

Oregon Department of Transportation

Highway Division

Program Description

The Highway Division designs, builds, maintains, and preserves quality highways, bridges, and related system components, operating and maintaining approximately 8,000 miles of highways throughout Oregon. The highway system is as diverse as the state itself. It ranges from six-lane, limited-access freeways with metered entrances in the Portland area, to a graveled state highway in central Oregon. Oregon's economy and industries—including agriculture, timber, tourism, and technology—all depend on a sound highway system.

As of January 2008, state highways comprise less than 8 percent of total road miles, but carry almost 60 percent of the traffic and more than 20.6 billion vehicle miles a year. Preliminary 2008 traffic data indicates that Oregon is mirroring the nationwide trend of about a 4% drop in highway travel over 2007. In the ten year period between 1997 and 2007, driving increased 8 percent, but Oregon's arterial and collector mileage grew only about 1 percent. About 73 percent of commuters drive alone to and from work.

A strong economy needs good highways. State highways link producers, shippers, markets, and transportation facilities. A total of 3,753 miles of highway are designated as rural and urban National Highway System routes and play an essential role in the state economy. They give access to airport freight services, ports, and many other kinds of transportation facilities.

Commercial trucks rely on state highways for both short- and long-haul freight movements. Annually, trucks travel more than two billion miles on Oregon Highways. According to a Federal Highway Administration (FHWA) report, trucks moved an estimated 225 million tons of goods to, from and within Oregon in 2002. This same report estimates that by 2035, trucks will move some 560 million tons of freight on Oregon roads. (Source: http://www.ops.fhwa.dot.gov/freight/freight_analysis/faf/state_info/faf2/or.htm)

Many state highways, especially heavily traveled routes and urban-area highways, are built to support alternative modes to travel. Special features include bicycle and walking paths, transit stops, bus pullouts and shelters, and park-and-ride lots. Intercity buses, transit buses and vans, car pools, motorcycles, bicycles, and pedestrians also use highways. Electric, gas, telephone, and other utility lines use highway right-of-way.

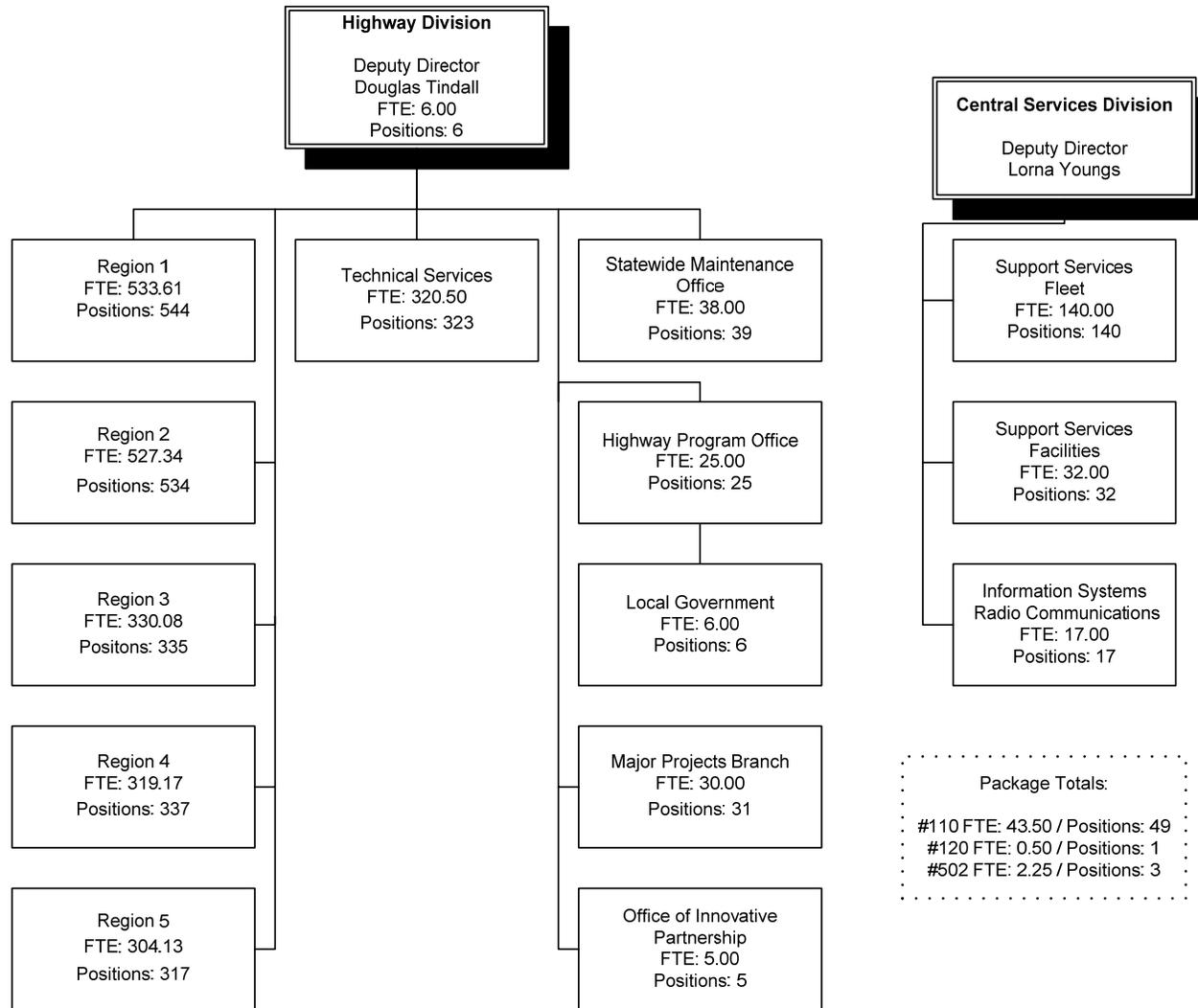
The Highway Division derives its mission and activities from plans and policies developed and maintained under the direction of the Oregon Transportation Commission. A key document to implement those plans and policies is the Statewide Transportation Improvement Program (STIP), a project funding and scheduling document developed through a planning process that involves local and regional governments, transportation agencies, and the interested public. It is updated every two years through a public hearing process. ODOT is responsible for delivering STIP projects on the state highway system that are funded with traditional fund sources, as well as Oregon Transportation Investment Act (OTIA) projects with specific funding identified by the legislature.

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2009–2011 Organization Chart

FTE: 2,589.83 (with Packages 2,636.08)

Positions: 2,641 (with Packages 2,694)



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Internal Measures and Division Performance

The Highway Division has been holding Quarterly Business Review (QBR) meetings over this current biennium. During these reviews, a number of internal measures are discussed to gauge the performance of the division as a whole. These internal measures look at different aspects of the division including Project Delivery measures, Maintenance and Operations measures and division-wide Human Resource measures.

- For the Project Delivery measures, the division looks at measures that relate to construction projects such as the percentage of projects that are on time, projects that are on budget, preliminary engineering to the total project cost, and construction engineering to the total construction phase cost.
- For the Maintenance and Operations measures, the division looks at planned versus actual expenditures for various maintenance activities such as drainage, snow and ice, roadside and vegetation and traffic services. Other measures include the usage of the 511 number, TripCheck visits, average minutes per incident and travel time measures.
- HR measures include vacancy measures, performance appraisal measures, employee separation measures and employee safety measures.

This quarterly review of the business allows the Highway Division to see trends developing so that actions can be taken if needed to improve performance.

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

The Highway Division is administered through ODOT's five regional offices and the headquarters office. The Highway Division consists of two major program areas: Maintenance and Construction. In the 2003-05 biennium, the division reorganized to decentralize staff to move decision making closer to the local level. At the same time, in order to accomplish OTIA, ODOT expanded partnerships with the private sector to the greatest extent in Department history. Approximately \$0.83 of every dollar spent in the Highway program's \$2.5 billion biennial budget is paid to the private sector for highway design, construction and maintenance, making the program one of Oregon's largest providers of living wage jobs.

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Highway Maintenance

Highway maintenance includes the daily activities of maintaining, preserving, repairing, or restoring existing highways to keep them safe and usable for travelers. Highway maintenance may include replacing what is necessary to keep highways safe (such as signs, pavement markings, and traffic signal components), but generally does not include road reconstruction. There are two types of general highway maintenance functions: reactive and proactive.

- **Reactive** - If it breaks, fix it. These activities most usually fix an existing problem or concern. This type of highway maintenance is incident-driven. Patching a pothole would be an example of a reactive activity.
- **Proactive** - Spend now to save later. These activities include inspection, upkeep, preservation, or restoration to prevent problems or damage to highways or other highway-related infrastructure and to reduce life cycle costs. This type of highway maintenance considers the amount of the benefit versus the cost. A proactive activity may be applying a chip-seal over a pavement in fair condition, preventing it from further deterioration.

Highway maintenance also includes maintaining the buildings and equipment used by ODOT employees. ODOT's maintenance offices are a visible presence in communities throughout Oregon. They serve as local points of public contact regarding questions about state highways, requests for special highway-use permits, and general maintenance information.

Types of Maintenance activities include: surface and shoulder repair, drainage, roadside and vegetation, snow and ice, bridge maintenance, traffic services, and extraordinary maintenance (emergency relief).

Highway Construction

Highway construction includes projects to repair, reconstruct, replace, or add new highway features. These projects are accomplished through construction contracts with the private sector, and are the most visible on the highway system as they last from a few months to several years from inception to completion. The construction programs make up the majority of the Highway Division budget. The program areas include:

- **Preservation** – The Preservation program rehabilitates existing surfaces and extends the useful life of a road without increasing its capacity.
- **Bridge** – The Bridge program preserves nearly 2,700 bridges, tunnels and large culverts on the state highway system and inspects all state and local bridges on the National Bridge Inventory (NBI), totaling 6,700 structures.

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- **Modernization** – The Modernization Program funds capital construction projects that add capacity to the system, either by adding lanes or building new facilities such as bypasses.
- **Highway Operations** – The Highway Operations program relies on emerging strategies and technology-based tools to increase system efficiency, increase safety, and manage congestion.
- **Highway Safety** – The Highway Safety Program identifies where the most serious crashes occur on the state system and applies cost-effective measures to reduce the number and severity of crashes.
- **Highway Special Programs** – The Highway Special Programs is composed of new innovation, construction projects and construction project support.
- **Local Government program** – The Local Government program helps ODOT meet a federal responsibility to administer all federal funds supporting highway construction in Oregon by including all local expenditures related to federal highway programs within this program area.

MAJOR BUDGET DRIVERS, ISSUES AND ENVIRONMENTAL FACTORS

- Most Oregon bridges were designed to be replaced after approximately 50 years. More than one third of state-owned bridges are more than 50 years old and require extensive rehabilitation and/or replacement. These bridges were not built to be maintained indefinitely, nor were they designed for today's weights, volumes and traffic speeds. The collapse of the I-35 Bridge in Minneapolis in August 2007 brought national focus to bridges. Insufficient investment over many years has prevented the bridges from being replaced on schedule. As a result, a growing number of bridges are in need of load restrictions and emergency repairs. When inspections show additional cracks over a short period of time, ODOT must consider imposing weight restrictions on a bridge to ensure public safety. Because trucks deliver needed goods to every community in Oregon, these weight restrictions can affect Oregon's economy through higher shipping costs and delays, causing significant adverse economic effects at the local and regional level. The Oregon Transportation Commission, the Governor and the Legislature have increasingly prioritized Oregon's bridge program. In 2003, the Legislature passed House Bill 2041, the Oregon Transportation Investment Act (OTIA III) which provides \$1.3 billion for the replacement and repair of bridges on state highways. This program will address problems at bridges that need to be open to heavy and oversized truck traffic; load-restricted bridges; Interstate 84 and Interstate 5 bridges; and other key transportation links critical for freight mobility. In spite of this significant investment in state bridges, there remain a large number of bridges nearing the end of their expected life that cannot be restored with existing funds.

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- State revenues (gas taxes, weight mile taxes and registration fees) have not kept pace with Highway Division program costs. Inflation reduces the buying power of the ODOT's share of the Highway fund by approximately \$14 million a year. Increasing costs have driven up expenditures in three main areas:
 - Fuel costs for maintenance vehicles operated by ODOT;
 - Electrical costs for traffic signals and illumination; and
 - Materials such as asphalt and concrete.
- Oregon's highway infrastructure—including pavements, bridges, and traffic control systems—continues to age, and therefore requires more maintenance and a growing share of ODOT's revenue. As the infrastructure ages it becomes increasingly difficult to keep pace with growing costs through efficiency gains.
- Oregon is expected to grow by 1.2 million people by 2020. Seventy-two percent of this growth will occur in the Willamette Valley, from Portland to Eugene. Growth places additional stress on already crowded highways and bridges. Increased vehicle travel also causes safety concerns for drivers, as well as for highway employees and contractors in work zones.
- Growing demand for driveway access to state highways creates congestion, slows traffic and increases safety concerns for both vehicles and pedestrians.
- Oregon's population is aging. Ensuring mobility for older citizens requires creative transportation solutions, such as more visible pavement markings, traffic signals, and signing.
- Environmental concerns have prompted many changes to ODOT practices. Often, additional work is required to deliver projects and programs in the most environmentally responsible manner.

ACCOMPLISHMENTS

Delivering Highway Projects

Sustaining jobs, preserving the Highway System, investing in the future.

The largest program in the Highway Division of the Oregon Department of Transportation is the delivery of highway projects. In the six years since passage of the first phase of the Oregon Transportation Investment Act (OTIA), ODOT has advanced 100 percent of the state OTIA I and OTIA II projects into design or construction, with over 75 percent completed. Some 80 percent of the state bridges

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identified for repair or replacement with OTIA III funding are in design, construction, or complete. The OTIA III funding for modernization projects is also helping to fund projects such as the Pioneer – Eddyville project on US 20.

The delivery of the OTIA work is in addition to the regular, ongoing projects in the Statewide Transportation Improvement Program (STIP).

In addition to creating jobs directly through construction, these efforts preserve the public's investment in its highway system and improve the flow of commerce throughout the state, translating into new family wage jobs and more dollars for Oregon's economy. A safe, vibrant and efficient highway system is critical to ensuring Oregon's growing role in the global marketplace.

Being Fiscally Responsible

Ensuring public funds and assets are used wisely.

The Highway Division construction program is delivered with a critical eye towards schedule and budget. As each contract for a project being constructed is awarded, the Oregon Transportation Commission (OTC) authorizes a specific amount to complete the project. At the December 2008 E-Board, ODOT responded to a 2007-2009 budget note to address concern over construction project over/under-runs. The findings that were presented showed that over a six year period, the net result was a savings of \$10 million, which equates to about a half-percent of the total project volume.

The Highway Division has also implemented asset management practices that allow aggressive management of all the property owned by the division. Because the Highway System has grown and property has been acquired, ODOT now owns a number of properties. By placing property that is no longer needed for road projects in the real estate market, ODOT not only realizes additional funds, but returns property to the local tax rolls.

Responding to Catastrophic Events

Re-opening roadways impacted by natural events.

While delivering and managing projects represents the largest portion of Highway Division expenditures, keeping roads available for travel is its most visible function. From relatively common weather events that impact travel over mountain passes during the winter to major wind and rain events that close entire highways, the Highway Division responds quickly to restore options for travelers and ensure that businesses can remain open. In 2008, northwest Oregon experienced a major snow event that forced many motorists off of the roads. ODOT maintenance workers spent many countless hours making the roads safe for the traveling public.

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Keeping Oregon's Economy Moving

Facilitating traffic movement while carrying out an unprecedented number of projects.

ODOT's statewide traffic mobility program focuses on maintaining the flow of traffic throughout the state while Oregon experiences the highest level of road construction ever. To ensure this continued traffic flow, ODOT created a structure to coordinate construction and mobility issues and resolve potential conflicts faster. ODOT collaborated with various stakeholders, including the trucking industry, to develop mutually beneficial project staging and schedule solutions. Delay threshold limits in key highway corridors and the use of innovative technology are minimizing construction-related vehicle delays.

Oregon is seen nationally as a leader in mobility management. Continued emphasis, teamwork and support in this area will support a strong economy in the short term and long term, keep people and goods moving safely and efficiently, and reduce the negative impacts of travel delays and detours.

Policy Packages

The Highway Division's 2009–2011 Governor's Recommended Budget includes the following policy packages:

#110	Graduate Engineering Program and Technical Staffing	(\$147,658)	49 Positions	43.50 FTE
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This request is to make a strategic investment in employee recruitment and retention. The goal is to mitigate loss of technical quality due to staff retiring or leaving to pursue employment elsewhere. This request addresses two issues: (1) the need to sustain core technical competency within the Highway Division; and (2) the need to establish and grow a pool of technically proficient early career employees to assume progressively responsible technical assignments as they mature in their roles and work.

#120	Last Resort Spray Program	\$2,249,130	1 Position	0.50 FTE
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The Agency has been asked to look into implementing a Last Resort Herbicide Spray program for the Maintenance Vegetation Management Program. This means that the Agency will resolve to use herbicidal spraying as a last resort such as in control of noxious and invasive weeds behind guardrail and areas of specific needs.

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#140	Truck Weigh Station Deferred Maintenance	(\$2,000,000)	0 Position	0.00 FTE
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Provide MCTD's Field Services with a budget for major and routine maintenance of weigh station scales, buildings, and grounds. When faced with such costs in the past, MCTD has either sought assistance from the Highway Division or managed its budget by holding vacated job positions open in order to realize vacancy savings. That strategy becomes increasingly impractical and insufficient as infrastructure ages and the cost and volume of maintenance needs climb. This policy package will allow for work, such as replacing deteriorating asphalt and concrete scale ramps and scale parking areas, to proceed in an orderly and planned manner.

#502	Jobs and Transportation Act of 2009	\$337,687,244	3 Position	2.25 FTE
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This is the Governor's Transportation Plan for the 2009 Legislature. Investing in Oregon's transportation system is one of the strongest most immediate stimulus tools available during the current economic downturn. This package will create and sustain jobs, support the efficient movement of goods, and help local businesses keep their doors open.

This Policy Package will provide ODOT's Highway Division with additional revenues to maintain, preserve and modernize the Transportation System within Oregon. The package would direct investments to Maintenance and all of the construction programs including Modernization, Bridge, Preservation, Highway Safety and Highway Operations projects. Besides increasing the base of each of these program areas, the policy package would also do the following:

- set aside \$15 million annually for the Columbia River Crossing project,
- utilize bonding authority to allow for modernization projects to relieve major freight bottlenecks,
- increase the base funding for the bicycle/pedestrian program from 1% of the State Highway fund to 1.5%,
- seek to implement environmental permitting and performance developed under the 2003 OTIA act across all STIP and Local projects,
- directs the Agency to look at other funding options including: 1) continue to work on seeking ways to fully implement the findings of the Road User Fee Pilot Program, 2) develop and test alternatives for the Vehicle Mileage Tax (VMT) for vehicles that will no longer be paying the State Gas Tax and 3) undertake a pilot project for congestion pricing.

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Proposed Reductions

ODOT is now forecasting a revenue shortfall of approximately \$54.4 million Other funds for the 2009 – 2011 biennium based on the latest cash flow forecast (March 2009) and the most recent revenue forecast (December 2008). Transportation is seen as the means to keep Oregonians working and the Governor has proposed the Jobs and Transportation Act that will increase revenues to help stimulate the economy and create jobs. ODOT continues to look for ways to be more efficient and seeks to build partnerships with business, local governments and others to provide the most efficient and safe transportation network for Oregon.

Revenue Sources

There are three main revenue sources for the Highway programs, State, Federal, and Local. The majority of the Federal funds available for the Highway program are Federal Highway Administration funds (FHWA). The State funds come from a mixture of fuel tax receipts, weight mile taxes, vehicle registration, bond proceeds, and other dedicated funds. The Local funds are for projects that Cities and Counties fund from their revenues. In some cases, they pay ODOT to complete part or all of the project work or contribute to a state project.

Summary of Proposed Legislation

HWY #2—Safety Rest Area Activities

Purpose: This concept would authorize the department to establish a penalty for engaging in certain activities that are prohibited in highway rest areas, scenic overlooks and other property under the department's jurisdiction.

Policy: The department has an administrative rule in place that prohibits certain activities (e.g., harassing behavior, soliciting, and camping) in rest areas and other property controlled by the department. However, there is no authority to establish a penalty. The concept would allow the department to establish a penalty for citable offenses up to a maximum \$360 allowed under a Class B violation. Citations issued by law enforcement officers could carry differing levels of penalty depending upon the severity of the violation, up to the maximum permissible level. The concept would not authorize Department of Transportation personnel to issue citations.

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HWY #3—Authority To Enter Private Property To Remove Hazard Trees

Purpose: This concept would authorize ODOT in an emergency situation to go onto private property without prior permission from the property owner to cut, remove, or trim damaged trees that may fall onto the highway.

Policy: In most situations, ODOT personnel may lawfully go onto private property only after providing notice and obtaining permission. During emergencies, ODOT personnel notify property owners when they can be identified and obtain permission to remove trees that may fall onto the highway. When the property owner cannot be identified, the trees are left standing pending notice and may fall later, blocking the highway.

This concept would allow ODOT to lawfully enter private property during an emergency for the purpose of cutting trees that have become a hazard to the public traveling on adjacent highways. It would allow ODOT to restore safe highway system operations without having to identify, locate, and negotiate with the private owner of the trees when the owner cannot be easily identified.

HWY #6—Alternative Fuels Corridor Project

Purpose: The concept would allow ODOT to participate in the multi-state Alternative Fuels Corridor project. It would allow the sale of alternative fuels (including solar powered plug in charging stations for electric vehicles) and limited commercialization of safety rest areas and possibly other right-of-way and ODOT-owned property to incubate consumer demand for more alternative fuel vehicles and reduce greenhouse gas emissions in the state.

Policy: These changes support the leadership of Governor Kulongoski and 2007 legislature in state sustainability goals (ORS 184.423) and state energy policy (ORS 469.010) as follows:

- Supports HB 3543, which put Greenhouse Gas Reduction goals into statute.
- Supports the Oregon Transportation Plan (OTP) policies: 4.2 – Energy Supply and Strategy 4.2.2, which encourage efforts of the state to move to a diversified and cleaner energy supply, promote fuel efficiencies and prepare for possible fuel shortages.
- Supports the Governor’s stated commitment to help implement a “Hydrogen Highway” from B.C. to California.
- Supports economic development of a budding industry that is part of the cluster of “sustainable industries” being attracted to Oregon by the Governor’s economic development efforts.
- Supports energy security by helping the region move away from foreign-produced fossil fuels to fuels made regionally or nationally from more sustainable feed stocks.

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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
Program					
<u>Maintenance</u>	\$342,316,126	\$372,840,101	\$400,110,651	\$52,500,000	\$452,610,651
<u>Construction:</u>					
STIP: Preservation	\$273,678,739	\$242,085,137	\$354,985,675	\$37,500,000	\$392,485,675
Bridge	505,321,643	928,978,170	698,745,846	15,000,000	713,745,846
Modernization	380,872,899	396,555,261	289,000,369	170,437,244	459,437,613
Highway Safety	58,386,574	52,028,686	62,042,873	0	62,042,873
Highway Operations	50,152,650	48,418,206	68,953,471	33,000,000	101,953,471
STIP subtotal	\$1,268,412,505	\$1,668,065,460	\$1,473,728,234	\$255,937,244	\$1,729,665,478
Local Government Program	\$213,191,783	\$260,700,511	\$390,706,255	\$0	\$390,706,255
Special Programs	179,529,747	257,277,249	213,745,494	29,250,000	242,995,494
Utility ROW Permits	1,686,271	0			
Total Construction	\$1,662,820,306	\$2,186,043,220	\$2,078,179,983	\$285,187,244	\$2,363,367,227
Total Highway	\$2,005,136,432	\$2,558,883,321	\$2,478,290,634	\$337,687,244	\$2,815,977,878
Expenditures by Revenue Source					
Federal	\$651,748,119	\$730,558,790	\$874,920,119	\$0	\$874,920,119
State (Other)	424,263,806	1,015,049,371	1,068,370,515	337,687,244	1,406,057,759
Revenue Bonds	929,124,507	813,275,160	535,000,000	0	535,000,000
State (General)					
Total	\$2,005,136,432	\$2,558,883,321	\$2,478,290,634	\$337,687,244	\$2,815,977,878
Positions	2,702	2,647	2,691	3	2,694
Full-Time Equivalent (FTE)	2,649.32	2,596.84	2,633.83	2.25	2,636.08

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Personal Services	\$376,668,997	\$397,313,455	\$440,695,024	\$419,889	\$441,114,913
Services & Supplies	1,576,474,557	2,079,981,804	1,950,380,848	327,517,355	2,277,898,203
Capital Outlay	29,941,870	21,414,563	25,356,404	0	25,356,404
Special Payments	22,051,008	60,173,499	61,858,358	9,750,000	71,608,358
Debt Service	0	0	0	0	0
Total	\$2,005,136,432	\$2,558,883,321	\$2,478,290,634	\$337,687,244	\$2,815,977,878

Essential Packages

	Package Amount	Pos / FTE
Non PICS Increases	\$ 2,161,748	
General Inflation	47,752,708	
PERS Pension Bond Increase	198,064	
State Government Service Charge Increase	1,560,944	
Phase In / Out:		
Construction Limitation - STIP	(167,413,460)	
Technical Adjustment:		
PS transferred from TPD	95,792	
Total	\$ (115,644,204)	

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Summary

In conclusion, the Highway Division of the Oregon Department of Transportation maintains and improves, in a cost effective manner, the safety and operation of the state highway system infrastructure. Those efforts create jobs directly through construction, and they preserve the public's investment in its highway system and improve the flow of commerce throughout the state, translating into new family wage jobs and more dollars for Oregon's economy. The Highway Division also stands ready to respond to catastrophic events, reopening closed highways quickly to provide access for emergency services and to keep the economy moving. The Highway Division is a good buy for Oregonians, serving as a pipeline for far more benefits for the state than the costs detailed in the budget.