# Transportation Vision Committee Report to Governor Ted Kulongoski

November 2008



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November 6, 2008

The Honorable Theodore R. Kulongoski 160 State Capitol 900 Court Street Salem, OR 97301-4047

Dear Governor Kulongoski,

I am pleased to submit to you the final report of your Transportation Vision Committee. Over the past year, a group of dedicated individuals worked together to develop these recommendations with the focus of how to make a new investment in the transportation system that creates jobs for our workers, a sustainable environment for our children and expand transportation choices for Oregonians.

We believe this report charts a new course for transportation in Oregon. It departs from our traditional approach, which has led to fragmented and underfunded transportation programs, and puts us on path toward a sustainable transportation system that includes all modes to move people, goods and services safely and efficiently, and adequate funding of our system for the long-term. This report presents a multi-year strategy to change the way transportation investments are made and how they are funded. It ensures we make continued investments so we can maintain and modernize our infrastructure as repairs are needed, instead of the inefficient infusion of billions of dollars after decades of deferred maintenance – which is more costly to taxpayers and to our economy. The committee also hopes this report will engage Oregonians differently when they think about transportation and what it means to their lives and our collective quality of life.

This report is the first step to making the critical transportation infrastructure investments that our economy needs. It provides a path to both jump-start our economy by investing in direct jobs today, and it provides a path to make sure we continue this investment in the future instead of the piecemeal approach of the past. I believe that this report is the comprehensive framework Oregon has been missing and marks the most ambitious, strategic and green transportation plan in Oregon history.

As you take this document under advisement in preparation for the 2009 session, please know that the members of the committee stand ready to work with you as the legislative process begins in January.

I want to thank all of the committee members for their hours of volunteered time and expertise in developing this report. And I want to thank you for allowing me to be a part of a process that will help create jobs, keep commerce and people moving, and maintain our position as leaders in green transportation.

Sincerely,

Pat Reiten President

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#### Introduction

regon's multi-billion dollar transportation infrastructure hasn't been maintained to keep up with population and freight traffic growth, hindering Oregon's ability to move people, goods and commerce effectively throughout the state. If we do not make critical improvements, it is forecasted that congestion on our roads will increase by 42 percent by 2025, creating gridlock for commuters and further challenging Oregon's ability to compete in the traded sector economy. In addition, since transportation accounts for nearly 40 percent of greenhouse gas emissions, we must reexamine how we provide transportation options that complement our carbon reduction strategies.

In December 2007, Oregon Governor Ted Kulongoski, citing risks to the economy, environment and quality of life for all Oregonians, identified transportation as one of his top priorities for the 2009 Oregon Legislative session.

Governor Kulongoski convened three workgroups composed of business leaders, legislators, local and state officials, transportation stakeholders and sustainability and land use experts to develop recommendations for a comprehensive transportation package for the 2009 legislative session to meet immediate needs and create a framework for future action. The workgroups focused on three areas: Governance; Public Awareness; and Vision.

Governance: The Governance Committee, chaired by Steve Clark of Community Newspapers, was charged with developing recommendations for improving efficiency, coordination and accountability in the transportation system, including how transportation decisions are made, the balance between local, state and federal jurisdictions in decision-making, and how projects are prioritized.

Public Awareness: The Public Awareness Committee, chaired by Chip Terhune, Chief of Staff to the Governor, was charged with developing a plan to engage the public in discussions about the importance of transportation to Oregon's economy and quality of life. The committee was asked to develop tools to help inform the public about the needs of the transportation system, its benefits, and how transportation dollars are spent at the local, state and federal levels.

The Governor asked both of these committees to report to a third, the Transportation Vision Committee, chaired by Patrick Reiten of Pacific Corp.

*Vision*: The Transportation Vision Committee began its work by developing a consensus statement about what Oregon's transportation system should look like in 2030. It is intended that this vision will help guide transportation investments in 2009.

The Governor outlined five core principles to use as guides in developing the recommendations: economic development; local decision-making; sustainability; transparency and oversight; and statewide distribution.

#### **Economic development**

Because of Oregon's desirable strong traded sector economy, one in every five jobs in Oregon is transportation related. Transportation is vital to maintain and grow the traded sector economy; without transportation, industry will go elsewhere. Transportation funding stimulates the state's economy and directly creates jobs as the infrastructure is both maintained and expanded. Oregon's experience over the past half decade is that these jobs are from Oregon companies, and those companies have grown as a result.

#### Local decision-making and identification of priorities

The Oregon Transportation Commission will work with Area Commissions on Transportation, local governing bodies, and stakeholders to identify priorities for transportation investment.

#### Sustainability

The state must develop an investment strategy that not only preserves the current system but makes a strategic investment in a sustainable transportation system, including working towards requirements of the state's goals on greenhouse gas reduction.\*

#### Transparency and oversight

Funding strategies, based on adopted policies, will involve an open discussion for citizen input and direction to guarantee that the funding priorities deliver what the citizens want.

#### Statewide distribution

Transportation funding is a priority for every corner of the state, whether it is maintenance, preservation or expansion of the system. All Oregonians must benefit from this investment.

<sup>\*</sup>The state of Oregon has adopted goals for the reduction of greenhouse gas emissions. These are:

<sup>•</sup> To arrest the growth of Oregon's greenhouse gas emissions and begin to reduce greenhouse gas emissions by 2010;

<sup>•</sup> To achieve greenhouse gas levels that are 10 percent below 1990 levels by 2020; and

<sup>•</sup> To achieve greenhouse gas levels that are at least 75 percent below 1990 levels by 2050.

#### The Oregon Vision

By 2030, Oregon has a working transportation system that safely supports people, places and the economy. To the greatest extent possible, efficient vehicles powered by renewable fuels and non-motorized sources move all transportation modes. Greenhouse gas emissions from the transportation system are consistent with the reduction targets established by federal and state law.

Oregonians and visitors have real transportation choices and transfer easily between air, rail, motor vehicle, bicycle and public transportation. In addition to being the norm in the state's urban communities, high quality, multi choice, and reliable transit serves rural communities and connects them with the state's population centers. Senior and disabled lifeline services are available throughout Oregon.

Oregon's transportation system provides timely and efficient access to global markets. Goods flow just in time through interconnected highway, rail, marine, pipeline and air networks. Our communities and economies -- large and small -- are connected to the rest of Oregon, the Pacific Northwest and the world.

As communities grow and change, the transportation system and funding structures are nimble enough to accommodate growth wherever it occurs in the state. Land use, economic activities and transportation support each other in environmentally responsible ways. Communities are designed to enable people to take care of more of their needs while driving less.

Oregon excels in using new technologies to improve efficiency and mobility. The state maximizes the use of existing facilities across traditional jurisdictions and adds capacity strategically.

Funding for transportation has been shifted away from a dependence on the gas tax to a model that includes having highway users pay based on how much they drive, levels of congestion they drive in, when and where they drive, and the carbon footprint of their vehicle. This system has been developed with an understanding of the diverse needs that exist in the state and does not disadvantage rural or agricultural Oregon.

Under this model, new state and local funding sources are identified to enable investment in all modes of transportation for moving individuals and goods. Public/private partnerships respond to Oregonians' needs across all transportation modes. New investments in the transportation system are evaluated for their economic, environmental and climate change impact.

Transportation system benefits and burdens are distributed fairly, and Oregonians are confident transportation dollars are being spent wisely. Funding for transportation aligns closely with the state's constitutional requirement of "cost responsibility" where system users pay for the cost of their use of the system.

In 2030 Oregonians support innovative, adequate and reliable funding for transportation.

#### The Oregon Challenge

he Oregon Challenge: Oregon's transportation system is not currently equipped to respond to the needs of a global economy, increases in population, rising energy costs, and the obligation to reduce greenhouse gas emissions, which contribute to climate change. As Oregonians begin to drive fewer miles in more fuel-efficient vehicles, the revenues from the gas tax and related fees will continue to be less than necessary to meet needs. In fact, ODOT predicts that, within the next few years, revenues will decline in real as well as relative terms. This reduction, combined with the rapid increase in the cost of construction, severely limit Oregon's capability to maintain and preserve existing infrastructure. Further, the economic slowdown the country is facing reduces resources even more. Oregon's challenge is to find a sustainable way to fund a transportation system that supports a vibrant economy, creates jobs, and offers safe, efficient options for travel.

#### **Oregon's Needs**

n September 2006, the Oregon Transportation Commission adopted the Oregon Transportation Plan (OTP), capping a two-year effort to bring the state's 25-year multimodal transportation plan up-to-date and make it a vital part of transportation efforts around the state. The OTP covers Oregon's airports, highways and roadways, bicycle and pedestrian facilities, pipelines, ports and waterway facilities, public transit, and railroads.

Key findings from the OTP highlight the growing needs and underscore the importance of continued investment in Oregon's transportation system:

- By 2030, freight is expected to increase 80 percent statewide and double in the Portland metropolitan region (most of the increase carried by trucks).
- Oregon's population will grow by 41 percent, increasing demand for transportation, as well as wear and tear on the existing infrastructure.
- By 2030, fuel taxes, the traditional means of funding highways, will lose 40 percent of their purchasing power.
- Increasing congestion will undermine the state's economic competitiveness, lengthening the delivery time

for goods and services, shrinking market access and reducing business productivity. Accidents, stalled vehicles, weather, work zones and other incidents cause about 50 percent of traffic delay.

 Oregon's growing population will also grow older, with 26 percent of the population aged 60 and older by 2030. While the state's senior citizens are likely to be healthy and continue to drive until age 85, many will outlive their ability to drive by six - ten years.

The OTP transportation needs analysis found a significant gap — approximately \$1.3 billion per year in 2004 dollars between current expenditures and the "feasible needs" that adequately maintain and expand the transportation system. "Feasible needs" refers to a level of investment that maintains the system at a slightly better condition than it is currently maintained, replaces infrastructure and equipment on a reasonable life cycle, brings facilities up to standard or adds capacity in a reasonable way. The needs vary for each transportation mode or program, and complete information is available in the OTP.

### Summary of 2005 – 2030 Modal Needs and Growth Forecasts (Average 2004 dollars in millions)

Note: Footnote numbers match adopted OTP for consistency

Mode	Forecasted Annual Growth Rate	Current Annual Expenditures	Annual Average Feasible Needs	Annual Gap
Air Freight and Passenger <sup>9</sup>	2.62% freight tons 2.40% passengers			
Portland International Airport <sup>10</sup>		\$44.4	\$115.3	\$70.9
Major moderniza- tion <sup>11</sup>		\$13.9	\$15.1	\$1.2
Other airports — Modernization and Preservation <sup>12</sup>		\$10.7	\$47.4	\$36.7
Intermodal Connectors <sup>13</sup>	1.35% total highway travel	n/a	\$11.3	n/a

Mode	Forecasted Annual Growth Rate	Current Annual Expenditures	Average Annual Feasible Needs	Annual Gap
Local Roads and Bridges <sup>14</sup>	Reflects state highway program and public transportation growth rate	\$718	\$1,000 - \$1,200	\$282 – 482
Natural Gas and Petroleum Pipelines <sup>15</sup>		n/a	n/a	n/a
Ports and Waterways <sup>16</sup>	0.97% deep draft freight 0.29% shallow draft freight	\$51.3	\$56.2	\$4.9
Public Transportation <sup>17</sup>	*	\$510	\$812	\$302
Rail Freight and Passenger <sup>18</sup>	1.83% freight tons 3.60% passengers			
Private rail facilities		more than \$6.7	\$18.8	n/a
Passenger rail <sup>19</sup>		\$4.8	\$9 – 57	\$4.2 - 52.2
Safety programs		\$1.6		
State Highway- Related Programs <sup>20</sup>	1.35% total highway travel 1.35% passenger highway travel 1.40% freight highway travel	\$786.5	\$1,277.5	\$490.9
Transportation Options Program		\$2.8	\$3.6	\$0.8
TOTAL	n/a	\$2.2 billion	\$3.4 – 3.6 billion	\$1.2 – 1.4 billion

<sup>&</sup>lt;sup>9</sup>Needs forecast addresses capital needs at Oregon's 101 public-use airports.

<sup>&</sup>lt;sup>10</sup>Needs based on Portland International Airport Master Plan alternative.

<sup>&</sup>lt;sup>11</sup>Needs identified for eight airports other than Portland International Airport where growth is expected to exceed capacity.

 $<sup>^{\</sup>rm 12}{\rm Needs}$  based on 2000 Oregon Aviation Plan and individual airport master plans.

<sup>&</sup>lt;sup>13</sup>NHS Intermodal Connectors are located in Astoria, Boardman, Coos Bay/North Bend, Eugene, Medford and Portland

<sup>&</sup>lt;sup>14</sup>The county funding gap may grow because of a drop in federal forest funding. This drop may be as high as \$90 million a year for county roads as early as FY 2007-08. The Association of Oregon Counties' 2006 County Road Needs Report finds the counties' current annual expenditures at \$377 million, with an additional average annual funding need of \$433 million a year for the next five years, increasing annually over the 25-year timeframe.

<sup>&</sup>lt;sup>15</sup>Pipelines are primarily private facilities with no cost information available.

<sup>&</sup>lt;sup>16</sup>Needs forecast address nine port districts that have economic activity associated with waterborne commerce.

<sup>&</sup>lt;sup>17</sup>Feasible needs are consistent with Oregon Public Transportation Plan Level 3 recommendation to increase ridership in accordance with service delivery plans.

<sup>&</sup>lt;sup>18</sup>Only public expenditures are available. Needs are inclusive of both public and private facilities. Freight rail needs include capital costs for rehabilitation and enhancements of short line, mainline and some on-site rail facilities at ports.

<sup>&</sup>lt;sup>19</sup>Number includes capital and operating costs for increased service. A range of costs is given since multiple proposals currently exist.

<sup>&</sup>lt;sup>20</sup>Includes state bicycle and pedestrian program. Specific program expenditures and needs are available in OTP Technical Appendix 2.

<sup>\*</sup>The 2006 Oregon Transportation Plan forecast public transit ridership to grow 3.16 percent per year during 2005 to 2030. Ridership grew by more than 8 percent during 2008 – 09 due to high fuel prices. Ridership is now expected to grow by 3 – 5 percent per year beyond 2009, not including growth from service improvements, higher fuel cost and impact of future carbon-neutral policies.

#### **Preface**

The Transportation Vision Committee believes a comprehensive strategy can address the unique challenges Oregon is facing, seizing opportunities never before presented to the transportation industry, by creating a sustainable transportation system. A sustainable transportation system is one that meets present needs without compromising the ability of future generations to meet their needs from the joint perspective of environmental, economic and community objectives. A sustainable transportation system is consistent with, yet recognizes differences in, local and regional land use and economic development plans. It is efficient and offers choices among transportation modes. It distributes benefits and burdens fairly and is operated, maintained and improved to be sensitive to both the natural and built environments. With this in mind, the Vision Committee recommends the following set of concepts and associated actions to preserve the state's existing assets and strategically expand the entire transportation system to support job growth and quality of life and ensure the state's competitive stance in the global marketplace.

### **Chapter One**Transitional Pillars:

The foundation for a new, sustainable approach to transportation

regon has established a strong foundation for its transportation system by making smart investments throughout the years based on community needs, economic stability and environmental considerations. As new demands pressure the system, including increasing population, volatile fuel supplies, and global warming, a new approach will strengthen that foundation. The following are proposed new "pillars" of a framework for the future.

### Create dedicated funding for non-highway investments.

Before creation of the *Connect*Oregon program in 2005, there was no mechanism for routine investment in Oregon's non-highway transportation system. Given the constitutional restrictions placed on Oregon's highway fund<sup>1</sup>, the Vision Committee recommends the immediate creation of a fund statutorily dedicated to investments in Oregon's non-highway transportation needs. A dedicated fund is imperative to assure balanced, multimodal transportation services for people and goods.

### Ensure Oregon's transportation system meets the state's goals for reducing greenhouse gas emissions.

Reducing transportation greenhouse gases requires that Oregonians have choices in how they travel, the transportation systems that serve them, and the towns and neighborhoods in which they live and work. Oregon should continue to require that new cars and light trucks sold in the state emit less green-

house gas emissions. As the state's population and economy grow, Oregon will be unable to meet its emission reduction targets if Oregonians have no choice but to continue driving as much as the average household does today.

The state's fast-growing metropolitan areas need new planning initiatives to enable communities to provide a mix of transportation choices — walking, biking and transit as well as driving — and more mixed-use development in town centers, main streets and other appropriate places, so that more Oregonians have the opportunity to get to and from destinations with fewer miles of driving. These transportation and land use planning strategies should be employed primarily in the larger urban areas of Oregon, where most growth is predicted to occur in the next 20+ years and the opportunities for providing more mixeduse development are greatest. Rural Oregonians will need to be able to maintain current driving patterns because of greater distances and fewer transportation choices in the near term. The state should seek sufficient improvement in rural area transportation emissions through improvements in vehicles and fuels.

In urban area plans, to reduce the need for driving, priority should be given to maintaining freight trips because the movement of goods is critical to the state's economic health. In planning transportation system improvements to reduce reliance on driving, the state

'The Oregon Constitution (Article IX, section 3a) dedicates the money raised by taxes and fees on the ownership, operation or use of motor vehicles or on the fuel they use. The money may only be used for the maintenance, operation, improvement or construction of Oregon's public highways, roads and streets, with limited exceptions.

should recognize that properly designed capacity projects addressing system bottlenecks could have a net greenhouse gas reduction benefit by contributing to congestion reduction.

#### Expand user per mile fee concept.

While congestion grows throughout the state and the nation, fuel tax revenues have flattened — and will soon enter into permanent decline. Policymakers are searching for new approaches to fund and manage the nation's road system. Oregon has led the way with its Road User Fee Task Force, created in 2001 to examine potential alternatives to the gas tax for raising revenue. Distance-based or "per mile" road user fees have emerged as worthy of serious consideration.

Based on the Road User Fee Task Force's findings, Oregon developed a pilot program to test the per mile fee concept, with more than 260 volunteers in the Portland area participating in the one-year effort. The results were positive and highly sought by transportation stakeholders around the world.

According to the findings, Oregon's road user charging system is fairly inexpensive to operate, simple for motorists to use, and can accommodate the addition of local options, including time-of-day pricing for congestion management. While the field test showed that a vehicle-mile-tax (or VMT) based fee collection system works, the prototype equipment used in the pilot is not ready for commercial introduction.

The Vision Committee recommends that Oregon continue refining the VMT fee system so that, eventually, VMT charges can replace the fuels tax. Further development of the technology and systems is essential for VMT fee implementation, including work that assures privacy protection for motorists.

The Vision Committee also recognizes that new vehicles will soon enter the market that do not require a trip to the filling station. The committee recommends that the state develop and test an alternative VMT collection system for these types of vehicles while ensuring efficiency of fee payment, cost effectiveness in operations, administrative feasibility and ease of use by the motoring public.

#### Implement least cost planning.

Oregon Congressman Peter DeFazio, member of the House Transportation and Infrastructure Committee and chair of the House Subcommittee on Highways and Transit, has said he intends to develop the next federal transportation reauthorization bill around the "least cost planning" model. Oregon could also make good use of this proven tool in transportation, acting in advance of a federal requirement. The Vision Committee recommends ODOT begin developing a least cost planning model for use by the state, Metropolitan Planning Organizations (MPOs), and local governments to optimize critical investments in transportation while addressing climate change and other environmental issues critical to Oregon's quality of life. Collaboration between ODOT, MPOs and the local governments is essential to implementing least cost planning due to the strong relationship between land use and transportation.

"Least cost planning" is a concept developed for the electric utility industry that analyzes the methods and costs of taking actions to increase supply while at the same time analyzing the methods and costs of taking actions to decrease demand, and linking these to transmission and power system management choices. This broadens the scope of potential choices for meeting service requirements. The least cost planning framework has the potential to substantially improve transportation

planning in terms of economic efficiency while integrating environmental considerations into the planning process with greater transparency, to better support informed decision-making and accountability. However, application of least cost planning needs to be structured by the defining characteristics of the transportation sector. In transportation, this approach would allow, for example, evaluation of alternatives that increase capacity while also evaluating alternatives that reduce congestion. In addition to evaluating no-build alternatives, least cost planning also allows for objective consideration of other important policy goals such as reducing carbon output, addressing climate change, supporting economic viability, and enhancing system reliability.

There are fundamental differences between transportation planning and electric utility planning. With transportation, the focus is primarily on movement, but interaction with vehicles, fuels, and facility use is essential. Both applications rely on comparing scenarios that seek to optimize for achieving multiple values rather than any single value, while minimizing risks. An important lesson from the utilities is that there does not appear to be one best way to do least cost planning. Rather, it is important to broaden the range of options considered to achieve transportation objectives and to generate information on the cost and effectiveness of various alternative investment and operations scenarios in transportation.

In least cost planning, different resource and delivery system scenarios (not individual projects) are developed, assessed for costs, and compared. The development of options or scenarios would need to encompass modal choices, geographic areas and the relevant planning horizon. Additional considerations include the quality of transportation service; the costs and availabilities of fuels and ve-

hicle technologies; current and desired future land uses; environmental goals and limitations; and the network aspect of the system (recognizing that the value of any one segment of a transportation mode is dependent on the availability and quality of other segments; a related issue is that there must be some understanding of the inter-relationships among modes: aviation, transit, rail, highway, bike, etc). Finally, the scenarios must take into account the availability of funding and the cost of achieving certain outcomes. Environmental costs that cannot be monetized or quantified are still explicitly weighed in developing scenarios. For example, the scenarios could encompass the full range and needs of the MPO or local government, rather than focusing on any specific project; but specific projects would need to be consistent with the proposed scenarios. If the scenario operates under a greenhouse gas reduction constraint, that constraint would function as a limiting factor in scenario design (as minimum safety requirements might, for example).

There are aspects of least cost planning that exist in the current planning processes at both the state and local levels. The application of this concept to the provision of transportation services is now strongly supported by the Oregon Transportation Plan and the Oregon Highway Plan. The Oregon Transportation Plan also endorses the cost-minimization and cost-effectiveness principles. However, additional work is needed in developing a least cost planning model and using it as a decision making tool in the selection and development of plans and projects, as well as making it accessible and available for MPO-level planning.

### Create a Transportation Utility Commission.

The current governance structure for transportation often presents challenges

to funding transportation facilities and services. Currently, the legislature, county commissions and city councils all have responsibilities to set tax rates to pay for roads and other transportation services, and the lines of responsibility for raising these funds are often unclear. In addition, much of the state gas taxes (and weight mile fees) are distributed to cities and counties under a fixed formula. Cities and counties are also expected to contribute some of their general revenue to support local roads, but there is not a clear rationale for determining the relative share between state and local taxes. Also, the ability of local governments to contribute to their roads is constrained because of property tax limitations and, more recently, the loss of federal timber receipts. Oregon's legislature is asked to set rates to pay for the transportation system without a clear accounting of local and state needs and without a clear theory of funding responsibility among state and local jurisdictions.

Throughout the state, it is clear that revenues cannot even maintain existing facilities, as evidenced by ruts and potholes. This is particularly disturbing because an optimal maintenance schedule (in terms of life cycle costs) requires maintenance well before the need is perceived by the public. An optimal cycle is estimated to be four times less expensive than delaying treatments until failures occur.

Given the lack of clear responsibility and the complexity of determining actual needs, it would be unfair to blame elected officials for the failure to maintain the state's transportation infrastructure. Instead, the system itself needs thorough examination, assessment and, ultimately, changes. Utilities have demonstrated how this can be done with the Public Utility Commission, and transportation facilities fundamentally provide public services just like a

utility. Rather than relying on the state legislature and local governments to set rates, a professional agency determines revenue needs and sets the rate design.

The Vision Committee recommends the Legislature create a Transportation Utility Commission, giving it limited powers initially but with the expectation that the Commission will take greater responsibilities as the model proves itself. Members were concerned about whether the Oregon Legislature could delegate its authority to set tax rates to an executive branch agency. In addition, it is unclear how another principle of Oregon road finance — cost responsibility — would be implemented. These constitutional issues should be resolved before the Commission is fully empowered to set rates to recover the cost of transportation infrastructure. The initial authorization for the Commission should sunset January 2012, requiring a legislative review of these matters.

The Commission would have five members, representing the broad interests of Oregon, with a chair appointed by the Governor. The legislature would allot funds to hire staff, including loaned staff from the Oregon Public Utilities Commission, the Oregon Department of Transportation and local transportation agencies.

In its first biennium, the Commission would have five major responsibilities to establish:

- A common chart of accounts.
   This would determine the current revenues, expenditures and facility conditions by city, county and state transportation agencies. This system of accounts should enable easy comparisons across the system. This data will be the foundation for all further work by the Commission.
- 2. A system-wide revenue requirement estimate. This estimate would be divided by jurisdictions. The

- report should provide a good understanding of the revenue needs for maintenance, preservation and modernization by jurisdiction.
- 3. A conceptual framework for a rate design. This framework would show how to pay for transportation services in the future. This rate design would broadly address two questions: 1) What should be the weighting of responsibility for raising funds between local and state jurisdictions? 2) How should revenue be collected, looking at a combination of fixed and variable charges, as well as peak and offpeak pricing?
- 4. A framework for least cost planning.
- 5. Alternative rates for immediate adoption. Drawing on the research on rate design, the Commission would be responsible for adopting alternative rates (including congestion pricing pilots) for consumers to choose as an option to the gasoline tax.

Future work would include analyses of opportunities to merge responsibilities among city, county and state roads to improve the effectiveness of delivery.

The Commission would report to the legislature a plan and budget for how it would assume greater responsibility for setting rates for transportation services that meet the state's objectives for efficiency, safety, reliability and environmentally responsible transportation services. As Oregon moves away from the gas tax to a system of sophisticated mileage fees, the Commission will establish the appropriate level for funding and set the rates.

Oregon ranks 38th in title fees (2007)

### Chapter Two Transitional First Steps:

Immediate actions for an evolving transportation system

he Vision Committee supports taking some immediate steps to smooth the way for a transition that will continue to serve Oregonians while supporting the economy and preserving the environment.

#### On Governance and Accountability

Additional expansion can address only some of the challenges facing the transportation system. Half of all congestion is unrelated to system capacity. In the short term, several steps can make management and operation of the existing system more efficient and better align limited resources with jurisdictional responsibilities.

### 1. Improve program delivery through Intergovernmental Agreements (IGAs).

Resources may be more effectively raised or invested at a multi-jurisdictional level. There may be a variety of opportunities for improving overall program efficiency through sharing resources. Further, regional transportation authorities may be a more effective means of both raising revenue and focusing investments on the most important needs. There may be a number of impediments that currently block or slow efforts to optimize use of IGAs.

ODOT should establish a state and local government task force to (a) identify opportunities for greater program efficiencies through IGAs; (b) determine needed or desirable legislation; and (c) consider pilot programs or incentive grants.

# 2. Review city, county and state transportation capabilities to rationalize ownership and management.

The growth of the State Highway Fund has lagged behind investment needs, affecting the ability of local governments to maintain roads and streets programs evenly across the state. The size and expense of local systems may now be beyond the capacity of some jurisdictions to the state's economic detriment.

A review of jurisdictional responsibilities is required in order to determine if some form of ownership rationalization would better ensure overall system performance. This is a complex question requiring a legislatively mandated statewide task force to develop and recommend a better alignment of system responsibilities and financial capacity.

### 3. Improve the public involvement process.

Improving the public process in transportation projects has two distinct advantages. First, a better public involvement process increases support for projects because people feel part of and influential to the project. Second, a more streamlined public involvement process saves taxpayer dollars and gains valuable time in implementing important projects.

There are a variety of ways to improve the process, including the following: 1) Determine if smaller projects could be constructed within the existing programmatic permit; 2) Determine if project descriptions at

the Transportation System Plan level might be detailed enough to forgo an additional public process that would be redundant; and 3) Determine if public involvement can be conducted concurrently with, not after, certain development phases.

There may be other models of public involvement that can speed projects and provide greater accessibility to the decision-making process. The Vision Committee recommends that a joint legislative/stakeholder task force review national "best practices" standards, local planning and project development guidelines and make recommendations for improving the public involvement process in Oregon.

#### 4. Evaluate transportation decisionmaking in metropolitan regions.

Area Commissions on Transportation (ACTs) make recommendations on transportation investment priorities. Metropolitan Planning Organizations (MPOs) set similar priorities and make federal planning, system management and investment criteria. Membership, authority, and decision-making processes differ between these local organizations and improvements in the process may increase stakeholder consensus and metropolitan transportation management.

The Oregon Transportation Commission (OTC) should initiate a study of national "best practices" for improving the delivery of metropolitan transportation services through enhanced regional decision making.

### 5. Expand the use of local option registration fees.

Prompted in part by the loss of federal timber payments to counties, the inadequacy of local government transportation revenue is becoming critical. Local maintenance and capital improvement costs continue to grow

exponentially. Both increased state and local funding will be required to meet these growing costs. Yet local jurisdictions today have limited ability to raise revenue, and for counties there are few options that do not require referring a ballot measure to the voters.

There is general agreement that local governments need more effective tools to raise transportation revenues. Local governments, AAA Oregon, and the Oregon Trucking Associations each have distinct concerns that could be resolved if cost-responsibility could be addressed and maintain relative equity between cars and trucks. These parties are currently discussing these issues and examining other options to provide local jurisdictions with the opportunity to raise transportation revenue locally with the goal of achieving resolution during the 2009 Legislature.

### 6. Relax legal constraints on facility co-location.

There are potential economies in the colocation of ODOT and local government highway facilities. Efforts to implement facility co-locations, however, have been frustrated by the extremely long lead times demanded by the state capital construction process. A mechanism for exempting ODOT buildings from current state budget requirements is needed if ODOT is to be able to respond better to co-location opportunities.

Modification of statutory requirements governing state/local co-locations to better enable consideration of the mutual benefits of these transactions would both protect the public interest and facilitate the efficiency gains of co-location. This will require ODOT to develop a legislative concept.

### 7. Develop and implement interim project selection criteria.

ODOT's modernization program remains funded at a modest level, and much

of any new revenues generated will be directed at maintaining and preserving the existing system, which is also chronically under-funded. As part of the Transitional Pillars, the Vision Committee recommends state and local officials develop least cost planning tools to ensure that transportation investments are made strategically. These tools will take time to develop and implement.

Until a workable least cost planning model is developed, the Vision Committee recommends that the STIP stakeholder group develop new, interim criteria to be used for project selection for upcoming STIP allocations.

To guide the STIP stakeholder group in its deliberations, the Vision Committee recommends the following principles for project selection. Projects should:

- Improve the state highway system, or major access routes to the state highway system on the local road system, to relieve congestion by expanding capacity, enhancing operations, or otherwise improving travel times within high-congestion travel corridors.
- Enhance the safety of the traveling public using access management and other techniques in support of decreasing traffic crash rates, promoting the efficient movement of people and goods, and preserving the public investment in the transportation system;
- Increase the operational effectiveness and reliability of the existing system by using technological innovation, providing linkages to other existing components of the transportation system and relieving congestion;
- Be implemented in a timely manner to reduce congestion in other modes of transportation and reduce the need for additional highway projects;

- Improve the condition, connectivity and capacity of freight-reliant infrastructure serving the state;
- Support improvements necessary for the state's economic growth and competitiveness, accessibility to industries, and economic development;
- Provide the greatest benefit in relationship to project costs;
- Foster livable communities by demonstrating that the investment reinforces or does not undermine compact urban development;
- Enhance the value of transportation projects through designs and development that reflect environmental stewardship and community sensitivity; and
- Be consistent with infrastructure plans and reinforce the state's greenhouse gas reduction goals.

#### On the Environment

### 1. Enhance transportation demand management.

The Vision Committee recommends an expanded Transportation Options (TO) program be a key element in the Governor's Transportation Initiative. TO programs provide Oregonians with local, meaningful, and cost effective ways to reduce vehicle miles traveled (VMT), providing relief from high fuel prices while enhancing community livability. A comprehensive TO program could include:

- education and marketing;
- expanded pedestrian and bicycle programs;
- increased numbers of carpools and vanpools;
- a statewide rideshare program; and
- incentive programs designed to reduce VMTs.

A TO program could also include the creation of an Oregon Transportation Options Trust, a first in the nation permanent and ongoing fund to implement

proven Transportation Demand Management techniques.

#### 2. Implement variable first time title fees.

As fuel prices increase, consumer behavior is changing. Miles traveled are reduced, public transit ridership is increased, and big purchasing decisions — such as vehicles and homes — are impacted. These results demonstrate that price signals are useful in predicting consumer choice.

However, relying entirely on the price of gas as the "price signal" has several weaknesses:

- Gas prices provide an ambiguous reward for individuals who make carbon-friendly choices (although people who reduce travel pay less, they still feel the pain of high prices).
- Gas prices don't signal the differences between paying for the basic infrastructure (average capacity), paying for the last increment of capacity (congestion, or peak, pricing), and paying for consumption of the airshed.

The Vision Committee recommends that the first time title fee be structured as an incentive to drivers using vehicles that have a high EPA mileage rating. The committee proposes that drivers who can prove their vehicle is rated above 30 mpg be charged a first time title fee of \$50. For others, the title fee would remain the \$100 proposed by the committee.

The Vision Committee recommends that this proposal function in a revenue neutral manner. Additionally, the committee recognizes this policy may not provide a loud enough signal to Oregonians who may be purchasing a new vehicle, however, the committee believes this can serve as a "first step" in a broader conversation about pricing signals.

### 3. Implement a congestion-pricing pilot.

Pricing transportation services has the potential of reducing congestion in heavily traveled corridors. Time-of-day charges, variable pricing and other approaches have been used successfully in other areas to improve the flow of traffic, reduce fuel consumption, improve air quality and ensure reliable freight movement.

The Vision Committee recommends the Oregon Transportation Commission implement a congestion-pricing pilot using its existing authority. The Commission should seek out a community or a group of volunteers who are interested in participating in an incentive program to demonstrate the potential of pricing to reduce traffic congestion.

In addition, the Vision Committee encourages continuation and enhancement of the study performed every two years by the Office of Economic Analysis to ensure that cars and trucks are paying their fair share for using Oregon's roads. These analyses should be enlarged to encompass the social and economic costs of traffic and to consider how variable congestion pricing can be designed to better pay for and reduce these costs.

### 4. Promote the use of new vehicle technologies.

There are several ways Oregon can promote and support the use of alternative-fueled and new technology vehicles. The State of Washington passed a law in 2007 enabling state agencies to provide electric vehicle charging infrastructure at state expense to encourage use of electric vehicles. Oregon could do the same to give visibility and a positive incentive to electric vehicles. Oregon could also implement a medium speed vehicle

solution, as Montana and Washington have done. Currently, Oregon defines a low-speed vehicle as a four-wheeled motor vehicle with a top speed of more than 20 mph but not more than 25 mph. Such vehicles cannot travel on a highway that has a speed limit of more than 35 mph. An exception does currently exist for a city or county to adopt a local ordinance to allow operations of low-speed vehicles on city or county roads (typically used by rural jurisdictions with ATV use).

This speed limitation can prevent wide adoption of small fuel-efficient neighborhood vehicles. Oregon could create a category of medium-speed vehicles with a maximum speed of 35 mph on roads posted 40 mph or less (like Washington; Montana allows travel on roads posted up to 45 mph at maximum speeds of 35 mph). Oregon could still require safety technology comparable to low-speed vehicles and could add in a requirement for roll cage or crush proof body design like Washington and Montana have in their legislation. Medium-speed vehicles would still require a title, registration, driver license and insurance for operation.

#### Use tax incentives to accelerate adoption of new vehicle technology.

Currently, tax credits provide incentives for using alternative fuel vehicles and associated fueling infrastructure.

Residential Energy Tax Credit program: Eligibility for the RETC program is determined by technology with no regard to efficiency or greenhouse gas emissions (by statute). The amount of credit is 25 percent of the cost of the alternative fuel device with a cap of \$750 per energy device. The typical full hybrid qualifies for two credits: one for the electric propulsion portion of the vehicle and one for the on-board

battery recharging system, for a total of \$1,500 in tax credits. Additional credits for a plug-in conversion and external charging system could be problematic, as the credit cap would have been met on the original charging system if the vehicle had received a hybrid credit.

Business Energy Tax Credit program: Eligibility for the BETC program is determined by technology. The eligible cost is the lower of either the incremental cost of the hybrid in comparison to a conventional like vehicle or the simple payback limit. Conversions and external charging, pedestals or shore power receptacles, along with time of use electricity control units, are eligible for the BETC credit.

Alternative fuel vehicle technologies are integrated into various vehicle platforms such as hybrid small compact cars or hybrid large sport utility vehicles. There are improvements in efficiency and emissions when the hybrid technology is added, but the overall vehicle energy efficiency is low and emissions may still be unacceptable. There is no reason to believe that future technologies will always be applied in a favorable manner no matter how good they are.

RETC/BETC also includes alternative fuel vehicle and refueling infrastructure credits for fuels such as natural gas and propane. These fuels typically do not offer a significant efficiency over petroleum-based fuels but offer emission reduction and petroleum displacement benefits as well as a good fit for greenhouse gas emission reduction strategies. Credits for these and other fuels that may come along should be based on their benefits.

Hybrid technology has become widespread, though, and the state may not be getting the best results for its investment. The state could review the limiting statutes and phase out tax

credits for common hybrid technologies and apply the credits to vehicle technologies that meet a high standard for efficiency such as Plug-in Hybrid Electric Vehicles (PHEV). If structured correctly, the state could increase the credit for higher efficiency vehicles and still be revenue neutral over the next two biennia. This credit could sunset as PHEV technology becomes more widespread.

The programs described above reveal larger questions about how the state adopts and approves vehicles for tax credits. Despite technologies and the rapidly shifting marketplace, statutes limit the Oregon Department of Energy's ability to adapt. It has the flexibility to set standards for new appliances eligible for the tax credit, but not for vehicles. The state should consider giving ODOE rulemaking authority to set standards for vehicle tax credits so it can stay as current as possible.

### 6. Plan land use and transportation to include reduction of greenhouse gases.

Oregon's transportation investments must be consistent with the state's commitment to reduce greenhouse gases. In addition to policies and incentives for more efficient vehicles and lower carbon fuels, the legislature should enact planning requirements to enable the state's federally designated metropolitan areas to grow, without causing an increase in the need for automobile travel. Each of Oregon's metropolitan planning organizations and the local governments within the commuting area of each MPO should develop integrated land use and transportation plans that ensure existing and future residents have sufficient choices in where they live and how they travel so that growth in driving does not violate climate standards.

ODOT and the Department of Land Conservation and Development, using existing planning grant programs and additional resources made available in this funding proposal, should support and assist the MPOs in developing accurate models for estimating the amount of car and light truck travel in each metropolitan travel-shed (commuting area) under various combinations of future land use patterns, transportation investments. and transportation system management techniques. The state should also make grants and assist cities and counties within those travel-sheds in making changes to their comprehensive plans and transportation system plans to ensure that future car and light truck emissions stay within emission targets. These regional plans and implementing local plan amendments should be developed with broad public involvement to ensure that the choices developed are feasible and desirable.

Oregon's rural areas and smaller cities outside the commuting areas of the state's MPOs have fewer alternatives to the automobile and are not projected to experience significant growth. These areas should be able to reach climate change goals as residents change vehicles and fuels in the future. These communities should be exempt from the planning requirements described here unless growth projections change or communities wish to plan for significant new growth.

### 7. Create logistical hubs for rail freight.

Rail has much lower energy intensity than trucks and cars. The Vision Committee believes it makes sense to build on existing resources and preserve rail resources. The Committee encourages the increased use of rail for long haul shipping to improve efficiency, reduce greenhouse gasses and create savings for businesses and consumers.

As Oregon continues moving toward the integration of transportation and land use planning, the state should include "logistical hubs" located close to rail lines and transportation corridors. These strategically located hubs and corridors would include multimodal connections to encourage the nearby location of wholesale centers so that freight can be delivered by rail and efficiently moved to storage pending short haul transportation by truck. This planning requires that the state locate and plan for hubs and obtain necessary right of way. Representatives from wholesale, retail and shipping industries should be involved in the planning. The Oregon Freight Advisory Committee should take the first steps to identify potential hubs.

#### 8. Encourage the use of clean diesel.

The trucking industry has already taken big steps to clean up emissions from its heavy-duty diesel engines. It is equally important to focus on reducing consumption of diesel fuel, as it plays a vital role in reducing carbon output and addressing climate change.

The 2007 Oregon Legislature passed the Clean Diesel Bill that retrofits older diesel engines with modern pollution control technologies. This program not only works with trucks, but it also helps to clean up emissions from school buses, heavy construction equipment, railroad locomotives and marine diesel engines. The Vision Committee recommends asking the 2009 Legislature to provide additional funding for this important program.

Another way to reduce carbon emissions from diesel engines is through conservation. The Oregon Department of Energy, through its Business Energy Tax Credit program, is working with the trucking industry to purchase technologies that reduce fuel consumption. Reducing consumption by

10 percent or more qualifies a trucker for the tax credit. The Vision Committee recommends ODOE increase efforts by continuing to help equip Oregon's trucking industry with the latest in fuel savings technologies.

The Climate Trust, along with Oregon Solutions, has also been working to reduce diesel emissions by helping install new technologies at Oregon truck stops that allow truckers to reduce idling. The Vision Committee encourages the Climate Trust to continue with this important effort that saves fuel, reduces carbon output and improves highway safety.

### 9. Support 'Pay-As-You-Drive' auto insurance.

The Vision Committee recommends extending the tax credit for insurance companies that pilot 'Pay-As-You-Drive' auto insurance in Oregon. For motorists, PAYD insurance offers a voluntary alternative to fixed-premium auto insurance. PAYD insurance converts a portion of one's annual insurance fee into a per-mile fee. All existing rating factors required by state law (such as a driver's crash and moving violation history, vehicle type, and geographic territory) are incorporated into the permile price. PAYD insurance gives drivers more control over driving expenses and provides a strong financial incentive to drive less. Studies suggest that drivers paying per-mile premiums will reduce driving by 5-15 percent and save up to 25 percent on their premiums; and within any given insurance pool, anyone who reduces their driving could save, whether they live in a rural or an urban area. The 2003 Legislature approved a tax credit for insurance companies who pilot the concept in Oregon. This tax credit will expire in 2010 and should be extended since several insurance companies are nearing completion of their research and development phases and may be able to provide a PAYD

product to Oregon drivers in the near future.

### 10. Adopt environmental standards for construction.

oDOT has successfully employed environmental performance standards in its OTIA III construction contracts to minimize the air quality impacts of construction. These standards cover such things as materials recycling, HAZMAT, dust control, air quality, equipment and fuel standards. Reports suggest that many of these performance standards can save money for contractors in addition to protecting the environment.

The Vision Committee recommends broadening the use of environmental standards to all transportation construction contracts funded with state funds. This concept would include all ODOT contracts, but could also include any municipal contracts given for transportation construction projects if they receive state or federal funding.

In the long run, the concept could be expanded to all publicly funded construction projects.

# 11. Increase the use of performance-based environmental permitting and project design.

ODOT's OTIA III State Bridge Delivery Program has successfully delivered projects with improved environmental stewardship through the use of programmatic permits based on performance standards. ODOT and its partners worked collaboratively to develop these standards, which describe how a project must function in the environment. The standards also outline the conditions the project must meet in order to use the programmatic permit(s). Finally, the standards address species and habitat impact avoidance and minimization, site restoration,

compensatory mitigation, water quality, and fluvial (river and stream) functions.

The implementation of the standards results in positive environmental outcomes because they meet the environmental and sustainability goals of both ODOT and the regulatory agencies. Incentives to meet the standards, such as shorter permitting timeframes, reduced costs and increased certainty regarding project scope, support actions that meet the standards.

The Vision Committee recommends ODOT expand the use of performance-based programmatic permitting beyond the OTIA III Bridge Program. The approach could be used to permit significant portions of the Statewide Transportation Improvement Program (STIP), such as bridge projects, modernization projects, or projects within a specific geographical area, or the entire STIP.

### 12. Protect water quality and wildlife habitat.

Road construction can hasten erosion, alter natural hydrology and create barriers to fish passage when stream crossings are poorly designed. Polluted runoff from roads can degrade water quality and harm aquatic life if it reaches waterways. Roads can promote the spread of invasive weeds, and roadside vegetation can have positive or negative impacts on wildlife habitat and water quality, depending on how it is managed.

The Vision Committee recommends that ODOT make it standard practice to: 1) use sustainable low-maintenance plants for landscaping and roadside areas; 2) manage roadside vegetation using integrated pest management techniques; and 3) use "green elements" in road design, such as managing road runoff when it could

reach waterways, minimizing stream crossings, protecting stream corridors with buffer areas, and using bridge or simulated stream-bottom culverts instead of conventional culverts.

#### 13. Increase bicycle mode share

Bicycling is a cost effective and environmentally friendly form of transportation. In a time when Oregonians are driving less and are concerned about their financial wellbeing, bicycling offers a practical and time-effective alternative for commute, school-based, and shopping trips. Increasing bicycle commuting can have a positive impact on congestion and can reduce demands on public transportation.

Studies indicate that 60 percent of the population is interested in cycling but has safety concerns based on a lack of safe and convenient bike routes. Existing programs, such as the Safe Routes to Schools program, which receive federal, state and local funding, should be expanded to reach more of Oregon's children through education and infrastructure improvements. Implementing a point-of-sale excise tax on the purchase of adult bicycles should be used to enhance bicycle transportation, including Safe Routes to Schools.

### Chapter Three Proposed funding for a healthy system

hile Oregon takes steps toward a transportation system that is both financially and environmentally sustainable, it is critical to make immediate investments that preserve the existing system, stimulate the economy, and create job opportunities for Oregonians. These investments should maintain and preserve the system we have today, maximize its efficiency and strategically expand capacity.

The Transportation Vision Committee recommends an immediate investment to provide much needed funding to maintain and preserve our roads and bridges, and to replace aging public transit buses, as well as continuing to expand the network of multimodal opportunities around the state.

#### Highway and bridge investments

The road-funding concept listed below provides an option for investment. A revenue work group, working as a subset of the Vision Committee, developed this proposal. Each of

these revenue increases could be smaller or larger (see an example of another option, page 15). This design is intended to allow the Governor and the Legislature the ability to make the ultimate decisions about what may be viable in the legislative environment during 2009.

In addition, the Vision Committee may further refine this recommendation as they receive reports from the Governor's Public Awareness Committee shedding light on public opinion surrounding these issues.

The Vision Committee is aware that this proposal would represent increases to the average Oregon consumer, as well as the constitutionally mandated increases in the weight mile tax paid by Oregon's trucking industry. The Committee believes the proposal must strike a balance between investing to protect the assets of the state's transportation system and support Oregon's competitiveness and minimizing the impacts on working families and business today.

#### Proposed revenue increases

Road Funding Concept	Light Vehicle Share <sup>1</sup>	Heavy Vehicle Share <sup>1</sup>	Total Approximate Annual Revenue
Increase registration fee (\$27 per year to \$81 per year) One dollar increase in auto registration fees would raise about \$5.7 million from light and heavy vehicles per year	\$203 million	\$105 million	\$308 million
Increase title fee (\$55 to \$110 for light vehicles) One dollar increase in the title fee would raise about \$1.8 million from light and heavy vehicles per year	\$65.9 million	\$34.1 million	\$100 million
First time title fee (new \$100 fee or a variable fee based on fuel economy) One dollar first title fee would raise about \$330,000 from light and heavy vehicles per year	\$21.7 million	\$11.3 million	\$33 million
2¢ fuel tax increase (from 24¢ per gallon to 26¢) One cent increase in the fuel tax would raise about \$29 million from light and heavy vehicles per year	\$38.2 million	\$19.8 million	\$58 million
	Annual fund	ding increase	\$499 million

<sup>&</sup>lt;sup>1</sup>All potential revenue estimates assume proportionate increases in heavy vehicle fees to ensure cost responsibility. Light vehicles should pay 65.9 percent and heavy vehicles should pay 34.1 percent of state highway revenue per 2007 Highway Cost Allocation Study.

#### What does this mean to motorists?

The proposal for road finance meets the constitutional requirement that each class of road user pay a proportionate share of the road user revenue. The proposal identifies the light vehicle fees that could be increased. The amounts above represent a 56 percent increase in total light vehicle tax payments over forecasted 2008 payments.

#### What does this mean to a driver?

What does this mean to a driver? The typical motorist keeps a car about eight years and pays about \$180 per year in gas tax and registration and title fees. Under the following proposal, the motorist would pay an additional \$7 per month (about \$85/year):

- \$54 in registration fees
- \$19 in title fees
- \$12 in gas tax

For the additional investment (a total of about \$265/year), motorists would receive increased road and bridge maintenance.

Poor road conditions cost the typical urban motorist more than \$400 per year in additional vehicle maintenance, according to The Road Information Program (TRIP). While estimates for Oregon specifically are not available, recent TRIP reports estimate that poor road conditions in other states cost a typical motorist \$150 - \$260 per year more in maintenance expenses.

### What does this mean to the trucking industry?

The proposal for road finance meets the constitutional requirement that each class of road user pay a proportionate share of the road user revenue. Heavy vehicle fees provide 34.1 percent of the total revenue above. This represents a 56 percent increase in total heavy vehicle tax payments over the forecasted 2008 payments. Heavy vehicle registration and title fees or weight mile taxes could be increased to provide this revenue.

#### Another option for proposed revenue increases

The Vision Committee recognized that there are alternative ways to provide the target highway and road funding. The Committee developed the alternative below with a higher fuel tax and lower registration fee to illustrate a different response to policy considerations.

Road Funding Concept	Light Vehicle Share <sup>1</sup>	Heavy Vehicle Share <sup>1</sup>	Total Approximate Annual Revenue
Increase registration fee (\$27 per year to \$54 per year) One dollar increase in auto registration fees would raise about \$5.7 million from light and heavy vehicles per year	\$101.5 million	\$52.5 million	\$154 million
Increase title fee (\$55 to \$100 for light vehicles) One dollar increase in the title fee would raise about \$1.8 million from light and heavy vehicles per year	\$52.7 million	\$27.3 million	\$80 million
First time title fee (new \$100 fee or a variable fee based on fuel economy) One dollar first title fee would raise about \$330,000 from light and heavy vehicles per year	\$21.7 million	\$11.3 million	\$33 million
8¢ fuel tax increase (from 24¢ per gallon to 32¢) One cent increase in the fuel tax would raise about \$29 million from light and heavy vehicles per year	\$152.9 million	\$79.1 million	\$232 million
	Annual fund	ding increase	\$499 million

<sup>&</sup>lt;sup>1</sup>All potential revenue estimates assume proportionate increases in heavy vehicle fees to ensure cost responsibility. Light vehicles should pay 65.9 percent and heavy vehicles should pay 34.1 percent of state highway revenue per 2007 Highway Cost Allocation Study.

#### State, County and City revenue sharing

State highway revenues are shared resource of state and local governments. The revenue from the Vision Committee's proposal will be allocated among the jurisdictions as follows:

Proposed Allocation of Additional Highway Revenue	Amount
50% allotment to the state highway program	\$249.5 million
30% allotment to county road programs	\$149.7 million
20% allotment to city street programs	\$99.8 million
Total Additional Highway Revenue	\$499 million

#### Proposed new expenditures

State Highway Program	Millions per year
County Minimum Road Funding	\$6.4
Road User Fee  Refine technology needed for a vehicle miles of travel fee  Develop and test a solution for electric vehicles	\$4.0 \$1.0
Backfill to Highway Program to replace federal "flexed" funds	\$44.0
Columbia River Crossing  Minimum funding amount to keep project going	\$15.0
Take Care of the System  Maintenance, Preservation and Safety  • Maintenance and safety (Appendix A)  • Preservation (Appendix B)  • Urban preservation (Appendix B)  • Bridge (Appendix C)  • Culverts and landslides (Appendix D)  Subtotal	\$35.0 \$15.0 \$5.0 \$10.0 \$10.0
Make the System Work Better Improve Operations and Efficiency/Intelligent Transportation Systems (Appendix E)	\$10.0
Make Strategic Investments  • New state highway modernization program (Appendix F)  • Freight bottleneck relief (\$400 million bond proceeds¹)  Subtotal	\$61.1 \$33.0 \$94.1
Total Additional State Highway Program	\$249.5
County Road Programs (distributed to Oregon's 36 counties by formula)	\$149.7
City Street Program (distributed to Oregon's 242 incorporated cities by formula)	\$99.8
TOTAL PROPOSED HIGHWAY EXPENDITURES	\$499.0

<sup>&</sup>lt;sup>1</sup> Pledging \$33 million in annual revenue is estimated to raise \$400 million in bond proceeds

#### Multimodal funding investments

Transit ridership across Oregon has increased dramatically during 2008. For many Oregonians, public transit has moved from a transportation choice to a transportation necessity. The state's urban areas have seen 13 - 17 percent increases; buses and trains are crowded and passengers are being passed by. In Oregon's rural areas, such as Union County, Baker City and Tillamook County, ridership increases have reached more than 25 percent. Transit is a lifeline in rural communities for those who cannot afford to drive long distances as well as for those individuals who can no longer drive at all.

Further, Oregon's population is aging rapidly and will require transportation assistance to remain independent and productive. This demographic change is even more significant in Oregon's rural communities. A recent PSU study commissioned by the legislature points to the need for additional resources to meet this demand.

In addition to the growing demand for transit service, increased diesel fuel prices have forced some transit agencies to raise fares and cut service. In July 2008, some transit agencies were paying \$4.20 a gallon for diesel fuel to operate their bus fleets; this required budget adjustments that hurt transit at a time when the need is greatest.

Oregon's ability to respond to this need and support vital public transportation services is limited for two reasons that most other states do not face. The first is the Oregon Constitution (article IX, Section 3a), which dedicates money raised by fuel taxes and vehicle fees

to Oregon's public highways, roads and streets. The second is that most public transit operations in the U.S. are supported primarily by state and local sales taxes, which Oregon doesn't have.

Instead, Oregon and its communities have used a patchwork of sources to fund transit capital and operating needs. Capital funding includes buses, trains, tracks, special needs vehicles and related purchases. Operating funds provide for the ongoing fixed route or on demand transit service.

The Transportation Vision Committee recommends that the state, through statute, establish a dedicated non-highway transportation fund for transit capital investments. The initial investment in this fund should equal at least 20 percent of any new revenue generated for the highway fund.\*

The Committee proposes an ongoing investment of 15 percent of lottery revenue as a first step in meeting this objective. Additional revenue sources must also be identified to adequately fund the operation of public transit as well as other elements of Oregon's non-highway transportation system.

The Transportation Vision Committee also recommends these funds be used as an incentive for local governments to make investments in their non-highway transportation infrastructure using local sources such as systems development and parking fees, tax increment financing, transportation utility fees, local improvement districts and other funding mechanisms.

The Committee recommends that state funds be limited to capital investments,

<sup>\*</sup>This target was identified as an initial step toward an allocation structure similar to that of the federal government, which allocates 80 percent of the federal transportation dollars to highway projects and the remainder to other modes.

unless they are required for unfunded federal mandates (such as the Americans with Disabilities Act) or to provide intercity or intrastate service. In order to meet the demands for increased local service, the Committee recommends that the legislature authorize an increase in the employer payroll tax from the current ceiling of 0.7 percent to 0.8 percent for Oregon's urban transit providers, while also considering other options such as enacting statutory changes to facilitate the formation of transit districts.

The "Oregon Bike Bill" currently dedicates one percent of highway and

road funding for bicycle and pedestrian improvements that are within the public right of way, such as marked bike paths on streets and sidewalks, and curb cuts. The Vision Committee recommends increasing the amount of this dedication from one percent to one-and-a-half percent. The Committee also discussed how to fund improvements that are not within public road rights of way. While lottery funds can be used for parks and recreation areas, there are more needs for off-road improvements than can be funded. Committee members explored the option of authorizing an excise tax on adult bicycles that could be levied and collected by cities and counties.

#### Proposed new revenue

Multimodal Funding Concept	Approximate Annual Revenue
Additional Lottery Revenue (see table page 21)	\$39.5 million
5¢ state cigarette tax increase	\$10.5 million
Allocate all federal Surface Transportation Program (STP) money to eligible multimodal investments	\$44.0 million
Annual funding increase	\$94 million

Oregon's gas tax is 16th highest in the nation; diesel tax is 19th highest

#### Proposed total revenue for multimodal investments

	Existing	Proposed	Total (millions)
15% of Lottery Revenue			
Westside LRT bonds expiring 2010	\$10.0		
Transit bond obligations <i>LRT extension, streetcar, commuter rail</i>	\$26.2		
Freight rail bond obligations Shortline Credit Premium, Industrial Spur, Joseph Branch	\$2.6		
Ports/marine bond obligations Columbia River channel, Coos Bay channel	\$7.9		
ConnectOregon I and II	\$13.8		
Additional 7% of Lottery Revenue see "Potential Uses"		\$39.5	
			Subtotal: \$100
Elderly and Disabled			
Special Transportation Fund 2¢ cigarette tax, ID card revenue, and "Lawnmower Fund"	\$9.25		
5¢ state cigarette tax increase		\$10.5	
			Subtotal: \$19.75
Passenger Rail Amtrak Cascades service (GF)**	\$4.5		\$4.5
Mass Transit Assessment payments in lieu of tax	\$8.5		\$8.5
Allocate all federal Surface Transportation Program (STP) money to eligible multimodal investments*		\$44.0	\$44.0
TOTAL POTENTIAL MULTIMODAL FUNDING	\$82.75	\$94.0	\$176.75

<sup>\*\*</sup> By increasing the fee for "vanity" plates from \$25 to \$50 the general fund allocation for the Amtrak Cascades trains could be eliminated.

<sup>\*</sup>About \$44 million in federal STP money was available for projects (obligation) in FFY 2007. These funds are currently committed to highway projects. The proposal is to "flex" these funds, when allowed by federal law, to fund non highway projects. Rather than eliminate the programs currently funded with these dollars, we would propose taking \$44 million off the top of any highway package to backfill this hole. This proposal would be dependent on receiving an influx of new dollars into the highway fund.

#### Proposed additional revenue for multimodal investments

Additional amount \$94.0 million Westside LRT Bonds, expiring 2010 \$10.0 million

Total available for new multimodal investments (after 2010) \$104.4 million

#### **Proposed Multimodal Investments**

Total available for new multimodal investiments (after 2010) \$104.4 million LESS ConnectOregon III debt service (\$150 million bonds) \$12.6 million This program provides funds strictly for multimodal projects, such as rail, marine, public transit and aviation, through a competitive application process.

LESS Amtrak Cascades train debt services (\$35 million bonds) \$3.5 million (Replaces train now leased from Washington state)

Total available for new multimodal investments (after 2010) \$87.09 million

#### Other proposed multimodal investments

	Annual Amount
Support special transportation service for senior citizens and people with disabilities	\$10.5 million
Replace public and special transportation vehicles	\$31.5 million
Use innovative approaches and best practices to improve the cost effectiveness of special transportation service	\$5 million
Deploy traffic signal priority technology (ITS) to improve public transit performance	\$2 million
Improve sidewalks and bus stops	\$1.5 million
Upgrade rail track to modern standards (about 15 miles per year)	\$30 million
Upgrade rail signal system	\$5 million
Support the Competitive Urban Trail program	\$20 million
Upgrade tracks and switches at specific locations for passenger rail	\$2 million
Improve grade crossings	\$1 million
Increase rail capacity in Portland (10 projects)	\$17 million
Increase intermodal container security	\$2.5 million
Improve marine access to ports (channels, docks, equipment)	\$35 million
Improve rail system access at ports	\$25 million
Improve road access at ports	\$1.6 million
Dredge docksides and marinas	\$1 million
Rehabilitate docks	\$2 million
Potential Multimodal Commitments	\$192.6 million

In addition to the potential revenue from sources listed above, the Vision Committee recommends consideration of actions that would allow local governments to generate revenue, such as the following:

#### Proposed new revenue for multimodal investments - local

Multimodal Funding Concept	Approximate Annual Revenue
Increase payroll tax to 0.8 percent • TriMet* • Lane Transit*	\$30 million \$4 million
Allow transit and transportation districts to adopt authorized financing methods** by board action.	
Parking excise tax (10¢ per space per day) • TriMet (based on 1995 and 1998 studies) • Other districts	\$29 million \$15 million
System development charges for transit  TriMet (based on 1998 study)  Other districts (estimate)	\$32 million
Annual funding increase	\$126 million

<sup>\*</sup>The current maximum level of the payroll tax is 0.7 percent of gross payroll, subject to a 10 year phase-in that began in 2004. The estimate is additional money that could be raised by 0.8 percent payroll tax above a 0.7 percent rate, assuming current levels of gross payroll.

<sup>\*\*</sup> Under current law, districts may finance public transportation service using revolving funds, bonds, business license fees, net income taxes and payroll taxes. The TriMet and Lane Transit district boards have authority to finance their service without first obtaining voter approval; other district boards must first obtain voter approval. The boards may refer their proposals to the voters. In addition, board action is subject to referral by initiative.

#### **Chapter Four**

#### **Transitional Concepts:**

Areas identified for further action and exploration

he Vision Committee recommends the following steps to make management and operation of the system more efficient and to better align the limited resources of the State Highway Fund with jurisdictional responsibilities. While these are recommendations for long-term changes, they should also be considered in conjunction with measures to provide additional resources.

### 1. Develop a new state funding allocation formula.

The current formulas used to distribute State Highway Fund money among state, counties and cities do not recognize the size or use of the highway, road and street systems that each is charged with maintaining and operating. A new jurisdictionally blind formula that incorporates both maintenance and modernization needs is required in order for a superior allocation of funds to state, county and city road and street programs.

This will require both detailed analysis of system preservation and modernization needs and significant participation by ODOT and local government. A legislatively authorized state and local government task force to oversee the effort is recommended.

#### 2. Establish more realistic Transportation System Plan expectations.

Transportation System Plans (TSPs) are a component of the land use planning process. TSPs coordinate local governments' land use and transportation planning processes to

ensure that planned transportation improvements support the travel and land use patterns envisioned in comprehensive plans. Except in large metropolitan areas where TSPs must be consistent with financially constrained regional transportation plans, local government TSPs do not have to be financially constrained to expected revenues. There is concern that this results in inflated public expectations of local government's ability to build the transportation projects needed to meet their comprehensive plans' stated development objectives.

The OTC should undertake a policy review of this issue to (a) determine its extent and significance; (b) consider alternative ways of better aligning plan objectives and expected deliverables; and (c) develop recommended changes to state planning requirements.

### 3. Develop new highway design investment criteria.

Current Federal Highway Administration (FHWA) project investment criteria require a level of traffic performance in the last year of the planning horizon. Projects, then, must be built to a scale to insure free traffic flow conditions for at least 20 years into the future. This frequently results in large projects that cost more than the ODOT and local agencies can afford or that have the effect of reducing the number of projects that ODOT and

Oregon's vehicle registration fee (\$27 for cars and light vehicles) is the 47th lowest (2007)

local agencies can fund in any budget cycle. This problem is particularly acute in congested urban areas where achieving 20 year design standards can be physically difficult as well as inordinately expensive.

Because smaller scale projects may still have a positive economic return on investment, economic performance should be considered along with engineering factors in project design decisions, particularly in times of severe budget constraint.

The development of new design criteria for highway projects poses a number of technical and policy challenges. Therefore, ODOT should establish a statewide task force to consider the issue. FHWA will have to be involved in the effort given its statutory role in the investment of federal-aid funds. Demonstration projects may be a useful approach.

### 4. Expand the use of System Development Charges (SDC).

Inadequate local transportation funding in many jurisdictions suggests an expanded use of SDCs. This may be possible by expanding the scope of impacts that can be considered when developing SDC rates. This will require some study of SDCs, an exploration of the range of currently eligible impacts, and feedback from local governments in order to develop a legislative concept.

### 5. Streamline processes.

In many cases, excessive regulations delay transportation projects beyond a reasonable time, adding costs and creating bigger problems. Acquiring right of way and following National Environmental Protection Act procedures are two examples of areas where it may serve the public better to have more streamlined processes. These regulations are federal requirements and any changes would have to occur at a national level. ODOT should pursue efforts to streamline the process in conjunction with other states.

### **Chapter Five**

### **Recommendations for a Successful Transition:**

The next steps in moving toward a new vision for transportation

### Legislative actions for 2009

- Create a fund statutorily dedicated to investments in Oregon's nonhighway transportation needs (page 1).
- 2. Create a Transportation Utility Commission (page 3).
- 3. Establish a statewide task force to develop and recommend a better alignment of transportation system responsibilities and financial capacity (page 6).
- Establish a joint legislative/stakeholder task force to review national "best practices" for streamlining the public involvement process (page 6).
- 5. Exempt ODOT buildings from current state budget requirements to make the most of opportunities to co-locate county, city and state transportation facilities (page 7).
- Revise the local option vehicle registration fee statute to allow counties to raise more revenue locally (page 7).
- 7. Authorize a graduated first time title fee based on a vehicle's mpg ratings (page 9).
- 8. Enable state agencies to provide electric vehicle charging infrastructure at state expense (page 9).
- 9. Create a category of medium-speed vehicles with maximum speed of 35 mph on roads posted 35 mph or less (page 9).
- 10. Give the Department of Energy rulemaking authority to set standards for vehicle tax credits (page 10).
- 11. Provide state funding and technical support for amending land use and transportation plans to reduce greenhouse gases, and require

- MPOs and affected local governments to do so. Local communities outside of MPOs may also apply for state funding and technical support in order to adjust their land use and transportation plans to encourage a reduction in greenhouse gases (page 11).
- 12. Authorize additional funding for the Clean Diesel program to reduce emissions from truck, bus and heavy equipment engines (page 12).
- 13. Extend the 'Pay As You Drive' tax credit for insurance companies offering this program (page 12).
- 14. Increase funding from traditional sources (vehicle registration and title fees, fuel tax and heavy vehicle fees) to maintain and preserve the state's road system and make strategic investments in its capacity (page 15).
- 15. Allocate at least 15 percent of state lottery proceeds for investment in non-highway transportation (air, marine port, public transportation, rail passenger, and rail freight) infrastructure (page 19).
- 16. Increase the state cigarette tax by 5 cents per pack to fund transportation services for senior citizens and people with disabilities (page 20).
- 17. Increase the custom plate fee to offset state General Fund money now used to support the Amtrak Cascades trains (page 21).
- 18. Increase the required minimum spending level for bicycle and pedestrian improvements within highway rights of way from 1.0 percent to 1.5 percent (page 20).
- 19. Allocate additional flexible federal transportation money to public

- transportation and other eligible non-highway purposes (page 20).
- 20. Enact statutory changes to facilitate the formation of transit districts, and authorize an increase in payroll tax from .7 percent to .8 percent (pages 19 23).
- 21. Authorize mass transit and transportation districts to levy an excise tax based on the number of commercial parking spaces, subject to a maximum level of ten cents per space per day (pages 19 23).
- 22. Authorize mass transit and transportation districts to levy a systems development charge for public transportation infrastructure (pages 19 23).
- 23. Establish a state and local government task force to develop a jurisdictionally blind allocation formula (page 24).

#### Legislative actions for 2011

- 1. Act on the recommendations of the Transportation Utility Commission.
- 2. Act on the recommendations of the task force created to study better alignment of state and local jurisdictions' responsibilities.
- 3. Act on the recommendations of the task force created to review "best practices" for streamlining the public involvement process.
- 4. Consider recommendations for additional multimodal investment.

### Administrative actions for 2009 to 2013

- 1. Initiate a public private partnership to develop and refine the vehicle miles of travel (VMT) fee system so that VMT charges can replace the fuels tax, making the technology commercially viable and assuring the privacy protection expected by the motoring public (page 2).
- 2. Develop a least cost transportation planning model for use by the state, Metropolitan Planning Organizations and local governments (page 2).

- 3. Establish a state and local government task force to identify opportunities for greater program efficiencies through the use of intergovernmental agreements; determine needed or desirable legislation; and consider the value of using pilot programs or incentive grants (page 6).
- 4. Initiate a study of national "best practices" for improving the delivery of metropolitan transportation services through enhanced regional decision-making (page 6).
- 5. Develop a legislative concept that modifies statutory requirements for intergovernmental agreements to facilitate co-locating county, city and state transportation facilities (page 7).
- 6. Engage the STIP stakeholder committee to develop criteria for project selection that will be used until the least cost transportation planning model is in place (page 7).
- 7. Continue to support and expand the Transportation Options program (page 8).
- 8. Implement a congestion-pricing pilot to demonstrate the potential of pricing to reduce demand (page 9).
- 9. Expand the biannual study of car and truck road usage and traffic analysis to include social and economic costs (page 9).
- 10. Increase Oregon Department of Energy efforts to help Oregon's trucking industry save fuel with new technology (page 10).
- 11. Initiate a project to identify potential logistical hubs for multimodal freight connections (page 11).
- 12. Broaden the use of environmental performance standards to all transportation projects funded with state money (page 13).
- 13. Expand the use of programmatic-based environmental permitting beyond the OTIA III program (*page 13*).

- 14. Protect water quality and wildlife habitat by changing design and maintenance practices (page 13).
- 15. Review the transportation system planning process to determine if process improvements can better align objectives and expected deliverables (page 24).
- 16. Work with the Federal Highway Administration to develop alternatives to the 20-year project investment criteria (page 24).
- 17. Study potential for expansion of SDC authority (page 25).
- 18. Pursue efforts with other states to streamline NEPA procedures (*page 25*).

### **APPENDICES**

### **Appendix A Maintenance and Safety Funding List**

The Vision Committee recommends an additional investment of \$35 million in Maintenance and Safety. The material below illustrates how ODOT could use the additional revenue to improve winter driving safety and improve the condition of the state highway infrastructure. The department could reduce or eliminate spending to accommodate a lower level of investment.

### Goal: ensure safe winter driving conditions

#### Expand chain up areas

\$1,000,000

Create two miles of new chain up area each year. The attached list (see pages 28 – 30) identifies 53 potential sites.

### Add 1 million gallons of deicer

\$1,000,000

Treats approximately about 1,000 lane miles of roadway three times, helping keep up with increasing costs of materials and providing extended coverage.

#### Add sanding rock

\$250,000

Provides sand to treat about 10,000 lane miles of roadway once, or 1,000 lane miles of roadway 10 times per year; this will help keep up with increasing costs of materials.

#### Automate signs for snow zones, including speed signs

\$750,000

This would automate about 10 signs per year, allowing more rapid changes in chain requirements as roadway conditions change. The focus would first be on the interstates and mountain passes.

### Improve winter maintenance equipment

\$2,000,000

Replace and purchase additional fleet to maintain and increase existing levels of service. Winter maintenance equipment includes snow blowers, plows, graders, deicer tanks, equipment for storage and for vehicles, and sand spreaders. As an example, this amount would purchase two new snow blowers and four new graders per year.

Subtotal: Ensure Safe Winter Driving Conditions

\$5,000,000

#### Goal: take care of what we have

#### Recover some fuel inflation costs

\$4,500,000

Maintenance has lost \$9 million in purchasing power in the 07-09 biennium due to increases in fuel and power costs from the 05-07 biennium, impacting every aspect of maintenance activity.

### Implement fleet efficiencies and reduce emissions

\$2,000,000

This includes the purchase of LED rotobeams, LED message sign boards, engine heat recirculation devices, low battery warning devices, and some fleet replacement to hybrid or other more efficient vehicles and equipment.

### Add energy efficiency upgrades to facilities

\$ 500,000

This includes lighting systems, insulation, window replacements and alternate power devices.

### Replant the highway right of way

\$500,000

Planting low maintenance vegetation reduces the costs of maintenance, lowers emissions from maintenance equipment and/or herbicide applications, and fixates carbon on the right of way. This would replant about 80 acres on non-landscaped land or about 15 acres of landscaped land.

### Maintain pavement

\$12,500,000

The increase in oil and fuel prices has doubled the price of pavement treatments in the last several years. To treat the same number of miles of pavement treated in 2003, the following annual increased investment is required:

Chip seal 100 miles of two lane road

\$3,500,000

- Apply various thin treatments and patching of the low volume roadways, treating about 145 lane miles per year. In 2001-03, this funding amount would have treated about 315 lane miles.
   \$5,000,000
- Patch cracked, rough or rutted pavement

\$4,000,000

### Replace failing illumination poles and wiring

\$500,000

This would replace about 55 lights. Existing inventory is about 21,000.

Replace damaged signs and those no longer visible at night \$500,000 This replaces about 500 minor signs and 175 major signs combined. Existing inventory is about 14,800 major and 144,000 minor signs.

#### Replace failed culverts and meet fish passage criteria

\$2,000,000

More culverts fail unexpectedly each year and must be replaced as emergencies. The cost to replace culverts varies significantly depending on the size of the culvert, its depth from the surface and if it is required to meet fish passage standards. Using an average price of \$125,000 per culvert, this could replace about 16 culverts.

#### Provide emergency response to landslides and rockfalls

\$1,000,000

#### Add durable striping

\$2,000,000

Stripe 200 miles of two lane roadway with a striping product that lasts for several years and is visible throughout the year.

#### Replace substandard/unsafe guardrail terminal ends

\$350,000

This replaces about 100 designated ends. Existing inventory in this condition is about 11,000.

#### Replace substandard/unsafe guardrail

\$500,000

This replaces or installs almost four miles of guardrail. Existing inventory of guardrail in this condition is about 140 miles.

#### **Upgrade sidewalk ADA ramps**

\$250,000

This adds about 100 ramps to bring sidewalks to new standards or install them. ODOT's last inventory was about 2,500 ADA sidewalk ramps.

#### Replace traffic signals

\$2,000,000

This replaces nine traffic signals with more adaptive signal components and new poles. ODOT has about 13,000 traffic signals in its inventory.

#### Increase litter pickup

\$100,000

This allows litter pickup litter along about 2,000 miles of shoulder once, or 1000 miles of shoulder twice.

### Improve maintenance at safety rest areas

\$500,000

This maintains restroom cleanliness levels of service and reduces building and grounds repair backlog.

#### Identify and remove hazardous trees

\$300,000

A certified arborist will identify trees for removal that are dead, sick or injured to the level that they present a safety threat to the traveling public. This reduces the risk of a tree unexpectedly falling on the highway and can significantly reduce the number of trees that fall during a major wind storm. This would typically cover 120 miles of roadways of unsafe trees.

Subtotal: Take Care of What We Have

\$30,000,000

### **TOTAL MAINTENANCE AND SAFETY**

\$35,000,000

### Sites for Chain Up Area Expansions

Priority	Route	MP	Direction	Local Name
High	5	1-15	NB and SB	Siskiyou Pass
High	5	64	NB and SB	Sexton/Stage Pass
High	5	80	NB and SB	Sexton/Stage Pass
High	US 97	241.1	SB	Foot of Spring Creek Hill
High	US 97	240.6	SB	Top of Spring Creek Hill
High	US 97	243.2	NB	Foot of Spring Creek Hill
High	US 97	241.1	NB	Top of Spring Creek Hill
High	84	249.3- 250.3	EB	Spring Creek
High	84	303-304	EB	Baker CIty
High	84	236-237	EB	Blue Mtn Summit
High	58	68.96	EB	Willamette Highway
High	US 26	55.7	WB	Trillium Lake
High	US 26	53.7	EB	Multorpor
High	22E	73.59	EB and WB	North Santiam Hwy

### **Sites for Chain Up Area Expansions**

Priority	Route	MP	Direction	Local Name
Medium	US 97	146.5	SB	Foot of Lava Butte
Medium	US 97	73.4	NB	Cow Canyon
Medium	US 97	78.5	SB	Hell Hill Chainup
Medium	US 97	80.5	SB	Hell Hill Dechain
Medium	84	253-253.5	EB	Hillgard Chain-off
Medium	84	225.2-226.5	WB	Deadman's Pass
Medium	84	249.8-250.1	WB	Spring Creek Chain-off expand existing area
Medium	20	72	EB and WB	Santiam Highway
Medium	US 20W	89	WB	Jack Lake Road
Medium	US 20W	89	EB	Jack Lake Road de-chain
Medium	US 20W	94	WB	Black Butte - Camp Sherman
Medium	US 20W	100	WB	Sisters
Medium	58	55.58	EB	Willamette Highway
Medium	US 26	75.3	EB	Top of Odell Butte
Medium	OR 35	61.7	NB	White River
Medium	OR 35	61.7	SB	White River
Medium	US 26	75	EB	
Medium	US 26	75	WB	
Medium	US 26	72	EB	Wapinitia Jct
Medium	US 26	72	WB	Wapinitia Jct
Medium	OR 140	57	EB	Bottom of Doak Mtn
Medium	204	10.6-10.7	EB	Weston Sandshed

### **Sites for Chain Up Area Expansions**

Priority	Route	MP	Direction	Local Name
Low	84	369-370	WB	Ontario
Low	OR 31	29.1	NB	Bottom Horse Ranch Hill
Low	OR 31	26.9	SB	Horse Ranch Hill
Low	OR 31	29	NB	Fort Rock Jct
Low	OR 31	60.7	SB	Foot of Picture Rock Pass
Low	OR 31	63.6	NB	Top of Picture Rock Pass
Low	OR 140	71	EB	Bottom of Quartz Mountain
Low	OR 140	27.2	EB	Bonanza Cut-off
Low	OR 140	26	EB	Bottom of Bly Mtn
Low	OR 140	26	WB	Bottom of Bly Mtn
Low	OR 140	35	EB	Bottom of Bly Mtn
Low	OR 140	35	WB	Bottom of Bly Mtn
Low	OR 35	74	NB	Cooper Spur
Low	OR 35	74	SB	Cooper Spur
Low	OR 35	97.3	SB	Pine Grove
Low	OR 140	23	EB	Grizzely Road
Low	OR 140	23	WB	Grizzely Road

### Appendix B Pavement Preservation

The Vision Committee recommends an additional \$20 million investment in the state highway Pavement Preservation Program. This includes \$15 million for the pavements in general plus an additional \$5 million for high volume highways in urban areas. A smaller investment would result in fewer miles of pavement overlays.

#### Pavement preservation program supplement: \$15 million

The Oregon Transportation Commission set the goal of maintaining 90 percent of state highway pavement mileage in "fair" or "better" condition. The most recent (2006) Pavement Condition Report found that 87 percent of state highway mileage was in fair or better condition.

Historical pavement performance data has suggested that between 500 to 550 centerline miles of state highway needs to be rehabilitated annually to maintain statewide pavement conditions due to normal deterioration. If this deterioration rate is not matched by improvements completed by pavement rehabilitation treatments, the overall condition of the state highway system will decline.

The high cost of asphalt and fuel decreased the number of miles the State Highway Preservation Program could resurface in 2007 and 2008. It is anticipated that the percentage of pavements in "fair" or "better" condition in 2008 will decline by a few percentage points. If this trend continues (i.e, fewer than 500 to 550 miles of pavement are repaved each year), state highway pavement condition could be much lower by the middle of the next decade: as low as 75 percent "fair" or "better."

An estimated additional \$15 million will allow ODOT to resurface about 40 more lane miles of state highway at today's high asphalt and fuel cost. The attached map shows pavements in fair or poor condition as of the 2006 pavement survey. It illustrates where pavement projects may be located during the next few years. The map will be redrawn based on the 2008 pavement survey when that data becomes available.



#### Urban pavement preservation supplement: \$5 million

ODOT has identified about 85 miles (150 miles) of high volume urban highways that have deteriorated to "poor" and "very poor" condition (see attached). While the number of miles is small (about one percent of total state highway miles), these highways are driven by thousands every day.

Extensive rehabilitation and reconstruction is required to restore these highways to "good" condition. The amount set aside for Urban Preservation will supplement the statewide Preservation Program.

### **Potential Urban Pavement Preservation Projects**

Project	Route	MP	Length	Est. Cost
REGION 1				
OR 10: SW 189th-SW170th (Farmington Road)	OR 10	5.88-7.61	1.7	\$3,000,000
OR 43: I-5 - Terwilliger Blvd	OR 43	0.60-5.79	5.1	\$10,000,000
OR 43: Glenmorrie Rd - I-205	OR 43	7.60-11.10	3.5	\$7,000,000
OR 99W: I-5 - Tualatin River	OR 99W	7.47-12.20	4.7	\$35,000,000
OR 141 and OR 210: (Hall, Boones Ferry, Scholls Ferry roads)	OR 141	2.57-12.70	7.4	\$14,000,000
US 26: I-205-Gresham	US 26	5.75-9.96	4.1	\$7,000,000
US 30B: St. Johns BRidge - MLK Blvd. (Lombard Street)	US 30 BY	1.31-6.56	5.2	\$25,000,000
OR 99E: Marine Way - Lombard St	OR 99E	-5.73 - -3.75	2.0	\$\$7,000,000
OR 99E: Clackamas River Br-SCL Oregon City	OR 99E	11.26-14.0	2.3	\$8,000,000
OR 99E: Oregon Pacific RR - Mo- Ialla R (City of Canby)	OR 99E	20.46- 22.11	1.7	\$10,000,000
OR 213: (82nd Ave) Columbia Blvd-Division St	OR 213	0.0-4.2	4.2	\$24,000,000
OR 213: (82nd Ave) Division St- SE Lindy Ave	OR 213	7.4-9.0	2.5	\$5,000,000
US 30: Cascade Locks Section	US 30	29.71- 31.28	1.6	\$3,000,000
OR 211: Blackmans Corner-Ma- thias Rd (Molalla)	OR 211	11.31- 13.43	2.1	\$3,000,000
OR 281: US 30-Eliot Dr (Hood River Section)	OR 281	0.0-1.24	1.2	\$3,000,000
	SUBTOTA	L REGION 1	84.8	\$183,000,000
REGION 2				
OR 99W: First Street (Newberg)	OR 99W	23.18- 23.89	0.7	\$3,000,000

### **Potential Urban Pavement Preservation Projects**

Project	Route	MP	Lengt	h Est. Cost
OR 99W: Riverside Dr-OR 18 (McMinnville Section)	OR 99W	35.19-39 .24/43.84- 44.0	4.	3 \$11,000,000
OR 214: Jefferson St-Mtn View Rd (Silverton)	OR 214	49.62-50 .66/39.1- 40.84	2.	8 \$3,000,000
US 20: Lebanon Section	US 20	12.7-15.7	3.	0 \$12,000,000
OR 99E: Halsey Section	OR 99E	19.61- 20.49	0.	9 \$3,000,000
US 101: Florence Section	US 101	187.62- 190.84	3.2	\$7,000,000
OR 99: W. Martin Rd - S Mill St (Creswell)	OR 99	5.15-6.2 /14.73- 14.88	1.1	\$1,000,000
OR 99: Main St - Harrison Ave (Cottage Grove)	OR 99	14.79- 15.36	0.6	\$2,000,000
	SUBTOTAL	REGION 2	16.5	\$42,000,000
REGION 3		,		
OR 138: Stephens St - Kincaid Dr (Roseburg)	OR 138	-0.94 - 2.2	3.1	\$12,000,000
OR 138: Fort McKay Rd - Calapooya St (Sutherlin)	OR 138	23.89- 25.89	1.5	\$4,000,000
OR 540: US 101-Fir Ave (North Bend)	OR 540	-0.05 - 2.24	2.3	\$5,000,000
	SUBTOTAL	REGION 3	6.9	\$21,000,000
REGION 4				
US 26: NW Riverland Loop-Ochoco Hwy (Prineville)	US 26	24.74- 26.28	1.5	\$3,000,000
US 97: US 26 Jct-SW K St (Madras)	US 97	91.87- 93.13	1.3	\$8,000,000
US 97: Veterans Way-Wickiup Ave (Redmond)	US 97	121.82- 123.17	1.4	\$8,000,000
OR 39: Austin St-OR 140 Jct (Klamath Falls)	OR 39	2.44-5.6	3.2	\$6,000,000
	SUBTOTAL	REGION 4	7.3	\$25,000,000
REGION 5				
US 30B: Emigrant-Frasier Couplet (Pendleton)	US 30	0.08-1.52	1.4	\$5,000,000
	SUTOTAL	REGION 5	1.4	\$5,000,000
		TOTAL	84.8	\$276,000,000

### Appendix C Bridge Funding List

The Vision Committee recommends an additional investment of \$10 million in the state highway Bridge Program. Bridge repairs and replacements are usually planned ahead of time, but can be affected by unforeseeable conditions. The material below illustrates how ODOT would make needed improvements to state highway bridges based on information from its bridge management system, local transportation plans, and input from local stakeholders and the Area Commissions on Transportation.

### A proposed additional annual amount of \$10 million for the bridge program would enable the following to occur:

Address bridge deck replacements while accomplishing other work, such as combining deck work with Pavement Preservation projects when priority bridges are included in a Pavement	\$3,000,000
Preservation project's limits. (500 average length X 40' average width at \$150/SF = \$3.0 million)	
Overlay bridge decks (about three per year) while accomplishing other work. (500' average length X 40' average width at \$100/ SF = \$2.0 million per bridge)	\$6,000,000
Address bridge deck replacements while accomplishing other work, such as combining deck work with Pavement Preservation projects when priority bridges are included in a Pavement Preservation project's limits. (500 average length X 40' average width at \$150/SF = \$3.0 million)	\$3,000,000
Address impact loading systematically, about 10 bridges. (\$25,000 average for mud jack/overlay impact panel)	\$250,000
Address bridge deck cracking systematically, about 15 bridges. (\$50,000 per bridge average for deck seal)	\$750,000

The enhanced funding for the State Bridge Program would extend the life of existing bridge decks currently in "satisfactory" or "fair" condition by sealing concrete cracks and addressing settlement issues at impact panels; it would likely have small effect on the deck performance measure.

Bridge decks are the only part of the bridge that vehicles should be in contact with as they use the bridge. As a result, it is critical that bridge decks are well maintained for the safety of users. Deterioration that users might notice include a polished riding surface, rutting, pot or pan holes, spalls, and bumps at deck joints. Of greater concern are safety issues associated with decks such as loose rebar or armored corners and broken steel grates.

The number and mix of projects that can be funded with \$10 million can vary greatly based on the bridges selected for work. For example, the deck replacement for the Columbia River's Biggs Rapids Bridge of \$14.6 million

would take the bulk of available funding for two years.

In addition to deterioration users see, bridge owners are interested in other signs of deck deterioration. Approach panels that have settled can cause vehicles to bounce excessively, creating increased load effects. Cracks allow water to penetrate the deck and can contribute to corrosion of the reinforcement. While no decks will last indefinitely, every effort should be made to prolong the useful life of the bridge decks. Recent projects to replace decks, such as the St. Johns in Portland and the Longview and Biggs Rapids bridges over the Columbia River have been expensive and required closures from several hours to several months. A wellconstructed and maintained bridge deck can be expected to last 30 to 50 years. With a life expectancy of this length, modern bridges can expect a deck replacement or major rehabilitation mid-way through the bridge's expected life cycle.

While joints are a separate element, they are usually addressed as part of a deck rehabilitation project and are often also addressed by district routine maintenance and major bridge maintenance. Leaking joints can contribute to excessively rapid deterioration of concrete and corrosion of steel bearings.

In 2008, ODOT has 179 bridges that are "structurally deficient." Of these, 38 bridges are structurally deficient due to just the condition of the deck. While some of these bridges are scheduled for repair or replacement through either the STIP or OTIA III program, an average of 12 bridges are rated as structurally deficient each year. In addition, there are bridges with deck issues that are of concern that have not

deteriorated to the level necessary to be considered structurally deficient.

Bridges rated structurally deficient due to deck deterioration clearly must be addressed, but there are other, better, indicators of deck conditions that let us know that deck work is needed. If a deck condition problem can be addressed early enough, the deck may be treated with an overlay, instead of requiring a full deck replacement. This reduces costs and creates safer driving conditions.

Here are the other indicators of deck condition the Bridge Section uses to identify problems as they are developing. In addition to the 38 structurally deficient bridges due to deck condition, there are:

- 1. 167 bridges that have traffic impact loading in the most serious category (rating of 3 on a scale from 1 to 3).
- 2. 75 bridges with deck cracking that is moderate to severe (ratings of 3 or 4 on a scale from 1 to 4).
- 3. 30 bridges with the wearing surface in poor condition (rating of 3 on a scale from 1 to 3).
- 4. 24 bridges with cracking on the underside of the deck that shows active corrosion (ratings of 4 or 5 on a scale from 1 to 5).
- 5. 60 bridges with the deck element that has already required significant patching (concrete), has advanced corrosion (steel), or shows loss of strength due to decay (timber); (ratings of 3, 4 or 5 on scales from 1 to 4 or 1 to 5).

Since some bridges have multiple areas of concerns, there are 309 bridges that currently meet one or more of the criteria noted above.

### Appendix D Culverts, Slides and Rockfalls Funding List

The Vision Committee recommends an additional annual investment of \$10 million to address landslide and rockfall issues and culvert issues on state highways. ODOT would invest half of the money in its landslide and rockfall program and half in its culvert program. The department would reduce or eliminate spending to accommodate a lower level of investment in this area.

#### Landslides and Rockfalls

ODOT's landslide and rockfall program has these goals:

- Safety reducing the risk to the traveling public presented by landslide and rockfall hazards.
- Efficiency reducing road or lane closures and costs associated with traffic delays.
- Preservation reducing the significant impacts to the highway system and ongoing maintenance costs associated with repairing and maintaining known landslide and rockfall areas.

ODOT has identified more than 500 high priority landslide and rockfall sites around the state that present a significant hazard to the traveling public. In addition, there are more than 3,000 additional sites that present a lower risk.

A \$5 million annual investment represents a 78 percent increase in the funding to address landslides and rockfalls. The department could address one additional site that requires immediate attention, for a total of two sites per year and increase the number of priority sites receiving corrective action from five sites per year to nine sites per year.

If this level of additional funding is sustained, the length of time needed to address the sites that have been identified as needing immediate attention could be reduced from 29 years to 16 years; the length of time needed to address all known priority sites statewide could be reduced from 93 years to 52 years.

#### Culverts

ODOT classifies culverts as "large" when they are more than six feet in diameter. Large culverts can range in size up to 20 feet in width, the threshold for a bridge. There are more than 3,200 large culverts under state highways. In addition, the state highway system has an estimated 45,000 to 50,000 culverts of smaller sizes.

A \$5 million annual investment represents a 192 percent increase in funding for ODOT's large culvert program. ODOT would increase the number of large culverts sites rehabilitated or replaced from 4.5 per year to 12.8 per year or could be used to address culverts of all sizes (similar to the Culvert Repairs Program) and would correct up to 59 culverts per year.

# Appendix E Highway Operations and Intelligent Transportation Systems Investment List

The Vision Committee recommends an additional \$10 million annual investment in Intelligent Transportation Systems and Operations to improve the capacity of the state highway system. The lists below identify 48 projects statewide totaling about \$60 million. Projects would be selected from the lists during the first few years. Additional projects will be identified as the additional funding is integrated into the Statewide Transportation Improvement Program.

Region	Project name	Route	Description	Cost
1	I-205 SB to I-5 SB Connector	I-5	Merge area is too short	\$4,000,000
1	VMS replacement	Various	Existing VMS are at the end of life, are incompatible with existing standards, and have problems with parts availability. Locations: I-5 at Lombard, I-84 at 148th, I-84 at 28th, and I-5 at Iowa	\$2,850,000
1	Ramp metering	Various	dd ramp meters on I-84 east of I-205 and a few locations on I-5 and I-205	\$2,000,000
1	Chain condition signs	US 26	Add remotely operated snow zone signs near Mt. Hood	\$500,000
1	99W active corridor management	99W	Upgrade controllers and soft- ware, improved detection, add cameras and communications	\$600,000
1	Integrated corridor management - SE Milwaukee Expressway	OR 224	Upgrade controllers and soft- ware, improved detection, add cameras and communications	\$450,000
1	Sign replacements	Various	Replace and upgrade existing signs	\$4,000,000
1	Signal interconnect	Various	Add signal interconnect to enable coordinated signal operations	\$2,000,000
1	Illumination replacement	Various	Replace illumination systems that have reached the end of their life cycle	\$3,000,000
1	Ramp meter controller upgrade	Various	Upgrade some ramp meter controllers to 2070 controllers and remove remote loop amps	\$358,000
			Region 1 subtotal	\$19,758,000

Region	Project name	Route	Description	Cost
2	LED replacement	Various	Upgrade existing LED and replace incandescent signal head displays with new LED displays	\$300,000
2	Solar school flashers	Various	Remove power source from power lines to eliminate meters and power costs to existing school flashers. Install wireless communication between flasher displays controlling opposite directions of traffic.	\$60,000
2	Replace traffic signal at Evergreen	Hwy 140	Pole in SW quadrant severely damaged from repeated hits from trucks. Sidewalk ramp is severely damaged due to truck off-tracking. R/W needed to relocate poles to offset truck off-tracking. This project is top priority on Electrical Manger list to replace. Can not wait for future I-5 interchange project funding.	\$1,000,000
2	Replace traffic signal at Pacific Way	Hwy 9	Replace old span wire installation with mast arms. Upgrade quadrants to current ADA standards. R/W is needed to install new poles and controller.	\$1,000,000
2	Replace traffic signal and sign bridge at the end of HWY 30	Hwy 9	Complex intersection for signing and signalizing. Existing traffic signal and sign bridge are old and need updating. Also an ATR site. R/W constraints may exist requiring unique design features. Intersection illumination will need to be replaced.	\$3,000,000
2	Replace 3 traffic signals at Pacific Ave, 1st, 3rd and 4th	Hwy 9	Old signals need to be updated.	\$3,000,000

Region	Project Name	Route	Description	Cost
2	Replace 5 traffic signals and signal interconnect at Adams/2nd, Baker/2nd, Baker/3rd, Adams/12th, Baker/12th	Hwy 1W	Signals are old. Interconnect system is old AC type. Signals and interconnect have had numerous repairs over the years. Pole at Adams/2nd keeps is severely damaged due to repeated hits from trucks. A 6th signal (Adams/4th) is currently on STIP for rebuilding.	
2	VMS replacement	OR 18	Replace existing VMS at OTIS and at Wallace Bridge. Existing signs are at end of life and parts are not available.	\$1,200,000
2	Signal upgrades	Various	Upgrade to 2070 Controllers, install signal interconnect, flashing yellow arrow conversion.	\$800,000
2	Replace traffic signal and add southbound trav- el lane at John- moore/Harney	Hwy 33	Span wire signal needs to be replaced. Current signal operation is split phased on side street. Need to add at least one southbound lane and reassign lane use to make intersection more efficient.	\$2,000,000
			Region 2 subtotal	\$17,360,000

Region	Project Name	Route	Description	Cost
3	I-5 SB Off-Ramp at US 199 6th & Morgan (Grants Pass)	US 199/ OR 99/6th	This intersection is a top 5% SPIS location for several years. It has unusual geometry and operational/safety problems associated with it. The signal system is old and needs to be replaced.	\$1,600,000
3	Region 3 signal upgrades	Various	Old signals, repeated maintenance problems, potential liability issues due to failure.	\$1,600,000
3	Region 3 ITS installations	Various	Road weather information systems and ITS systems necessary to inform travelers.	\$1,200,000

Region	Project Name	Route	Description	Cost
3	Region 3 ATR installations	Various	Many highway segments do not have traffic data necessary for traffic analysis and decision making process.	\$400,000
3	OR 62 Mill Creek intersections	OR 62	Fatal crash location, several complaints, unusual intersection.	\$1,550,000
3	Edison Creek left turn lanes	US 101	Perceived safety problem, potential for left turn related crashes, several complaints.	\$1,714,000
3	OR 540: Broad- way & Virginia Signal Replace- ment	240	Old signals, non-standard signals, repeated maintenance problems, potential liability issues due to failure.	\$1,588,000
			Region 3 subtotal	\$9,652,000

Region	Project Name	Route	Description	Cost
4	Low Volume Sign Replacement	Various	Replace signs on low volume roads.	\$300,000
4	Greenwood signal	US 20	Replace signal and poles, meet ADA at Greenwood and 8th	\$750,000
4	Esplande	OR 39	Replace signal	\$400,000
4	Regionwide durable markings	Various	Add \$100,000 per year to durable marking program.	\$600,000
4	Shaniko illumination	US 97	Install illumination in Shaniko.	\$200,000
4	The Dalles illumination upgrade	I-84	Upgrade illumination and remove poles	\$500,000
4	Hood River VMS	I-84	VMS at Hood River on Eastbound I-84	\$450,000
4	Corridor management	US 97/ US 20	Phase 1 Bend Parkway & 3rd Street Corridor Mngt	\$1,000,000
4	Regionwide RWIS/Camera Project	Various	Regionwide RWIS/Camera Project	\$700,000
4	US 26 VMS	US 26	Partner with Region 1: East- bound VMS between Gov't Camp and OR 35	\$200,000
4	La Pine new signal	US 97	1st Street in La Pine	\$500,000
4	Locust new signal	US 20	Locust Street in Sisters	\$500,000

Region	Project Name	Route	Description	Cost
4	Bend new signal	US 97	SB onramp at Empire Ave in Bend	\$500,000
			Region 4 subtotal	\$6,600,000

Region	Project Name	Route	Description	Cost
5	US 395: South- gate Place Inter- section Improve- ments	Hwy 28	Reconstruct intersection to include NB left turn refuge and new signal.	\$1,250,000
5	US 20: Monroe at Broadway Intersection Im- provements.	Hwy 7	Provide proper truck right turning radius from Broad- way onto Monroe. Modify existing signal as needed. May need to coordinate with future 3-Lane on Monroe(?).	\$1,100,000
5	Region 5 Signal Upgrades, Incl. 2070 Controllers	Various	Replace all 170/HC11 controllers with the new 2070 standard. Includes Cabinet replacements, minor operational improvements, communication, Count Down PED Signals, other misc. improvements. Site by site improvements as needed.	\$1,500,000
5	Region 5 Sig- nal 3L Head (Protected Left Turns) to 6L Heads (Prot/Per- missive w/ FYA) Conversions	Various	Replace existing 3L Heads with 6L Heads to improve the efficiency of the intersections during Off-Peak times where gaps are present.	\$150,000
5	US30/OR82: Adams Avenue at Spruce/Hwy 82 Video Detection.	Hwy 66/10	Install video detection to reduce congestion and improve signal efficiency. Roadway is fairly new concrete and boring conduit and adding junction boxes is not cost effective.	\$35,000
5	US 30: La Grande-Baker Hwy at Hughes Ln./Pocahontas Rd. Intersection Improvements	Hwy 66	Reconstruct Intersection and install signal.	\$1,250,000

Region	Project Name	Route	Description	Cost	
5	Replacement of Sylvia VMS	Hwy 6	Replace VMS at MP263 EB and 286 WB	\$600,000	
5	Variable speed signing for snow zones	Hwy 6	Install VMS to accommodate variable speed	\$750,000	
			Region 5 subtotal	\$6,635,000	
	Statewide total \$60,005,000				

### Appendix F Modernization Funding List

The Vision Committee recommends \$94.1 million for a new State Highway Modernization Program. \$66.1 million would be added for Modernization projects selected annually in the Statewide Transportation Improvement Program (STIP); \$33 million would be used to pay debt service for \$400 in Modernization bonds. The bond proceeds would finance modernization projects to address freight bottlenecks.

The Oregon Transportation Commission identified projects that relieve congestion, improve freight mobility and enhance safety to respond to 2007 Senate Bill 566. The process used to identify these projects is described below. In addition, the 99 modernization projects that were identified are listed in the next few pages.

These projects illustrate the need for state highway modernization across the state. These projects and others would be evaluated under interim criteria developed by the Commission pursuant to the Vision Committee's recommendation (see page 7).

### Projects that enhance safety, improve freight mobility, and reduce congestion

Senate Bill 566, passed by the 2007 Oregon Legislature, required the Oregon Transportation Commission to consult with stakeholders, local government, and Federal Highway Administration to identify critical transportation projects. These parties are also involved in the biennial update of the Statewide Transportation Improvement Program (STIP), which identifies, schedules and budgets for regular transportation

projects around the state. The project identification process for SB 566 was done concurrently with the 2010-2013 STIP process because its timing requirement aligns closely with the STIP process.

ODOT Regions worked with the Area Commissions on Transportation (ACTs) and other planning organizations to prepare a list of projects for 2010-2015 that would be possible if increased funding were made available. ACTs are advisory bodies chartered by the Oregon Transportation Commission in order to expand opportunities for local citizen, business, and industry involvement in ODOT's decisionmaking. ACTs consider regional and local transportation issues that affect the state system. They work with other local organizations and include representation from stakeholders in areas such as freight, trucking, bicycle and pedestrian, public transportation, public interest, environmental, land use, business, education, public safety, and non-profit organizations, along with local residents.

Each project identified by the ACTs was required to have a narrative describing how the project reduces traffic congestion, improves freight mobility, and enhances safety.

The ACTs had a large pool of project concepts from which to select potential SB 566 candidates. Projects may be either on the state system or on local roads and streets that relieve pressure on state highways. Extensive lists of projects have been identified by the Oregon Freight Advisory Committee, in regional transportation plans (RTPs), and transportation system plans (TSPs).

ACTs also recently completed reviews of the 2008-2011 STIP and the screening of projects for the Draft 2010-2013 STIP.

The ACTs followed the criteria approved by the Commission for 2010-2013 STIP as they selected projects for SB 566. This ensured that the selected projects met land use planning requirements and were consistent with the Oregon Highway Plan and the Oregon Transportation Plan. If the Legislature makes additional money available, the selected projects could be added to the STIP and moved through project design to construction within the 2010 to 2015 timeframe.

Prioritizing projects around the state is a challenging task. ACTs were asked to identify projects in two lists. The first was a "constrained list." It was developed by taking an annual of \$140 million over six years (established by considering ODOT's share of a revenue package similar to what was discussed during the 2007 legislative session, after setting aside dollars for maintenance and preservation of the existing highway system), for a total of \$840 million. Each ODOT Region was given a target based on its share of the state highway modernization program in the 2010-2013 STIP (the "mod equity split"). The ACTs within each Region then identified projects to be funded at the regional level over the six-year

period.

After consultation with bond experts, ODOT concluded that as much as one-fourth of the annual allocation was available to be bonded. This allowed consideration of some large projects on the constrained list.

The ACTs then identified projects for a second list that are estimated to cost more than \$100 million. Despite an assumption that a large amount of additional revenue might become available, these projects are so costly that they alone would consume all or most of even significant revenue increases. In order to qualify for the second list, a large project must be listed in a Transportation System Plan.

The projects identified by the ACTs in each Region are summarized below.

In the following tables showing the complete list of projects, the large projects (over \$100 million) are shaded for identification purposes.

Project cost estimates and timelines are based on current information; project development work — especially the environmental impact statements required for large projects — may significantly affect both timelines and cost estimates.

	Cons	trained List	Meg	a Projects
	Num- ber	Estimated Total	Number	Estimated Total
Region 1 Clackamas, Multnomah, Washington and Hood River counties	11	\$315,000,000	10	\$10 billion - \$11.8 billion+
Region 2 Benton, Clatsop, Lane, Lincoln, Linn, Marion, Polk, Tillamook and Yamhill counties	12	\$242,000,000	14	\$3.7 billion+
Region 3 Coos, Curry, Douglas, Jackson and Josephine counties	15	\$123,200,000	4	\$725,000,000
Region 4 Crook, Deschutes, Gilliam, Jefferson, Klamath, Lake, Sherman, Wasco and Wheeler counties	9	\$108,500,000	5	\$943,000,000
Region 5 Baker, Grant, Harney, Malheur, Morrow, Umatill, Union and Wallowa counties	19	\$69,500,000	-	-
Statewide total	66	\$858,200,000	33	\$15.4 billion - \$17.2 billion+

REGION 1				
Project	Objectives	Est. Cost (millions)	Est. Start of Construction	
I-205/I-5: I-205 South to I-5 South Auxiliary Lane† Constructs acceleration lanes at merge of I-205/I-5 for improved operations.	Reduce traffic congestion Improve freight mobility Enhance safety	\$16	2011	
I-205/I-84: I-84 East to I-205 North Auxiliary Lane† Extend exit lane from I-84 to I-205 back to Halsey exit to allow traffic to exit the mainline I-84 sooner so as to not block the outer travel lane.	Reduce traffic congestion Enhance safety	\$15	2011	
I-205: Eastbound Airport Way to I-205 North† Improve the I-205 / Airport Way interchange to address congestion from eastbound Airport Way to northbound I-205.	Reduce traffic congestion Improve freight mobility Enhance safety	\$48	2012	
I-5: Delta Park - Phase 2 (Portland) † Phase II improves the local street network by building new connec- tions between Columbia Blvd. and Denver Ave, replacing Denver Ave. overpass and Slough bridge, and rebuilding / signalizing the Denver / Schmeer Rd. intersection.	Reduce traffic congestion Improve freight mobility Enhance safety	\$96	2012	
The OTC identified this as a project of statewide significance.				

<sup>†</sup> Should one of the above projects not be funded or if additional funding were to be made available, the region would prioritize project development funding for the US26 / Glencoe Road Interchange, US26 / Springwater Interchange and/or one of the large projects that is anticipated to cost more than \$100 million.

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
I-84: Troutdale Interchange at I-84, Phase 1† Build first phase of Marine Drive Extension as refined through the current IAMP work. (Current assumption is 2 lanes Marine Drive Extension).	Reduce traffic congestion Improve freight mobility Enhance safety	\$35	2014
State Highway Preservation Enhancements† Safety and freight focused supple- mental funding (\$3 million per year) for sidewalks, crosswalks, street lighting and other enhancements that are required for pavement pres- ervation projects.	Improve freight mobility Enhance safety	\$18	2010-15
Mobility Corridor Intelligent Transportation Systems and Operations† ITS and Operational improvements within Mobility Corridors that pro- vide a benefit to the State highway system (\$3 million per year)	Reduce traffic congestion Improve freight mobility Enhance safety	\$18	2010-15
US 26 at Staley's Junction† Replace existing at-grade intersec- tion with new grade separated inter- change. Partial funding (\$12 million) identified in STIP.	Reduce traffic congestion Enhance safety	\$10	2009
OR 35 / US 30: Button Junction Intersection† Install traffic signal and left turn lanes.	Enhance safety	\$9	2013
US 30: Swedetown Road Bridge Replacement† Widen bridge to 4 lanes to remove existing bottleneck. Improved verti- cal clearance will enhance freight access to Port Westward industrial park.	Improve freight mobility	\$16	2015
US 26: Additional Lane West from Government Camp† Add a westbound travel lane (4th lane) from W. Govt Camp Loop Road approximately 1.2 miles to tie into an existing 4 lane section. The project may need to include re-alignment of the W. Govt Camp Loop Road-US 26 intersection and modifications to the Ski Bowl approaches.	Reduce traffic congestion Enhance safety	\$34	2015

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
I-5/I-84 Interchange Project (Portland)* Improve function of I-5 at the I-5/I-84 Interchange.  The OTC identified this as a project of statewide significance.	Reduce traffic congestion Improve freight mobility Enhance safety	\$780 - \$1,300	
I-5 Columbia River Crossing (Portland/Vancouver)* To implement preferred alternative from the Environmental Impact Statement (EIS)  The OTC identified this as a project of statewide significance.	Reduce traffic congestion Improve freight mobility Enhance safety	\$3,100 to \$4,200	
I-5 to Highway 99W Connector (Tualatin—Sherwood Connector)* Implement outcome of regional process looking at I-5/99W.  The OTC identified this as a project of statewide significance.	Reduce traffic congestion Improve freight mobility Enhance safety	\$2,100	
Sunrise Corridor (Between I-205 and US 26) * Implement the outcome of the Sunrise Supplemental Draft EIS covering from I-205 to Rock Creek Junction.	Reduce traffic congestion Improve freight mobility Enhance safety	\$1,035	
The OTC identified this as a project of statewide significance.			
OR 217: Braided Ramps Beaverton-Hillsdale Hwy to Allen* Build braided ramps from BH to Allen to improve capacity and operations on OR 217, further planning/environmental required	Reduce traffic congestion Improve freight mobility Enhance safety	\$250 to \$300	
Sellwood Bridge Implement outcome of Sellwood Bridge EIS	Reduce traffic congestion Enhance safety	\$300 to \$450	
Sunrise Parkway* Implement outcome of Highway 212 Corridor Refinement Plan.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100 plus	

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
I-84/US 26 Connector* Implement outcome of I-84/US 26 Connector Corridor Plan	Reduce traffic congestion Improve freight mobility Enhance safety	\$100 plus	
South I-205 Corridor Project (from the Columbia River to I 5)* This project would make major improvements along the entire I-205 corridor. A corridor plan would be required to identify and prioritize needs. Selected improvements could be built in the 2010-2015 timeframe.  The OTC identified this as a project of statewide significance.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100 plus	
I-5 South* Corridor Plan Required to Identify and Prioritize Corridor Needs	Reduce traffic congestion Improve freight mobility Enhance safety	\$2,100	

REGION 2					
Project	Objectives	Est. Cost (millions)	Est. Start of Construction		
US 101: Camp Rilea-Surf Pines Rd Unit 1 (Glenwood) Improve capacity of US101 by adding turning bays and passing lanes. Safety issues will likely be addressed by developing frontage roads.	Reduce traffic congestion Enhance safety	\$30	2015		
I-5 at Woodburn Interchange Rebuild I-5 / Woodburn interchange and improve OR 214 on both sides of the interchange. Estimate is ad- ditional money needed to fully fund project.	Reduce traffic congestion Enhance safety	\$50	2012		
OR 22 at OR 51 Interchange Replace existing at-grade intersection with interchange.	Enhance Safety	\$20	2012		
OR 18: Oldsville Passing Lane Section Build passing lane on OR 18 in vicin- ity of Oldsville Road and Delashmutt Road in Yamhill County.	Improve freight mobility Enhance safety	\$4.3	2012		

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
US 101: 16th - 36th (Lincoln City) Extend five lane section southward to SW 36th, reducing congestion in the two lane bottleneck between five lane sections.	Reduce traffic congestion Improve freight mobility Enhance safety	\$8.5	2012
I-5: Linn Co. Line - OR 34 Build Phase I of the construction alternative for this 13 mile segment identified in a Final Environmental Impact Statement. Project may in- clude rebuilding one or more inter- changes, adding I-5 travel lanes and other improvements identified in the FEIS.	Reduce traffic congestion Improve freight mobility	\$30	2015
OR 34: Van Buren Street Bridge (Corvallis) Build the preferred alternative identified in a Final Environmental Impact Statement. May include bridge replacement with additional lanes, an interchange with the Corvallis Bypass, and other capacity improvements.	Reduce traffic congestion Improve freight mobility Enhance safety	\$25	2014
OR 99W: UPRR - Circle (Corvallis) Build additional lanes between adjacent four lane sections of OR 99W, eliminating a two lane bottleneck	Reduce traffic congestion Improve freight mobility Enhance safety	\$4.3	2012
I-5 at Beltline Interchange Implement elements of the Beltline Interchange Area Management Plan, continuing work now under con- struction.	Reduce traffic congestion Improve freight mobility	\$25	2010-2015
I-5 at Coburg Interchange - Phase II Phase II implements elements of the Interchange Access Management Plan. Phase I is currently funded for construction.	Reduce traffic congestion Improve freight mobility	\$19.5	2010-2015
Beltline: River Road - Coburg Road (Phase II) Increase capacity and improve safety along about 3 miles of road.	Reduce traffic congestion Improve freight mobility Enhance safety	\$15	2010-2015

Project	Objectives	Est. Cost	Est. Start of
		(millions)	Construction
Gateway Street at Beltline (Unit 2) Improve intersections and re-align Gateway Street to improve opera- tion of I-5 / Beltline interchange.	Reduce traffic congestion Enhance safety	\$10	2010-2015
I-5: Linn Co. Line - OR 34 The project would widen I-5 (likely to 3 lanes each direction), modify interchange connections to accommodate added travel lanes. Project will also close the View Crest and Murder Creek Interchanges north of Albany and replace with a new interchange near Tank Farm Road.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100+	
I-5 at Beltline Interchange The project would rebuild the exist- ing interchange. Project will provide free flow ramp connections between I-5 and west Beltline Highway, add capacity across I-5, and improve the Gateway intersection area. Proj- ect will also add auxiliary lanes on Beltline between Coburg Road and I-5, and add auxiliary lanes on I-5 between Beltline and I-105.	Reduce traffic congestion Improve freight mobility Enhance safety	\$175	
Beltline: River Road - Coburg Road The project would improve capacity on Beltline Highway, likely with 3 lanes in each direction. Project will add capacity across the Willamette River in the area. Project will also modify interchanges within the seg- ment. Project has not yet begun environmental documentation.	Reduce traffic congestion Improve freight mobility Enhance safety	\$250	
Newberg Dundee Transportation Improvement Project The project would build a multilane bypass from Rex Hill to Dayton on OR 18. Project includes 4 inter- changes and several local road con- nections/modifications. A location level EIS for the project has been completed.	Reduce traffic congestion Improve freight mobility Enhance safety	\$550	
The OTC identified this as a project of statewide significance.			

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
New Youngs Bay Bridge The project would add capacity to the crossing of Youngs Bay. Project has not started environmental docu- mentation. The Youngs Bay Bridge currently operates over capacity and is a bottleneck in the Astoria-War- renton area.	Reduce traffic congestion Improve freight mobility Enhance safety	\$400	
I-5: Kuebler Blvd to Linn County Line The project would add capacity to I-5, likely 3 lanes in each direction. Project would also improve several interchanges within the section.	Reduce traffic congestion Improve freight mobility Enhance safety	\$500	
OR 22: Gaffin Road to 25th The project would improve capacity within the section, adding a 3rd travel lane each direction from I-5 to 25th Street. Project also would include a grade separated intersection treatment at 25th Street. Project may also include upgrades to I-5 interchange and Lancaster Drive interchange.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100	
OR 18: Van Duzer – Steel Bridge Road The project would provide additional capacity from the Van Duzer corridor to Steel Bridge Road, two travel lanes each direction. Project includes reduction of direct access with frontage roads. Project also includes new interchanges at Grand Ronde Road and Valley Junction (OR 22). A location environmental assessment has been completed for the project.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100	
OR 22: New Salem Willamette River Crossing The project would add capacity across the Willamette River in Salem. Project could include building a new bridge north of the existing bridges, providing a better connection to the Salem Parkway/ Keizer/I-5 north. Project also could include a direct connection from OR 22 to the new bridge. Project has not completed the EIS process.	Reduce traffic congestion Improve freight mobility Enhance safety	\$670	

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
Yaquina Bay Bridge This project would add capacity across Yaquina Bay. Project could add a new bridge or replace the existing with a multilane structure. The Yaquina Bay bridge operates over capacity and is a bottleneck in the Newport area. Project has not started environmental documenta- tion.	Reduce traffic congestion Improve freight mobility Enhance safety	\$400	
North Corvallis Bypass This project is the second phase of the Corvallis bypass. Project would extend the current bypass from its connection to OR 34 west of the Willamette River north and reconnect to OR 99W south of the UPRR railroad bridge. Project would include an interchange at OR 34 and OR 99W and possibly connections to US 20.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100	
OR 126: I-5 to Main Street (Springfield) This project includes improvements to existing interchanges in the corridor and adding new interchanges at 52nd Street and Main Street. Project also would include auxiliary lanes as necessary on OR 126.	Reduce traffic congestion Improve freight mobility Enhance safety	\$200	
Franklin Blvd: Ferry Street Bridge to Springfield Bridge (City of Eugene project)	Reduce traffic congestion Improve freight mobility Enhance safety	\$100	
I-5: I-105 to OR 58 The project would add capacity to the section, likely 3 lanes in each direction. Project would also include upgrades to several interchanges, Judkins Point, Glenwood, and 30th Ave (others possible). Project has not started environmental documentation.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100+	

REGION 3			
Project	Objectives	Est. Cost (millions)	Est. Start of Construction
US 199 Expressway Upgrade Address capacity and safety issues along 3.7 miles of US 199. Project would include widening US 199 to 3 lanes each way, access manage- ment and frontage roads.	Reduce traffic congestion Enhance safety	\$26.6	2014
I-5 Fern Valley Interchange Widen Fern Valley Road and recon- figure interchange to accommodate growth in Phoenix and south Med- ford.	Reduce traffic congestion	\$15.3	2012
OR 99 at Hersey/Wimer Re-align Hersey Street and Wimer Road at OR 99 in Ashland.	Enhance safety	\$1.2	2014
Foothill Road: Hillcrest to Delta Waters (Medford) Re-build Foothill Road as a five lane urban arterial. Project would improve bicycle and pedestrian facilities throughout its length.	Reduce traffic congestion	\$7.5	2014
I-5: Exit 61 Interchange (Merlin) Reconfigure interchange to re-align Highland Road 1/4 mile east and signalize ramp terminals.	Reduce traffic congestion	\$5.1	2014
OR 238: New Hope to Urban Growth Boundary (Grants Pass) Widen highway to three lane urban section, including bike lanes, curb/ gutter, and sidewalks. Implement access management.	Reduce traffic congestion Enhance safety	\$5	2014
OR 99: Rapp Rd to Creel (Talent) Widen OR 99 through Talent. Add center turn lane, bicycle lanes and sidewalks. Implement access management.	Reduce traffic congestion Enhance safety	\$4.3	2015
I-5 Truck Climbing Lanes (Sexton) Build truck climbing lanes at Sexton Pass to alleviate safety issues, con- gestion, and conflict between auto and truck traffic.	Improve freight mobility Enhance safety	\$10	2014
OR 138E: Oak to Fulton Street (Roseburg) Improve capacity and safety between I-5 and Fulton Street through downtown Roseburg.	Reduce traffic congestion Enhance safety	\$6.5	2015

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
I-5: Exit 120 SB Ramps Widen off-ramp to add second turn lane. Add one southbound lane to OR99 between southbound off-ramp and Happy Valley Road.	Reduce traffic congestion	\$7.5	2014
OR 42 over I-5 Widen OR 42 over I-5 to northbound ramp.	Reduce traffic congestion	\$2	2013
I-5 Truck Climbing Lane SB (Roberts Mtn) Build truck climbing lanes on south-bound I-5 over Roberts Mountain.	Improve freight mobility Enhance safety	\$6.8	2013
OR 42: County Line Curves Straighten and improve curves on highway between Douglas and Coos counties.	Enhance safety	\$10	2014
US 101: Saunders Lake Passing Lane Provide new passing opportunities by building a southbound passing lane between Saunders Lake and Hauser.	Reduce traffic congestion Enhance safety	\$5.5	2014
OR 42: East of Bridge Passing Lane Add passing lanes in both directions and re-align curve at project's east end to improve safety.	Reduce traffic congestion Improve freight mobility Enhance safety	\$9.9	2014
Highway 62 Corridor Project (Medford) The project would increase capacity and safety for this congested strategic highway corridor connecting Interstate 5 with Oregon Highways 140 and 62. The OTC identified this as a project	Reduce traffic congestion Improve freight mobility Enhance safety	\$375	
of statewide significance.  Southern Oregon I-5 Truck Climbing Lanes The project would provide climbing lanes for trucks and other vehicles facing the steep grades. The project is located on several mountain passes located in southern Douglas County, northern Josephine County, and in Jackson County bordering California. This segment of I-5 contains 4 of the 5 highest elevations between Mexico and Canada.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100	

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
OR 240: Isthmus Slough Bridge The project would replace the Isthmus Slough Bridge. Located Southeast of the city of Coos Bay, the Isthmus Slough Bridge provides the only access across the slough for 15 miles. The area is a major employment center for Coos County developed with large lumber mills and port facilities. Access to industrial companies will be enhanced and separated from residential traffic. An Environmental Assessment is underway and expected to be completed in fall 2008.	Reduce traffic congestion Improve freight mobility Enhance safety	\$150	
OR 38: Scottsburg Bridge Replacement The project would replace the Umpqua River Bridge near Scottsburg. The existing bridge is narrow and is functionally obsolete. An Environmental Assessment is expected to be necessary, although it is not currently funded.	Reduce traffic congestion Improve freight mobility Enhance safety	\$100	

REGION 4			
Project	Objectives	Est. Cost (millions)	Est. Start of Construction
US 20: Tumalo Interchange Grade separated interchange on US 20 to serve through traffic as well as the community of Tumalo and the surrounding area.	Improve freight mobility Enhance safety	\$28.2	2013
US 97 at J Street Relocate segment of highway to increase distance between highway couplets, install two signals at US 97/J Street.	Enhance safety	\$6.1	2013
US 97: Lava Butte-South Century Add travel lanes, close accesses, complete median, and build frontage roads.	Reduce traffic congestion Improve freight mobility Enhance safety	\$4.2	2009
US 97: Veterans Way to South Wickiup (Redmond) Pavement reconstruction, access management, drainage, curb and sidewalk.	Reduce traffic congestion Improve freight mobility Enhance safety	\$25.5	2014

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
US 97 Madras - Crooked River Passing Lanes Construct one or more passing lanes in both directions.	Reduce traffic congestion Improve freight mobility Enhance safety	\$4.5	2014
US 97: Sand Creek To Spring Cr. Hill Construct one or more passing lanes in both directions.	Reduce traffic congestion Improve freight mobility Enhance safety	\$4.5	2014
OR 140: Ritter Rd - Deer Run (Bly Mtn) Widen shoulder, realign curves, and pavement preservation.	Enhance safety	\$4.5	2011
US97: Redmond - Bend median barrier and frontage roads - Phase 1 Enhance safety by removing direct accesses to the highway and constructing a median. Phase 1 would build on the existing Deschutes Jct. interchange.	Enhance safety	\$29.2	2015
OR 140: Beatty Curve Shoulder widening, realign curves, and pavement preservation.	Improve freight mobility Enhance safety	\$1.8	2014
US 97: Bend North Corridor Construct a grade separated highway segment between the Deschutes Market Road/Tumalo Junction interchange and the Bend Parkway/Empire Avenue inter- change.	Reduce traffic congestion Improve freight mobility Enhance safety	\$248.5	2016
US 97: South Redmond (Reroute Ph 2) Construct a grade separated highway segment between Evergreen Ave. and the S. W. Quarry Ave.	Reduce traffic congestion Improve freight mobility Enhance safety	\$251.2	2017
US 97: Strategic Interchange Improvements Geometric improvements at US 97/Biggs Jct and US 97/Greensprings Jct., an over-crossing at US 97/O'Neil Jct, new interchange at US 97/Quarry Ave. and US 97 Dan O'Brien Way.	Reduce traffic congestion Improve freight mobility Enhance safety	\$172.6	2015

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
US 26: Realignment away from Beaver Creek Construct new highway alignment away from sensitive creek.	Reduce traffic congestion Improve freight mobility Enhance safety	\$138	2014
US 97: S.Century-LaPine (includes Wickiup Phase 2) Construct a grade separated highway segment bypassing the unincorporated community of Wickiup Junction	Reduce traffic congestion Enhance safety	\$132.7	2015

REGION 5			
Project	Objectives	Est. Cost (millions)	Est. Start of Construction
Westland Road / Lamb / Walker Intersection Improvements Project Re-align and rebuild the intersection.	Improve freight mobility Enhance safety	\$1.14	2010
I-84: Spring Creek Climbing Lane Build climbing lane on a 6% grade. Add chain-up area.	Improve freight mobility Enhance safety	\$5.67	2011
OR207/OR206 Intersections Re-align or rebuild intersections at Shobe Canyon, Clarks Canyon, Rhea Creek, Gooseberry and Porcupine roads.	Reduce traffic congestion Improve freight mobility Enhance safety	\$0.54	2010
OR 82: Lostine-Enterprise Passing Lane Build west bound passing lane.	Enhance safety	\$2.36	2012
Chico Road Reconstruction (Baker) Rebuild Chico Road, a freight route to the Elkhorn View Industrial Park.	Improve freight mobility Enhance safety	\$1.0	2010
OR 82 Alternate: Enterprise- Joseph Rebuild Hurricane Road and Airport Lane (county roads) to provide an alternate route to OR 82 for local vehicle and bike/pedestrian traffic.	Reduce traffic congestion Improve freight mobility Enhance safety	\$5.0	2010

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
Pierce Road Improvements (Union County) Widen and pave county road for more direct truck access to I-84 from OR 82.	Reduce traffic congestion Improve freight mobility Enhance safety	\$5.0	2010
Wallowa Truck Route Improvements Widen Spruce and Alder streets (OR 82 to Truck Route), build 5 foot bike/ped pathway and repair side- walks on OR 82 (Main Street).	Reduce traffic congestion Improve freight mobility Enhance safety	\$1.8	2010
I-84: Snow Zone Speed Signing Install message signs indicating speed at strategic locations on I-84.	Enhance safety	\$1.09	2010
Chandler Lane Reconstruction (Baker) Rebuild Chandler Lane between I-84 and US 30 to provide alternate truck route.	Reduce traffic congestion Improve freight mobility	\$1.0	2010
Umatilla Port of Entry Circulation Improvements Improve traffic flow / reduce back- ups on I-82 ramps for trucks pass- ing through Port of Entry.	Improve freight mobility Enhance safety	\$4.72	2012
I-84: Chain Up Enhancements Build safety pull out / chain-up ar- eas at strategic locations on I-84.	Enhance safety	\$4.72	2012
OR 82: Minam Grade, Phase II Realign curves and widen roadway.	Reduce traffic congestion Improve freight mobility Enhance safety	\$12.06	2013
OR 74: Horseshoe Bend Curve Correction Re-align or rebuild sharp curve to improve safety.	Improve freight mobility Enhance safety	\$5.31	2015
US 395: Mt. Vernon Improvements Widen and improve US 395 from junction with US 26 northward, including construction of bike/ped lanes.	Improve freight mobility Enhance safety	\$2.47	2013
SW 4th Business Park Connector, Ontario (Malheur County) Build new north-south collector road to connect Ontario Business Park to SW 4th Avenue.	Improve freight mobility Enhance safety	\$4.0	2013

Project	Objectives	Est. Cost (millions)	Est. Start of Construction
US 395: Curve Corrections Correct curves on US 395 at mile points 31 and 38.	Improve freight mobility Enhance safety	\$2.6	2012
NW Washington Ave (Ontario) Realignment Re-align to remove curve.	Reduce traffic congestion Improve freight mobility Enhance safety	\$4.5	2009
Izee-Paulina Highway Rebuild about 10 miles of county road that serves as alternative to US 26 during closures.	Improve freight mobility Enhance safety	\$4.5	2012

#### **Appendix G County Distribution Lists**

Thirty percent of the revenue, or \$149.7 million per year, from the Vision Committee's 2009 recommendation will be distributed to county road programs. The distribution to each county is based on its proportional share of statewide vehicle registrations.

The table below shows the approximate annual distribution to each county. The estimates are based on vehicle registrations in 2008.

County	Vehicle Registrations	Estimated Distribution (\$149.7 million total)
Baker	24,243	\$864,000
Benton	80,179	2,858,000
Clackamas	412,341	14,700,000
Clatsop	44,443	1,584,000
Columbia	65,437	2,333,000
Coos	78,788	2,809,000
Crook	34,854	1,243,000
Curry	31,408	1,120,000
Deschutes	205,402	7,322,000
Douglas	140,771	5,018,000
Gilliam	3,689	132,000
Grant	11,846	422,000
Harney	11,381	406,000
Hood River	29,250	1,043,000
Jackson	233,495	8,324,000
Jefferson	27,590	984,000
Josephine	107,026	3,815,000
Klamath	89,483	3,190,000
Lake	12,985	463,000
Lane	368,752	13,146,000
Lincoln	56,238	2,005,000
Linn	139,543	4,975,000
Malheur	38,515	1,373,000
Marion	327,414	11,672,000
Morrow	15,707	560,000
Multnomah	748,648	26,689,000
Polk	76,119	2,714,000
Sherman	3,425	122,000

County	Vehicle Registrations	Estimated Distribution (\$149.7 million total)
Tillamook	35,014	1,248,000
Umatilla	89,521	3,191,000
Union	33,874	1,208,000
Wallowa	11,922	425,000
Wasco	31,908	1,137,000
Washington	469,457	16,736,000
Wheeler	2,470	88,000
Yamhill	106,135	3,784,000
TOTAL	4,199,273	149,700,000

#### County minimum road funding

In the past, county road programs received 75 percent of the Secure Rural Schools (SRS) payments for federal Forest Service lands. For fiscal year 2007, SRS support for county road programs was about \$104 million. The federal government is phasing out SRS over four years under a bill that recently became law.

State Highway Funds, Federal Highway Funds, and SRS funding provide about 70 percent of all county road program funding in Oregon; the percentage is much higher in rural counties. Low-population counties responsible for expansive road systems do not receive enough money from the state's distribution for highway fund money alone to adequately operate their road programs.

Minimum funding for county road programs consists of State Highway Fund money, discretionary federalaid highway project money, and federal forest severance payments. The Federal Forest Payments Task Force recommends a supplemental distribution of state highway funds to

ensure that county road programs have a minimum base level of funding: a total of \$1 million per year, or \$4,500 per mile of county arterial and collector roads, whichever amount is greater.

The State Highway Program would provide 76 percent of the money required for base level funding for county road programs; counties would provide the balance, 24 percent. The cost of the program and the number of counties that would benefit will increase as the SRS programs is phased out by the federal government.

Base level funding for county road programs was estimated to benefit twelve counties and cost about \$8.5 million per year when it appeared that the federal government would terminate rather than phase out the SRS program. The estimate was based on 2006 – 07 data. Of the \$8.5 million, \$6.4 million would be provided by the State Highway Program; \$2.1 million by counties. The twelve counties likely to benefit from the supplemental distribution include Baker, Crook, Gilliam, Grant, Harney, Lake, Malheur, Morrow, Sherman, Wallowa, Wasco, and Wheeler counties.

#### **Appendix H**City Distribution Lists

Twenty percent of the revenue, or \$99.8 million per year, from the Vision Committee's 2009 recommendation will be distributed to city street programs. The distribution to each city is based on its proportional share of Oregon's population that lives within cities.

The table below shows the approximate annual distribution to each city. The estimates are based on 2008 population and are rounded to the nearest \$1,000.

	Population	Estimated Distribution (\$99.8 million total)
Adair Village	930	\$36,000
Adams	335	·
Adrian	185	\$13,000
Albany	47,470	\$7,000
Amity	1,480	\$1,816,000
Antelope	60	\$57,000
Arlington	610	\$2,000
Ashland	21,630	\$23,000
Astoria	10,045	\$827,000
Athena	1,270	\$384,000
Aumsville	3,306	\$49,000
Aurora	955	\$126,000
Baker City	10,105	\$37,000
Bandon	3,235	\$387,000
Banks	1,435	\$124,000
Barlow	140	\$55,000
Bay City	1,230	\$5,000 \$47,000
Beaverton	85,687	·
Bend	77,780	\$3,278,000 \$2,975,000
Boardman	3,310	\$2,975,000
Bonanza	445	\$127,000
Brookings	6,455	•
Brownsville	1,755	\$247,000
Burns	3,020	\$67,000
Butte Falls	445	\$116,000 \$17,000
Canby	15,140	
Cannon Beach	1,680	\$579,000
Canyon City	670	\$64,000
Canyonville	1,640	\$26,000 \$63,000

	Population	Estimated Distribution (\$99.8 million total)
Carlton	1,755	\$67,000
Cascade Locks	1,075	\$41,000
Cave Junction	1,686	\$64,000
Central Point	17,035	\$652,000
Chiloquin	720	\$28,000
Clatskanie	1,710	\$65,000
Coburg	1,070	\$41,000
Columbia City	1,955	\$41,000 \$75,000
Condon	775	\$30,000
Coos Bay	16,210	
Coquille	4,215	\$620,000
Cornelius	10,895	\$161,000
Corvallis	54,890	\$417,000
Cottage Grove	9,345	\$2,100,000
Cove	620	\$357,000
Creswell	4,653	\$24,000
Culver	1,315	\$178,000
Dallas	15,065	\$50,000
Damascus	9,775	\$576,000
Dayton	2,495	\$374,000
Dayville	175	\$95,000
Depoe Bay	1,355	\$7,000
Detroit	265	\$52,000
Donald	995	\$10,000
Drain	1,075	\$38,000
Dufur	655	\$41,000
Dundee	3,040	\$25,000
Dunes	1,360	\$116,000
Durham	1,395	\$52,000
Eagle Point	8,565	\$53,000
Echo	710	\$328,000
Elgin	1,685	\$27,000
Elkton	245	\$64,000
Enterprise	1,940	\$9,000
Estacada	2,695	\$74,000
Eugene	153,738	\$103,000
Fairview	9,695	\$5,880,000
Falls City	965	\$371,000
Tails Oity	703	\$37,000

	Population	Estimated Distribution (\$99.8 million total)
Florence	8,270	\$316,000
Forest Grove	20,991	\$803,000
Fossil	465	\$18,000
Garibaldi	895	\$34,000
Gaston	650	\$25,000
Gates	505	\$25,000 \$19,000
Gearhart	1,185	\$19,000 \$45,000
Gervais	2,250	
Gladstone	12,202	\$86,000
Glendale	955	\$467,000
Gold Beach	2,445	\$37,000
Gold Hill	1,080	\$94,000
Granite	30	\$41,000
Grants Pass	31,740	\$1,000
Grass Valley	170	\$1,214,000
Greenhorn	2	\$7,000
Gresham	99,225	\$0
Haines	435	\$3,795,000
Halfway	355	\$17,000
Halsey	780	\$14,000
Happy Valley	10,380	\$30,000
Harrisburg	3,400	\$397,000
Helix	230	\$130,000
Heppner	1,415	\$9,000
Hermiston	15,785	\$54,000
Hillsboro	88,311	\$604,000
Hines	1,825	\$3,378,000
Hood River	6,740	\$70,000
Hubbard	3,095	\$258,000
Huntington	560	\$118,000
Idanha	230	\$21,000
Imbler	295	\$9,000
Independence	7,905	\$11,000
Tone	345	\$302,000
Irrigon	1,850	\$13,000
Island City	980	\$71,000
Jacksonville	2,635	\$37,000
Jefferson	2,590	\$101,000
JOHO 3011	2,370	\$99,000

	Population	Estimated Distribution (\$99.8 million total)
John Day	1,850	\$71,000
Johnson City	675	\$26,000
Jordan Valley	230	\$9,000
Joseph	1,100	\$42,000
Junction City	5,145	\$197,000
Keizer	35,435	\$1,355,000
King City	2,700	\$1,353,000
Klamath Falls	21,040	\$805,000
La Grande	12,854	\$492,000
La Pine	1,590	\$492,000
Lafayette	3,730	\$143,000
Lake Oswego	36,356	·
Lakeside	1,545	\$1,391,000
Lakeview	2,730	\$59,000
Lebanon	14,718	\$104,000
Lexington	280	\$563,000
Lincoln City	7,615	\$11,000
Lonerock	20	\$291,000
Long Creek	220	\$1,000
Lostine	250	\$8,000
Lowell	995	\$10,000
Lyons	1,105	\$38,000
Madras	6,593	\$42,000
Malin	800	\$252,000
Manzanita	715	\$31,000
Maupin	490	\$27,000
Maywood Park	750	\$19,000
McMinnville	31,665	\$29,000
Medford	75,701	\$1,211,000
Merrill	915	\$2,896,000
Metolius	850	\$35,000
Mill City	1,620	\$33,000
Millersburg	1,030	\$62,000
Milton-Freewater	6,550	\$39,000
Milwaukie	20,920	\$251,000
Mitchell	175	\$800,000
Molalla	7,195	\$7,000
Monmouth	9,339	\$275,000
	1,20,	\$357,000

	Population	Estimated Distribution (\$99.8 million total)
Monroe	625	\$24,000
Monument	135	\$5,000
Moro	380	\$15,000
Mosier	470	\$18,000
Mt. Angel	3,755	\$144,000
Mt. Vernon	600	\$144,000
Myrtle Creek	3,632	\$139,000
Myrtle Point	2,540	
Nehalem	240	\$97,000
Newberg	21,675	\$9,000
Newport	10,455	\$829,000
North Bend	9,830	\$400,000
North Plains	1,890	\$376,000
North Powder	500	\$72,000
Nyssa	3,220	\$19,000
Oakland	940	\$123,000
Oakridge	3,700	\$36,000
Ontario	11,325	\$142,000
Oregon City	30,060	\$433,000
Paisley	250	\$1,150,000
Pendleton	17,260	\$10,000
Philomath	4,530	\$660,000
Phoenix	4,845	\$173,000
Pilot Rock	1,560	\$185,000
Port Orford	1,248	\$60,000
Portland	568,380	\$48,000
Powers	730	\$21,740,000
Prairie City	1,100	\$28,000
Prescott	60	\$42,000
Prineville	10,204	\$2,000
Rainier	1,775	\$390,000
Redmond	24,809	\$68,000
Reedsport	4,305	\$949,000
Richland	150	\$165,000
Riddle	1,040	\$6,000
Rivergrove	350	\$40,000
Rockaway Beach	1,360	\$13,000
Rockaway Beach	1,300	\$52,000

	Population	Estimated Distribution (\$99.8 million total)
Rogue River	2,085	\$80,000
Roseburg	21,255	\$813,000
Rufus	275	\$11,000
Salem	152,318	\$5,826,000
Sandy	7,595	\$3,820,000
Scappoose	6,090	\$233,000
Scio	763	\$29,000
Scotts Mills	300	\$11,000
Seaside	6,402	\$245,000
Seneca	230	\$9,000
Shady Cove	2,827	\$9,000 \$108,000
Shaniko	40	
Sheridan	5,865	\$2,000
Sherwood	16,381	\$224,000
Siletz	1,165	\$627,000
Silverton	9,205	\$45,000
Sisters	1,825	\$352,000
Sodaville	290	\$70,000
Spray	160	\$11,000
Springfield	57,321	\$6,000 \$2,193,000
St. Helens	12,075	\$462,000
St. Paul	410	\$16,000
Stanfield	2,155	\$18,000
Stayton	7,765	\$297,000
Sublimity	2,255	
Summerville	120	\$86,000
Sumpter	170	\$5,000 \$7,000
Sutherlin	7,660	·
Sweet Home	8,995	\$293,000
Talent	6,525	\$344,000
Tangent	970	\$250,000
The Dalles	13,112	\$37,000
Tigard	46,715	\$502,000
Tillamook	4,690	\$1,787,000
Toledo	3,585	\$179,000
Troutdale	15,436	\$137,000
Tualatin	26,025	\$590,000
Turner	1,690	\$995,000
	,	\$65,000

	Population	Estimated Distribution (\$99.8 million total)
Ukiah	260	\$10,000
Umatilla	6,440	\$246,000
Union	1,960	\$75,000
Unity	115	\$4,000
Vale	2,040	\$78,000
Veneta	4,640	\$177,000
Vernonia	2,365	\$177,000
Waldport	2,130	
Wallowa	885	\$81,000
Warrenton	4,645	\$34,000
Wasco	400	\$178,000
Waterloo	210	\$15,000
West Linn	24,180	\$8,000
Westfir	335	\$925,000
Weston	745	\$13,000
Wheeler	445	\$28,000
Willamina	1,885	\$17,000
Wilsonville	17,405	\$72,000
Winston	5,780	\$666,000
Wood Village	3,100	\$221,000
Woodburn	22,875	\$119,000
Yachats	765	\$875,000
Yamhill	820	\$29,000
Yoncalla	1,110	\$31,000 \$42,000
Total Population	2,609,160	\$99,803,000 <sup>1</sup>

<sup>1-</sup> The estimated distribution to each city from cities' \$99.8 million is rounded to the nearest \$1,000. The additional difference is due to rounding error.

#### Appendix I Resources and Links

The information used in this report was gathered from many sources.

- The Oregon Transportation Plan www.oregon.gov/ODOT/TD/TP/ortransplanupdate.shtml
- The County Needs Report www.aocweb.org/crp/Portals/1/Major%20Reports/AOC%20Technical%20 Reports/Needs%20Report%20for%20WEB.pdf
- City Streets: Investing in a Neglected Asset www.orcities.org/LinkClick.aspx?link=Headlines/LOC%20Transportation%20 Report%20FinalMaster2\_3-28-07.pdf&tabid=798&mid=1588
- The Oregon Business Plan www.oregonbusinessplan.org/index.html

#### **Appendix J Committee Memberships**

The individuals listed below participated in the Vision, Governance and/or Public Awareness Committees. The recommendations in this report capture the discussions of the Vision Committee, but should not be read as a blanket endorsement.

Legislators

Senate President Peter Courtney

Senator Richard Devlin
Senator Mark Hass
Senator Betsy Johnson
Senator Rick Metsger
Senator Rod Monroe
Senator Bruce Starr
Senator Joanne Verger
Representative Terry Beyer
Representative Bruce Hanna
Representative Dave Hunt
Representative George Gillman
Representative Tobias Read

Committee members

Pat Reiten, Chair Pacific Power

Gail Achterman

Oregon Transportation Commission

Jessica Adamson

Associated General Contractors

Tony Andrews Teamsters Jim Austin

Clackamas County

Dan Bates
City of Portland
Jeremiah Bauman
Environment Oregon

Len Bergstein

Oregon Business Association

Hans Bernard Governor's Office Bernie Bottomly

Portland Business Alliance

David Bragdon

Council President, Metro

Scott Bricker

Bicycle Transportation Alliance

Tamara Brickman

Department of Administrative Services, Budget and Management Division

Susan Brody

Oregon Environmental Council

Rex Burkholder Metro Councilor Craig Campbell AAA of Oregon/Idaho

Olivia Clark TriMet

Steve Clark

Community Newspapers

Jay Clemens

Associated Oregon Industries

Marshal Coba

American Council of Engineering

Companies

**Bob Cortwright** 

Department of Land Conservation and

Development

Danielle Cowan

Clackamas County

Ryan Deckert

Oregon Business Association

Angi Dilkes
Governor's Office
Craig Dirksen

Mayor, City of Tigard

Brian Dougherty

Western States Petroleum Association

Angus Duncan

Bonneville Environmental Foundation/ Oregon Global Warming Commission

Andrea Durbin

Oregon Environmental Council

Pat Egan **PacifiCorp** 

Ben Fetherston Jr.

Associated Oregon Industries

Matthew Garrett

Oregon Department of Transportation

Lanny Gower Conway

Rick Gustafson

Oregon Environmental Council

Chris Hagerbaumer

Oregon Environmental Council

Fred Hansen TriMet

Marion Haynes

Portland Business Alliance

**Brad Hicks** 

Medford Chamber

Craig Honeyman

League of Oregon Cities

Tom Hughes

Mayor, City of Hillsboro

Tom Imeson Port of Portland

John Ledger

Associated Oregon Industries

Mark Landauer City of Portland

Sid Leiken

Mayor, City of Springfield

Don Lindly

Lincoln County Commissioner

Linda Ludwig

League of Oregon Cities

Keith Mays

Mayor, City of Sherwood

Mary Kyle McCurdy 1000 Friends of Oregon

Deanna Palm

Oregon State Chamber of Commerce

Lynn Peterson

Chair, Clackamas County Commission

Jim Piro

Portland General Electric

Joan Plank

Oregon Department of Transportation

Harvey Platt Platt Flectric **Annette Price** Port of Portland John Rakowitz

Associated General Contractors

Karl Rohde

Bicycle Transportation Alliance

Danelle Romain

Oregon Petroleum Association

Paul Romain

Oregon Petroleum Association

Bob Russell

Oregon Trucking Associations

Mike Salsgiver

Associated General Contractors

Art Schlack

Association of Oregon Counties

Marcy Schwartz

CH2MHill

Mel Sears

American Council of Engineering

Companies Andy Shaw Metro

**Bob Shiprack** 

Oregon State Building and Construction

Trades Council

**Bob Stacey** 

1000 Friends of Oregon

Chip Terhune Governor's Office

Randy Tucker

Metro

Chris Warner ODOT/Governor's Office

Duncan Wyse Oregon Business Council

#### Oregon Department of Transportation staff

Kevin Beckstrom
Jerri Bohard
Travis Brouwer
Patrick Cooney
Victor Dodier
Jack Evans
Damon Fordham
Robin Freeman
Shelley Snow
Doug Tindall
David Williams

#### Legislative staff

Phil Bently Senate Presidents Office

Amy Fauver Senate Majority Office

Jim Keller House Republican Office

Debbie Koreski House Majortiy Office

Abby Tibbs Senate Majority Office

Angela Wilhelms House Republican Office