Regional Mobility Pricing Project

This version of the Draft Purpose and Need Statement, including Goals and Objectives, was revised in May 2023 to reflect input received during the EA scoping period, (November 2022 to January 2023) from participating agencies, tribes and the public, on the prior version, dated August 2022.

Purpose

The purpose of the Regional Mobility Pricing Project is to use congestion pricing on all lanes of Interstate-5 (I-5) and Interstate-205 (I-205) to manage travel demand and traffic congestion on these facilities in the Portland, Oregon metropolitan area in a manner that will generate revenue for transportation system investments.

Need for the Proposed Action

Daily traffic congestion is negatively affecting the quality of life in the growing Portland region.

In the Portland metropolitan area[1], people use I-5 and I-205 to get to work and school, shop, recreate, and congregate. Traffic congestion creates long backups of vehicles traveling at slow speeds—a scenario that many people experience daily while traveling during the morning and evening rush hours. Interstate 5 has the most bottlenecks (10) of any highway in the Portland region which illustrates the severe congestion along I-5, particularly in the northbound direction where multiple bottlenecks overlap. The most significant northbound bottleneck locations on I-5 occur at the Interstate Bridge to Capital Highway (12.2 mile bottleneck length, 8.75 hours of daily congestion), I-405 diverge to I-84 merge (1.3 miles, 8.0 hours), and Marquam Bridge to Hood Ave (1.1 miles, 8.0 hours), and the most significant southbound bottleneck locations on I-5 occur at Killingsworth to Interstate Bridge (3.0 miles, 6.5 hours) and I-84 to Rosa Parks (3.3 miles, 12.5 hours) (ODOT 2021a).

There are six primary bottlenecks on I-205, three in each direction. The NB Bottleneck Locations on I-205 occur at the Glenn Jackson Bridge to Sunnyside (11.3 miles, 7.0 hours), Division/Powell to Sunnyside (5.00

What is a toll?

A toll is a fee imposed to drive on a specific road, tunnel or bridge to generate revenue for that facility. Tolls have been used for centuries to pay for construction and maintenance of bridges, tunnels and roads. Historically, travelers had to stop and pay in cash, but that is no longer necessary with modern technology that allows for an all-electronic collection system (FHWA, n.d.)

Is congestion pricing the same thing?

The term congestion pricing describes a different type of road pricing where drivers on a priced facility are charged higher prices during peak traffic periods (such as morning and evening commutes) and lower prices during off-peak periods. The higher price encourages some drivers to consider using other travel options such as carpools or transit, or change their travel time to other, less congested times of the day, or not make the trip at all. If a small percentage of drivers choose another mode of travel or time of travel, it could reduce traffic congestion for those who can't modify their trip and improve traffic flow for the entire system. The benefits of congestion pricing are well documented, based on the experiences of multiple toll and express lane projects in operation across the country (FHWA 2017).

[1] Portland metropolitan area refers to the Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area.

miles, 33.75 hours), and Abernethy Bridge to I-5 (8.3 miles, 4.25 hours), and the SB bottleneck locations are at Powell to Airport Way (5.6 miles, 4.0 hours), 82nd Ave to Sunnyside (3.1 miles, 3.0 hours), and 10th St to 82nd Ave (4.4 miles, 3.5 hours) (ODOT 2021a).

Congested conditions on I-5 and I-205 result in traffic rerouting to other highways in the region (I-405, US 26, etc.), local streets, and arterial streets. This rerouting results in additional traffic congestion and creates potential safety conflicts. Crash frequency on both freeways and arterials is known to increase with severe congestion levels and stop-and-go traffic. The conditions caused by traffic congestion make travel on I-5 and I-205 unreliable such that drivers and transit riders cannot predict how long it will take them to get to work, home, services, or childcare arrangements.

Forecasts for the region show that population and employment will continue to steadily grow. The Portland metropolitan area population is expected to grow from approximately 2.5 million residents in 2018 to more than 3 million by 2040 (23%) and more than 3.5 million by 2060 (43%) (Census Reporter 2018; Metro 2016). By 2039, the number of vehicles travelling along Interstate 5 per average weekday in the Portland region is projected to be between 127,200 and 192,900, depending on the freeway segment (ODOT 2020), which is an approximate increase of 18% from 2017 traffic counts. Planned roadway projects, improvements in transit, and increased use of active transportation modes (bicycles, walking, etc.) will not fully address the increase in daily trips and increased hours of traffic congestion (Metro 2018a).

COVID-19 Pandemic Traffic

Traffic volumes decreased substantially during the early days of the COVID-19 pandemic, and rush-hour traffic congestion has not been as severe as it was before the pandemic. With the economy reopening, vehicle numbers are increasing. As of July 2021, the Portland metropolitan area state-highway volumes are only 3% to 5% below pre-pandemic levels for weekday traffic and 4% to 7% below weekend traffic. Permanent changes in travel behavior due to COVID-19 are currently unknown. Some of the changes made because of COVID may be long-term, while others may not (ODOT 2022a). ODOT expects that over the near term traffic levels will return to pre-pandemic levels and will continue to grow in the future (ODOT 2021b).

Traffic congestion adversely affects the Portland metropolitan area economy.

Oregon's economy depends on a functional transportation system in the Portland metropolitan area to efficiently move people, goods and service providers. Oregon is a trade-dependent state, relying heavily on exports from our farms, forests and factories to create jobs. Freight moves to and from the Portland metropolitan area and across the state of Oregon primarily by commercial trucking. I-5 is a vital north-south interstate, connecting the markets and industries of the entire west coast of North America. For the state and region to be competitive in global markets, the transportation system must efficiently move people, goods and services. Thus, the highway transportation system is critical to the economic strength of the Portland metropolitan area and Oregon businesses and households (ODOT 2017).

Traffic congestion affects the Portland metropolitan area economy through slow and unpredictable travel times for freight services, small businesses, employers, employees, and all highway users. Unreliable travel times can cause late fees for truck deliveries, missed opportunities for additional deliveries, and reduce the number of work sites a service provider can access in a day. From 2015 to 2017, drivers in the Portland region experienced an 18.5% increase in the number of hours of traffic congestion. In 2015, the

daily cost of traffic congestion in the Portland metropolitan area was $1.7 million, which increased to $2.0 million in 2017 (ODOT 2018).

Of the interstate freight routes in the Portland region, I-5 carries the highest freight volume, ranging from 10,000 to 19,000 trucks per day, while I-205 carries the second-highest freight volume, ranging from 7,800 to 14,000 trucks per day (ODOT 2018). Additionally, according to the American Transport Research Institute, three of the top 100 freight bottlenecks in the nation are within the Portland metropolitan area, including #28 – I-5 at I-84 (Rose Quarter), #33 – I-5 Interstate Bridge and #83 – I-5 at I-205 (South).

State and federal transportation revenue sources are increasingly insufficient to fund transportation system needs.

ODOT's transportation funding originates from a mix of state (approximately 77%) and federal (approximately 23%) sources (ODOT 2022b). The State Highway Fund relies on a three-pronged approach: the gas tax, weight-mile tax, and driver and motor vehicle fees, and the Federal Highway Trust Fund - funded primarily by federal fuel taxes. These sources have not kept pace with the costs of maintaining Oregon's transportation system or constructing new transportation projects. These state and federal funds have not been adjusted to reflect increasing construction costs, rising inflation, a more fuel-efficient State of Oregon vehicle fleet, and growing transportation infrastructure demand. Especially on the state level, escalating expenditures to maintain aging infrastructure, perform seismic upgrades for state bridges, and complete needed construction have increased financial needs. Simultaneously, despite recent federal investments in transportation infrastructure including, e.g., the Infrastructure Investment and Jobs Act of 2021, federal funding has not kept pace with rising transportation costs over the last several decades (Congressional Budget Office 2020). For example, the federal gas tax has not been adjusted since 1993, and federal funds have been supplemented by increasing state-based contributions including from sources outside of state fuel taxes (Oregon Legislative Revenue Office 2022).

Compounding the need for additional transportation revenue is Oregon's substantial increase in travel demand as the state experiences population and employment growth, particularly in the Portland metropolitan area. Additional means to generate revenue are required in order to meet the Portland metropolitan area and greater Oregon transportation needs. ODOT must explore every possible method for maximizing use of its existing infrastructure while developing new, recurring funding sources for future transportation system investments. In its plans and policies, ODOT has consistently identified tolling and congestion pricing as important tools to generate needed revenue.

Our regional transportation system must reduce greenhouse gas emissions by managing travel demand and traffic congestion.

Climate change is a significant threat to Oregon's economy, environment, and way of life (Gov. Kate Brown 2019). To address the state's contribution to climate change and its negative impacts such as extreme temperatures and flooding, Oregon has committed to reducing greenhouse gas emissions by at least 45% below 1990 levels by the year 2035, and by 80% by 2050 (EO 20-04 2020). The transportation sector creates approximately 36% of greenhouse gas emissions in Oregon (Oregon Global Warming Commission 2020). Traffic congestion leads to an increase in fuel consumption and carbon dioxide emissions. During congestion, vehicles spend more time on the road, idling or crawling, and undergoing numerous acceleration and deceleration events that leads to an increase in emissions.

To help meet the state's goals for greenhouse gas reduction, total vehicle emissions in the Portland metropolitan area must be reduced by decreasing the number of hours vehicles spend stuck in traffic, the amount of stop-and-go traffic, and the vehicle miles traveled by motor vehicles. Vehicle electrification and the use of non-carbon propulsion can also greatly reduce greenhouse gas emissions. Current air emissions models already account for a transition of the vehicle fleet to low- and non-carbon energy over time.[2] Even with these changes in vehicle technology, a full suite of tools are needed to meet the state's greenhouse gas reduction goals, including reducing congestion and implementing congestion pricing (ODOT 2023b).

A lack of comprehensive multimodal travel options in the Portland metropolitan region contributes to congestion and limits mobility.

Multimodal travel accommodates a wide range of travel methods including walking, bicycling, driving, and public transportation. Multimodal travel can increase transportation system efficiency and accommodate more trips in the same amount of space, thereby reducing roadway congestion. When effectively integrated, multimodal travel can help advance various environmental, health, and congestion-mitigating benefits for communities, such as creating a more equitable system, reducing crash frequency, and reducing greenhouse gas emissions. Multimodal travel results in a reduction of vehicle emissions, which in turn improves air quality and reduces greenhouse gas emissions (USDOT 2015). Multimodal travel provides additional access to populations who do not drive, such as youth, seniors, people with disabilities, low-income residents, and those who do not own a car (Litman 2021).

Transit service in the Portland metropolitan area is not evenly or widely distributed, and it is not possible for many people to use transit as an alternative to automobile travel (Metro 2018a). In many places in the region, gaps exist in sidewalks, bike lanes and regular, frequent transit service is not available (Metro 2018a). Additionally, land use patterns result in transit service and active transportation facilities that are often very distant from residential areas and job centers, preventing safe or convenient access to these facilities. Finally, transit and active transportation service and facilities are often not available late at night, when many people travel, especially shift workers. Therefore, despite the benefits of transit and active transportation, alternatives to personal vehicle use are not presently a viable option for all road users in the region, and regional coordination is needed to plan, fund, and implement multimodal travel options.

The Portland metropolitan area's transportation networks have resulted in inequitable outcomes for historically and currently excluded and underserved communities.

Many urban interstate highways and major civic centers were deliberately built through neighborhoods with concentrations of people experiencing low incomes and communities of color, often requiring the destruction of housing and other local institutions (Federal Register 2021). A local example of transportation inequity occurred in Central Portland during the 1950s and 1960s, where the construction of I-5, the Veterans Memorial Coliseum, Emanuel Legacy Hospital, the Portland Public School Blanchard site, and urban renewal programs divided and displaced communities in North and Northeast Portland, affecting and burdening communities of color – especially Black communities – in the historic Albina

[2] The U.S. Environmental Protection Agency MOVES model estimates emissions for mobile sources at the national, county, and project level for criteria air pollutants, greenhouse gases, and air toxics, and can be used to model the impacts of changing fractions of fully electronic passenger cars, passenger trucks, and light commercial trucks (EPA 2021b).

neighborhood (Gibson 2007). Also noteworthy was a shift in the planned alignment of I-205 due to political motivation and public protest during the mid-1960s (Fackler 2009). The alignment was moved away from Lake Oswego, farther east and south into Clackamas County and farther east in Portland, away from majority white and wealthier cities, reinforcing social and economic inequity (Invisible Walls 2019).

Influenced by these discriminatory transportation policies and politics, a geographic mismatch exists today between job locations, essential resources, community services, and housing that is affordable (Oregonian 2012). This disproportionality affects communities of color, immigrant communities, people experiencing low income, lesbian, gay, bisexual, transgender, gender non-conforming, and queer (LGBTQ+) individuals, and people living with a disability (Federal Register 2021). Members of these communities often have fewer transportation options and travel farther between destinations, which increases transportation costs and dependence on unreliable travel options and adds more time in traffic congestion. Between 2002 and 2012, the number of jobs accessible within a typical commute (7.1 miles for the Portland Metro service area) held steady for white households but fell 12 percent for African Americans, 3 percent for Latin American households, and 4 percent for low-income households (Metro 2018b).

ODOT's Commitment to Equity

ODOT acknowledges that past land use and transportation investments have resulted in negative cultural, health, economic, and relational impacts to local communities and populations and that these investments have disproportionately affected historically and currently excluded and underserved communities. ODOT recognizes that these communities have historically been left out of transportation planning and the decision-making process.

ODOT is committed to serving all Oregonians equitably. To meet this commitment to equity, the Oregon Toll Program convened an Equity and Mobility Advisory Committee (EMAC) made up of equity and mobility experts and advocates who meet regularly and provide input on how congestion pricing and tolling on the freeway system can include benefits for populations that have been historically excluded or underserved by transportation planning projects. Together with the EMAC, the Oregon Toll Program developed an Equity Framework to identify the burdens and benefits of congestion pricing and tolling and provide a process for determining how to equitably distribute the burdens and benefits from the projects.

ODOT will engage communities who use or live near the Regional Mobility Pricing Project area, especially those who have been historically and are currently excluded and underserved, to participate throughout the development of the proposed action, criteria for decision-making, and continuing through Project implementation and monitoring.

Collectively, these transportation and land use outcomes, and the systems that led to them, have resulted in discrimination and unequal investment in these communities. This leads to lasting trauma and continued economic, social, and health impacts for historically and currently excluded and underserved individuals and communities (Federal Register 2021).

For communities located near transportation-related activities, there is a greater risk of concentrated air pollutants and heat islands. Communities located near major roads can experience increased air pollution from cars, trucks, and other motor vehicles, and can have an increased incident and severity of health problems associated with air pollution exposures (EPA 2014). Higher amounts of traffic, congestion, stop-and-go movement, or high-speed operations can increase the emissions of certain pollutants (EPA 2014).

Areas with large areas of pavement for transportation uses such as parking areas and roadways can create heat island areas, areas with ground temperatures substantially higher than surrounding areas with less pavement (EPA n.d). Minority communities and individuals experiencing low-income are often in close proximity to high traffic roads and transportation land uses and therefore at an increased risk of exposure to ambient air pollution, heat island areas, and their related health effects (EPA 2021a).

Goals and Objectives

Project goals and objectives are desirable outcomes of the Project including and beyond the Purpose and Need Statement. The following goals and objectives reflect input collected during the Project's Summer-Fall 2021 engagement and from the Value Pricing Feasibility Analysis Policy Advisory Committee, partner agencies, the Equity and Mobility Advisory Committee, and other Project stakeholders. Most recently, these goals and objectives incorporate changes that reflect new state policy, specifically new Goal 6 language in the Oregon Highway Plan (January 2023) and revisions to ORS Title 31, Chapter 383 resulting from H.B. 3055. Additional changes were made to reflect comments received during EA scoping, which occurred between November 18, 2022 and January 6, 2023. These goals and objectives will be considered in comparing a congestion pricing Proposed Action against a No Action (no congestion pricing) alternative. Many of these goals and objectives relate to more than one of the Need statements provided above. These goals are not listed by order of priority but are generally grouped by the Need statements above.

- **Goal: Support management of congestion and travel demand on the priced facility and local roads affected by congestion pricing.**
  Objectives

  Design the congestion pricing project to improve efficient use of roadway infrastructure and improve travel reliability.

  Design the congestion pricing project to reduce per capita vehicle miles traveled and vehicle hours traveled to use existing and planned infrastructure efficiently.
- **Goal: Provide benefits for historically and currently excluded and underserved communities.**
  Objectives

  Maximize benefits and minimize burdens associated with implementing the congestion pricing project.

  Support equitable and reliable access to job centers and other important community places.

  Support equitable and reliable access to health promoting activities.

  Design the congestion pricing project to support affordable travel options for people experiencing low incomes.
- **Goal: Limit the amount of traffic diversion onto local roads and neighborhoods as a result of congestion pricing on I-5 and I-205.**
  Objectives

  Design the congestion pricing project to limit rerouting of trips away from I-5 and I-205.

  Design the congestion pricing project to minimize impacts from traffic rerouting to quality-of-life factors, such as air quality, noise, and traffic safety for local communities.

Identify potential project effects to identified historically and currently excluded and underserved communities and work with local agencies to address diversion routes so that these communities are not disproportionately impacted by rerouting.

Collaborate with local agencies to address project impacts of diversion to transit, bicyclists, and pedestrians.

- **Goal: Support multimodal transportation choices to provide travel options and manage congestion for local transportation systems affected by congestion pricing.**
  Objectives

  Support shifts to higher occupancy vehicles (including carpooling).

  Collaborate with transit providers to support availability and enhancements to transit and other transportation services complementary to congestion pricing on I-5 and I-205, especially for historically and currently excluded and underserved communities.

  Support increased transit ridership to accommodate the movement of people to similar origins and destinations as the priced facility.

  Collaborate with local agencies to address gaps in the existing biking and walking system to accommodate movement of people to similar origins and destinations as the priced facility.

- **Goal: Create a recurring revenue stream to fund maintenance, rehabilitation and modernization of existing infrastructure, and local transportation systems affected by congestion pricing.**
  Objectives

  Develop a congestion pricing project that provides long-term recurring funding for congestion pricing implementation, operation, and modernization over time.

  Provide revenue to fund congestion pricing program costs, routine operations, maintenance, rehabilitation, and modernization on the priced portions of I-5 and I-205.

  Generate sufficient revenue from congestion pricing for local transportation system investments that support congestion relief and travel demand management.

  Support investments that produce reliable, emissions-reducing, and a competitive range of transportation options (bike, walk, bus carpool, vanpool, etc.) to advance climate, safety, and mobility goals, and prioritize benefits to historically excluded and underserved communities.

- **Goal: Support safe travel regardless of the transportation mode.**
  Objectives

  Improve vehicle safety on I-5, I-205, and affected local roads by managing congested conditions and travel demand.

  Support safe multimodal travel options (for example, walking, bicycles, transit, and automobiles) on local transportation systems affected by congestion pricing.

- **Goal: Contribute to regional improvements in air quality and reductions in GHG emissions that contribute to climate change effects.**
  Objectives

  Contribute to reduced greenhouse gas emissions in the Portland metropolitan area by managing congestion and travel demand, therefore resulting in more consistent vehicle speeds, less vehicle idling, and fewer overall motor vehicle emission hours on I-5, I-205, and local roads affected by congestion pricing.

Reduce localized air pollutants by managing congestion and travel demand on I-5, I-205, and local roads affected by congestion pricing.

Contribute to regional improvements to air quality and reduction of greenhouse gas emissions by reducing the per capita amount of motor vehicle miles traveled and motor vehicle hours traveled on I-5, I-205, and local roads affected by congestion pricing.[3]

- **Goal: Support statewide and regional economic growth.**
  Objectives

  Provide for reliable and efficient regional movement of goods and people on the priced portions of I-5 and I-205.

  Provide for reliable and efficient movement of goods and people on local roads affected by congestion pricing.

  Improve regional access to jobs and employment centers, especially for historically and currently excluded and underserved communities.

- **Goal: Maximize integration with future road pricing systems and other transportation systems.**
  Objectives

  Design a congestion pricing project that can be expanded in scale, integrated with road pricing on other regional roadways, or adapted to future road pricing system applications.

  Design a congestion pricing project that is interoperable with other transportation systems in the region and nearby states.

[3] Reducing vehicle miles traveled and vehicle hours traveled has benefits across multiple goals, such as for goals related to congestion management and for goals related to reductions of air pollutants and greenhouse gas emissions from vehicles and fuel use.

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The following documents and studies were used in preparation of this Statement of Purpose and Need and are incorporated by reference. These materials are publicly available using the weblinks provided.

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