.oregon.gov/ODOT/Planning/Pages/Plans.aspx



Source: Oregon Commodity Flow Forecast Data, October 2009

¹Retail trade and wholesale trade were not included in the tonnage overview because tonnage conversion data are not available for these industries.

² Tonnage does not translate into the value of goods or economic output. Thus, the growth rate of Agriculture, Forestry and Fishing does not indicate that

Household Travel Expenses

Pavement condition impacts vehicle operating and maintenance costs for owners. For example, a medium sedan operating solely on rough pavement instead of smooth pavement could increase operating costs nearly 30 percent per year. Transportation costs are a significant budget item for households and businesses.

MARINE

Oregon's location along the Pacific Ocean and the Columbia-Snake-Willamette River system provides valuable links for waterborne freight movement and commerce. There are 23 ports, including five deep-draft marine ports and four shallow-draft marine ports.

Marine ports face a number of challenges that need to be addressed. Of particular importance is maintaining appropriate depths via dredging that will ensure sufficient vessel accessibility. The current trend of increased vessel size will necessitate multiple improvements at Oregon's ports such as: dock improvements at both public and private terminals, additional anchorage capacity and stern buoys, and channel width improvements.

AVIATION

The aviation industry in Oregon includes over 300 aviation related companies providing a variety of employment opportunities ranging from manufacturing and repair, to pilots. Aviation provides a significant economic boost to the state, supporting thousands of living wage jobs.

Oregon has become a host to the Unmanned Aircraft System (UAS) industry with an estimated 200 companies in the state involved in developing, manufacturing, and providing research to an up-and-coming technology. The state is home to three of the Federal Aviation Administration's federally-mandated UAS test sites in partnership with the states of Alaska and Hawaii as part of the Pan Pacific Test range. Oregon sites are located in Tillamook, Warm Springs and Pendleton. Aviation is a vital element of Oregon's transportation system and economy.



ROUGH ROADS

The current ODOT budget forecast for Maintenance, Pavement, Bridge and Enhance programs will shift funding from expansion and enhancement activities to maintenance activities in response to deteriorating infrastructure conditions and limited funding availability. Not only are preservation costs deferred to the future, funds are also shifted away from projects designed to improve system performance and capacity, such as congestion-relieving projects. While these improvements are deferred, construction costs will continue to rise due to inflation; each dollar ODOT spends buys less construction activity than it did a decade ago.

Deteriorating pavement and bridge conditions cause transportation costs to rise for households and business. Weight restricted bridges require heavy trucks to take detours or split loads into multiple lighter trucks, which increases business costs and transportation emissions, as well as negatively impacting shipping times.

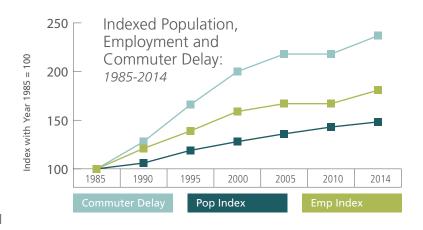
COMMUTERS AND TRANSPORTATION

Oregon reached the 4 million population mark in 2015. The economy has fully recovered from the Great Recession and traffic congestion has increased. Delay is increasing at a faster rate than employment growth, which is common when highway volumes approach capacity limits. Congestion and delays disrupt just-in-time manufacturing processes, cause goods to be delivered late, people to be late for work, miss appointments, or in other ways have negative impact on business and quality of life. When congestion levels rise travel time reliability declines, and as expenditures shift to system maintenance there is less funding available for improvements designed to mitigate congestion and delay. Without system improvement actions this trend will continue and reliability will decline resulting in negative economic impacts to the state.

BRIDGES

Maintaining good bridges is critical to a strong economy and to preserving safe and reliable travel. Deteriorated bridges can impede mobility and force trucks to detour, costing businesses time and money. Measuring the current health of Oregon's bridges enables ODOT to track conditions over time to determine bridge rehabilitation and replacement needs. More than half of the bridges in the state's current inventory will reach the end of their design lives by 2020. Each year, approximately 14 bridge structures in the state deteriorate to the point of being considered structurally deficient. By 2020, that rate of deteriorated bridges is expected to increase significantly, with close to 70 bridges becoming structurally deficient each year.

Local bridges are also aging at this same rapid pace which can result in closures and detours, affecting households and businesses. Oregon needs significant increased investment to maintain the service level of our aging bridges and to get ahead of the continuing deterioration.



Sunrise Expressway

Oregon's first newly constructed highway in more than 30 years, the Sunrise Expressway in Clackamas, opened on July 1, 2016. The 2.15-mile four-lane highway has that been on the drawing board since the mid-1980s, broke ground in August 2013 and was mostly funded by Oregon's 2009 Jobs and Transportation Act (JTA), which contributed \$100 million to the project. The remaining \$30 million was funded by Metro, Clackamas County, and the Federal Highway Administration. The expressway was completed on time and on budget.

TRANSPORTATION AND TOURISM

Transportation and tourism are natural partners in the state's economic vitality. Oregon's tourism industry is one of the state's largest industries, contributing \$4.3 billion to the state's GDP, ranking tourism in the top three export oriented industries in Oregon's rural areas. Total direct travel spending in Oregon was over \$10.8 billion in 2015, representing a 4.5 percent increase over the preceding year. This spending supported more than 105,000 jobs in the state, 2015 marked the sixth straight year of growth in the travel and tourism industry in Oregon.

Passenger air travel is an important mode for those visiting Oregon and is a crucial component of the state's tourism industry, with 3.5 million visitors touching down in Oregon in 2015. The Portland International Airport is often named among the best domestic airports in the nation, citing location, access, ease of check-in and security, good restaurants and bars, shopping, family-friendly atmosphere and design.

The state's highway infrastructure is also a vital part of the state's travel and tourism industry. Travel along highways not only links communities together, resulting in great economic benefit, but it also provides a way for people to connect with each other and to commune with the natural splendors of our state. Bicycling is also an ever-increasing mode of transportation for Oregonians and visitors alike. Bicycle tourism is a critical niche in Oregon, providing a valuable economic impact. The Oregon Bicycle Tourism Partnership is a public-private partnership that shares information and resources to support bicycle tourism in Oregon to maximize its impact throughout the state. Activities that have grown out of the partnership include the Oregon Parks and Recreation Department's Oregon Scenic Bikeway Program, which assesses, designates, signs and supports the best tourism bike rides in Oregon. This unique tourist opportunity attracts visitors from within Oregon and around the world, contributing to local economies.



2009 JOBS AND TRANSPORTATION ACT

The 2009 Oregon Jobs and Transportation Act (JTA) represents the state's largest recent long-term investment in transportation infrastructure, putting Oregonians to work while making investments in all sectors of Oregon's transportation system. The 2009 Oregon Legislature increased vehicle registration and title fees, commercial vehicle registration fees and weight-mile taxes, other vehicle related fees and the fuels tax, intending to raise about \$300 million a year in funds for investments in highway safety, congestion reduction, mobility, preservation and more, across all parts of the state.

The JTA funds are allocated annually as follows:

- Half for Oregon cities and counties to maintain and improve local street systems.
- Half to maintain and improve the state highway system. The majority of this money finances \$960.3 million in bond proceeds for 37 state highway projects to relieve key bottlenecks, address safety concerns, and allocations to 14 local government projects in eastern Oregon.

When complete, projects funded by the JTA will improve economic development opportunities, reduce congestion and enhance the movement of freight, and support more livable communities. Most of the projects are complete, and the remaining projects are expected to be completed over the next few years. The JTA invested in all transportation sectors including airports, bridges, city streets, county roads, marine ports, public transit, railroads and state highways.



Tualatin River Greenway Trail

The Tualatin River Greenway Trail is a bicycle and pedestrian facility that promotes active, healthy living and economic vitality through walking and biking while connecting people with nature, residential and commercial areas, jobs, bus and rail transit, and public facilities. The new trail improves connectivity and enhances transportation options. The trail fills a gap in this segment of the Tualatin River Greenway Trail. It includes lighted, safe, and inviting crossings of Interstate 5 and runs along the banks of the scenic Tualatin River linking the cities of Tualatin, Durham and Tigard.

Public-private partnerships underpinned the success of this project, including a \$600,000 private cash donation, in-kind contributions, land dedications, a mix of grants, and local funding. Educational interpretive elements along the trail provide an experiential opportunity for people to learn about local geologic history. This trail project received an Excellence in Sustainability Award for Green Infrastructure from the American Planning Association in April, 2016.



CONNECTOREGON - MAKING MULTIMODAL IMPROVEMENTS

The Oregon Legislature approved a sixth round of the ConnectOregon program in 2015. ConnectOregon is aimed at improving transportation connections around the state by investing in rail, marine ports, aviation, public transit and bicycle and pedestrian projects. The overall investment in ConnectOregon leverages nearly \$605 million in other funds and supports multimodal connections and better integrated transportation system components; this in turn improves the flow of commerce and promotes economic development.

CONNECTOREGON I – VI FUNDING BREAKDOWN							
Mode	Projects Awarded	Funds Awarded (in millions)	% Funds by Mode				
Aviation	74	\$97.9	23%				
Marine	32	\$66.5	16%				
Rail	66	\$173.8	42%				
Transit	34	\$49.7	12%				
Bicycle/Pedestrian*	11	\$13.9	3%				
Multimodal**	4	\$15.5	4%				
Total	221	\$417.3	100%				

The chart contains funds awarded as of January 1, 2017.

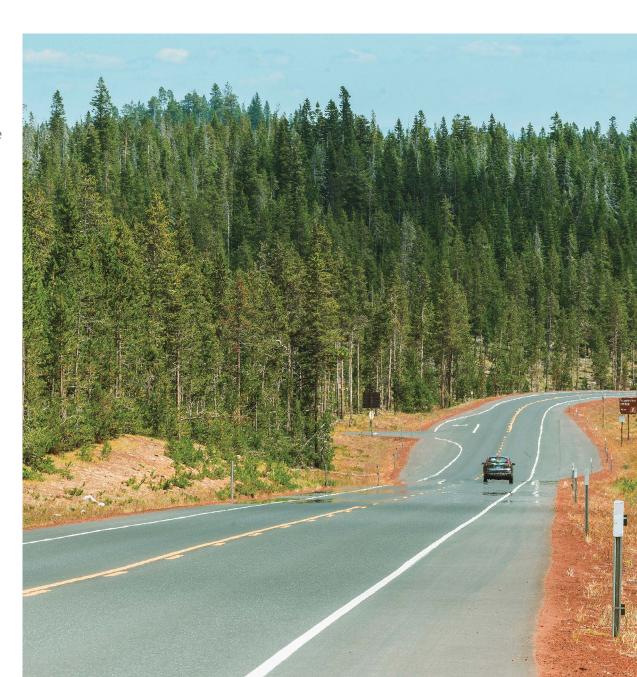
The chart total does not include ConnectOregon Rural Airport funds and administrative costs.

- * Bicycle and pedestrian projects became eligible for ConnectOregon funds in 2013.
- **The funds were used to construct facilities for two or more different modes of transportation.

DMV SERVICE TRANSFORMATION

The Service Transformation Program is a multi-year program to improve DMV business processes, enhance service capabilities, replace computer systems, and enable DMV to become more flexible and timely in meeting customer expectations and legislative mandates. Dramatic changes are happening throughout the country affecting driver licensing and motor vehicles. Legislation at both federal and state levels is impacting the services DMV currently offers or will soon be required to provide. Oregonians are expecting DMV to deliver services in new ways that match the convenience of the private sector, like expanded online services and flexible payment options at field offices.

Technology used for DMV computer systems, created in the mid-1960's and 1970's, is obsolete and in acute need of replacement. Each passing year, the risk of a critical computer system failure increases, which would impact DMV's ability to deliver services to Oregonians. It could also affect the collection of revenues that support Oregon's transportation system. DMV is focused on enhancing service delivery and establishing a technology platform that is more adaptable to the changing needs of its customers, business partners and the legislature. It is important for DMV to improve core business processes and support these with better technology.



GOAL

SUSTAINABILITY

Meet present needs without compromising the ability of future generations to meet their needs from the joint perspective of the environment, economy and communities. Encourage conservation and communities that integrate land use and transportation choices.

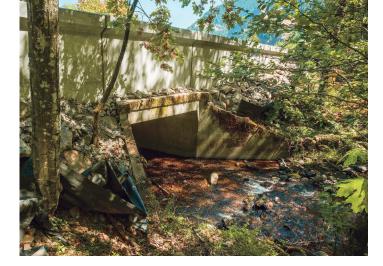
ransportation is relevant to many issues that sustainable practices aim to address, such as environmental stewardship, energy conservation and the impacts of a changing climate. A sustainable transportation system considers the joint perspective of environmental, economic and community objectives in its development, operation and management. The transportation sector has a large impact on air quality and transportation of all kinds is responsible for more than a third of greenhouse gas emissions.

SUSTAINABILITY AND TRANSPORTATION

→ Wildlife Crossings

In 2012, ODOT built two wildlife undercrossings and installed exclusionary fencing as part of the four mile long U.S. 97 Lava Butte highway project. The crossings are currently being monitored as part of a five year post construction monitoring effort. Goals of the project were to reduce animal-vehicle collisions along the project area, as well as to provide habitat connectivity for mule deer and other wildlife species.

Overall the project is showing great success in improving roadway safety through reduced collisions and promoting habitat connectivity for a variety of species. Prior to the project, 35 confirmed mule deer strikes occurred over a five year period along U.S. 97 in the project area. Following the installation of the undercrossings, over a four year monitoring period only two mule deer were confirmed struck within the project limits, resulting in a 95% reduction in the number of mule deer-vehicle collisions in the project area. The project received the Federal Highway Administration Exemplary Environmental Initiative award in 2012.



→ Ladd Creek Culvert

Ladd Creek in ODOT Region 5 traveled under the I-84 freeway in a concrete box culvert that included a 26 foot vertical drop. This created a fish passage barrier that isolated 14 miles of high quality habitat for Chinook salmon and Steelhead. This culvert was severely deteriorated and presented a risk of failure under the freeway. To replace the culvert, fish passage criteria would need to be met. However, due to the steep topography within Ladd Canyon, traditional fish passage methods could not be utilized. ODOT worked with ODFW, NOAA Fisheries, USF&W Service, Grande Ronde Model Watershed and the Confederated Tribes of the Umatilla Indian Reservation to develop an innovative fish passage method for the Ladd Creek Culvert. Extensive hydraulic design was needed to provide fish passage and stream enhancements on the 5.5% gradient while also providing for channel stability underneath the freeway. The project team installed a 500 foot long by 21 foot wide arched pipe to convey the creek under the roadway. Immediately upon completion, fish began moving through the culvert and accessing the habitat that has not been available since 1971. The new culvert is performing as planned and is a good example of interagency cooperation.

ELECTRIC VEHICLE ACTIVITIES

In 2014, ODOT completed the installation of the West Coast Electric Highway, a network of 44 DC fast charging stations along the I-5 and U.S. 101 corridors, as well as several east-west routes from the coast to central Oregon. These stations, completed with federal grant funding, are part of a larger multi-state effort to enable long-range electric travel from British Columbia to Baja California. As of 2016, the 44 Oregon stations have dispensed more than 500 megawatt-hours of charging, powering more than 1.5 million miles of all-electric driving in the state. ODOT is partnering with utilities providers, automakers, and charging providers to investigate new opportunities to increase access to EV charging stations and increase range confidence for EV drivers in the state.

ODOT is continuing to participate in the Multi-State ZEV Task Force, a bicoastal group of policy makers working to implement the California Zero Emission Vehicle program. This group serves as a forum for its eight member states to coordinate electrification efforts, exchange best practices and lessons learned, and engage with automakers, utilities, and other stakeholders to collaborate on developing strategies to support the growing market for electric vehicles. ODOT also participates in the Pacific Coast Collaborative, along with Washington, California, and a number of cities and counties in West Coast states to establish fleet targets for electric vehicles. Lastly, ODOT works directly with its sister agencies such as DEQ and DAS, as well as with public-private partnerships like Drive Oregon, to coordinate on electric vehicle activities.

Oregon is one of the top three markets for electric vehicles in the United States. There are nearly 11,000 plug-in electric vehicles registered in Oregon today.





CONSTRUCTION AND MAINTENANCE

ODOT utilizes a wide-range of sustainable practices related to materials and management of the transportation system. Through use of best practices and standards in construction specifications, ODOT is actively reducing the need for raw materials, increasing recycling, minimizing greenhouse gas emissions and promoting the use of cleaner technologies. Several standards used in ODOT's innovative Context Sensitive and Sustainable Solutions approach to the OTIA III Bridge Program support sustainability. One of the standards limits truck idling except in extreme cold weather or when needed for other reasons. A materials standard required contractors to use ultra-low sulfur fuel, bio-diesel. or EPA-verified fuel additives in vehicles and equipment where possible and available. A third standard required the preparation of contractor reuse and recycling plans, and tracking of reused and recycled materials. These practices save money, reduce waste and emissions, and have become standard practice for ODOT construction projects.

oDOT continues to successfully implement the award winning Environmental Management System (EMS) program for its maintenance yards. Compliance with core regulatory requirements has exceeded 95 percent over a seven year period. EMS priority procedures include best practices for storage, handling, and disposal of fuel, oil, pesticides, winter maintenance chemicals, lighting, aerosol cans and drainage. Procedures include best management practices to prevent surface and groundwater pollution. ODOT has also successfully reduced the use of herbicides to treat non-noxious vegetation along Oregon highways. Five years into the herbicide reduction strategy, ODOT has reduced pounds of active ingredient by over 50 percent compared to 2010. The reduction was accomplished by

improving equipment, changing application practices, and standardizing bare-shoulder widths. In addition, hazardous materials use and waste generation remains low statewide, and is trending downward.

→ Sustainability at DMV

Online services support reductions in greenhouse gas (GHG) emissions by reducing vehicle miles traveled. Oregon DMV promotes its online services as one way for the public to reduce vehicle emissions, wear and tear on roads, and crowding in DMV field offices. Currently, online services include changing an address, submitting notice of sale or transfer of a vehicle, scheduling an administrative hearing, checking current wait times in DMV offices, and renewing vehicle registration. Registration renewals are by far the most used feature of DMV's online services with about 25 percent of registration renewals completed online each year. DMV processes about 300,000 vehicle registrations online each year – nearly 800 per day.

→ Adaptation and Mitigation

The Statewide Transportation Strategy, which was accepted by the Oregon Transportation Commission in 2013, explored how transportation and land use interactions over the coming decades could affect the future of the transportation sector. Recommendations were developed for transportation and land use actions that demonstrate the most promise in reducing transportation related greenhouse gas emissions while also increasing community livability and supporting economic vitality.

ODOT has completed the initial phases of implementing the Statewide Transportation Strategy, including; supporting electric vehicles through the West Coast Electric Highway, reducing congestion through Intelligent Transportation

System implementation, and conducting the EcoDrive campaign to provide information about sustainable driving habits. ODOT, in partnership with the Department of Land Conservation and Development (DLCD), has also engaged with Metropolitan Planning Organizations (MPOs) in Portland, Eugene, Corvallis and Rogue Valley to provide assistance in conducting scenario planning activities to identify ways that the regions can improve community livability and transportation system performance while also reducing greenhouse gas emissions. In 2015 ODOT, DLCD and the Corvallis Area MPO received an FHWA Environmental Excellence Award for the Corvallis Area MPO's scenario planning project; Strategic Assessment of Land Use and Transportation Plans for the Corvallis Area MPO.

ADAPTING TO A CHANGING ENVIRONMENT

ODOT is taking steps to prepare for the impacts from climate change, such as extreme storms, sea level rise, flooding and landslide risks. In 2012, ODOT completed work on a Climate Change Adaptation Strategy to guide future work in this area. The strategy is a preliminary assessment of climate change impacts to ODOT's assets and system operations, and underlines the need to conduct vulnerability and risk assessments. ODOT established an internal Adaptation Work Group to help drive these efforts. In 2014, ODOT completed work on a FHWA-funded climate change vulnerability assessment and adaptation options study. The pilot study was focused on the North Coast and assessed the vulnerability of state highway infrastructure to extreme weather events and higher sea levels. The study also inventoried and prioritized hazard areas, and prepared a range of adaptation options to address potential hazard sites. The findings from this regional pilot are informing current adaptation priorities, including:

- Work to develop sea level rise maps and guidance for use in transportation planning and design.
- Research on coastal landslides and bluff retreat monitoring and risk assessments.
- Conceptual design and policy study regarding green infrastructure techniques for coastal highway resilience (FHWA-grant funded).

ODOT will continue to conduct additional research and vulnerability assessments that strategically guide statewide efforts and strategies for planning, project development, maintenance and emergency response so that the transportation system is better prepared for the impacts of climate change.

TILLAMOOK CLIMATE ADAPTATION AND RESILIENCY CASE STUDY

As communities across Oregon prepare for new climate conditions, the question of how to adapt to those changes can seem overwhelming. Oregon's Tillamook County has already made great strides to improve the resilience of their health and transportation systems by better preparing for the types of severe weather events that the community encounters today. ODOT and Oregon Health Authority–Public Health Division staff interviewed leaders from Tillamook County transportation and health organizations about the December 2015 storms, which damaged roads throughout the county and caused a presidentially declared disaster. These community leaders shared successes and unanticipated challenges related to integrating disaster response, putting emergency plans to the test and building regional cohesion. The insights from this experience will be collected into a case study to help other communities in Oregon make preparations to increase long term resilience to major environmental events.



GOAL

SAFETY AND SECURITY

Build, operate and maintain the transportation system so that it is safe and secure. Take into account the needs of all users: operators, passengers, pedestrians and property owners.

Safety and security practices allow individuals to travel on the transportation system in a safe manner, and serve to keep the transportation system secure and operational following a natural or man-made disaster. Safety within the context of transportation means reducing the risk of transportation related crashes or incidents as people use the transportation system. Security means reducing exposure and increasing resilience to dangers, including natural disasters such as earthquakes and floods as well as criminal and terrorist activity. Both safety and security measures include planning, education, engineering, enforcement and emergency responses, and ODOT has an important role in each of these areas.

SAFETY

While Oregon has made incredible strides in reducing the number and severity of motor vehicle crashes, these crashes continue to inflict a terrible toll. Preliminary figures for fatalities on Oregon roads in 2016 show a 10 percent increase over 2015. This is following a 24 percent increase over the number of fatalities in 2014. The increase has reversed decades of steady decline in the number of fatalities on Oregon roads. These numbers will be refined as research into the cause of the increase continues. Reducing crash incidences saves lives and prevents injuries, and it also spares families and society needless burdens. The state's goal is zero fatalities on Oregon's roads. The Oregon fatality rate is above the national average for the first time since 1998, continued vigilance is necessary to turn this trend around.

Transportation safety is a major catalyst for many infrastructure improvements, including ramp meters, variable message signs, rumble strips, crash barriers, new guardrails, left turn lanes and traffic-calming devices like traffic circles and speed bumps. One example of this kind of improvement is connecting automatic rail crossing signals to roadway traffic signals.

As part of its Intelligent Transportation System operations (ITS), ODOT maintains electronic systems to monitor a variety of road conditions including high winds, flooding, ice and snow. Road Weather Information Systems (RWIS) are weather stations that use sensors to provide data such as air and pavement temperatures, wind speed and direction, visibility, humidity and precipitation. Maintenance crews use RWIS data to make winter road decisions, and the data is also shared with the public through *TripCheck.com*, ODOT's incident and road conditions website.

ODOT works with law enforcement and the entire legal system to make safety a top priority. Regulation of the users of the highway system serves to increase safety and preserve the system. Driver regulation is primarily safety focused - whether via provisional licensing for teen drivers, medical referrals for those that may be driving impaired due to medical conditions, or the laws and rules that govern commercial drivers. Inexperienced drivers are linked to higher rates of crashes and traffic citations, work is continually done to educate Oregon's youth through driver education, community education and training.

TRANSPORTATION SAFETY IS MULTIMODAL

→ Transportation Safety Action Plan

The Oregon Transportation Safety Action Plan (TSAP) provides long-term goals, policies and strategies and nearterm actions to eliminate deaths or life-changing injuries on Oregon's transportation system by 2035. The Plan serves as Oregon's Strategic Highway Safety Plan (SHSP) as required by federal law (MAP-21). 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'. The TSAP update was developed in collaboration with many stakeholders and was adopted by the OTC on October 14, 2016.

In 2015, the Oregon Transportation Commission approved

→ Railroad Safety

an updated set of rules for transporting hazardous materials by rail in Oregon. The rules aim to improve the emergency responder's knowledge of hazardous material transported through their territory and improve the state's ability to respond if accidents occur. In response to these rules ODOT hired and trained three additional Federal Railroad Administration-certified rail inspectors to aid in the prevention of accidents. Despite these additional efforts to prevent problems, a derailment occurred in June 2016. An after incident investigation revealed the successes of the incident response and identified areas for needed improvement in the future. The investigation indicates that existing agency and interagency policies and protocols were effectively implemented during the incident. State agency personnel possessed a high level of proficiency associated with the performance of essential tasks at all levels and state agencies participated in community outreach efforts in collaboration with affected local and tribal jurisdictions to provide timely updates to impacted populations. The investigation also identifies lessoned learned from the incident, in particular the closure of I-84 for an extended period caused traffic impacts across Oregon and into Washington. ODOT in partnership with other agencies, including the Oregon State Police and the Washington Department of Transportation, has created a task force to re-evaluate the response plan and enhance it to include additional options for managing such extraordinary situations in the future.

Did you know?

In Oregon, during the last five years there has been an average of:

- 477 work zone related crashes
- 13 work zone related serious injury crashes

Oregon work zone fatalities:

- 2014 4
- 2013 6
- 2012 6

National work zone fatalities:

- 2014 670
- 2013 579
- 2012 619

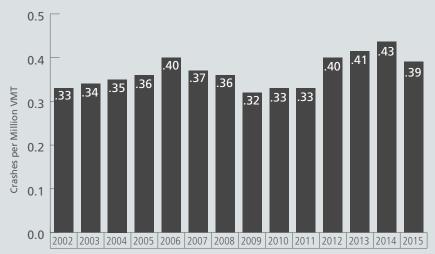
Oregonians crossing campaign

Sasquatch leads the way promoting pedestrian safety in a positive, community building message reminding Oregonians that "Every Intersection is a Crosswalk." This popular campaign is the result of collaborative efforts of the Region 1 Bicycle & Pedestrian Safety Working Group and partners including; TriMet, Metro, Washington County, Clackamas County, Portland Bureau of Transportation, Hillsboro, Safe Routes to Schools, and OHSU ThinkFirst. This campaign has been leveraged for use throughout the state by ODOT and the project partners.

→ Large Truck Crashes

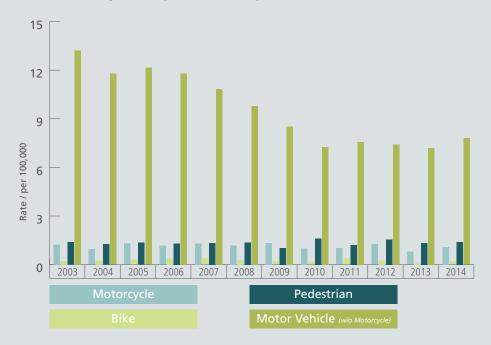
In 2015 there were 1,332 crashes involving trucks, a 6% decrease from 2014. Of these, it was determined that the truck was at-fault in 712 of the crashes, a 6% decrease from 2014.

Large Truck At-Fault Highway Crashes





→ Fatalities by Mode (per 100,000 Population)

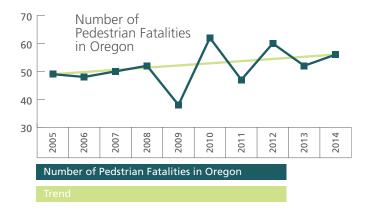


→ Commercial Vehicle Safety

Identifying unsafe commercial vehicles and drivers contributes to the goal of reducing bus and truck-at-fault crashes in Oregon. In 2015 ODOT performed almost 40,000 commercial motor vehicle inspections. These inspections were of trucks and drivers, and when warranted resulted in unsafe vehicles and drivers being taken out of service. ODOT is also responsible for over 300 bus and driver inspections a year.

→ Pedestrian Fatalities in Oregon

Recent data indicates that fatalities and serious injuries for pedestrians have increased, especially in relation to other modes. A number of factors contribute to these safety issues, which necessitates an evaluation and revision of Oregon's approach to safe walking and biking facilities to eliminate deaths and serious injuries. Facility design, slower vehicle speeds and separation from traffic can improve safety for bicyclists and pedestrians.



CONTINUING PROBLEMS

While Oregon has made incredible strides in reducing the number and severity of motor vehicle crashes, these crashes continue to inflict a terrible toll. In 2015, 447 people lost their lives, and 35,054 people were injured while on the road. Continued vigilance is necessary:

- Impaired drivers continue to be a menace on the road, contributing to 187 fatalities 42 percent of the overall total fatalities.
- Speed is indicated as a contributor in 26 percent of all fatal crashes and 16 percent of all injury crashes.
- Unbelted drivers typically represent less than 5 percent of all drivers, but are disproportionately over-represented in fatalities on Oregon roadways.
- In 2014, drivers age 15-20 represented 6.2 percent of total licensed drivers, but also represented 9.6 percent of drivers involved in crashes. There is a need to increase the number of teens who participate in an approved driver education program.
- Distracted driving is a behavior dangerous to drivers, passengers, and non-occupants alike. Distraction is a specific type of inattention that occurs when drivers divert their attention from the driving task to focus on some other activity instead. In 2015, 3,502 people were killed or injured on Oregon roads as a result of distracted driving. There is strong evidence, in Oregon and in other states, that laws and enforcement efforts are only effective if they are impactful, continuously publicized, and highly visible to the public. Passing a law or putting in place a new program does not guarantee success; the public needs to be informed and educated to take the law seriously.



SECURITY

→ Transportation Seismic Vulnerability

Cascadia Rising 2016, sponsored by the Federal Emergency Management Agency (FEMA), was a simulation of a 9.0 earthquake and tsunami event in the northwest. The exercise engaged Oregon, Washington, Idaho and British Columbia in a multi-agency exercise from June 6 through June 10, 2016. As a participant in the event, the ODOT Maintenance and Operations Branch developed emergency management tools and provided training to the Regions and Agency Operations Center staff that would be most affected by such an event. Many of this same staff participated in the functional exercise on June 6 while activated within their own Emergency Operations Centers. FEMA deemed the exercise highly successful, and each participating Agency is now working on improving response based on what was learned from the exercise. Staff is working to identify roles and responsibilities for Agency and Region Operations Centers, and to develop new training and outreach materials for emergency response actions.

→ Identification Security and Fraud Prevention

Driver licenses are the most common form of personal identification requested by businesses and government agencies. DMV agencies across the nation have strengthened eligibility requirements and issuance protocols through various state and federal laws, rules and procedural changes. These changes enhanced identity verification checks before someone can obtain a driver license or ID card. Oregon DMV strives to issue photo identification credentials that are difficult to counterfeit or alter, and accurately identifies the person whose photo is depicted on the card. DMV uses facial recognition technology to detect and deter fraud, and is upgrading the security features embedded in a new card design to be released in 2018. Today a driver license is far more than evidence that someone can operate a vehicle safely.

The U.S. Department of Homeland Security is implementing a staged enforcement of the federal Real I.D. Act of 2005. Oregon has received extensions, but is not compliant with the federal law. In 2009, the Oregon Legislature passed a law preventing state agencies from attempting to implement the Act unless sufficient federal funds were received to cover implementation costs. It is likely that the Transportation Security Administration (TSA) will stop accepting Oregon driver licenses and ID cards at security checkpoints for commercial flights in January 2018. At that point, Oregonians will need to present U.S. passports or other acceptable documents to board an airplane leaving Oregon.

Orange is your clue to slow down!

Pay extra attention when you see orange signs, barrels, cones and barricades. An inattentive driver is the most common cause of work zone crashes. Fines are double 24/7 whether workers are present or not.



Marijuana may now be legal in Oregon, but driving impaired is not. Learn more at https://www.oregon.gov/olcc/Pages/index.aspx or http://whatslegaloregon.com/



GOAL

FUNDING THE TRANSPORTATION SYSTEM

Create sources of revenue that will support a viable transportation system today and in the future. Expand ways to fund the system that are fair and fiscally responsible.

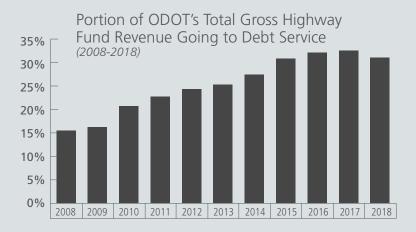
he complex and diverse elements that compose Oregon's transportation system are funded through local, state and federal programs, private investments and a combination of these sources. Oregon relies heavily on highway user fees to fund highway, road, and street improvements across the state. These fees include fuels taxes, vehicle registration and title fees and weight-mile taxes. The amount of available funding is limited, and investments must be prioritized across all modes to provide the most long term benefit to the transportation system.

TRANSPORTATION FUNDING TRENDS

The Oregon Legislature and Congress have made significant investments in Oregon's transportation system through the Oregon Transportation Investment Acts (OTIA), ConnectOregon, the American Recovery and Reinvestment Act (ARRA), and the Jobs and Transportation Act (JTA). Under these programs local governments and ODOT have completed hundreds of important projects that have improved safety, created a more efficient freight transportation system, preserved critical transportation assets and improved the livability of Oregon's communities. However, most of these investment packages were onetime infusions rather than long term sustainable funding. The state faces long term funding challenges. Growing debt service on bonds, rising construction costs, uncertain federal funding, and growing fuel efficiency in vehicles all of these forces combine to reduce the resources local governments and ODOT will have to preserve and improve the transportation system. Without significant, sustainable revenues the condition and performance of the transportation system will deteriorate.

→ Increasing Debt Service

Starting in 2001, ODOT sold bonds to fund three installments of the Oregon Transportation Investment Act, and in 2009 sold bonds for projects under the Jobs and Transportation Act. These investment packages were one-time infusions of spending frontloaded through bonding, allowing for a large quantity or costly projects to be completed in a short period of time. The cost to this bonding is the debt service payments on the bonds. Once the last series of bonds are sold, ODOT's debt service on these bonds will be approximately \$180 million annually.

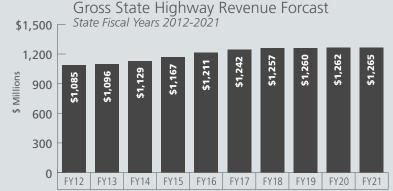


→ Stagnating Future State Revenue Growth

The economic recovery has led to some growth in highway fund revenues. Record in-migration has resulted in more drivers and vehicles on the roads and a healthy labor market has allowed for more discretionary travel and spending, leading to increased fuels tax and weight-mile revenue. While this period had a positive impact on highway revenues, economic growth is projected to slow considerably in 2018 and continue growing slowly into the future. A big factor weighing down future growth is the impact of increasing fuel economy standards on fuels tax revenues. To meet federal standards, vehicle manufacturers must continue to improve the fuel economy of new vehicles. As the fleet transitions to these more efficient vehicles, individuals will use less fuel to drive the same distances, reducing fuels tax revenues.

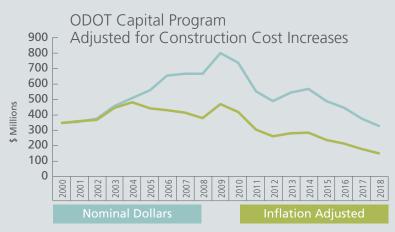
This spells trouble for both Oregon and the federal government, which will collect less in fuels taxes. In the long term, the fuels tax will not be viable as transportation's major revenue source. The fuels tax provides just under half of the money in Oregon's State Highway Fund and the majority of the money in the federal Highway Trust Fund, of which Oregon receives a portion.





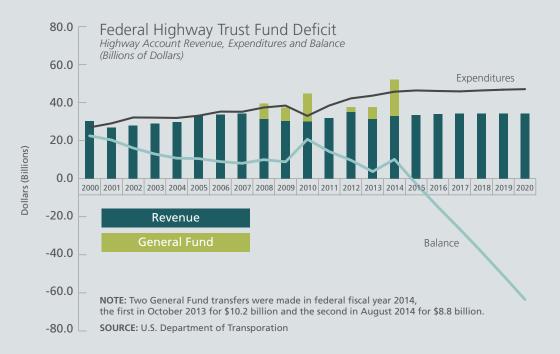
→ Increased Construction Costs

Over the last decade, construction costs have surged and will continue to increase. Each dollar ODOT spends buys less construction activity than it did just a decade ago.



Uncertain Federal Funding

In December of 2015, Congress passed the Fixing America's Surface Transportation Act, or FAST Act. The FAST Act, which locks in federal funding through September of 2020, is the first long term authorization of federal surface transportation funding policy to be approved in over a decade. The FAST Act relies heavily on one-time contributions of General Fund revenues to bolster the declining revenues from federal fuels taxes. This means that despite the fact that Congress locked in federal funding for a period of five years by passing the FAST Act, the uncertainty of future funding remains. As fuel economy of vehicles improves, the federal Highway Trust Fund will take in even less in gas tax revenue. Each year since 2008, the federal Highway Trust Fund has paid out more funding to states and local governments than federal fuels taxes have generated in revenues, thus running a significant deficit. Unless Congress takes action to find additional long-term revenue, federal highway funding is at risk of being cut by upwards of 30 percent. When the FAST Act expires in 2020, the uncertainty will return and the financial imbalance of the Highway Trust Fund will only have gotten worse. This will greatly impact state and local plans and programs for future transportation investments.



→ Funding for Non-Highway Modes

Funding for rail, public transportation, ports and non-roadway bicycle paths and walkway projects has always been intermittent. There is no adequate, sustainable, long-term dedicated funding for non-highway projects and the state only provides a small amount for public transportation. The six legislative packages which make up the *Connect*Oregon program have provided significant investments in non-highway modes and transit. Competition for these Oregon Lottery-backed bond funds has been robust, with requested funds typically outpacing funds available by more than two-to-one. As a result of the limited funds, investments in non-highway modes have been made in a piecemeal manner, making it difficult to plan for the future or leverage federal investments.

→ DMV Revenue

DMV collects revenues at its 60 field offices, through the mail, and online for vehicle registration renewals. DMV fees support state and local government highway projects, senior and disabled transit, driver education and passenger rail programs. Special county registration fees support specific projects, such as the Sellwood Bridge project in Portland. DMV also partners with the Department of Environmental Quality (DEQ) to enable vehicle registration renewals as a part of emissions testing. A large portion of DMV fees are used to repay highway bond debt issuances under the state's OTIA and JTA programs. Currently, many DMV fees are insufficient to recover the full cost to provide core products and services. As a result, less money is available for state and local transportation needs because vehicle registration fees are subsidizing other required DMV services.

USFS Payments to County Road Funds



→ Funding Issues Also Impact Local Governments

Cities and counties are also seriously impacted by these trends as they receive funds from the same resources as ODOT, as well as local revenues and other federal funds. A study conducted by the Association of Oregon Counties found that over a five-year period (2014 - 2018), counties have funding for about 64 percent of their maintenance, repairs, operations and pavement preservation needs. Overall, county transportation is about 46 percent funded. Of particular note for counties are the payments they have received for most of the last century from the U.S. Forest

Service which are based on timber receipts. As shown in the graph, due to the rapid decline in timber harvest, timber receipts to counties dropped to less than 10 percent of previous levels. To compensate the counties, Congress passed legislation providing temporary funds to counties and schools. Unless further legislation is passed, payments to counties will return to 25 percent of the timber receipts, resulting in a loss of over 90 percent of funds, a major impact on the counties' ability to fund road maintenance and improvements.

OReGO – Oregon's Road Useage Charge Program

Drawing on the success of several pilot projects resulting from the work of the Road User Fee Task Force, the state passed Senate Bill 810 in July 2013 establishing the nation's first mileage-based revenue program for light-duty vehicles (passenger vehicles). The program, branded OReGO, successfully launched on July 1, 2015.

Enrolled volunteers pay 1.5 cents per mile driven and are credited 30 cents per gallon for the state fuels tax paid on gallons used to drive taxable miles.

ODOT uses private sector partners to administer the program. They provide account management services, devices and options to volunteers. ODOT oversees these functions.

As the OReGO Program continues, it is evaluating other technologies that could be used to report mileage and fuel consumption. This will provide more options to participants and allow the market to innovate and grow.

GOAL

COORDINATION, COMMUNICATION AND COOPERATION

Foster coordination, communication and cooperation between transportation users and providers so various means of transportation function as an integrated system. Work to help all parties align interests, remove barriers and offer innovative, equitable solutions.

ffective coordination, communication and cooperation are critical to the delivery of an efficient transportation system. This includes effective planning and institutional relationships among public and private transportation service providers and those most affected by transportation activities, collectively referred to as stakeholders.

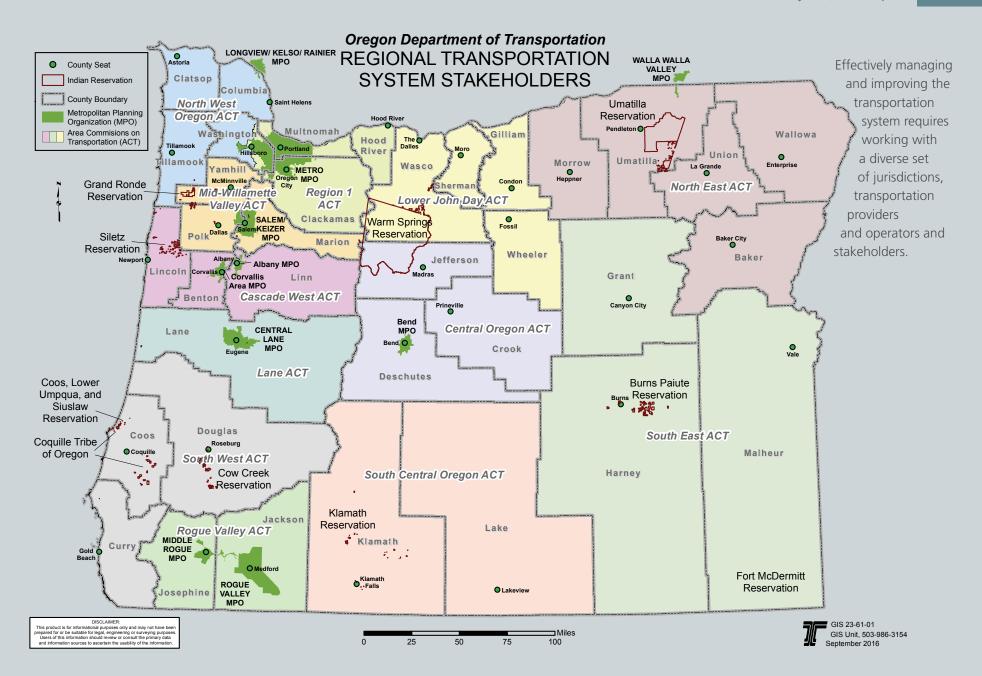
Oregon transportation jurisdictions include:

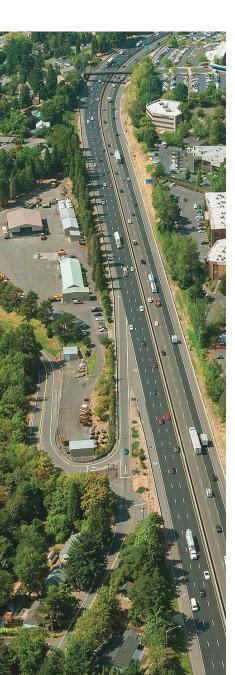
- 10 metropolitan planning organizations
- 9 federally recognized tribal governments
- 36 counties
- 241 incorporated cities

Stakeholder groups include:

- 12 Area Commissions on Transportation (ACTs)
- Business, industry and interest groups
- Community groups and the general public
- Federal regulators and authorities
- Organizations representing local jurisdictions
- Standing advisory committees
- State and Federal agencies
- Special advisory committees to address specific modes, issues and initiatives

Advisory committees and stakeholder groups provide insight, advice and recommendations to ODOT and the Oregon Transportation Commission (OTC) about the diverse aspects of the transportation system. Typically, committee members represent a wide array of transportation stakeholders including business, special interest groups, local jurisdictions, other state and federal agencies and other parties. Task or topic specific special advisory committees are used to help





- develop long range transportation plans. The OTC adopted three statewide plans in 2015 and 2016 and ODOT is currently in the process of developing a fourth. These plans provide a vision, policy, and a framework for decision making and prioritization considerations around the particular mode or topic. These plans become elements of the Oregon Transportation Plan.
- The 2015 Oregon Transportation Options (TO) Plan established a vision and policy guidance that supports and advances TO program activities and suggests ways to integrate TO into transportation planning and investments. The plan also supports TO program activities and integration with capital investment planning at the local and regional level. Transportation options strategies, programs and investments enhance traveler opportunities to bike, walk, take transit, share rides and telecommute. The plan was adopted by the OTC in 2015 and the agency is now engaged with local partners in implementation efforts.
- The Oregon Transportation Safety Action Plan (TSAP) provides long-term goals, policies and strategies and nearterm actions aimed at eliminating deaths or life-changing injuries on Oregon's transportation system by 2035. The plan serves as Oregon's Strategic Highway Safety Plan as required by federal law. Transportation crashes and resulting injuries have historically been considered by many as an inevitable consequence of mobility. However, recently this idea has been challenged as jurisdictions in Oregon and across the world seek to eliminate traffic fatalities and life-changing injuries entirely. The TSAP update was developed in collaboration with many stakeholders and was adopted by the OTC in 2016.

- The Oregon Bicycle and Pedestrian Plan serves as the statewide vision for walking and bicycling. This plan supports decision-making for walking and biking investments, strategies and programs that can help facilitate a more connected, efficient and safe transportation system for Oregon. Prioritization of needs and selection of walkway and bikeway projects are developed in processes that follow plan adoption and will use the framework this plan provides. Development of the plan included extensive public engagement. The plan was adopted by the OTC in 2016 and the agency has developed an implementation work plan.
- The Oregon Public Transportation Plan (OPTP) will provide a statewide vision for the public transportation system and describe the role of public transit in contributing to the transportation system overall. The existing OPTP is outdated given our growing and changing population. The new OPTP will help guide decisions to ensure that public transportation is an integral component of the state's transportation system providing convenient, affordable, and efficient travel options that improve our quality of life and contribute to our economy. The OPTP is being developed in collaboration with many stakeholders and with input from the public; OTC adoption of the new plan is anticipated in fall 2018.
- ODOT's Americans with Disabilities Act Title II Transition Plan serves to ensure that the department;
 - Creates an accessible transportation system for people with disabilities, and
 - Provides facilities (buildings, structures, etc.) that are accessible to all.

ODOT is committed to improving the accessibility of the transportation system and its facilities. Currently, nearly all ODOT-owned buildings meet standards for accessibility for people with disabilities, and ongoing efforts will ensure that all leased buildings remain up to current standards. ODOT has made significant progress in reducing the number of missing and non-compliant curb ramps in recent years, and a commitment to ongoing resources will address remaining shortcomings. This plan lays out an analysis of ODOT's progress to date, identifies gaps that remain and provides a commitment to ensure ODOT facilities meet standards through investments with a schedule and measurable outcomes.

WHAT COORDINATION, COMMUNICATION AND COOPERATION CAN LOOK LIKE AND ACHIEVE

→ DMV Partnerships

DMV works closely with many stakeholders and business partner organizations. Here are just a few examples:

- DMV partners with the Oregon State Police and local governments that enforce parking and traffic laws by providing vehicle ownership data.
- DMV receives driving-related convictions from state and local courts.
- DMV works with the Department of Environmental Quality to enforce vehicle emissions standards and collect registration fees.
- DMV partners with the Secretary of State's Office on voter registration.
- DMV and the Department of Veterans Affairs work on military related license plates and veteran benefits information.

DMV's stakeholders include all vehicle dealers and dismantlers, insurance companies across the state, other public organizations, and nonprofit groups such as Donate Life that records organ/tissue donor designations as part of driver license issuance. DMV revenue collections support state and local government transportation systems, Oregon State Parks & Recreation Department, Oregon Cultural Trust, Watershed Enhancement Board, and others.

→ EMS Data Sharing

ODOT supports the Oregon Health Authority–Public Health Division's Injury and Violence Prevention Section in a project that upgrades the Oregon Trauma Registry to national standards and strives to achieve timely, complete, valid and reliable data for 100 percent of reporting agencies. The result of this work integrates EMS prehospital data with trauma data and creates a data sharing agreement to produce a linked traffic and health data set. As a result of this collaboration ODOT now has access to more crash data to improve safety through research, planning and quality improvement efforts.

→ Mission Community Master Plan

The Mission Area is the center of government, economic and civic life of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). CTUIR has seen extensive economic development in the past 20 years with much of the development having occurred in the vicinity of Oregon 331, including the Wildhorse Resort and Casino. The community has expressed a desire to foster small local businesses and develop a livable community with obtainable housing options.

The Mission Community Master Plan that is funded through the Transportation and Growth Management Program will coordinate with ODOT and DLCD to support infill development and efficient use of resources that reflect the



transportation, housing, and economic growth needs of the community. This project is unique as historical tribal village design, footpaths and waterways will be integrated into the planning for contemporary community development patterns.

→ ODOT & ODFW Culvert Repair Pilot

Oregon taxpayers and native fish both benefit under a new three-year (2015 to 2017) culvert repair pilot program agreed upon by the Oregon Department of Transportation and the Oregon Department of Fish and Wildlife. The pilot allows ODOT greater flexibility to address fish passage needs when repairing culverts and assists ODFW in addressing the highest priority fish passage barriers in the state. The pilot program will enhance passage at all ODOT culverts undergoing repairs, without requiring bridge construction to fully meet fish passage design criteria. This approach makes positive improvements to fish passage, while giving ODOT cost effective culvert repair options.

→ Tribe Contributes to Newberg-Dundee Bypass

The Confederated Tribes of the Grand Ronde officially presented ODOT a \$4 million contribution to the Newberg-Dundee Bypass Project Phase 1 on March 7, 2016 during a special ceremony near where the bypass will meet up with Oregon 219 at Hess Creek. The ceremony included a special invocation and an honor song performed by Tribal Culture Department employees.

→ Wallowa Lake Multi-Use Path

Oregon 351 Joseph – Wallowa Lake Bicycle and Pedestrian project creates a separated multi-use path between the city of Joseph and the recreation area at Wallowa Lake. The area around Wallowa Lake holds significant scenic value and is an important cultural site for three Native American tribes. The path extends past the Old Chief Joseph burial site memorial, which is managed by the National Park Service. ODOT conducted multiple open houses to gain input from locals on the design and treatments of the pedestrian bridges and retaining walls along the project. The community provided clear direction to the design team, which was incorporated into the project plans and specifications.

Prior to the project, the National Park Service conducted a Cultural Landscape Inventory to define the important cultural elements related to the cemetery. It was determined that everything in view from the cemetery is a significant cultural resource that needs to be considered. ODOT has consulted with the Nez Perce, the Confederated Tribes of the Umatilla Indian Reservation, the Chief Joseph Band of the Colville Indian Reservation, Oregon State Parks, and the National Park Service regarding the design of the project. This project enjoys strong community acceptance and will begin construction in 2017.

→ Sunriver Interchange

La Pine, Oregon's youngest city, is being transformed through partnerships with ODOT Region 4, the city, Deschutes County and regional partners. The U.S. 97: Sunriver Interchange to Oregon 31 project, originally a pavement preservation project, will now create a more connected environment with bicyclist and pedestrian friendly facilities. Building on safety improvements constructed in 2015, La Pine will boast

sidewalks, bike lanes and streetscapes through its downtown core after the project's completion in 2018. Additionally, the La Pine City Council unanimously approved the addition of a proposed transit center to the project. The transit center will be used by Cascades East Transit to connect La Pine to the rest of central Oregon and will eventually offer elements such as a pedestrian and bicycle facilities, park-and-ride, city parking and public green space.

→ Sisters' Barclay Roundabout

ODOT Region 4 and the city of Sisters are helping lead the way for roundabouts on the state highway system. After extensive engagement with stakeholders including the trucking industry (including truck "roundabout rodeos" in central Oregon and Portland), adjacent landowners, emergency services and local and federal partners, final plans for the U.S. 20 at Barclay Avenue project in Sisters are almost complete. The Barclay Roundabout will be ODOT's first east of the Cascades since the 1990s, and will solve intersection safety problems and help transition drivers from a Scenic Byway to an urban environment as well as provide a gateway into Central Oregon. ODOT attributes a large part of this project's success to focus groups of neighbors, businesses, the Forest Service and property owners who met regularly to discuss plans for the aesthetics of the roundabout, the proposed management of the construction traffic and roundabout artwork after completion. Thanks to the work of this group, innovative solutions like a dual multi-use path and oversize truck bypass are taking shape. The next step is to present renderings of the aesthetics and traffic detour plans to the broader public in the context of a city council meeting to provide a chance for the council and community to understand the project.

→ Myrtle Creek Park and Ride

Where Myrtle Creek in Douglas County once had a rough gravel lot off of I-5, it now has an intermodal park-and-ride. This project is a result of collaboration between ODOT's Region staff, the Rail and Public Transit Division, the city of Myrtle Creek, and Umpqua Transit. The facility has bike racks, lighting, a transit stop with regular service, parking spaces, and a kiosk with transit schedules and Drive Less Connect carpooling information. This project was inspired by an initiative to create park-and-rides on ODOT right of way in order to build intermodal connections. Travelers now can move seamlessly between bicycling, driving, carpooling and riding transit between Canyonville to the south, and Roseburg and Umpqua Community College to the north.



MOVING FORWARD

The challenges facing jurisdictions and transportation providers in the state are significant and the transportation system is growing more complex. It is critical that we effectively monitor the system so we can best manage, maintain and improve the transportation system to meet these challenges. The Oregon Transportation Plan provides a framework for making decisions to efficiently and effectively provide a transportation system that meets Oregon's diverse needs.

Publishing the State of the System provides an opportunity to report on how Oregon is doing in key areas. Future editions of the State of the System report will continue to discuss trends in many of these areas and introduce new information as additional data becomes available.

Where to Find Additional Information

You can find this State of the System report, additional information and links on the ODOT Website at: https://www.oregon.gov/About/Pages/State-of-the-System.aspx.
Information includes links to videos, reports, publications and organizations.

Thank you for your interest. Your ideas, questions and comments are welcome in making the State of the System report more informative and valuable.

Mailing Address:

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