

# STATE OF THE SYSTEM

2012 REPORT ON OREGON'S  
TRANSPORTATION SYSTEM

## PHOTO CREDITS

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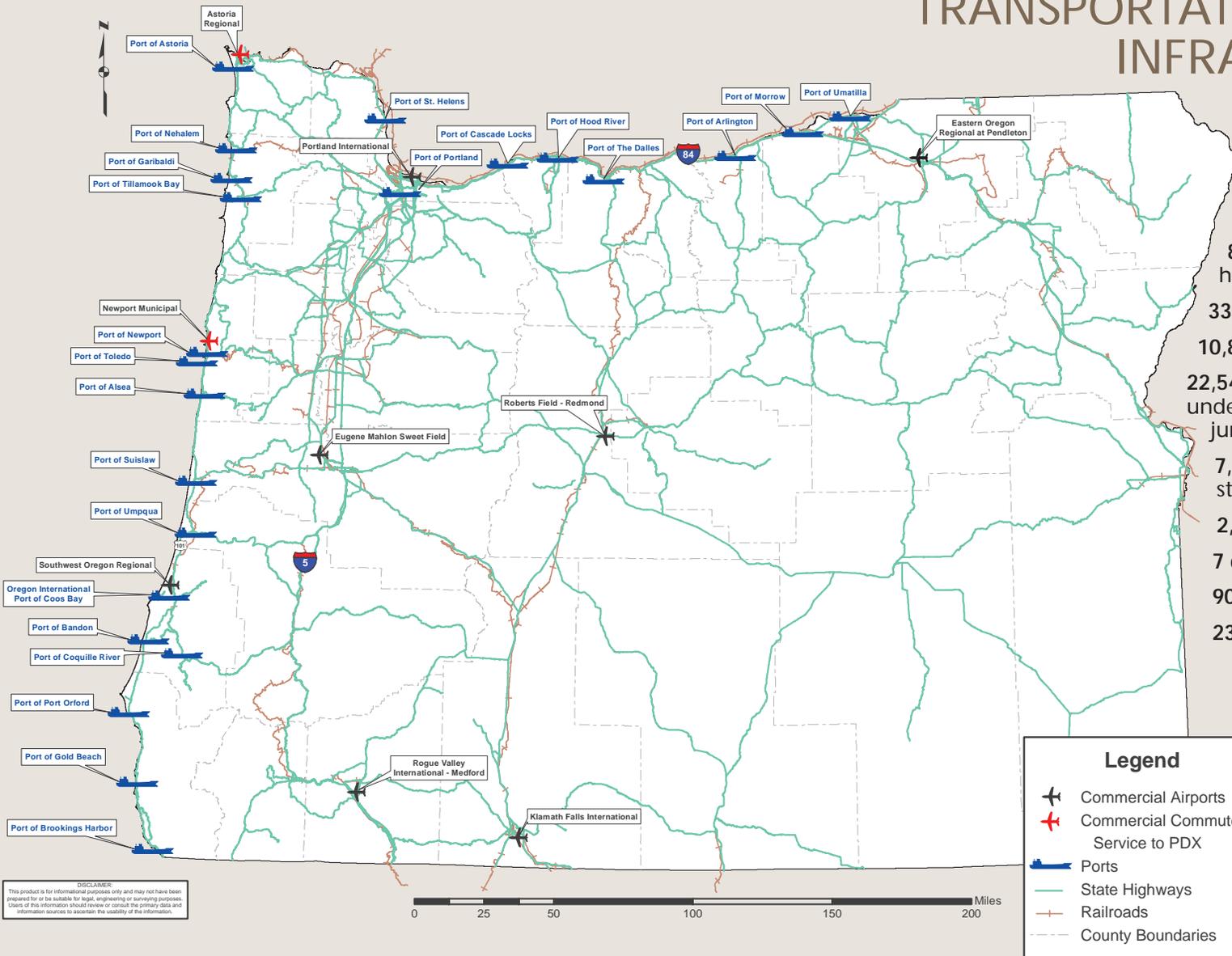
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# STATE OF OREGON TRANSPORTATION SYSTEM INFRASTRUCTURE



## THE NUMBERS

- 74,508** total miles of highways, streets and roads
- 8,029** miles of state highways
- 33,072** miles of county roads
- 10,867** miles of city streets
- 22,540** miles of "other roads" under other state and federal jurisdictions
- 7,734** total bridges statewide
- 2,377** miles of rail track
- 7** commercial airports
- 90** public use airports
- 23** marine ports

**Legend**

- Commercial Airports
- Commercial Commuter Service to PDX
- Ports
- State Highways
- Railroads
- County Boundaries

DISCLAIMER:  
This product is for informational purposes only and may not have been prepared for or be suitable for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of this information.

*Due to space and scale limitations, only some transportation system infrastructure is shown. Many other important transportation facilities play critical roles at local and regional levels.*

*Sources: ODOT Transportation Data Section, 2011 Oregon Mileage Report; FHWA; ODOT Rail Division*

# INTRODUCTION

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

Oregon's transportation system is a multibillion dollar 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 and other facilities. The transportation system serves important functions for all Oregonians and visitors – employees commuting to work, children going to and from school, farmers shipping crops to market, people traveling throughout the state, businesses receiving materials for use in manufacturing, high-tech manufacturers sending their products across the globe, consumers buying groceries at the local market – it touches all of our lives. The better the transportation system works, the better it supports Oregon's economy and livability.

## 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 aims to increase

awareness of the state's transportation assets and the significant trends and challenges affecting the system. The report provides a statewide high level look with emphasis on the portion of the system managed by the Oregon Department of Transportation (ODOT).

While this edition of the State of the System report does not provide a complete picture of the roles fulfilled by local, tribal and federal jurisdictions or facilities such as the rail system, marine ports, pipelines and airports, it integrates additional information on these system components where available.

## 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 address an intermodal transportation system. ODOT's mission, "to provide a safe, efficient transportation system that supports economic opportunity and livable communities for Oregonians," guides the

agency's work. 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, and more.

Local governments and other 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 services, airport, 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 the 2008 or 2010 State of the System reports, while others are new conditions that significantly impact transportation in Oregon.

### → Economic challenges

Recent global economic challenges and high unemployment have brought transportation's role and impacts on the economy into greater focus. 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 service delivery. In 2011, goods dependent industries like manufacturing, agriculture, construction and retail provided nearly 600,000 jobs and generated \$26 billion of personal income. This shows a moderate pace of improvement over 2009 and 2010, however it has not yet returned to the 2008 level. In addition

to providing a framework to support economic activity, transportation investments help spur job creation and retention through construction and infrastructure projects.

### → Dwindling federal transportation trust funds

The federal fuels taxes, which supply the vast majority of the revenues flowing into the Federal Highway Trust Fund for surface transportation programs, have not increased since 1993. In addition, as fuel economy improves, less revenue is collected per vehicle mile traveled. Inflation compounds the problem by further eroding the value of the funds available.

As a result, revenues have not kept up with funding commitments, and the balances in the Federal Highway Trust Fund have been exhausted. Congress was forced to step in four times between 2008 and 2012 to provide cash infusions into the Trust Fund totaling \$55 billion.

### → Federal spending authorization

The current federal funding authorization, titled Moving Ahead for Progress in the 21st Century (MAP-21), expires October 1, 2014. Previous surface transportation authorization bills have covered a six year period, rather than the two years covered by MAP-21, and the Highway Trust fund will again exhaust its balances around the time MAP-21 expires. The uncertainty of funding levels beyond the expiration date of this bill impacts state and local plans and programs for future transportation investments.

### → Increasing population

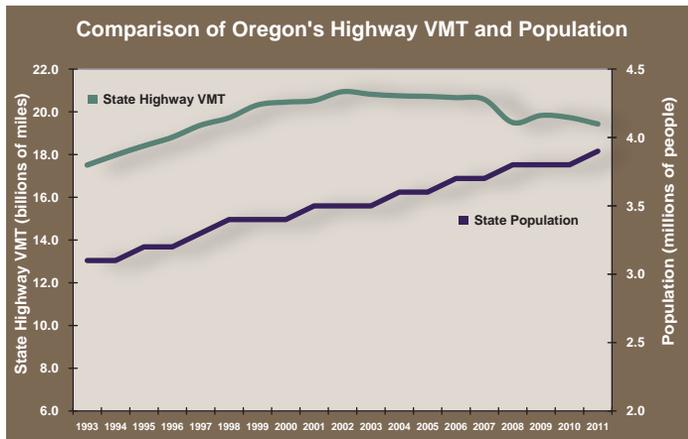
Oregon's population is expected to increase over 25 percent between 2010 and 2030, creating increased demand and new and continuing challenges for the transportation system. Most of the growth will take place in eight counties: Clackamas, Deschutes, Jackson, Lane, Marion, Multnomah, Washington, and Yamhill.

### → Increasing urban and rural populations

Over the last six decades, the population in urban areas has increased about 200 percent compared with an increase in rural areas of 33 percent.

### → Aging population

As baby boomers age, Oregon residents 65 and over represent an increasing share of the population. As this group moves into a different phase of their lives, they will reduce vehicle miles of travel, and as they age may increasingly rely on transportation options that do not require them to drive. Geographic differences also appear when looking at this group. The U.S. Census Bureau American Community Survey shows that in 2011 those aged 65 or older represented a larger share of the local population in rural Oregon than in urban areas. In 2011, the percentage of the population over age 65 in rural areas was 18.2 percent, but only 12.9 percent in urbanized areas.



*Ten vehicles, each traveling five miles on the highway, equal 50 VMT.*

### → Changes in vehicle miles traveled

The total number of vehicle miles traveled (VMT) is one measure of demand on the highway system. Oregon highways see VMT numbers in the billions each year. For decades, VMT numbers in total were on an upward trend due to increasing population and increasing participation of women in the labor force. Beginning in 2003, state highway VMT began to decline slightly, per capita VMT has been decreasing since 2000. Due to a number of factors, including changing demographics and the economic downturn, total state highway VMT has leveled off.

### → Aging infrastructure

Oregon's transportation infrastructure is getting older and more expensive to maintain, preserve and expand. Many important structures such as bridges, interchanges, locks and jetties are between 50 and 80 years old. Increased maintenance investments are necessary to keep 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.

### → Maintaining investments

Transportation infrastructure requires resources for maintenance and preservation throughout the life of the facility. While completely new facilities are rare, investments are being made to ensure more efficient operation of the existing system. Many of these investments are in operational equipment and technologies that often require expanded and relatively new types of maintenance commitments; challenging existing maintenance and operational budgets.

### → Active Transportation and public health

There is growing interest in addressing public health concerns through changes to the built environment. The phrase “active transportation” refers to sustainable, multimodal transportation solutions that connect people to where they need to go - such as work, school and to access essential services using “active” modes such as walking, bicycling, and taking public transit. Increasingly, communities are interested in providing active transportation options to support healthy lifestyles, fight obesity, and to provide opportunities for those who choose not to or cannot drive a car.

The state recognizes the health benefits of active transportation. ODOT and the Oregon Health Authority are working together to strengthen the links between health and transportation.

### → Concern about climate change and the environment

Climate change concerns prompted the 2007 Oregon Legislature to set specific greenhouse gas emissions reduction goals for Oregon (Oregon Revised Statute (ORS) 468A.205). By 2020 the state is to achieve greenhouse gas levels that are 10 percent below 1990 levels and 75 percent below 1990 levels by 2050. Because the transportation sector is responsible for over a third the state’s greenhouse gas emissions, the 2010 legislature directed ODOT and the Oregon Department of Land Conservation and Development (DLCD) to provide an overall framework for reducing transportation-related GHG emissions.

Oregonians are also concerned about other impacts on the environment. This includes protecting wetlands, waterways and air quality, and inhibiting invasive species. Transportation projects have to address all of these considerations on an ongoing basis.

### → Expanding safety and security objectives

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. Ideally, Oregon needs to be able to respond to emerging safety and security issues and be prepared for sudden events so that safety and mobility are managed effectively. Oregon continues to make strides in traffic safety as measured in reduced injuries and fatalities.



## THE OREGON TRANSPORTATION PLAN AND ITS IMPLEMENTATION

In 2006, the Oregon Transportation Commission (OTC) adopted an updated Oregon Transportation Plan (OTP), the state's long-range multimodal transportation plan. ODOT and others have been implementing the OTP since that time. The State of the System report is based on the OTP because the Plan provides a vision for the future of Oregon's transportation system.

The OTP considers all modes and jurisdictions of Oregon's transportation system as one integrated system and addresses the future 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.

## 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: [www.oregon.gov/ODOT/TD/TP/pages/otp.aspx](http://www.oregon.gov/ODOT/TD/TP/pages/otp.aspx)



## GOAL 1

## 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.

An effective transportation system provides for the safe and reliable movement of people, services and goods. This section primarily addresses the movement of *people* in Oregon; *freight* mobility is discussed in greater detail in Section 3, “Economic Vitality.” The emphasis in this section is on enhancements to mobility and accessibility for people that an integrated multimodal transportation system can bring.

Mobility is the ability of people to travel from one place to another safely and efficiently. Accessibility means ensuring that Oregonians can reach their destinations and that they have choices for their means of transportation whenever possible. Accessibility is more than being able to drive a vehicle. It includes availability of public transportation by bus or rail within cities, alternatives for travel between cities, and special transportation services for senior citizens and people with disabilities. It also includes access to facilities supporting travel by foot, bicycle, wheelchair, scooter or other means.

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 help fuel 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. With Oregon’s population expected to increase by over 25 percent between 2010 to 2030, the demands on this system will only increase.

#### CHALLENGES TO MOBILITY AND ACCESSIBILITY

- Highway congestion continues to increase and last for longer time periods of the day.
- Funds for expansion and maintenance of roadways have been decreasing relative to real dollars.

- Oregon's goal of a seamless network of bicycle routes within cities and urban areas remains incomplete, although progress has been made since the 1971 law requiring a minimum level of expenditure on bicycle infrastructure.
- Sidewalks in Oregon's towns and cities, in both urban and rural areas, are in poor condition and there are gaps in coverage, making pedestrian travel unreliable and disconnected in many areas.
- The economic recession caused a 25 percent decrease in freight traffic on Oregon's main north-south rail line, which was running near capacity. This decrease in rail freight has allowed for improved passenger rail on-time performance; however, as the economy recovers, the line is expected to see more freight traffic. This may again pose challenges for the single line to effectively balance freight and passenger rail service.
- The economic recession resulted in deep cuts in public transportation services, thereby reducing access to jobs, medical facilities, businesses and other destinations.
- Travelers between cities often lack travel options beyond a private automobile. This limits mobility for Oregonians. Choices are limited because of the large investments required to establish public transportation routes and to cover the ongoing operation costs.
- Access to commercial air service remains a challenge for much of Oregon's rural areas.

Responses to these issues, trends and conditions must be managed on several fronts and will require innovative decisions. These decisions must prepare Oregon for the future, balancing the use of limited funds on solutions for urban, rural and freight mobility needs while also addressing mode choices for Oregonians.

## HIGHWAY CONGESTION

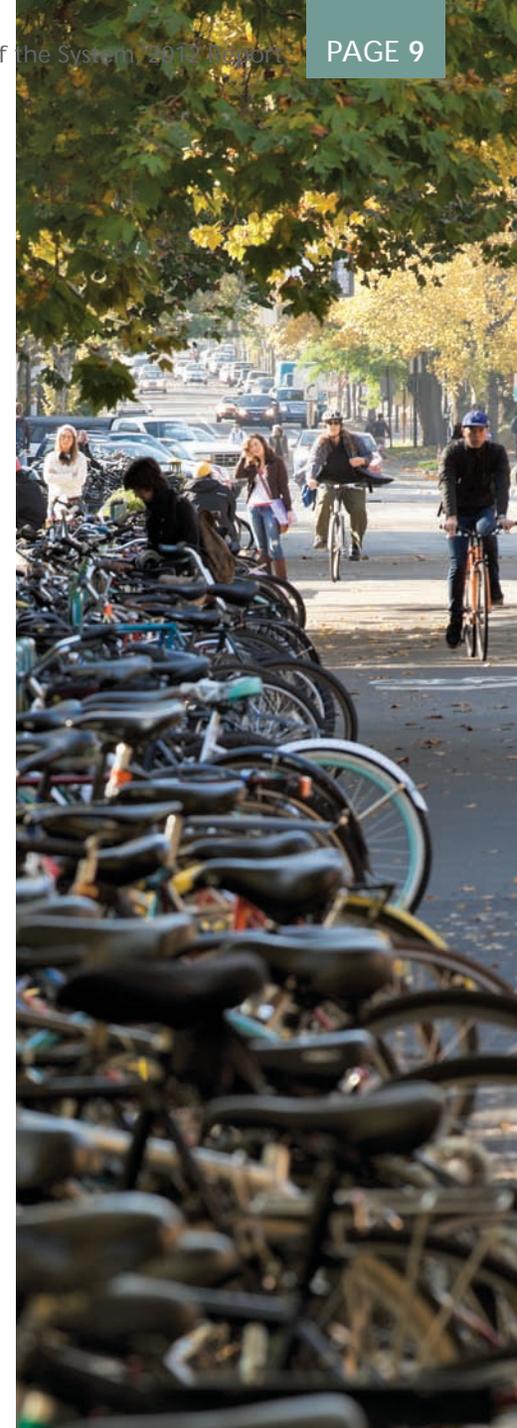
Improvements to Oregon's highway infrastructure are expensive, and given limited resources it is necessary to be strategic in all investment decisions. There are alternatives to consider to help address highway congestion, especially in urban areas. These include improvements to public transportation services and technologies, bicycle and pedestrian facilities, as well as increased rates of carpooling, vanpooling and telecommuting. Dollar-for-dollar, measures that reduce single-occupancy auto trips are often more effective at reducing congestion than roadway expansions, but also have limitations.

## TRANSPORTATION DEMAND MANAGEMENT

Congestion occurs when too many people choose to travel on a facility and the capacity cannot accommodate it; this typically occurs during peak travel times. Transportation Demand Management (TDM) is a set of strategies aimed at making more efficient use of existing roadway capacity in order to manage congestion. TDM focuses on promoting and encouraging travel options other than driving alone. Carpooling, vanpooling, transit, telework, cycling, and walking are all options encouraged and supported by TDM. Transportation options encouraged by TDM result in less polluting, less expensive and more physically active travel that consumes less roadway capacity than driving alone.

## WALKING AND BICYCLING

Oregon continues to be a leader in bicycling and walking. Three Oregon cities have been named in the top 10 bicycle friendly communities of the nation by the League of American Bicyclists. The 2010 US Census Journey To Work Data reports that Corvallis has the highest share of bike



# Did You Know

In 2011 and 2012, Oregon added 62 miles of new sidewalks - a 7% increase over 2010.

## STATUS OF SIDEWALKS AND BIKE FACILITIES ALONG STATE HIGHWAYS IN OREGON 2012

Sidewalk Need	Existing Sidewalks	Sidewalks Complete
1,005 miles	634 miles	63%

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

Bike Facility Need	Existing Bike Facilities	Bike Facilities Complete
1,589 miles	958 miles	60%

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

Source: ODOT's Bike/Ped Program

commuters in the nation at 9.3%, with Eugene-Springfield coming in second at 6%. Corvallis came in second in the nation for walking, with 11.2% commuting to work on foot.

In 2011, ODOT published a new Bicycle and Pedestrian Design Guide. The Guide takes into consideration the importance of good design and context, recognizing that inadequate or poorly placed facilities discourage use and waste funds. The guidelines apply to all state highway projects, and can also be used at the local level.

## PUBLIC TRANSPORTATION

Public transportation itinerary information has become more readily available in Oregon in the last two years. TriMet has been a world leader in the development of the multimodal open source Open Trip Planner. ODOT and transit agencies around the state have been creating and maintaining General Transit Feed Specification (GTFS) data for Oregon fixed route transit service. GTFS combines information on regularly scheduled public transportation services, allowing data to be shared and integrated in multiple ways. As of fall 2012 there are 37 Oregon transit services with GTFS data available with more expected to come on line in the coming months. GTFS data allows applications like Google Transit and DriveLessConnect to provide useful transit itinerary planning services and transit availability information to the public.

Even though the recession has caused cuts in public transportation services, important new urban and rural investments are being made in public transportation infrastructure through programs like the American Recovery and Reinvestment Act (ARRA) and *ConnectOregon*. Several communities throughout the state have benefited from *ConnectOregon* investments in multimodal projects featuring the integration of public transit facilities.

## INTERMODAL CONNECTIONS

The new Oregon Streetcar Loop opened in Portland on September 22, 2012. ODOT was a partner with the City of Portland and TriMet to support redevelopment and create new connections for the city. The new loop connects with light rail, bus lines, commuter park and rides, and walking and biking facilities to create a significantly more livable east side.

## PASSENGER RAIL

Passenger rail service in the Pacific Northwest has been growing in popularity, fueled in part by cooperative efforts of Oregon, Washington and Amtrak. The two states are developing a Corridor Management Plan for planning, marketing and operating the Cascades passenger service between Vancouver, B.C. and Eugene under a single management structure instead of through separate agreements as has been the case since 1994. Separately, Oregon is developing a Corridor Investment Plan/EIS for the Oregon portion of the corridor that will include an alternatives analysis and produce recommendations for routes, goals and frequency of passenger rail service south of the Columbia River. This will also lay the groundwork for Oregon to apply for any future federal funds as they become available.

Passenger rail, like other forms of public transport, lacks adequate, reliable and consistent funding for capital and operating needs. In addition, the rail system is complicated by private ownership of mainline tracks, which are owned and operated by freight carriers. However, in 2010 the federal government



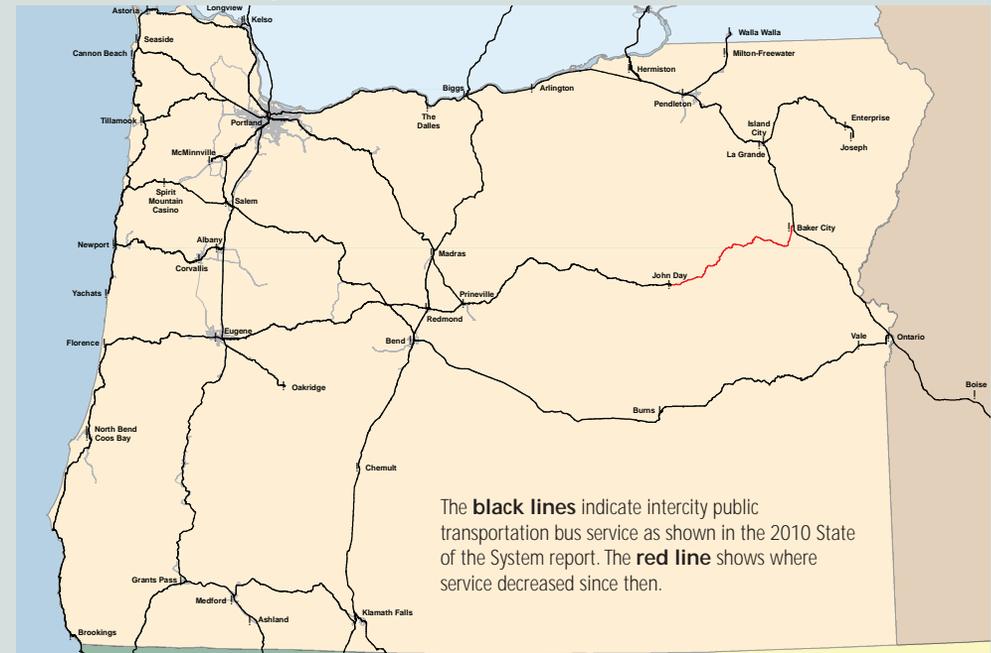
began making significant investment in passenger rail planning and infrastructure, including \$19.3 million for Oregon. These funds are being used to structurally rehabilitate Portland Union Station and plan for additional work there. Also funded is preliminary engineering for two rail projects to improve mobility and reduce congestion in north Portland, and to construct passenger train layover facilities in Eugene. Federal funds also are helping to pay for the Corridor Investment Plan/EIS and an update of Oregon's State Rail Plan.

Working closely with the Federal Railroad Administration, ODOT has begun the process of updating the State Rail Plan, last revised in 2001. In 2010 ODOT completed a statewide passenger and freight rail assessment that documented railroad infrastructure, operations, corridors at risk of abandonment, future commodity flow projections and the freight and passenger outlook for the next 20 years. This work, titled the Oregon Rail Study, forms the technical work to support the update of the State Rail Plan.

## INTERCITY PUBLIC TRANSPORTATION

Since 2009 ODOT has been developing the POINT (Public Oregon Intercity Transit) network to connect people and communities. Oregon continues to support the State's transit network with the POINT bus services; NorthWest POINT (Amtrak Thruway bus service between Astoria and Portland), SouthWest POINT (Klamath Falls to Brookings via Medford and Grants Pass), Eastern POINT (service between Bend and Ontario), and HighDesert POINT (service between Redmond and Chemult). Overall, POINT bus service ridership is up almost 10% for the period July 2011 – June 2012 over the prior year.

## Intercity Public Transportation Bus Service



For up-to-date information on transportation options available in and between areas throughout Oregon, or to find local transportation providers, click on **Transportation Options** at [www.TripCheck.com](http://www.TripCheck.com) or visit [Google.com/transit](http://Google.com/transit) or <http://drivelessconnect.com/>

## AVIATION

Oregon's rural residents lack population density to entice commercial service air carriers to their communities. While smaller carriers have attempted service to rural airports in the past, they are not generally sustainable without public subsidies in the form of Essential Air Service grants. These funds are limited and competition for them is significant.

## GOAL

## 2

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 on a day-to-day basis as well as for the long-term. Efforts to improve operations serve to get the most out of existing transportation infrastructure in Oregon. These include operational efficiencies that help traffic move more smoothly, licensing and regulation to facilitate driving safety, and asset management to prolong the life of the infrastructure. Preservation of existing infrastructure is the highest funding priority in order to protect the significant investments that built the transportation network.

**SYSTEM OPERATIONAL EFFICIENCIES**

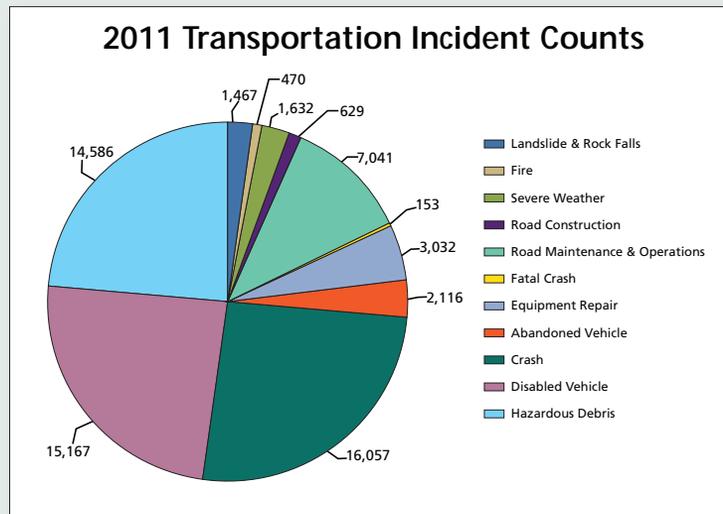
Highway system operations encompass many different management and operational activities that inform the traveler, improve traffic flow and provide information regarding travel alternatives.

Tools used on Oregon highways such as ramp metering, traffic signal coordination, variable speed limits, the Green Light preclearance program for weighing trucks in motion, incident management programs and traveler information services, among many others, make the existing system safer and more efficient. These tools assist in reducing congestion, improving travel times, reducing emissions and fuel use, and providing other system and traveler benefits.

One strategy for congestion relief is real-time information. This is "decision-quality" information that transportation system users can access, understand and act on to choose the most efficient modes and routes. Timely and detailed information about traffic incidents, weather, construction activities, transit and special events all aid in improving travel time predictability, enable better travel choices and reduce congestion.

Another strategy for congestion relief is to provide travel choices or to shift travel to less congested times of the day. ODOT encourages the use of carpools, park-and-ride facilities, telecommuting, flexible work schedules, public transportation, bicycling and walking to carry out this strategy.

ODOT has been working on an Active Incident Management System for the connection of the I-5 / I-405 corridor in Portland. The goal of this effort is to use variable speed limits to improve traffic flow through bottlenecks and improve safety. This is currently being tested and should be operational in early 2013.



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. The counts shown for "Road Construction" and "Road Maintenance Operations" indicate there were work activities that impacted traffic. Those occurrences were reported to the public via ODOT traveler information systems such as 511 and TripCheck.

## TRIP CHECK

**Travel Information Systems** provide a means for delivering critical information to travelers. People can make better traveling choices based on information from ODOT's website, TripCheck.com or use the site to select safer routes and avoid adverse weather and road conditions. The same 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 are also used to deliver information to travelers en route. The TripCheck website provides comprehensive information about public transportation options and travel services. The ODOT TripCheck system has proved popular with the public with peak usage of over 5.8 million visits in a single month. ODOT's TripCheck system had over 14 million visits in 2011, an average of 1.4 million visits a month. TripCheck helps travelers "know before they go," so they can make informed travel choices based on the most current information. And with TripCheck Mobile people can have traveler information at their fingertips via handheld devices.

Oregon public transportation providers are making progress in providing information that can help people travel bus, bicycle, carpool, rideshare, and on foot as easily as using a hand-held device. Urban areas like Portland, can now provide immediate information about how to get to a destination. This information is also being provided in Bend, Corvallis, Eugene-Springfield, Medford-Central Point and Salem-Keizer. This is exciting because this information also links to the statewide intercity transportation information.

In 2011, the "DriveLess/SaveMore" education website was expanded to include "DriveLessConnect," a tool that can help people customize and locate rideshare options throughout Oregon, Washington and Idaho.

### TripCheck Local Entry

To provide an even more thorough picture of current traffic conditions, a new addition to automated information is available electronically through TripCheck Local Entry (TLE). TLE's purpose is to more quickly inform local motorists of incidents and construction taking place on county and municipal roads. Via TLE, local agencies can directly input their own incident data to TripCheck.

## Green Light Preclearance

Green Light precleared its 16 millionth truck in October 2012. It is estimated that truckers have saved 1.3 million hours of travel time and \$160 million in operating costs the past 13 years as they cleared Oregon weigh stations 16 million times without having to slow or stop. Moreover, according to emission tests, the 16 million weigh station preclearance events resulted in trucks emitting:

10,672 pounds less particulate matter,

21,328 pounds less hydrocarbons,

51,200 pounds less carbon monoxide,

170,672 pounds less nitrogen oxides, and

30,576,019 pounds less carbon dioxide.

The program is currently serving 3,600 trucking companies with 33,000 trucks equipped with transponders.

## REGULATORY MANAGEMENT

Regulation of the users of the highway system serves to increase safety and preserve the system. Driver regulation is primarily safety-focused – whether it's via provisional licensing for teen drivers, medical referrals for those whose driving may be impaired due to a medical condition, or the laws and rules that govern commercial drivers.

Regulation of vehicles that are driven on Oregon's highway system, while related to safety, also serves to manage the impacts of commercial vehicle size and weight of loads traversing its routes. The table below shows the number of oversize permits issued in 2011. Careful evaluations go into routing for these over-dimension vehicles, because a highway can be shut down for hours when a high load gets stuck under a bridge or a long load cannot make the turns on a twisting route.

### LARGER LOAD PERMITS ISSUED IN OREGON

	2009	2011
Single Trip Permits for nondivisible large loads. Good for one movement.	96,035	119,541
Annual Continuous Trip Permits issued by the State of Oregon. Good for one calendar year.	9,486	10,828
Annual County Operation Variance Permit (COPV). May be issued jointly with another jurisdiction, or by the state or county alone.	164,858	165,749

## ASSET MANAGEMENT, SYSTEM PRESERVATION AND MAINTENANCE

Life-cycle management, through maintenance, preservation and replacement of assets, is an essential focus for organizations serving as stewards of Oregon's transportation system. Timely maintenance and preservation activities extend a facility's useful life and help avoid more expensive repairs or reconstruction. An

asset management program guides proactive and strategic decision-making, looking at specific assets in the context of the system as a whole.

Three Oregon Transportation Investment Acts (OTIA) and the 2009 Jobs and Transportation Act (JTA) have funded critical repairs and improvements; however, the aging of the transportation infrastructure remains a key factor for management of the system. Significant aspects of Oregon's highway infrastructure assets are near or beyond their expected useful life. These assets include bridges, pavement, tunnels and culverts. Oregon's local jurisdictions and ODOT must navigate the increasing needs of the aging infrastructure while serving an increasing population and more vehicles.

The cost for a typical lane mile of highway pavement receiving preservation, rehabilitation or reconstruction treatment ranges from \$200,000 to \$1.5 million dollars. Timely treatments reduce lifecycle costs, but when funds do not meet needs, treatment must be deferred. This results in higher costs for repairs when pavement conditions decline.

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. Since this pattern is expected to continue for the foreseeable future, managers are making strategic choices about where to invest in pavement and other infrastructure with data from asset management systems. Transit fleets and private rail tracks suffer from similar strains of aging infrastructure and limited resources and also use asset management data to maximize the value of their investments.

Due to the age of Oregon's bridge inventory, a disproportionately large group of bridges will require major rehabilitation and replacement within a relatively short

period in the coming decades. As bridges deteriorate some face weight restrictions which affect some freight routes important to Oregon's economy. OTIA enabled Oregon to reduce backlogs in bridge and pavement needs, but the needs continue to multiply. The waves of significant additional infrastructure construction that occurred 50-80 years ago mean a disproportionately large number of bridges will still need to be replaced or will need major rehabilitation work to keep them fully functional. Oregon has benefitted from increased investments in critical repairs and improvements to aging transportation infrastructure funded through bonding allowed by the OTIAs and JTA, but bonds must be repaid. This repayment will further reduce the funding available over the next two decades. The average annual Bridge Program budget will be less than \$50 million as compared to \$80 or \$90 million in the past. Charts on page 33 show the projected trends for state highway pavement conditions and also for the bridge performance measure – number of distressed bridges.

A recent asset management effort completed a five year assessment for pedestrian and bicycle facilities on the state highways. Pedestrian and bicycle needs have been identified in all urban areas and inventories of pedestrian and bicycle facilities have been completed. This information was used to determine that the cost to complete the sidewalk and bicycle systems in urban areas is approximately \$700 million in today's dollars. This information will be used in the development of the Bicycle and Pedestrian Plan. Another asset management project recently identified ADA needs on existing state highway facilities. The project found that 16,938 ADA Ramps were needed along state highways to meet ADA accessibility requirements, at an estimated cost of \$24 - 35 million. This resulted in the establishment of a new \$1 million per year funding program to construct ADA facilities.

Maintenance includes a variety of important activities that enable safe travel and extend the useful life of highway related 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 and sanding roads.

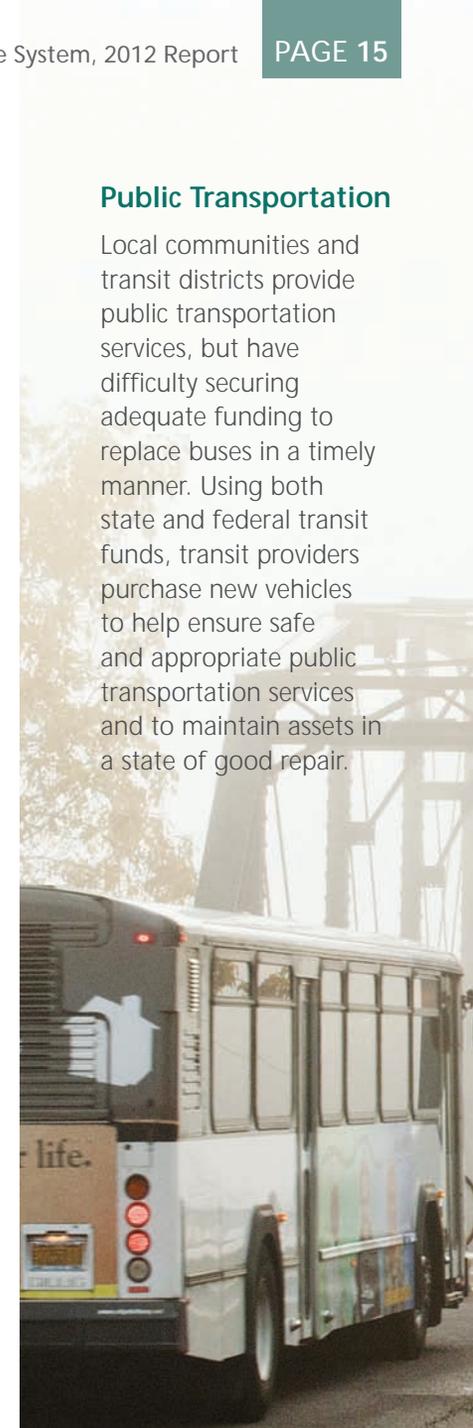
When proactive Asset Management and preservation activities cannot happen under ideal timing, maintenance activities become paramount. In this circumstance maintenance activities provide a temporary stop gap and serve to manage the decline of infrastructure. However, funding for maintenance activities is also constrained and impacts levels of service.

The Federal Railroad Administration established nine levels of track maintenance standards that prescribe the maximum speed for freight and passenger trains across the U.S. Oregon Class I carriers, BNSF Railway and Union Pacific Railroad (UP) lines are well maintained. The network of short line railroads faces challenges brought on by aging infrastructure and constrained resources. Short line railroads run on about 1,258 miles of the 2,377 miles of track in Oregon.

The Oregon Department of Aviation administers and coordinates 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 pavement rehabilitations.

## Public Transportation

Local communities and transit districts provide public transportation services, but have difficulty securing adequate funding to replace buses in a timely manner. Using both state and federal transit funds, transit providers purchase new vehicles to help ensure safe and appropriate public transportation services and to maintain assets in a state of good repair.



# GOAL 3

## 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.

Oregon's economy is diverse, relying on forest products, agriculture, manufacturing and technology-based businesses, and a variety of service-related industries. Despite this diversity, Oregon did not escape the effects of the recession. Exports led the state toward recovery, reaching nearly 95 percent of their 2008 value in 2011. More recently, exports to our primary Asian trading partners have declined relative to recent highs, reflecting slowing economic growth in those countries. However, Oregon exports to North American partners continue to increase.

Oregon remains a trade-dependent state, with goods exports accounting for nearly ten percent of state Gross Domestic Product (GDP) in 2011. This statistic illustrates the economic importance of trade-oriented sectors, such as computer and electronics manufacturing, logistics and distribution, and processed foods, to the Oregon economy. This also 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. Transportation investments can also help spur economic opportunity, job creation and job retention through construction and infrastructure projects.





## AN INTEGRATED AND EFFICIENT FREIGHT SYSTEM

The movement of freight is vitally important to the economic health of Oregon and the rest of the nation. In 2010, roughly 403 million tons of freight worth about \$253 billion moved on Oregon’s transportation system.

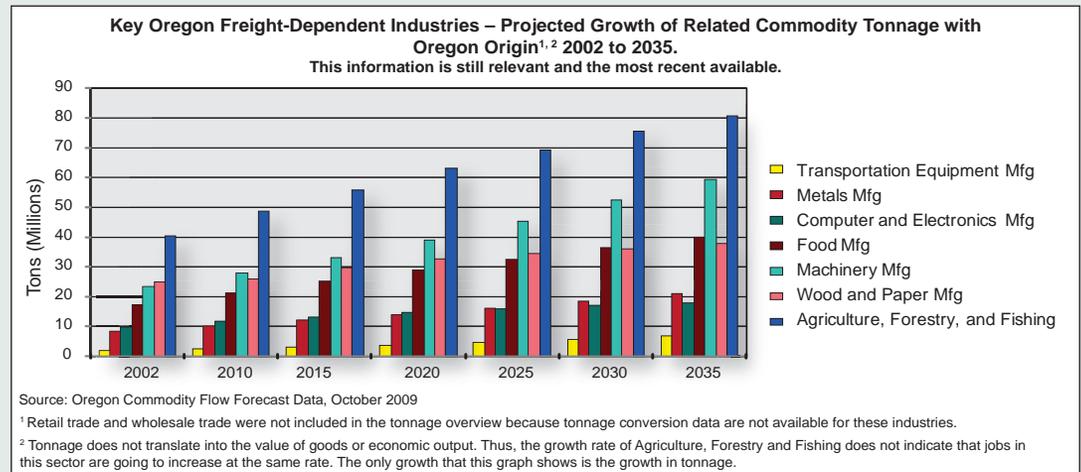
Freight movement relies on an integrated system that takes best advantage of the relative efficiencies of different modes. The choice of mode depends on availability, reliability, cost, the value and weight of the product and many other factors. Oregon’s high-value industries tend to have long-distance supply chains that require materials from all over the world, and they tend to sell the products globally. They depend on smooth functioning marine, air, and highway transportation and, to a lesser extent, on rail. 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.

Freight moved on Oregon’s transportation system

2008	389 million tons of freight	\$242 billion in value
2010	403 million tons of freight	\$253 billion in value

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. Since “just-in-time” delivery requires that few goods be stored on-site, shippers need reliable and predictable travel time. They also need to be able to transfer freight seamlessly between distant areas and different modes of transportation. Constraints for one mode or facility mean additional pressures on all the others.

Creating sustainable funding sources and developing performance measures will help promote choices about projects that best enhance the freight system. Working with stakeholders to identify system bottlenecks and sharing that information with infrastructure owners and stewards will also lead to smart investments. Freight shippers and transportation providers identified these challenges and others in the development of the new Oregon Freight Plan.



## Columbia River Highway State Trail Plan

The Historic Columbia River Highway is one of the most significant and iconic historic roads in the nation. Replaced by what is now I-84 as the main auto route in the 1950's, several sections of the Historic Highway were destroyed, leaving the remaining sections disconnected and abandoned. Today 63 of the original 73 miles of the Historic Highway are again open for use by bike, foot and/or car. The Historic Columbia River Highway State Trail Plan, completed in 2010, was a joint planning effort undertaken by the Oregon Department of Transportation, Oregon Parks and Recreation Department, US Forest Service and Hood River County to provide a clear plan to reconnect the remaining 11 miles of this scenic corridor, which attracts visitors from around the world.



Scan the Quick Response code with your Smart Phone to view the video *One Great Road, America's Greatest Scenic Drive*

## OREGON FREIGHT PLAN

The Oregon Freight Plan, a new statewide multimodal plan adopted by the Oregon Transportation Commission in June 2011, brings together issues affecting all freight-related modes of transportation and proposes strategies to maximize the efficiency of the system. A Steering Committee of executive-level industry and public sector stakeholders guided development of the plan, based on analyses of Oregon's economy, commodity flows and freight transportation issues. The plan describes a 25-year vision of a freight system that supports diverse industrial sectors, including traditional resource-based industries as well as the newer high-tech sectors.

The plan proposes strategies that address capacity constraints, modal alternatives, reliable travel times, partnerships with local communities and neighboring states, accommodation of overdimensional loads, protection of industrial land supply, freight emissions, environmental permitting processes, sustainable freight system funding and other issues. The plan also proposes protection of a strategic freight system based on the freight corridors that play the most critical role in supporting Oregon's economy.

## OREGON STATE RAIL PLAN UPDATE

The update to the State Rail Plan, last done in 2001, is building from the information and findings in the 2010 Oregon Rail Study. The Rail Study was a statewide assessment of current passenger and freight rail conditions which documented infrastructure, operations, corridors at risk of abandonment, future commodity flow projections and the freight and passenger outlook for the next 20 years. This work laid a solid foundation to begin the update of the State Rail Plan, where policies and strategies can be developed

through a comprehensive planning process. The majority of rail lines are in private ownership, although several short lines are owned by cities, counties or port authorities in Oregon. Public support of passenger rail and some critical system improvements promotes the rail system for the benefit of the state. Together, both public and privately owned rail lines and services form an important part of the interconnected transportation system. This system is important not only to Oregon's economy, but also to how Oregon connects with markets across the nation and the world.

## COMMUTERS AND LOCAL BUSINESSES

Individuals and businesses value travel time reliability and predictability. Slow commute times and congestion impact economic vitality. It is critical to businesses and consumers that the costs associated with moving commodities and delivering services are kept as affordable as possible. Increased population and economic growth will increase infrastructure needs and congestion. Increased congestion may slow the movement of goods and decrease reliability, affecting Oregon businesses.

## 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 \$3.3 billion to the state's GDP. This GDP level ranks tourism the third largest traded sector industry in Oregon's rural areas. Total direct travel spending in Oregon was \$8.8 billion in 2011. This represents a 2.6 percent increase over the preceding year. In 2011, the travel industry supported 92,000 jobs with earnings of \$2.2 billion. This equates to a 1.9 percent increase in jobs and a 4.3 percent increase in earnings over

2010. Passenger air travel represents an important mode for those visiting Oregon. Passenger air travel is vital to Oregon's tourism industry. Recent data suggests a rebound in passenger air travel with U.S. Domestic air arrivals of 2.6 million passengers in 2011; a 2.8 percent increase over 2009 visitor total.

Many visitors travel throughout Oregon to enjoy its natural beauty. Oregon has more National Scenic Byways, All-American Roads, and State Tour Routes than any other state in the nation. All regions of Oregon host a least one Scenic Byway or Tour Route. Travel Oregon estimates that travelers spend an average of \$104 per day along Scenic Byways, directly benefiting businesses and the communities along the route, often in rural areas.

In response to Legislative direction, tourism promotion at Oregon rest areas received a significant increase in funding. The Oregon Bicycle Tourism Partnership is a public-private partnership that shares information and resources to support bicycle tourism in Oregon. 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 bike rides in Oregon. To date, nine Oregon Scenic Bikeways have been designated, totaling over 717 miles. Travel Oregon hosts [www.RideOregonRide.com](http://www.RideOregonRide.com) - a one stop bicycle tourism website.

## ECONOMIC STIMULUS

Over the past several years there have been a number of special funding packages that have provided much needed investment in Oregon's transportation infrastructure. These investment packages have both improved infrastructure in Oregon and stimulated Oregon's economy by supporting

projects that reduce transportation costs, remove barriers to economic development and improve safety as well as supporting the creation and retention of jobs.

The Oregon Legislature provided funds through:

- *ConnectOregon*
- Oregon Transportation Investment Act (OTIA)
- Jobs and Transportation Act (JTA)

The federal government provided funds through:

- American Recovery and Reinvestment Act (ARRA)

## CONNECTOREGON - MAKING MULTIMODAL IMPROVEMENTS

The Oregon Legislature approved a fourth round of the *ConnectOregon* program in 2011. *ConnectOregon* is aimed at improving transportation connections around the state by investing in non-highway projects for rail, marine ports, aviation and public transit. *ConnectOregon* I through III (2005, 2007, and 2009) each authorized \$100 million in lottery-backed bonds for multimodal projects. For *ConnectOregon* III the legislature set aside \$5 million of the total for rural aviation projects. The legislature awarded \$40 million for *ConnectOregon* IV funding. The overall investment in *ConnectOregon* supports multimodal connections and better integrated transportation system components; this in turn improves the flow of commerce and promotes economic development

## OTIA III BRIDGE PROGRAM

The OTIA III State Bridge Delivery Program is part of the Oregon Department of Transportation's \$3 billion Oregon Transportation Investment Act. OTIA funds are repairing or

## Supporting Disadvantaged Businesses

ODOT is committed to supporting certified disadvantaged, minority-owned, women-owned, and emerging small businesses. Despite greater declines elsewhere in the agency, the number of contracts going to these firms showed a slower rate of decline, 3.6 percent in 2011 over 2010. During the same period, the dollar value of those contracts declined by 7.4 percent, a decrease that can, in part, be attributed to the types of contracts available. ODOT continues its program and initiatives to increase contracting opportunities for certified firms.

<b>ConnectOregon Project Counts</b>
<b>ConnectOregon I Projects</b>
36 complete 2 under construction
<b>ConnectOregon II Projects</b>
27 complete 2 under construction 1 in design phase
<b>ConnectOregon III Projects</b>
20 complete 14 under construction 6 in design phase
<b>ConnectOregon III Rural Airports Projects</b>
48 complete 9 under construction
<b>ConnectOregon IV Projects</b>
38 projects awarded funding

Based on recent estimates, about 11.8 family-wage jobs are sustained for every \$1 million spent on transportation construction in Oregon (2012 dollars).

replacing hundreds of bridges, paving and maintaining city and county roads, improving and expanding interchanges, adding new capacity to Oregon's highway system and removing freight bottlenecks statewide.

When OTIA III legislation was passed in 2003, the potential economic impacts of impending weight restrictions on Oregon's bridges was estimated at \$123 billion in lost production and 88,000 lost jobs during a 25-year period. Hundreds of bridges were included in this rehabilitation/reconstruction program, making the OTIA III bridge program the largest bridge construction effort in Oregon since the interstate era. The \$2.46 billion OTIA III provided \$1.3 billion to address aging state highway bridges and \$1.16 billion to fund city and county maintenance projects, local bridge repair and replacement work, and modernization projects statewide.

As of September 30, 2012, 264 of the 365 bridges in the program are complete and open to the public; seven are in construction; and 94 bridges do not require repair or replacement. By the end of 2013, all but one project will be open to traffic. The Interstate 84 Sandy River Bridge will be complete in 2014, marking the end of the OTIA program.

Businesses and individuals have earned more than \$1 billion after taxes since work started on the program in 2003. The bridge program has generated more than \$83.5 million in tax revenue for state and local governments. Since that time, the investments made in the transportation infrastructure have accomplished the following:

- Through 2011, the bridge program has sustained more than 17,000 jobs.
- Overall, the program will create or sustain approximately 23,000 jobs.

- The program instituted many cost-effective innovations, such as streamlined environmental programmatic permitting and extensive geographic information systems tools. In terms of costs avoided, these initiatives saved \$73 million and \$7.3 million, respectively.
- OTIA projects will continue to strengthen our economy by helping people and products move safely and more efficiently throughout the state.
- The OTIA III bridge program has earned 32 awards to date.

## 2009 JOBS AND TRANSPORTATION ACT

The 2009 Oregon Jobs and Transportation Act (JTA) represents the state's largest long-term investment in transportation infrastructure, putting Oregonians to work while making investments in all sectors of Oregon's transportation system. The Oregon Legislature increased vehicle registration and title fees, commercial vehicle registration fees and weight-mile taxes, other vehicle related fees, and the gas tax 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 provides the following allocation of funds:

- \$138 million a year for Oregon cities and counties to maintain and improve local street systems.
- \$162 million a year to maintain and improve the state highway system. A portion of this money finances \$960.3 million in bond proceeds for 37 projects to relieve key bottlenecks and address safety concerns and allocations to 12 local governments 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. Many of the largest projects funded under the JTA are reaching key milestones and heading into construction in the near future. The next two years will represent the peak construction of the JTA projects.

The JTA invests strategically in all transportation sectors including airports, bridges, city streets, county roads, marine ports, mass transit, railroads and state highways. These investments help keep thousands of Oregonians employed.

## ARRA - PROMOTING ECONOMIC RECOVERY

In Oregon, the American Recovery and Reinvestment Act (ARRA) has been effective but is nearing completion. ARRA's transportation funding has both promoted economic recovery and made resources available for improving the state's transportation system in ways that strengthen communities and improve long-term economic opportunities. Over 260 transportation-related projects were completed with AARA funds. Funds were used to preserve and improve Oregon's highways, transit systems, rail, bicycle/pedestrian infrastructure and related projects. ARRA funds also helped Oregon businesses. Nearly half a billion ARRA dollars have helped fund transportation projects across all modes, employing thousands of Oregonians and helping Oregon's construction industry during a time when commercial and residential construction were affected by the economic recession.

Among the most important accomplishments under ARRA:

- 268 projects were completed with ARRA funds (as of May 31, 2012).
- Some 65 projects remain underway.

- \$259.3 million: total ARRA Funds expended, providing private sector jobs and keeping Oregon businesses at work during the economic slowdown.
- \$61.2 million: funding for urban transit districts in the ARRA program.
- \$14.6 million: funding for rural transit districts in the ARRA program.
- 65 percent: percentage of ODOT ARRA funds that went to "Economically Distressed Areas" (EDAs) around the state. EDAs are those areas designated under Oregon law based on a seasonally adjusted unemployment threshold at the county level.
- Jobs were created quickly, putting Oregon contractors and private sector workers back on the job within months.
- Multimodal investments improved Oregon's transportation system, reducing congestion, providing better transit options, and helping Oregon companies move their goods to market.
- Local communities were able to fund priority projects.

## HIGHWAY CONSTRUCTION LEVELS DROP

As OTIA and ARRA projects come to completion; the number of state highway related construction projects open to bid has declined by about 20 percent a year in each of the last three years. Correspondingly, contract payments declined about 39 percent in the two year period from 2009 to 2011.

It is anticipated that in 2013 there will be temporary increases to construction levels as some major projects in the JTA move from design to construction.



# GOAL 4

## 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.

Transportation is relevant to many issues that sustainable practices aim to address, such as climate change, environmental stewardship and energy conservation. A sustainable transportation system considers the joint perspective of environmental, economic and community objectives in its development, operation and management. Transportation of all kinds is responsible for more than a third of greenhouse gas emissions.

### SUSTAINABILITY, CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS REDUCTION

Oregon's Legislature and Governor have taken significant actions in response to climate change concerns. The Oregon Sustainability Act (ORS 184.423) passed by the 2001 State Legislature established the state's overall sustainability policy. The legislature passed additional energy and climate change related bills in 2009 and 2010.

Two of those bills include the 2009 Jobs and Transportation Act (HB 2001, Section 37 to 39, Chapter 865 Oregon Laws 2009) and, Chapter 85 Oregon Laws 2010 Special Session (SB1059) which together fostered the creation of the Oregon Sustainable Transportation Initiative (OSTI). OSTI is an integrated statewide effort to reduce transportation-related greenhouse emissions (GHG) while considering ways to improve the built environment for healthier, more livable communities and potentially position Oregon to better compete in a changing global economy. OSTI's work is being led by both the Oregon Department of Transportation (ODOT), and the Department of Land Conservation and Development (DLCD), in consultation with the Department of Environmental Quality (DEQ), the Oregon Department of Energy (DOE), and stakeholder committees. The effort is designed to help the State achieve its goal of reducing GHG emissions by 75 percent below 1990 levels (ORS 468.205) by 2050.

For additional information on OSTI please visit the website [www.oregon.gov/ODOT/TD/OSTI/Pages/index.aspx](http://www.oregon.gov/ODOT/TD/OSTI/Pages/index.aspx)

### Adapting to a Changing Environment

ODOT is responsible for providing a safe, efficient transportation system; one that balances economic, environmental, and community well-being in a manner that protects the needs of current and future generations. In the face of increased climate variability and change, it becomes even more important to make decisions and take actions that will prepare and protect the transportation system for the future.

In order to prepare for impacts like sea level rise, flooding, landslides, and wildfires, ODOT developed a Climate Change Adaptation Strategy (April 2012). The purpose of the Adaptation Strategy is threefold: (1) provide a preliminary assessment of the climate change impacts to ODOT's assets and systems operations; (2) underline the need for a vulnerability and risk assessment; and (3) identify current opportunities and potential long- and short-term actions.

The ultimate goal is to develop an Adaptation Plan that will strategically guide the agency's planning, project development, maintenance, operations, and emergency response teams in preparing the transportation system for the impacts of climate change. Work is underway to determine where and how transportation systems are vulnerable to such things as flooding, landslides, erosion, sea level rise, and wildfires. This vulnerability assessment is the foundation for much of the future adaptation work that will allow Oregon to take a strategic look at the transportation system and pinpoint the vulnerabilities of the system. The end goal is creating and maintaining a more resilient transportation system.

### CONSTRUCTION AND MAINTENANCE

Several standards in ODOT's innovative Context Sensitive and Sustainable Solutions approach to the OTIA III Bridge Program support sustainability. One standard limits truck idling to five minutes, except in extreme cold weather or when needed for other reasons. A materials standard requires 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 requires extensive tracking of the reuse and recycling of bridge materials. These practices, which save money and reduce waste and emissions, have become standard practice for ODOT construction projects.

ODOT continues to successfully implement the award winning Environmental Management Program for its maintenance yards. Based on audits completed in 2012, upwards of 97 percent meet regulatory requirements for 7 priority 'procedures' that include fuel, oil, pesticides, winter maintenance chemicals, lighting, aerosol cans, and drainage. Procedures include best management practices to prevent surface and groundwater pollution.

ODOT is also in the process of reducing the use of herbicides in order to meet the Director's goal of a five-year 25% statewide reduction in the use of herbicides to treat non-toxic vegetation along Oregon highways. ODOT was able to reduce pounds of active ingredient (compared to 2010) by approximately 23% in the first year (2011) by improving equipment, application practices, and standardizing bare-shoulder widths. Herbicide use may vary in any given year depending on weather, chemical availability, and budget constraints/restrictions that affect equipment and labor availability. Varying the type of herbicide applied over the years tends to increase chemical effectiveness.

## Oregon a Leader in Electric Vehicle Sales

[Recent data from Edmunds.com](#) shows Oregon continues to be a leader in electric vehicles sales. Oregon ranks 16th in the nation for purchases of hybrid vehicles and 17th for electric vehicles -- despite ranking 31st overall in new car sales. Oregon continues to lead globally as well. Click [here](#) for an infographic that ranks cities across the world in terms of their electric vehicle deployment -- Portland is ranked 4th in the world.



## Did You Know

Southern Oregon has emerged as a leader in the use of Compressed Natural Gas (CNG) as an alternative vehicle fuel. In December 2012, a fueling station opened at the Rogue Valley Transportation District (RVTD) serving the District's bus fleet as well as public and private customers. The project was funded by a combination of federal grants and *ConnectOregon* funds. RVTD's alternative fuel fleet has improved air quality in Southern Oregon by displacing 100,000 gallons of diesel fuel.



ODOT is in the process of evaluating three pilot projects based on the Greenroads sustainability performance metric. This performance metric awards points for more sustainable practices during the design and construction phases of the roadway projects and would tangibly demonstrate Oregon's progress towards and commitment to building and maintaining our roadways in a sustainable manner.

### TECHNOLOGY

Fuel economy in gasoline powered engines continues to improve due to consumer demand and state and federal policies. In 2010, the National Highway Transportation Safety Administration and the Environmental Protection Agency issued new rules for Corporate Average Fuel Economy (CAFE) standards for model years 2017 and beyond. These new federal rules will help address the country's dependence on imported oil, save consumers money at the pump, and reduce emissions of greenhouse gases that contribute to global climate change.

ODOT is at the helm of Oregon's electric vehicle (EV) movement, setting the stage for EVs to proliferate by building a network of EV fast-charging stations that will crisscross Interstate 5, the coast, the Columbia River Gorge, the Willamette Valley and the Cascades. This network, known as the West Coast Electric Highway, which will extend across the west coast states, serving EV drivers all along I-5, is near completion. This will provide seamless travel between the three western states, which are all working together to create a uniform user experience.

The first phase in Oregon, was completed in March 2012. ODOT and AeroVironment, the contractor charged with supplying, installing, operating, and maintaining the West Coast Electric Highway equipment, unveiled the first 10 stations spanning over 200 miles of I-5 electric

highway from Halsey to Ashland. Phase II is underway with 22 stations scheduled for completion by Spring 2013 throughout northwestern Oregon. Phase III will kick off in 2013 extending the network to Central Oregon and the southern coast with 11 more charging stations scheduled for completion in 2014. This will bring the total EV fast-charging stations installed to 43 by 2014.

In addition to ODOT's EV infrastructure efforts, Oregon is also a participant in the national ARRA-funded "EV Project," run by ECotality, which is the largest deployment of EVs and charging infrastructure in history. In fact, since deploying infrastructure for the EV Project, ECotality has reached a major milestone when they recently surpassed 1 million charging events.

Because of Oregon's leadership in promoting EVs, the state was awarded \$500,000 by the U.S. Department of Energy, one of only 16 awardees in the nation, to create a next generation deployment EV readiness plan. The plan will define next generation deployment strategies, integrate and optimize existing EV efforts, increase awareness and understanding of EVs through outreach, and create momentum to reach Oregon's goal of 30,000 EVs by 2015.

### THE OREGON SOLAR HIGHWAY PROGRAM

Through the Oregon Solar Highway Program, ODOT is using its transportation infrastructure to generate renewable energy. In 2008, ODOT and Portland General Electric (PGE), through an innovative public-private partnership, powered up the country's first "solar highway" project – a 104 kilowatt solar array built on public right of way in the middle of the I-5 and I-205 interchange. And in 2012, through another ODOT-PGE partnership, the Baldock Solar Station was built. Baldock is 17-times larger than the first project, and at 1.75 megawatts, it is the largest solar highway project

in the nation. In using the existing public right-of-way for the development of renewable energy, ODOT seeks to serve multiple public values, including:

- Creating or sustaining local green technology jobs;
- Putting renewable energy onto the electrical grid;
- Providing a revenue stream;
- Shifting the cost of maintaining that parcel of land to the private partner – the entity owning and operating the solar project; and
- Adding value to the existing right-of-way asset, complementing - not compromising - the transportation system.

In exchange for use of the land, ODOT receives a share of the renewable energy certificates (RECs) generated by the solar project, and an annual site usage fee from the project owner. The RECs help ODOT offset its carbon footprint.

## MORE PROGRAMS SUPPORTING SUSTAINABILITY

An important part of a sustainable transportation system is providing choice and good community access. The Transportation and Growth Management (TGM) Program

continues to support community efforts to expand transportation choices for people. By linking land use and transportation planning, TGM works in partnership with local governments to create vibrant, livable communities in which people can walk, bike, take transit, or drive where they want to go.

The provision of transit services across the state provides an option for those without access to a personal automobile, and another option for those who do. For fiscal year 2011, transit ridership increased 2% over 2010 numbers. Transit ridership continues to increase, despite some service cuts due to constrained resources. During 2009, as fuel prices escalated dramatically, transit ridership increased by about 13% over 2008 ridership. Information about how to contact any of Oregon's transit agencies can be easily found through ODOT's TripCheck or the DriveLessConnect website.

Transportation Demand Management (TDM) is the application of strategies, policies or programs to reduce auto trips while still meeting people's transportation needs. Examples of TDM efforts include carpooling, vanpooling, public transportation, telecommuting, bicycle-friendly facilities, parking pricing, and flexible work schedules. Reducing trips reduces GHG emissions and congestion, and driving less typically saves both traveler and taxpayer dollars.

The Driver and Motor Vehicle Services Division (DMV) promotes online services (e.g., vehicle registration renewals) to reduce vehicle miles travelled and to encourage fewer visits to DMV offices where customer volumes influence wait times. DMV renews about 25,000 vehicle registrations a month from its website and customers receive their new tags in the mail within 2-3 days.

## TRANSPORTATION AND AIR QUALITY

The Driver and Motor Vehicle Services Division (DMV) assists the DEQ in enforcing vehicle emissions standards in the Portland and Medford areas. ODOT also evaluates and works to reduce the effects of proposed transportation solutions on air quality as part of the planning and project development processes.



# GOAL 5

## 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.

Although the definitions of safety and security are closely related, safety within the context of transportation means reducing the risk of transportation-related crashes or incidents. Security means reducing exposure to dangers including criminal and terrorist activity and natural disasters such as earthquakes and floods. Both safety and security measures include planning, education, engineering, enforcement and emergency responses.

### SAFETY

Since 1999, for the first time since the early 1950's, Oregon rates for fatal crashes continue to be lower than the national average. Based on the most recent published data (2011) the number of fatal crashes has continued to decline. This is significant given the fact that during recent decades the number of licensed drivers and number of vehicle miles traveled are significantly higher than 60 years ago.

Reducing crashes saves lives and prevents injuries, but it also spares families and society needless economic burdens. It is estimated that each traffic fatality costs an average of \$1 million in lost wages, lost productivity and expenses associated with the crash and death. Each traffic crash injury costs an average of \$50,000 in lost productivity, medical bills, rehabilitation and other expenses.

Transportation safety is integral to roadway engineering work. The first traffic signal was in response to a traffic safety problem. Today it is transportation safety that serves as a major catalyst for many infrastructure improvements, including ramp meters, variable message signs, other hazard warning systems, rumble strips, crash barriers, new guardrails, left turn lanes, and traffic-calming devices like traffic circles and speed bumps. An improvement that has occurred, in cooperation with rail, is that the automatic rail crossing signals are interconnected to the roadway traffic signals.

As part of its Intelligent Transportation System (ITS) operations, ODOT maintains electronic systems to monitor a variety of road conditions including vehicle speed, 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. RWIS data are used for making winter road maintenance decisions and are shared with the public through the TripCheck website.

Transportation safety is multi-disciplined and takes the long view. To improve transportation safety conditions statewide, the Transportation Safety Division has developed a long range plan – the Transportation Safety Action Plan, as a roadmap for addressing safety issues. Through grants, partnerships, and training, the Division works with law enforcement and the entire legal system to make safety a top priority. Work is done to educate Oregon's youth through driver education, community education and training. ODOT works with local governments to improve their individual responses to problems. Local government or ODOT field staff is often the first responder to arrive on crash scenes in rural Oregon, providing immediately needed medical care until additional help arrives.

Inexperienced drivers are linked to higher rates of crashes and traffic citations. To help address this problem, Oregon implemented a Graduated Driver Licensing program. Drivers younger than 18 are required to get 100 hours of driving experience, or 50 hours of experience plus pass an ODOT-approved Driver Education course before applying for a driver license. After obtaining a license, there are limits on the number of passengers they can carry as well as other restrictions until they reach their 18th birthday.

## TRANSPORTATION SAFETY IS MULTIMODAL:

### Railroad Safety

Achieving railroad safety is a cooperative endeavor between the states, the federal government and private rail operators. The Rail Safety Program uses a combination of inspections, enforcement and industry education. It aims to reduce the potential for train derailments and the release of hazardous materials. It also funds and constructs rail crossing and light rail safety projects.

### Pedestrian Fatalities in Oregon

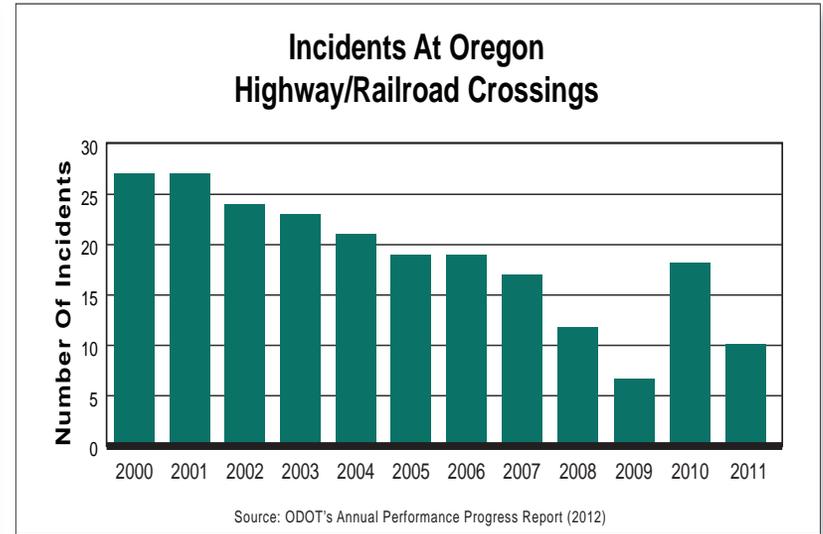
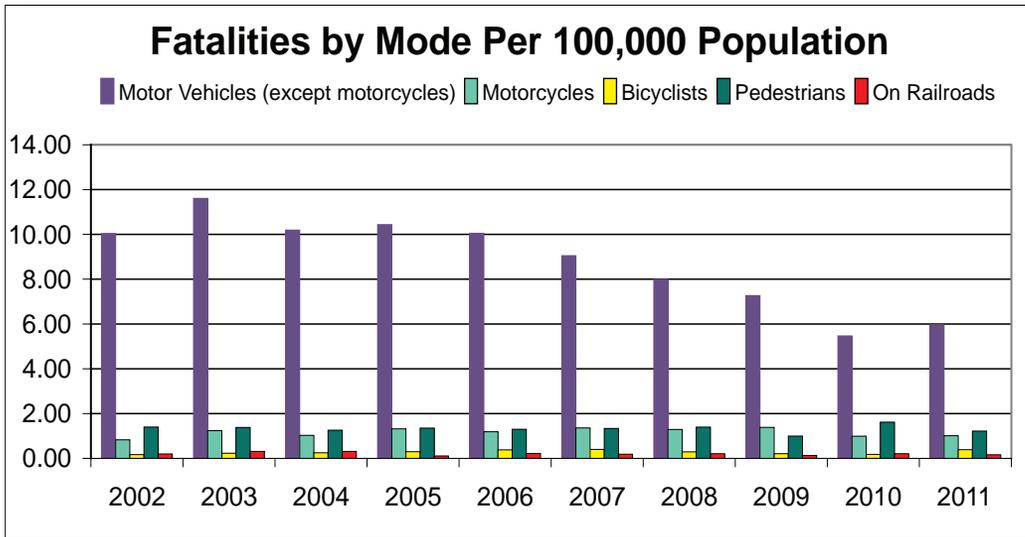
The increase in pedestrian fatalities between 2009 and 2010 has been a subject of great concern. Two factors create the 51 percent increase – a record low number of deaths in 2009 and a record high for the decade in 2010. Although declines were seen in 2011, pedestrian fatalities are on the rise again in 2012, with 54 deaths as of November 2012.

Many of the pedestrian fatalities are related to the pedestrians not being visible and taking action that drivers are not expecting, such as crossing mid-block or walking in the roadway. Some pedestrians have been hit by impaired drivers.

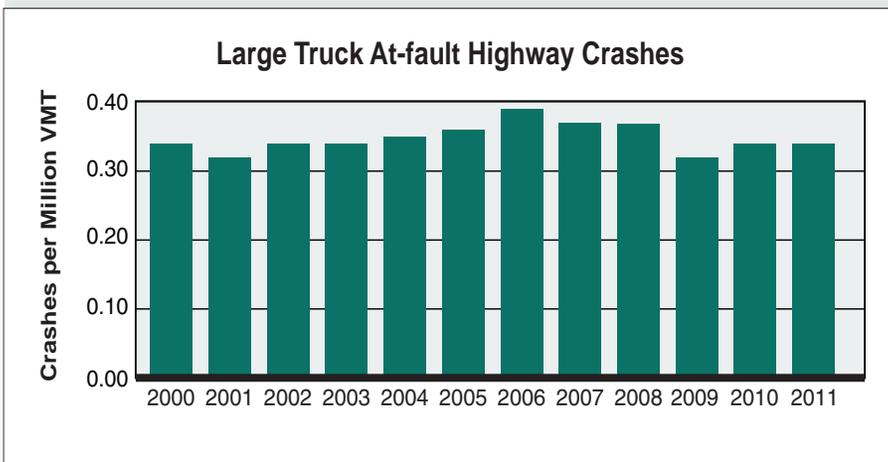
Year	Number of Pedestrian Fatalities in Oregon
2000 – 2004	Annual average of 51
2005	49
2006	48
2007	50
2008	53
2009	37 (lowest since early 1940's)
2010	61
2011	46

## Did you know?

- In Oregon during the last 10 years, there's been an average of 510 work zone related crashes each year; an average of 19 work zone related serious injury crashes each year; and an average of 9 work zone fatal crashes each year.
- For 2012, preliminary estimates confirm two work zone fatalities to date in Oregon. In 2011, the number of work zone fatalities was eleven, while in 2010, there were nine.
- Nationally, in 2010 there were 576 fatalities in work zones. In 2009, there were 680 fatalities in work zones, and in 2008 there were 716 work zone fatalities.
- Work zone safety is a growing concern. In 2010 work zone fatalities represented 3% of all roadway fatalities for the year.
- Roadway construction is one of the most dangerous occupations in the United States: the risk of death is seven times higher for roadway workers than for an average worker.
- The situation is serious for both drivers and workers, but there are actually far more drivers and their passengers killed and injured in roadway work zones in comparison to workers. Four out of five work zone fatalities are drivers and their passengers.
- Work zone crashes tend to be more severe than other types of crashes.



Traffic fatalities continue a general decline in recent years. Motor vehicle and motorcycle fatalities were at lowest rates in recent years in 2010. Bicyclist fatalities have followed the same trend over the past four years, but jumped in 2010. Pedestrian fatalities have hovered around 50 per year over the last few years, but dropped significantly in 2009, jumped sharply in 2010 and then returned to near average in 2011. Railroads continue low fatality rates per 100,000 Oregonians



#### 2011 Compared to 2010

In 2011, there were 1,021 crashes involving trucks, a 2 percent increase over 2010; of these it was determined that the truck was at-fault in 547 of the crashes, a 5 percent increase; the number of people injured increased by 11 to 419, a 3 percent rise; the number of people killed in these accidents increased by 2 to a total of 45, a 5 percent increase; and the number of crashes from mechanical issues decreased to 31 which is 4 fewer than 2010, an 11 percent drop.

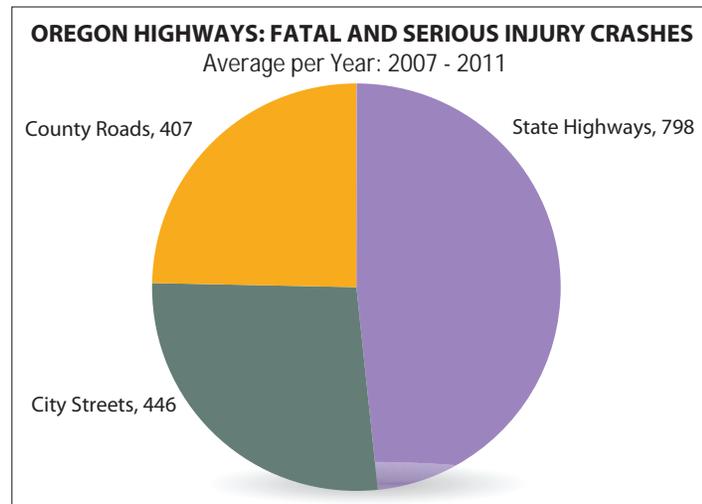
#### 2011 Compared to 2008

The 2011 totals are slightly higher than 2010 but they are still at a historically low level. Compared with 2008 totals, truck crashes in Oregon are down 19 percent, crashes in which the truck driver is at-fault are down 19 percent, crashes caused by a truck mechanical problem are down 11 percent, and injuries in truck crashes are down 16 percent. However, fatalities, compared to 2008, are up 16 percent.

## 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 2011 over 300 people lost their lives, and 35,000 people were injured while on the road. More has to be done:

- Impaired drivers continue to be a menace on the road, contributing to nearly 100 fatalities – over 30% of the overall total fatalities. New laws and technologies continue to be developed and focused on this problem, but these crashes continue.
- Speed is indicated as a contributor in 37% of all fatal crashes and 16% of all injury crashes.
- Unbelted drivers represent typically less than 5% of all drivers, but are disproportionately over-represented in fatalities on Oregon roadways.
- Driver Education is proven to lower teen crashes and fatalities, but it is not available in all areas of Oregon.



## SECURITY

Local, state and federal agencies work together to prepare emergency response plans to effectively respond to a wide variety of emergency scenarios.

### Oregon Seismic Lifeline Routes

The Oregon Highway Plan emphasizes the provision of secure network of streets, highways and bridges to facilitate emergency services response and to support rapid economic recovery after a disaster. In the past year, ODOT went through a process to identify a backbone system of lifeline routes in the event of a major earthquake. The focus of the effort was on preparation for response and recovery from a major Cascadia Subduction Zone earthquake and related events.

The project assessed the vulnerabilities of the highway system, considered links to critical facilities and prioritized routes for investments in improved resilience. Critical connections considered include emergency response, medical and shelter facilities, population centers, energy and communications facilities and resources for short- and long-term road repairs. Freight needs were also considered for response (food, water, supplies) and economic recovery.

The result was a recommended “Backbone” system of lifeline routes and the findings were incorporated into a Seismic Options Report to the OTC that describes the types of retrofits that would be needed to address bridge, landslide and other hazards that can be mitigated. While the report demonstrates that achieving seismic resiliency on key lifeline routes is feasible, it does not address the financial resources necessary to do the costly implementation.

### New Safety Laws and Programs

The law banning texting and hand-held cell phone use while driving was modified as of January 1, 2012. Oregon lawmakers removed the exemption for using a hand-held cell phone for business purposes.

The Ignition Interlock law is intended to increase the use of these devices for driving under the influence of intoxicants (DUII) offenders. As of January 2012, anyone that enters in to a DUII diversion program, must install the ignition interlock device as part of that agreement.

### Identification Security and Fraud Prevention

Driver licenses are the most common form of identification required by businesses and government agencies. The DMV helps to prevent fraud and identity theft with electronic verification of data presented for issuance, facial recognition technology, fraud investigators, and security features on driver license and identification cards.

# GOAL 6

## 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.

The many and diverse elements of Oregon's transportation system are funded through local, state and federal programs, private investments and sometimes a combination of all these sources. Oregon relies heavily on highway user fees to fund highway, road and street improvements across the state. These fees include fuel taxes, vehicle registration and title fees, and weight-mile taxes.

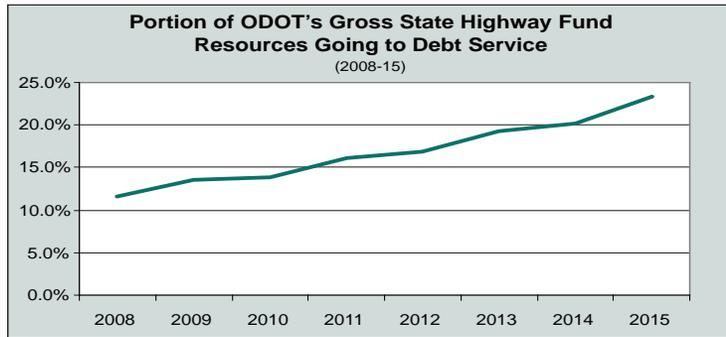
### TRANSPORTATION FUNDING TRENDS

The Oregon Legislature and Congress have made significant investments in the state's transportation system in recent years through the three Oregon Transportation Investment Acts (OTIA), *ConnectOregon*, the American Recovery and Reinvestment Act (ARRA), and the Jobs and Transportation Act (JTA). Under these programs ODOT and local governments 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 one-time infusions rather than long-term sustainable funding, and ODOT faces long-term funding challenges. Growing debt service on bonds, revenue projections that are down significantly from previous expectations, agency operations costs that are growing faster than revenue, uncertain federal funding, and growing fuel efficiency—all of these forces conspire to reduce the resources ODOT will have to preserve and improve the transportation system in coming years. Over the next several years, as the Jobs and Transportation Act projects reach completion, the agency's construction program will drop off significantly, and in the long term the condition and performance of the transportation system will be impaired.

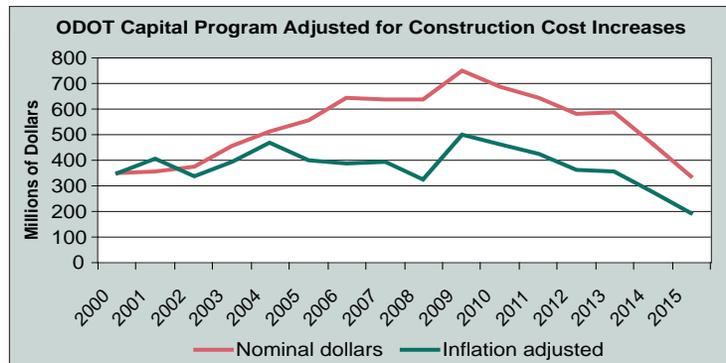
➔ **Increasing debt service**

Recent investment packages were one-time infusions of spending frontloaded through bonding. ODOT will be paying significant debt service for OTIA, the JTA and other projects that will constrain future spending— about \$200 million each year by 2016. This level of debt service will continue through 2036, reducing funding available for new projects for decades.



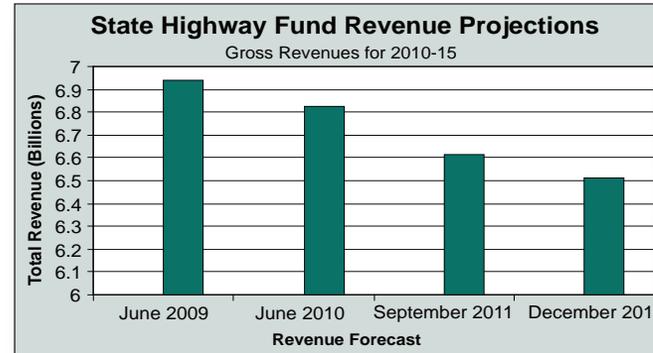
➔ **Increased construction costs**

Over the last decade, construction costs have surged: in 2010 costs were nearly 70 percent higher than they were in 2001. Each dollar ODOT spends buys less construction activity than it did a decade ago.



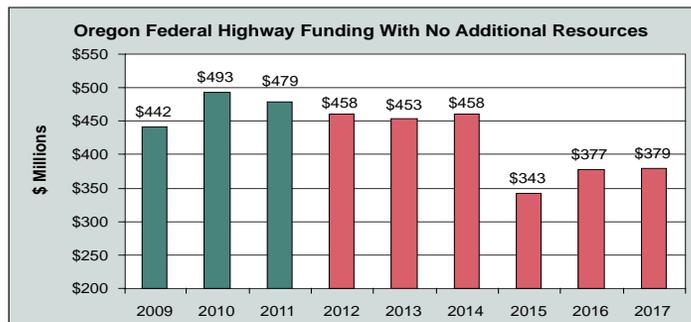
➔ **Reduced state revenue projections**

State Highway Fund revenue projections are down significantly from previous expectations, largely due to economic conditions. The JTA was originally projected to take in \$298 million in 2012. Now it's projected to take in \$270 million—a 9 percent reduction from original expectations.

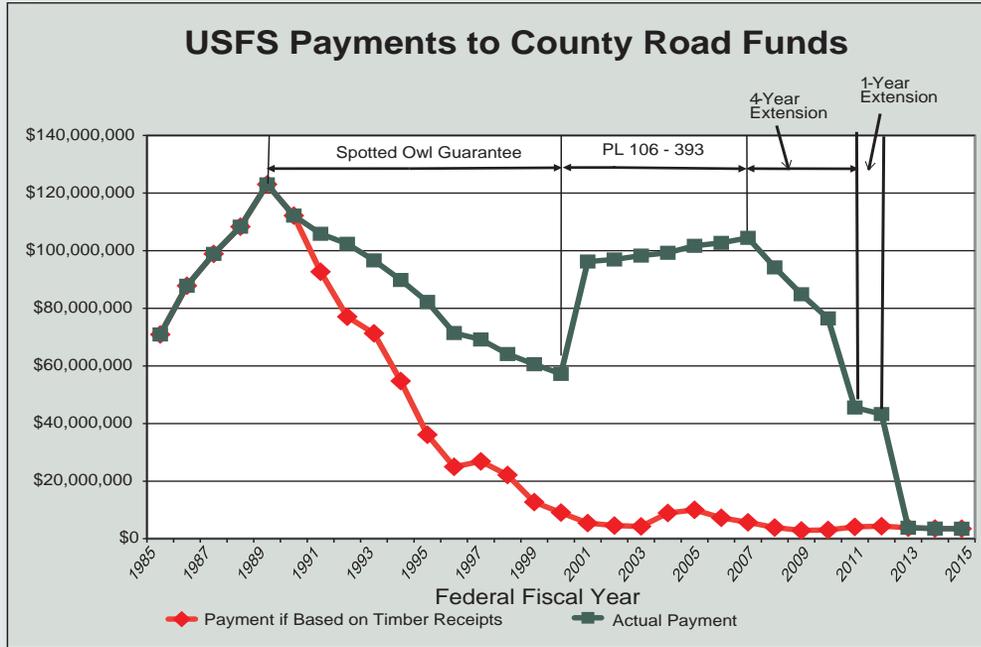


➔ **Federal funding**

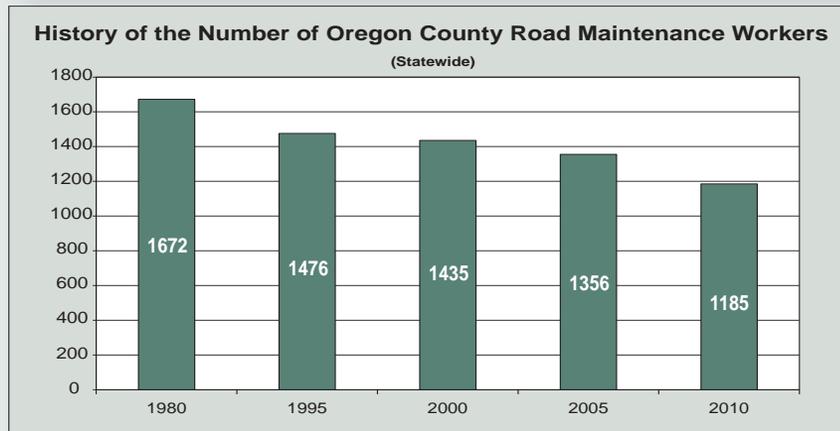
Because Congress increased spending from the federal Highway Trust Fund without increasing its revenues, the Trust Fund is taking in less than it is paying out. Unless Congress takes action to find additional long-term revenue, federal highway and transit funding is at risk of being cut by about 25 percent once the surface transportation authorization bill, MAP-21, expires in fall 2014.



## FUNDING ISSUES ALSO IMPACT OREGON COUNTIES



For most of the last century payments from the U.S. Forest Service (USFS) were based on timber receipts; 25 percent of these were distributed to counties. Each county then distributed 75 percent of its timber revenues to county road funds and 25 percent to county school funds. As shown in the graphic at left, due to the rapid decline in timber harvest, the timber receipts to counties dropped to less than 10 percent of previous levels. To compensate the counties, Congress passed PL106-393, the Secure Rural Schools and Community Self-Determination Act of 2000, authorizing payments to counties at close to previous timber receipt levels through Federal FY 2007. In 2008 Congress authorized a four-year extension of PL106-393 payments, but at a rapidly declining rate. Another one-year extension was authorized in 2012, but unless further legislation is passed, payments to counties will return to the 25 percent of timber receipts, a loss of over 90 percent, a major impact on the counties' ability to fund road maintenance and improvements.



➔ **Fuel efficient and alternative fuel vehicles**

Federal fuel efficiency standards are scheduled to rise significantly by 2025, when requirements for new vehicles will average around 50 miles per gallon. At that point, when the average new vehicle is as efficient as a Prius, the gas tax will not be viable as transportation's major revenue source.

➔ **Researching new funding options**

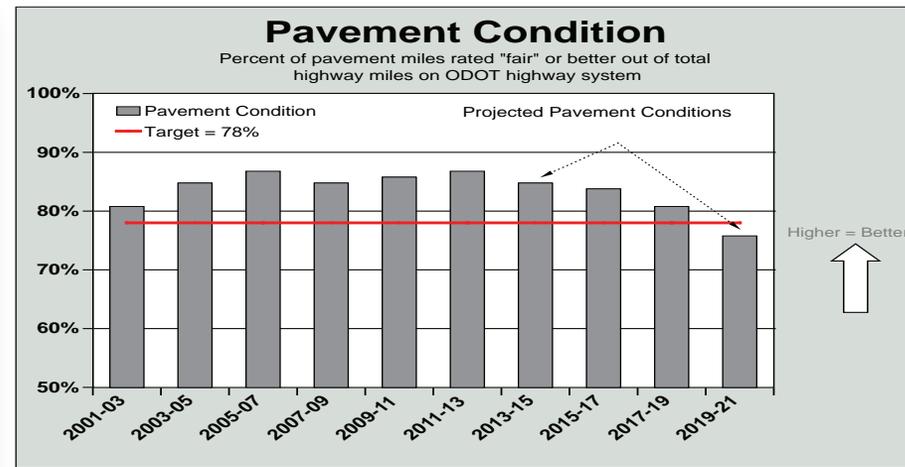
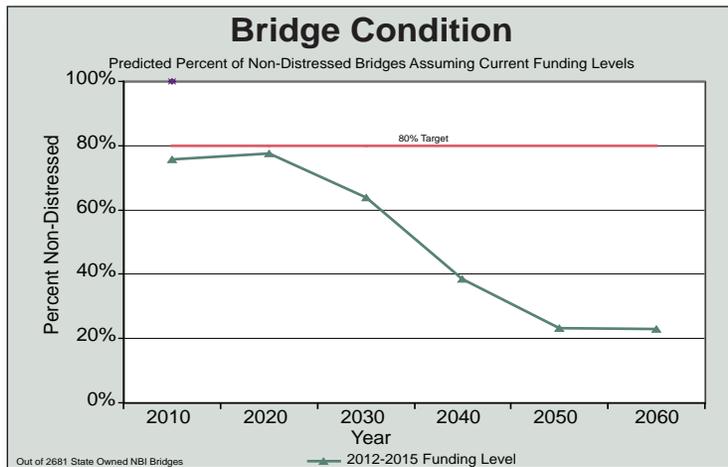
The Oregon legislature directed ODOT to develop a system to address funding gaps caused by a rise in fuel efficiency and a projected decline in gas tax revenues. A Road User Charge Pilot Project, in 2012 and 2013, is testing a new way of

collecting user fees from drivers in Oregon. Volunteers pay a charge for each mile that they drive during the three month pilot, rather than paying the state gas tax.

➔ **Funding for non-highway modes**

Although Oregon has made significant investments in non-highway modes, the state has no adequate, sustainable, long-term funding source for these modes. As a result, investments in non-highway modes have been made on a one-time, episodic basis, making it difficult to plan for the future or leverage federal investments.

**WHAT DOES THIS MEAN FOR OREGON'S TRANSPORTATION SYSTEM?**



These charts show the projected trends for state highway pavement conditions and also for the bridge performance measure – number of distressed bridges. A distressed bridge is a bridge that has deteriorated or has reduced functionality that compromises mobility or safety. Bridges built during earlier decades are a significant part of the inventory and create a bubble of aging infrastructure in need of repair or replacement from 2030 to 2050.

Although pavement and bridges represent some of the most important elements of transportation infrastructure, inadequate funding will impact the condition and performance of the entire transportation system-- from culverts and Intelligent Transportation Systems to public transportation and pedestrian and bicycle facilities, as well as safety improvements and much more.

# GOAL 7

## 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.

Effective 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:

- 6 existing metropolitan planning organizations
- 3 newly designated metropolitan planning organizations forming in 2013
- 9 federally recognized tribal governments
- 36 counties
- 242 incorporated cities

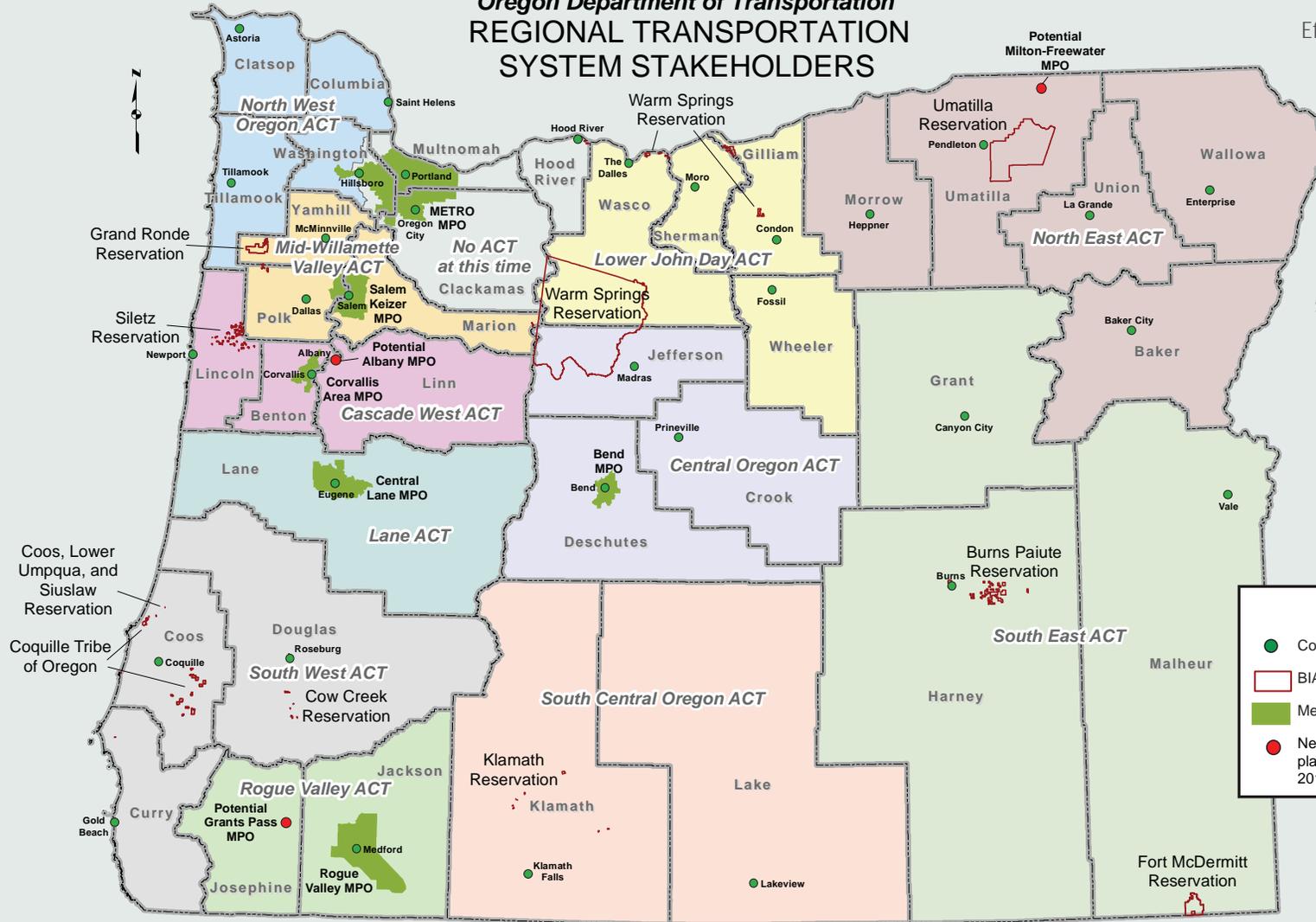
More than 160 stakeholder groups include:

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

Many stakeholder groups and advisory committees include representatives from businesses, special interest groups, local jurisdictions, and other parties. Task-specific advisory committees include those working on transportation GHG emission reduction planning, in response to legislation, and the freight shippers, public and private transportation providers, business interests and local jurisdiction

## Oregon Department of Transportation REGIONAL TRANSPORTATION SYSTEM STAKEHOLDERS

Effectively managing and improving the transportation system requires working with a diverse set of jurisdictions, transportation providers and operators, and stakeholders:



### Legend

- County Seat
- BIA Tribal Lands
- Metropolitan Planning Organization
- Newly designated metropolitan planning organizations forming in 2013

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representatives and other interests steering the development of the State Rail Plan. The Oregon Rail Plan is being developed in parallel with the state of Washington Rail Plan.

## WHAT COORDINATION, COMMUNICATION AND COOPERATION CAN LOOK LIKE AND ACHIEVE

- The Oregon Transportation Commission's public involvement policy provides a framework for statewide transportation planning to meaningfully involve the public by providing for early, open, continuous and effective participation in key planning and project decision-making processes.
- Responding to traffic incidents is a joint effort by ODOT, local public works departments, Oregon State Police, local police, fire and rescue responders, and towing companies.
- ODOT is exploring and implementing a number of public-private partnerships to advance use of alternative energy, including establishing electric vehicle plug-in stations, using solar power for highway lighting and creating conveniently-located alternative fuel facilities.
- ODOT continues its strong relationship with the American Council of Engineering Companies of Oregon (ACEC) in order to build relationships and improve processes between ODOT and private sector firms.
- The Oregon Department of Agriculture and ODOT coordinate efforts to control and deter invasive species through vegetation management.
- The Statewide Transportation Improvement Program (STIP) Stakeholder Committee, representing diverse transportation interests, advises the Oregon Transportation Commission on investment selection criteria and processes

and is currently serving as a project steering committee for ODOT's development of Mosaic: value and cost informed planning (formerly least cost planning).

- The development of the Oregon Statewide Transportation Strategy: A Vision for Greenhouse Gas Emissions Reduction required both a Policy Committee and a Technical Committee with stakeholders from state commissions, other state, federal and metropolitan agencies, advocacy groups, technical experts and academia.
- The Transportation and Growth Management Program, a joint program of ODOT and DLCD, supports local community planning efforts. The TGM programs offers technical assistance through grants, quick response, code assistance and outreach, as well as producing guidebooks on planning techniques of interest to local governments. Through this program, ODOT and DLCD work in partnership with local governments to create vibrant, livable places in which people can walk, bike, take transit or drive where they want to go.
- The one-mile stretch of I-5 near the Rose Quarter represents one of the busiest transportation crossroads in the state, and has notoriously high crash rates. ODOT and the City of Portland have collaborated to develop a solution that serves to improve safety and better knit the surrounding neighborhood and business districts together.
- Through a partnership involving the Confederated Tribes of Siletz Indians, the Oregon Department of Fish and Wildlife, and the Oregon Department of Transportation, Dogbane, an often hard to find plant important to local Native American culture is thriving in the Willamette Valley.
- The Driver and Motor Vehicle Services Division's field offices collect voter registration forms and address changes on behalf of state/local elections officials.

## THE GREENSTEP MODEL

ODOT created the GreenSTEP model, an award winning new planning tool that has been adopted at the national level and is being shared with other states. GreenSTEP is used to estimate GHG emissions from surface transportation and to assist in determining how the transportation sector can meet the statewide emissions targets in the future.

- DMV works with diverse stakeholders on a number of important subjects for ODOT. DMV partners with representatives of law enforcement associations and the Department of Justice to discuss issues and common interests, such as avoiding fraud in the use of driver licenses. They also meet annually with the Latino community to discuss service delivery and seek advice on effective communications.
- ODOT, Oregon Department of Aviation, and Business Oregon coordinate on projects ranging from freight planning to *ConnectOregon* funding.
- To permit the hundreds of bridges in the allotted time frame for the OTIA III State Bridge Delivery Program, ODOT collaborated with 11 state and federal regulatory agencies to combine more than 14 separate environmental statutes and permits into a single set of standards that met all of the contributing agencies' goals. The formation of a multi-agency team to establish, manage and monitor the environmental programmatic permitting process allows ODOT quick access to decision makers, leading to faster response times and flexibility during design and construction. Potential permit violations or other issues could be resolved efficiently with insight from all appropriate stakeholders. In 2009, a cost benefit analysis was conducted to determine the return on investment in programmatic permitting in terms of costs avoided. The new process not only lead to efficient use efficient use of our regulatory partners' time, but it is also more cost-effective than the traditional permitting process. The results were definitive: The return on investment of traditional permitting was \$.75 for every \$1 expended. For programmatic permitting, the return was \$3.19 for every \$1 expended.
- Through the OTIA III State Bridge Delivery Program, ODOT replaced eight bridges in the Columbia River Gorge National Scenic Area. For the first time, the agency developed a unified strategy to encompass all construction in the Gorge. ODOT, representatives of state and federal agencies, adjacent counties and the private companies consulting on the bridge program came together to form the Gorge Committee Level 1 team. Their extensive collaboration led to a set of design guidelines — the I-84 Corridor Strategy — that addresses aesthetic elements ranging from abutments and railings to landscaping and wildlife crossings in accord with National Scenic Area provisions. The team synthesized the feedback of local citizens, who participated via a series of public meetings. The overall model for construction was the Historic Columbia River Highway, whose arched bridges reflect the basalt rock cliffs in the Gorge.
- ODOT employees volunteer to share their knowledge with local schools in many ways. In 2011, District 9 employees visited The Dalles Middle School as part of National Engineers Month. There they challenged the young learners to build transportation structures in the process learning about structural integrity.
- Department of Veteran's Affairs, ODOT and Ride Connection, Inc., a non-profit organization, worked together to help disabled veterans using mobility devices get transportation to medical services. ODOT contributed accessible vehicles, veterans contributed volunteer drivers, Ride Connection trained the drivers and together communities across Oregon can now help isolated veterans get to places they need to go.
- *ConnectOregon* IV funds awarded to Ride Connection in Portland will be used on a Resource and Operation Center. Ride Connection will partner with Human Solutions and Reach Community Development so that each of the organizations can use the shared center as they work with community partners to provide transportation options for the elderly, people with disabilities, and the community at large.

# 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: [www.oregon.gov/ODOT/TD/stateofthesystem.shtml](http://www.oregon.gov/ODOT/TD/stateofthesystem.shtml). 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.

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