Regional Mobility Pricing Project

Memo	Decisions Advanced from Value Pricing Feasibility Analysis
Date	July 26, 2021

PURPOSE OF THIS MEMORANDUM

This memorandum summarizes the project decisions made in the 2017-2018 Portland Metro Area Value Pricing Feasibility Analysis (VPFA) that the Regional Mobility Pricing Project will use for its analysis.

BACKGROUND: VALUE PRICING FEASIBILITY ANALYSIS PHASE

In 2017, the Oregon Transportation Commission directed the Oregon Department of Transportation (ODOT) to begin the VPFA. The VPFA explored the available tolling options, determined how and where tolling could help improve congestion on I-5 or I-205 during peak hours, and studied potential benefits and impacts to travelers and nearby communities.

Policy Advisory Committee

The Oregon Transportation Commission established a Policy Advisory Committee to provide input during the VPFA. The committee was designed to bring a diversity of perspectives and provide recommendations to the Oregon Transportation Commission on key project elements.

Name	Affiliation
Tony DeFalco	Verde
Craig Dirksen	Metro
Phil Ditzler	Federal Highway Administration
Marie Dodds	AAA Oregon/Idaho
Chris Hagerbaumer	Oregon Environmental Council
Marion Haynes	Portland Business Alliance
Matt Hoffmann	Kroger Co.
Katrina Holland	Community Alliance of Tenants
Jana Jarvis	Oregon Trucking Association
Gerik Kransky	The Street Trust
Bernie Bottomly	TriMet
Anne McEnerny-Ogle	City of Vancouver
Sean O'Hollaren	Oregon Transportation Commission
Eileen Quiring	Clark County
Curtis Robinhold	Port of Portland
Roy Rogers	Washington County

Table 1. Policy Advisory Committee Members



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Name	Affiliation
Brendan Finn	City of Portland
Vivian Satterfield	OPAL Environmental Justice Oregon
Paul Savas	Clackamas County
Alando Simpson	Oregon Transportation Commission
Kris Strickler	Washington State Department of Transportation
Pam Treece	Westside Economic Alliance
Jessica Vega Pederson	Multnomah County
Park Woodworth	Ride Connection, Inc
Rian Windsheimer	Oregon Department of Transportation

Public Engagement

During the VPFA, ODOT conducted extensive public and stakeholder engagement in multiple counties in the Portland metro area, including Multnomah, Washington, and Clackamas Counties in Oregon, and Clark County in Washington. This process included eight open houses, six discussion groups with historically excluded and underserved communities, three online surveys, and one listening session that the Oregon Transportation Commission hosted. Members of the public also provided comments to the Policy Advisory Committee. More than 5,000 comments were received and considered as part of the final recommendations.

VALUE PRICING FEASIBILITY ANALYSIS RECOMMENDATIONS

The VPFA evaluated the impact of various tolling measures on I-5 and I-205 in the Portland metro area. The analysis considered five concepts that combined different tolling options:

- Which highway would be tolled: I-5, I-205, or both?
- Which parts of each highway would be tolled?
- How many lanes on each highway would be tolled?

The Policy Advisory Committee recommended moving forward with an initial pricing project on I-5 through the central Portland area and on I-205 on or near the Abernethy Bridge. The committee also recommended advancing a broader study of tolling on all lanes of I-5 and I-205 within the Portland metro area, referred to as Concept C (Figure 1, page 3). The Oregon Transportation Commission accepted these recommendations during their meeting on August 16, 2018.



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This broader toll concept is being carried forward as the Regional Mobility Pricing Project. Building on the work from the VPFA, the Regional Mobility Pricing Project is advancing two key recommendations.

Recommendation 1: Stop analysis on single managed lane concepts because they would not effectively manage corridor congestion or raise revenue. They would result in higher toll rates that benefit fewer people and vehicle types.

The VPFA compared two ways to implement the toll: 1) tolling the whole highway; and 2) tolling a single lane, either by tolling an existing lane or constructing a new tolled lane in each travel direction (called "single managed lane" tolling). The analysis showed that the disadvantages of



Figure 1. Selected Concept C for Implementation

the single managed lane outweighed its benefits in the following ways:

- **Reduced total number of vehicles moved.** Converting one existing lane to a single managed lane (tolled lane) would largely eliminate congestion in that lane. However, some vehicles might switch to a non-tolled lane to avoid the toll, making congestion worse in the non-tolled lanes. In considering both tolled and non-tolled lanes, tolling just one lane would likely worsen traffic conditions for the whole highway, compared to not tolling at all.
- **Requires three through-travel lanes.** Single managed lanes would make driving more difficult where there are only two travel lanes, and several I-5 and I-205 segments have only two travel lanes. If these lanes were converted to one managed lane and one non-tolled lane, the ability of drivers to maneuver and change lanes would be very limited.
- No benefits to large or heavy vehicles, including freight trucks. Single managed lanes would need to be in the left-most lane. Because the State of Oregon limits or restricts large and heavy vehicles in the left-most lane, freight vehicles would not benefit from travel time savings and reduced congestion.¹
- **Higher toll costs for single managed lane users.** A single tolled lane is more sensitive to traffic conditions compared to multiple tolled lanes for example, one tolled lane could

¹ Oregon Revised Statute 2017 Edition. Chapter 811.325: Failure to keep camper, trailer or truck in right lane, applies to any vehicle with a trailer and any vehicle with a registration weight of 10,000 pounds or more.



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become quickly overwhelmed by an influx of traffic. Therefore, a single managed lane would require higher toll rates to maintain vehicle speeds and to accommodate changes in demand.

• Similar implementation costs but lower revenue. Implementing tolling on one lane would cost about the same as tolling all lanes but would produce less revenue to compensate for infrastructure and operational costs.²

The main goals for the Regional Mobility Pricing Project are to reduce corridor congestion and to raise funds for transportation infrastructure. Tolling just one lane (single managed lane) would clearly not meet this goal. Therefore, the Regional Mobility Pricing Project is only analyzing tolling options that toll all lanes.

Recommendation 2: Continue to evaluate VPFA Concept C (regional tolling on I-5 and I-205) and include Boone Bridge in the evaluation.

The original Concept C would toll all lanes on both I-5 and I-205, from the Columbia River to the split of I-5 and I-205 in Tualatin, south of Portland. The next phase of the Regional Mobility Pricing Project will incorporate this recommendation and will also extend the I-5 study area south to the Boone Bridge for the following reasons:

• **Greater flexibility to manage congestion.** In general, the larger the area tolled, the better traffic can be managed. Even though some tolled areas are less congested, the larger total area gives more flexibility to the whole network to redistribute vehicles. Therefore, tolling more I-5 and I-205 segments would mean more effective congestion management.



Figure 2. Concept C including Boone Bridge

• There is no benefit to analyzing I-5, including

Boone Bridge, separately from I-205. The VPFA showed that many drivers can use I-5 or I-205 interchangeably, meaning they can choose which interstate to use for the most efficient route to reach their destination. Furthermore, drivers can choose other transportation modes to travel in and through the region, including public transit, walking, and biking. This all means that evaluating I-5, Boone Bridge, and I-205 separately ignores the fact that the transportation system is all connected, and travelers have options to meet their travel needs. For this reason, including Boone Bridge in the analysis for I-5 and I-205 together would

² Capital cost would include developing back-office systems to collect tolls, building toll gantries along the tolled facilities, and restriping lanes and improving signage to delineate the tolled facilities.



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produce a more comprehensive and clearer analysis of how tolls might affect travel across the region and across travel modes.

- **Per-trip toll rates may potentially be lower.** Tolling more vehicles in a larger area instead of fewer vehicles on a smaller segment of I-5 means that the cost of the tolls would be shared more evenly and that rates could be set lower while generating similar revenue.
- Most of the vehicles that cross the Boone Bridge from the south travel through the Regional Mobility Pricing Project study area. Therefore, extending the tolling area southward to include the Boone Bridge would not notably change the conclusions from the VPFA.

Consistent with the requirements of 23 U.S.C. 168, the information in this document, and the public and agency input received, may be adopted or incorporated by reference into a future environmental review process to meet the requirements of the National Environmental Policy Act.

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