



# 7 Implementation and Investment Strategies

# 7.1 Implementation and Investment Strategies Overview

The OTP is the highest-level policy document for transportation planning in the State of Oregon. Implementation of this plan affects statewide and local plans, as well as influences programs, investments, and how the transportation system is managed. The OTP outcomes are built on three primary means of implementation: Policy, Programs, and Investments.



Oregonians must work together to develop and fund a transportation system that meets future challenges the state will face in the coming decades. The OTP vision is for an equitable, climate-friendly and safe transportation system that supports our communities, our economy, and our environment. The OTP lays out the framework for making the hard choices through the vision, goals, policies and strategies.

The OTP employed exploratory scenario planning to better understand how effectively the investment packages address the desired policy outcomes defined in Chapter 6. This Implementation and Investment Strategies chapter summarizes roles and responsibilities, key coordination activities, transportation planning consistency actions that implement the OTP, and investment and policy outcome scenarios.

#### 7.2 Cross-Sector Coordination

As the OTP addresses the interconnected transportation network across Oregon, it is critical for transportation agencies and other entities to coordinate across sectors to achieve the desired outcomes in this OTP. Below is a list of the key integration points across state agencies:

- Land Use Transportation Coordination The integration of land use and transportation is critical to achieving reductions in GHG emissions and effective transportation options. Understanding the role of the Department of Land Conservation and Development (LCDC) and Oregon's county and city governments, which are charged with implementing our statewide planning goals through comprehensive plans and zoning and other implementing regulations, are important in understanding the relationship between land use planning and transportation investments. As Department of Land Conservation and Development works with Oregon cities and counties on the land use needs of the public, communities, and the state, it provides planning guidance and technical assistance to help local and regional entities plan for their future. Increased mix of uses and density produces higher transit and bike use, reduced carbon emissions, and provides equitable access to the transportation system for users of all income levels. Promoting affordable housing options near transit routes in urban areas is an important component of providing an equitable transportation system. Similarly, Oregon businesses and industry require a reliable system to continue provide job opportunities and wealth creation across the state. This includes facilitating the movement of goods as well as providing accessibility to employment opportunities for all Oregonians. Strengthening this transportation-land use connection will require significant coordination between the multiple government agencies from the state, regional and local levels to promote strong ties between land use and transportation planning and encourage collaboration between private developers and governmental agencies.
- Energy Transportation Coordination As transportation continues to electrify, the source of electricity plays a bigger role in reducing the transportation sector's climate impact. At the state level, this will require regular coordination between the Department of Energy and ODOT to identify and utilize sustainable energy sources for zero emissions freight, transit, and individual vehicles. This coordination must also continue at the local and regional level through cooperation among public utility providers, business organizations, and local governments, and opportunities will likely vary across Oregon and be dependent on the extent to which climate-friendly energy sources are available.

- Resiliency and Climate Transportation Coordination Passenger vehicle emissions are one of the major contributors to GHG globally. Meeting climate goals will require changes to transportation technologies and driving behavior. Additionally, climate change and resiliency are changing the very needs of infrastructure, with added emphasis on the emergency access needed to combat forest fires and maintain the movement of people and goods, the frequency of landslides, major flooding events, culvert washouts, and bridge repairs. Partnerships among the Department of State Lands, Department of Forestry, Department of Environmental Quality, and ODOT will help address the impacts of climate change in a unified manner at the state level but must also include regional disaster preparedness organizations, cities and counties, emergency service providers and civic organizations to properly coordinate the highly integrated nature of the transportation system.
- Economic and Tourism Transportation Coordination Transportation infrastructure has a major role in supporting business owners, employees, and customers. This includes all modes in all areas of Oregon, as the economy requires an inter-modal connected system to serve the many needs of Oregonians and Oregon businesses, including the movement of freight and commuter and customer access. Oregon's economy also relies on connecting visitors to the state's many attractions. This will require regular coordination between Travel Oregon, Business Oregon, and ODOT to maximize economic potential and wealth creation while providing a positive experience for visitors, and should also include shipper and carrier companies, major businesses and recreational organizations that depend on the transportation system.



# 7.3 Coordinated Statewide Transportation Planning

#### 7.3.1 Statewide Modal Plans

As the long-range transportation system plan for the state, the OTP functions as the "umbrella plan" over the statewide mode and topic plans such as the Oregon Bicycle and Pedestrian Plan, the Oregon Public Transportation Plan, and the Oregon Transportation Safety Action Plan. The statewide mode and topic plans refine and apply OTP policy to specific modes or topics and guide state, regional, and local investment decisions for the parts of the transportation system that they address. Many statewide modal and topic plans have been updated in recent years. ODOT will reevaluate the most effective way to incorporate OTP policies as future modal and topic plans are considered for updates. Similarly, ODOT will update these plans as federal requirements necessitate amendments. The development of a statewide modal plan must provide opportunities for public engagement in accordance with the State Agency Coordination Program and federal requirements.





#### 7.3.2 Facility Plans

Facility plans provide information for individual transportation facilities including identification of needs, an overall plan for improving the system, and policies for operating the facility. Facility plans include specific area refinement plans, interchange area management plans, and corridor plans. The Oregon Transportation Commission adopts facility plans for the state highway system into the Oregon Highway Plan. ODOT facility plans are expected to implement OTP and applicable modal/topic plan goals, policies, implementation, and broad investment scenarios. Facility plan development must provide opportunities for public engagement in accordance with the State Agency Coordination Program and federal requirements.

#### 7.3.3 Regional and Local Transportation System Plans

Oregon Administrative Rule 660-012, known as the Transportation Planning Rule, defines the requirements for regional and local transportation system plans. The Department of Land Conservation and Development develops the Transportation Planning Rule and recently issued rules to address statewide mandates for reducing greenhouse gas emissions. This set of rules, known as the Climate Friendly and Equitable Communities Program, outline

Topic Plans
(eg., freight)

Local / Regional
Plans
(eg., transit plans)

Priority Program
Projects

Funding
Identified

the requirements for major transportation system plan updates included in Oregon's eight recognized metropolitan areas. Changes resulting from this work are also supportive of the findings of this OTP. As communities update their transportation system plans, OTP policies can be incorporated at the same time as the rulemaking updates issued by Department of Land Conservation and Development. For rural areas and small communities, local Transportation System Plans can use the OTP to help achieve consistency with the OTP, modal or topic plans, and transportation facility plans. This also helps identify investment priorities for communities across Oregon.

# 7.4 Making Transportation Investments

The OTP outlines how investments in the transportation system can influence desired policy outcomes. An exploratory scenario planning process was used to test over 4,000 different combinations of investments to identify the mix that best advances the collective goals of the OTP. This is especially important given the many needs of transportation infrastructure, the limited funding to address those needs and the many drivers of change affecting transportation.

Today's transportation system is funded by federal and state dollars. Oregon's funding sources such as vehicle registration fees, the weight-mile tax, and gas tax go into the State Highway Fund. Money in this Fund is constitutionally restricted to be spent within the public road right-of-way. Needed investments not eligible for State Highway Funds must pull from other sources like federal dollars or the state's employee payroll tax for public transportation. Federal dollars also help to supplement other state funding programs but still have limits in the ability to pay for transit operations, passenger rail, operations and maintenance, and administration. Between federal and state programs, most dollars are mandated to specific activities like funding for safety, bridges, or the like. There is less flexibility than one might think for how transportation dollars are allocated, for example, approximately three-fourths of ODOTs budget is required to be directed at specific activities and is not flexible.

Not only does the inflexibility of funding present challenges in the ability of transportation agencies to meet the immense needs described in the OTP, the total amount of funding available is woefully insufficient. Lack of funding has in fact resulted in disinvestments across the multimodal

# INVESTMENT CATEGORIES



Electrification



Intelligent Transportation Systems and Operations



**Active Transportation** 



**Transportation Options** 



Strategic Additions to Road Networks



**Transit** 



Preservation and Adaptation

transportation system, moving further away from desired goals. To fully realize the OTP vision, a four-times increase in funding is needed. The investment scenarios described below outline how funds can best be spent with the few dollars available today, up through meeting the total need.



### 7.4.1 Oregon Funding Context and Funding Scenarios

The state's transportation network is complicated, and as such, it receives funding from many diverse sources. However, there are three primary sources that fund the state's transportation budget:

- vehicle ownership fees (registrations, inspections, etc.),
- road user fees (VMT taxes, weight and mileage fees, etc.), and
- fuel taxes (potential electricity taxes, gasoline taxes, etc.).

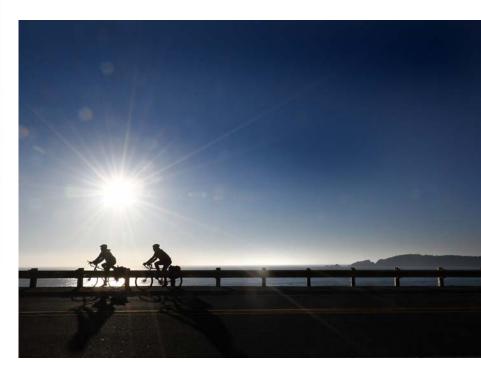
The OTP considered four different funding scenarios to understand how transportation investments can lead to different policy outcomes to address known needs. The four funding levels below were evaluated for different user costs using a cost per mile equivalent basis. The four funding scenarios range from the current ~1.9 cents per mile to a high of 'Blue Sky funding' at 7.6 cents per mile (4x the current level), which accounts for federal, state and local revenue sources. The funding levels provide a wide range of funding scenarios to inform different policy outcomes.



<sup>&</sup>lt;sup>1</sup> Approximate Transportation Budget in 2050 (\$2022)

Oregon drivers pay \$0.38 per gallon in gas tax in 2023. Assuming an average fuel economy of 20 miles per gallon, most vehicles would pay around \$0.02 per mile. To support the Blue Sky funding level, a four-times increase in available funding, users would pay closer to \$1.14 per gallon, or 7.6 cents per mile, or a combination of equivalent fees through other sources.

The Blue Sky scenario is the only investment level that addresses the many needs of the transportation system. Given the current gap between needs and available funding, careful consideration of policy trade-offs, potential co-benefits to multiple policy areas, clear prioritization is needed to optimize the balance of policy outcomes. At any particular level of funding, Oregon needs to keep the existing system operating while also making strategic improvements and enhancements to adequately serve Oregonians in the future.



<sup>&</sup>lt;sup>2</sup> Average fuel tax per vehicle mile traveled (\$2022)

#### 7.4.2 Policy Emphasis Areas of Investment Scenarios

The OTP examines outcomes from exploring thousands of possible futures to understand what lead to results that support this plan's vision and goals. The OTP examined 16 scenarios, four different policy influence areas each with four different funding levels. Each of the 16 scenarios evaluated has a different outcome given the particular suite of funding and policy goals that are emphasized. The OTP evaluated four different policy goal emphasis areas, each of which focuses on a different combination of goals:

- GHG and Equity Priority. This goal emphasis area is to maximize sustainability goals and equitable outcomes through reducing total GHG emissions and reducing transportation costs for households with lower incomes.
- Travel Time Reliability and Stewardship of Public Resources Priority. This goal emphasis area is to achieve a reliable transportation system and prioritize maintenance and resiliency of the transportation system.
- Multimodal Travel with Reduced Per Capita
   VMT Priority. This goal emphasis area is to maximize travel options and reduce VMT per capita through increased walking, biking, and transit investment.
- Balanced Outcomes –
   This goal emphasis area
   is to achieve an optimized outcome across all policy goal areas.



Given the policy direction of the

OTP, all future scenarios reduce GHG emissions, reduce VMT per capita, and reduce vehicle transportation costs for lower income households. They all also increase the amount of funding for Preservation and Adaptation and increase transit and multimodal trip making relative to today. Higher levels of funding increase the availability of funds for transit and Preservation and Adaptation leading to improvements in other outcomes.



### 7.4.3 Investment Scenarios

In crafting the following investment scenarios, the ways to achieve different types of outcomes were assessed. Different types of investments were found to help further some of these outcomes more than others, as shown in the table below.

Desired Outcomes	Investment Categories That Best Support Each Outcome			
GHG Reduction and Improved Equity	<ul> <li>Transportation Electrification</li> <li>Active Transportation</li> <li>Transportation Options</li> <li>Land Use Strategies</li> </ul>			
Reliable Travel Times and State of Good Repair	<ul> <li>ITS and Operations</li> <li>Transportation Options</li> <li>Preservation and Adaptation</li> </ul>			
Increased Multi- Modal Travel and Less VMT Per Capita	<ul> <li>Active Transportation</li> <li>Transportation Options</li> <li>Transit</li> <li>Land Use Strategies</li> </ul>			

However, there is also opportunity to advance multiple outcome areas simultaneously. The scenarios described below identify the mixes of funding that advance the OTP vision overall, within the fiscal realities of different levels of funding. There are some overall key findings across the different funding levels, and some key differences worth noting. At low funding levels, limited transit and significant deficits associated with system preservation and adaptation suggest investing in higher levels of transportation demand management and transportation electrification to best meet OTP goals. However, when funding increases and transit is more widely available and there are more investments in system preservation and adaptation, the emphasis on the lower-cost investments to achieve the OTP goals decreases.

This is not to say that these investments are not important, but rather the OTP goals can be met through a variety of ways and the OTP provides an approach to optimize investment choices at each budget level.

The significant costs associated with preserving and adapting the transportation system has emerged as the most significant underlying challenge. Transportation's resiliency is directly affected by our decisions on how to manage and adapt Oregon's



transportation system to change. Climate induced risk is increasing such as wildfires, flooding, landslides, and other natural events such as earthquakes all pose risks to the operation and use of the transportation system. These risks can be reduced by reducing the exposure to potential issues or reducing the consequences of any one issue. Adequate funding for preservation and adaptation of the system is essential to reduce these risks and achieve the goals of the OTP.

The scenarios also illuminate regional differences in travel and how urban areas may experience the future differently than more rural areas of the state. Multimodal travel options will be more widely available in more dense locations; walking and biking are more feasible given shorter trip lengths, and transit is financially more viable with a larger user base. If one roadway is closed to do flooding or another event, often there is more than one alternative route. More rural areas have less redundancy with fewer roads connecting communities and more susceptible to impacts from closures and other events. Travel distances are longer, creating limited opportunities for walking, biking, and a much smaller user base for transit.

To help guide current and future investments, the following four funding scenarios were crafted. These will form the basis for funding decisions by the Oregon Transportation Commission, with adjustments made to consider current data and needs utilizing the investment framework considerations and tiers outlined in Strategy SP.2.1.1 of this plan . These funding scenarios should also serve as a guide to all whom deliver and manage transportation systems and services, to ensure we are leveraging and capitalizing on investments in coordination to collectively achieve the OTP vision.

#### **TOP TIER**

- Address fatalities and serious injuries.
- Maintain and preserve critical assets, key corridors, and critical lifeline routes.
- Add critical bikeway and walkway connections in "high need locations" (i.e., transportation- disadvantaged areas and surrounding schools, shopping, employment centers, medical services, connections to transit, and downtowns).
- Preserve current public transportation service levels and maintain a state of good repair for vehicles and facilities.

#### **SECOND TIER**

- Address contributing factors and reduce the severity of crashes and safety incidents.
- Maintain the broader transportation system and assets.
- Complete the active transportation network.
- Improve the efficiency, frequency, and reliability of public transportation services.
- Improve the efficiency and capacity of existing transportation infrastructure and facilities through operational improvements to the existing system, for the movement of people and goods.

#### THIRD TIER

- Increase users' sense of safety and comfort.
- Expand public transportation services and fleet, and add new facilities, identified and prioritized at the regional level.

# CURRENT LEVEL Optimized Funding Scenario Investment Summary

#### Electrification

3.9%

#### **Lane Mile Additions**

8.8%

#### **Transit**

25.0%

#### **Active Travel**

**12.7**%

## Transportation Demand Management

0.3%

# Intelligent Transportation System

5.0%

#### Preservation

44.2%

#### **Current Funding Level**

Under current funding levels, System Preservation and Adaptation investments fall further behind in addressing the needs of the current system and addressing climate resiliency leading to future unreliability and disbenefits. Walkways and bikeways remain disconnected and limited progress is made to close only the most critical gaps, such as around schools. Limited to no progress is made toward accomplishing the desired policy outcomes in all investment areas. Nearly 300 bridges are likely to be weight restricted, with a \$7 billion backlog in bridge maintenance and \$4 billion backlog in pavement preservation.

Different parts of the state have different experiences using the transportation system. Seismic retrofits may have slowed in this funding option, creating challenges to east-west travel to and from the critical I-5 corridor during seismic events. The current funding levels have failed to keep pace with inflation limiting bridge, culvert, and preparations for natural events. Rural areas are more likely to see road closures due to flooding and several bridges are weight restricted forcing trucks to make long detours, increasing transportation costs and GHG emissions.

Urban areas have a similar challenges as today, with moderate transit service. Oregonians may continue to

be more comfortable driving to certain destinations because of remaining gaps in the walking and biking network. Areas of the state with fewer travel routes are at greater risk for being isolated and may have travel temporary affected by risk events. Urbanized areas have more travel options and opportunities to meet daily needs through various modes or alternative routes. Despite some minor benefits by optimizing the allocation of investments, the state continues to fall further behind in maintaining our current transportation infrastructure, leaving the state's communities and economy prone to disruptions.

# INCREMENTAL Increase Scenario Investment Mix Summary

#### Electrification

3.2%

7.5% decrease from current funding

#### **Lane Mile Additions**

7.8%

2.0% increase from current funding

#### **Transit**

28.3%

30.7% increase from current funding

#### **Active Travel**

11.2%

2.4% increase from current funding

## Transportation Demand Management

 $\mathbf{0.2}^{8}$ 

1.0% decrease from current funding

# Intelligent Transportation System

5.0%

16.3% increase from current funding

#### Preservation

44.2%

15.8% increase from current funding

#### **Incremental Increase (30% more)**

This funding scenario relies upon ITS, fleet electrification, land use and travel options investments to best achieve policy outcomes. The modest change in overall funding prioritizes funding in more urban areas to maximize the per capita impact per dollar of spending. Moving travel to active travel modes is supported by changes in the delivery of the Transportation Options program and completing the priority gaps in the walking and biking network. ITS, operations and safety investments focused on spot improvements. The backlog for bridges and pavement preservation remains significant.

A sizable gap remains in addressing the need for System Preservation and Adaptation policy goal areas and pushes out the benefits of investments into later years in the planning horizon due to the high costs of those investments. Rural and coastal communities are more likely to experience delays or detours than funding scenarios with larger increases as compared to today. The increasing costs associated with insufficient funding for the system preservation continue to grow and begin to affect the system performance and put the system at greater risk in the face of climate, seismic and other events. Overall, only modest progress toward achieving the OTP goals is attained.

# MAJOR INCREASE Scenario Investment Mix Summary

#### Electrification

2.7%

5.1% decrease from current funding

#### **Lane Mile Additions**

6.6%

2.5% increase from current funding

#### **Transit**

26.6%

46.2% increase from current funding

#### **Active Travel**

8.9%

3.8% decrease from current funding

## Transportation Demand Management

0.2%

4.0% decrease from current funding

# Intelligent Transportation System

3.7%

1.9% increase from current funding

#### Preservation

51.4%

**60.3** increase from current funding

#### Major Increase (2x)

The major increase funding scenario at two times the current budget is the first funding scenario that begins to make progress on substantially achieving policy goal outcomes. This funding scenario begins to make real progress toward addressing the investment needs for System Preservation and Adaptation and Transit relative to lower funding scenarios. Significant advancements are made toward increasing travel options, transit gets funded at a higher level, which has benefits to equity and climate change policy goal areas. Communities enjoy stronger connections and fewer gaps in the bike and pedestrian network, including improving the active transportation connections between schools and residential communities across the state. Similarly, additional investments in transit reinforce higher density land uses in urban areas, which in turn provide more opportunities for climatefriendly travel options. Backlogs in bridge and pavement preservation are cut in half from today's funding levels but still amount to several billion dollars.

The benefits of greater funding levels start to have noticeable effects geographically across the state. Bridges are being replaced, adaptation efforts reduce the impact of climate-driven weather events, including faster response to wildfires, improved stability of slopes along roads and culvert washouts are less frequent. Improvements to the condition of pavement of roadways provide more reliable and comfortable travel, in particular to cars, trucks and bikes and overall efficiency of pavement programs is achieved by limiting costly deferred maintenance. This scenario allows progress to be made toward achieving the policy goals of the OTP.

# BLUE SKY Scenario Investment Mix Summary

#### **Electrification**

1.7%

14.6% decrease from current funding

#### **Lane Mile Additions**

4.5%

0.5% decrease from current funding

#### **Transit**

24.8%

92.3% increase from current funding

#### **Active Travel**

7.5%

15.1% decrease from current funding

## Transportation Demand Management

0.1%

2.1% decrease from current funding

# Intelligent Transportation System

4.2%

63.1% increase from current funding

#### Preservation

57.1%

**151.0**% increase from current funding

### Blue Sky (4x)

The Blue Sky scenario, approximately four times the funding of today, provides additional funding for investments in transportation and lower overall transportation costs with more equitable outcomes across the state. However, the funding would likely derive from higher user fees for the system, with potential negative impacts to equity. The benefits of the increased funding include a more resilient system, less affected by climate and natural events, a more reliable system, and a system with more travel options for everyone. All areas of the state benefit from improved travel options with reduced disruptions and improved resiliency for travel around Oregon's communities. This is the only scenario that projects no bridge or preservation backlog and no bridges are projected to be weight restricted.

This funding level best addresses Transit and System Preservation, as those two investment areas have the greatest gap between the current level of funding and the funding needed to attain the OTP goals. This funding scenario provides upgraded bridges, culverts, and improved access to respond to wildfires. The preservation of the current roadways is substantially improved over today's investment levels leading to fewer potholes or ruts in the road. Rural and coastal areas of the state have a system that is less subject to disruptions and provides a variety of reliable travel options. Urban areas have benefited from significant increases in transit, improved flood management, and updated complete streets to provide a diverse set of travel options. The Blue Sky scenario best addresses the future and changing needs of the transportation system for travelers in Oregon.



## 7.5 Oregon Transportation Plan Implementation Actions

Oregon will need to implement actions and initiatives that address multiple goals at once to create equitable, healthy, and thriving communities; meet GHG reduction targets; and be resilient in the face of climate change, seismic, and other emergencies. The following implementation actions are not the only means to implement the OTP but serve as a starting point as they provide the most cross-cutting benefits and are within control of Oregon's transportation agencies. These priority implementation initiatives will, together, ensure Oregon's transportation agencies are collaborating to achieve the most urgent goals and objectives.

Near-term implementation of the OTP should focus on program-level policy and funding decisions that are most likely to "move the needle" on achieving OTP goals. All of the OTP objectives, policies and strategies will be important to achieving the OTP vision. Focusing implementation on the Top 10 actions will direct energy and resources toward changes that will affect multiple types of projects and programs, and/or have trickle-down effects that influence many aspects of the transportation system. While these top cross-cutting actions are intended to apply across all agencies, they also fit under the Oregon Department of Transportation's 2021–2023 Strategic Action Plan pillars—Equity, Modern Transportation System, and Sufficient and Reliable Funding—and should be considered in the next update of short-term Strategic Action Plan actions. The Top 10 implementation actions are outlined below.

Secure sustainable, resilient, and reliable transportation funding streams.

Maximize the life cycle of existing assets and incorporate resiliency and prioritization into maintenance, repairs, and replacement.

Support compact development and reduce trip lengths by investing in priority active transportation and transit networks and facilities to connect people with destinations (jobs, schools, retail, etc.).

Adopt Safe Systems, Americans with Disabilities Act compliant, and performance-based roadway design approaches and operation of all projects, with a focus on reducing fatalities and serious injuries.

Plan, invest in, and construct the infrastructure to electrify the multimodal transportation system and transition fuels and materials to low- and no-carbon sources.

Invest in resilient, efficient, and sustainable movement of commodities and people through comprehensive congestion management.

Complete and maintain data and mapping of crashes, social equity indices, multimodal networks, and environmental risks for use in identifying priority investments and solutions.

Create and practice equitable processes and ensure decisions lead to more equitable outcomes.

Update planning and funding decision-making processes to reduce GHG emissions and passenger VMT per capita.

**Leverage emerging data** and technology through strategic partnerships and targeted investments that advance Road User **Charging, electric vehicle** charging and sustainable fuels infrastructure, vehicle-to-infrastructure and vehicle-to-vehicle, broadband, on-demand transportation option platforms (e.g., Mobility as a Service, and mobility hubs), and open data standards (e.g., General **Transit Feed Specification).** 

# 7.6 Transportation Performance Monitoring

#### 7.6.1 Purpose of Key Performance Indicators

The six goals of the OTP establish a direction for the state's future transportation system. Key Performance Indicators (KPIs) provide a compass, indicating how closely Oregon's transportation system is performing relative to that direction. KPIs track progress towards statewide goals and inform strategic decision-making, by focusing on the outcomes that the state wants to achieve.

KPIs are distinct from performance measures, which focus more closely on operational or tactical activities. For the OTP, KPIs will provide a statewide perspective on policy outcomes that extends across agencies, departments, and transportation modes and services. Collectively, the KPIs paint a picture of the downstream results of a wide-ranging and dynamic body of upstream activities, investments, and operational decisions.

#### 7.6.2 Role of Key Performance Indicators within Oregon Transportation Plan

The OTP identifies the most valuable KPIs for measuring progress against this plan's goals and objectives. The KPIs have been developed through a multi-stage process, integrated within the broader OTP planning and policy development process.

The OTP's KPIs serve as a complement to existing federal and state performance measures, rather than a replacement or duplication. Federal legislation (established through MAP-21) requires the FHWA to set performance measures in safety, pavement and bridge conditions, and system performance. ODOT monitors and reports on those performance measures for the state. ODOT also adheres to a legislatively approved set of performance measures, as well as metrics adopted through state transportation plans. GHG emissions and safety targets are specifically addressed in the Oregon STS and TSAP, respectively. ODOT's modal plans set mode-specific measures. Additionally, each transportation agency in Oregon has agency-specific performance measures used to benchmark progress toward local or narrowly-defined goals.

#### 7.6.3 Key Performance Indicators for the Oregon Transportation Plan

The OTP goals and objectives establish measurable systemwide outcomes that will be critical to achieving the OTP's vision for the future transportation system. The specific policies that articulate these outcomes are listed below, organized by Goal as they are found in Chapter 6 (with associated policy reference in parentheses).



## **Sustainability and Climate Action**

- Achieve state goals for reducing GHG emissions.
- Transition to cleaner vehicles and fuels.



#### **Safety**

• Eliminate the occurrence of people being killed or seriously injured on the transportation system.



#### **Stewardship of Public Resources**

- Secure sustainable and reliable funding.
- Implement a funding allocation framework and project prioritization process that evaluates the impact of investments on GHG emissions and results in total spending that reduces GHG emissions to meet STS and state goals.



#### **Mobility**

• Reduce the per capita VMT for passenger vehicles.



#### **Social Equity**

- Reduce household transportation costs for those disproportionately burdened.
- Reduce disparities between historically marginalized populations and general populations for key economic, safety, and sustainability indicators.



## **Economic and Community Vitality**

- Provide safe and reliable movement of goods and materials.
- Provide systems for the movement of people and goods to help communities thrive and prosper.

These measurable outcomes provide the basis for a set of proposed KPIs. The table on the following page identifies the proposed indicators, the associated goal(s) of the OTP, and the desired direction of improvement (i.e., measuring an upward or downward trend). The last two

columns identify which proposed indicators:

- draw from metrics already documented through federal or state performance monitoring
- can be further analyzed to compare outcomes for people who have been historically harmed and excluded from our transportation system

Transportation system performance may involve disproportionate impacts for historically marginalized communities.

These disparities can be documented by disaggregating data by race, income, or disability status, where relevant. In much of the United States, policies that lead to residential segregation and unequal distribution of resources have resulted in many people of color and people with low incomes living in communities with poor transportation facilities and amenities. This often leads



to higher fatality rates, VMT, and levels of air pollution. Tracking KPIs for different sub-populations in Oregon helps to determine if two groups are experiencing unequal outcomes. In most cases this will be done at the community level, for example, analyzing pollution in a BIPOC community compared to a mostly white community. In other cases, it may be reasonable to compare outcomes on a household or individual level, such as the race of victims of traffic deaths or the amount spent on transportation by a household where someone has a disability.

Effective KPIs must be grounded in available sources of consistent and reliable data and be able to provide meaningful pictures of future outcomes (e.g., unbiased, as completely representative as possible, etc.). Each OTP indicator that overlaps with existing performance monitoring benefits from existing available data sources and added efficiency of the monitoring process. For further discussion of metrics used in monitoring each KPI, see Volume 2.

Key Performance Indicators	Nexus with OTP Goals	Desired Direction	Reflected in Existing Federal and Oregon Performance Measures	Additional Analysis for Social Equity
Multimodal Travel	Mobility and Economic and Community Vitality	Increase	Both	Yes
VMT per Capita	Mobility and Safety	Reduce	Oregon Only	Yes
Travel Time Reliability	Mobility and Economic and Community Vitality	Increase	Both	
Traffic Fatalities and Serious Injuries	Safety	Reduce	Both	Yes
GHG Emissions	Sustainability and Climate Actions	Reduce	Both	
Transportation Cost Burden	Social Equity	Reduce	Neither	Yes
Funding for Operations, Preservation, and Adaptation of the Transportation System	Stewardship of Public Resources	Increase	Both	46.0%

Oregon needs a plan that meets the challenges we face not only today but also during the coming decades. Oregonians want a transportation system that connects people and goods to places in the most climate-friendly, equitable and safe way. Oregon must work collaboratively across government agencies and private industry to achieve the vision lined out in this OTP. Similarly, Oregon must work collectively to address declining revenue to keep the transportation system in a state of good repair and implement the projects that will move toward Oregon's desired future.

