

# Oregon Department of Transportation

## Transportation Program Development

---

### Program Description

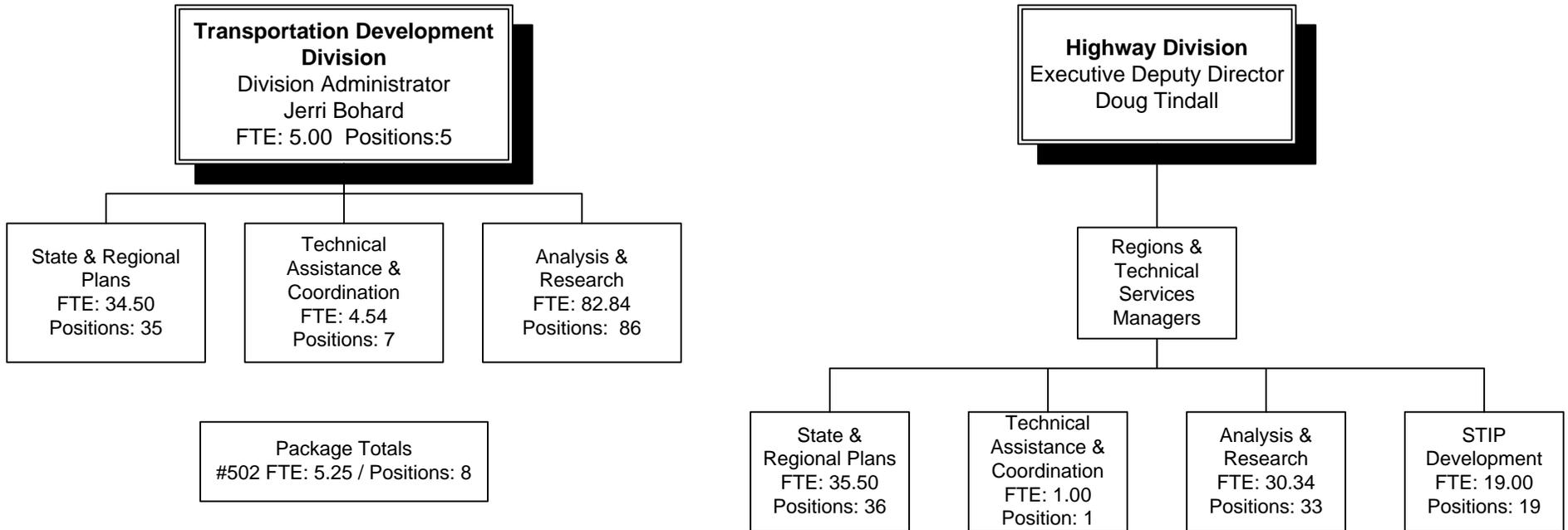
In stewardship of the state's transportation system and in support of the department's mission, Transportation Program Development's (*TPD*) responsibilities include providing policy and technical direction as well as data and information for comprehensive decision-making for the long-term management and improvement of Oregon's transportation system. Additionally, state and federal laws and rules require ODOT to conduct project development activities such as planning, scoping of projects, data collection and data analysis to design and operate an efficient transportation system. All of this is accomplished via five umbrella programmatic areas within TPD.

1. Statewide Transportation Improvement Program (*STIP*) Development—Oregon's four-year transportation capital improvement program. This document identifies the scheduling of and funding for transportation projects and programs.
2. Statewide Plans and Special Studies—Develops short-term and long-term Transportation System Plans (*TSP*). This includes responsibility for producing the long-range Oregon Transportation Plan (*OTP*), the Oregon Highway Plan (*OHP*), facility plans for specific highway corridors or specific geographic areas, and conducting statewide freight planning activities. Many of these facility plans are the precursor to defining future improvement projects that can proceed into project delivery and construction.
3. Analysis and Research—Manages the performance of the transportation system utilizing transportation asset management programs that incorporate data collection, analysis and reporting, GIS analysis, mapping and system modeling, and conducting research projects to identify new effective ways to enhance the transportation system.
4. Technical Assistance and Coordination—Provides Metropolitan Planning Organizations (*MPO*)s and local governments with technical assistance; this includes administering funds and providing input to MPO work products, working with local governments on planning projects, guidance in code language updates, and traffic analysis. In coordination with the Department of Land Conservation and Development (*DLCD*), provide transportation planning resources for local governments through the Transportation and Growth Management Program (*TGM*).
5. *ConnectOregon*—ODOT implements the provisions of Senate Bill 71 and HB 2278 known as *ConnectOregon* I and II. *ConnectOregon* is a lottery-bond-based initiative first approved by the 2005 Oregon Legislature to invest in air, rail, marine, and transit infrastructure. This key strategy ensures Oregon's transportation system is strong, diverse and efficient. *ConnectOregon* is focused on improving the connections between the highway system and the other modes of transportation to better integrate the components of the system, improve flow of commerce and remove delays. TPD is responsible for the process of gathering, reviewing, prioritizing and selecting the projects to be completed via *ConnectOregon* funds.

# Oregon Department of Transportation Transportation Program Development

## 2009–2011 Organization Chart

FTE: 212.72 (217.97 with Packages)    Positions: 222 (230 with Packages)



# Oregon Department of Transportation

## Transportation Program Development

---

### Internal Measures and Other Data That Quantifies and Effectively Illustrates Performance Results

- As of February 28, 2009 the *ConnectOregon I* program has generated 994 construction jobs based on 14 jobs per \$1 million expended.
- As of February 28, 2009 the *ConnectOregon II* program has generated 31 construction jobs to date.
- ODOT has been tracking the outcomes of research projects since 2003 to determine what percentage of projects undertaken result in either a change in department practices or validate current practices. Since tracking began, the measure has averaged 84% and the current biennium average is 88%.
- Transportation Data standard products met production targets 88% of the time, and custom products 97% of the time in the 07-09 biennium. Standard products include annual data and analysis publications as well as custom data and GIS-based mapping products.
- Federal Highway Administration (FHWA) requires mandatory annual certified mileage and Highway Performance Monitoring System (*HPMS*) reports on an annual basis and these were completed on time for each of the last two years.
- The TGM Program managed \$5 million in local grants and \$1.2 million for Direct Community Assistance projects. The applications for the next round of grants have just come in; the total requests, from 76 applications, are almost \$9 million.
- Current data shows that 70% of all jurisdictions reporting have locally adopted TSPs.

### 2009-11 Essential Budget Level (EBL) and the Governor's Recommended Budget (GRB)

The TPD Essential Budget Level supports a broad range of activities and products that further the department's mission as well as supports joint state and local jurisdiction's transportation planning efforts. The challenges and strategies identified in the OTP guide the department in assessing program priorities. The policy directions of the plan include system optimization, integration of transportation modes, integration of transportation, land use, the environment and the economy, and the need to make strategic investments using a sustainable funding structure.

# Oregon Department of Transportation

## Transportation Program Development

---

### Freight Mobility Planning

The department continues to incorporate freight issues and perspectives into the transportation planning process, which will result in a safe and effective transportation system for the movement of freight and goods. The upcoming biennium's work includes the development and completion of a Statewide Freight Plan to address the needs of freight including the recognition that the tonnage of freight moved is forecasted to increase by 80 percent by the year 2030.

### Research

The ODOT Research Program is a nationally recognized and peer-reviewed research program that partners with Oregon State University (OSU), Portland State University (PSU), and University of Oregon (U of O), to conduct and publish research on depth and breadth of topics that address transportation modes, material and methods affecting planning, design, construction, operations, and maintenance. The Technology Transfer (T2) Center provides transportation-related information to local agencies throughout Oregon. This is funded jointly by ODOT, Federal Highway Administration (FHWA) and local agencies. Other services provided by the T2 Center include safety-oriented training, practical training in road maintenance, operations, and preservation.

### Sustainability

The department is striving to determine how to best incorporate sustainability efforts, including climate change, and Greenhouse Gas (GhG) emissions related to transportation both internally within the department, and externally as it relates to the state's transportation system. The department is in the process of updating its Sustainability Plan for transportation, which is the road map for the Department, leading towards more efficient and sustainable internal business practices, operations and facilities.

### Modeling and Analysis

Transportation models and data needed for these models is a shared effort between the state and the state's six MPOs. The department is also working with PSU to ensure that some transportation modeling expertise is provided to smaller communities with limited staff that lack this expertise. Noteworthy is the current development of the GhG Statewide Transportation Emissions Planning Model. High level planning and project alternatives are analyzed with the transportation and land use models and more detailed traffic

# Oregon Department of Transportation

## Transportation Program Development

---

analysis is completed to fulfill the requirements of the National Environmental Protection Act (NEPA) and to support project decision making.

### Asset Management

As a department, collecting data on the state's facilities, such as roadways, traffic control structures, bridges, guardrail, etc. has been occurring for a long time. The department's Asset Management effort is a systematic approach to maintain, upgrade, and operate physical assets, using life-cycle costing principals. Asset management, which draws on the principles of engineering, business management, data management and economics, is greatly enhancing the department's capacity to manage the state's transportation infrastructure. There is essentially now a structure in place for the collection and storage of data whether used for the purpose of maintenance, operations or project development that is consistent statewide and usable and accessible for all who need the information. This is allowing for a more strategic approach to assess funding allocations and project decisions using system-wide tools and data for the transportation system as a whole.

### Public Involvement

Federal regulations place additional emphasis on developing transportation plans in consultation with state, tribal and local agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation, as well as an expectation to increase the use of visualization tools such as using the web to assure the broadest participation. The department continues to enhance customer access to data both internally and externally, including geographic information system mapping products on both the internet and the ODOT intranet. The success in these efforts will be to more effectively engage various stakeholders and will increase the transparency of the decision-making process.

# Oregon Department of Transportation

## Transportation Program Development

---

### Process and Program Changes

During the past biennium, much of the work accomplished through TPD was consistent with previous efforts, but with an elevated expectation of developing or using completed work products that align more effectively with project delivery. One of the areas of emphasis is the linkage between planning, construction, operations, and maintenance to both streamline the work and communicate more effectively with stakeholders. Some efforts include changes in the planning process that expedite the project development process such as including any commitments made during the planning process in the project prospectus; and clearly articulating the alternatives analyzed during the planning process in an effort to streamline the environmental process. This has led to a better method of collecting and handing off information only once, and sharing it with others in the department. Another example is the development of a scheduling template that integrates the necessary planning work into the project delivery process, which provides for better use of the technical resources and improved coordination for project delivery.

Internally ODOT has developed a geographic database that provides quick access to the various plans completed over the years within an identified geographic area. This is an efficient way of sharing data that is collected through the planning process at the state, regional and local levels. Other Geographic Information Service (GIS) efforts include moving the production of city, county, and official state map to GIS instead of the previous process which was labor intensive, which saves processing and production time and effort.

The completion of the TransInfo database will combine ODOT's primary highway construction and maintenance linear asset databases. This will create efficiencies in the management programs such as bridge, pavement, safety, maintenance, etc. This database will help ODOT make more informed and strategic decisions in regard to asset replacement and maintenance. TransInfo will also help streamline the production of various reports and publications such as the Oregon Mileage Report, and the federally mandated Highway Performance Management System (HPMS).

The STIP document is available online and is searchable. This makes it easier for the public interested in projects that are in their county, community, are of a specific type, or in a specific timeframe, etc., to find and access this information quickly and easily. This also reduces the number of printed copies, and is a significant savings when the document typically exceeds 425 pages.

Several improvements have been made to the application and approval processes between *ConnectOregon* I and II. These improvements will also have positive impacts on all future *ConnectOregon* funding packages.

## Oregon Department of Transportation Transportation Program Development

---

A Statewide Development Review System is being developed that not only captures information and data associated with the often complex and iterative development review process, but also makes that documentation available for scoping and project teams. This will ensure that agreements and commitments are appropriately captured and memorialized. This supports ensuring that mitigation and funding agreements for the state system are followed through on.

The State of the System report is a new publication that provides a report on progress in implementing the OTP as well as informing the public on important aspects of their transportation system.

### **Current Revenue Issues That May Impact EBL**

The loss of revenues at both the local and MPO levels has increased demand for state technical assistance in the areas of planning and transportation analysis and modeling.

The proposed Jobs and Transportation Act (*JTA*) has a number of new initiatives that could impact the work load for TPD. The impacts range from the need to establish task forces, to addressing Least Cost Planning, project selection criteria and modeling support in an effort to integrate aspects of climate change into transportation planning efforts at the state, regional and local levels.

### MAJOR BUDGET DRIVERS, ISSUES AND ENVIRONMENTAL FACTORS

As climate change concerns have received heightened attention in Oregon. Transportation is the second largest source of Greenhouse Gas emissions in Oregon. The development of a strategy for the state has become very important issue and ODOT is developing a GhG Statewide Emissions Planning Model. This model will be used by the Global Warming Commission to assist in the development of a statewide strategy for managing GhG emissions. Adding this workload without additional staff and resources, would mean that transportation analysis services would be reduced for some of the smaller MPOs.

Total freight tonnage in Oregon is projected to increase from 57 million tons in 1997 to 122 million tons in 2030. The vast majority (97.5 tons of the projected 122 million tons) of goods will continue to be transported via truck, adding to the demands on roadway facilities and freight mobility efforts. This projected increase in freight volumes also emphasizes the criticality of inter-modal facilities (truck, rail, ports, and air) that support freight transfers. Inter-modal (in addition to modal) planning, analysis and support, as well as project selection responsibilities for *ConnectOregon*, are the purview of TPD.

# Oregon Department of Transportation

## Transportation Program Development

---

Federal authorization for transportation is a significant 'unknown' at this time. However, conversations occurring at the federal level indicate the federal reauthorization will likely contain concepts around Least Cost Planning (LCP), design flexibility, complete streets which is ensuring safe travel for Americans whether they are driving, bicycling, walking, or taking public transportation, and livable communities. This will require ODOT to incorporate Oregon's planning and technical assistance with federal direction. Oregon's practices often make us a leader in some of the efforts but this will require additional work and ODOT will have to adapt and incorporate change.

### Policy Packages

#402	Connect Oregon III	\$153,289,134	0 Positions	0.00 FTE
------	--------------------	---------------	-------------	----------

### Purpose

This policy package is designed to build on the success of *ConnectOregon I* and *ConnectOregon II* programs that were passed by the 2005 and 2007 Legislature.

The *ConnectOregon* policy package forms the basis to further advance a multi-modal transportation agenda to improve the freight, rail, marine, aviation, and transit systems to support and improve Oregon's economy. Its purpose is to continue to ensure that Oregon's transportation system is strong, diverse and efficient. Public investment in infrastructure is a wise use of public funds in that it stimulates the economy in the short term in the creation of jobs and associated economic activity. In the long term, safe, efficient and reliable transportation in multiple modes is in the interest of the state, in that, it provides low cost transportation of goods and people. Continuing to improve the modes of transportation for shipment of Oregon products allows Oregon businesses to compete in the global marketplace. Efficient service to Oregon's markets is critical to Oregon's prosperity, increasing jobs and economic benefits; and adequate funding allows projects to be funded statewide, affecting all Oregon businesses and business owners.

## Oregon Department of Transportation Transportation Program Development

---

### **How Achieved**

*ConnectOregon* provides lottery-backed bond proceeds for transportation improvement projects to be selected by the Oregon Transportation Commission (OTC). The Commission will make project selection decisions in consultation with other state boards and commissions, and advisory committees. Project proposals could include improvements to public transportation, the aviation system, the rail network, marine and ports, especially projects that facilitate the movement of people or freight between roads and air, water and rail transportation.

### **Staffing Impact**

TPD staff with assistance from Rail and Transit staff are responsible for the rulemaking, application, and selection process. This work is completed with existing staff in addition to hiring a consultant to review the projects. Based on administrative costs for the past *ConnectOregon* efforts, the administrative costs for *ConnectOregon* III are anticipated to be approximately \$600,000.

## Oregon Department of Transportation Transportation Program Development

---

<b>#502</b>	<b>Jobs and Transportation Act (JTA)</b>	<b>\$66,980,197</b>	<b>8 Positions</b>	<b>5.25 FTE</b>
-------------	--	---------------------	--------------------	-----------------

HB 2120 directs the department to do work in a number of areas much of which impact TPD. This represents new work, requiring additional staffing and consultant services. A key component of the legislation is centered on the development of new planning and modeling techniques to address the issues of Greenhouse Gas emissions as well as the development and agreement on assumptions of a Least Cost Planning process. This will require additional staff and data collection efforts. The staff will support these state efforts as well as provide technical support to MPOs and local governments as these initiatives move forward. Implementation of LCP requires the development of comprehensive transportation modeling and evaluation techniques to accurately evaluate transportation options, including alternative modes, transportation demand management (TDM) strategies, land use management, and economic analysis interactions. This will require two key data collection activities. The first is household data, which illustrates the interaction, interdependence, and joint activity-travel decisions made within households. The other data collection to support modeling and planning requires additional automated traffic recording devices at a one-time cost and biennial data collection and analysis work. The changes anticipated with these new initiatives will influence the asset management program as well. All of these systems collect data, analyze needs, assist in policy discussion, and are used to select ODOT's operations, modernization, and preservation and maintenance projects.

### Resources Needed (2009-2011)

Staffing: 8 permanent positions	\$1,101,600
Consultant Services	\$ 990,000
Data Collection	\$1,000,000
Equipment and installation	\$1,200,000

There are two other initiatives identified in the JTA that existing staff should be able to support with some consultant assistance. This includes engaging the STIP Stakeholder Committee to develop criteria for project selection until the LCP model is in place. The other effort is to establish a state and local government task force to look at the management and resources available at each level of government to better align resources and responsibilities. Work would include assessing "best practices" for stakeholder involvement in transportation decision making as well as looking nationally for practices that improve the delivery of metropolitan transportation services through enhanced regional decision-making.

## Oregon Department of Transportation Transportation Program Development

### Budget Detail

	2005–2007 Expenditures	2007–2009 Approved Budget	2009–2011 Governor’s Recommended w/o JTA	2009–2011 JTA	2009–2011 Governor’s Recommended
<b>Program</b>					
<u>Transportation Program</u>	\$82,854,952	\$170,761,419	\$172,679,848	\$66,980,197	\$239,660,045
<u>Development</u>			\$153,289,134		\$153,289,134
Connect Oregon III					
<b>Total TPD</b>	<b>\$82,854,952</b>	<b>\$170,761,419</b>	<b>\$325,968,982</b>	<b>\$66,980,197</b>	<b>\$392,949,179</b>
<b>Expenditures by Revenue Source</b>					
Federal (FF and FF as OF)	\$40,325,338	\$44,846,483	\$44,853,945	\$0	\$44,853,945
State (Other)	42,529,614	30,575,136	32,486,103	66,980,197	99,466,300
Revenue Bonds	0	95,339,800	248,628,934	0	248,628,934
State (General)					
<b>Total</b>	<b>\$82,854,952</b>	<b>\$170,761,419</b>	<b>\$325,968,982</b>	<b>\$66,980,197</b>	<b>\$392,949,179</b>
Positions	336	224	222	8	230
Full-Time Equivalent (FTE)	318.51	215.40	212.72	5.25	217.97
Personal Services	\$33,283,825	\$36,637,412	\$39,944,486	\$798,047	\$40,742,533
Services & Supplies	28,538,590	33,334,049	37,809,214	62,678,750	100,487,964
Capital Outlay	207,986	375,144	385,648	0	385,648
Special Payments	20,824,551	100,414,814	247,829,634	3,503,400	251,333,034
Debt Service	0	0	0	0	0
<b>Total</b>	<b>\$82,854,952</b>	<b>\$170,761,419</b>	<b>\$325,968,982</b>	<b>\$66,980,197</b>	<b>\$392,949,179</b>

# Oregon Department of Transportation Transportation Program Development

---

## Essential Packages

	Package Amount	Pos / FTE
Non PICS Increases	\$ 46,120	
General Inflation	3,623,603	
PERS Pension Bond Increase	86,018	
State Government Service Charge Increase	(32,449)	
Phase In / Out:	(4,979,800)	
Technical Adjustment:		
PS transferred to Hwy	(95,794)	
Total	\$ (1,352,302)	

## Summary

In summary, the efforts outlined including the planning, data collection and research undertaken are really the first steps in informing project selection and laying the foundation for strategic investments, setting the stage for making the right investments in the system at the right time in support of a variety of initiatives to enhance the state's economic development opportunities.