

6. TRANSPORTATION

SUMMARY

The Stakes. Oregon depends greatly on a transportation system that has served us well in the past but is not keeping pace with current and evolving needs driven by growth in our population, economy, freight and commuter demand and environmental goals. In our highway and road system in particular, we are falling behind in maintenance and modernization at a time when congestion is rising, threatening our quality of life, our economy, and our ability to achieve important goals in sustainability.

The Problem. Rising *highway* congestion ranks among our most pressing problems. As two recent congestion studies indicate, vehicle congestion delays movement of freight and people and it jams connecting transportation modes such as air and marine freight and local streets. This, in turn, produces a chain of negative impacts statewide, including higher business costs and lower competitiveness. Without intervention, the studies say, statewide congestion in 2025 will increase by 42 percent overall – and 54 percent for trucks. This travel delay in 2025 will cost Oregon's economy and its citizens one million hours of travel delay per day at an annual cost of \$1.7 billion and 16,000 jobs. Apart from highway congestion, other modes of transportation also need attention. In concert with road maintenance, modernization, and efficiencies, these modes can help relieve congestion, improve overall transportation service, and reduce the system's environmental impact.

The Vision. To promote a successful economy, to maintain quality, livable communities, and to shrink our environmental footprint, Oregon must begin *now* to accomplish the following strategies:

- Take care of the transportation system we have.
- Make this system work better, in particular by optimizing capacity and safety.
- Invest strategically in new capacity.
- Put reliable funding mechanisms in place that pay for such investments.
- Better integrate transportation with our goals in land use, economic development, and sustainability.
- Better integrate the transportation system across jurisdictions, ownerships, and modes.

Recommendation. Oregon should pursue investments in its transportation simultaneously along three tracks.

- *Track 1. Immediately take care of highway system maintenance and high-priority modernization and capacity enhancements.* Over the next 12 months, all Oregon parties – business, state and local governments, and advocacy groups – should prepare an annual transportation funding package for the 2009 legislative session that identifies critically needed infrastructure projects, along with cost-benefit analyses. Fund this investment with an increase in the gas tax, with vehicle registration fees, or both, with commensurate increases in the weight-mile tax. The Oregon Business Plan proposal submitted in 2007, which should be updated for subsequent inflation and cost increases, provides a template for shaping that package.

Track 2. Step up attention to and resolution of the bottleneck at Interstate 5 where it crosses the Columbia River. Extreme and growing congestion at the crossing not only hurts adjacent regional and state economies, it also impedes critical interstate freight movement north and south, east and west.

- *Track 3. Launch a more fundamental, far-reaching review of transportation delivery and financing,* by a widely representative blue-ribbon task force working with legislators, local governments, and state transportation officials on studies and pilot projects to inform panel deliberations and proposals for the 2009 Legislature and beyond. It should consider:
 - The adequacy of road, rail, marine, and air transportation systems, their integration with one another, their relation to land use and urban design, and their role in achieving Oregon's economic, social, and environmental goals, including reductions in greenhouse gas emissions.
 - The roles and responsibilities of city, county, state, and federal jurisdictions in transportation system upkeep, operation, and coordination.
 - A new public transportation financing system to replace or supplement the gas tax and other revenue sources. This should incorporate demand management as a strategy for reducing congestion and system cost.

Federal Agenda. Work with Oregon's Congressional delegation to support strategic and sustained federal investments in transportation infrastructure in Oregon, as well as policies that promote transportation efficiencies. In particular, stabilize the Federal Highway Trust Fund, re-authorize the timber safety net, keep Columbia River channel deepening on track, pursue long-range replacement of the Columbia River jetty, and work with state-level interests to resolve problems with regional freight rail competition and service.

Why Transportation Improvement Is Vitally Needed

Oregon's economy and its traded-sector industries are unusually dependent on the state's transportation system for competitive success and growth. Twenty percent of all jobs in Oregon are transportation dependent. Traded-sector industries are especially reliant on transportation to move freight to market. Among the 4Ps of the Oregon Business Plan, transportation has a key role in maintaining Oregon's competitive edge in Productivity in particular, but also Place and People. Reliable, efficient transportation speeds the flow of goods and services, connecting Oregon's economy to national and global markets. It contributes to Oregon's livability, environment, and overall quality of life, factors that make Oregon a magnet for talented people.

We have reached a juncture in transportation where we cannot coast on past investment and past practices.

Transportation at a Crossroads

Our transportation system has played this role dependably, but there is no certainty that it can keep doing so. Today, Oregon is living mostly off past investments in its transportation system. Recent investments, while significant and beneficial, have focused primarily on preserving the existing system and are not keeping pace with the demands of a growing population and economy. Recent Oregon Transportation Investment Act programs will soon expire, and system improvements seen under OTIA will fade away as the investment drops back to previous levels. We face a critical choice. Will we make the essential investments and changes needed to keep us competitive and maintain our quality of life? Or will we settle for gridlock, wasting our time and money stuck in traffic?

Thanks to visionary investment by previous generations, our transportation infrastructure gives us a foundation to meet evolving demands. But we have reached a juncture where we cannot coast on past investment and inherited capacity. Despite recent efforts to modernize and enhance the transportation system (see adjacent summary of accomplishments), significant parts of the system are aging, degrading, or operating inefficiently at the same time that the economy and population are growing. This is true of the entire multimodal system, but in particular our railroads and our federal, state, and local system of roads and bridges. Not only is there a large backlog in basic maintenance and replacement needs, the road system is near or at capacity in many locations, especially in the Portland region, and vulnerable to interruptions caused by accidents, bad weather, and other incidents.

NOTABLE ACCOMPLISHMENTS

- ✓ Secured International Air Service to Mexico, Asia, and Europe
- ✓ Passed the Oregon Transportation Investment Act, to add lane capacity and repave hundreds of miles of highways and roads, and to repair or replace more than 570 bridges statewide, a process on schedule
- ✓ Increased Federal Highway Funding through the 2005 Transportation Reauthorization bill
- ✓ Secured federal funding for critical projects, such as the Columbia River Crossing environmental impact statement, and statewide bridges
- ✓ Through the Army Corps of Engineers, deepened 41 miles of the 100 miles of Columbia River channel between Portland and the Columbia River mouth; is on schedule, assuming funding, to complete the balance
- ✓ The Corps has repaired key portions of the Columbia River jetty, buying time for needed long-term replacement of the jetty
- ✓ Launched Mileage Fee Pilot, a funding option test program
- ✓ In 2005 Passed \$100M Connect Oregon I for non-highway freight and transit infrastructure; in 2007 passed an equal amount for Connect Oregon II.

As a result, travelers and freight are running into congestion and delay more often. Unless we act decisively – and boldly – such choke points will become far more common and frequent. This will impede local commerce, delivery of goods, shipment to out-of-state markets, business growth, and our ability to attract both investment and talent.

Inadequate Funding Structure

How do we find ourselves in this situation? Apart from the transportation investments summarized on the previous page, Oregon has not been making system investments at the level needed to anticipate and meet growing demand. In particular, we lack a reliable, long-term public financing structure for our highway and road system. As described further below, there is a \$1.3 billion annual gap between available resources and the needs of all our transportation modes, including \$875 million for our state and local road system.

Sustainability Frustrated

Delays and inefficiencies also waste fuel and raise emissions, diminishing attainment of our goals in sustainability, in particular, reduction in greenhouse gases.* Oregon has legislatively set ambitious goals to reduce Greenhouse Gas Emissions: at least 10 percent below 1990 levels by 2020 and more than 75 percent below that level by 2050.

Although aggressive measures are underway to help reach those goals in the utility sector,** much work remains on transportation, which is responsible for 38 percent of Oregon’s carbon dioxide emissions. If current trends continue, carbon dioxide emissions in the state will increase by 33 percent mainly because of increased driving. Cars and trucks sitting idle in traffic are burning dollars along with hydrocarbons. Businesses, consumers, and the environment all suffer when highways are congested and when people and goods are not moved efficiently.

As a cause of global warming, greenhouse gas emissions force us to look at transportation in a new way. It will be imperative for Oregon to determine the level of greenhouse gas reductions that will be needed from the transportation sector, and it to factor greenhouse gases into our investment options.

POSITIVES TO BUILD ON

- ✓ Oregon has the transportation infrastructure and the geographic position to connect to the international economy.
- ✓ Our basic transportation infrastructure is a solid foundation for community livability and economic growth, providing that we maintain it.
- ✓ Sustainability practices are being implemented from farms to urban areas. The state is well-positioned to foster the development of green transportation industries.
- ✓ Communities throughout Oregon are using public transit and other alternatives that save fuel; commuting via bicycle is growing.
- ✓ Cities are planning development that expands transportation options.
- ✓ Innovative technology is already a part of several metropolitan transportation systems, and its use is spreading to other parts of the state.
- ✓ TripCheck, a statewide traveler information web site, allows travelers and shippers to plan their trips to avoid congestion and unsafe traveling conditions.
- ✓ State and regional organizations and offices provide forums for addressing the challenges.

* From Oregon Strategy for Greenhouse Gas Reductions: 1. By 2010, arrest the growth of Oregon’s greenhouse gas emissions (including, but not limited to CO₂) and begin to reduce them, making measurable progress toward meeting the existing benchmark for CO₂ of not exceeding 1990 levels. 2. By 2020, achieve a 10 percent reduction below 1990 greenhouse gas levels. 3. By 2050, achieve a “climate stabilization” emissions level at least 75 percent below 1990 levels.

** These include the Renewable Portfolio Standard that passed through the 2007 legislature as well as the Western Regional Climate Initiative of which Oregon is a key partner.

The Crunch in System Demand, Condition, and Funding Stability

Oregon transportation is caught in the middle of dynamic and conflicting pressures. On one hand, the state has a growing population and economy that demand more of our roads, rails, air and marine ports, and transit systems; and on the other, it faces the difficulty of maintaining existing infrastructure, getting the most from existing capacity, adding new capacity, and funding both upkeep and improvements. The choices we make in addressing these tensions will determine whether Oregon withers or prospers. It's that simple. The pages below discuss this issue in more detail, drawing from conversations with transportation officials and advocates, and from recent plans and studies.*

Demands and Pressures on Our Transportation System. Oregon's transportation system is projected to experience steep growth in a variety of demands through 2030. Here are some key projections through 2030 from the Oregon Transportation Plan:

- From a baseline of 3.4 million people in 2000, Oregon's population will grow by 41 percent, reaching 4.8 million people, with nearly 60 percent of the population in urban areas along the I-5 corridor from Portland to Medford.
- Freight tonnage is expected to increase 80 percent statewide, representing a 147 percent real increase in the value of freight moving in the state. Freight tonnage will double in the Portland metropolitan region. Most of these increases will be carried by trucks.
- Vehicle miles traveled will grow 40 percent, a rate of 1.35 percent annually.
- Increases in population densities, traffic, and fuel prices will spur demand and create opportunities for public transportation in metropolitan areas; bicycle travel will also increase in these areas.
- Without interventions in the form of system efficiencies or selective addition of capacity, choke points in high usage motor corridors will get worse before they get better. Familiar areas of congestion include Interstate 5 between Tualatin and Wilsonville, the stretch of I-5 that crosses the Interstate Bridge over the Columbia River, and eastbound and westbound connections between Interstate 84 and Highway 26 at the Vista Ridge Tunnel.

In addition to these projections, the effects of climate change must be factored in as a wild card. Climate change could alter the mix of agriculture products, their destinations, and their transportation requirements. Volatile weather patterns could accelerate the severity of road conditions, battering bridges in high floods, increasing slides along mountain roads, or leaving low lying sections of coastal roads vulnerable to elevated sea levels.

* These include the *Oregon Transportation Plan (OTP)*, *Oregon's Transportation System: Critical Needs*, and *The Cost of Highway Limitations and Traffic Delay to Oregon's Economy* (Oregon cost of congestion study). The OTP is a 25-year multimodal transportation plan for Oregon's airports, highways and roadways, bicycle and pedestrian facilities, pipelines, ports and waterway facilities, public transit, and railroads. It was adopted by the Oregon Transportation Commission in September of 2006; the plan is strongly supported by the Oregon Business Plan. The critical needs paper was produced by the Oregon Department of Transportation in consultation with business leaders, public agencies, and its own commission. The statewide cost of congestion study, commissioned by the Oregon Business Council and the Portland Business Alliance, was completed in March 2007. As recommended in the January 2007 Policy Playbook, the study expands an earlier analysis of congestion impacts on the economy of the Portland area. These and additional source documents and links are listed at the end of this section.

System Condition and Congestion

Various parts of Oregon's multimodal system need attention, but none so much as our system of state and local highways, roads, and streets, whose condition and adequacy is under threat as demand and usage grow while the system itself ages.

The recent short-term surge of highway construction activity under the OTIA programs (which will peak in 2008 and 2009 before declining and then ending early in the next decade) has temporarily improved the condition of Oregon's roads and bridges. The statewide condition of highway pavement, for example, has improved from 78 percent "fair or better" in 1999 to 87 percent fair or better in 2006. Oregon has also made significant progress under OTIA in upgrading the condition of bridges. ODOT reports that 29 percent of the 2,660 state highway bridges are still rated deficient. This is a slight improvement over last year. The department expects conditions to improve in the near term as bridge projects are completed under OTIA III funding. Bridge conditions will peak in 2010, but decline as the department wraps up the OTIA bridge program and begins to pay bond debt service from funds earmarked for its bridge program.

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The most obvious problem for our economy and quality of life, however, is congestion – mainly highway congestion. Some of this problem has been relieved by addition of lane capacity under OTIA, such as Highway 26 from Sylvan west for several miles. Unfortunately, investment in highway expansion projects will fall as the temporary OTIA program that paid for projects like this comes to a close in the near future. Moreover, recent reductions in the funding available to Oregon's highway program will further limit the ability to invest strategically in adding capacity at chokepoints.

It's important to note, however, that not all congestion is caused by capacity limitations; and capacity additions will not always be appropriate or feasible. Even where the highway system is normally adequate to meet demand, it is vulnerable to disruption and delay from random events in high-traffic areas. Incidents such as vehicle accidents and breakdowns, roadway spills, severe weather, and construction activity frequently bring traffic to a near or full standstill, backing up roads for miles and even hours, particularly on our freeways. These incidents, which account for about half of total traffic delay, have a ripple effect, impeding the flow of goods and people both near and far, and through modes of transportation interconnected with the highway system.

Non-injury, low-impact accidents, in particular, cause more delay than they need to because drivers fail to move their vehicles immediately out of traffic. Transportation officials say that every minute a vehicle stops on the freeway backs up approaching traffic from three to seven minutes. One analysis of a typical collision in the Portland area found that it took 55 minutes for a tow truck to arrive, 17 minutes to clear the wreck, and another 33 minutes for traffic flow to return to its normal pace, paralyzing traffic for 105 minutes at an economic cost to other drivers of \$150,000.

Reducing congestion caused by these non-recurring events is much less expensive than capacity expansion.

Potential Economic Damage of Congestion And other Limitations to Transportation

As these citations suggest, both the economy and our quality of life suffer when shipments of supplies or finished goods are delayed, when commuters are delayed getting to work or home, or when someone stricken in an ambulance doesn't get to the hospital on time. Businesses experience costs for additional drivers and trucks due to longer travel times, loss of productivity due to missed deliveries, reduced market areas, and increased inventories.

Highway congestion in the Portland area has become the most obvious source of travel delay. *The Cost of Congestion to the Economy of the Portland Region*, a study completed in 2005, indicates that congestion is already threatening the Portland region's economic viability. Portland area businesses report that traffic congestion is already costing them money. The study shows that failure to invest adequately in transportation improvements in the Portland region will result in a potential loss value of \$844 million annually by 2025 (\$782 per household) and 6,500 jobs.

The Cost of Highway Limitations and Traffic Delay to Oregon's Economy, a 2007 study, reaches similar conclusions for the state as a whole. Not only are businesses reporting financial loss from congestion, many are changing their operations and location decisions. The study estimates that failure to invest adequately statewide in transportation improvements will result in a potential loss valued at of \$1.7 billion annually by 2025 and 16,000 jobs. It equates to an additional 1 million hours of vehicle travel per day caused by congestion and delay.

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use of the capacity we have.*

Because congestion is showing up in so many places – and growing – it isn't likely that Oregon can rely exclusively on building its way out of the problem. While strategic investments can address bottlenecks, much of our capacity limitations must be approached in other ways, in particular by making smarter, more efficient use of the capacity we have. System optimization is also less expensive than constructing new facilities.

The statewide congestion study notes that road and highway deficiencies are not the only bottlenecks to the economy. There are also limitations to rail, air, and marine service and connections, which are critical to business needs as well. Businesses throughout the state are increasingly relying on trucks to move goods due to limitations with other modes of delivery. Firms adopting intermodal shipping to reduce costs are finding they must increase inventories due to unforeseen delays and uncertainties. While all modes are critical for businesses, the various modes are not interchangeable for business logistics and supply chain management. Improving links between the modes is particularly vital to achieve a seamless, efficient system.

Rail Service

Regional rail service limitations are also causing significant problems for Oregon businesses, many of whom rely on rail to transport their products to national and global markets. Rail service has become more costly and does not always offer the most reliable means of shipping goods, particularly goods that are time-sensitive. The large Class 1 railroads, including Union Pacific and Burlington Northern Santa Fe, have shifted to a business model

that involves transporting large “unit” trains across long distances. In doing so, they bypass many communities and businesses that need to ship smaller numbers of cars. When Class 1 railroads refuse to provide service or impose large rate increases on Oregon businesses, many of these enterprises are forced to transfer their shipments from train to truck. This incurs significant increased costs that make them less competitive while it compounds the congestion problems on our highways.

Threats to business competitiveness also come from the deteriorating condition of the freight rail infrastructure. The first Connect Oregon multi-modal transportation package made a significant investment in rail projects, and it is likely that a substantial portion of the funding under Connect Oregon II will also flow to projects that rehabilitate the rail system and address capacity constraints. Despite these investments, Oregon’s rail network seems to be falling farther behind, and just preserving the existing system and levels of service is proving to be a challenge. In recent months short-line railroads have halted service on two lines (the Bailey Branch Line in Benton County and the Coos Bay Line from Eugene through Coos County) due to safety concerns that have arisen as the lines have deteriorated due to lack of investment. Halting service on these lines has led to significant problems for shippers who must find alternative – and more costly – means of getting their products to market. Because of concerns over the condition of Oregon’s rail system, ODOT’s Rail Division will be undertaking a significant study of the conditions and needs of rail lines. The report should serve as a basis for determining how the state and private sector can partner to preserve the critical components of the rail system.

Marine Transportation

Columbia River commerce is estimated to range between \$16 billion and \$18 billion per year, with 2,000 ships crossing the bar at Astoria, many of them connecting with cargo from barges that reach as far inland as the Snake River system. Two infrastructure issues are central to this commerce: deepening of the 100-mile channel from the Columbia River bar to Portland, and keeping the river’s jetty in working order.

The channel dredging project is well under way, with 41 miles of the inland waterway now at 43 feet or more, a depth that accommodates large ocean vessels. Marine officials are pleased with the progress but mindful that timely federal appropriations will be needed in the next two phases of the project to stay on schedule and budget. The federal government is funding almost two-thirds of the \$150 million project, Oregon and Washington, the balance.

The Columbia River jetty, which protects a navigable channel across the bar, is 125 years old in some places and in danger of falling apart without intervention. A mile of the south jetty, once six miles long, has disappeared. In 2006 Northwest delegates appropriated funds for the Army Corps of Engineers to repair broken sections, extending the jetty’s service another ten years. But in the long term, the jetty is falling apart and will have to be replaced, an undertaking that will cost hundreds of millions of dollars. Congress has

CURRENT HIGHWAY FUNDING

Oregon collects State Highway Fund revenue through motor fuel taxes, vehicle registration fees, title fees, driver license fees, and the weight-mile tax for heavy vehicles. The State Highway Fund is a shared resource for the state highway program and for county roads and city streets. Other resources for highways, roads and streets include federal-aid highway funds (primarily for state highway) and U.S. Forest Service and Bureau of Land Management allocations, property taxes and system development charges (primarily for local roads and streets). The private sector helps build the local transportation system through subdivision development as well as pay for road construction and maintenance through local taxes and system development charges.

funded a study of the replacement project, which will be essential to Columbia River shipping and the economies of Northwest states.

The Widening Investment Gap

Historically, Oregon has supported the development and maintenance of its surface transportation system, most notably pioneering the nation's first gasoline tax in 1919 to pay for its road system. Unfortunately, that's no longer so true. Each year Oregon falls farther behind in generating the funds required to maintain and upgrade its aging transportation infrastructure. It hasn't increased its gas tax since 1993, and other revenue sources pay for only a small portion of overall needs. According to the Oregon Transportation Plan, in all modes of publicly funded transportation in Oregon, there is a \$1.3 billion annual gap (in 2004 dollars) between available resources and needed public investment in our air, highway, marine, public transit and rail systems. In our stressed state and local road system, the annual shortfall is about \$875 million of that total. Our funding sources, such as the gas tax and motor carrier fees, are not indexed to inflation, so they have been producing a diminishing share of needed revenue. Right now, they meet only 27 percent of what we need to maintain existing service. In the next 25 years, these revenue sources, if left in their current form, are expected to lose 40 percent of their already-diminished purchasing power. This means they will meet an even smaller fraction of our funding requirements.

Funding Alternatives

Oregon can employ a range of funding options to pay for its transportation needs. An increase in the gas tax is one practical short-term solution (one cent raises \$29 million annually). Washington recently passed a transportation funding package through an increased state gas tax that will produce approximately \$9 billion. Other funding sources might include a higher vehicle registration fee (each \$1 dollar increase raises \$5.7 million annually) and a car title transfer fee (each \$1 dollar increase raises \$1.8 million annually). The short-term practicality and scale of the gas tax is offset by its diminishing buying power against inflation and by fuel efficiency improvements and alternative engine designs that boost vehicle mileage. To illustrate, Oregon drivers are currently paying about 1.2 cents per mile in state gas tax, a calculation based on average passenger fuel consumption of 20 miles per gallon. Newer model cars, especially hybrid electric cars, can be twice or three times as efficient, effectively reducing their payment to 0.6 cents or 0.4 cents per mile. Updated corporate average fuel economy standards in Oregon and at the national level will likely drive average fuel efficiency to around 35 miles per gallon, effectively lowering the gas tax to .69 cents per mile by 2025. These trends make it imperative that Oregon explore alternative funding sources to finance its transportation system. New technologies will soon make it possible to consider toll roads, mileage fees, peak use pricing, surcharges for traveling in congestion-prone areas, and other possibilities. An ODOT task force has examined alternatives to the motor fuel tax

KEY CHALLENGES AND STRATEGIC OPTIONS

Challenges

- ✓ 41% increase in population by 2030
- ✓ 80% increase in freight tonnage by 2030
- ✓ 40% increase in vehicle miles travelled by 2030
- ✓ Declining purchasing power of gas tax
- ✓ Impacts of climate change on the system condition
- ✓ State goal of reducing greenhouse gas emissions 75% below 1990 levels by 2050

Strategies

- ✓ Take care of the system we have
- ✓ Make the existing system work better
- ✓ Invest selectively and strategically in new capacity
- ✓ Put reliable funding mechanisms in place
- ✓ Improve land-use/transportation integration
- ✓ Improve mode integration within the overall system

and recently concluded a demonstration project for one alternative based on mileage. Metro and ODOT are exploring the possibility of pricing roads, including tolling, to fund new improvements.

The same funding mechanisms also have the potential to make system use more efficient by the incentives and disincentives they create to influence the choices drivers make about road use. For example, about two-thirds of Portland area drivers commute to work in a vehicle by themselves, contributing significantly to congestion. Time or location fees might encourage them to choose other times or routes, to consolidate trips, or to car pool as a means of reducing or offsetting fee costs.

Vision for a an Efficient Transportation System

The Oregon Business Plan endorses the strategies recommended in the Oregon Transportation Plan:

- ***Take care of the system we have.*** The replacement value of our highway system alone is \$27 billion. Maintaining our roads, rails, docks, airports, public transit, and related equipment on a timely basis keeps them safely and reliably in service, reduces congestion by improving efficient use of capacity, and avoids the higher expense of deferred maintenance and replacement. In road surface preservation, for instance, every dollar invested on a timely basis saves \$4 to \$5 later if the surface is allowed to deteriorate.
 - ***Make the existing system work better, in particular by optimizing capacity and safety.*** Oregon cannot simply build its way out of congestion. The problem has grown too rapidly and is too complex for any one solution or approach. However, a great deal can be done to make more efficient use of the state's existing transportation. Rapidly removing crashed or stalled vehicles from travel lanes.
 - Timing traffic signals so that more drivers see green lights and coordinating freeway ramp signals and local street signals to reduce backups to local streets.
 - Providing better information about traffic flow and about alternative routes.
 - Diversifying development patterns. Land uses and project designs should take advantage of existing transportation infrastructure or reduce pressure on infrastructure already stretched past capacity.
- ***Invest strategically in new capacity.*** There are cases in which better use of existing capacity will be helpful but not sufficient to meet demand. In such cases, Oregon should make select investment in additional capacity, striving as much as possible to consider such alternatives as mass transit, either as an add-on or as a substitute for highway capacity. Alternatives to relieve congestion at the I-5 Columbia Crossing include replacing the existing bridges, adding an additional bridge, mixing mass transit (rail and bus) in both of those alternatives, or building nothing and relying on new policies to alter bridge use and make existing capacity sufficient.

Whether congestion relief is achieved through more efficient use of existing capacity, or through the select addition of capacity, it can have significant impact in reducing

greenhouse gas by improving traffic flow at optimum speeds and reducing the fuel inefficiencies caused by idling and stop-and-go movement*.

- ***Put reliable funding mechanisms in place that pay for such investments.*** Oregon’s current transportation funding system is a dead end. Left in place, it will pay for less and less as demand increases and the costs of maintenance and new construction rise with inflation. As a short-term measure, Oregon should increase existing revenue sources such as registration fees, the gas tax, and weight mile fees with the idea of phasing out the gas tax in favor of more adequate funding mechanisms of the kind suggested above.
- ***Better integrate transportation with our goals in land use, economic development, and sustainability.*** Many tools exist to achieve economic goals while reducing emissions, including optimization system efficiency, mode-shifting to less carbon-intensive forms of transportation, and better integrating land-use and community planning with transportation planning.

On the last point, we can’t stress enough the importance of re-examining long-range land-use planning efforts, such as Metro’s “New Look” and Oregon’s “Big Look.” In a later section this policy guide contains an initiative proposal to reactivate the Big Look Task Force in order to address land-use/transportation integration along with other key land-use planning challenges. Where new land is put into use or old land is recycled, land uses and project designs should take advantage of existing transportation infrastructure or they should reduce pressure on infrastructure already stretched past capacity.

Each of these options – optimization, mode-shifting, and integration of land-use and transportation – must be done with economic, community, and environmental, goals in mind. Globalization is driving the expected 50 to 80 percent increases in freight volume over the next 20 years. The movement of this freight is key to sustaining long-term growth of jobs in Oregon and the long-term health of our communities. We must find solutions that allow for the free-flow of goods throughout the state while minimizing environmental impacts and preserving the quality of community life.

- ***Better integrate the transportation system across jurisdictions, ownerships, and modes.*** Highways, roads, streets, and multimodal facilities often lie across multiple jurisdictions, all of which have some responsibility for operation, maintenance, and improvement of their piece of the overall system. Unfortunately, governance, operation, and upkeep of these pieces are often not well planned or coordinated, to the detriment of the system as a whole. A design or capacity change made in one jurisdiction or mode, can affect system use and efficiency in another. So can operation, from signal sequencing to maintenance. SB 566, sponsored by Sen. Rick Metzger, passed in the 2007 Legislature recognizes the specific challenges facing local transportation systems in coordinating and funding vital services. The bill calls for an interim study by a joint committee on transportation of funding options, including the possible creation of transportation utility districts to raise funds for regional needs. This work may generate promising new approaches to coordination and financing.

* From the *Oregon Strategy for Greenhouse Gas Reductions*, page 88, 2004: “Truck and auto travel is most energy efficiency when vehicles travel in the 40 to 50 mph range without frequent stops and starts. Traffic flow can be optimized through targeted infrastructure investments, traffic signal re-timing, value pricing and investments in alternatives to the automobile.”

In regard to the choices outlined immediately above, specific decisions are not as appropriate or important at this stage as a commitment for Oregon to use its time in 2008 to set its priorities, identify the choices it favors, and marshal its case for the 2009 Oregon legislative and U.S. congressional sessions. That will be the work of 2008 leading to the next Leadership Summit.

Agenda for 2008 and Beyond

Oregon should pursue transportation investments simultaneously along three tracks.

- ***Track 1. Immediately take care of highway system maintenance and high-priority modernization and capacity enhancements.*** Over the next 12 months, all Oregon stakeholders – business, state and local governments, and advocacy groups – should prepare an annual transportation funding package for the 2009 legislative session that identifies critically needed infrastructure projects, along with cost-benefit analyses that consider, among other things, return on investment, statewide economic benefit, and reduction in capacity and safety problems. Oregon should fund this investment with an increase in the gas tax, with vehicle registration fees, or both, with commensurate increases in the weight-mile tax. The Oregon Business Plan proposal submitted in 2007 (appended to the end of this section) provides a template for shaping that package. That proposal recommended a \$350 million annual investment, but that should be updated for inflation and cost increases,
- ***Track 2. Step up attention to and resolution of the bottleneck at Interstate 5 where it crosses the Columbia River.*** Extreme and growing congestion at the crossing not only hurts adjacent regional and state economies, it also impedes critical interstate freight movement north and south, east and west.
- ***Track 3. Launch a more fundamental, far-reaching review of transportation delivery and financing,*** probably by a broadly representative blue-ribbon task force. This task force should work with both local and state jurisdictions on studies and pilot projects to inform panel deliberations and proposals for the 2009 Legislature and beyond. It should consider:
 - The adequacy of road, rail, marine, and air transportation systems, their integration with one another, their relation to land use and urban design, and their role in helping Oregon achieve its economic, social, and environmental goals. The portion of this examination dealing with land use should be carried out with regard to the deliberations of a reactivated Big Look task force.
 - The roles and responsibilities of city, county, state, and federal jurisdictions in transportation system upkeep, operation, and coordination.
 - A new public transportation financing system to replace or supplement current revenue sources. This should incorporate demand management as a strategy for reducing congestion and system cost.
- ***Federal Agenda.*** Work with Oregon's Congressional delegation to support strategic and sustained federal investments in transportation infrastructure in Oregon, as well as policies that promote transportation efficiencies. In particular:
 - *Stabilize the Federal Highway Trust Fund.* Congress should take action in the next two years to resolve both our short- and long-term funding problems. A revenue boost equivalent to a 3- to 4-cent gas tax increase would allow Congress to meet

SAFETEA-LU's funding commitments in 2009 and provide for continued growth in highway spending in the next reauthorization.

- *Re-authorize the timber safety net* or other means to help counties find ways to make up for lost revenue. This issue, explored more fully in the Public Finance section of this document, has a large impact on county roads as well as schools and general government operation. The one-year extension of the Secure Rural Schools and Community Self-Determination Act (PL 106-393), recently expired. Counties with large federal land holdings (and constricted tax bases) are once again vulnerable to severe revenue shortfalls unless Congress works out a long-term solution. This is an issue that everyone in the state must work to address. Otherwise, the effects will be felt throughout Oregon's economy.
- *Maintain timely phased funding and stay on schedule in deepening the Columbia River channel.*
- *Pursue needed intermediate repair and long-term replacement of the Columbia River jetty.*
- *Work with state-level interests to resolve problems with regional freight rail competition and service.*

What You Can Do

Review policies and consider opportunities and incentives to work with your employees to reduce the number of single-occupancy vehicle trips and vehicle miles travelled. Roughly 73 percent of commuters travel alone to and from work in Oregon. There are many resources available to employers and employees through government and nonprofit entities to help reduce the number of single occupancy vehicle trips (SOVs) and vehicle miles traveled (VMTs).

Transportation Initiative Leaders

Steve Clark, Community Newspapers
Patrick Reiten, Pacific Power

Background Resources

- Oregon's Transportation System: Critical Needs.* Oregon Department of Transportation (December 2006)
Oregon Transportation Plan
Oregon County Roads Needs Report (November 2006)
"Strengthening Our Investment in Roads and Bridges" (PDF) -- Oregon Business Plan White Paper (January 2003)
- Oregon Transportation Investment Act (OTIA)
 - Oregon Dept. of Transportation Innovative Partnerships Program
 - Oregon Rail Plan
 - I-5 Rail Capacity Study
- Columbia River Channel Coalition (www.channeldeepening.com)
Oregon Department of Aviation (www.aviation.state.or.us)
- Oregon Aviation Plan
- Port of Portland
- "Freight Rail and the Oregon Economy"
 - "Marine Terminals Master Plan"
 - *Cost of Congestion to the Economy of the Portland Region*
 - *The Cost of Highway Limitations and Traffic Delay to Oregon's Economy*
 - "Freight Rail Bottom Line Report"
 - "Freight Capacity for the 21st Century"