Transportation Policy Agenda:
Meeting Oregon’s Transportation Challenges and Opportunities

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Vision

A world-class, constantly innovating, multimodal transportation system that gets people, goods, and services where they need to go safely, affordably, and delivering economic competitiveness in a manner that is consistent with Oregon’s climate goals.

Executive Summary

How people, goods, and services get from place to place in Oregon is undergoing the biggest technological transformation in a century. Oregon is an infrastructure leader, and must remain at the leading edge of innovation to help people get to their jobs, get their kids to school, and transport goods and services to market in a timely and safe manner. Vehicles on our roads are the single largest source of greenhouse gases and a contributor of air pollutants. These emissions must be addressed over the coming decade.
In this period of transformation, the Oregon Department of Transportation (ODOT), and the transportation sector as a whole, must continue its evolution from a traditional focus on a network of roads and highways to an integrated multimodal system. A system that moves our families and our freight, builds communities, and provides a critical foundation for a robust economy. ODOT must continue to lead with other agencies to promote and invest in all modes of transportation. The transportation system of the future must leverage new and varying types of housing development and evolving freight demands in rural and urban communities across the state.

This needs to be done while significantly reducing greenhouse gas emissions consistent with Oregon’s climate emission goals, as well as reducing other pollutants. In addition, transportation options, particularly transit, are an important path out of poverty for underserved populations who are forced to live considerable distances from employment opportunities. Increasing opportunities for active transportation options will improve the health of Oregonians and decrease congestion.
The Governor’s strategies for achieving this vision are:

1. Deliver on-time, on-budget implementation of the $5.3 billion statewide transportation package, including construction and maintenance of critical roads and bridges, and a major new statewide transit program.

2. Tackle congestion with multimodal solutions on existing facilities and strategic additions to capacity.

3. Support broad innovation in the transportation sector.

4. Put 50,000 electric vehicles on Oregon roads by 2020.

5. Maintain a strong Oregon trucking industry while addressing the health impacts of diesel emissions.

6. Utilize aviation to support rural Oregon and resiliency.

7. Bring high speed rail to the Pacific Northwest.
In 2015, Governor Brown appointed a Transportation Vision Panel made up of elected officials, civic and business leaders, stakeholders, and community members from across Oregon. The panel traveled the state to visit with residents and learn about transportation. The final report gave policymakers an overarching view of the transportation needs in Oregon, looking at all regions and across all modes. It outlined the challenges and opportunities facing Oregon’s transportation system, identified key priorities for action, and laid out a vision for how the transportation system can support the state’s economy and quality of life. The work of the Vision Panel identified key statewide priorities—public transportation investments, congestion relief, and preservation of our transportation system. The Vision Panel laid the groundwork for the Legislature’s work on the transportation funding package, which embodied the key priorities that came out of the Vision Panel.

**Growing Population Pressures**

The State of Oregon is experiencing record levels of employment and population growth that has presented both opportunities and challenges to the transportation sector. With an anticipated 25% increase in population and 60% increase in freight volume by 2035\(^1\), how Oregon’s transportation systems are planned now will profoundly impact our state’s livability, economic success, public health, and preservation of our treasured natural environment.

Today, mobility challenges are being experienced throughout Oregon. The lack of transit connections in our rural communities are negatively impacting the bottom line of Oregon families. Many people in smaller communities have few choices when deciding how to travel to work, school, medical appointments, or other needed trips. Having adequate public transportation options can save a family up to $10,000 per family annually.\(^2\)

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2. American Public Transportation Association, [https://www.apta.com/mmediacenter/ptbenefits/Pages/default.aspx](https://www.apta.com/mmediacenter/ptbenefits/Pages/default.aspx)
“The transportation sector is a significant contributor to air pollution in the state... accounting for nearly 40% of total statewide emissions of greenhouse gases in 2016”

Even with enhanced transit options, the continually increasing levels of congestion in the Portland Region are having a ripple effect on the rest of the state. With the 12th highest levels of congestion in the United States\(^3\), Oregon companies are being put at a competitive disadvantage when attempting to export goods produced in Oregon. This affects the economic well-being of every Oregon family, from those that live in our largest cities to our smallest towns.

**Pollution Impacts**

The transportation sector is a significant contributor to air pollution in the state, including both air toxins such as lead and heavy metals, as well as greenhouse gases. Transportation sector emissions accounted for nearly 40% of total statewide emissions of greenhouse gases in 2016.\(^4\)

Much of Oregon’s freight movement and construction is powered by diesel engines. Diesel is the dominant fuel used by the commercial transportation sector and powers most construction equipment. People

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rely on diesel engines for good reason: they offer fuel economy, power, and durability. Newer standards imposed by the Environmental Protection Agency in 2007 drastically reduced the particulate emissions in heavy-duty highway diesel engines and in 2010, standards further reduced nitric oxide and nitrogen oxide. Newer diesel engines are heading in the right direction for public health.

Unfortunately, older diesel engines emit large amounts of nitrogen oxides, particulate matter, and toxic air pollutants. Diesel engine exhaust is a known human carcinogen and increases the risk of heart and lung disease. In addition to the health impacts, diesel engines are the largest source in North America of black carbon, a potent climate forcing agent. Black carbon warms the atmosphere and has immediate effects like accelerating snow melt in the Cascades.

**Dramatic technological change: Shared, Electric, and Autonomous**

New transportation technology is rapidly changing how many Oregonians get around. Ride-sharing services like ZipCar and ReachNow provide wheels on demand to drivers, while ride-hailing apps like Uber and Lyft have made getting a ride as easy as touching a cell phone screen. Electric vehicles continue to grow in market share as manufacturers offer a broader range of vehicles and body styles, and now buses and trucks are beginning to move toward an electric platform. Autonomous vehicles are currently under testing in a number of states, including Oregon, and could offer entirely new forms of mobility.

In the future, these trends might strengthen and reinforce each other, leading to shared, electric, and autonomous vehicles that maximize benefits to the transportation system, including improving safety, mobility, and affordability while reducing pollution. Vehicle sharing has the potential to reduce trips and congestion. Automation can improve
safety, provide convenience, and bring down the cost of transportation. Electrification will dramatically lessen the environmental impact of vehicle travel. Oregon is preparing for these changes, working to expand access to electric vehicle charging and convening the Task Force on Autonomous Vehicles in 2018. This will lay the foundation for driverless vehicles in the state, prioritizing safety and preparing to assist the workforce that could be displaced by changing transportation technologies.

**Oregon’s Transportation Industry**

Oregon is home to a vibrant transportation industry that provides thousands of family-wage jobs in areas like trucking, manufacturing, aviation, and increasingly in software.

Daimler Trucks North America is headquartered in Portland and has invested in the High Desert Proving Grounds, a major test track facility in Madras where they run vehicles through a full spectrum of road and weather conditions.

Oregon’s pioneering spirit has also put it in a leading position to capitalize on new mobility opportunities. Daimler founded moovel Group a new mobility company based in Portland that is working to reinvent the concept of urban mobility. The company offers new ways to connect the urban mobility ecosystem with products like the moovel app, which allows people to search, book, and pay for rides with a single app and moovel transit, which provides access to public transit with mobile ticketing. Similarly, Jaguar Land Rover has established Innovation Labs in Portland and partners with companies in the automotive technology ecosystem.
Our Current System

Oregon’s transportation system is made up of a diverse set of statewide agencies, regional districts, and local cities and counties. The Governor appoints the members of the Oregon Transportation Commission, which sets statewide transportation policy and oversees the Oregon Department of Transportation (ODOT). The Governor also appoints the boards of the three largest urban transit districts: TriMet, Lane Transit District, and Salem-Keizer Transit, as well as the Port of Portland. Other statewide agencies play important roles in transportation: the Department of Aviation oversees aviation and runs a number of public airports; the Department of Environmental Quality works to reduce pollution from transportation fuels; and the Department of Land Conservation and Development maintains a comprehensive land use and transportation planning system to help communities and citizens plan for, protect, and improve the built and natural systems that provide a high quality of life.

Oregon’s transportation system relies on a variety of state funding sources. The State Highway Fund, a shared resource between the Oregon Department of Transportation, cities, and counties collects resources from three main sources:

- Taxes on motor fuels, including gas tax and diesel tax.
- Taxes on heavy trucks, including the weight mile tax and truck registrations.
- Driver and vehicle fees, including licenses and vehicle title and registration.

Transit districts have traditionally raised most of the funding needed for service at the local level, with little state support. TriMet and Lane Transit District both rely on a regional employer payroll tax, and other districts rely on local property taxes and other funding. Keep Oregon Moving (House Bill 2017), passed by the 2017 legislature created a one-tenth of one percent employee payroll tax to provide public transportation service in both rural and urban communities, the state’s first major investment in public transportation.
Recent Accomplishments

Historic Transportation Package

In 2017, Governor Brown signed into law House Bill 2017 which provides historic levels of investment that will enhance our transportation and transit infrastructure to mobilize people and freight, and to Keep Oregon Moving and prosperous.

- Transparency and accountability: ODOT and local governments are required to show the public how tax dollars are being spent in order to demonstrate the value of investments.

- Congestion relief: Bottleneck relief projects, combined with better transportation options and management of the system, will help unlock the congestion that grips Portland.

- Multimodal options: A major infusion in transit and investments in bikeways and walkways will help people get around and improve the health of Oregonians.

- Preservation: Investments in roads and bridges will keep the system in good repair and make it more resilient to a major earthquake.

- Freight: Multimodal projects in the Willamette Valley and Treasure Valley will help agricultural shippers get their goods to market.

- Clean transportation: Electric vehicle incentives will help get zero-emission vehicles on the road, and the Clean Fuels Program will reduce the carbon intensity of transportation fuels.
Taking Steps to Promote Electric Vehicles: 50,000 EVs by 2020

• Executive Order: In 2017, Governor Brown signed Executive Order 17-21 that directed state agencies to provide the infrastructure and incentives needed to ignite the adoption of zero emission vehicles and their availability for all Oregonians.

• Leadership in electric vehicle infrastructure: Governor Brown has established Oregon as a leader in EV charging infrastructure, deploying a network of 44 DC fast chargers on important travel corridors around the state, allowing EV travel along the Oregon Coast, into Central Oregon, and up and down the I-5 corridor. Altogether, this “West Coast Electric Highway” has fueled more than 100,000 charging sessions and powered more than 3 million miles of all-electric driving since it was installed.

• Making electric vehicles more affordable: Beginning in 2018, the Oregon Department of Environmental Quality has administered a rebate program that offers Oregon drivers up to $5,000 towards the purchase or lease of a new EV, depending on eligibility.

“In 2017, Governor Brown signed into law HB 2017 which provides historic levels of investment that will enhance our transportation and transit infrastructure”


Preparing for Autonomous Vehicles

Signing into law House Bill 4063 in 2018, Governor Brown directed the formation of a Task Force on Automated Vehicles and report to the legislature with legislative recommendations in September 2018. Initially, the Task Force on Autonomous Vehicles will look into how AVs intersect with issues including licensing and registration, insurance and liability, law enforcement and accident reporting, and cybersecurity. In 2019, the task force will be addressing longer term issues around deployment and safety.
The Governor’s Strategy:

**ONE:** Deliver on-time, on-budget implementation of the $5.3 billion statewide transportation package, including construction and maintenance of critical roads and bridges statewide and implementation of a major new statewide transit program

**TWO:** Tackle congestion with multimodal solutions on existing facilities and strategic additions to capacity

**THREE:** Support broad innovation in the transportation sector

**FOUR:** Put 50,000 electric vehicles on Oregon roads by 2020

**FIVE:** Maintain a strong Oregon trucking industry while addressing the health impacts of diesel emissions

**SIX:** Utilize aviation to support rural Oregon and resiliency

**SEVEN:** Bring high speed rail to the Pacific Northwest
ONE: Deliver on-time, on-budget implementation of the $5.3 billion statewide transportation package

Keep Oregon Moving (House Bill 2017) will provide a historic investment in all modes of Oregon’s transportation system. Governor Brown is committed to ensuring that the Oregon Department of Transportation (ODOT) delivers these projects and programs on time and on budget with new accountability and transparency measures included to make sure the public can see the return on their investment. Governor Brown will work with the Oregon Transportation Commission and hold it accountable to ensure ODOT delivers these investments effectively and efficiently.

Complete aggressive project schedule for roads and bridges
House Bill 2017 expanded ODOT’s construction program and set timelines for important projects, including bridge and pavement projects to improve the resilience and performance of our roads and bridges.

Expand transit options
To meet the transit needs of Oregonians in both urban and rural areas, especially low-income communities, $200 million will be invested over the next three years to improve transit systems with a focus on expanding service. This is the first sustainable funding for public transportation in the rural areas of Oregon.

Safe Routes to School
Safe Routes to School creates healthier communities, benefits children’s ability to learn, and improves family health. Over the next three years the Governor will oversee ODOT’s $30 million for safe routes to schools across the state.

“Governor Brown is committed to delivering the Transportation Package on time and on budget”

**Congestion relief**
Congestion relief on our roads will be provided with the investment of 43 highway infrastructure projects the Governor has directed to begin this year and continuing through 2025. These include capacity improvements to I-5 at the Rose Quarter, improvements to I-205, and new lanes on Highway 217. Investments in transit, active transportation, and better management of the system will also provide congestion relief.

**Keep freight moving to support rural Oregon**
Governor Brown has directed the Oregon Transportation Commission to authorize construction through Connect Oregon funding in House Bill 2017 of two intermodal facilities in the Mid-Willamette Valley and Treasure Valley in Eastern Oregon that will use rail to avoid bottlenecks and help farmers and other Oregon businesses get their goods to market.
TWO: Tackle Portland metro region congestion with multimodal solutions

The Governor’s Transportation Vision Panel heard all across the state that congestion in the Portland metro region is hurting businesses across Oregon that move products from farms, forests, and factories through Portland to markets across the country and world.

Bottleneck relief projects
ODOT already has projects under construction that will make traffic flow better on I-5 and I-205, and Keep Oregon Moving funded capacity improvements on I-5 at the Rose Quarter and on Highway 217. Governor Brown will hold ODOT and the Oregon Transportation Commission accountable for delivering these projects on time and on budget.

Multimodal transportation options for people and freight
Reducing congestion and improving mobility in the 21st century will require multimodal solutions. Keep Oregon Moving will provide the largest increase in funding for public transportation in the state’s history, as well as historic increases in funding for bikeways and walkways. Freight rail projects across the state funded by Connect Oregon will help move more goods by rail. Governor Brown will ensure these investments, particularly the Willamette and Treasure Valley multimodal facilities, are implemented effectively and quickly.

Moving forward on the Interstate Bridge
The Interstate 5 bridge over the Columbia River is now over 100 years old, and its age is showing. The bridge is a seismic risk, a freight bottleneck, a barrier to effective public transportation, and a source of some of the worst gridlock in the nation. As the region’s population and economy continue to grow, so does traffic across the bridge, causing congestion impacting more and more Oregonians—even
those who don’t regularly use the bridge. If it is not replaced, Oregon and Washington face hundreds of millions of dollars of repair and operations costs to keep it open to traffic.

Leaders in Southwest Washington have expressed interest in coming to the table to restart discussions about the future of the Interstate Bridge. Oregon business and elected leaders look forward to future discussions with bi-state partners on how to move forward on this critical project, which must include a light rail extension.

THREE: Support broad innovation in the transportation sector

Smarter transportation planning
The newly adopted Statewide Transportation Strategy identifies a variety of effective greenhouse gas emission reduction strategies in transportation systems, vehicle and fuel technologies, and urban land use patterns. We must implement these in order to preserve Oregon’s natural environment, build livable communities, and significantly reduce the transportation system’s carbon footprint.

The Governor will ensure that ODOT and the Department of Land Conservation and Development will work together to assist Oregon’s major metropolitan areas plan their transportation systems in a way that reduces greenhouse gas emissions from light-duty vehicles, as well other adopted goals. This will include an aggressive push for higher levels of housing density in transit oriented developments, which will preserve farmland and decrease transportation costs.

SW Corridor light rail in Portland metro region
More people are choosing to live and work in the Southwest Corridor from Tualatin to Southwest Portland, with more than 70,000 new residents and 65,000 new jobs expected in the area by 2035. This
We must implement a variety of greenhouse gas reduction strategies to preserve Oregon’s natural environment, build livable communities, and significantly reduce the transportation system’s carbon footprint.

will exacerbate a corridor transit system already overburdened and experiencing high levels of congestion. Local leaders studying the best way to address these challenges have recommended building light rail to ensure residents, commuters, and visitors can get around safely and efficiently.

The proposed route would travel along Southwest Barbur Boulevard to Tigard and then along local roads to Bridgeport Village. This project will include station and area planning efforts that will ensure this transportation investment minimizes impacts and maximizes the production of affordable and market rate housing. It will also leverage over a billion dollars of investment from the federal government.

Greenhill Transload
The state must take the next step to expand this transload facility in Lane County from lumber only to commodities that connect the Coos Bay Rail Link to the valley, providing economic development opportunities in Coos Bay and decreasing congestion. Oregon also needs to explore the feasibility of using the Coos Bay Rail Link as a passenger transit connection between Eugene and communities to the west.
Transportation Policy Agenda: STRATEGY

Autonomous Vehicle Task Force

House Bill 4063 created a Task Force on Autonomous Vehicles to develop recommendations for legislation regarding testing first, and then the deployment, of autonomous vehicles on highways. The task force submitted a report to the Legislature in September that included a recommendation for a permitting process for testing autonomous vehicles in Oregon. The proposed permitting process would collect certain information about vehicles and drivers involved in testing and set minimum insurance coverage requirements for entities testing autonomous vehicles. This report also recommends the requirement of safety assurances regarding autonomous driving systems, and direct testing entities to engage with law enforcement and first responders to promote safe testing.

Innovation in funding

The Governor supports the continuation and expansion of the nation’s first voluntary road usage charge program. Using a mobile application, OReGO is designed for Oregonians to pay by the mile instead of by the gallon, establishing a fair and sustainable way to fund road maintenance, preservation, and improvements in the future.9

FOUR: Put 50,000 electric vehicles on Oregon roads by 2020

As electric vehicles (EVs) have entered the mainstream over the past several years, Oregon has consistently been a national leader in EV market share, boasting some of the highest rates of EV sales in the country.

There are currently nearly 18,000 electric vehicles in Oregon, and in November 2017, Governor Brown established an ambitious target to reach 50,000 EVs by the end of 2020.10 To reach this goal, Governor Brown issued Executive Order 17-21, outlining a range of actions the state will take to provide additional support to this growing market for clean cars. The Executive Order directs more EVs in public fleets, establishes recognition programs for EV champions, helps school and transit districts deploy clean buses, and provides support to many other

9. OReGO: Oregon’s Road Usage Charge Program, https://www.oregon.gov/ODOT/Programs/Pages/OReGO.aspx
state programs around low-carbon transportation. And House Bill 2017 included one of the nation’s leading rebate programs to incentivize EV purchases.

Governor Brown is committed to seeking out innovative ways to reduce transportation emissions. The state will continue to be a national leader in EVs through successful implementation of the components of Executive Order 17-21 and successful marketing of the EV rebate. Electric vehicles may play the biggest role in the near term, but hydrogen fuel cell vehicles and vehicles powered by renewable natural gas and biofuels are also an important part of the Governor’s vision for a low-carbon transportation system.

**FIVE: Maintain a strong Oregon trucking industry while addressing the health impacts of diesel emissions**

The trucking industry is vital to Oregon’s economy, typically responsible for 74% of all freight tonnage moved in, out, and through our state. Because of federal regulations, newer diesel engines used by heavy-duty trucks are clean burning and emit 90-95% less pollution than older engines. There is a cost to replacing older engines with newer, lower emission engines and Oregon is already the most expensive state in the country to operate a commercial vehicle.

The Governor will pursue the following approaches to incentivize the purchase of new engines ensuring that Oregonians will realize the benefits of newer, cleaner technologies:

- **Establish tax credits for replacing and recycling older engines**
  Tax credits can incentivize owners to replace older diesel-powered engines. Tying the tax credit to the recycling of the older equipment prevents any additional diesel pollution and can be crafted to target smaller, Oregon-based companies that historically have not applied for similar credits. Tax credits can be tiered to the age, size, and type of equipment being replaced.
• **Ensure clean equipment is used in public works projects**
  Large public works projects can lead to high levels of diesel pollution in a concentrated area. Incorporating clean diesel specifications or performance standards in public works contracts can reduce pollution and mitigate the impacts on those who live or work near the project. The use of clean diesel in public works projects can be required through contract specification or incentivized by offering preference points in the bidding process. This policy should be crafted to not further disadvantage minority- and women-owned businesses.

• **Transit Districts non-diesel fleet conversions**
  The state will support transition plans for the large transit districts conversion to a non-diesel fleet and other emission reduction efforts.

• **Establish a voluntary clean diesel certification**
  Clean diesel certification provides the dual benefit of recognizing forward-thinking fleet owners who operate clean diesel equipment and eases implementation of clean diesel contracting standards. Certified fleets will stand ready to comply with clean diesel standards being considered by local contracting agencies.

• **Investing in clean diesel**
  Utilize Volkswagen settlement funds to increase the amount and types of financial assistance the state can provide to equipment owners looking to upgrade their fleets.
**SIX: Utilize aviation to support rural Oregon and resiliency**

Oregon’s airport infrastructure of 97 public use airports is comprised of 28 state-owned and operated and 69 public use airports owned and operated by cities, counties, port authorities, and others. The state’s Department of Aviation oversees policy regulations, interoperability, and safety at all airports.

The Statewide System Plan of Airports will play a critical role in the event of a natural disaster, and we must ensure the system is well prepared. House Bill 2075 (2015) created the Aviation System Action Program (ASAP) which provides approximately $3.5 million in funding per calendar year as a result of an aviation fuel tax increase. The current ASAP program sunsets in 2022 and we must extend the program to maintain the successful 10 to 1 match for FAA funds that ASAP funds have been achieving. The ASAP program funding is comprised of:

- **Critical Oregon Airport Relief (COAR):** 50% of ASAP funds are used for grants for FAA grant match, emergency preparedness and economic development.
- **Rural Oregon Aviation Relief (ROAR):** 25% is used to assist commercial air service to rural Oregon.
- **State Owned Airports Reserve (SOAR):** 25% is used for infrastructure and safety improvements at the 28 state owned airports, of which 12 are also federally funded under the National Plan of Integrated Airport Systems (NPIAS).

**Supporting the unmanned aerial vehicle industry**

Oregon has three test range areas approved by the FAA in Pendleton, Tillamook, and Warm Springs. The Governor’s office works to promote these facilities and the economic development opportunities and provide support in connecting them with educational opportunities, such as the program at Oregon State University.
Resiliency
Maintain our resiliency commitment in the Oregon Resiliency Plan: the full integration of aviation sector into resiliency planning for near term need, such as firefighting, as well as long term need, for severe events such as Cascadia, along with funding to complete projects that prepare sites and maintain readiness.

Aviation workforce
Promote and coordinate opportunities in aviation education that will maintain a strong pipeline of aviation sector workers: the next generations of pilots, mechanics, and other industry professionals need assistance with opportunity and cost sharing in order to be ready to operate and innovate for aviation businesses. Without these high-skill, high-wage jobs being filled, the aviation industry in Oregon may end up in contraction while it is expanding in other areas of the country.
SEVEN: Bring high speed rail to the Pacific Northwest

Due to its geography, infrastructure constraints, and population growth, travel within the Pacific Northwest has become increasingly more difficult and time-consuming, adversely affecting the economy and contributing to air pollution. Governor Brown supports bringing high speed rail to the region, connecting Vancouver, British Columbia to Portland and south through the Willamette Valley to Eugene.

The Governor has directed ODOT to participate with partners from the State of Washington, British Columbia and Microsoft in finalizing a business case study that refines options for public and private investment in high speed rail for the region. In addition, over the next year the state will be overseeing plans for improving the Eugene-Portland Passenger Rail line, including engaging a private sector analysis that identifies opportunities for housing development adjacent to existing passenger rail stations.

These rail connections will decrease congestion on Interstate 5 and provide added transportation capacity for the upcoming World Track in Field Championships in Eugene in 2021 and any future large scale events.